#### ORIGINAL ARTICLE



# Factors affecting the quality of online learning in a task-based college course •

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#### The Challenge

What makes college students' online learning experiences satisfying? How can we provide more evidence and context to understand the effectiveness of online learning? In response to the recent publications of Gacs et al.(2020) and Hodges et al. (2020), the present study shows the qualitative differences between crisis-prompted online courses and a planned online course during the pandemic.

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#### **Abstract**

In the face of the COVID-19 pandemic, all colleges in Korea were forced to transition to online teaching, as was the case in most of the rest of the world. This situation engendered confusion, frustration, and dissatisfaction among students as well as instructors. The present study examined college students' perceptions of online learning in general and of one purposedesigned course in particular and compared their responses. The objective was to identify factors that might enhance the quality of online education (OE) and learner satisfaction. The present study applied a mixed method to ensure robust results, using a survey, interviews, students' reflection papers, and the instructor's field notes. The results indicated that the students perceived online learning as less effective than traditional face-to-face classes overall but were satisfied with the customized online course, specifically citing the instructor's prompt feedback, interaction among students, and effective design of tasks. Given this

outcome, the present study suggests several pedagogical implications for OE in the future.

#### KEYWORDS

effectiveness, learner satisfaction, online education, task-based language learning

#### 1 | INTRODUCTION

In the several decades of its existence, online education (OE) has never been more prominent or received more attention globally than in 2020, because of the COVID-19 pandemic. Institutions had rarely prepared for this unexpected situation, but all were forced to transition to OE hastily (Jung, 2020; Xie et al., 2021). Before the pandemic, OE was seldom allowed in schools and universities in Korea. In elementary and secondary schools, online or hybrid classes were not permitted by the Ministry of Education of Korea. In universities, except for online-only universities, only a very limited number of undergraduate courses were allowed to be conducted online only after instructors obtained permission from their university in advance. Before the pandemic, only 1% of the courses in universities were conducted online (The Ministry of Education of Korea, 2020).

As Hodges et al. (2020) noted, OE has been perceived as lower quality than face-to-face education; this negative view toward OE existed in Korea as well, and mainly due to this view, OE was rarely used in universities. In addition, synchronous OE was not allowed before the pandemic and most universities did not provide videoconferencing tools. As a result, schools and universities did not have adequate infrastructure (e.g. Learning Management System [LMS]), and most instructors and teachers were not familiar with OE before the pandemic in Korea (Jung, 2020).

Moreover, in the beginning of the semester (March, 2020), the Ministry of Education of Korea did not expect the COVID-19 pandemic to persist and, after delaying the semester by two weeks initially, requested schools and colleges to resort to OE for only 2 weeks. This was temporarily extended by another 2 weeks, then another 4 weeks, and finally for the entire semester, leaving most instructors unable to prepare or develop online curricula for a semester. The frequent shifts and amendments at the beginning of the semester caused a great deal of commotion and chaos in Korea among students, teachers, administrators, and parents (Chang, 2020; Lee & Kim, 2020). Individual schools and teachers, from primary schools to universities, began to use platforms, content, and methods that they had never employed before without specific guidelines or training (Jung, 2020). Consequently, there have been complaints from many users about technical problems, inefficiencies, inconvenience, ineffectiveness of learning, and increased workload.

Some complaints about OE raised during the pandemic may be related to the nature of OE, such as the feeling of isolation and technical problems, whereas others may be related to curriculum design or teaching strategies. The recent study by Gacs et al. (2020) stressed that adequate processes of preparation, planning, design, implementation, and evaluation are necessary for successful OE. Similarly, various factors including technology, behavioral characteristics of learners, and instructors' teaching styles help determine the quality of OE (Arbaugh et al., 2008; Jung, 2020). While it may be difficult in a forced-transition or emergency remote teaching (ERT) situation due to its improvised and temporary nature, sound pedagogical design and implementation considering such variables is essential to ensure the success of

OE (Chang, 2020; Kebritchi et al., 2017). Therefore, the present study investigated factors influencing the quality of an online class and students' satisfaction.

#### 2 | LITERATURE REVIEW

Scholars have identified numerous educational benefits of OE. For example, it can improve the effectiveness and efficiency of learning by eliminating barriers and increasing convenience, accessibility, flexibility, personalization/customization, feedback, and currency (Kebritchi et al., 2017). It allows students to learn in their own way and at their own pace, permits greater focus on content, and fosters deeper understanding and engagement (Abe, 2020). It also helps students develop the skills of self-directed, autonomous learning, and time management (Crews et al., 2015; Lee, 2016; White, 2017). An online environment is less intimidating, has less time pressure, and provides opportunities for more equal participation by students (Lee & Han, 2020; Shonfeld & Ronen, 2015). Conversely, certain disadvantages have also been described, such as students' feelings of isolation and frustration, lack of interest and interaction, reduced motivation to learn, and technical problems (González-Lloret, 2020; Jacobs, 2014).

A large number of studies have researched what factors, conditions, pedagogical designs, and teaching strategies can make OE effective. Chickering and Gamson (1987) outlined seven principles of good practice for undergraduate education: (1) encourages interaction between students and faculty, (2) develops reciprocity and cooperation among students, (3) encourages active learning, (4) gives prompt feedback, (5) emphasizes time on task, (6) communicates high expectations, and (7) respects diverse ways of learning. Although these principles were originally developed for traditional classrooms, they have been adopted for effective OE (Crews et al., 2015) because the basic principles can be similarly applied in both online and face-to-face classes despite the different learning environment (Kebritchi et al., 2017). Grounded in the seven principles of good practice, Crews et al. (2015) emphasized that it is necessary to use active learning strategies and to engage students in higher-order thinking for successful OE. Active learning strategies, in turn, enhance learning performance, increase motivation to gain knowledge, and cultivate student-centered learning and social and cognitive presence (Kay et al., 2019).

Task design also plays an important role in OE because effective task design encourages interaction, collaborative learning, and active participation among students (Hampel, 2010). Particularly in language learning, Lee (2016) recommended task-based instruction for more effective online learning because it engages students in the target language community, and offers authentic, interactive, and contextualized language learning opportunities. In addition, in designing effective OE, learner variables and attitudes, such as self-directed learning, motivation, computer and online communication self-efficacy, and learner control, should be considered and incorporated (Hung et al., 2010). From this perspective, the use of a variety of modes of learning content, such as visual, aural, and text modes, is effective in enhancing student engagement and accommodating different learning styles (Hathaway, 2013).

Alongside effective design, the human dimension, such as interaction and feedback, is a critical factor in the success of online learning (Cherry & Flora, 2017). Interaction encourages student participation, promotes student-centered learning, involves more reticent students, and helps reduce feelings of stress and isolation (González-Lloret, 2020). Through interaction, students can develop a shared sense of norms and purpose and cocreate identities as valued

members of a learning community (Koole, 2014). According to Crews et al. (2015), interaction helps students experience mutual interdependence, build a sense of trust, and have richer and more engaging online learning experiences. Similarly, studies have found that students were more attentive and interactive online, which resulted in more in-depth learning (Chang, 2020; So & Lee, 2016).

Besides student–student interaction, the instructor's feedback is another key element in successful OE. Various studies have described the qualities that feedback must possess to foster online learning (Coll et al., 2013; Jung, 2020; Lee & Han, 2020). These include the following: (1) it must be given immediately, (2) it must be provided continuously, and (3) it should focus on process as well as product. In other words, the instructor should offer formative feedback to cultivate student learning. Timely feedback also positively affects students' self-regulated and autonomous learning online (Lee, 2016). In OE, the instructor takes not only a pedagogical role but also a social role. Accordingly, Samora (2013) categorized the instructor's role in OE into cognitive, social, and facilitative presences (i.e., Garrison et al., 2001) and elaborated that among the three, the facilitative presence is the most significant in OE. She further claimed that feedback requires incorporation of all three presences to facilitate online learning effectively. Therefore, as the instructor in OE needs to adeptly inhabit diverse roles from instructional designer, to facilitator, to learning partner, instructor variables, such as attitude, teaching style, or comfort level with technology, are thus major factors affecting the quality of OE (Jacobs, 2014; Kebritchi et al., 2017).

Numerous studies have been published on a wide range of topics in the field of OE, including learner satisfaction (i.e., Jacobs, 2014; Jung, 2020), strategies for OE (i.e., Abe, 2020; Coll et al., 2013; Crews et al., 2015), and TBLT in OE (Kurek & Müller-Hartmann, 2017; Lee, 2016), and a significant number of studies have confirmed the effectiveness of OE; however, very little attention has yet been given to the transition from traditional to online classes in the context of an emergency. Hodges et al. (2020) differentiated ERT from online learning because unlike online learning, preparation, technical support, and faculty training are not adequately provided in ERT. Although OE due to the pandemic was a unique situation, research on ERT will provide a valuable insight into OE, moreover, it can help to prepare for another unexpected situation in the future. The present study aimed to address the following research questions:

- 1) What were the students' general perceptions of the online learning driven by the pandemic?
- 2) What factors influenced the quality of a planned online class and the students' satisfaction of the class?

#### 3 | METHOD

# 3.1 | Participants and course description

The participants were a cohort of 20 English-major students (male = 5, female = 15; junior = 9, senior = 11) in a four-year college in Korea, enrolled in the online *Multimedia-assisted Language Learning* (MALL) course. The students' English proficiency level was mostly advanced based on the ACTFL Proficiency Guidelines (advanced = 16, superior = 4). The course objectives included (1) promoting abilities to critically evaluate digital information, (2) enhancing digital and technology literacy, and (3) creating original digital content in the target language

(English) using various media. Before the start of the semester, the instructor had redesigned the curriculum to optimize it for online learning. Broadly speaking, the course was developed based on the ADDIE model (Analysis–Design–Development–Implementation–Evaluation) (Hess & Greer, 2016). Because it had been offered in previous years (face-to-face course), learner level and needs could be assumed based on data from previous years. A rapid prototyping strategy was also applied to respond quickly to the students' needs as they were recognized. For example, the course originally included five tasks, one of which was removed, and the schedule was modified in response to the assessment of the students' progress and workload.

Regarding course design, Chickering and Gamson's (1987) seven principles of good practice were applied in its implementation and execution in terms of feedback, interaction and task design. That is, prompt feedback was provided, interactions among the participants were encouraged, and task designs for active learning were implemented. Furthermore, in designing language learning tasks, González-Lloret and Ortega's (2014) five characteristics of effective technology-mediated tasks were adopted and implemented into the course: (1) meaning-focused (i.e., carrying out communications for diverse purposes), (2) goal-oriented (i.e., accomplishing the tasks), (3) learner-centered (i.e., allowing learner freedom and autonomy in selecting topics and media), (4) authentic (i.e., playing a game and telecommunication with students from Hong Kong), and (5) containing reflective components (i.e., writing reflection papers).

The course consisted of two modules with four major tasks. The first module included three consecutive, related tasks, whereas the second module involved one independent task. During the first module, the students played a murder mystery game in English using their mobile phones (Task 1), wrote creatively on the basis of the plot of the game (Task 2), and created a related media project in teams (Task 3). An off-the-shelf game, *Her Story*, rather than an educational game for language learning, was selected to make the learning experience more interesting and authentic. Moreover, playing games was an authentic activity for college students, which they often did outside the classroom. The media project required the students to read others' creative writing first and to select partners based on their common interests. Apart from these tasks, the students had a telecollaborative communication activity (one-session only activity), engaging in group discussions with the English-major students at a university in Hong Kong. This was intended to provide an authentic opportunity for communication and to motivate the students. During the second module, the students wrote essays in teams on the topic of their choice on a Google My Map, which enabled them to show the locations of incidents or the paths shown in the story that they created (Task 4).

Tasks 3 (media project) and 4 (map essay) were newly added when the course was switched to online. In the previous MALL classes, students performed different tasks, such as creating a digital story on a location-based app on campus. This would not have been possible during the lockdown period. Hence, those tasks were replaced with the new tasks. In addition, the telecollaborative activity was also new. In previous years, videoconferencing tools were not available, and it was difficult to find a partner university. However, the tool became available and as universities in other countries also moved online during the pandemic, a partner school could be found. The procedures of the tasks are summarized in Figure 1.

A student-centered approach was integrated into the pedagogical design. For example, the students were free to choose a topic, media genre, and team members for the tasks and could negotiate the deadline with the instructor. As the four tasks were the major part of the course, its content, such as short instruction videos (5–10 min, provided when necessary), reading materials (i.e., newspaper clips, book chapters, articles), and online

Task	Synchronous	Asynchronous (students)	Asynchronous (instructor)	
Creative writing (individual task) TASKS 1 & 2	Playing the game (pre-writing task)	Playing the game		
	Φ	Φ		
	Instruction on writing (I) Writing the first draft	Uploading the first draft	Reviewing the drafts & giving feedback	
	Φ.	<b>D</b>	Φ	
	Writing the final draft 1:1 writing conference (I)	Uploading the final draft	Reviewing the drafts & giving feedback	
	Φ.	0	Φ.	
	Final presentation on writing	Reading others' writing Making comments on the discussion board	Participating in the discussion board	
Φ	Φ			
Telecollaboration activity	Discussions with students from HK	•	Φ	
Φ	Φ.			
Media task (group task) TASK 3	Instruction on how to create a media project & use tools (I)	Posting topics	Reviewing the topics & giving feedback	
	Φ	4	Φ	
	Topic presentation Selecting team members Making a storyboard	Uploading a storyboard	Reviewing the storyboards & giving feedback	
	•	•	Φ	
	Group sessions Facilitation with groups (I)	Uploading the first draft Uploading the final draft	Reviewing the drafts & giving feedback	
	Φ			
	Final presentation	Φ	Φ	
	•			
	Reviewing others' work	Making comments on the discussion board	Participating in the discussion board	
	•			
	Writing a reflection paper	Φ	Φ	
Φ.	Φ			
Map task (group task) TASK 4	(same as the procedure of the media project)			

FIGURE 1 Instructional design of the MALL course.

discussions, was organized around them. The students wrote one-page reflection papers for each module. All the tasks were evaluated based on rubrics presented at the beginning of each task (i.e., content and creativity (50%), language (30%), and delivery (20%) for Task 2, 3, and 4).

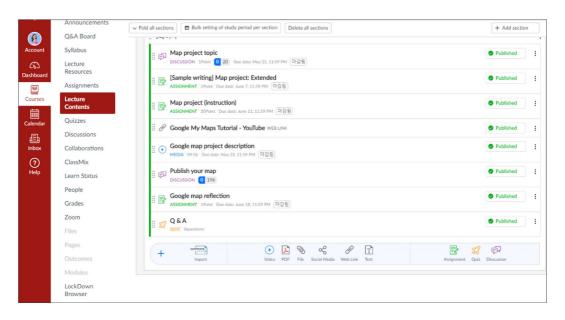


FIGURE 2 Screen capture of e-campus (LMS). [Color figure can be viewed at wileyonlinelibrary.com]

Classes were held twice weekly (75 min each) via videoconferencing, during which time the students engaged with the instructor's lecture (varied depending on the topic) and participated in individual and group sessions. Online discussion boards were also used to share ideas and comments about the tasks outside the class. The students communicated with the instructor using various channels (i.e., videoconferencing, email, messaging, discussion board, and assignment box). They used the university's LMS, which provided a variety of tools for videoconferencing, discussion, messaging, quizzes, surveys, and assignment submission (see Figure 2).

It should be noted that the current LMS (localized CANVAS) was provided a few weeks after the semester began before which each class in the universities utilized whatever resources were available and convenient, including the university's old LMS (the university's in-house LMS) with very basic functions (e.g., announcement, discussion board), Google Classroom, YouTube, and Zoom. The MALL class used the old LMS and Zoom and switched to the new LMS immediately after it became available. However, most of the classes that the participants of the present study belonged to did not use the new LMS because it was difficult to switch the system after the class began and the instructors worried that the new system would not be stable. Approximately half of the classes in the university during the semester were lecture captures which contained PowerPoint files with narration by the instructor. Accordingly, the participants in this study took lecture capture classes and real-time videoconferencing classes in similar numbers.

The course instructor had a broad spectrum of experience with OE; she previously developed and taught classes at K-MOOC and an online university for several years. She performed two major roles, namely, curriculum designer and facilitator, during the MALL course. She focused on the facilitative role and provided prompt feedback, usually answering messages within a few hours and reviewing papers within a couple of days. She reviewed each task multiple times and provided detailed feedback on language and content (see Appendix A). She used discussion boards for encouraging comments and private messages to correct errors or provide negative comments/feedback. During group or individual facilitation sessions through

videoconferencing, she provided oral feedback and real-time interaction with the students. Overall, great effort was put forth on the part of the instructor (approximately three extra hours per day compared to previous years) to change the long-standing belief of both the students and administrators of online classes are of lesser educational quality.

## 3.2 Data collection and analysis

The present study used mixed methods to gain a better understanding of the process of the course under investigation and the students' perceptions of online learning. The data included a post-survey, interviews, students' reflection papers, and the instructor's field notes. The survey contained 18 five-point Likert-type questions, with two open-ended questions on strengths and weaknesses of online learning (see Appendix B). All the students participated in the interviews individually or in groups (two to three persons) for 15-20 min. During the interviews, the students talked freely about their perceptions and experiences of online learning, including the MALL course. The interviews were recorded and transcribed. The students also wrote one-page reflection papers about their experiences with online learning and the MALL course. All data collection instruments used in the present study can be freely downloaded on the IRIS Database (https://www.iris-database.org). The surveys were analyzed using descriptive statistics in SPSS 23. The interviews, reflections, and field notes were first open-coded and then thematically coded based on the emerging themes. MaxQDA was used for qualitative analysis. The emerging themes were categorized first into positive and negative groups. The themes in the positive group were further categorized into four categories, feedback, interaction, task design, and learning outcomes, based on Chickering and Gamson's (1987) seven principles.

#### 4 | RESULTS

# 4.1 | General perceptions of online learning

The first part of the survey revealed the students' general experiences with and perceptions of OE. More than two-thirds of the students (N=15) answered in the survey that they had previous experience of OE. These included one student who had taken one course (K-MOOC) during college, and 14 students who had had online classes during high school consisting of captured videos provided by private educational institutes. The students perceived instructors' lectures (M=4.53), the types and quality of assignments (M=4.40), and feedback from instructors (M=4.80) as important in online learning but viewed interactions with their peers (M=3.53) as less important. Regarding modes of learning, they preferred real-time video-conferencing (M=3.33) to lecture captures (M=2.20) or assignments (M=2.67, assignments were varied depending on the classes taken). The students preferred to see the instructor in OE (M=3.93). In terms of pedagogical effectiveness, real-time videoconferencing scored highest (M=3.53), followed by alternative assignments (M=2.92), and recorded video lectures (M=2.67). The mean score of the response to the question asking whether they perceived themselves as self-directed learners was 3.11. Overall, the students felt that they learned less in OE than in offline classes (M=2.33). The mean satisfaction score was 2.87.

Among the advantages of OE, the students most frequently pointed to efficiency, as they were able to avoid commuting and could study anywhere. Personalized learning,

particularly the ability to watch lecture videos repeatedly, was also cited as an advantage. Several students reported that they could concentrate better during online learning. Conversely, they listed various disadvantages, of which the most frequently mentioned were lack of interaction and feedback and technical problems. The students also criticized instructors' competence in OE and the adequacy of teaching techniques. Comments included "when the professor asked questions, no one answered and then he became so embarrassed and did not know what to do. That was really an awkward moment," and "some professors talked by themselves all through 75 min without any interaction even in videoconferencing classes." The students also felt that instructors gave more assignments than necessary, out of a concern that the students would not learn enough in online classes. Assessment was also raised as an urgent issue to address, as cheating in online exams has become a serious problem in several universities in Korea since OE started in 2020 (Chang, 2020). However, it was noteworthy that as the students (and instructors) "became used to online learning, it seemed to get better and it does not feel as bad as in the beginning." The students' responses regarding the advantages and disadvantages of OE are summarized in Table 1.

### 4.2 | Students' responses about the MALL course

The survey results showed that the students perceived the MALL course to be interesting (M=4.91), satisfying (M=4.80), and effective (M=4.62). The course received 95.86 (out of 100) from the students in the final evaluation conducted by the university (the department mean = 83.35; the university mean = 86.99). The reflections and interview results also revealed that most of the students considered the course enjoyable and effective. Three factors appeared to influence the students' positive perceptions: the instructor's *feedback*, *interaction among peers*, and *effective task design*, which, in turn, led to the students' positive perceptions of their own learning. Table 2 summarizes the students' responses from the interviews and reflection papers.

Almost every student mentioned their appreciation of the instructor's frequent and timely feedback to assignments and inquiries, for example:

We used all the possible communication tools, such as Zoom, email, discussion board, and messaging. Interactions with the professor helped me to successfully complete the assignments (*JM*, *interview*).

TABLE 1 Advantages and disadvantages of OE: summary of the students' responses

Advantages	Disadvantages
Efficiency: saving time and easy to access $(N=17)$ Personalized learning: self-paced, independent learning, viewing lectures repeatedly $(N=11)$ Better concentration $(N=5)$ Comfortable environment $(N=4)$	Lack of interaction and feedback $(N=18)$ Technical problems $(N=14)$ Instructors' unfamiliarity with OE $(N=12)$ Distraction (N=11)Losing human touch $(N=6)$ Lack of self-directed learning, out of routine $(N=5)$ Unfair assessment $(N=5)$

TABLE 2 Students' responses about the MALL course

Category	Subcategory	Students' responses	N
Positive comments	Feedback	The instructor's prompt feedback Diverse ways of communicating with the instructor	18 8
	Interaction	Opportunities to reflect my tasks based on others' comments	11
		Learning from other students	9
		Learning about other students	6
		Engaging in higher-order thinking skills through discussions	6
	Task design	Collaborative tasks	17
	-	Learner-centered, active learning	14
		Authentic learning	11
		Reasonable workload; using the class periods for the tasks	8
		Multiple media and learning tools	7
		Reduced language anxiety	6
	Learning experiences &	Enjoyable, satisfying learning experiences	19
	learning outcomes	Effectiveness of learning	17
		Producing better outcome	12
Negative		Technical problems	11
comments		Still missing offline interaction	5
		Difficult to get to know each other	3

*Note*: N = 20.

Detailed feedback, frequent reviews, and 1:1 consulting sessions greatly helped to enhance the quality of the outcomes (*SI*, *reflection paper*)

The instructor's feedback not only "supported learning" but also "promoted rapport" with the students. Feedback was provided both in the class (oral and synchronous through Zoom) and outside the class (written and asynchronous through email, messaging or discussion board), which the students found effective and supportive. The course spent more time on group sessions than on lectures, however, this did not weaken teacher presence or teaching presence but rather cultivated rapport with the instructor. One student said that "because we always saw the professor in the room [videoconferencing session],...even when the instructor was with another group in another breakout room, we still could feel her presence, which actually made us feel comfortable and work hard on the task." It was possible because they could always ask the professor for help any time by using the Ask for Help function. Another student mentioned that "being only three of us in the room (breakout session) made me feel closer to the professor and I could talk more freely to her."

The students also perceived interaction among themselves as a significant factor affecting their online learning experiences. Interactions occurred mostly via two channels, videoconferencing during group sessions and discussion boards. While they considered videoconferencing an effective communication tool to discuss the task at hand, such as discussing and negotiating about the project with the members and collaboratively creating the content, the students also identified numerous benefits of using the discussion boards. They reported that conversations on

the latter enabled them to learn from and about their peers, to get feedback from others, to develop higher-order thinking skills, and thus to achieve better quality outcomes. They wrote that the online situation did not impede interaction, as in the following excerpt:

In this course, we were able to see each other and interact more frequently even than offline classes, through videoconferencing. We could do work on the computer efficiently and quickly, moving between Zoom and search windows. Also, we could easily find and share information with others. Our conversations helped me further develop my thoughts. This online course was more effective than F2F classes (*MH*, reflection paper).

Seven students even mentioned that the MALL course allowed more interaction than the traditional classes, because they could view all their classmates' assignments and talk about them on the discussion boards. The students thus considered online discussions more effective than those offline, in which they rarely had opportunities to review each other's work in depth. In fact, the discussion board for the media project contained 252 messages, and that for the map task had 196. Although online discussions were not included in assessment, the students actively participated in the discussion boards and posted quite lengthy messages. In the case of the map task discussion alone, each student wrote 548 words on average. The online discussions functioned in many positive ways, as the students particularly appreciated hearing about their tasks. Comments from others were found to be very encouraging: "unlike other classes, in this class, my work was not just an assignment to be submitted only to the professor but something that I could share with others," and "I became more confident about my work after I got many good comments from the peers." The students also accepted negative comments well. One student remarked that "negative comments helped me think about my work from another perspective and improve it."

Over the course, the students developed a community that was both socially supportive and facilitated learning. Although the students initially felt awkward with each other during videoconferencing, they soon began to create a new online culture. As they usually turned off their microphones when not speaking, they began to use various gestures, for instance, waving hands (saying hi and bye), clapping (after presentations), raising a hand (asking for a turn), bowing (showing thanks), and showing an OK sign. The students said in the interviews that they came to learn how to better communicate and respect each other online. They sometimes even engaged in to show and tell about their collections and pets before the class started, adding further enjoyment to online learning.

Finally, the students recounted the tasks that were particularly effective for the online course. As tasks were computer-based, the students "efficiently did multi-tasking on the computer, such as talking with their group members on Zoom, creating media files, and checking the instructor's comments on the LMS." They also utilized various other social networks and digital tools to communicate effectively and work collaboratively, such as Padlet, Face Time, and KakaoTalk (the most popular social network service in Korea), which were not included in the LMS. Quite naturally, they also took advantage of another aspect of OE. In the traditional classes, the students usually had to leave the room after the class ended and often struggled to find extra time for group work. By contrast, there was no need for them to leave the online classroom (the instructor intentionally did not end the videoconferencing sessions), and those who did not have classes after MALL often stayed and continued to work on their tasks for a few more hours. The students reported that being allowed enough time for each task and

using the class time for group work helped to improve their results. As a consequence, most of the outcomes surpassed the instructors' expectations for each task.

Regarding the tasks, most students also enjoyed the group discussion with the students from Hong Kong (N=18) because it was "a new, authentic, and meaningful learning experience" and it was "something that we could do only in an online class." They added that it "motivated them to study English more and speak more fluently." They also liked to have the live, cross-cultural, communicative opportunity to share their experiences of life and education during the pandemic with those from another country.

Moreover, group assignments helped the students "become more interested in the tasks," "find each member's expertise," and "make better outcomes." Particularly, because group tasks were learner-centered and allowed greater freedom and autonomy, the students "felt more responsible for the tasks," "wanted to do better," and "created satisfying outcomes." Several of the students also mentioned that they could locate group members more effectively in the online class (most of the students did not know each other before this class); they were able to post their topics for the tasks and view others' topics and formed teams based on common interests. The students wrote in the reflection papers that this allowed them to select group members based on the topic, whereas, in the traditional classes, they usually formed teams with their friends regardless of the topic. Conversely, a few students said that they had difficulty finding team members "because they did not have enough opportunities to get to know each other in the online class."

Presentations were necessarily different online, and most students agreed that they felt more comfortable with the online format. Because their audience was not physically present, they were less concerned with non-verbal issues or appearances, which lowered their anxiety. Additionally, because they could simultaneously see the camera and memos on the screen, they could manage presentations better. One student remarked that presenting online did not lower language apprehension, but he later realized an advantage of the technique: he recorded his own presentations and reviewed them for improvement.

However, a few of them still preferred the traditional classes. One student wrote "I really enjoyed this course, but I often imagined how much more fun it would be if this had been offline," and another student said "I now understand why the students came back to the dormitory and lived together when they did not have any offline classes. They didn't want to feel detached from the community."

#### 5 | DISCUSSION

The present study investigated the perceptions of 20 students regarding the emergency online courses that they took for a semester and the MALL class in particular. Overall, the students regarded OE in general as less effective and less satisfying than the traditional classes. In terms of format, they preferred real-time videoconferencing to video lectures. Contradicting prior studies that found positive perceptions of lecture capture (Domment et al., 2020; O'Callaghan et al., 2017), this study found that the students had a negative perception of it, viewing it as ineffective and boring, although noting that it supported self-paced learning. However, as lecture captures are in various formats (i.e., audio only, PPT with narration, narration with the video of the instructor), their effectiveness can vary depending on the format and other variables, such as lecture techniques. On the other hand, the students in the current study preferred videoconferencing over lecture captures because it was more immediate and resembled

the face-to-face class. During videoconferencing, the students felt more connected and supported because the instructor stayed visible to them. This, in turn, increased students' autonomous learning and self-confidence because they knew that the teacher's assistance was available as necessary (White, 2017). The present study proved that, by remaining visible, the instructor enhanced teacher presence and made learning more comfortable and effective.

The survey results also showed that the students valued teacher feedback and peer interactions. This finding was consistent with their answers to the open-ended questions. They highlighted a lack of feedback and interaction as major disadvantages of online learning, which had a detrimental effect on levels of satisfaction. Additionally, since most instructors were not ready for OE in the crisis in Korea (Chang, 2020; Jung, 2020), the students remarked on instructors' inexperience with it, although some mentioned that online learning improved as both instructors and the students gained experience. Before or during the pandemic, supports for instructors' professional development for OE had rarely provided; however, the students' responses implied the importance of instructors' readiness for successful OE (Hodges et al., 2020).

In addition, numerous studies have maintained the positive role of feedback in OE (Chang, 2020; Konings et al., 2005; Koole, 2014; Lee, 2016), and the students in this study particularly appreciated the ability to receive feedback "immediately" and "multiple times on the tasks" (see Appendix A). They received feedback in a variety of modes (i.e., spoken, written, synchronous, and asynchronous) and methods (i.e., message, email, and discussion board). According to Kreonidou and Kazamia (2019), individual students prefer different forms of feedback and these forms should also be appropriate to task type, and the current study showed that utilizing various forms of feedback served well for this course and raised the students' satisfaction.

Interaction among the students also served to promote learning online. In the MALL class, the students performed group tasks that naturally engaged them in discussions both during and after the class. Lee (2014) pointed out that online discussions often fail to generate meaningful and constructive conversation and result in serial monologue. By contrast, even though it was not part of their assessment, the students in this study actively participated in online discussions. This helped to sustain social, cognitive, and communicative processes and thus promoted learning. The students developed a learning community, in which they supported each other and learned collaboratively. The students' sense of achievement and satisfaction toward learning thus increased, and their social connectedness mitigated feelings of loneliness, one of the most serious weaknesses of OE (González-Lloret, 2020; Lee & Han, 2020).

The tasks of MALL were also well-matched with the online learning environment. First, technology-supported tasks worked efficiently with OE. Once the OE environment of the course was set up, the students from the digital native generation quickly adapted to the new platform, strategically utilizing various digital tools for multitasking, despite the chaos due to the multiple transitions in the beginning of the semester. Since tasks were computer-based, the students were able to execute them more efficiently by moving between multiple windows and even derived additional benefits from OE, such as by recording their own presentations. Second, the tasks promoted social interaction. Lee (2016) asserted that types of tasks and digital tools influence student learning online in diverse ways. As she maintained, the collaborative, open-ended tasks in this study facilitated interaction among the students and allowed them to explore the understanding of the topics through interaction. The collaborative tasks also helped the students to develop such a sense of community, which could decrease negative emotions associated to OE, such as loneliness, isolation, low self-esteem, and low learning motivation (González-Lloret, 2020). Finally, the tasks were authentic, meaningful, and purposeful, so that the students enjoyed doing them. This, in turn, helped them become active and responsible

agents in their learning and increased their motivation to achieve better outcomes. Overall, the fluid, flexible, and interactive course design of MALL contributed to successful OE.

The results of this study have a number of pedagogical implications. Most importantly, this study showed that the instructor's role as an instructional designer becomes more important in OE. While it was difficult to adequately prepare for online courses during the emergency situation, this study inferred that a successful online class demands careful preparation from designing a curriculum to implementing adequate teaching methods and from assessment to facilitating. Particularly in ERT, the instructor should understand that they are placed in the most challenging position and are responsible for compensating for the lack of necessary support (Bozkurt & Sharma, 2020); in other words, they must be more creative and innovative in teaching. During ERT the instructor should quickly adjust instructional plans, curriculums, contents and assessments (Mohmmed et al., 2020), and they should constantly check student needs and difficulties, such as workload, pacing, and learning progress, and respond to them. To this end, midterm evaluations of the class (formal or informal) will be more useful than final-term evaluations because the instructor can quickly and adeptly redesign the course to accommodate students' needs based on the evaluations.

In addition, as language learning demands various language skills and interactions and opportunities to use the language, it requires the instructor's creativity in designing authentic and meaningful language learning tasks in OE. The instructor also needs to select the best medium for lectures, activities, feedback, and interaction in the OE, considering the students and the context. Assessment should be carefully planned in advance, as there are a number of significant issues regarding online assessment (i.e., ethical issues, technical problems).

Last but not least, the instructor's role as a facilitator is significant in interaction and communication, as OE demands effort to build relationships among the instructor and students. Interaction, facilitation, and communications with students are even more important during ERT during which students often struggle socioemotionally and academically (Xie et al., 2021). The current study showed that although most students were generally satisfied with the class, a few still missed traditional classes. While the course was quite satisfying, they still felt that it was "lacking human touch," and "unfriendly and lonely" because the course was online after all. This implies the importance of socioemotional interaction and the socio-affective role of an instructor (González-Lloret, 2020; White, 2017) but also shows that, despite the instructor's effort, feelings of isolation may still be a barrier in OE. This may also be attributed to learner variables, such as personality characteristics and cognitive styles. Prior studies stressed that certain student characteristics are associated with successful online learning and some personality types may be better suited to particular learning formats and media (Chisum, 2018; Kauffman, 2015). Therefore, instructors should frequently check on individual students' needs and respond to them during the course.

This study also showed that instructors' inexperience with OE negatively affected the students' perceptions of OE. As instructors' technology literacy will affect the quality of OE and ultimately affect students' learning experience, they must first be comfortable with the technology and its use, to make OE successful. To this end, institutional supports, such as training, professional development, and technology support, are vital (Kebritchi et al., 2017). These cannot be done over a short period of time, thus they should be prepared beforehand to avoid the difficulties. After all, it is people who make the difference, not technology.

On the basis of these findings, the present study suggests the following:

1. Utilize various possible online communication tools to maximize interaction among students and between students and the instructor;

- 2. Provide timely and formative feedback;
- 3. Check students' progress and needs during the course and be open to change;
- 4. Provide various types of facilitation (synchronous and asynchronous, spoken and written, individual and in group);
- 5. Use a variety of media types for content;
- 6. Design authentic and motivating learner-centered tasks;
- 7. Allow students to follow their interests;
- 8. Cultivate collaborative learning and develop a learning community.

The present study has several limitations, and it may be difficult to generalize its results. First, data collection was limited to a small number of students. Most of these were juniors and seniors, and working with freshmen may produce different results. Considering the great amount of time spent by the instructor on feedback and reviewing the students' tasks, comparable levels of interaction may not be possible with larger online classes. Despite these limitations, the present study was significant in illustrating factors that can make online classes more motivating and effective even during a crisis.

#### 6 | CONCLUSION

Because of the COVID-19 pandemic, most educators were forced to start OE in 2020 without adequate preparation. Despite their efforts, this caused dissatisfaction with online learning among students (Chang, 2020; Xie et al., 2021), as this study revealed. Although the students in this study did not generally perceive online learning to be effective, they regarded the MALL course as effective and satisfying. They pointed out constant feedback from the instructor, interaction among the students, and effective task design as major factors underpinning successful online learning. As mentioned previously, various factors affect the quality of online courses, but instructors' attitudes and strategies are key determinants (Kebritchi et al., 2017). One student in this study said, "I was quite satisfied with this class, but that was all because the professor's tremendous work compensated for the downsides of the online class." Her remark acknowledged both her discontent with OE in general and the importance of the instructor's role in OE. The present study reemphasized that the instructor needs to take more responsibility for course design, implementation, and facilitation in OE. In other words, teachers need to perform diverse roles, and without their constant endeavors, OE cannot be successful and will not be able to satisfy students' expectations. The COVID-19 pandemic has changed the map of education, and OE has become a new normal. In this new beginning for OE, we need more diverse, fine-grained studies of online classrooms, with examples and a research agenda able to identify pedagogical implications and to guide educators in improving OE in the near future.

#### OPEN RESEARCH BADGES



This article has earned an Open Data badge for making publicly available the components of the research methodology needed to reproduce the reported procedure and analysis. All materials are available at https://www.iris-database.org/iris/app/home/detail?id=york% 3a939493&ref=search

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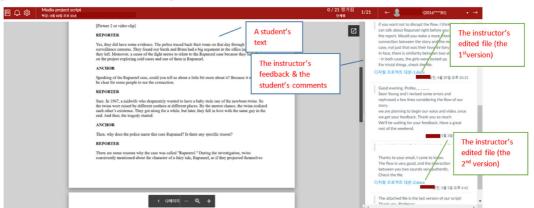
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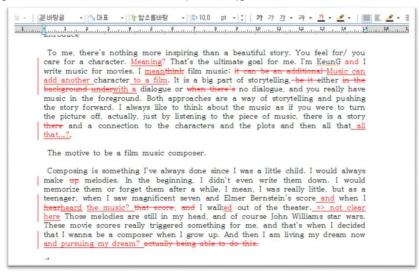
**How to cite this article:** Lee, S.-M. (2022). Factors affecting the quality of online learning in a task-based college course. *Foreign Language Annals*, 55, 116–134. https://doi.org/10.1111/flan.12572

#### APPENDIX A: Feedback samples

#### [The instructor's feedback on LMS]



#### [The instructor's feedback on the file (edited file)]



# APPENDIX B: Postsurvey (conducted in Korean; 5 point-Likert scale used the questions from No.: 2-18)

- 1. I have taken online classes before (Yes No) (In the university During the high school).
- 2. I am a self-directed learner.
- 3. The quality of instructors' lectures is important in online education.
- 4. The quality and type of alternative assignments are important in online education.
- 5. Instructors' feedback is important in online education.

- 6. Interaction among the students is important in online education.
- 7. I prefer to see the instructors' faces in online education.

Please answer about the online classes you have taken this semester except for MALL (8-15).

- 8. I prefer real-time videoconferencing.
- 9. I prefer lecture captures.
- 10. I prefer alternative assignments.
- 11. Real-time videoconferencing was effective to learning.
- 12. Lecture captures were effective to learning.
- 13. Alternative assignments were effective to learning.
- 14. I learned in the online classes as much as the offline classes.
- 15. I was satisfied with the online classes.

Please answer about MALL (16-18).

- 16. MALL was interesting.
- 17. MALL was satisfying.
- 18. MALL was effective.

Please write about your experiences with online classes offered by the university during this semester.

- 19. What are the advantages of online learning?
- 20. What are the disadvantages of online learning?