Incorporating Digital Multimodal Composing and MOOC Courses in L2 Speaking Classes: Learners' Attitudes in Focus

Abstract

In recent decades, language educators have taken advantage of technological advancements in the language classroom, and L2 learners have voiced their interests, concerns, and preferences about those technological advancements. The current investigation was designed to find out the attitudes of Iranian intermediate IELTS candidates towards using digital multimodal composing (DMC) and massive online open courses (MOOC) in their speaking classes. To achieve this aim, a sample of 60 male and female EFL learners at the intermediate level were selected based on volunteer sampling procedures. Subsequently, the participants were assigned to the two conditions of DMC and MOOC. The two groups were exposed to the same instructional materials, with the difference being that in DMC, the learners had to produce videos during the course and post them on the Flip platform for their peers and teacher to review and comment. They then could use the feedback to make corrections/revisions; in the MOOC condition, the learners signed up for an IELTS course on futurelearn.com and received video presentations, pdf articles, and quizzes, and they were asked to leave comments or react to each other's' comments during the course. Each group received a researcher-made attitude questionnaire at the end of the course and expressed their opinions about the treatment they were exposed to. Not surprisingly, both groups welcomed the use of DMC and MOOC and had positive attitudes towards incorporating such techniques into speaking courses. Based on these findings, this study presents a discussion of certain pedagogical implications.

Keywords: Attitude, DMC, IELTS, MOOC, Speaking

Introduction

The use of digital multimodal composing (DMC) as a key component of ELT instruction is currently gaining popularity. The use of DMC for the development of multi-literacies is widely documented (Jiang, 2017; Zhang et al., 2021), but less is known about how DMC might help students learn English in general and L2 speaking in particular (Xu, 2023), especially in the Iranian EFL context (Maghsoudi, et al., 2022).

DMC is a method of communication that combines many semiotic modes, including but not limited to image, word, and audio, using digital tools to create texts. For modern English language learners, DMC examples like audio podcasting and video creation are becoming more and more popular. Other examples of DMC include digital poems, digital book reviews, and digital storytelling. It is crucial for language teachers to be aware of the instructional potential of DMC for particular learning objectives in ELT contexts as researchers have argued for its benefits (Early, et al., 2015; Kress, 2003).

DMC has gained attention in language classrooms across diverse contexts, including secondary schools in the United States (Miller & McVee, 2012) and Australia (Mills, 2016), as well as university-based English programs in Hong Kong (Hafner, 2015). Despite this, our understanding of its pedagogical potential remains incomplete and limited. Previous research

highlights how DMC can foster multi-literacies (Mills, 2016), motivation (Jiang & Luk, 2016), and identity formation (Hafner, 2015) in language classrooms. However, studies also underscore the challenges posed by DMC compared to traditional print-based learning and high-stakes exam preparation (Tan & McWilliam, 2009). This conceptual divide suggests that DMC-mediated literacy learning differs from conventional literacy learning. Furthermore, there is a lack of research on how DMC is perceived by students in language learning, particularly in an IELTS preparation course in the EFL contexts of Iran.

Massive online open courses (MOOCs) have emerged as a technological innovation that has greatly impacted education in general and language learning specifically. MOOCs are online courses characterized by open enrollment, freely accessible curriculum, and flexible outcomes. They incorporate social networking features, provide readily available online materials, and are facilitated by renowned experts in the respective subject area. Significantly, MOOCs encourage student engagement by allowing them to plan their participation based on learning objectives, prior experience, shared interests, and individual abilities (McAuley et al., 2010).

MOOCs offer several key benefits, including the emphasis on social connections and the availability of flexible learning materials that allow students to progress at their own pace while fostering a sense of community (Ventura & Martn-Monje, 2016). Another advantage of MOOCs is the opportunity for numerous students from diverse countries to engage in learning. In other words, MOOCs provide a platform for a diverse and inclusive learning environment where students from various backgrounds can interact and learn together. Virtual learning environments enabled by MOOCs offer new and interactive ways of learning, characterized by openness and innovation. These digital learning settings create a learning network enriched by online interactions among students, utilizing the unique capabilities and characteristics of digital learning (Navío-Marco & Solórzano-García, 2019).

Past research has focused on using MOOCs for different language skills and components. However, as Fang et al. (2022) mention in their review of journal publication studies from 2009 to 2018, in relation to language skills, MOOC studies conducted on speaking and vocabulary were less than the ones dealing with reading and writing. As learning to speak in a second language is one of the most demanding aspects of second language acquisition (SLA), the present study aimed to explore the attitudes of L2 learners towards utilizing DMC and MOOC-based learning in their speaking courses.

Literature Review

Indeed, computers have become an integral part of modern educational systems. According to Prensky (2000), students today consider computers, digital media, and the Internet as essential components of their lives. They have become so accustomed to these technologies that the world would seem meaningless without them. In this context, Computer-Assisted Language Learning (CALL) has emerged as a powerful tool to personalize education and enhance student engagement.

Research by Vahdat and Eidipour (2016) supports the notion that CALL can greatly assist in customizing education. By utilizing CALL, materials can be personalized to meet individual student needs and preferences. The use of animated objects on the screen and interactive multimedia elements can make learning more engaging and enjoyable. Additionally, CALL offers

practice exercises that integrate challenges and curiosity within specific contexts, which can significantly enhance student motivation.

CALL is an effective tool that can enhance language learning and instruction in several ways, as supported by research. Hani (2014) highlights the following factors contributing to its effectiveness: (a) practical classroom activities: computers can be utilized to create interactive activities that help students develop their language skills in listening, speaking, reading, and writing; (b) learning inside and outside the classroom: CALL extends learning beyond traditional classrooms, providing students with access to language learning resources and practice materials anytime and anywhere; (c) personalized and real-world learning: CALL can be customized to meet individual learners' needs and offer authentic materials and real-life contexts, making language learning more personalized and meaningful; (d) learner-centered approach: CALL empowers students to take an active role in their learning process, allowing them to set goals, work at their own pace, and engage with interactive learning materials, which reduces apathy and enhances engagement; (e) integration of four language skills: CALL seamlessly integrates listening, speaking, reading, and writing skills through multimedia components, interactive exercises, and communication tools; and (f) instant feedback: CALL platforms provide immediate feedback to students, enabling them to assess their performance and make improvements in a timely manner.

While CALL has received praise from researchers and educators, it is important to acknowledge its limitations and shortcomings. Bas (2011) highlights several concerns associated with CALL education: (a) inaccurate evaluation of verbal communication: computers are limited in their ability to accurately assess students' verbal communication skills. Machine-generated pronunciation lacks the nuances and variations present in human speech, making it challenging for computers to provide accurate feedback on pronunciation and oral communication; (b) questions about software stability and quality: there are concerns regarding the stability and quality of CALL software. Some commercially available resources may not meet the desired pedagogical outcomes, potentially limiting the effectiveness of the learning experience; and (c) inadequate computer skills: insufficient computer skills among both students and educators can hinder the learning process. If learners and teachers lack proficiency in using computers and navigating CALL software, it can impede effective implementation and utilization of CALL resources.

Taking into account the drawbacks outlined above for implementing CALL, Al-Kahtani and Al-Haider (2010) highlighted several reasons why educators may avoid incorporating technologies like CALL in their classrooms: (a) lack of CALL teaching experience: educators may hesitate to utilize CALL due to a lack of experience in integrating technology effectively into language instruction. The unfamiliarity with CALL teaching methods and strategies can be a barrier to its implementation; (b) lack of computer accessibility: limited access to computers or insufficient availability of technology resources in educational settings can hinder the adoption of CALL. Without adequate access to computers, it becomes challenging to integrate technology into language learning activities; (c) lack of CALL trained teachers: teachers may face difficulties in teaching students computer skills necessary for using CALL effectively. The absence of educators trained in CALL techniques and computer literacy can impede the successful integration of technology into language instruction; (d) lack of computers and funding: insufficient availability of computers and the lack of financial resources to acquire them can be a significant obstacle. Inadequate infrastructure and funding make it difficult for institutions to provide the necessary technology resources for CALL implementation; and (e) high cost and rapid technological progress: the cost associated with technology equipment, including hardware and software, can be

prohibitive for some educational institutions. Additionally, the rapid pace of technological advancements may create concerns about investing in technology that might quickly become outdated.

It is important to recognize these limitations and challenges within the field of CALL. However, despite these drawbacks, the benefits of CALL in language teaching and learning are significant. Hani (2014) suggests that the use of CALL can positively impact students' language performance. It is crucial to acknowledge that the use of CALL does not eliminate the role of teachers. Instead, teachers play a vital role in guiding students towards the fundamental objectives of communication and language acquisition. Therefore, it is inappropriate to ignore or replace teachers with computers, as they remain essential in language education alongside the integration of technology.

With the increasing availability of digital technologies in educational settings, the practice of digital multimodal composing (DMC) has become prevalent in classrooms. DMC involves the creation of digital texts that incorporate multiple modes of communication, including written language, images, videos, voice recordings, audio elements, and more. Examples of DMC activities include digital storytelling, creating digital book reviews, and composing digital poems.

The existing body of research on DMC in ELT primarily focuses on evaluating and applying this technology in EFL classrooms, while experimental studies investigating its effectiveness in practice remain limited. Hanfer (2020) addresses the significance of incorporating DMC in ELT and emphasizes the influential role of digital media in contemporary communication, enabling new forms of multimodal representation. Hanfer argues that ELT pedagogy often overlooks the systematic integration of multimodal aspects of communication. To bridge this gap, the pedagogical approach of DMC has been developed to meet the needs of English language learners in the digital era. It involves engaging with various forms of communication within digital media, alongside traditional reading and writing activities In his article, Hanfer provides an overview of scholarly work that has contributed to the development of this approach. In a case study involving English language learners in Hong Kong, the pedagogical approach of DMC was demonstrated in practical implementation. The study suggests that this approach could be effectively applied in other contexts, achieving a balance between multimodal communication within digital media and the fundamental requirements of the English language curriculum.

A framework by Liang and Lim (2020) integrates DMC into English classrooms. This framework, inspired by Systemic Functional Theory and Design Thinking, categorizes DMC knowledge and skills into critical thinking, creativity, and technical areas. Their four-lesson package, informed by this framework, was implemented in a Singaporean secondary school English class. The study's findings highlight the importance of a pedagogical framework for guiding students' development and demonstration of DMC skills, rather than assuming they are innate.

Jiang's (2017) research explored the benefits of DMC for EFL learning. The study revealed that integrating DMC offers students a multitude of technological, educational, and social advantages, impacting their EFL learning in various interconnected ways. It also unearthed the potential to link DMC with print-based literacy learning within EFL classrooms. Based on these findings, Jiang proposed a framework demonstrating how DMC's affordances can enhance student engagement with English learning.

Hanfer and Ho's (2020) study examined DMC use in L2 writing and proposed a process-based assessment model. Focusing on a university English for science course and a digital video scientific documentary assignment, the researchers interviewed teachers to gain insights into their perceptions of the multimodal assessment task's practicalities and challenges. Their findings led to a process-based assessment model for DMC, illustrating the interplay between instructional processes, design activities, and assessment. The results emphasized planning assessments at various design stages, incorporating both formative and summative strategies. Additionally, the model stressed the importance of considering the orchestration of multimodal affordances during assessment. Overall, the study provides valuable insights for educators on effectively assessing DMC in L2 writing.

Jiang's (2018) study investigated the effects of DMC on investment in writing among EFL learners at a university in China. The research employed a combination of observation, interviews, and analysis of student-created multimodal texts. The findings revealed three distinct patterns of investment change, each illustrated by a student's experience. One student transitioned from being a reluctant writer to an active participant through DMC activities. Another student transformed from prioritizing exams and textbooks to becoming a designer through DMC tasks. However, a third case showed minimal change in the student's investment in writing. These findings suggest that while DMC broadened the range of potential identities for EFL learners, individual responses varied, impacting their investment in writing. The study also highlighted that these responses were influenced by students' commitment to specific identities and external factors associated with high-stakes testing. Overall, the research underscores the importance of considering individual learners' identities, motivations, and external influences when exploring the effects of DMC on investment and writing in the EFL context.

Jiang and Ren's (2020) study focused on the experiences of teachers and students involved in a university English course in China that incorporated a DMC video production program. Their findings, based on data from various sources, revealed contrasting ideologies between teachers and students regarding language, teacher roles, and valid evidence of learning in the context of DMC. These divergent ideologies, according to the researchers, unintentionally created barriers to students' investment in English learning at both individual and systemic levels.

Jiang, Yang, and Yu's (2021) longitudinal case study investigated the impact of a DMC project on a Chinese ethnic minority student's investment in EFL learning. Data collection included interviews, classroom observations, informal conversations, written reflections, and student-created multimodal videos. The findings suggest that integrating DMC into mainstream English classrooms can be an empowering and culturally sustaining approach to enhance the investment of ethnic minority students in English learning. The student in the study not only received peer support and participated in a collaborative learning environment, often underemphasized in traditional classes, but also learned to leverage their cultural knowledge as valuable capital for active participation.

Zhang, Liu, and Chen's (2022) exploratory study investigated the effects of creating voice and video blogs (v-logs) on the speaking performance of EFL learners. The study involved 67 middle school students from China. Data analysis included pre-test and post-test speaking scores, two recorded vlogs, a questionnaire, and a semi-structured interview. The results revealed that vlog-based DMC had a positive impact on students' speaking fluency, with improvements evident in their second vlogs compared to the first. Interestingly, video blog creators outperformed voice blog creators in terms of accuracy but exhibited lower fluency.

Maghsoudi, Golshan, and Naeimi's (2022) study examined the differential effects of multimodal and monomodal writing on the writing ability of EFL learners. The study involved 59 university students in Iran, divided into two groups: a multimodal group that composed five digital essays using various modes, and a monomodal group that used only text for their essays. The researchers assessed writing ability five times throughout the semester. The findings revealed that both groups improved their writing ability over time, with the multimodal group exhibiting stronger writing skills compared to the monomodal group.

All the studies cited above on the topic of DMC indicate that language skills in general and speaking in particular have not been subject to much scrutiny under the influence of DMC. That is why the present study sought to find out the attitudes of Iranian EFL learners towards DMC and MOOC-based instruction for speaking courses.

MOOC is a relatively recent and extensively utilized form of online education (Dhawal, 2013). One of the key advantages of MOOCs is their focus on social connections, allowing students to engage with peers and instructors, fostering a sense of community (Ventura & Martn-Monje, 2016). Additionally, MOOCs offer flexible learning materials that enable students to progress at their own pace, catering to individual learning needs and preferences.

Another notable advantage of MOOCs is their accessibility, allowing students from diverse countries and backgrounds to participate in the courses (Ventura & Martn-Monje, 2016). This global reach provides opportunities for learners who may not have access to traditional educational resources or who are unable to attend physical classes due to geographical or logistical constraints.

According to Li (2017), MOOCs are open courses that utilize network platforms and expand the scope of traditional teaching methods. They are particularly effective for distance learning, providing opportunities for integrating technology-assisted teaching and learning (Khalid, 2017). Generally, MOOCs possess three distinctive characteristics: they are Internet-based courses that offer audiovisual teaching and learning materials accessible online, they are free of charge, and they can accommodate a large number of users without requiring individualized instruction from an instructor (Chacón-Beltrán, 2017).

The positive response to MOOC platforms and courses can be attributed to the belief held by many students that their experiences with MOOCs can be personally fulfilling. Alhazzani (2020) suggests that certain students find learning through MOOCs to be efficient and effective, particularly those who thrive on having internet access. The availability of online classes that allow students to study at their own pace and according to their preferences is highly motivating. MOOCs have the potential to meet these demands and offer flexibility, which students greatly appreciate (Cripps, 2014).

Students show a keen interest in MOOCs as they provide an opportunity to explore new topics and expand their knowledge of current affairs. They are motivated by personal challenges and often strive to earn as many completion certificates as possible (Hew & Cheung, 2014). This desire for continuous learning and the drive to achieve personal goals contribute to the positive reception of MOOCs among students.

Despite the advantages of MOOCs, there are also criticisms directed towards them. One of the main concerns is the significantly low completion rates compared to traditional education, including traditional online education (Zhong et al., 2016). It is estimated that around 90% of participants in MOOCs discontinue the courses before completion. While low completion rates

may not be the ideal measure of learning outcomes, they raise questions about the effectiveness and value of MOOCs (Chafkin, 2013; Jordan, 2014).

Another criticism revolves around the weak structure of MOOCs, which can lead to a reduction in the quality of education and make it challenging to measure attainable learning objectives (Dagmar, 2014). Additionally, Bing (2017) criticized MOOCs for their testing methods. Online tests taken without direct supervision may lead to concerns about the authenticity of the test-takers' identities and raise the possibility of students asking others to take tests on their behalf. This could potentially inflate test scores, allowing even students with limited English proficiency to perform well.

Furthermore, online instruction presents challenges related to the computer skills of both teachers and students, technical anxiety, a lack of motivation, and difficulties with independent work (Holcomb et al., 2004). These factors can hinder the effectiveness of online learning experiences.

Several studies have examined how effective MOOCs are for learning. Ventura and Martín-Monje (2016) looked at how adding Facebook to a MOOC for learning a second language affected students' ability to learn specialized vocabulary. Their research used a mix of quantitative methods, like tracking students within the MOOC, and qualitative methods, like surveys. They found that using Facebook groups helped students feel more motivated to learn new vocabulary and improved their progress in the MOOC.

Another study by Mellati and Khademi (2018) investigated how a MOOC-based program affected the English proficiency of Iranian EFL learners. The research used a mixed-method approach and involved 38 participants at Baqer al-Olum University in Iran. Half the participants used the MOOC program, while the other half took a traditional English language class. The researchers collected data through pre-tests, post-tests, and interviews. The results showed that the participants who used the MOOC program performed better than those in the traditional class. The qualitative data analysis also revealed two main challenges associated with MOOCs: technical challenges (related to technology access and skills, control over learning materials, and assessment) and emotional challenges (including motivation, cultural differences, and individual learning styles).

Sahli and Bouhass Benaissi (2018) conducted a study to explore how MOOCs can be used to teach writing skills. The researchers selected 15 students from the University of Ibn Khaldoun–Tiaret, Algeria, and enrolled them in an online writing course. After completing the course, the students filled out a questionnaire about their expectations and experiences. The findings indicated that the students had positive attitudes towards using online instruction for learning writing skills.

Alanazi and Walker-Gleaves (2019) conducted a study to investigate students' attitudes towards using a blended learning approach that combined MOOCs with flipped classrooms, compared to traditional teaching methods. The research used a mixed-method approach, utilizing surveys and interviews. The findings revealed that students had positive attitudes towards the blended learning approach. Participants also reported that this approach significantly helped their English learning both inside and outside of the traditional classroom setting.

Hashemifardnia et al. (2021) conducted a study to assess the effects of a MOOC on the speaking skills of Iranian EFL learners. The study involved 130 learners who initially took an English placement test. From this group, 60 intermediate learners were chosen and divided into an

experimental group (using the MOOC) and a control group (using traditional classroom instruction). Both groups took a speaking test before and after the study. After the treatment, the experimental group also completed a questionnaire to assess their attitudes towards MOOC instruction. The results indicated that the students who used the MOOC performed better on the speaking test after the study. The findings also revealed that Iranian EFL learners had significantly positive attitudes towards using MOOC instruction for speaking classes, as evidenced by the results of the one-sample t-test.

Many people start MOOCs but do not finish them. Tamjidyamcholo, Gholipour, and Afshar Kazemi (2020) investigated this issue by looking at factors that influence whether someone completes a MOOC. They based their research on a theory by Triandis and analyzed data from 234 people who were enrolled in Coursera courses. The researchers found that people were more likely to complete a MOOC if they believed it would help them learn new things, allow them to interact with others, and fit in with their interests. Interestingly, social pressure from friends or family did not seem to influence completion rates. Additionally, the study found that if people had the resources they needed to take the MOOC (like reliable internet access) and were already planning to finish it, they were more likely to actually follow through.

The studies reviewed above show that no research study to date, to the researchers' best knowledge, has dealt with the issue of students' perceptions about using DMC and MOOC-based learning for speaking development in the context of Iran. The present study, therefore, aims to fill this gap in the literature and contribute to the existing body of knowledge in this domain. Thus, the following research question was posed to be investigated in the present study: What are Iranian IELTS test takers' attitudes and perceptions about the use of DMC and MOOC courses for the purpose of speaking development?

Methods

What follows presents the description of the methodology that was used in this study.

Design of the Study

The present study had a quantitative survey design because the researchers utilized two carefully designed questionnaires to investigate the attitudes of Iranian intermediate-level IELTS candidates towards using DMC and MOOC in their speaking classes.

Participants

The participants of the study were selected from EFL learners and enthusiasts who responded to an ad for free IELTS classes. Their level of proficiency was checked through the administration of an Oxford Quick Placement Test (OQPT) that was given to them at the beginning of the study. They were assigned to the two groups of DMC and MOOC, consisting of 31 and 29 learners, respectively. They were roughly homogeneous in terms of age ($M = 27.96$) and mother language background (i.e., Persian) in addition to their language proficiency level (i.e., intermediate). The available learners who met these criteria were recruited as the participants in the study. The characteristics of the participants of the study are also shown in Table 1:

Table 1

Characteristics of the Participants of the Study

Groups	*N*	Proficiency Level	Mother Tongue	Age	Academic Qualification
DMC	31				
MOOC	29	Intermediate	Persian	25-37	Bachelor's and above
Total	60				

Instruments and Materials

The instruments that were used in the study included an OQPT and attitude questionnaires. The OQPT is a standardized English proficiency test that has been widely used by researchers around the world. It consists of 60 vocabulary, grammar, and reading comprehension questions, and can place language learners in the right level of proficiency. Based on the scoring rubric of the OQPT, learners who receive a score between 30 and 47 on this test could be labeled intermediate. The reliability and validity of this test had already been established by previous researchers, but for good measure, its reliability was once again calculated through the Cronbach's alpha formula (.87).

Furthermore, the researchers developed two attitude questionnaires examining the perceptions of the EFL learners about the benefits of using DMC and MOOC-based environments for speaking practice. The questionnaire that were given to each of the groups consisted of 15 questions, dealing with design, implementation, use, and learners satisfaction with their treatment. These questionnaires consisted of closed-ended items weighed on a five-point Likert scale, with options ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The questionnaires were given to three experts in the field of TEFL to check their validity, and the reliability of the questionnaires were examined via the Cronbach's alpha reliability formula. The reliability coefficients were calculated to be .77 and .82 for the DMC and MOOC attitude questionnaires, respectively.

In addition, the materials that were used in this experiment included information on the speaking section of the IELTS test, the test format, timing, speaking assessment criteria, and practice in the three parts of the IELTS speaking test followed by tutor feedback. The instructional materials were collected from the books and resources provided by British Council and Cambridge Assessment English. In fact, in the DMC group, resources were made available to the learners so that they composed videos of themselves, answering Part 1, 2, and 3 questions of the IELTS test (using the guideline provided for them by the teacher) in the platform of Flip (flip.com), which is a simple, free, and accessible video discussion experience for learners. On Flip, a teacher can define a community of learners, create a conversation starter, share it with his/her learning community, and the learners can view and share their video responses.

On the other hand, the materials that were used in the MOOC course were similar instructional materials intended for the three parts of the IELTS test, uploaded to futurelearn.com by British Council through the course *Understanding IELTS: Speaking*. The materials consist of videos and articles of British Council IELTS tutors, followed by tasks to be done individually and a comments section where the participants can reflect and comments on the lesson and/or on what they did, or on other participants' responses.

Data Collection Procedure

In the first place, over 120 Iranian EFL learners expressed their willingness to participate in this study; they were then given an OQPT and those who qualified to serve as the participants in this study (i.e., whose scores fell between 30 and 47) were recruited as the participants. They were assigned into the two groups of DMC ($M = 31$) and MOOC ($M = 29$). In the DMC condition, the teacher taught IELTS speaking lessons and included all the information on task types, test structure, and speaking guidelines, and after each lesson, she asked the learners to create a video in response to the task assigned to them, and post it on their Flip learning community. There, all the group members could watch each other's videos and could receive feedback from their peers and the teacher as well.

In the MOOC group, however, the participants were led to register for the IELTS speaking course delivered by British Council in www.futurelearn.com, where they could be taught IELTS speaking for free. In this MOOC course, the lessons were delivered using a variety of ways such as videos and articles. The participants were exposed to the lesson and were asked to share their comments and respond to each other's comments underneath the lesson. Some comments were liked or recommended by the course leaders. The participants were also asked to do some speaking exercises and provide/receive feedback. The first researcher of the present study also signed up for the course and followed the participants throughout the course to ensure they were actively involved in the course.

The treatment sessions (which lasted for three weeks) were followed by an attitude questionnaire given to the learners in both groups. In order to analyze the data collected from the questionnaires, chi-square for goodness of fit was run for each of the items in the questionnaire to compare the frequencies of agree (i.e., strongly agree and agree) choices with the disagree (i.e., strongly disagree and disagree) choices.

Results

Table 2 presents the frequencies of responses, the Pearson Chi-square value, and the p value for the items in the questionnaire handed out to the DMC group learners:

Table 2

Results for Attitude Towards DMC Questionnaire

Item	SA	A	U	D	SD	Chi-square	Sig.
1. I am excited about the way I get prepared for IELTS speaking.	12	16	2	1	0	25.13	.000
2. Learning IELTS speaking through Flip was a pleasurable experience.	11	15	4	1	0	23.14	.000
3. Using video coaching, I received plenty of constructive feedback on my speaking.	8	17	3	2	1	17.28	.000
4. You learn and improve a lot when you have to film yourself and post it for others to watch.	10	14	5	2	0	18.61	.000
5. I think I have received enough practice during this course.	6	12	8	3	2	7.34	.007
6. The time I spent on preparing my videos was well worth it.	5	13	8	4	1	7.34	.007
7. I learned from both the feedback I received and the feedback I gave to my peers.	7	13	9	2	0	14.72	.000
8. I feel I was truly engaged in the lesson.	9	11	5	4	2	7.53	.006
9. The fact that I could use the platform whenever I had the time to study made it very convenient.	10	14	4	3	0	16.33	.000
10. What I learned will be kept in mind for a long time as it was through meaningful interactions with my peers.	6	15	5	3	2	9.84	.002
11. After this course, I feel more confident about the IELTS speaking exam.	6	14	4	4	3	6.25	.012
12. I feel my vocabulary knowledge improved in this course.	3	15	7	3	3	6.00	.014
13. I feel my grammar knowledge improved in this course.	5	14	4	5	2	5.53	.019
14. I feel my pronunciation improved in this course.	6	11	7	5	2	4.16	.041
15. I'd like to use Flip to learn other (language) skills as well.	10	12	4	4	1	10.70	.001

- Abbreviations: SA: Strongly Agree; A: Agree; U: Undecided; D: Disagree; SD: Strongly Disagree

All of the questionnaire items received p values smaller than .05, which means that there were significant differences between the agree responses (including strongly agree and agree) and the disagree responses (including strongly disagree and disagree options). A second look at the frequencies of the responses reveals that for all the questionnaire items, the agree responses outweighed the disagree responses, implying that the respondents agreed to all of the statements in the questionnaire, which are all positive comments about DMC. Take item # 1 for instance: the DMC group learners agreed ($f = 28$) that they were excited about the way they got prepared for IELTS speaking; there was only one disagree response for this item. The p value under the Sig. column is lower than .05, indicating that the learners' degree of agreement reached statistical significance. This is true for all the items in this questionnaire.

To come up with a more detailed analysis of the results presented in this questionnaire, it helps to take a look at the Pearson Chi-square column of the table. The larger the value of the Chi-square, the higher the degree of the learners' agreement. It could be thus argued that the learner agreed most with item # 1 (25.13), and with the following items in a descending order:

Learning IELTS speaking through Flip was a pleasurable experience (item # 2, 23.14), you learn and improve a lot when you have to film yourself and post it for others to watch (item # 4, 18.61), using video coaching, they received plenty of constructive feedback on their speaking (item

3, 17.28), the fact that they could use the platform whenever they had the time to study made it very convenient (item # 9, 16.33), they learned from both the feedback they received and the feedback they gave to their peers (item # 7, 14.72), they would like to use Flip to learn other (language) skills as well (item # 15, 10.70), what they learned would be kept in mind for a long time as it was through meaningful interactions with their peers (item # 10, 9.84), they felt they were truly engaged in the lesson (item # 8, 7.53), they thought they received enough practice during the course (item # 5, 7.34), the time they spent on preparing their videos was well worth it (item # 6, 7.34), after the course, they felt more confident about the IELTS speaking exam (item # 11, 6.25), they felt their vocabulary knowledge improved in the course (item # 12, 6.00), they felt their grammar knowledge improved in the course (item # 13, 5.53), and they felt their pronunciation improved in the course (item # 12, 4.16).

To recap, as it could be seen above, the DMC group participants significantly agreed with all the statements in the questionnaire. Table 3 provides the results for the MOOC group learners' attitudes towards the treatment they were exposed to.

Table 3

Results for Attitude Towards MOOC Questionnaire

Item	SA	A	U	D	SD	Chi-square	Sig.
1. It feels good to learn (IELTS speaking) through a large community of international students.	10	12	4	2	1	14.44	.000
2. Learning about IELTS speaking through FutureLearn was a pleasurable, exciting experience.	8	11	6	2	2	9.78	.002
3. I learned a lot about IELTS speaking from the comments posted by my peers and by the course leaders.	9	13	4	3	0	14.44	.000
4. The videos posted on the platform were professionally made and included necessary information.	11	14	3	1	0	22.15	.000
5. I liked the way I could learn at my own pace.	5	10	8	4	2	3.85	.049
6. Preparing a video as an assignment was a challenge, but it proved to be a very useful experience.	12	16	0	1	0	25.13	.000
7. The articles provided by the course leaders were really useful.	6	12	3	5	3	3.84	.049
8. Having to respond to each other's comments made me reflect and learn.	4	14	7	3	1	8.90	.003
9. I learned a lot about IELTS speaking in the course.	8	12	8	1	0	17.19	.000
10. I feel my vocabulary knowledge improved in this course.	4	13	5	4	3	4.16	.041
11. I feel my grammar knowledge improved in this course.	6	11	5	5	2	4.16	.041
12. I feel my pronunciation improved in this course.	3	9	12	3	2	2.88	.090
13. After this course, I feel more confident about the IELTS speaking exam.	11	12	2	2	2	13.37	.000
14. This course made me more responsible for my own learning.	8	14	6	1	0	19.17	.000
15. I'd like to use FutureLearn to learn other (language) skills as well.	7	15	5	2	0	16.66	.000

- Abbreviations: SA: Strongly Agree; A: Agree; U: Undecided; D: Disagree; SD: Strongly Disagree

Table 3 shows that except for item # 12 ($p > .05$), all other questionnaire items received p values lower than .05, insinuating that there were significant differences between the agree responses and the disagree ones. As it was the case with the questionnaire items for the DMC

group, for the MOOC questionnaire, all the questionnaire items have higher frequencies for the agree responses compared to the disagree ones. This means that the respondents expressed their agreements with all of the statements in the questionnaire, which are all positive comments about MOOC.

As it was mentioned above, the value of the Pearson Chi-square is an indication of the extent to which the agree and the disagree frequencies differed: the larger the value, the higher the difference between the frequencies of the agree and disagree options. As the frequencies for the agree options outweighed the frequencies for the disagree options for all the items, it could be concluded that the higher the Chi-square value, the greater the degree of the learners' agreement.

Item # 6 has the greatest Chi-square value in Table 4.26 (25.13, $p < .05$), indicating that the MOOC group learners agreed most with this item, which stated that preparing a video for the assignment was a challenge, but proved to be a very useful experience. In a descending order, the other items are: the videos posted on the platform were professionally made and included useful information (item # 4, 22.15), the course made them more responsible for their own learning (item # 14, 19.17), they learned a lot about the IELTS speaking in the course (item # 9, 17.19), they would like to use FutureLearn to learn other (language) skills as well (item # 15, 16.66), it felt good to learn (IELTS speaking) through a large community of international students (item # 1, 14.44), they learned a lot about IELTS speaking from the comments posted by their peers and by the course leaders (item # 3, 14.44), after the course they felt more confident about the IELTS speaking exam (item # 13, 13.37), learning about IELTS speaking through FutureLearn was a pleasurable and exciting experience (item # 2, 9.78), having to respond to each other's comments made them reflect and learn more (item # 8, 8.90), they felt their vocabulary knowledge improved in the course (item # 10, 4.16), they felt their grammar knowledge improved in the course (item # 11, 4.16), they liked the way they could learn at their own pace (item # 5, 3.85), the articles provided by the course leaders were really useful (item # 8, 3.84), and they felt their pronunciation improved in the course (item # 12, 2.88, $p > .05$). As it was mentioned above, for item # 12, the difference between the agree and disagree options did not reach statistical significance, but the agree responses ($f = 12$) still outweighed the disagree responses ($f = 5$).

Discussion

The research question posed in this study was: 'What are Iranian IELTS test takers' attitudes and perceptions about the use of DMC and MOOC courses for the purpose of speaking development?' To properly answer this research question, the frequencies of responses to the items of the attitude questionnaire were tallied and tabulated, and then for each item, the difference between the agree and disagree responses were examined using chi-square for goodness-of-fit. For the DMC learners, it was found that all the questionnaire items, the agree responses outweighed the disagree responses significantly, implying that the respondents agreed to all of the statements in the questionnaire, which were all positive comments about DMC.

With regard to the learners in the MOOC group, except for one questionnaire item, there were significant differences between the agree responses and the disagree ones. And as it might be recalled, all the questionnaire items had higher frequencies for the agree responses compared to the disagree ones, which means that the respondents expressed their agreements with all of the statements in the questionnaire, which were all positive comments about MOOC.

MOOCs and DMC have revolutionized the way L2 speakers learn due to their ability to provide a multitude of opportunities for continued engagement within the learning experience. MOOCs offer students the opportunity to interact with a wide array of learning materials, allowing them to tailor the curriculum to their individual needs and interests. As digital multimodal composing is becoming increasingly popular as an effective tool for teaching and learning, this form of educational technology offers students an immersive and interactive experience, with the ability to customize content according to individual preferences.

This combination of convenience, customization, and accessibility has been so attractive to L2 learners, as the process of learning is often tailored to the individual's level and interests. In this way, the student is able to be motivated and engaged with their own learning and is less likely to become overwhelmed or disengaged in the process. Additionally, due to the nature of DMC and MOOC, the student feels a sense of autonomy in the learning process and is able to take a more active role in their own learning journey.

Language learners generally approve of such methods of instruction, according to a review of the results of earlier relevant studies as well as this one. Six factors relating to students' views regarding using MOOCs in higher education were reported by Fesol and Salam (2016). These six categories are: student attitudes toward online learning, study management, flexible learning, technology use, online interaction, and classroom learning. They demonstrate their willingness to adapt to MOOCs in education when they are positively exposed to these six elements, and vice versa. The study also showed that the few students who have little academic autonomy are more likely to adhere to traditional face-to-face instruction.

In another investigation, Kulik and Kidimova's (2017) results showed that 71% of the participants strongly agreed or agreed that integrating MOOCs into their curriculum was a good idea. Joseph and Nath (2013) conducted another investigation of a similar nature in India. They sought to understand how the students felt about including MOOCs in the curriculum. Data were gathered using a pre- and post-survey. The learners' opinions were completely different between the pre- and post-survey periods. According to the results of the post poll, 60% of students intended to enroll in MOOC courses as part of their study. Furthermore, 66% of students strongly suggested that their university must incorporate MOOC courses in the college courses.

Li et al. (2015) performed an experimental investigation at Zhejiang University in China. The study's participants included 15 undergraduate students, one professor, and two teaching assistants. The study sought to learn more about how they felt about integrated MOOCs and flipped classrooms. Participants showed a high degree of satisfaction in a number of areas, including different assessment methods, perceived MOOC user-friendliness, perceived utility, and Internet quality.

In contrast, a study within the Russian educational system was undertaken with the objective of eliciting beliefs toward integrating MOOCs in Russian institutions. This was in contrast to other studies where MOOCs were strongly favored. The results showed that only the best pupils, who were highly autonomous learners and active learners, had a positive mindset about this integration. In addition, the study disclosed very clearly opinionated intentions of students regarding advantages and disadvantages of this new learning method (Roshchina,et al., 2018).

As previously noted, the fundamental qualities of DMC and MOOC contexts are primarily responsible for the learners' favorable opinions toward using these tools in speaking. The variety of learning options (video, discussion, articles, quizzes, etc.) impacts learners' positive

perceptions of MOOCs. Additionally, it was seen favorably since they were not required to be physically present in class. The fact that learners may access DMC and MOOC on their mobile platforms has had a favorable effect on their opinion of it, as technology use among the youth in Iran is on the rise. A prominent issue was that although it was the first time for all learners studying with DMC and MOOC, there was no negativity towards them, after they dealt with the new teaching method.

Conclusions and Implications

This study aimed at examining L2 learners' attitudes towards using DMC and MOOC-based instruction for speaking development. The data analysis results pointed to the fact that almost all of the learners' evaluations of these teaching methods for speaking enhancement were positive.

Many people struggle with the IELTS exam preparation; it is well-known for being tough and will test anyone's language abilities to the limit. For a lot of people in an EFL context, the speaking part of the test can be the most stressful one. They are required to understand the question, prepare quickly, keep the idea simple and straightforward, consider and observe cohesion and coherence, lexical resource, grammatical range and accuracy, pronunciation, and many other factors involved in speaking.

The advantages of MOOCs make the effort invested in learning well worth it. When used as a learning tool, MOOCs provide a rich and varied learning environment where students from all backgrounds can interact. The students can now learn in new ways in virtual learning environments because of its interactive, open, and innovative processes. It is a learning network that is enhanced by interactions between students engaged in online learning and uses the unique features of digital learning environments (Navio-Marco & Solórzano-Garca, 2019).

Offering a variety of classes on many subjects, MOOCs maintain their competitive edge and make it easy for students to stay updated with news and trends in their chosen fields and stay on top of their careers, especially when it comes to speaking development. Students are free to set their own schedules and pace for learning. In other words, learning takes place in a less formal environment, frequently around the schedule of the learner. Lessons are more interesting and meaningful. MOOCs have a great deal of potential to broaden viewpoints and knowledge. Participants consult one another for interpretational support, look for more or related sources, and publish their interpretations on social media. Through this distributed learning, participants gain a better understanding of the material and can get immediate feedback if questions arise. All these properties provide a suitable ground for the enhancement of speaking.

DMC and MOOC offer unique features that can improve language learning and foster speaking skills among learners of a second language. Unlike conventional instruction, DMC and MOOCs provide a more engaging and interactive platform for students to learn and practice.

For example, DMC provides learners with the ability to use a variety of media to communicate their ideas in the target language. From text to audio to video, DMC allows students to find a form of expression that best suits their linguistic and creative needs. This ability to express themselves in multiple modes encourages learners to find the courage to communicate more fluently and more confidently with their peers.

MOOCs are also beneficial in teaching language skills in large classes. Instead of being limited to the instructor's instruction and feedback, MOOCs offer a wide variety of activities and

resources that students can use to practice and become comfortable with their language. Students can take part in online discussions, language exchange activities, or watch video lectures that are tailored to their language level. These activities help to build a sense of community and develop the active listening and speaking skills that learners need in order to communicate effectively.

Overall, digital multimodal composing and massive online open courses are effective tools for improving L2 speaking. These learning platforms provide learners with a more engaging and interactive environment that encourages active listening and speaking, as well as an opportunity to practice and expand their language skills.

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