DEVELOPING MOOC-BASED VIDEO CONTENT FOR CREATING SUPPORTIVE LEARNING ENVIRONMENTS IN SPEAKING COURSES FOR EFL LEARNERS

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Abstract: MOOC (Massive Open Online Courses) represents a pivotal point in language learning, as this platform can facilitate various form of learning materials such as handouts, instructional videos, and online assignments. In this study, the authors focus on developing MOOC-based video content for the course Speaking for Academic Purposes at Universitas Negeri Malang, providing engaging and easily understandable materials for its users. The research was conducted by applying the research and development design known as the R & D cycle. It was adapted and simplified into five stages: research and information collection, product development, expert validation, field testing, and final product. Having conducted the research, the writers consider the developed MOOC-based video content product feasible for English Department students. Based on the expert validation, the product obtained a 95.8% feasibility score, while in the field research, the product achieved an 89.9%. The final product serves as valuable speaking materials for teachers and students, highlighting experiences that enhance language learning.
Keywords: *MOOC; speaking; speaking materials; developing MOOC.*

INTRODUCTION

The use of MOOCs at Universitas Negeri Malang has been quite optimal, as seen from the utilization of the LMS, Sipejar, which has been used every semester in recent years. To improve the quality of teaching-learning process, the institution consistently adapts to manage the teaching and learning process effectively. One such example is, Universitas Negeri Malang which introduced a scheme i.e., 25% of online classes and 75% of face-to-face classes after the pandemic. Despite the predominance of face-to-face lectures, Universitas Negeri Malang continues to maximize the use of several contents that exist in the institution's LMS.

This demonstrates the university's commitment to providing maximum learning facilities for its students. In addition to the existing LMS, Sipejar, Universitas Negeri Malang is also developing MOOCs. These MOOCs aim to provide learning facilities to the broader community, allowing people from various backgrounds to access and develop themselves according to their preferred learning topics. MOOC stands for Massive Online Open Courses, a system of online courses that can be accessed widely and openly through the provided web platform (Wiswanti & Belaga, 2020). With MOOCs, the scope of learning, previously confined to the classroom, can now reach many participants, enabling everyone who wants to improve their skills or competencies to participate in competence enhancement with the MOOC facilities.

The development of MOOCs in this study focuses on the course "Speaking for Academic Purposes." This course is mandatory for students of the English Language and Literature Program and the English Education Program. It consists of two credits and covers how students can maximize the use of English in academic speaking in various formal activities. Besides understanding the theory of word choice and formal speaking techniques, students are also required to practice speaking according to the provided topics. The course "Speaking for Academic Purposes" focuses on the application of English for academic or formal purposes. Academic English refers to formal

English that teaches the formal aspects of conversation and writing, as found in research articles (Axmadjonovna, 2023). This formal language differs from everyday language, as the choice of words must adhere to standard and formal usage. Applying formal English can be challenging, as students, before entering higher education, tend to focus more on learning general English. Additionally, the position of English as a foreign language influences students' ability to master academic English.

Several studies have discussed that developing MOOCs for speaking materials requires a comprehensive understanding of learning design, platform issues, instructional strategies, and the role of instructors. Windrati et al. (2023) focus on developing learning designs specifically for Public Speaking within MOOCs, emphasizing the importance of structuring courses effectively to enhance speaking skills. Haron et al. (2019) discuss the challenges in MOOC platforms, highlighting the need to review MOOC models, characteristics, and the involvement of established providers. Instructors play a crucial role in MOOC development, as highlighted by Aydın and Karal (2023), who stress that instructors are pivotal in creating and offering MOOCs.

Furthermore, Yunus et al. (2019) offer a critical review of prior research on MOOCs, focusing on preparing educators for MOOC implementation, especially in developing countries like Vietnam. This study addresses the development of MOOCs for English communication skills, highlighting the tailored design for skill acquisition. In the context of MOOC development, Pireddu et al. (2022) discuss the strategic role of MOOCs in the business model of universities, emphasizing their significance in offering micro-credentials. MOOCs have been recognized as a globally accessible form of online learning (Rasheed et al., 2019), indicating their potential impact on education worldwide. Ismail et al. (2022) evaluate the effectiveness of MOOC approaches among undergraduate students, emphasizing the simplicity, speed, and additional information provided by MOOCs for enhanced learning.

Developing MOOCs for Academic Purposes courses holds significant importance in enhancing students' academic experiences and providing additional learning opportunities. MOOCs, when hosted by reputable academic institutions, can offer valuable experiences that complement traditional academic settings (Zhang et al., 2019). These courses play a crucial role in democratizing educational opportunities, challenging established higher education structures, and offering diverse learning options (Aldowah et al., 2019).

Previous studies highlight various aspects related to the development and implementation of MOOCs that are pertinent to Academic Purposes courses. For instance, the study by Windrati et al. (2023) emphasize the need for synchronous modes with limited participants to ensure the effectiveness of distance learning courses in Public Speaking. Additionally, the research underscores the pivotal role of instructors in MOOC experiences, leading to professional development and academic outcomes (Aydın & Karal, 2023).

Moreover, MOOCs have been recognized for their potential to enhance student interest, improve learning progress, and support lifelong learning and professional competence (Ивашкина et al., 2022; Malykhina et al., 2019). The adoption of MOOCs is influenced by learners' perceptions of their utility in improving academic performance (Pham et al., 2021). Furthermore, found that MOOCs have been associated with higher levels of academic performance and empathy among health sciences undergraduates (Martín-Valero et al., 2021). Studies have also delved into the influence of academic and emotional support on sustainable MOOC use, underscoring the importance of support mechanisms in enhancing learners' perception and experience with MOOC platforms (Luo, 2024).

In short, the development of MOOCs for Academic Purposes courses aligns with the evolving landscape of education, offering opportunities for enhanced learning experiences, improved academic performance, and the cultivation of essential skills for students in diverse academic disciplines.

This research addresses the problem of maximizing students' abilities in academic and formal speaking. A significant research gap exists in addressing common issues in speaking class, such as students; lack of confidence, insufficient self-training, and limited self-study resources. To bridge this gap, the objective of this research is to develop a Speaking for Academic Purposes course in the form of a MOOC, providing a comprehensive self-learning resource for students. The course features several instructional videos designed to enhance the student's understanding and proficiency in academic speaking.

The findings from this research can benefit not only students from the Department of English but also students from various disciplines. This is particularly relevant for those who will participate in international conferences, present seminar

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proposals, or defend their theses, especially when required to use English.

METHOD

The researcher used the research and development (R&D) design to create MOOC video content as speaking materials for students. To simplify the development process, the researcher adapted Borg and Gall's (1983) R&D cycle model. The following picture displays the modified model:

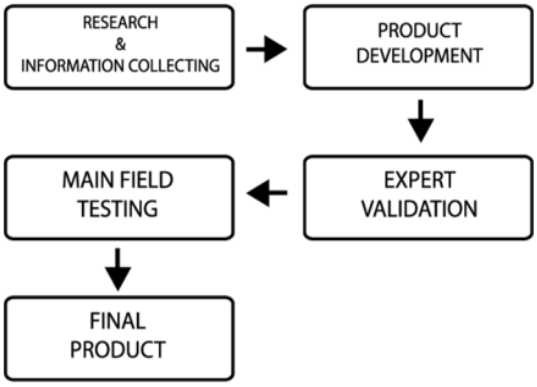

Figure 1. *Research and design model modified from Borg and Gall (1983)*

This first stage aimed to ensure that the final product fulfills the students' and teachers' needs as well as the curriculum's learning objectives. The researcher began by observing the curriculum to ensure that the developed product aligns with the learning objectives of the Speaking for Academic Purposes course. The researchers of this research are all the lecturers of the course. This research is based on the experience faced by the researchers while teaching speaking skills.

Then, the researchers acquired data by conducting a needs analysis of the students. The need analysis was done by interviewing 15 undergraduate students from the Department of English who passed this course. The questions are mainly about students' opinions on their problems when speaking English, opinions about the course, and opinions on the product to be developed.

The pre-production stage involved designing and preparing materials for the production process. The researchers created visuals after completing the materials provided in the product. Then, the storyboard was created including sketches of the sequence of events. The production stage immediately started to develop the storyboard into colorful illustrations arranged in video panels based on the plot sequence.

At this stage, the product's development had been verified by experts. This stage was crucial since it allowed the researcher to assess whether the product needed revisions or was practical and ready for the main field testing. This product received feedback from one validator. The initial assessor was a doctor with experience in educational media. The expert then validated the product based on four main aspects of the product: (1) the content of the product, (2) language use, (3) the design and layout of the product; and (4) back sound. A questionnaire in the form of a Likert Scale was used to validate the product consisting of a 5 scale from strongly agree (5), agree (4), fair (3), disagree (2), and strongly disagree (1). The total score was converted into a percentage which would indicate the feasibility of the product. Below is the formula used to calculate the data:

$$P = \frac{\Sigma X}{\Sigma Xi} x\ 100$$

P: percentage
ΣX: The total score gotten
ΣXi: The maximum score

The product had to achieve at least 80% of the feasibility score to be accepted as feasible. The result then had been interpreted using the score interpretation table presented below adapted from Sulistyo (2011):

Table 1. *Score interpretation guide (Sulistyo, 2011)*

Percentage (%)	Score Interpretation
80-100%	Feasible
60-79%	Fairly Feasible
40-59%	Less Feasible
0-39%	Not Feasible

Considering expert evaluation and validation, the researcher's next steps are based on three possible outcomes: (1) If the final product is accepted as feasible without revision, the researcher can proceed to the main field-testing stage. (2) If the product is accepted as feasible with revision, the researcher needs to modify the necessary parts before proceeding to the next stage of development. (3) If the product is rejected, the researcher needs to develop a new product.

The product was tried out to 168 undergraduate students of the Department of English using questionnaires as the instrument to decide the product's feasibility. The instrument and the formula used to indicate the product's feasibility are the same as those used for the expert validation.

After acceptance as feasible, the product was completed and published. The product is easily accessible via mooc.um.ac.id, making it suitable for all teachers and students.

RESULTS AND DISCUSSION

Result of research and information collecting

There are three activities in this stage including (1) curriculum observation, (2) need analysis from the researchers' view as the lecturer of the course, and (3) students' need analysis. Curriculum observation was done to ensure that the product to be developed fit the learning objectives of the course.

Teaching speaking skills poses various challenges for educators across different contexts, including traditional classroom settings, online environments, and post-pandemic adaptations. Previous language teaching experience of the researchers in delivering these courses inferred that teachers face some hurdles preventing them from being more successful instructors when it comes to EFL speaking classes. The primary problems are (1) limited class time, (2) insufficient resources to run the class effectively, (3) large class size, (4) students not well engaged with their subject matter, and (5) technological barriers.

Then, the interview section was conducted to analyze students' learning needs when they take speaking course and their opinions on the product to be developed. Related to speaking problems faced by students, the result shows that 67% of students are worried about making mistakes when practicing their English. Next, is about the time given to perform a speaking task was not enough. There are 80 % of students who agreed with limited class time. Besides, half of them (50%) agreed that they are e afraid of being the center of attention when they speak in front of the class. Some students often experience a fear of being the center of attention when speaking in front of a large class. This anxiety can stem from several factors and can significantly impact their ability to participate effectively in speaking activities. In line with the previous result, factors that affected this phenomenon are that the students are worried about making mistakes. Then, the presence of many peers can create a heightened sense of social pressure. Students might feel that they are being evaluated by the teacher and everyone in the room, amplifying their nervousness. The next factor is that the students are not experienced with the content of the materials that should be presented. Most students (76%) expressed a lack of familiarity with the roles of a moderator, a presenter, a panelist, and a debater. This indicates an opportunity to provide training and support in public speaking to help students overcome any fears associated with these roles. Students who have had few opportunities to practice speaking in front of others may feel unprepared and overwhelmed by the task. The last challenge is about lack of familiarity with technology. 87% of students rarely utilize a language learning app to practice speaking skills.

By recognizing and addressing those problems, the researchers develop MOOC-based video content to develop more effective strategies for teaching speaking skills and create a more supportive and engaging learning environment for the students. Related to students' interest in the product to be developed, the researcher concluded that the students would be interested in using it. As many as 93% of the students agreed that learning material by listening and viewing a video could save time and be more interesting.

The result of product development

In this stage, the authors write the material for the video content. There are three videos to be developed. There are (1) Seminar presentation, (2) Panel Discussion, and (3) Debate.

The first video is about how to conduct a seminar. This video introduces the students to explore what a seminar is and its attributes (chairperson, moderator, and presenter). The next video is about panel discussions. This video provides a brief overview of panel discussion activities, including the purpose of holding a panel discussion, the conditions necessary for conducting one, the roles and responsibilities within a panel discussion, and finally, the stages involved in conducting a panel discussion.

The last video covers how to organize a debate. It also explains the requirements for hosting a debate. This educational video presents the various aspects of debating, as well as the roles of each debate team.

The result of expert validation

The expert validator of this product was a lecturer who was an expert in media and technology in English Language Teaching. According to the validation result, the validator considered those three videos feasible. The product got a 95,8% feasibility score which has four aspects to be validated: the content, the design and layout, language use, and the back sound. The scores for each aspect of the video can be seen in the table below.

Table 2. *Expert validation's feasibility for each aspect*

No	Expert validation's feasibility score per	Percentage (%)

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	aspect	
1	Content	100%
2	Design and Layout	95%
3	Language Use	91.6%
4	Back sound	100%

Although the video was already accepted as feasible, it still needed revisions due to the speed of the voice in some parts of the video being quite fast. The expert comments that not all viewers may be fluent in the language used in the video.

The result of main field testing

The MOOC video was tested on 168 students using a questionnaire as the instrument to assess the video's feasibility. The content aspect of the video received good feedback from the students. According to the results of the questionnaire, it could be interpreted that most students considered the video content aligned with the topic many as 30.6% of the students agreed that the video content aligns with the topic and 69.4% of students strongly agreed. 93.4% of them agreed that the delivery of materials is clear and easy to understand. 98% of students agreed that the materials are presented systematically and supplemented with examples. Besides, the language use aspect of the video achieved good responses from the students. 92% of students agreed that the video used standard English and was appropriate for their level of understanding. They also agreed that the speed of the video voice is appropriate.

The design and layout aspect of the video also received quite positive feedback from the students' validation questionnaire. All of them agreed that the font choice was easy to read, with as many as 48,5% strongly agreeing and 51,5% agreeing. Regarding the pictures, 48.5% of the students agreed that the illustration in the video helped them understand the topics given, with 42% strongly agreeing. Related to the last aspect of the video 46.4% of students agreed that the background music is not too dominant, thus it does not disrupt the process of understanding the presented material, with 25% strongly agreeing. When calculated, the feasibility score of the video was 89.9%, which passed the feasibility score based on the score interpretation guide. After review by an expert, validation was done and the video was tested in major field testing, it was finally ready for publication to the wider audience.

The research findings discussed highlight the successful implementation of MOOC-based video content in enhancing language education for EFL learners, The study demonstrates the feasibility of the MOOC-based video content by achieving high scores in expert validation (95.8%) and field testing (89.9%). This success underscores the value of the final product as valuable speaking materials for both teachers and students, showcasing the significance of innovative online learning tools in improving language education (Stöhr et al., 2018).

The study aligns with previous research that emphasizes the central role of video content in MOOCs. MOOCs heavily rely on video lectures and demonstrations as a primary learning component, with the bulk of the material being presented in video format (Stöhr et al., 2018; Zee et al., 2017). The effectiveness of MOOC media, particularly context-based video learning, has been shown to improve student understanding more easily, effectively, and efficiently, further supporting the findings of the current research (Perguna et al., 2020).

Moreover, the study's emphasis on the design of video lectures that incorporate animations, live-action videos, casual communication styles, and humor aspects resonates with existing literature that highlights the importance of engaging and diverse video content in enhancing the learning experience in MOOCs (Nordin & Norman, 2018; Zee et al., 2017). Additionally, the impact of students' engagement behavior with videos on their success in MOOCs, as discussed in previous studies, further reinforces the significance of video content in online learning environments (Atapattu & Falkner, 2018; Bonafini et al., 2017).

Besides, Zhu's findings (2021) also found that MOOC instructors can enhance learners' self-management skills through various strategies such as setting clear learning goals, providing time management guidance, offering resources and support, and facilitating navigation within MOOC platforms. These aspects contribute to creating a conducive learning environment that supports students in effectively engaging with the course content and achieving their learning objectives.

Furthermore, the research by Hidayah (2022) highlights the positive impact of MOOCs on English teachers' teaching competencies, showing that participants not only increased their teaching knowledge but also improved their teaching practices and their students' achievement. This underscores the potential of MOOCs to enhance professional development among educators and ultimately benefit student learning outcomes.

Considering the implication of these findings, educators and policymakers may contemplate integrating the MOOCs approach into traditional settings or developing blended courses (Yasar and

Polat, 2021). This suggests a potential paradigm shift in educational delivery methods toward a more technology-enhanced and flexible learning environment. Additionally, the use of video as an EFL learning method has been identified as effective in enhancing students' English performance, indicating the value of innovative approaches in language education (Aprianto and Muhlisin, 2022).

To sum up, the research findings discussed in the study not only validate the feasibility and effectiveness of MOOC-based video content in language education but also highlight the transformative potential of MOOC-based video content in language education within EFL learners' settings.

CONCLUSION

Based on the result of this study, this research highlights the successful adaptation of the R&D cycle in designing a MOOC for the Speaking for Academic Purposes course. The high feasibility scores obtained through expert validation (95.8%) and field testing (89.9%) underscore the robustness of the developed video content. This MOOC not only enriches language learning through its engaging and accessible format but also serves as a valuable resource for teachers and students seeking to enhance speaking skills in academic contexts. Moving forward, further exploration and refinement of MOOC-based educational tools hold promise for advancing language education, fostering a more interactive and inclusive learning environment that meets the evolving needs of students in the digital age.

The development and implementation of MOOC for the Speaking for Academic Purposes course represent a significant advancement in language learning technology. By leveraging various multimedia resources such as instructional videos and online assignments, MOOCs offer a versatile platform that enhances learning experiences. The structured application of the R&D cycle ensured rigorous development and validation of the course materials, culminating in a highly feasible product. Expert validation and field testing substantiated the effectiveness of the MOOC-based video content, affirming its suitability for integration into English Department curricula. The implication of this study underscores the potential of MOOCs to innovate language education by providing accessible, engaging, and pedagogic resources for both educators and students.

However, the study's findings are based on a specific context and population, which may not be generalized to all educational settings. The long-term impact of the MOOC on students' speaking skills was not assessed, therefore it is needed for further studies to determine its effectiveness. Future research should also consider the varying levels of digital literacy among students, which might affect their ability to fully engage with the MOOC content.

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