

AN EVALUATION OF A MOOC PROGRAM ON ENGLISH FOR NON-ACADEMIC UNIVERSITY STAFF

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ABSTRACT

The purpose of the course, called ENAS MOOC, is to increase the English language proficiency of non-academic university staff related to their employment tasks while they stay productive while working at home. The course was run as a field trial in preparation for launching more widely. This study elicits the reactions of the participants who completed the program as quantitative data. Some evidence is quite illuminating to support effective data for further implementation; yet some variables revealed that the program need to be revisited. Variables like *contribution to course* and *amount of effort* need to be investigated further to serve more reliable implementation of the program.

Keywords: MOOC, Online learning, Program Evaluation, Reaction

INTRODUCTION

This study is an evaluation of a Massive Open Online Course (MOOC) that was especially designed to assist Indonesian non-academic university staff to improve their English language proficiency. It was called English for Non Academic Staff (ENAS MOOC), and has already completed a ten-week field trial that ran from 2nd October to 2nd December 2020.

The purpose of this study was to evaluate the field trial stage based on the reactions of participants. Evaluation results indicate which aspects are ready for the MOOC to be launched more widely who want to participate and which are not. Expressed operationally, this study sought to answer the following research questions: Considering the style of online delivery of the ENAS MOOC (1) Which aspects are already suitable for large-scale implementation? (2) Which aspects require further investigation before large-scale implementation?

These aspects are expressed as variables:

1. Amount of effort required to perform prescribed tasks
2. Contribution to learning
3. Course online system
4. The facilitator
5. Course content

English language and university staff

Non-academic university staff need English language proficiency to perform some university tasks. Before the pandemic, institutions provided various programs of capacity building for their staff, but they all ceased due to the pandemic.

Most universities now seek international recognition and participate in international networks. Consequently, non-academic staff now handle correspondence and provide information for overseas guests, use documents in other languages, participate in recruiting overseas students, and then assist them outside classes. These tasks are now unavoidable; if staff lack the English proficiency to do them, their careers are in jeopardy, as well as their university's internationalization program. Unfortunately, not all staff have this level of English language proficiency, and they need support and opportunity to improve them.

Language learning especially designed for non-academic university staff is both an opportunity and a challenge. A learning mode should be able to accommodate staff to learn while working, without increasing their workloads or lengthening their working hours. Consequently, the MOOC was selected as the teaching approach. It can normally accommodate a large number of participants, and uses an online platform to guarantee flexibility and autonomy for participants. As the systems are now familiar and already supported by most Indonesian universities, it was assumed that technical factors would not be a hindrance.

The ENAS MOOC was designed to assist staff to improve their English proficiency needed for workplace tasks, especially during the pandemic. The course was designed by selecting topics relating to tasks and duties in the university workplace. The course comprises four modules based on integrated activities that are designed using a content-based approach. At the end of the course, participants are expected to have better language skills appropriate to the university workplace.

The effects of the COVID19 pandemic

The pandemic has recently changed people's lifestyles. Before the pandemic, people tended to work outside the home, had relatively less time at home, and were less inclined to think of doing all work from home. People made many changes in order to halt the spread of the virus, such as avoiding crowds, staying at home, "social distancing," and doing more through the Internet. In the new lifestyle, people transformed their homes into offices and worked from home through Internet connections.

The pandemic could be a blessing in disguise. Some aspects of living remotely are attractive. People can become even more productive as they can multitask, doing both office work and household chores at the same time. Working from home has created more flexible work schedules that blend office and household. Workers can still maintain connections with clients, colleagues, partners, or friends through unlimited online meetings, which they can schedule for any convenient time with no concern for traffic, weather, or other factors beyond their control. To some extent, this has reduced anxiety and other psychologically detrimental effects of the pandemic. The positive effects of the pandemic have helped people to survive a difficult situation. An idea to use time productively became a program that could keep people active by learning English language skills that continue to be needed in their workplaces.

The MOOC background

In 2008, the first MOOCs attracted thousands of students seeking free, high quality learning. MOOCs then developed rapidly and became a global phenomenon in remote teaching. Using the power of

f the Internet, MOOCs spread around the world and offered free access to people with different backgrounds and origins, including those from developing countries, to experience world-class education from internationally recognized universities without needing to leave their home countries. MOOCs grew in popularity and providers used different software platforms to run MOOCs with varied learning purposes and objectives. (Yin, 2016; Firmansyah & Timmis, 2016; Shen et al., 2016).

At first, only providers in developed countries such as US, UK, and Canada offered MOOCs. Now, however, Southeast Asian countries have MOOC providers that are open to applicants from all over the world. Like other countries, Indonesian institutions have already started providing MOOCs, although they are still limited in number. (Lubis, Idrus, & Rashid, 2020).

The New York Times inaugurated 2012 as the year of MOOC in the United States, but 2014 was the year MOOCs were introduced in Indonesia when several platforms began to accommodate MOOCs. For example, *SekolahPintar*, the beta version of *Kelase*, and *RuangGuru* were founded to provide various technology-based learning services, including virtual classrooms, online exams, subscription learning videos, private tutoring, and other educational content. In October 2014, the Directorate of Learning and Student Affairs, the Directorate General of Higher Education of Indonesia initiated the Indonesian Open and Integrated Online Learning Program or *Pembelajaran Daring Indonesia Terbuka dan Terpadu* (PDI TT), which later changed its name to Online Learning System or *Sistem Pembelajaran Daring* (SPADA). Then, in late 2014, *KelasKita* emerged as the online medium to facilitate classes with students, friends, teams, and communities. Then in early 2015, Dicoding.com went online, followed by IndonesiaX in August 2015. Due to this background of online learning (also known as *e-learning*) in Indonesia, the authors are confident that many Indonesians would accept MOOCs.

Moreover, MOOCs have some very attractive characteristics. They can facilitate large numbers of participants with different locations and educational backgrounds. They offer flexibility so that students can pursue learning without leaving their work routines and without studying on a campus. In the context of the pandemic, MOOCs become more attractive because they do not require participants to attend in a classroom. They adopt a new Internet-connected lifestyle, where they stay at home with a device, work remotely from home, and maintain physical distancing.

Several researchers have studied Indonesian MOOCs. investigated the opportunities and challenges for providing MOOCs, claiming that Indonesian providers have the opportunity to implement MOOCs because only a few are available while many prospective students are gaining interest in them. However, they warn providers to create proper business models since they still lack mature business models; otherwise, they could just adopt the already existing MOOCs and adjust them to fit Indonesian conditions.

Similarly, suggest that Indonesian MOOC providers need to make their MOOCs meaningful and locally relevant. After investigating *IDCourserians*, they found that Indonesian participants who subscribed to Coursera MOOCs found those courses to be difficult and they were very likely to withdraw. The investigation revealed how Indonesian *Courserians* managed their learning to prevent withdrawals. Working as a community, they supported each other to complete tasks that were far from Indonesian contexts, and met off-line to discuss and to do tasks together. They called this an attempt to localize MOOCs that otherwise lacked collaboration and interactions between participants. When Indonesian MOOC contributors want to host a MOOC, it should be localized by arranging off-line discussion between participants, or at least facilitating participants with online discussion under the supervision of a facilitator.

Santoso et al. (2019) claimed that most Indonesian MOOC participants chose MOOCs based on the availability of the preferred topic, ease of use, completeness, materials that matched their problems, and forums that supported communication between participants, and rewards such as certification. Attractive interfaces and up-to-date information were also the other attractions. Although such findings are less generalizable to the characteristics of Indonesian MOOC students, they at least suggest the major features that Indonesian MOOCs needed. The present study complements those findings by considering some major factors in MOOC design.

METHODOLOGY

Educational program evaluation can be defined as the systematic collection and analysis of information related to the design, implementation, and outcomes of a program, for the purpose of monitoring and improving the quality and effectiveness of the program. Program evaluation seeks to identify the sources of variation in program outcomes both from within and outside the program, while determining whether these sources of variation or even the outcome itself are desirable or undesirable. ; .

According to Kirkpatrick, the evaluation process consists of a series of four progressive assessment levels, namely reaction, learning, behaviour, and result. Each level aims to assess different purposes. First, *reaction* refers to gathering information regarding participants' satisfaction with the program. Second, *learning* refers to the learning gain that can be measured using a pre/posttest analysis to identify what participants have learned from the program and changes in attitude or skills. The third is *behaviour*, in which change is assessed through documented supervisory ratings on how the participants apply the knowledge gain through performance. Fourth, *result* is the measurement of targeted outcomes affecting the organization. This represents the highest level of complexity in the model, although implementation is generally beyond the scope of most educational evaluators due to lack of available data. However, educators often feel satisfied with only assessing the first two of these levels (reaction and learning) that seem more essential to academic performance, while the last two (behavior and results) levels go beyond just learning, and assess what students can do and how this contributes to a more general measure of educational success. (Tatum, 2016)

Prior to field trial, the researchers held an open recruitment by distributing a flier through social media (i.e. *whatsapp* and *Facebook*) and 93 non-academic university staff from different universities registered. Only 40 completed all four modules, and they became the subjects of the study.

The ENAS MOOC was field-tested from the 2nd of October through the 2nd of December 2020. The evaluation followed only the first level of the Kirkpatrick approach, namely reaction. Researchers elicited responses from the field trial participants through an online questionnaire. Questions related only to satisfaction levels. There were five domains: the amount of effort required to performing tasks, contributions to learning, online system, facilitators, and course content. Prior to its distribution, the validity and reliability of the questionnaire were estimated. Responses were then described to evaluate the success of the program in meeting the participant's satisfaction.

FINDINGS AND DISCUSSION

Validity and Reliability of the Questionnaire

The validity of questionnaire data was determined using *Pearson correlation*. If the significance value (Sig.) < 0.05, then the instrument was declared valid. The reliability of the instrument was yielded if a *Cronbach's alpha* was > 0.60.

The five domains in the questionnaire acted as variables in the validity test, which is presented in the tables below.

Table 1. Validity Testing Result with *Amount of Effort variable (TU)* as the first Variable

Evaluation Indicators	<i>Pearson Correlation</i>	<i>Sig.</i>	Conclusion
TU.1 - Effort to do the learning tasks	0.932	0.000	Valid
TU.2 - Effort to complete the learning tasks	0.968	0.000	Valid
TU.3 - Persistence in doing the learning tasks	0.970	0.000	Valid
TU.4 - Participation in interaction in WAG*	0.876	0.000	Valid
TU.5 - Persistence in completing the course	0.938	0.000	Valid

(Note: TU stands for Amount of Effort; WAG means Whatsapp Group)

Each indicator of the evaluation of the MOCC program based on variable of the amount of effort (TL) produces a significance value of the Pearson correlation (Sig.), smaller than 0.05, so that each indicator on this variable is valid and the data can be used for further analysis.

Tabel 2. Validity Testing Result with *contribution to learning (CL)* as the Second Variable

Evaluation Indicators	<i>Pearson Correlation</i>	<i>Sig.</i>	Decision
CL.1 – Pre Course Skills of English language Skills	0.831	0.000	Valid
CL.2 – Post Course of English language Skills	0.956	0.000	Valid
CL.3 – Pre Course Mastery of Vocabulary	0.852	0.000	Valid
CL.4 – Post Course Mastery of Vocabulary	0.967	0.000	Valid
CL.5 – Course Benefits for Language Skills development	0.886	0.000	Valid
CL.6 – Course Benefits for Vocabulary Enhancement	0.920	0.000	Valid

The results of the validity testing show that each indicator for the evaluation of the MOCC program based on the *contribution to learning (COS)* variable produces a significance value of the Pearson correlation (Sig.), smaller than 5%, so that each indicator is valid and the data can be used for further analysis.

Tabel 3. Validity Testing Result with *course online system (COS)* as the third Variable

Evaluation Indicator	<i>Pearson Correlation</i>	<i>Sig.</i>	Decision
COS.1 – Suitability of the MOOC model online course with learning expectations	0.891	0.000	Valid
COS.2 – Flexibility for learning	0.928	0.000	Valid

The results of the validity test show that each indicator for the evaluation of the MOCC program based on the course online system variable produces a significance value of the Pearson correlation (Sig.) Less than 5%, so that each indicator on the course online system variable is valid and the data can be used for further analysis

Tabel 4. Validity Testing Result with *the facilitator* (F) as the third factor

Indikator Evaluasi	<i>Pearson Correlation</i> <i>n</i>	<i>Sig.</i>	Conclusion
F.1 – Ability to stimulate interest to learn	0.941	0.000	Valid
F.2 – Availability to assist participants' learning	0.967	0.000	Valid
F.3 – Precise assessment and feedback	0.962	0.000	Valid

The results of the validity test show that each indicator of the evaluation of the MOCC program based on the responsiveness of the facilitator variable produces a significance value of the Pearson correlation (Sig.), less than 0.05, so that each indicator on the facilitator variable is valid and the data can be used for further analysis.

Tabel 5. Validity Testing Result with *course content* (CC) as the fourth variable

Evaluation Indicator	<i>Pearson Correlation</i> <i>n</i>	<i>Sig.</i>	Conclusion
CC.1 – Clarity of the learning objectives	0.927	0.000	Valid
CC.2 – Suitability of the learning objectives	0.889	0.000	Valid
CC.3 – Course content management	0.914	0.000	Valid
CC.4 – Suitability of selected reading materials	0.939	0.000	Valid
CC.5 – Sufficiency of learning loads	0.920	0.000	Valid
CC.6 – Stimulation for participants' active involvement	0.914	0.000	Valid
CC.7 – Clarity of the task instructions	0.878	0.000	Valid
CC.8 – Utility of Video	0.942	0.000	Valid
CC.9 – Suitability of the projects	0.904	0.000	Valid

The results of the validity test show that each evaluation indicator of the MOCC program based on the course content variable produces a significance value of the Pearson correlation (Sig.), less than 0.05, so that each indicator on the course content variable is valid and the data can be used for further analysis.

Furthermore, the results of the reliability testing of the five evaluation variables for the MOOC program are presented in Table 6 below:

Table 6. Reliability Testing

Variables	Cronbach's Alpha	Critical value	Conclusion
<i>Amount of Effort (TU)</i>	0.963	≥ 0.60	Reliable
<i>Contribution to Learning (CL)</i>	0.953	≥ 0.60	Reliable
<i>Course Online System (COS)</i>	0.785	≥ 0.60	Reliable
<i>The Facilitator (F)</i>	0.952	≥ 0.60	Reliable
<i>Course Content (CC)</i>	0.974	≥ 0.60	Reliable

The reliability results show that the five evaluation variables for the MOOC program all result in a Cronbach's Alpha value greater than 0.60, so it is concluded that the MOOC program evaluation questionnaire is based on the level of effort variable, contribution to learning, online course system, skills and responsiveness of the facilitator, and course content are reliable or reliable, so that the resulting data can be used for further analysis.

Descriptions of Evaluation Variables for MOOC ENAS

The descriptions of the MOOC program evaluation are elaborated into five variables, namely the amount of effort, contribution to learning, online course system, skills and responsiveness of the facilitator, and course content. They are described based on the average value (mean) on each indicator, and can be categorized as follows:

$$class\ interval = \frac{max - min}{number\ of\ classes} = \frac{6 - 1}{6} = 0.83$$

The scale employed in this study is 1 to 6, with the number of classes the researchers wanted is six, so the class interval is known to be 0.83. With a class interval of 0.83, the following categories can be arranged:

- 1.00 < mean ≤ 1.83 : for very poor
- 1.83 < mean ≤ 2.67 : for poor
- 2.67 < mean ≤ 3.50 : for fairly good
- 3.50 < mean ≤ 4.33 : for good
- 4.33 < mean ≤ 5.17 : for very good
- 5.17 < mean ≤ 6.00 : for excellent

The results of the description on each evaluation indicator of the MOOC program are presented in Table 8 below:

Tabel 8. Descriptions for evaluation variables for ENAS MOOC

Evaluation Indicators	Min.	Max.	Mean	Category
TU.1 – Effort for doing the tasks	1	6	3.65	Good
TU.2 – Effort for completing the	1	6	3.62	Good
TU.3 – Routine tasks	1	6	3.43	Fair
TU.4 – Participation in the facilitator's WAG	1	6	3.11	Fair

TU.5 – Persistence in completing tasks	1	6	3.89	Good
CL.1 – Pre-course English skills	1	6	2.54	Poor
CL.2 – Post-course English skills	1	6	3.35	Fair
CL.3 – Pre- course Mastery of Vocabulary	1	6	2.46	Poor
CL.4 – Post-course Mastery of Vocabulary	1	6	3.30	Fair
CL.5 – Course benefits for language skills development	1	6	3.54	Good
CL.6 – Course benefits for vocabulary enhancement	1	6	3.57	Good
COS.1 – Suitability of the MOOC model online course with learning expectations	1	6	3.38	Fair
COS.2 – Time Flexibility	2	6	3.68	Good
F.1 – Facilitator’s Stimulation for learning interest	2	6	3.81	Good
F.2 – Facilitator’s availability to assist learning	2	6	4.05	Good
F.3 – Facilitator’s precise Assessment and Feedback	2	6	4.16	Good
CC.1 – Clarity of the learning objectives	3	6	3.89	Good
CC.2 – Suitability of the learning objectives	2	6	3.70	Good
CC.3 – Content management	3	6	3.95	Good
CC.4 – Suitability of the topics for selected reading materials	2	6	3.97	Good
CC.5 – Sufficiency of the learning loads	2	6	3.92	Good
CC.6 - Stimulation for participants’ active involvement	1	6	3.68	Good
CC.7 – Clarity of the task instructions	1	6	3.84	Good
CC.8 – Utility of the video	1	6	3.92	Good
CC.9 – Suitability of the project	2	6	3.95	Good
Overall Mean = 3.61				

The results of the descriptions of the evaluation indicators for the MOOC program as a whole produce an average value of 3.61, which is in the high category (3.5 - 4.33), meaning that the MOOC program has been assessed well by respondents. The three indicators for evaluating the MOOC program that were rated and received high category are *precise assessment and useful feedback (F.3)*, *facilitators always available and helpful (F.2)*, and *reading materials with appropriate topics (CC.4)*.

The description of each MOOC program evaluation indicator based on the average value can be more clearly illustrated in the bar chart as follows:

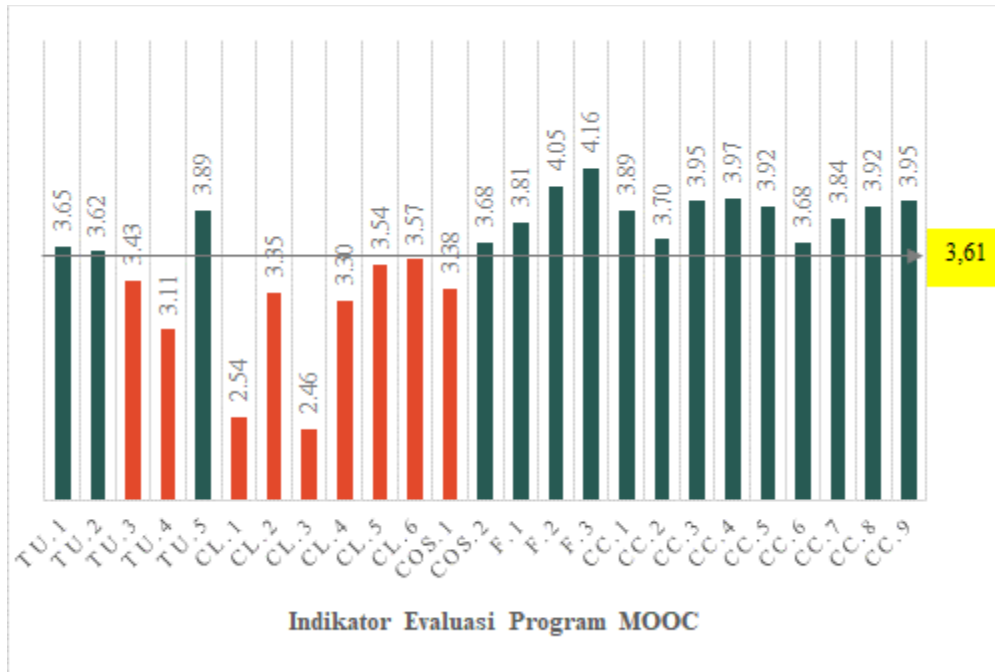


Figure 1. Graph of the evaluation results of the MOOC program on each indicator

Figure 1 shows that there are 9 evaluation indicators for the MOOC program that are still considered low (below the middle value of 3.61), namely:

TU.3 - Routine doing tasks

TU.4 - Participation in the facilitator's WAG

CL.1 - Pre-course English skills

CL.2 - Post-course English skills

CL.3 – Pre-course Mastery of vocabulary

CL.4 – Post-course Mastery of vocabulary

CL.5 - Benefits of courses for English language skills development

CL.6 - Benefits of the course for vocabulary enhancement

COS.1 - Suitability of the MOOC model online course with learning expectations

Furthermore, the description results on each MOOC program evaluation variable are presented in Table 9 below:

Table 9. Description of the MOOC program evaluation variables

The description of the evaluation on each MOOC program variable based on the average value can be more clearly illustrated in the bar chart as follows:

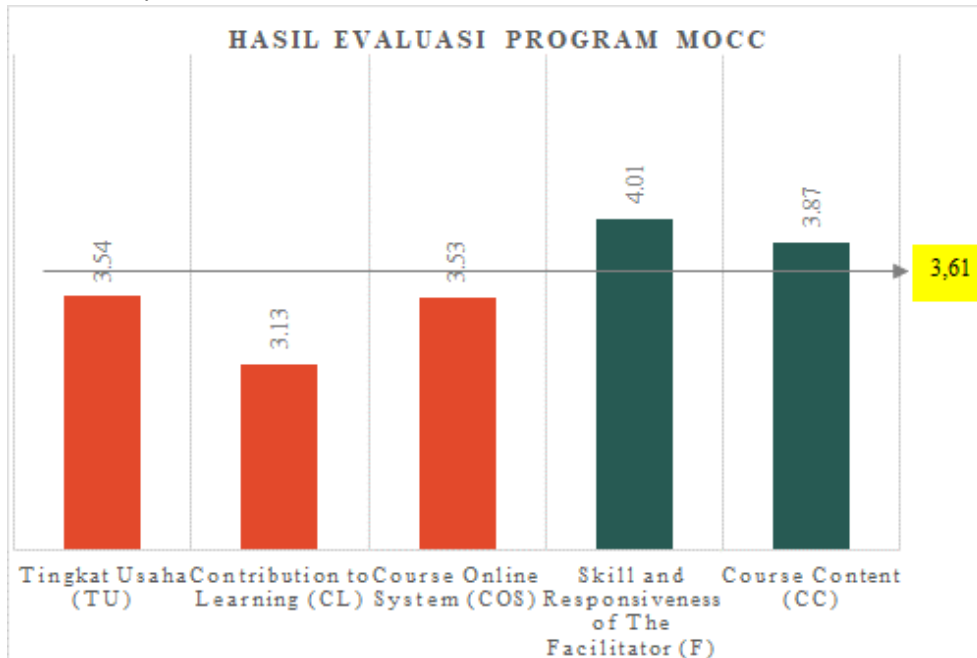


Figure 2. Graph of the evaluation results of the MOOC program on each variable

Figure 2 shows that there are 3 variables in the MOOC program that are still considered low (below the middle value of 3.61), namely the level of effort, contribution to learning, and the online course system.

DISCUSSION

The descriptions above indicate some strengths of the the program that should be maintained. Of the five variables, two variables, namely facilitators and course contents, are found to be satisfying. Thus, in the vicinity of the MOOC facilitators, the program can serve the participants' expectation in the way that facilitators have provided satisfying assessment and feedback, learning interest stimulation, and learning assistance. This finding implicitly demonstrates how participants want to be treated in the course. They seem prefer to have facilitators that can maintain interactions during the online learning process in MOOC learning system; moreover, they need facilitators who can help them maintain the interest to continue learning. This reminds us to the premise of cMOOCs (i.e., an original offer of MOOCs design, known a *connectivist* course), as cited by , that this MOOC emphasizes connections between participants by helping them to find each other across the various distributed technological tools they were using to express their views on the course themes.

In the context of *connectivist* MOOCs, facilitators hold a vital role in helping participants to meet online with each other. In doing so, facilitators of the first distributed courses encouraged students to explore the topic, and to perform tasks using technologies that would establish their personal learning environment. The facilitators then used special software to aggregate these distributed activities in daily newsletters to help participants locate the content and each other, and "acquire learning for themselves, r

rather than have learning served to them by the institute”), and . By the same token, MOOCs in Indonesia n contexts need to be localized by adaptating to suit the caharacteristics of local participants. Briefly, facilitators’ role in the course was s found to be effective and should be maintained in further implementation.

The other variable, namely *Course Content*, also received a positive, so the program can continue to use the same course content. Despite the positive responses on the good quality of course materials, there is a discrepancy between course contents (CC) and course contributions of learning (CL). In contrast to the *course contents* that are categorised as good, the *contributions to learning* was consider fairly good or even the lowest value of all variables. This contrasts with some evidence from several studies revealing that the quality of the course or instructional materials will positively correlate with the academic performance of the participants (Abdi, 2017; Bukoye, 2019; Modesta, 2013). A positive response to the course contents should ideally be followed by positive responses to the course contributions toward participants learning. This the factors leading to this discrepancy need further investigation.

Despite lower than average value, the category “selection of online platform” could still be considered good. The MOOC used the platform provided by the institution, so course managers could not choose it. However, participants’ responses indicate this platform could be retained for further program implementation.

Finally, regarding the amount of participants effort to complete the program, participants performed well and as expected by the program contributors. Yet, they seem to have less effort for *routines or persistency in doing the tasks*. This confirmed the claims of previous researchers about Indonesian participants’ autonomy . As cited by Ginting et al., Indonesia participants had a lower degree of autonomy in their commitment to complete tasks. This suggests the need for future research into autonomy in online learning among Indonesian participants.

RECOMMENDATIONS

The findings of the present study give a common ground with other previous researches on the implementation of Indonesias MOOCs. The way that facilitators managed the course and the course contents can be maintained in future implementation of the ENAS MOOC. However, there is a need to investigate factors causing low contributions of the course toward participants’ learning.

More quantitative and qualitative data are and need to be involved to make the finding more elusive. Then, in dealing with the attributes of the participants involving in the MOOC learning system, the autonomy attributes need to be taken into further account. There is a need for investigating how such a n attribute that is ideally signified the success of MOOC achievement can really have its influence. The last, future research should also employ other factors in Kirkpatrick’s model of program evaluation to yield more holistic evaluation results including the effectiveness of the program as seen from the scores or performances attained by participants. Moreover, it will contribute more to the university stakeholders if the study also evaluates the impacts of the course on participants’ institutions.

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