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Fraters' Learning Approach for Understanding English Philosophical Texts Through the MOOC

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Abstract:

This study examines the impact of the Frater learning approach through Massive Open Online Courses (MOOCs) in enhancing the reading comprehension skills of philosophy students tackling English-language philosophical texts. By integrating pre-tests, post-tests, and qualitative feedback, the research highlights how MOOCs address challenges in understanding dense and complex philosophical material. The findings reveal a significant 11% improvement in reading comprehension after MOOC participation, emphasizing its effectiveness in breaking down intricate concepts into manageable components. Key elements contributing to this success include segmented video content, which facilitates focused learning, and interactive assessments that reinforce comprehension in real time. This research underscores the potential of the MOOC-based Frater approach as an innovative solution for bridging language and content barriers in the study of philosophy.

Keywords: *Fraters' community; interactive assessments; philosophical texts; reading comprehension, segmented learning.*

INTRODUCTION

In the context of higher education, language skills, especially English, play a very important role in students' academic success. This is increasingly important, considering that English has become an international language in various fields of science, including philosophy. Many reference sources, scientific journals, and main textbooks in the field of philosophy are written in English, making this language skill crucial for students to be able to access and understand philosophical thoughts developing at the global level. Therefore, the ability to understand English-language philosophical texts is not only an academic requirement but also a necessity to participate in global intellectual discourse (Casson et al., 2023).

In Indonesia, especially at Parahyangan Catholic University (UNPAR), students at the Faculty of Philosophy often face challenges in understanding English-language philosophical texts, especially in their first year of study. This is understandable, considering that philosophical texts are often very complex, contain complicated terminology, and introduce various traditions of thought that are not always easily accepted by students who are new to philosophy. This challenge is further exacerbated by the limited command of English among most students, who may not have previously received sufficient exposure to this international language during their primary and secondary education (Martín-Monje et al., 2018).

Mastery of English to understand philosophical texts is becoming increasingly important, considering that philosophy as a scientific discipline often relies on in-depth reading of classical and modern texts based on English. In practice, most students at this faculty face difficulties in explaining philosophical arguments which are often dense and layered, especially for students who do not have sufficient English language skills to access the texts directly (Shah et al., 2019). This creates a gap between students' academic potential and their ability to access relevant knowledge.

Traditionally, various teaching methods have been used to overcome this problem. Much English teaching focuses on improving grammar, vocabulary, and other basic language skills. However, these approaches are often less effective in helping students understand complex English-language philosophical texts, which require deeper reading skills and higher critical thinking skills. For example, teaching based on TOEFL or other standardized tests can improve students' language skills in speaking and writing but does not directly improve their ability to understand scientific and philosophical texts in English that require deeper interpretation and understanding (Gieles et al., 2019).

In addition, much of the philosophy material in the curriculum is usually presented in English, either through textbooks or scientific articles. These texts are often more difficult to understand for students who have not mastered English sufficiently (Fitria, 2021). Therefore, an approach is needed that not only improves students' English skills but also gives them the tools to understand and engage with these texts critically (Fitria, 2023).

For this reason, an approach has emerged that can overcome these challenges, namely the learning approach *Frater*. This approach is based on the principle of community-based learning, where students who are more experienced or who are already more fluent in English help their friends who are newer or who are having difficulty (VanLeeuwen et al., 2020). Frater studies utilize collaboration and discussion to deepen understanding of difficult material, as well as develop critical thinking skills. This approach not only emphasizes individual teaching but also emphasizes the importance of social interaction and sharing knowledge in groups to increase mutual understanding (Cole & Scribner, 1978).

Learning with the basis of Frater is very relevant in the context of philosophy education, where many philosophical ideas and arguments require discussion to be understood more thoroughly. In addition, this approach can help students who have difficulty understanding English texts in a more structured and collaborative way. Through Frater studies, students can discuss and help each other in solving problems and understanding complex philosophical texts. This approach is expected to reduce the ability gap between students with different levels of English mastery while increasing understanding of texts that are difficult to understand (Stehle & Peters-Burton, 2019).

Apart from that, developments in educational technology also provide opportunities to overcome this problem. One innovation that is increasingly popular in higher education is the use of Massive Open Online Courses (MOOCs) (Agustini et al., 2023). This platform allows students to access various learning materials flexibly, anytime and anywhere. By integrating MOOCs into learning, students can learn independently with structured guidance and interact with other students through discussion forums provided by the platform (Aparicio et al., 2019). The advantage of MOOCs is their ability to present material in a more interactive way, such as through videos, quizzes, and gamification-based learning, which can help students understand the material more deeply and structured (Rahim, 2024).

The use of MOOCs in the field of philosophy can provide broader exposure to English-language philosophical texts. Through this platform, students can access lecture videos, articles and interactive discussions that make it easier for them to break down and analyze these texts (Das et al., 2024). In addition, MOOCs allow students to study independently in a more flexible way, allowing them to adjust their learning pace according to their abilities. However, to fully utilize MOOCs in philosophy learning, an approach is needed that combines this technology with social and collaborative aspects, which can increase student engagement and understanding (Wirani et al., 2022).

In this context, combining learning the frater approach with MOOCs platforms is a very relevant solution. This approach offers the opportunity to create a more inclusive and collaborative learning experience, where students can learn together through digital platforms while getting support from more experienced classmates (AlAli & Wardat, 2024). Thus, they can utilize technology to improve their understanding of English-language philosophical texts without feeling the difficulty of studying alone or feeling isolated in their learning process (Pellas, 2024)

The main aim of this research is to examine the effectiveness of combining learning the frater approach in learning English-language philosophy through MOOCs. This research focuses on how this approach can improve students' ability to read and understand philosophical texts written in English. In this context, students are expected to not only improve their language skills but also deepen their understanding of complex and abstract philosophical thoughts (Alzahrani & Alhalafawy, 2023). This research aims to contribute to the development of more innovative and effective teaching methods, which can help students overcome the challenges of learning English and philosophical texts in the future.

METHOD

This research was conducted in the 2023-2024 academic year at the Faculty of Philosophy, Parahyangan Catholic University, with participants consisting of first-year students. The odd semester course begins in September 2023. This study adopted an action research methodology consisting of two intervention cycles, and is often used in educational contexts to implement as well as assess interventions in real-world classrooms, with a focus on iterative improvement (Stringer & Aragón, 2020).

In the first cycle, students were asked to follow a pre-test to measure their basic reading comprehension. After the pre-test, they were involved in a Massive Open Online Course (MOOC) specifically designed for this course. This MOOC includes video lectures divided into short segments, a technique known as chunking. This technique has proven effective in increasing focus and understanding by allowing students to process information in smaller, easier-to-digest chunks (Seidel, 2024). Each video lecture is followed by an interactive assessment designed to reinforce the material and test student understanding in real time. This interactive assessment, which is commonly implemented in MOOCs, provides immediate feedback, which has been proven to improve student performance (Chen & Yen, 2021).

At the end of the first cycle, students are given a post-test to evaluate their understanding after following the intervention. The data collection process includes qualitative and quantitative analysis. Quantitative data was obtained from a comparison of pre-test and post-test scores, while qualitative data was obtained from student feedback regarding the effectiveness of the MOOC and their learning experience. The average student pre-test score was 60%, while the post-test score showed an increase of 11%. These results are similar to findings in other studies using MOOCs for language education (Buhl et al., 2018). In addition, this data was also further analyzed by considering various demographic variables, such as previous exposure to English and familiarity with online learning platforms.

This two-cycle methodology, which combines qualitative feedback and quantitative measurements, is consistent with previous research on the efficacy of MOOCs in improving reading comprehension, particularly in complex subjects such as philosophy. This research is supported by an action research framework that emphasizes ongoing evaluation of practices implemented in teaching (Elliott, 2021). In action research, the researcher focuses on investigating the resolution of identified problems and involves continuous reflection and evaluation of the quality of the learning experience (Al-Ababneh, 2020).

Whitehead and McNiff (2012) explained that action research is different from other alternative research methodologies because researchers do not only act as passive observers. Instead, researchers play an active role in designing and implementing interventions, as well as conducting critical analysis of existing knowledge. This research adopts these principles, where the researcher is directly involved in the development and implementation of the MOOC-based intervention as well as in the evaluation of the results obtained. The researcher begins this investigation from a position of knowledge, which according to Whitehead and McNiff, is essential to achieving a deeper understanding of the phenomenon under study (McNiff & Whitehead, 2012).

In addition, the action research methodology applied in this study also emphasizes the importance of four stages: formulating action plans, implementing actions, observing results, and analyzing and reflecting on the results obtained (Sirait et al., 2023). Each stage in this process aims to improve and optimize the interventions carried out, with the hope of improving the student learning experience in English philosophy classes. Referring to the opinions of Kemmis and McTaggart, this research uses a classroom action research method which includes the stages of planning, implementation, observation and reflection (Putra et al., 2021). This method is very relevant in the context of higher education, especially when dealing with complex material such as philosophy. In this case, action research allows researchers to explore

interventions that are more specific and relevant to students' needs, as well as providing space for the development of more effective learning.

In addition, this research uses a mixture of qualitative and quantitative analysis. Qualitative data was obtained through interviews and student feedback regarding their experiences in participating in the MOOC. Quantitative data, on the other hand, is obtained through a comparison of pre-test and post-test scores, which illustrate changes in students' understanding of the material being taught. The combination of these two approaches allows for a more comprehensive evaluation of the results achieved by students after participating in MOOC-based interventions.

In this research process, the temporal aspect of action research is also important, especially with regard to the duration of the intervention which was carried out for seven weeks. During this period, students participate in video-based learning, text assessments, and interactive discussions all aimed at improving their understanding of complex readings in philosophy courses. With a structured approach and based on empirical data, this research aims to evaluate the efficacy of MOOCs in improving students' reading comprehension, as well as providing deeper insight into their learning experiences.

This research also recognizes the importance of feedback from participants, which will provide valuable information about how MOOC content is delivered and received by students. This feedback will be analyzed to see if a video-based approach, interactive assessment, and discussion can optimize their understanding. Thus, this research does not only rely on quantitative measurements, but also pays attention to qualitative aspects that involve students' direct experiences in the learning process. This research proposes the use of a two-cycle classroom action research method with a MOOC approach as an innovative learning strategy.

By combining qualitative and quantitative analysis, this research aims to provide a deeper understanding of the effectiveness of MOOCs in improving students' reading comprehension in English philosophy classes. In this context, action research methodology is not only a tool for evaluating and improving learning practices but also for better understanding how technology-based interventions can be effectively implemented in higher education.

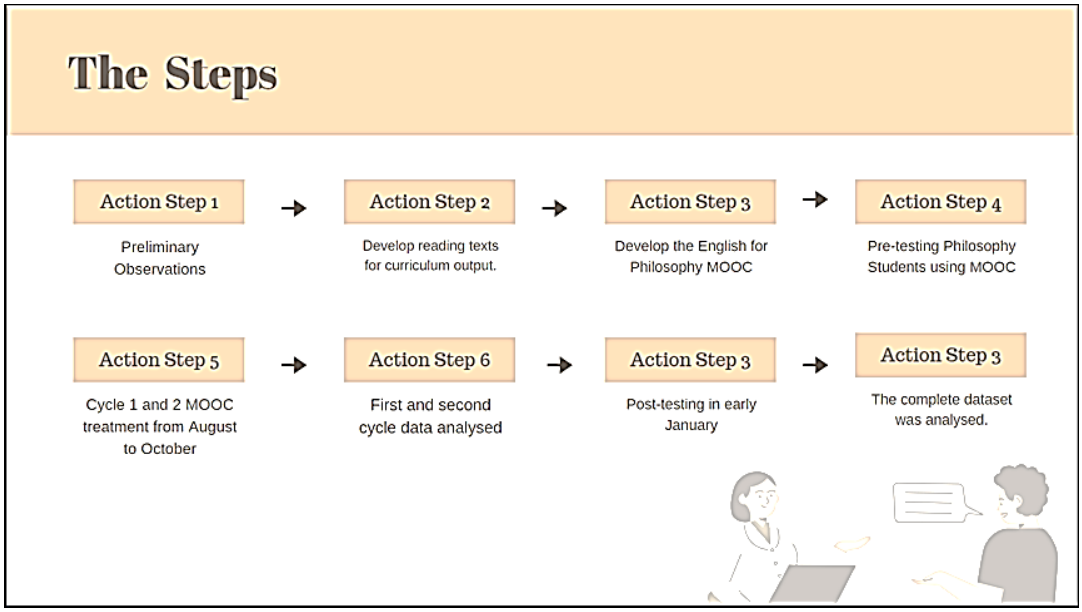


Figure 1. Research Steps.

RESULTS AND DISCUSSION

Process of Implementing a MOOC in English for Philosophy

The inclusion of MOOCs of these subjects in our learning platform serves to enhance the online learning environment. The initial step involves examining five selected philosophical books written by five prominent philosophers, specifically tailored to individuals with less knowledge in the field. This text focuses on a transformative and educational journey that promotes the development of analytical reasoning, sparks intellectual interest, and fosters a deep sense of communal and collaborative knowledge building. Three

paragraphs have been deliberately chosen as a reading test within the TOEFL standards, with word counts ranging from 250 to 300 words, originating from each respective philosopher (Du & Qian, 2022).

A minimum of three to five video explanations, each ranging from five to eight minutes, should be provided for each topic. These videos should aim to explain the main concepts presented in each paragraph of a philosophical text (Bylieva et al., 2021). The videos are created using deliberate chunking techniques, which aim to improve the viewer's ability to concentrate on the subject matter and increase their endurance. This further strengthens the temporal constraints associated with MOOCs (Afıfy, 2020) In addition, our services include providing an evaluation module within each reading text. This assessment improves reading comprehension skills through analysis of key concepts, lexical comprehension, quotations, and end captions. The selection of multiple-choice questions is usually used as a benchmark for exams such as TOEFL (Yelubay et al., 2022).

Massive Open Online Course (MOOC) offers collaborative sessions where students have multiple opportunities to engage in interactive modes that stimulate learning engagement. Each of these processes requires a minimum of 1 month of development. During the first cycle, a MOOC pre-test was given to students who used it Learning Management System (LMS) to assess their reading skills in understanding the short philosophical texts provided (Fonda & Sumargiyani, 2018). Pra you are then given, followed by implementation of treatment, which includes the use of video chunking, assessment activities, collaborative sessions, and evaluation for each text. The recommended duration for treatment is a minimum of six weeks, starting from late August to early October (Darmaji et al., 2018). This time frame allowed one week to be allocated for comprehensive analysis and understanding of each text (Serevina et al., 2018).

This cycle is then continued with the administration of a post-test as an assessment tool to evaluate participants' comprehensive skills in understanding the material. Each student needs a minimum of 45-55 minutes to complete all the questions in the pre-test. After completing treatment in cycle 1, participants demonstrated an average completion time of 35–55 minutes for an equivalent number of questions. Evidence shows that they can complete all questions 10 minutes ahead of schedule.

MOOC Integration on Improving Reading Comprehension Skills of Philosophy Students

The Fraters' learning approach, which emphasizes collaboration and interaction between students, is very relevant in the context of learning philosophy through English Massive Open Online Courses (MOOCs). The integration of MOOCs in philosophy learning allows students to improve their reading comprehension skills in a more flexible and structured way. As pointed out by Kuang & Zheng (Kuang & Zheng, 2022), students with a strong background in canonical texts of philosophy tend to have greater reading capacity compared to their less experienced peers. However, many students have difficulty understanding philosophical texts that are predominantly written in English (Stehle & Peters-Burton, 2019). In this case, MOOCs offer a solution that allows students to engage more deeply with the material, even if they have limited English language skills.

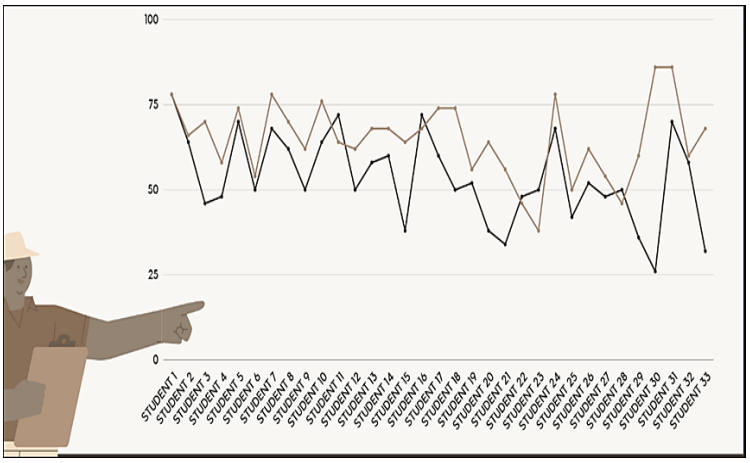
The MOOC approach combines various methods, including instructional videos, interactive activities, and online evaluations, providing opportunities for students to understand philosophical texts in depth without the limitations of time or space (Du & Qian, 2022). Frater learning in this context can be interpreted as collaboration between students on various virtual platforms that support discussion and exchange of understanding. This improves the quality of learning because students can help each other overcome difficulties in understanding the material, which is often complex and abstract in philosophy.

In research conducted by Malmsten (2020), it was stated that a person's ability to absorb information increases when they are actively involved with the material through various means, such as reading, speaking, or writing. With the instructional videos provided in MOOCs, students can break down long texts into more easily digestible segments, as well as strengthen their understanding of key concepts in philosophy. This method introduces an effective chunking technique, which facilitates deep understanding without reducing the required learning time (Malmsten et al., 2020).

Results of the pre-test And post-test conducted on philosophy students also show that MOOCs can significantly increase the efficiency of students' understanding. Before participating in MOOC-based learning, students need around 45 to 55 minutes to complete the pre-test. However, after they took the MOOC course, the time required to complete the same test dropped to 35 to 55 minutes, indicating an increase in efficiency in understanding philosophical texts. This decrease in time reflects an increase in the

ability to understand more quickly and effectively, which can be seen as an impact of the integration of MOOCs in philosophy learning (Popel et al., 2020).

Figure 2. Effectiveness of MOOCs for Improving Philosophy Students' Reading Comprehension.



(Graphical Comparison of Student Pre-Test and Post-Test Scores)

In addition, MOOC integration also improves the quality of independent study and self-evaluation. As many as 80% of students reported a significant increase in their understanding of philosophical texts after taking the MOOC and felt better prepared to evaluate themselves in understanding the material. With the virtual collaboration feature, students can work together in private discussion groups, which enriches their learning experience. These sessions not only involve reading skills but also speaking, listening, and writing skills—four linguistic skills that are interrelated and support each other in improving overall understanding of philosophical texts (Purohman, 2018).

By using a collaborative learning approach, MOOC learning allows philosophy students to not only understand English texts better but also develop sharper critical thinking skills and the ability to analyze and discuss philosophical ideas in more depth (Bylieva et al., 2021). The effectiveness of this approach was further demonstrated in the increase in pre-test and post-test scores, with statistical analysis revealing an 11% increase in philosophy students' reading comprehension. This shows that the integration of MOOCs with the seminarian's learning approach not only facilitates the understanding of English-language philosophy texts but also speeds up the learning process, making it more efficient and interactive.

In the context of the seminarians' learning approach to understanding English-language philosophy texts through MOOCs, analysis of pre-test and post-test scores revealed significant improvements in students' reading comprehension skills (Wu & Luo, 2022). Prior to the MOOC-based intervention, philosophy students involved in the program demonstrated an average pre-test score of 60%. However, after seven weeks of exposure to the MOOC-based approach, which combines various learning methods such as instructional videos, interactive activities, and online evaluations, the student's average score increased to 71%. This increase in scores not only reflects a better understanding of English-language philosophy texts but also indicates a change in how students manage their test-taking time. In the pre-test, students took an average of 45 to 55 minutes to complete the questions, while after participating in the intervention, the post-test completion time decreased to between 35 to 55 minutes, which shows that students are now more efficient in answering questions thanks to improved understanding. deeper.

This MOOC-based approach, which uses online learning platforms and integrates chunking techniques in instructional videos, has been shown to have a positive impact on philosophy students (Ruipérez-Valiente et al., 2021). By using technology that allows flexible access and independent learning, students can not only improve their reading comprehension but also develop relevant skills in understanding English-language philosophical texts (Xiao & Yue, 2024). Statistical tests with paired sample t-tests further strengthen these results, showing that the increase in scores is not a coincidence but is a direct result of applying the MOOC approach in learning philosophical texts. The application of MOOCs in philosophy learning not only encourages student involvement but also creates a more

collaborative and independent learning atmosphere in accordance with the principles of Fraters' learning approach, which prioritizes education based on collaboration and deep intellectual development.

In the context of learning philosophy through the MOOC approach, the influence of intervention on understanding philosophical texts can be seen not only through quantitative analysis but also through students' perceptions of the level of difficulty of the texts they study (Xiao & Yue, 2024). Students were asked to rate the level of difficulty of the texts they read before and after exposure to a MOOC-based intervention, which aimed to deepen their understanding of English-language philosophy material. The data collected revealed interesting insights into how learning experiences through MOOCs influence students' perceptions of the complexity of the philosophical texts they encounter.

Before the intervention, the majority of students felt that the text The Art of Loving works by Erich Fromm and The Geography of Genius Eric Weiner's work is relatively easier to understand compared to other more complicated texts, such as Homo Deus by Yuval Noah Harari and Turing's Essentials by Alan Turing. The latter two texts, which contain heavy concepts and deep philosophical arguments, were considered more difficult by students. This assessment is based on how easily students can identify the main arguments, understand the terminology used, and follow the flow of thought that develops in the texts. Thus, texts like The Art of Loving, The Geography of Genius, which are more structured with a simpler language style, are relatively easier for students to digest, while texts such as Homo Deus and Turing's Essentials require a deeper and more reflective understanding to be mastered well. Look at the following diagram.

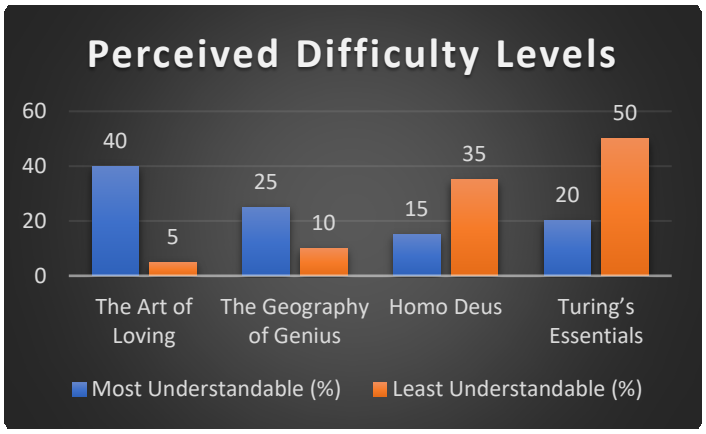


Figure 3. Difficulty Rating Chart for Text

However, after following the MOOC-based intervention for seven weeks, with various learning activities such as instructional videos, self-evaluation, and collaborative discussions, students' perceptions of the difficulty of this text experienced significant changes. The Art of Loving And The Geography of Genius, which was previously considered easy, is now a text that is easier for students to understand. This indicates that the MOOC approach is successful in helping students improve their understanding of these philosophical texts without even reducing the quality of the material contained therein. Students feel more confident in accessing and understanding the ideas contained in the text after they are exposed to a more interactive and technology-based learning approach (Du & Qian, 2022).

In contrast, although there was an increase in comprehension after the intervention, more complex texts such as Homo Deus and Turing's Essentials remain a challenge for students. This reflects the fact that although MOOC-based approaches are beneficial in facilitating easier understanding of texts, texts that are intrinsically more difficult and require higher levels of critical thinking skills still require a more in-depth approach (Ouyang et al., 2020). Students admitted that, although they felt better able to understand certain aspects of the texts following the intervention, they still felt that these texts required more time, analysis, and effort to understand well. Text like Homo Deus And Turing's Essentials does contain heavy topics such as artificial intelligence, future technology, and human evolution, which still require a deeper understanding and higher critical reflection.

To dig deeper into students' perceptions of text difficulty, qualitative data was also collected through feedback forms completed by students after completing the MOOC-based intervention. This feedback

provides insight into students' personal experiences in dealing with the philosophical texts they study. Most students report that they find it helpful to have tools in the course, such as instructional videos that break down the material into easier-to-understand (chunking) parts and interactive exercises that test their understanding of key concepts. For example, videos that explain difficult terms and highlight the main ideas of each philosophical text allow students to more easily grasp the basic ideas proposed by the philosophers, even if the texts themselves sound complicated at first.

However, although students reported that they felt more confident in understanding previously difficult texts, they also realized that there were limits to how much their understanding could develop without direct instruction or further discussion with the instructor or fellow students. More complex texts such as Homo Deus and Turing's Essentials require more in-depth interaction, with group discussions or guidance from more experienced instructors, who help students to contextualize the big ideas contained in these works. Although MOOCs give them the opportunity to interact virtually, some students feel that a deeper learning experience can only be achieved with more time to reflect and discuss the text (Bylieva et al., 2021).

From a Frater-based learning perspective, this approach emphasizes the importance of collaboration and discussion between fellow students. In this MOOC-based course, students are given the opportunity to share their understanding through discussion forums, where they can delve further into the text by asking questions and responding to their peers' thoughts. Although technology allows them to access material anytime and anywhere, the essence of the Fraters' learning which focuses on intellectual and collaborative engagement, provides a more personal and in-depth nuance in understanding complex material (Ahn, 2011). Such discussions are an important means of enriching the learning experience and helping students face greater challenges in difficult texts.

Feedback from students regarding MOOC course content applied to the study of English-language philosophical texts provides invaluable insight into which components were most effective in enhancing their understanding. The majority of respondents, approximately 65%, reported that video content was the most useful tool in helping them understand philosophy material. This shows that visual and auditory methods of delivering material really support the learning process, especially in overcoming the complexity of philosophical texts, which are often difficult to understand (Rahmaturrizki & Sukmayadi, 2021). Video content presented in short pieces provides an opportunity for students to digest information gradually so they do not feel burdened with too much information at once (Faishol & Mashuri, 2022). This technique, known as chunking, allows them to process information in a more structured and manageable way.

In addition, 20% of respondents stated that interactive quizzes were also an important component that supported increasing their understanding. This quiz provides students with the opportunity to actively test their knowledge of the material they have studied while also getting direct feedback. This is important in strengthening their learning, as it allows them to assess the extent to which they have understood the concepts taught and identify areas that may still need further review. With interactive evaluations, students can become more engaged in the material and feel more confident in the application of their knowledge.

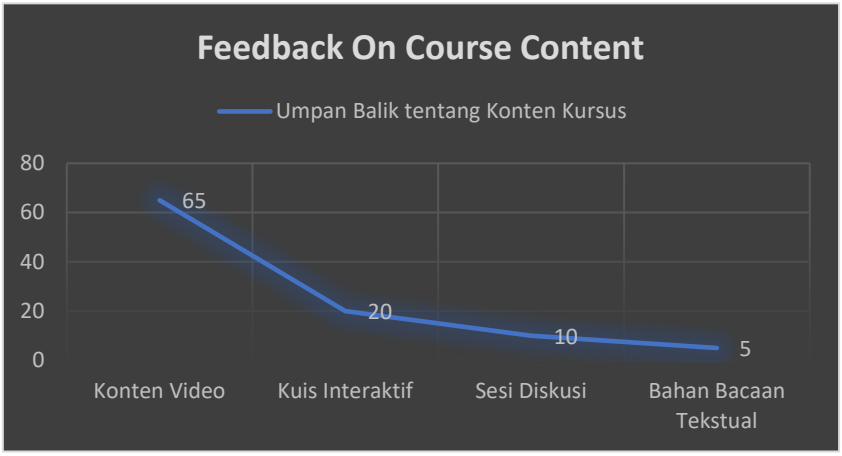


Figure 4. Most Useful Course Aspects Chart

Qualitative feedback gathered from students further revealed that shorter video chunks were highly appreciated as they provided enough time for students to digest and understand the information before moving on to the next section. With shorter and more focused videos, students can listen better without feeling pressured or overwhelmed. Many students also report that they find it easier to repeat the material presented in these videos, allowing them to understand more deeply if there are concepts they did not immediately grasp the first time they watched them.

Thus the feedback given by students regarding this course shows that the combination of video content and interactive quizzes is very effective in improving their understanding of English-language philosophy texts. These two elements function as complementary learning strategies, providing opportunities for students to access information in a flexible and structured manner while providing opportunities to test and strengthen their understanding through self-evaluation. This approach creates a more dynamic and interactive learning environment, which not only supports independent learning but also encourages collaboration and personal reflection, in accordance with the principles implemented in the Fraters' learning approach. Thus, this feedback provides further evidence of the effectiveness of using MOOCs in improving students' understanding of complex philosophical texts in English (Bylieva et al., 2020).

Time Management and Testing Performance

Time management and testing performance are crucial aspects in assessing the success of MOOC-based interventions (Voudoukis & Pagiatakis, 2022). Based on reports from students, before the intervention, they spent an average of 50 minutes completing the test. However, after taking the MOOC course, students were able to complete the same number of questions in slightly less time. About 35% of students reported that they were not only able to complete the test more quickly but also found it easier to understand and answer the questions asked.

This improvement in time management is a clear indicator that the MOOC-based intervention not only succeeded in improving their understanding of complex philosophical texts but also helped them manage their time more efficiently when taking exams (Sathanarugsawait et al., 2021). By analyzing the duration required to complete the pre-test and post-test, it can be concluded that students' reading and comprehension skills become more efficient as the course progresses. The average time required to complete the pre-test was between 45 to 55 minutes, while after the intervention, this time was reduced to 35 to 55 minutes, although the number of questions remained the same. This decrease in time shows that students are not only faster in processing and understanding the material but also more efficient in answering questions that previously seemed difficult. This confirms that MOOCs not only improve their understanding but also increase their cognitive efficiency (Voudoukis & Pagiatakis, 2022).

As many as 35% of students reported that they completed the post-test much faster compared to the pre-test, which they attributed to their increased understanding during the course. Meanwhile, another 65% of students completed the test at almost the same time as the pre-test, but they reported feeling calmer and more focused when answering questions, indicating that they experienced improvements in understanding and concentration. This shows that although the time required remains similar, the quality of understanding and ability to stay focused during the exam is much better.

To ensure the accuracy of these findings, quantitative data showing improvements in reading comprehension were cross-checked with qualitative feedback from students. Triangulation of these data revealed that those who reported better comprehension also demonstrated better performance in the post-test, strengthening the claim that MOOC-based interventions can improve both text comprehension and time management abilities (Du & Qian, 2022). Additionally, the analysis also showed that students who already had experience in self-directed learning reported a more significant increase—around 15%—compared to those who were using the MOOC platform for the first time, who experienced an increase of 7%. This suggests that although MOOCs are very effective in improving understanding, students who are used to self-directed learning may be quicker to respond and optimize their use of these platforms, while new students may need a little more support and guidance.

Therefore, by combining quantitative analysis of test scores and qualitative feedback from students, we were able to get a complete picture of how the MOOC intervention not only improved philosophy students' understanding of English-language philosophical texts but also helped them become more efficient in managing their time. while taking the exam. This suggests that MOOCs can serve as a highly effective tool

in supporting independent learning, although it is important to provide additional support for less experienced students (Du & Qian, 2022).

Discussion as a Method

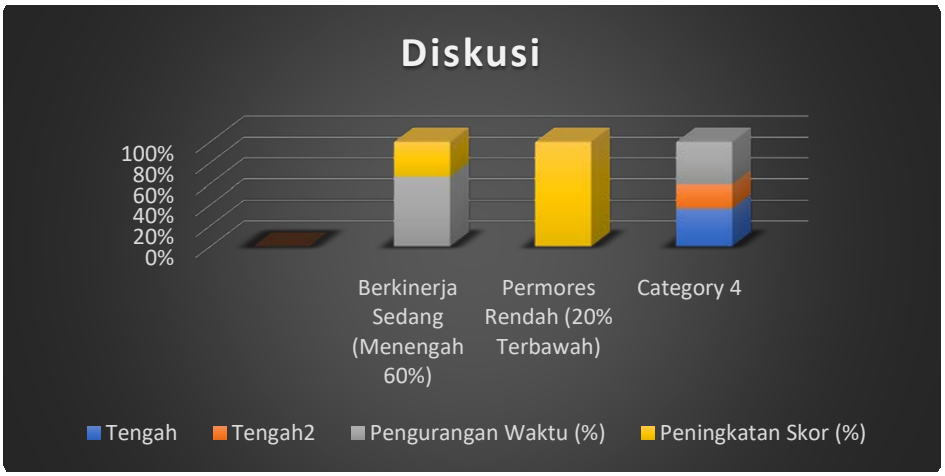


Figure 5. Student work analysis diagram

In the analysis of student performance, three distinct groups can be identified based on the time they spent completing the test and the increase in understanding they experienced after participating in the MOOC-based intervention. Students in the top 20% showed the most significant reduction in time, with their test completion time reduced from 45 minutes in the pre-test to 35 minutes in the post-test. This 22% reduction in time is in line with an increase in their reading comprehension score of 15%. This suggests that well-structured MOOC video content allows students in this group to quickly understand the concepts taught and apply them efficiently on exams (Ruipérez-Valiente et al., 2021). Short, focused chunks of video give them the opportunity to process information in manageable chunks, minimizing cognitive load, and allowing them to respond to test questions more quickly.

The majority group, who were in the middle 60% in terms of performance, showed a 20% reduction in time, from 50 minutes in the pre-test to 40 minutes in the post-test. Despite the improvement in time efficiency, their comprehension improved by about 10%, indicating that although they became faster at completing the tests, their understanding of the material also improved significantly. This suggests that the MOOC course structure, with short videos and interactive quizzes, helps students in this group to better understand philosophical texts in a more structured and efficient way (Wu & Luo, 2022).

However, in the bottom 20% group, the results were less adequate. Students in this group did not show a significant increase in time, with the time required to complete the test remaining around 55 minutes both before and after the intervention. Although they showed a slight increase in scores, namely about 5%, this indicates that they may have had greater difficulty managing time and understanding the material. These challenges can be caused by underdeveloped basic skills or lack of experience in independent learning, which increases the level of difficulty for them in taking the course. There may be a need for more support or personalized learning modules to help them improve their understanding and time management skills in the future.

The approaches used in MOOC courses, such as segmented videos, interactive quizzes, and well-structured learning, allow students to understand key ideas more efficiently. By breaking down material into smaller, manageable chunks, students' cognitive load can be minimized, which is in line with cognitive load theory which suggests that breaking down complex information into smaller chunks can reduce mental strain and improve comprehension.

Additionally, the repetition of questions in interactive quizzes helps students become more familiar with the types of questions that may appear in the final test, allowing them to improve their speed and accuracy in answering. This leads to an improvement in their time management, which is also reflected in a reduction in the time required to complete the test. However, challenges remain, especially for underperforming

students (Martín-Monje et al., 2018). They may need further assistance in terms of mastering basic skills or developing more effective learning strategies (Bylieva et al., 2021). Providing further scaffolding or more personalized learning may be a solution to overcome these challenges and help them improve their learning outcomes in future course iterations.

Thus the findings from this analysis confirm that a MOOC-based approach, especially when supported by video content and interactive quizzes, can effectively improve students' reading comprehension skills in the context of English-language philosophical texts (Aparicio et al., 2019). The significant increase in post-test scores and reduction in the time required to complete the test indicate that MOOCs not only improve understanding of the material but also help students manage their time more efficiently (Du & Qian, 2022). Videos, as a major component of this course, have proven to be very effective in conveying complex philosophical ideas in a more understandable manner, facilitating a faster and more efficient learning process. However, challenges remain, especially for students who need more support, highlighting the importance of further adapting courses to meet the needs of diverse students.

CONCLUSION

Frater's Learning Approach for understanding English-language philosophical texts through MOOC (Massive Open Online Course) has proven effective in improving the reading comprehension abilities of philosophy students. In this context, segmented video-based learning and interactive assessments become very helpful tools in simplifying and breaking down complex philosophical texts into parts that are more easily digested by students. The average increase of 11% in post-test scores and reduction in test completion time indicate that integrating MOOCs into philosophy learning produces significant gains in both reading comprehension and time efficiency.

Key features of this approach, such as learning videos combined with interactive quizzes, provide students with the opportunity to access material flexibly and at a pace appropriate to their abilities. This is important in philosophy education, where deep engagement with texts is key to understanding complex ideas. Moreover, students who had previous experience with self-directed learning methods showed greater improvement, indicating that MOOCs not only improve reading comprehension but also hone self-directed learning skills that are essential in philosophy education. This approach is very relevant for students who have limited access to English language instruction because they can utilize MOOC features to overcome language difficulties independently.

However, this research also underscores the importance of providing additional support to students who may struggle with technology or have not yet mastered basic English skills. For this group, the MOOC approach requires further guidance or additional material so that they can gain maximum benefit. Thus, further integration of scaffolding, personalized learning, and technical support would be helpful to bridge the gap in understanding philosophical texts. The MOOC-based learning approach developed in this research is proven to have great potential for improving philosophy students' reading comprehension skills, as well as developing their independent learning abilities. These findings are not only relevant for philosophy education but also open up opportunities for the application of similar approaches in other disciplines. Further research could explore the long-term applicability of this approach, as well as how it can be further expanded and adapted for various educational contexts, particularly in helping students overcome challenges in comprehending English-language texts.

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