Perspectives of computer science students on online learning quality and learning apps for sustaining communicative competence growth

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Abstract. The pandemic of COVID-19 has tremendously shifted the process of facilitating learning for undergraduates. All educational sectors are influenced by the robust implementation of online learning. Students all over the world are also challenged to be adaptive and be resilient with the fast changes of ways to learn. In responding to the sudden shift to online learning, most of students demonstrate tedious works to complete all online tasks and assignments set by lecturers. Consequently, students become more responsive to do the online tasks rather than obtain life-skill competence such as communicative skills. This research aims to investigate quality of online learning and online apps used in the online learning that support development of learners’ communicative competence. The data of this research are from 30 BINUS University students’ responses on the survey conducted during implementation of learning from home. The respondents are involved in English subject online classroom. The data analysis were employed qualitative approach to describe the main focus of the research. The results of data indicate the quality of online learning applied during COVID-19 breakout desired improvements in terms of content development, teaching and learning instruction, and learning evaluation system to accommodate the acquisition of communicative competence. Moreover, online learning devices were still lacking on catering the development of communicative competence. Overall, the research has proved that the quality and the tools of online learning are interdependent factors to reinforce communicative competence.

Keywords: Communicative competence, online learning quality, online learning apps, perspectives

1. Introduction

It is unquestionably true that all students acquire most of academic skills when they obtain full-time studying at school. In college or university, adult students improve social skills as well as academic skills. They have much fun having socialization with friends coming from different schools that result in positive awareness to develop social skills as well as to acquire other knowledge or skills. Going to
School is considered the best available public policy tool to improve and develop individuals’ skills [1]. Thus it is clear that school is the best place to advance skills and knowledge.

Unfortunately, with the recent coronavirus pandemic, most of countries in the world urged to close schools, universities, and companies for the sake of saving lives and reducing mortality rate. Similarly, the government of Indonesia had enacted a policy for the people to work, study and have their religious duties at home. Yet this condition creates problems not only for educators but also for students. They all have to carry the burden of having piles of assignments that leads to stressful life, panic, anxiety, and finally demotivation to learn. In short, these negative learning interruptions can hamper the knowledge and competence growth. This is also supported by statements on a causal effect of schooling on skills [2]. 12 weeks or 60 days of schooling implies a loss of 60% of standard deviation which is non-trivial. In other words, closing schools may affect the rise of skill growth of learners when taking knowledge or skill test.

Due to pandemic COVID-19, online learning becomes the best solution for conducting teaching and learning process. This fact is also supported by the advancement of technologies in all aspect of human life. Hence, educational stakeholders enforce all academicians to conduct online learning by maximizing internet connections and technology innovation. In addition, most of educational institutions alter the traditional learning to online learning due to the flexibility of accessing the mode of learning. Distance education has grown rapidly over the past few decades, and online enrollments have been growing substantially faster than overall higher education enrollments [3]. With this fact, it is absolutely confirmed that online learning can reach more students.

However, to provide online teaching success in such kind of flexible environment is not easy for educators. Online learning needs adequate skills and competencies such as technological skills, social skills, communicative skills and other relevant skills to ensure learning success. Moreover, with the technology use in online learning can boost the oral production of learners. For example, learners take advantage of recording voice for delivering messages in the targeted language, at this point learners do not only enrich the vocabulary ranges but also enhance communicative skills through the medias either asynchronous or synchronous devices.

Unlikely, not all educators are able to maintain students’ communicative competence growth through online learning. Factors such as lack of technical skills in operating technology devices, the minimum lesson preparations, and the huge teaching workload are often interrupting the quality of online learning delivered to the students. As a consequence, deliberating communicative competence is often absent from the online learning produced. The online learning environment only functions as content-delivery than skill-mastery.

Based on those phenomenon, the recent study aims to indicate to what extent online learning can facilitate the development of communicative competence. The study concentrates on quality of online learning and online devices applied in online learning during the pandemic of coronavirus. The result of the study will significantly beneficial for the institutional stakeholders to ensure the success of online learning deployment in higher educational institution. In addition, the output of the study will raise learners’ and educators’ awareness on the importance of mastering communicative competence via online learning.

2. Literature reviews

Online learning has tremendously affected learning system in most of higher educational institutions. Several research previously has put concerned on benefit of online learning to attest students’ success in learning. It is useful and helpful to have online material available, where it is also required for teachers to stress the importance of students actively engaging in the material to have its full effect [4]. In other words, online learning permits the access of learning materials. Furthermore, unlike traditional classes, the great thing about online learning is that learners feel more flexible to communicate with their teachers or professors [5]. Overall, online learning allows more opportunities and freedom for learners to fulfill their learning needs.
Meanwhile, online learning can hold up utilization of multimodal learning materials and technology. For example the use of video conference, moodles, learning management system (LMS), discussion board, website blogs, social networks, and internet can enhance social interaction during learning process. Accordingly, there is statement saying that various multimedia-facilitated language learning and teaching environment can provide learners with the salient support and successful learning experience to develop communicative competence [6]. Thus, integration of multimedia technology in online learning is essential to augment learners’ communicative competence.

Since the integration of technology in online learning is valuable for increasing learners’ communicative competence, lecturers are suggest using certain variety of technology tools in online learning classrooms. It has been proven that technology integration in online learning makes the learning becomes more meaningful, contextual, real and offer more chances to social interaction [7]. One example of familiar technologies that has been executed in most of online learning classroom is WhatsApp application. WhatsApp can develop students’ writing skills, vocabulary, word choice, and speaking ability, too [8].

Prior to research on the usage of WhatsApp application in language learning, it is suggested that Wiki technology (i.e. Wiki Page) would improve learners writing skills such as spelling and sentence structures by allowing learners to get immediate feedback from classmates or peers [9]. Although there are plenty of technologies that support online learning, computer-based communication is still considered as a useful feature for language learning [10]. Shortly, embedding technologies in language learning will support the success of the language learning.

3. Methodology
The study employs qualitative approach on basis of case study about matters of . There were 30 undergraduate students involved in the research. All of respondents are BINUS students majoring in Information Technology Department. They filled out a survey using Google Form consisting of five questions both open-ended and close-ended. To analyze the data, this study adopted descriptive qualitative analysis based on respondents’ responses on the survey.

4. Results and discussions
4.1. Online learning quality factors to develop communicative competence

![Figure 1. Online Learning Quality Factors Leading to Communicative Competence Growth](image-url)
Figure 1 indicates the satisfaction differences of four leading factors that influence quality of online learning in aiding communicative competence. For online learning implementation, the students admitted satisfied only for content development with 67% compared to the result of unsatisfied students that reached 33% only. While in two measured components as multimedia use and communicative instruction, the satisfying reactions remained steady in 33% but lower than the unsatisfying reaction which ended up at the highest percentages of 67% in two aspects. In the last factor, students assessment, the unsatisfying level was slightly above 10% comparing to the satisfying level that finally hit 47%. Overall, the result confirms the research results by Jeong [6] that content development is more important since it significantly affects the development of communicative competence in online learning.

4.2. Online learning devices supports communicative competence growth

![Figure 2: Online Learning Devices Supports Communicative Competence Growth](image)

The bar chart as seen in Figure 2 represents preferences of online devices uses to increase communicative competence through online learning. 83% of respondents—students, in this case—agrees that video screen shares as Zoom, Google Meet, Webex, Skype, Ms.Teams were highly recommended to level up communicative competence compared to other devices. Following video share screen, 67% of students conveyed that Chat apps like LINE, WA and Telegram also play significant role in accomodating communicative competence development via online learning. Unlikely, learning platform as LMS (institution moodle as Binus Maya and Google Classroom) and social media platforms such as Instagram and Facebook are less favoured to equip communicative competence in online learning due to lack of features to mediate communication or interaction and the unsecurity of privacy matters. Therefore, these tools were only utilized in the small portions, around 27% for social media and 33% found in LMS use. Altogether, these results are in line with the research results where students will shown greater participation in online learning that allows autonomy to access multimodal online learning medium [4].

5. Conclusion

Even though online learning is considered great solution for delivering lessons to learner during COVID-19 outbreak, communicative competence does not always expand progressively. There remains many intriguing factors affecting the development. Two problems that inhibit the
improvement of communicative competence in online learning are quality factors and online devices. These two dimensions jointly determine the success of building communicative competence. By paying attention to quality factors and application usage when addressing online learning, it is expected that online learning will consequently assist the growth of communicative competence. This research also recommends for future investigation on this area to examine other contributing factors to various types of failures of online learning which lead to communicative disengagement of learners in online learning shared by streaming channels.

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