The Learning of Business Principles Meaning Model Improve as an Effort to Enhance Active Interaction and Critical Thinking

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Abstract: The purpose of this study is to provide business principles learning module which bases an improvement to enhance the students of Marketing Vocational High School. It was started by need analysis and ended by testing for the user. The findings of research showed that the module guides students to think critically in finding new concepts about learning materials. An active interaction among student and feedback, upgrading, and enrichment activity where students have a full role in learning activity also happened during lesson. Besides having expediency to be applied, the module creates meaningful learning for students.

Keywords: business principal module, learning improvement, marketing vocational high school

INTRODUCTION

The 2013 Curriculum in Indonesia demands a change in learning system in the school. The innovation of curriculum 2013 is an intermediate step of competence-based curriculum development which is pioneered in 2004 and 2006 KTSP included competence of attitude, knowledge and skill integratedly. Mulyasa (2013) explaimed that the key of success which determines the result of implementation of 2013 curriculum is facilities and adequate learning source such as a module. Module is a complete learning source which can stand alone and consist of learning activity series arranged to help students in reaching learning achievement. Furthermore, it was formulated clearly and systematically that make the user can study independently with or without a teacher (Thuneberg et al., 2018). Teaching material will be proper based on 2016 standard agency of national education while complying four components, namely content expediency, language, presentation, and graph expediency.

There some advantages obtained from learning by using module. First, it stimulates an increasing students' motivation and after doing evaluation, teacher and student know success and failure in the learning process. Second, the learning material is devided more suitable in one semester, and lastly, education is more useful because it is arranged following acamedic ladder (Suryaningsih, 2010). The precendence of the module in the learning process includes several activities such as focusing on the individual abilities of students, because in essence students have the ability to work alone and be more responsible for their actions. Furthermore, it allows the control of learning outcomes regarding the use of competency standards in each teaching material that must be achieved by students. Lastly, curriculum relevance is indicated by the existence of goals and means of achievement, therefore students can know the relationship between learning and the results to be obtained (Reitsma et al., 2010). In producing a module, it must

also pay attention to the criteria in the module including self instruction, self contained, stand alone, adaptive, and user friendly (Enke et al., 2015).

Even though the contribution of module is very effective in helping learning process of students, but it is only little that module focuses on efforts believed can develop the way of student's thinking to be more critical. That is the reason why this research aims to integrate between the strengthening of learning student independently with a learning which is meaningful along with critical power development toward fenomena, model meant is improve model. Mavarech & Kramarski (1997) stated that improve is an acronym for introduction of introducing new concepts, matacognitive questioning, practicing, reviewing and reducing difficulties, obtaining mistery, verification, and enrichment where the learning model is designed for students that can develope their own knowledge concepts. The improve learning model is a learning model based on cognitive theory and social metacognition where the model has three independent components, namely: 1) metacognitive activities namely questions that build students knowledge such as questions that encourage students to find a strategy, a connection question where students begin to see differences and similarities about the concepts of learning learned, and reflection questions that can support students to focus on themselves to finish the process and ask themselves about right answers Balıkcıolu and Efe (2016), interactions with peers Weyns et al., (2018), and 3) systematic activities of enrichment, improvement and feedback.

This improve-based module is designed and completed by a guide in order that students think critically. Smith et al. (2018) stated that thinking critically is ability and disposition which connect the first knowledge, mathematical reasoning, and cognitive strategy to form generalisation, prove, and evaluate mathematical situation reflectively. Moreover, Suryadi (2001) defined that thinking critically is the using process of thinking ability effectively which can help someone make, evaluate, and take decision about what they believe and do. This case is appropriate with improve learning guide which consists five syntaxis: 1) introducing of new concept, 2) exercise combined with metacognitive question, 3) reviewing student's answer about study of solved case, 4) giving test and identifying students if they have reached a criterion or have not, and 5) improvement and remedying. The learning guide has a purpose in orther that students can be more active to do learning activity, so learning process in the class can be more meaningful and focuses on students.

Concept will have meaning if it is same as idea in its cognitive structure. A learning means as the result of learning event signed by relations happened among aspects, concepts, new information and situation with relevant components in student's cognitive structure. Thus, a teacher must always try to know more concepts which students have and help to combine the concepts with harmonis by new knowledge which will be learnt. Kostiainen et al. (2018) said that there are three advantages of meaningful learning including 1) information which is learnt meaningfully is longer to remember, 2) information which is learnt meaningfully facilitates next learning process for similar lesson, and 3) information which is learnt meaningfully can make us easier to learn similar thing although learners have forgot.

Kostiainen et al. (2018) remarked that there are four principles in application of meaningful learning teory, namely: 1) advance organizer something must be commited is directing and helping to remember again, 2) progressive differentation something must be commited is organizing concept by teaching the concept which is less inclusive becomes inclusive and the most inclusive, 3) learning subordinate, it can happen if the concepts have been learnt before, 4) integrative adaption for this type, material is arranged in order to actuate hierarchy concept, namely up and down which means that we can start with the most common concepts, but we need to show how to relate subordinate concepts, then move back through examples to new meanings for higher-level concepts. Based on those thingkings, therefore the development of improve-based module which is needed in this research and hoped that it is able to result module which is proper with school and student's need.

METHOD

This research uses Borg & Gall model which have been modified and based on need and condition of field namely using these seven steps: 1) potential and problem, 2) accumulation of data, 3) design of product, 4) validation of product, 5) revision of design, 6) trial of small grup, and 7) revision of the last product. Validation is excecuted by the expert of content and the expert of module.Subject of trial and the user are students in the third of the state of vocational high school 1 Pasuruan which attacks business priciples subject. The technique of taking data uses questionnarie an observation. An effort to know about level of module validation uses score of scale likert, then it is interpreted into expedience percentage. In order to know about level of meaningful learning uses student's estimation questionnarie with the effectiveness of module in the level of student's activity and critical thinking.

RESULTS & DISCUSSION

Results

Before being tested, module is started by validator test,both related to the material content and module qualifications. Validator result of material expert relates to conformity of material which is developed such as in the Table 1.

Table 1. Material Estimation by the Expert of Material

No	Aspect	Percentage
1	Learning Expedience	96%
2	Material Expedience	96%
3	Evaluation Expedience	100%
4	Language Expedience	84%
	Average	**94%**

Module expert validator who tests conformity level of module writing based on 8 dimensions resulted estimation such as in the Table 2.

Table 2. Module Estimation by Module Expert

No	Aspect	Percentage
1	Relevance	96%
2	Accuracy	85%
3	Completeness of presentation	91%
4	Presentation system	100%
5	Presentation with demand of learning which focuses on students	95%
6	The way of presentation	97%
7	The congruence of presentation with learning which focuses on students	73%
8	Readable and communicativeness	85%
Average		**91%**

Module is also tested in a small grup to know the level of easiness, meaningful,and user's interest. From this aspect is resulted that module is considered interesting and meaningful for students. It will be presented more detail in the Table 3.

Table 3. The Result of Interest and Meaningful Test

No	Aspect	Percentage
1	Aspect of presentation completeness	93.3%
2	Aspect of presentation way	90.2 %
3	Meaningful aspect	91 %
4	Aspect of readable and communicativeness	90 %
5	Aspect of benefit	86.6%
Average		**90.7%**

The result of testing is limited by module based on aspects of student's interaction and critical thinking can be seen in the Table 4.

Table 4. Description of Student's Interaction and Critical Thinking

A. Interaction Description		
No	**Aspect**	**Percentage**
1	Expressing of declaration	30%
2	Responding stimulus	80%
3	Clarification	70%
4	The making of note	90%
5	Excesution of duty	100%
B. Description of Critical Thinking		
1	Expressing of idea	95%
2	Argumentative reasoning	40%
3	Generalising	30%
4	Reflecting/evaluating	50%
5	The taking of cognitive decision	75%

Generally, the developed module characteristic is product of print teaching material. That is learning module of business principles based improve for the third of marketing senior high school in second semester. In this module, there are

exercise questions individually or in a grup like work sheet, and formative test which trains students to think critically individually or together. It is harmonized by meaning of using 2013 curriculum whuch mentions that curriculum follows basic opinion that knowledge cannot be moved directly from teacher to student. The student is subject who has ability to actively look for, turn, and use knowledge. The process of research and divelopment uses Borg's and Gall's which have been modified which is appropriate with field situation. The first step is potential and problem which means doing observation and interviewing teacher's business principles subject. because of that interview, it can be known that business principles book which is appropriate with 2013 curriculum has not been available. The teacher only relies on internete as learning guide. The teacher only uses speech methode so the students are bored in learning activity. From that case, the researcher plans to develop learning module can help to fulfill study source and being active in learning activity.

After analysing, potential and problem can be shown factually and up to date, therefore next step is collection of information data that can be used as material for planning of product. This case needs to learn KI/KD and main material which will be developed in module. After that, the researcher starts to design product, the first step must do is the making of module arranging framework which pervade format election and first module design. The module developed must be able to increase student's learning activity and have self-instructional characteristic,that is module as teaching material individually. Indeed, this findings in line with Supardi et al. (2011) which remarked that a good module must be appropriate with specified cretaria, one of the is a self instructional which means being able to teach students individually. Based on user's testing process, it can be known that improve-based module can be received positively by student and teacher viewed from student's learning activity which is more active when using improve-based module, besides that the students are enough enthusiastic to accept learning material because it is accompanied with examples like picture and ilustration about students' environment which can build students' knowledge, that make students are easy to understand learning material. This improve laerning model is designed and completed by guide in order that students think critically to find new concepts about material being learnt, giving metacognitive (BalıkcıoL·lu & Efe, 2016; Smith et al., 2018) questions like 1) question which supports student to find a strategy, 2) connection question where students start to see the differnce and the similarity about learning concept which they learn, and 3) reflection question which can support students to focus on themselves to finish process and ask themselves about right answer. Then, interaction activity with friends and systematic learning from feedback, uphrading and enrichment.

Discussion

The Improve-based module was able to make learning activities more meaningful and centering on the students. This is appropriate with ausubel's opinion in Herawati (1999) to be able to make meaningful learning come true. Therefore, every person who studies must be able to connect new knowledge to concept or proposition (links between the relevant) already known. On the other hand, in

memorizing learning system then knowledge can be got only by memorizing and put it into knowledge structure without existing interaction by what have been known. Donas (2016) gave opinion that meaningful learning is funny learning which will have superiority in taking whole informations completely that make the last consequence increases students' ability. Meaningful learning is a process which connects new informations to relevant concepts which exsists in person's cognitive structure.

Being meaningful in learning process appears because students bacome active in joining a learning and getting information which they obtanied directly through several learning sources existing in students's environment. Kostiainen et al. (2018) remarked that there is clarification shape of learning meaning into two dimentions. The first dimension relates to how information and material lesson are presented to student with finding technic. Learning according to dimension is got through giving information by communicating to student in form of finding learning and presentation of information in final form which require students to discover whole informations they got by themselves. The second dimension relates to how students connect information which is discovered by knowledge they have and it can be mentioned meaningful learning.

Based on result of product testing can be known that module of business principles based developed improve is clarified that it is proper to be used as teaching material for teacher and learning source for student in supporting learning process.the level of module expedience based on validation of material expert 94 percent which means including category very proper to use. Further more, expedience module based on average of research by module user is 90.7 percent which means that it is very proper. The average of module expedience level based on material expert, module writing expert, and module user is 92.5 percent showing that learning module developed by valid researcher and it is very proper to use to support learning process in the state of Senior High School 1 Pasuruan.

This research is supported by previous research executed by Arini (2015) who developed module based an approach which had to be used in school as teaching material of bank reconciliation material. The result of this study showed that module based approach which had to be used in school for the lesson of bank reconciliation material. It is very proper to use as learning medium proved from estimation of content estimation with percentage 77.65 percent, language expedience is 86.22 percent, presentation expedience is 84 percent, graph expedience is 83.83 percent. the next step is limited testing for students got percentage 95.83 percent, and a research by Yunita (2014) who developed module based contextual learning consisting characteristic of certain jounal material. The result of it shew that module based contextual learning consisting characteristic for accountancy lesson is very proper and it can be used as learning medium proved by estimation of content expedience with percentage 84.11 percent, language expedience is 86.61 percent, presentation expedience is 84.72 percent. The next step is limited testing for 20 students got percentage 98.25 percent. Module testing also shows effectiveness level for raising of learning communication which is interactibe between teacher and student, also there is raising indikator of students' critical thinking.

It can be understood that this model improve module is accompanied by cases and question which demand students to look for information actively and make cognitive decision of their opinion about casea demanded in module. Thus, this model of module also has identical effect by using mobile medium based problem based on learning such as Ismail et al (2018) or last step of thinking through explores context, reasoned Inquiry, facilitates shared decision making dan evaluation (Carter et al., 2018).

CONCLUSION

These research and development result learning module integrated by learning model existing in business principles module based improve where there are 5 learning activities such as introduction of new concept, exercise with META cognition question, reviewing students' answer about study of solved case, giving test and identifying category of students who have reached criteria or have not, also upgrading and remedying. This module interests students because there are picture and illustration inside which can facilitate students to understand the contents of this material. Module also can be integrated by learning model where there are steps inside which can make students' learning activity more active and meaningful. Testing result of module implementation based improve can make student's learning meaningful. Improve-based module can be used by students individually as learning source in vocational high school eventhough there is no guidance of teacher and it can increase critical thinking students.

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