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# Exploring Qualities that Prevent EFL Teachers from Redundancy

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## Abstract

The practice of English language teaching has dramatically changed with the existence of Internet-based learning platforms. The educational technology provides EFL students with a variety of language learning materials that can be accessed at anytime and anywhere. These phenomena might threaten the teacher's existence. Thus, this study aims both to understand whether or not EFL teachers' roles can be replaced with technology, and to explore what qualities they should possess and maintain to prevent redundancy due to the domination of mobile-based language learning applications. A mixed-method design was utilized to obtain the quantitative data through an online survey, and qualitative data through an open-ended question. A total of 199 EFL learners participated in the online survey, which consisted of a yes/no question on whether teachers could be replaced with mobile apps, and an open-ended question to record the reasons. The findings showed that 132 students (66.3%) thought that teachers could not be replaced by mobile technology, meanwhile, around one-third of the respondents 67 students (33.7%) had the opposing thought. Human interaction, sense of emotion, and delivery are still required by the students, over the mobile tech features that could provide availability, flexibility, and practicality. It is highly recommended that English teachers maintain their human qualities while adapting to technology to save themselves from redundancy.

**Keywords**: online teaching and learning; mobile technology; teachers' roles; redundancy

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## INTRODUCTION

The debate on whether a teacher can be replaced with technology in the learning and teaching process has been a hot issue among experts in the field. On the one hand, technology plays important roles in enhancing learning and teaching for both teachers and students; on the other hand, there is a belief that technology might one day substitute teachers' roles in the classroom (Carrillo, 2012) and potentially take over teachers' jobs (Kolchenko, 2018). Meanwhile, Mali (2022) claims that integrating technology in the EFL classroom is a process of trial-and-error that requires teachers to reflect on their teaching practices and have a positive view of technology in their learning and teaching. Indeed, technology versus teacher is still an ongoing battle as technology evolves further.

EFL teachers need to integrate an appropriate technology-based learning platform in their teaching and learning activities. According to Amhag *et al.*, (2019), teachers in the context of digitalized teaching should identify the pedagogical surplus value of information communication and technology (ICT). Meanwhile, Ungar & Baruch (2016) claim that teachers have a necessary role not only in delivering coursework but also as role models for their students. Teachers' challenges are not only in gaining technical proficiency with digital technologies, but also reconceptualizing their coursework to suit with digital technologies as tools to extend the capacities of humankind, and potential to improve instruction in teacher preparation programs and solve teaching problems (Baroud & Dharamshi, 2020; Garcia, Kelly, & Stamatis, 2022; Hager, 2020).

Another issue is that an EFL teacher needs to improve his/her competences e.g., personal and social competences. According to Collinson (2001), a teacher should guide the intellectual, social, and moral development of children. A close interpersonal relationship with students is highly valued and should emphasize on individual learner creativity and independent learning (Richards, 2010). Teachers need to acknowledge their weaknesses in teaching, and design strategies to improve instructional design and teaching practices, as well as support their students (Carmel & Badash, 2021; Helleve, Grov Almås, & Bjørkelo, 2020).

Apart from mastering technology-based teaching tools, teachers need to pay attention to other aspects–the so-called socio-affective skills as proposed by (Park & Lee, 2006), and good rapport as proposed by Faranda and Clarke (2004). Technology advancement could penetrate those teacher-student relationships and

then rapidly takes over several vital elements in the instructional processes. Starting from the utilization of technology as media until the domination of technology that could replace traditional classroom environments through a virtual meeting. This condition might also affect the teacher-student interaction which might redefine the teachers' roles in the classroom.

The rapid development of technology in the field of education affected the model of learning and teaching for both teachers and students. Literature review shows that digital devices like tablets and smartphones may change the roles of teachers and students (Prayudi, Hakiki, Putra, Anzka, & Ihsan, 2021). According to Mollaei and Riasati (2013), with the fast growth of technology in all dimensions of our life, including in the field of education, teachers and students control their learning process and conduct online classes using technology as a tool to enhance their education. The development of technology has set education in high demand for a reform on its pedagogical approach (Tanjung, 2020). Moreover, students' preference to learn has changed dramatically since the introduction of the internet (Hartman, Townsend, & Jackson, 2019). An investigation on the acceptance of the English language learning mobile application (ELLMA) across gender and experience differences concludes that there is a significant positive relationship between students' perceived effect and their intention to use ELLMA to learn English regardless of their gender (Putra, Saukah, Basthomi, & Irawati, 2020). Students tend to use ELLMA in learning English because they can decide not only when and where they want to learn but also how they want to learn. Meanwhile, the number of technology-based learning platforms utilized inside and outside the classroom has also boomed.

Research on the possibility of technology replacing human teachers has yielded interesting findings (Carrillo, 2012; Collinson, 2001; Djiwandono, 2019; Kolchenko, 2018). English teachers perceived ICT positively as a beneficial learning source that could foster communication, and diversify learning-teaching activities. This perception, at the same time, threatens teachers who are not willing to enhance their skills and knowledge in utilizing ICT in their instructional process. Students would prefer web-based material to their teacher if they perceive that the information they get from the web is more relevant to their needs than the information provided by their teachers or school curricula (Djiwandono, 2019).

Findings on the impossibility of technology replacing human teachers often give the compensating idea that technology might become teachers' assistants (Sankar & Aruna, 2020), helpers (Djiwandono, 2019), and learning tools (Kolchenko, 2018). Adaptive learning (AL), which is developed using artificial intelligence (AI), could provide an interactive learning-teaching experience and adapt to the individual needs of every student. Adaptive learning with AI could be a useful learning tool that provides extra student training that frees classroom time for higher-level learning activities. However, adaptive learning could not understand the whole pedagogical aspects of teaching and learning, such as students' learning-related psychological problems, teachers' non-verbal clues (facial expression, posture, movement, etc.), and personalized teacher adaptive learning strategies (Kolchenko, 2018). Besides, the effectiveness of technology applied in the classroom is often blurred by an incorrect assumption that students who are regularly involving in social media or using mobile devices are also familiar with the designated instructional platforms.

EFL Teachers are strongly encouraged to always upgrade their knowledge and experience in using numerous technology-based learning platform. Carrillo (2012b) claims that several possible applications for ICTs in the field of education might one day replace teachers in the classroom, and perhaps even mankind from other areas of human activity. This situation would be even worse in the absence of teachers' technological competence. Therefore, teachers' knowledge, skills, beliefs, and practices are still taken into account in applying a purposeful and instruction-driven technology (Garcia *et al.,* 2022). However, a very limited amount of research was carried out to examine the possibility of English language learning mobile apps that might replace the human teacher in the classroom.

This study would specifically view the possibility of mobile technology replacing the teachers. The investigation is directed to reveal the teachers' qualities that might and might not be able to be replaced by mobile technology. The findings would suggest the qualities to be obtained and maintained by the teachers to survive redundancy due to technological advancement in education. Based on the aforementioned review of related literature, the main research questions of this present study are posed as follows: 1) Can mobile applications replace the teacher? 2) What are the qualities that might prevent EFL teachers from redundancy?

## RESEARCH METHOD

The present study utilizes a mixed-method approach to examine respondents' views about the possibilities of mobile applications replacing a teacher in the learning and teaching process and to explore what qualities should be possessed by EFL teachers that might prevent them from redundancy. Furthermore, both quantitative and qualitative data were obtained from respondents' answers through yes/no questions, and the open-ended questions, which are administered online. The quantitative data is utilized to find out the respondents' views on whether or not a teacher could be replaced with mobile apps. Meanwhile, open-ended questions are applied to document the reasons given by the respondents on the teachers' quality that should be possessed and/or maintained by EFL teachers to prevent redundancy. These two questions are part of an online survey on the acceptance of the English language learning mobile application (ELLMA) *(Putra et al.,* 2020).

The demographic questions, asking about gender, age, educational background, and place of living are all added at the end of the survey to avoid biases. The data analysis is done by sorting the results from the demographic questions to describe the context of the respondents. A total of 199 respondents (142 females, 52 males, and 5 respondents who preferred not to disclose their gender) were involved in the data gathering process by filling out the online survey, which was distributed to several universities within Indonesia, namely Sumatera, Java, Bali, and East Nusa Tenggara. In terms of educational background, 28 respondents were high school students, three had diplomas, 152 had bachelor's degrees, 14 had master's degrees, and 2 were doctoral students. They all confirmed themselves as users of English language learning-related mobile applications (ELLMA), whose user experience ranges from one week up to more than one year.

The findings on the possibility of EFL teacher redundancy were examined from the comparison of respondents answering 'yes' and 'no.' Then, the respondents who answered 'yes' or agreed that teachers could be replaced with mobile apps were sorted to identify the reasons that related to the superiority of mobile apps over teachers. Besides, respondents who answered that teachers could not be replaced by mobile apps were also sorted to identify the teachers' valuable features that could not be provided by mobile apps. The analysis of both of the answers was then directed to conclude the qualities that should be attained

by the teachers and also the qualities that should be maintained to prevent EFL teachers from redundancy.

## RESULTS & DISCUSSION

### Results

### The Possibility of EFL Teacher Redundancy

The quantitative data gained from a survey 'yes' and 'no' answer revealed that 132 students (66.3%) viewed that teachers could not be replaced with mobile technology, while around one-third of the respondents (67 students; 33.7%) surprisingly had the opposing thoughts. The details of respondents' number of 'yes' and 'no' answers based on the category of gender, user experience, and educational background, were summarized in Table 1 as follows:

**Table 1.** The Distribution of 'Yes' And 'No' Answers based on Gender, User Experience, and Educational Background

| Categories | | Number of Respondents | Answer | n | % | Total (n) | |
|---|---|---|---|---|---|---|---|
| | | | | | | Yes (%) | No (%) |
| **Gender** | Male | 52 | Yes | 18 | 35% | 67 (33.7%) | 132 (66.3%) |
| | | | No | 34 | 65% | | |
| | Female | 142 | Yes | 49 | 35% | | |
| | | | No | 93 | 65% | | |
| | Prefer not to say | 5 | Yes | 0 | 0% | | |
| | | | No | 5 | 100% | | |
| **User Experience** | <1 month | 96 | Yes | 31 | 32% | | |
| | | | No | 65 | 68% | | |
| | 1-12 months | 68 | Yes | 29 | 43% | | |
| | | | No | 39 | 57% | | |
| | >12 year | 35 | Yes | 7 | 20% | | |
| | | | No | 28 | 80% | | |
| **Educational Background** | High School | 28 | Yes | 7 | 25% | | |
| | | | No | 21 | 75% | | |
| | Undergraduate | 155 | Yes | 56 | 36% | | |
| | | | No | 99 | 64% | | |
| | Postgraduate | 16 | Yes | 4 | 25% | | |
| | | | No | 12 | 75% | | |

Table 1 shows the respondents' responses on the possibility of EFL teacher redundancy based on gender, user experience, and educational background. In terms of gender differences, male and female respondents shared the same percentages of perceptions regarding the possibility of EFL teacher redundancy. Sixty-five percent of both male and female respondents viewed that EFL teachers

could not be replaced by ELLMA. The opposing thought up to 35% of the respondents in both genders. This finding shows that there was no perception difference regarding the possibility of EFL teacher redundancy across gender. However, the 35% thought teachers might be replaced should be taken into consideration.

In terms of length of experience, almost half of the respondents (n=96) had only less than one-month of experience in using ELLMA. During that short length of experience, 65 (68%) of the low-experienced respondents thought that ELLMA could not replace teachers. However, there were still 31 (32%) of the respondents, based on their short experience, concluded that ELLMA might replace teachers. The percentage of the respondents, who thought that teachers could be replaced, even increased to 43% (n=29) among the respondents who had used ELLMA between 1 to 12 months (medium-experienced). However, after 1 year of experience, most of the high-experienced respondents (n=28, 80%) thought that teachers were not replaceable by ELLMA.

The analysis of respondents' educational backgrounds also yielded an interesting finding. The comparison of 'yes' and 'no' answers regarding the possibility of teacher redundancy among high school students was 25% and 75%. One-fourth of high school respondents (n=28) thought that ELLMA might replace their English teachers. The percentage of 'yes' answers grew among the undergraduate students, where 36% of the respondents (n=56) agreed upon the superiority of ELLMA over their teachers. However, a lower percentage regarding the possibility of ELLMA replacing teachers was found among postgraduate students (n=4, 25%), who were assumed to have a better understanding of the comparison between ELLMA and EFL teachers and their replaceability.

## The Qualities that Prevent EFL Teachers from Redundancy

Apart from the survey 'yes' and 'no' answers, the present study utilized open-ended questions to explore the qualities should be possessed by EFL teachers to prevent EFL teacher's redundancy. The findings on the qualities that might prevent EFL teachers from redundancy revealed that teachers might be replaced with ELLMA providing the explanation related to the superiority of mobile apps over teachers. In other words, some qualities are possessed by ELLMA, which might not be found in teachers. Therefore, these qualities should be attained by teachers. Besides,

respondents who viewed that teachers could not be replaced with mobile apps identified the qualities that are absent in ELLMA. The following are some respondents' thoughts in connection with the teacher qualities that should be attained by EFL teachers.

### The Qualities that Should be Attained by EFL Teachers

The analysis of the reasons of the respondents who thought that ELLMA could replace teachers shows that the qualities that should be attained by the teachers include availability, flexibility, and practicality which are better provided by mobile apps. The availability quality is related to the time and place where students can access knowledge and learn a language. Concerning this issue, two respondents view the availability of mobile apps as reflected in excerpt 1 as follows:

> *ELLMA is a good application for us to learn anything about English and we can use ELLMA everywhere.* (R1)

> *with ELLMA, the role of the teacher can be greatly assisted in the learning process, because a teacher can only teach at certain times and is different from ELLMA.* (R2)

Both of the statements above show that time and place availability of ELLMA are the qualities that might not be given by teachers if the language teaching and learning is still seen as classroom bounded.

The second quality provided by ELLMA is flexibility. This quality is related to the ability of mobile apps to provide flexible content, method, and also the context of language learning. It can be inferred from the respondents' thoughts in excerpt 2 as follows:

> *(We can) get the lesson more than just sitting in the class.* (R3)

> *ELLMA can add more knowledge of English besides studying at school. With ELLMA we can learn while playing which makes us not bored quickly (when) learning English.* (R4)

The third quality is practicality; the quality covers the ease of use and also the usefulness of ELLMA. The statements that reflect the ease of use of ELLMA can be seen from a respondent in excerpt 3 as follows:

> *we can easily understand (English) if we learn by using ELLMA, (it is possible that) students will be smarter than a teacher.* (R5)

Ease of use in this context is also related to the ability of ELLMA to provide a simple and easy English language learning experience. Besides the ease of use, there is also the usefulness or the perceived effects of ELLMA in terms of faster knowledge gain and improved language skills. Concerning the issue, two respondents express their thoughts as depicted in excerpt 3 as follows:

> *Because ELLMA, (English) is understandable faster; Because using the application can save time.* (R6)

> *Using ELLMA, English teacher can (be) useless because the learners can improve their English skills with this strategy.* (R7)

Ease of use and usefulness are two main aspects that determine the acceptance of technology. Thus, teachers should adopt this quality, so that they can still be accepted amidst technological advancement.

### The Qualities that Should be Maintained by EFL Teachers

The analysis of the reasons of the respondents who viewed that teachers could not be replaced by ELLMA shows that there are qualities that should be maintained by EFL teachers, including human emotion, delivery, and interaction. Those human qualities are best provided by the human teacher, who cannot be replaced with a machine. Human emotion is seen as the emotional quality of a teacher that is involved during the teaching and learning process, e.g., patience, as stated by two respondents in excerpt 4 as follows:

> *Because I need some help from a teacher who someone can teach me patiently because sometimes, I can't say something without someone helps.* (R8)

> *It (ELLMA) cannot convey emotions of the teacher.* (R9)

This emotion quality is the strongest quality that creates a strong student-teacher bond. Human teachers are competent in solving social/emotional problems, such as unmotivated students, misbehaviors, anger, conflict, and social inequalities. This social skill is effective in developing good relationships and negotiating conflicts.

The second human quality that should be maintained by the teachers is delivery. Teachers' delivery covers a wide range of aspects, including the delivery of knowledge, feedback, explanation, guidance, and motivation. Table 2 provides a sample of respondents' statements on each of the aspects of teacher delivery.

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**Table 2.** The Sample Statements on the Aspects of Teacher Delivery

| Aspects | Sample Statements |
| --- | --- |
| Knowledge | *"…although ELLMA is useful, it can't replace a good teacher with a thousand knowledge."* |
| Feedback | *"ELLMA is only for the other way to learn English. Learning English sometimes need advice while finding the problem or error, so a student should meet the advisor or teacher to consult them."* (R10) |
| Explanation | *"…although ELLMA is easy to understand, flexible and fun, however, it cannot replace the teacher's role. Students need more explanation or even a guide… who will correct our misconception (if any)?"* (R11) |
| Guidance | *"…not all students understood what they learned by using ELLMA, some of them really need explanation in detail and guidance when learning English and it could be given by an English teacher. Even though some of the students really excited and improved their English after using ELLMA, they still need guidance from the English teacher too."* (R12) |
| Motivation | *"Teacher is important, ELLMA also the teacher but electronic teacher, but the real motivation for learning comes from the real teacher"* (R13) |

Table 2 depicts the quality that should be maintained by EFL teachers to prevent redundancy, namely knowledge, explanation, guidance, and motivation. From the respondents' views, we can acknowledge that such qualities are necessary to maintain because the teachers as human beings will be available to assist learners when they encounter problems; teachers have skills to explain and can guide learners to solve problems. In addition, teachers treat their students with humanistic approaches.

The third human quality that should be maintained by the EFL teachers is the interaction between teachers and students. Two respondents, who posted statements related to the interaction quality, built their arguments based on the need and importance of human interaction in language learning. Their thoughts about this quality can be acknowledged in excerpt 5 as follows:

> *I think it is no because we still need to interact with other people and sharing (with) each other is more fun. I can ask more questions to the teacher than ELLMA.* (R14)

> *The teacher's role is still important, because we use language to communicate with humans, and teachers are human, their experience is more valuable than the sophistication of applications, that's the advantage of teachers.* (R15)

**Discussion**

The results of the present study reveal that the majority of respondents think that mobile apps cannot replace teachers in learning and teaching processes. The quantitative data show that of 199, over 66% (132) of respondents' state that mobile apps cannot replace a teacher. The present findings are in line with Carrillo's (2012), which confirm that the technology-mobile applications or any other form of ICTs could not replace the teacher-students or student-student collaborative work or dialogue in an English language learning and teaching setting. However, of 199, over 33% (67) of the respondents think that teachers can be replaced with mobile apps for some reasons.

The description of the possibility of EFL teachers' redundancy could be seen clearly from the respondents' gender, experience, and also educational background perspective. One-fourth up to one-third of responses on the possibility that ELLMA might replace teachers are already significant enough to remind teachers to attain and/or maintain the qualities that might prevent them from redundancy. Teachers' quality should also be supported by their institution. Both teachers and their institution should race with the vast development of technology that possibly makes language learning proceed without the presence of human teachers (Djiwandono, 2019).

The quality of flexibility in terms of language learning content, context, and also method is in line with the concept of student-centered learning. Students can self-select the learning content that suits their needs. They are also provided with various learning methods with featured contexts that promote a tailored learning experience. Flexibility is considered one of the most attractive qualities of ICTs because it can give access to almost unlimited sources of information (Carrillo, 2012).

Students need teachers to help them learn to evaluate the credibility of information, think critically, and make judgments (Collinson, 2001). Although the technology has its flexibility quality, it cannot replace the experienced, and knowledgeable educators who have experienced various versions of the adaptive teaching-learning processes that might change dynamically (Kolchenko, 2018). A teacher is more than just a facilitator of knowledge, but a guide, and inspirer for their students, a role that cannot be substituted by technology of any kind.

The teacher's creativity will directly affect the effectiveness of language learning and teaching. Teachers can select the challenging activities for students by exploiting sources available with technological tools available in educational contexts which can make language learning autonomous, stress-free, faster, easier, and interesting (Sankar & Aruna, 2020). Moreover, good and strong student-teacher bound and the complex social situations require moral judgments that could be best provided by the teacher (Collinson, 2001). Teacher emotional quality would help the students to learn and practice their respect, sensitivity, self-discipline, and responsibility. The present study supports the findings of Anugerahwati and Saukah (2010), who confirm the importance quality of EFL teachers' competence. They went on to say that the most important quality is personal competence, including kindness, helpfulness, patience, and closeness to the students.

Another finding of Barnes and Lock (2010) shows that rapport and delivery are considered very indispensable characteristics of an EFL teacher based on the students' views. Meanwhile, Koç (2013) finds out that effective characteristics of effective teachers are patience with what the students do, inspiring the students, fulfilling the students' needs, establishing contact with their parents, and the need to maintain a harmonious relationship with students to facilitate students' learning. Those socio-affective skill qualities may not be found in the machines of technology.

Socio-affective skills concern EFL teacher-student interaction, establishing a positive relationship by listening to their opinions, alleviating their anxiety, having a good sense of humor, being friendly, and treating their students fairly. Moreover, socio-affective skills deal with both cognitive and emotional levels, which make teachers merge their behavior with both their emotions and minds. These teachers' qualities are in line with Karim *et al.,* (2020), who confirmed that the results of the interview with students nominate the socio-affective skills as the most important or the first rank category of the attribute of effective EFL teacher educators. One of the respondents (student teacher) states that socio-affective skill is the first one because a lecture only transfers knowledge, but also builds a good character, and is student oriented.

Similar results are obtained in the study conducted by Park and Lee, (2006). They state that professional qualities and classroom behaviors that should be

possessed by EFL teachers include reducing students' anxiety and knowing students' names. It is in line with Ambarwati and Mandasari's (2020) idea that developing a friendly relationship with students leads to teachers' effectiveness. A similar finding can be observed in Puspita's (2013) conclusion that students intend to opt for teachers who always smile and have fun to be with them. When a teacher can break the ice in difficult situations in the classroom with the use of humor, it can create an interesting atmosphere in the classroom.

Technology in education is opening up new doors; the use of computer-based technologies by teachers and students has increased sharply during the past decade (Russell, Bebell, O'Dwyer, & O'Connor, 2003). In learning and teaching, technology should be utilized as a process rather than an isolated, discrete activity (Shahneaz, Akhter, & Yasmin, 2014). EFL teachers and students are bombarded with news on technological innovations for their learning and teaching (McKenney & Visscher, 2019). We must finally acknowledge that technology plays a supporting role, but it is the teachers who bring it all together. In debating teachers versus technology, we should be in the middle ground of the two.

## CONCLUSION

Several crucial points are to be highlighted concerning the issue of whether or not technology-mobile applications can replace a teacher in teaching and learning contexts, and the qualities that should be attained and maintained to prevent redundancy are as follows: 1) the majority of respondents state that a teacher cannot be replaced with mobile applications because teachers may do more benefiting things than technology in learning and teaching settings; 2) human interaction, sense of emotion, and delivery are still needed by the students, over the mobile technology features that could provide availability, flexibility, and practicality that might put the role of teacher aside; 3) several important qualities that should be possessed and maintained by EFL teachers include (but are not limited to) developing a friendly relationship with students, alleviating their anxiety, having a good sense of humor, and treating their students fairly. Indeed, those teachers' qualities cannot be gained through any kind of technology at present. The present finding suggests that EFL teachers should maintain their human qualities while adapting to technology to preserve themselves from redundancy. The present study has its shortcomings; therefore, it is recommended

that the next researchers examine a similar issue on the teachers versus technology in the eyes of non-EFL teachers and students by involving a large number of respondents in the secondary level of education.

**Acknowledgments**

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