

MOOC as a technology-focused TPD for EFL teachers in Indonesia

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ABSTRACT

This study examines participants' expectations, perception of the learning experience, and factors contributing to satisfaction with the MOOC of a technology-focused TPD program, a professional development initiative focused on enhancing English teachers' technology integration skills. It was participated by 200 EFL teachers in Indonesia. They were engaged in the program components such as MOOC modules, Classroom Ideas, and Community of Practice (CoP). A mixed-methods approach combined pre- and post-MOOC surveys for quantitative data collection and thematic analysis of interview data to gain deeper insights into participants' responses. The findings indicated high participant expectations, reflecting initial interest and commitment to the program. The participants demonstrated dedication to learning and acquiring new knowledge and skills, highlighting the potential impact on learning outcomes. However, time management and internet connectivity challenges posed barriers to translating learning into practice. The CoP component was also highlighted for improvement to support the learning process better. These findings contributed to teacher professional development by offering insights for program designers and policymakers. Aligning the program with participants' needs, providing ongoing support, and fostering collaboration could enhance the MOOC's technology-focused program's effectiveness and promote the professional growth of English language teachers in Indonesia.

Keywords: Classroom Ideas; Community of Practice; English language teaching; MOOC; teacher professional development

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INTRODUCTION

The field of education has undergone significant transformations with the advancement of technology, and English language teaching (ELT) is no exception (Xu et al., 2019). Traditional paper-based resources have given way to interactive digital platforms, while technologies like Artificial Intelligence, Virtual Reality, and Augmented Reality have revolutionized language instruction (He, 2023). Ertmer and Ottenbreit-Leftwich (2010) argue that technology integration into teaching can extend and increase teaching effectiveness in ways. They furthermore argue that appropriate use of technology can facilitate students' meaningful

learning, that is enabling students to construct deep and connected knowledge. To keep up with the advancement of technology and pedagogical innovation, continuous professional development (TPD) programs such as workshops, conferences, and other forms of TPD programs or research become necessary for teachers to be involved in. TPD on the use of technology for teaching has been accepted to foster improvements in teaching and learning (Ammade et al, 2018; Kopcha, 2012; Rienties et al., 2013).

Despite the positive impacts of technology integration in teaching and learning, English language teachers in Indonesia face challenges in

their participation in TPD programs focusing on technology. They are reported to encounter problems with low resources, limited access to the internet, and lack of knowledge and experience in using technology (Muslem et al., 2018). They also face challenges relating to program timing, minimum information from the provider regarding workshop schedules, and a mismatch of topics with their needs of professional development in areas such as student assessment, classroom management, and information technology skills (Avillanova & Kuswandono, 2019). In response, Hidayat (2018) highlights the importance of addressing the challenges and evaluating the effectiveness of English language teacher education programs in incorporating technology. He also suggests the need for evaluating English language teacher education programs.

Kirkpatrick's Model has played a significant role in shaping the field of teacher training and professional development, including its use in English Language Teaching (Piryani et al., 2018; Wu et al., 2016). This Model has been used to evaluate training programs, deriving from the reaction, learning, behavior, and result (Kirkpatrick & Kirkpatrick, 2006). Each level gathered different types of data from the training participants. The reaction level collected the participants' perceptions and satisfaction with the training program. Meanwhile, the learning level explores the participants' knowledge and skills obtained through the program. Furthermore, the behavior level examines the application of learning practice, and the resulting level evaluates the program's overall impact on the participants' teaching practice and student learning outcomes (Rajeev et al., 2009; Ruiz & Snoeck, 2018).

Many educators and training providers use Kirkpatrick's Model to evaluate their TPD program. Educators can assess the extent to which participants are satisfied with the aspects of the TPD program, such as the content, delivery methods, resources, or support they received during the course (Fennelly-Atkinson & Dyer, 2021; Yükseltürk, 2007). By evaluating such reactions, understanding teachers' engagement, motivation, and perceived usefulness of the TPD program can lead to further development and refinement. Evaluating the learning level is also helpful for developers to examine the impact of a professional development program on the development of participants' knowledge and skills in applying what they have learned into practice (Guskey, 2002). Meanwhile, evaluating the behavioral level could help to examine how the participants adapt their knowledge and skills to their workplace. All in all, the overall effectiveness of a TPD program can be deepened through understanding this evaluation model.

Massive Open Online Course (MOOC) has become a new trend among educators to get access

to TPD programs as it provides scalable and cost-effective PD opportunities. It responds to the challenges that usually arise in conventional TPD programs, such as time and distance (Misra, 2018). It emerges as a promising solution, providing flexibility and accessibility to online PD for educators through self-paced courses, access to online materials, and, in some cases, facilitating collaboration among MOOC participants. According to Kennedy Laurillard (2019), MOOCs are particularly useful in reaching many participants at minimal costs, making them an appealing option for TPD programs.

Numerous studies have widely discussed the potential benefits of MOOCs for English language teachers. MOOCs could provide an efficient and cost-effective way of enhancing teachers' professional development through high-quality education (Jobe et al., 2014) and a solution for teachers with geographical and financial limitations who need support accessing traditional TPD opportunities (Vázquez & Montoya, 2015). MOOC programs have also proven to support teachers in boosting their content and pedagogical knowledge (Vivian et al., 2014), provide access to open educational resources on a large scale (Vázquez & Montoya, 2015), and serve as a powerful vehicle to improve classroom practices through the improvement of teachers' pedagogical knowledge (Koukis & Jimoyannis, 2019).

Regarding developing teachers' technological knowledge and skills, MOOCs have been essential in directing teachers' positive perceptions toward using technology for teaching and learning. Most participants in Ardavani's (2020) study about MOOC-based professional development believed that technology-related content would enhance their teaching skills. Participants become more familiar with digital tools and resources through this MOOC program, including educational apps and online platforms. They also mentioned that they learned how to integrate these tools into their teaching practices and develop their understanding of these tools. Furthermore, Palacios-Hidalgo et al. (2020) found that English teachers positively perceive the usefulness of technology-related content in MOOCs. These findings suggest that MOOCs can effectively enhance English teachers' teaching practices by providing relevant and practical technology-related training.

Several key factors determine the success of MOOCs in teacher professional development, among others are the technological infrastructure which facilitates learning and engagement, allowing participants to connect, collaborate, and access course materials (Saadatmand & Kumpulainen, 2014), and well-designed MOOCs with high-quality content and a user-friendly interface which could contribute to participants' satisfaction and motivation (Murray, 2014). Social tools within

MOOCs could also foster peer-to-peer interaction, community building, and information sharing (Alario-Hoyos et al., 2013). Additionally, participants learning experiences and performance can be enhanced through guidance and support from instructors, mentors, or facilitators (Koukis & Jimoyiannis, 2019). Facilitators can give feedback and personalizing assistance to help participants stay on track, deepen their understanding, and improve their learning experiences.

Evaluating MOOC programs is essential to ensure the effectiveness of the programs in achieving learning objectives. Through program evaluation, MOOC developers can identify areas that need improvement, such as content delivery, platform, instructional design, and learner engagement. MOOCs' critical success factors and quality should be empirically tested and proven (Gamage et al., 2015). Interaction among participants and facilitators (Nkuyubwatsi, 2013), the quality of learning activities, and the targeted learning outcomes (Ferguson et al., 2017) commonly become the focus area that needs to be paid attention to by MOOC designers and developers.

With their flexibility and accessibility, MOOCs have the power to offer the mode of teacher professional development required in the current situation (Manning et al., 2014; Perveen, 2018; Wang et al., 2018). However, past experiences show low participation in MOOCs, which shows the need for more personalized and relevant MOOCs equipped with personalized support (Zhang et al., 2018). Adjustment to the needs of the participants and participant selection is better than the "MOOC's open for all" approach to keep engaging participants in the program (Kundu & Bej, 2019).

This study examines the utilization of MOOCs for ELT TPD that focused on technology integration in language teaching called DIGI MOOC. It was aimed to enhance teachers' competence, confidence, and performance in integrating technology into their classroom practices through a digitally facilitated project. It was an extensive and inclusive online continuous TPD designed for Secondary English teachers across Indonesia. It was conducted for nine months, from April to December 2022. It included

ten trainers to accompany the participants' learning journey, providing mentorship, guidance, and assistance throughout the program. The participants were involved in a monthly cycle of self-paced MOOC modules, Telegram workshops, classroom experiments, and Telegram communities of practice (CoP). Different topics were discussed on a weekly basis, supported by various types of activities that attempted to enhance their technological and pedagogical skills and, at the same time, foster a collaborative learning community. Through these activities, teachers were expected to obtain theoretical knowledge, get engaged in interactive discussions, get the chance to implement innovative teaching strategies and indulge in a supportive learning community. Based on the description above, the study seeks the English language teachers' expectations, perception of the learning experience, and factors contributing to satisfaction with the teachers' participation in the program.

METHOD

In evaluating the impact of the DIGI MOOC Teacher professional development program, this study utilized an explanatory sequential mixed-method design using Kirkpatrick's evaluation model framework (Kirkpatrick & Kirkpatrick, 2006). Sequentially, the quantitative data were collected and analyzed, followed by the qualitative data collection and analysis based on the findings of the first sequence (Fetters & Molina-Azorin, 2020; Skamagki et al., 2022).

This study was participated by 200 secondary English language teachers in Indonesia consisting of 169 females and 31 males. Their ages ranged from 25 to more than 50 years old, with various years of teaching experience (less than five years to more than 30 years).

In the training, the participants were grouped into ten groups and took part in various online activities in cycles for nine months. Each cycle lasted four weeks (or about one month) and focused on one topic. There were nine topics on using technology in classroom instructions in the training, and each topic was accommodated in one MOOC. The following table shows the topics in the training.

Table 1
Topics of DIGI MOOC program

Month	MOOC	Topic
1	1	Teaching approaches with technology
2	2	Managing the different learning environment
3	3	Adapting existing materials for F2F and virtual learning and increase communication
4	4	Developing engaging teaching materials using technology
5	5	Giving students some ownerships of their learning
6	6	Managing participation, collaboration and interaction in different classrooms
7	7	Giving feedback
8	8	Understanding the role of language games and language acquisition
9	9	Assesment for learning

The monthly cycle provided activities for the participants' groups each week. In the first week, they accessed the materials (written documents and videos) and tasks provided in MOOC on Google Classroom. They discussed the materials and tasks in the second week through a video conference on Telegram. After that, they designed a lesson based on the training materials and implemented in the lesson design in their own classrooms. In the fourth week, they reported their classroom practices through a video conference on Telegram. During their participation in the training, they gave questions and shared experiences in a chat group on Telegram as their community of practice (CoP).

The study used two types of instruments to collect the data. The first was pre- and post-MOOC surveys. The pre-MOOC survey was used to collect the baseline data about the participants, including their demographics, prior experiences with MOOCs, expectations, and potential challenges in joining MOOCs. The survey consisted of close-ended and open-ended questions to thoroughly understand the participants' initial perspectives and concerns (Thomas, 2006). The post-MOOC survey was used to investigate the participants' satisfaction, covering three areas, among others, their level of participation, the content of the MOOC, and the effectiveness of the trainers (Lee, 1999; Mears, 2009). Both surveys utilized Likert-scale questions measuring participant responses and open-ended

questions, which allow participants to give additional feedback or comments (Robinson, 2014).

A semi-structured interview was conducted with 20 participants who volunteered for the interview (Larkin et al., 2021). A set of predetermined guidelines was prepared to allow the participants to share their opinions and thoughts on different aspects of MOOC. The interviews included the discussion related to the MOOC topics, the learning activities, and the trainers.

To ensure the instrument's validity and reliability, the researchers followed a systematic instrument development process. Relevant literature and theories were reviewed on online teacher professional development and participants' satisfaction (Kirkpatrick & Kirkpatrick, 2006; Lee & Ming, 1999; Morgan & Casper, 2000). Expert feedback was sought to assess content validity and relevance, resulting in refined items and improved clarity and comprehensiveness (Cohen et al., 2017; DeVellis, 2003). Pilot testing with ten teachers not involved in the study helped evaluate the feasibility and refine questions (Cresswel, 2014; Guest et al., 2013).

Reliability testing using Cronbach's alpha coefficient demonstrated high internal consistency, ensuring that the items consistently measured the intended constructs and dimensions (DeVellis, 2003; Joseph et al., 2010). The results indicated strong reliability across dimensions, as shown in Table 2.

Table 2
Reliability analysis using Cronbach's Alpha

Dimension	Number of items	Cronbach's Alpha
Expectation	5	0,89
Participation	4	0,87
Content	3	0,82
Trainer	3	0,91

The robust development process and high-reliability coefficients enhance the credibility and dependability of the survey measures (Pallant, 2020). The consistent and reliable results obtained from the instruments support the study's findings, affirming their ability to assess teacher satisfaction and engagement within the DIGI MOOC program.

The data were analysed differently based on their types. The quantitative analysis involved descriptive statistics on the Pre-MOOC and Post-MOOC surveys, which examine participant characteristics, expectations, satisfaction levels, and engagement. SPSS software (version 26.0) was used for statistical analysis, providing systematic insights into overall satisfaction and engagement (Cresswel, 2014; Pallant, 2020). The qualitative analysis focused on the thematic analysis of open-ended survey responses and interviews. Verbatim transcriptions were deductively coded to identify and categorize themes based on research questions. Analyzing relationships among themes offered more profound insights into participants' experiences,

perceptions, and suggestions, contributing to a nuanced exploration of teacher satisfaction and engagement in the TPD MOOC (Braun & Clarke, 2006).

FINDINGS

The participants in the study shared their perceptions towards the DIGI MOOC program before and after participating in the program. Based on the quantitative and qualitative analysis, the data showed the participants' positive expectations of the DIGI MOOC program. They also performed the participants' perceptions that they learned from the contents, training deliveries, and trainers.

Participants' Initial Expectations towards DIGI MOOC Program

Prior to learning the contents provided in the DIGI MOOC program, the participants were given a survey to identify their expectations of the program. Table 3 presents the participants' expectations about

participating in a MOOC in relation to their prior experiences in joining MOOC programs. Based on the frequency table, out of the 200 participants, most (71.4%) were interested in seeing how the MOOC works, while 55.8% were excited to participate. On

the other hand, only 8% of the participants were unsure of what to expect. 19.1% of participants said they felt confident about taking the MOOC; nevertheless, 39.2% of participants said they were slightly nervous about it.

Table 3
Participants' Initial Feelings Towards DIGI MOOC Program

Feeling_Mooc			Experience		Total
			No	Yes	
I am little nervous	Count		73	5	78
	% of Total		36.7%	2.5%	39.2%
I am interested to see how it works	Count		106	36	142
	% of Total		53.5%	18.1%	71.4%
I do not know what to expect	Count		13	3	16
	% of Total		6.5%	1.5%	8.0%
I feel confident	Count		19	19	38
	% of Total		9.5%	9.5%	19.1%
I am excited	Count		98	13	111
	% of Total		49.2%	6.5%	55.8%
Total	Count		146	54	200
	% of Total		73.4%	26.6%	100%

Through exploring the participants' responses, five findings emerged related to their initial expectations of participating in the DIGI MOOC program. The expectations ranged from more professional reasons to technical ones. Table 4 presents the findings of the participants' initial expectations. The first expectation of teaching competence reflects participants' eagerness to enhance their digital teaching skills and prepare students for the digital era. Similar to the first expectation, the next expectation of incorporation of technology in classroom also highlights the participants' enthusiasm to get more understanding of technology used to create engaging learning environments. Enhancement of students' learning

showcases their dedication to student-centered approaches and language proficiency development. Another expectation is knowledge sharing that shows the participants' enthusiasm for collaborative learning and professional growth. A more technical expectation was shown by the participants who expect to get participation certificates after the program.

Those expectations were relevant to their actual participation in the DIGI MOOC program. Their initial expectations were confirmed when they were surveyed of their participation in relation to the tasks that were expected to be completed by the participants.

Table 4
Participants' Initial Expectations

Findings	Participants' sample excerpts
Teaching competence	"I hope to gain more knowledge and skills in using digital tools and online resources to make my teaching more interactive and engaging." (T22)
Incorporation of technology in classroom	"Understanding and able to use technology in improving the teaching learning process so that the students can gain the same benefits from both technology and knowledge." (T3)
Students' learning enhancement	"I hope to use the knowledge and skills gained from this program to create a more effective and students-centered learning experience for my students." (T166)
Knowledge sharing	"I want to contribute to the development of a community of language teachers who support and inspire each other." (T36)
Participations certificates	"Certificate, as a proof. I can use it to add on my carrier Credit Point." (T76)

Table 5
Participants' Completion of DIGI MOOC

	I always completed the MOOC content	I always participated in the post-MOOC	I always well prepared in carrying out he classroom idea	I always participated in CoP each month on Telegram
N Valid	92	92	92	92
Mean	4.29	3.88	4.13	3.88
Median	4.00	4.00	4.00	4.00
Std. Deviation	.859	.900	.714	.905
Sum	395	357	380	353

Table 5 shows that the participants reported high levels of completing MOOC content (mean = 4.29, SD = 0.859) and preparing classroom ideas (mean = 4.13, SD = 0.714). However, participation in post-MOOC activities and Community of Practice (CoP) on Telegram was lower, with mean scores of 3.88 (SD = 0.900) and 3.88 (SD = 0.905), respectively. The statement “I always completed the MOOC content” received the highest agreement (mean = 4.29), indicating strong engagement. Conversely, “I always participated in CoP each month on Telegram” had the lowest agreement (mean = 3.88), suggesting lower involvement in the CoP. The relatively low standard deviations suggest consistent responses, enhancing the findings’ reliability. Overall, the MOOC successfully engaged participants in completing content and preparing for classroom implementation, but more effort is needed

to encourage post-MOOC activities and CoP participation.

Participants Perceptions of Learning in the DIGI MOOC Program

The data about the participants’ perceptions of learning during their participation in the DIGI MOOC program identified several findings of what the participants considered as their learning, as shown in Table 6. The first finding is learning with technology, which represented the participants’ reaction and enthusiasm to learn about different technology applications and integrate technology tools into their lessons. Their enthusiasm is also represented by the second finding of lesson ideas, which represented how they had the opportunity to learn to use specific technology tools and experiment with them with some innovative teaching strategies.

Table 6
Participants' Learning Experiences

Findings	Participants' sample excerpts
Learning with technology	“Learning technology applications.” (T1) “Telling the way to integrate technology in learning process.” (T13)
Lesson ideas	“The use activities and the new materials about teaching English, especially about the new technology that I know.” (T5) “The lesson ideas using adapting materials.”
Flipped learning	“The use of Flipped learning for the training model.” (T8) “The flipped learning materials as well as the ideas on how to use them.” (T12)
Sharing and collaboration	“The program shared the use of new technology in English language learning.” (T17) “Learning from other teachers’ teaching experiences and trainers teaching knowledge is great.” (T9)
Student engagement	“I can motivate learners during teaching and learning process and make them enjoy the lesson.” (T20) “The ideas are to encourage student engagement and interaction.” (T5)
New knowledge	“It gives me new things such as technology or new media on how to teach the students.” (T7) “It gives me a new perspective on teaching and learning.” (T11)

The perception of flipped learning demonstrated the participants’ positive attitude toward the flexibility and adaptability of the DIGI MOOC program. The flipped learning method in the training delivery can be interpreted as learning for the participants who collaborated and engaged in

training activities. The emphasis on sharing knowledge, experiences, and ideas with peers and instructors was made clear by the findings of sharing and collaboration. They seemed to understand the value of group learning experiences in creating efficient teaching methods. The engaging

students' finding also demonstrated their drive to establish engaging learning environments, highlighting their passion for motivating their students. Lastly, the gaining fresh insights and perspectives as new knowledge had been claimed as the participants' learning.

Factors Determining the Participants' Satisfaction with the DIGI MOOC Program

The positive expectations and learning that the participants perceived might be fostered by the activities that they underwent during the training. Some findings related to their satisfaction of their participation in DIGI MOOC program are revealed, such as classroom ideas, a community of practice, and trainers.

a. Classroom Ideas

Classroom ideas became one of the factors in the participants' satisfaction with participating in the program. Several reasons led to what they thought about fulfilling their feelings about the program because it provided insights into classroom practices.

The sample excerpts from participants' responses in Table 6 demonstrate the positive impact of the classroom ideas component in the DIGI MOOC. The participants expressed their

enthusiasm for learning and applying new ideas, highlighting the discovery of innovative teaching ideas, getting ideas for finding and adapting materials, and embracing new knowledge and challenges. Students' engagement was another key aspect highlighted by the participants. They mentioned students' enjoyment in learning while experimenting with teaching ideas from DIGI MOOC. Some teachers said the teaching ideas were challenging and made them consider making their students more active. The participants also valued sharing and collaboration as beneficial because they could discuss lesson ideas and share teaching experiences. The category of challenging and stimulating experiences reported the participants' feeling of being motivated, energized, and excited by the opportunity to introduce new ideas to their students. Lastly, the participants emphasized the significance of teaching and planning, including preparing and implementing lessons, adapting to the learning environment, and incorporating technology into the teaching process.

b. Community of Practice (CoP)

Table 7 presents the sample excerpts from participants' responses to illustrate the positive impact of the CoP in the DIGI MOOC.

Table 7
Participants' responses about classroom ideas in DIGI MOOC

Findings	Participants' sample excerpts
Learning and applying new ideas	"I learn ideas that sometimes never come across our mind before. Finding and adapting materials, new knowledge and new challenges." (T5)
Engaging students	"The activities done in the classroom are very interesting. The students enjoy the learning process. It is challenging and makes us think how to make the students more active." (T8)
Sharing and collaboration	"Sharing and it broadened my sights. Thanks. When sharing ideas. Discussing about the lesson ideas. Sharing ideas with other teachers in my group." (T12)
Challenging and Stimulating	"Feeling motivated and energized. Full of new ideas. When applying new things to my students, it gives them new things to learn. Explore what I can adapt into my class." (T20);
Teaching and Planning	"Preparing the lesson and applying the ideas in the teaching and learning process. Adapting with our environment. Creating the idea and practicing it." (T18)

The participants highlighted the value of sharing ideas and experiences within the CoP, emphasizing the opportunity to exchange teaching strategies, best practices, and solutions to challenges. They found inspiration in hearing about different approaches and learning from the experiences of fellow educators. They mentioned that learning from others was another significant aspect, as they appreciated the diverse perspectives and insights shared by their group members and trainers. They also expressed their appreciation for the materials provided within the CoP. They found value in exploring resources, gaining new insights,

and acquiring tips that supported their professional development. The opportunity to meet and connect with like-minded professionals was a highlight for participants, as they enjoyed establishing a supportive network and forming meaningful connections. In addition, they mentioned other aspects of the CoP, such as the alignment of ideas with current educational practices, the positive experience of engaging and learning from others, and the exposure to the Technological Pedagogical Content Knowledge (TPACK) framework.

c. DIGI MOOC Trainers

Table 8 presents the sample excerpts from the participants' responses, highlighting how the trainers delivered the lengthy training. The participants found that the trainers have fostered a

supportive and engaging learning environment through their dedication and expertise, contributing to the participants' learning and professional growth throughout the program.

Table 8
Participants' responses about DIGI MOOC trainers

Findings	Participants' sample excerpts
Communication	"The trainer communicates regularly with the group, offering support, challenges, and encouragement to share ideas and complete tasks. We feel comfortable contacting her anytime we need assistance. Her explanations and feedback on the materials provided are clear and helpful." (T11)
Motivation	"The trainer is excellent at providing motivation. She consistently encourages participants to be active and engaged in the program. Her enthusiasm and support for our contributions help us stay motivated throughout the learning journey." (T14)
Patience	"I admire the trainer's patience and competence. She takes the time to understand our individual needs and provides guidance accordingly. Her patient approach creates a comfortable learning environment where we feel supported and encouraged." (T18)
Support	"The trainer is highly supportive, encouraging us to actively participate and be engaged in the program. She understands the challenges we may face and provides assistance and guidance. Her support helps us overcome obstacles and maximize our learning experience." (T7)
Explanation	"The trainer's explanations are thorough and motivating. She ensures that we understand every idea by providing clear explanations and offering examples of technology applications. Her teaching style effectively conveys the concepts and inspires us to implement new ideas in our teaching practices." (T2)
Qualities	"Ms. S is the best trainer I have come across. Her knowledge, expertise, and dedication to our learning journey are commendable. I am grateful to have her as a mentor throughout this program." (T6)

The participants emphasized the trainers' excellent feedback and communication abilities, praising their constant contact, understandable explanation, encouragement, and support for task completion and idea sharing. Additionally, they appreciated the trainers' expertise and patience in assisting their learning process. They also appreciated the trainers' encouragement, comprehension of the difficulties, and readiness to offer help and resources. They perceived that their ability to overcome challenges referred to the trainers' support.

The participants noted the trainers' explanation and teaching abilities as significant advantages. They liked the trainers' capacity to simplify complex concepts, offer relevant examples, and motivate them to incorporate fresh concepts into their teaching methods. The trainers' knowledge, skill, commitment, and qualifications were other traits that the participants praised. The participants recognized the trainers' assistance as mentors throughout the program as crucial to their professional development.

Challenges in DIGI MOOC Program Participation

Among the data of the participants' responses on their expectations, learning, and satisfaction towards the DIGI MOOC program, the data also revealed

some difficulties that the participants faced during their participation.

Table 9 presents the participants' responses regarding their challenges while engaging in the DIGI MOOC program. The participants expressed concerns about time management, acknowledging the demanding nature of their teaching roles. They mention some challenges they might encounter in dealing with personal and professional responsibilities, such as planning lessons, grading, doing housework, and participating in the DIGI program. They also shared their mixed emotions and concerns about sharing ideas and practices with other teachers in the program. Some express apprehension about connecting with unfamiliar colleagues, while others express excitement about the opportunity to engage and collaborate with English teachers from diverse regions. Internet connectivity was a common concern among participants. They expressed worries about the reliability of their internet connection and its impact on conducting online classes effectively. Unstable internet connections, particularly in remote areas, are a particular worry due to potential disruptions and challenges in fully engaging with the program. Lastly, the participants recognized the complexity of their roles and expressed concerns about balancing various responsibilities such as grading papers, attending meetings, and managing personal activities or businesses.

Table 9

Possible Challenges of the DIGI MOOC Program

Findings	Participants' sample excerpts
Time management	"One of the biggest challenges for me as a teacher is time management. There are so many things that need to be done each day, from preparing lesson plans to grading assignments, and it can be difficult to find the time to do everything effectively." (T188)
Sharing and collaboration	"I feel nervous about sharing my ideas and practices with teachers I've met before." (T67) "I am worried that I won't be able to connect with the other teachers in the program." (T89)
Internet connectivity	"Due to the unreliable internet connection in my area, I've had a lot of troubles conducting online classes. Sometimes my connection drops mid-class, which is frustrating for both me and my students." (T102)
Management of multiple responsibilities	"As a teacher, I have to balance a lot of different responsibilities, from grading papers to attending meetings. It can be overwhelming at times, but I try to stay organized and prioritized my tasks to make sure everything gets done." (T76)

DISCUSSION

The findings of the study show how the participants perceived the DIGI MOOC program, a program that was designed to support English language teachers' technology integration in the classroom. Their perceptions were derived from the data before entering and after participating in the program. Based on the data analysis, their perceptions are categorized into the participants' initial expectations of the program, their perceptions of learning in the program, and the factors that determined their satisfaction of the program.

The data were analyzed using Kirkpatrick's model of professional development that includes reaction level, learning level, behavior level, and result level. Based on the analysis, the DIGI MOOC program could reach three levels of training evaluation, namely the reaction level, learning level, and behavior level.

The result of the pre-MOOC survey showed the participants' expectations towards the DIGI MOOC program. Participants' initial perception of a TPD program can be one of the determining factors for the future success of their program participation (Petrie & McGee, 2012; Richards & Farrell, 2011). The "Reaction" level of the Kirkpatrick model refers to the participants' initial response or feeling toward the training program (Kirkpatrick & Kirkpatrick, 2016). It was discovered that participants' initial emotions toward the MOOC were a mix of enthusiasm and apprehension. These results are in accordance with an earlier study by Bawa (2016), who discovered that learners who are embarking on Online Learning for the first time frequently experience feelings of dread and anticipation. The results further support Veletsianos et al.'s (2015) study, which reveal that prior exposure to online Learning or MOOCs might reduce learners' anxiety and boost their confidence. The enthusiasm of participants who had previously attended a MOOC

was much higher, suggesting that prior online learning experiences may increase motivation and lower anxiety. This shows that it is clearly beneficial to provide introductory or "primer" sessions for new MOOC participants in order to help them get used to the setting and lessen any initial apprehension (Terras & Ramsay, 2015).

The reaction level in Kirkpatrick's Model emphasizes participants' initial engagement and interest in the training program and infers an early positive response to the program (Hew & Cheung, 2014). In this study, participants' reactions towards DIGI MOOC were represented by the findings, such as learning with technology, lesson ideas, flipped learning, sharing and collaboration, engaging students, and new knowledge. These themes reflect participants' engagement, enthusiasm, and appreciation of the learning opportunities they obtain in the DIGI MOOC. The participants' enthusiasm for learning about technology applications, integrating technology into the learning process, sharing and adapting teaching materials, and collaborating with peers and trainers highlights their motivation to enhance their teaching practices and aligns with the goals of teacher professional development and the use of technology in education (Johnson et al., 2016; Koehler & Mishra, 2009).

The learning level of the Kirkpatrick model assesses the knowledge or skills the participants acquired through the training program (Baran & Correia, 2014; Terras & Ramsay, 2015). In this study, participants reported gaining new knowledge and skills, particularly regarding technology integration and innovative teaching practices. These learnings are also demonstrated in the completion of the MOOC content and the preparation of classroom ideas by the participants.

Furthermore, the high levels of completion of Massive Open Online Course (MOOC) content and

preparation in carrying out classroom ideas reported by the participants indicated their active involvement and commitment to the learning process. These findings align with the learning level of Kirkpatrick's Model, which focuses on participants' acquisition of new knowledge and skills (Embi et al., 2017; Kirkpatrick & Kirkpatrick, 2006). The participants' strong engagement in completing the course materials and their appreciation for gaining new knowledge and perspectives demonstrated the potential impact of the program on participants' learning outcomes, as observed in previous studies evaluating technology integration training programs for teachers (Afshari et al., 2009; Ertmer & Ottenbreit-Leftwich, 2010).

The behavior level evaluates whether the participants apply what they have learned from the program in real-world contexts (Kirkpatrick & Kirkpatrick, 2006). This can be gauged from their engagement with post-MOOC activities and participation in the CoP on Telegram, which shows room for improvement (Brindley et al., 2009). Encouraging active participation in post-MOOC activities and fostering a supportive CoP could help the participants effectively implement what they had learned and address the challenges they faced in translating their learning into practice. This aspect relates to the behavior level of Kirkpatrick's Model, which emphasizes participants' application of new knowledge and skills in their work environment. Previous studies have shown the importance of providing support and resources to facilitate participants' implementation of new teaching practices (Lieberman & Wood, 2003).

The CoP component is critical in fostering collaboration, sharing experiences and resources, and providing ongoing support for participants' professional growth (Wenger, 2010). Creating a supportive and engaging CoP that addresses participants' specific needs and challenges can enhance the program's effectiveness and facilitate the implementation of new teaching practices (Moore et al., 2017).

The findings of classroom ideas also align with the behavior level of Kirkpatrick's Model, as the participants recognized the applicability and relevance of the provided ideas to their teaching practices. The classroom ideas, which provided practical examples, resources, and guidance for integrating technology into teaching, were perceived as adequate by the participants. The classroom ideas component facilitated the transfer of participants' learning into their teaching practices by offering tangible examples and suggestions for incorporating technology in the classroom. This finding is consistent with studies emphasizing the importance of providing practical and context-specific guidance in technology integration training programs (Johnson, 1994; Johnson et al., 2014).

However, the transfer of knowledge into practice can be hampered by problems with time management and internet connectivity. These difficulties coincide with the behavior level of Kirkpatrick's Model, emphasizing how crucial it is to address them to adopt new instructional strategies successfully. While one of the benefits of TPD using MOOC is embracing a large number of teachers in different locations (Misra, 2018), internet connection remains to be an issue in MOOC programs participated by teachers and students (Ismail & Kamalludeen, 2020; Sanchez-Gordon & Luján-Mora, 2014). Concerning time management as a challenge for teachers' participation in MOOC programs, it might not be evident that time management strategies correlate with learning success, but metacognitive self-regulation is closely related to achievement and course completion (Gutiérrez-Rojas et al., 2014).

Maximizing the program's efficacy requires providing the necessary resources and support to overcome these obstacles. When comparing the results to earlier research that also employed Kirkpatrick's approach, recurring themes involving participant emotions, learning outcomes, and difficulties applying what was learned to the real world appear. This demonstrates how Kirkpatrick's methodology may be used to evaluate and enhance teacher professional development programs like the DIGI program.

CONCLUSION

This study has addressed the purpose of the study: to find out English language teachers' expectations, perception of the learning experience, and factors contributing to satisfaction with the teachers' participation in the TPD MOOC program called DIGI MOOC program in Indonesia. Through mixed methods, the data from a survey and interviews were analyzed quantitatively and qualitatively. The data were then discussed based on Kirkpatrick's model of professional development.

Based on the discussion, the study uncovered the three levels of Kirkpatrick's model of professional development: the reaction level, learning level, and behavior level. The reaction level was reached from the participants' expectations prior to their engagement in the DIGI MOOC program. Learning and behavior levels were gained from the participants' involvement in the program. The participants did not only take part in the discussion and task completion in MOOC for their learning, but also were encouraged to implement their learning points in their classroom and to report their practices. However, the data from the real classroom practice of the [participants were not included in the study so that the result level could not be revealed. The result level can be seen from

students' learning outcomes after they interact with the teacher in the teaching and learning process.

Overall, through this study, it is expected that the study contributes to the field of teacher professional development, primarily through using MOOC. The results highlight the value of considering participants' reactions, learning outcomes, and problems when developing and putting into practice successful teacher professional development initiatives. It is recommended to further the study through extension of data of classroom practices to learn how the students get the impact of teachers' learning in their professional development path.

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