Experiences and perceptions of exchange students learning online during the COVID-19 pandemic in the Republic of Korea: An exploratory descriptive study

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Abstract: The COVID-19 pandemic forced schools worldwide to suddenly transition to remote learning. The change forced students, who might not choose to take distance education courses, to adjust to a new way of completing their coursework. Further, this impacted certain student groups like exchange students more adversely since distance courses complicated academic exchanges by rendering short-term exchange students isolated on an empty campus in a foreign country, all while recently arriving to both. There are many intrinsic hardships to academic exchanges but there is a lack of research on exchange students’ experiences learning online when immediately transitioning from face-to-face courses to emergency remote or online courses under such circumstances. This exploratory descriptive study investigated exchange students’ experiences learning online during the COVID19 pandemic in the Republic of Korea. 140 exchange students responded to a survey about their experiences and perceptions of their online courses. The quantitative results in this study show a relatively ambivalent experience in terms of quality Teaching and Learning Processes, Course Structure, and Student Support, although students had both good and bad experiences. Qualitative data provided insight into the desired but missing aspects of exchange students’ ERT experiences: communication from faculty, interaction with other students, and feedback on their work.

Keywords: Korea, exchange students, distance education, emergency remote teaching, COVID-19

Highlights

What is already known about this topic:

- Emergency Remote Teaching (ERT) is not new, but it is a relatively uncommon subset of distance education that has become synonymous with distance education due to the COVID-19 pandemic.
- ERT is being practiced by millions of educators worldwide who do not have any background in distance education, and likely lacking much needed technological expertise to facilitate ERT effectively.

What this paper contributes:

- This paper investigated the experiences of international exchange students taking ERT courses in the Republic of Korea.
- This paper documents how ERT courses manifested early in the pandemic, as well as how a particular subgroup of students (i.e., exchange students) viewed their online courses, especially since these students expected a traditional residential educational experience.

Implications for theory, practice and/or policy:

- In crisis situations that necessitate the use of ERT, a standardized approach to course formatting and delivery would potentially improve the student experience and thus perceptions of ERT courses.
- Basic courses about facilitating online/ERT courses should be integrated into pre- and in-service teacher training programs to prepare schools and educators for teaching under crisis circumstances.
Introduction

The COVID-19 pandemic forced education institutions worldwide to transition courses to a remote or online learning format (Hodges et al., 2020). In the case of the Republic of Korea (hereafter Korea), the outbreak of the SARS-CoV-2 virus saw roughly 10,000 cases between February and March 2020 alone (Ministry of Health and Welfare, n.d.). The timing was particularly problematic since it coincided with (a) the end of the winter school holiday (mid-December to late February); (b) the Lunar New Year (late January); and (c) the start of the 2020 academic year (early March). The overlapping of these calendar events resulted in increased regional travel between China and Korea. Since Chinese nationals comprise both the largest immigrant (Shin & Moon, 2019) and international student (Park, 2019) groups in Korea, the government was greatly concerned with the post-holiday return to campuses. As a result, within weeks colleges and universities closed their doors and moved all courses online for the semester.

Some international students found themselves in a unique situation where they were still living on campus but taking all of their courses online in a foreign country (Peters et al., 2020; Stewart & Lowenthal 2021). Discussions early in the semester with students who were living on campus but taking courses online revealed that student experiences learning at a distance varied greatly. For instance, some students found themselves working with instructors who had prior experience teaching blended or online courses, whereas others had instructors with little-to-no experience teaching from a distance. While some inexperienced instructors chose to simply transition all face-to-face class sessions into live synchronous video-based web meetings (e.g., using tools like Zoom or WebEx) likely due to both the ease (e.g., requires very little additional planning or preparation) and familiarity with teaching in a certain way (e.g., lecturing), other instructors resorted to a variety of different and varying emergency remote teaching strategies (Crawford et al., 2020).

This variability is problematic for numerous reasons, one of which is because instructors’ and students’ experiences with teaching and learning in a remote or online format during the COVID-19 pandemic are likely going to shape their beliefs and attitudes about learning at a distance for years to come. Moreover, these experiences are combined with not only the challenges that international and exchange students can have in digital learning environments (Erichsen & Bolliger, 2011; Habib et al., 2014), but with the intrinsic difficulties of life as an exchange student (Stewart, 2020). For example, international students typically experience more isolation in face-to-face and online courses (Erichsen & Bolliger, 2011). During the pandemic, these difficulties have been combined with ERT, homesickness, limited language skills, cultural differences, and limited socio-cultural knowledge, etc., that occur normally in academic exchanges. Thus, we think it is critical for educators at institutions of higher education to better understand students’ experiences and perceptions of emergency remote teaching during the COVID-19 pandemic, even if only to be better prepared to address their needs moving forward. Given this, we set out to investigate international exchange students’ experiences at one university in Korea with online learning during COVID-19. In the following paper, we present the results of this descriptive exploratory study and discuss implications and areas of future research and practice.

Literature

Formal distance education dates back to Europe in the 1830s via postal correspondence (Bower & Hardy, 2004), coinciding with industrialization and the development of rail networks and communications infrastructures (Peters, 1994). Since then, technological developments have enabled additional delivery mediums such as radio and television (Casey, 2008), satellite broadcasting (Harasim, 2000), computer networked courses (Moore & Kearsley, 2012), and ultimately internet-based courses (Saba, 2011) which are now common throughout the world. Prior to COVID-19, over a third of students took at least one of these internet-based courses, commonly referred to as online courses or online learning, in a given year in the United States alone (Seamen et al., 2018).
Traditional Distance Educations vs. Emergency Remote Education

Conventional online courses take months to design and develop and are consistently iterated upon, often being designed according to well established standards of quality course design (Hodges et al., 2020). By contrast, the “courses” being delivered online as a response to the COVID-19 pandemic are in most cases improvisational. Hodges et al. (2020) even argue that we should not even label these kinds of remote learning experiences “online courses” since they are more accurately categorized as a distinct subset of distance education known as Emergency Remote Teaching (ERT) or what Williamson et al. (2020) refer to as Emergency Remote Education (ERE). Regardless of the term, the remote delivery of these courses is meant to be temporary; their instructors and institutions simply do not have the time, resources, or expertise to develop a proper online course (which normally takes 4-6 months to develop) in the middle of the semester. While distance education practitioners and scholars are well versed in the challenges (e.g., social presence, effective asynchronous communication, online student-student interaction) now facing students and educators worldwide, for the vast majority of students, faculty, administrators, and family members, the massive scale of obstacles related to COVID-19 and education have little precedent in living memory (Dietrich, 2020; Fischer, 2020). Moreover, this experience is far from uniform with some schools, students, and families fairing far better than others in terms of educational access, continuity, and quality (Aristovnik et al., 2020; Beaunoyer et al., 2020). Nevertheless, how distance courses are designed, built, and/or delivered ultimately influence students’ perceptions of these learning experiences (Bozkurt & Sharma, 2020).

Online Delivery Modes and Factors in Class Perceptions

There have been multiple forms of distance education and online learning for decades. For instance, twenty years ago, Harasim (2000) distinguished between three distinct modes of distance education: adjunct, mixed, and online. Later, Allen et al. (2016) and the Online Learning Consortium (OLC) similarly categorized courses in three distinct types of distance education based on an arbitrary percentage of content/activity that occurs online: web-facilitated (1-29%), blended/hybrid (30-79%), and fully online (80-100%) courses. Blended learning (BL), however, is perhaps the most flexible type of modality because it encompasses a wide range of modes or models which can facilitate various aspects of courses both on and offline (Horn & Staker, 2014), in addition to a combination of activities being done at both home and school. Horn and Staker’s (2014) model of BL includes four distinct models (i.e., rotation, flex, self-blend, enhanced virtual), and these models can even have their own sub formats. Each of these interaction modes illustrates that the lines between residential and virtual education are increasingly becoming blurred (Sethy, 2008), creating a learning landscape where there is no longer one standard type of face-to-face or online course (K. Lee, 2017; Lowenthal et al., 2009).

Given differences in corporate, vocational, K-12, higher education, government, profit/non-profit sectors, no one model can completely encompass the diversity of online learning, or what some argue should better be referred to as digital learning (Hanna, 2003; Horn & Staker, 2014; Waha & Davis, 2014). Lowenthal et al. (2009) even created a matrix to assist in describing the multifaceted contextual nature of online courses from how courses are set up (formality, setting, curriculum fit, pacing, synchronicity, developmental model), the type of media used (i.e., audio/video, text, virtual worlds), to the roles of teachers and learners, whether cohort-based or not, communication style, and so on. Therefore, the models presented here are meant to simply illustrate the potential variety and creativity inherent in learning modes.

Multiple Interaction Modes

While there is variability in face-to-face courses (e.g., seminar vs. large lecture courses vs. labs vs. internships), learning face-to-face tends to be a relatively uniform experience for students and faculty. The literature, though, shows that much more variability can take place in blended and online courses (Horn & Staker; Means et al., 2014). Watts (2016) explained that “although asynchronous [interaction]
has been the primary method for interacting in the online setting, technological advancements have made it possible for students and instructors to interact in a more face-to-face like setting” (p. 30). Today, instructors and students can interact and communicate asynchronously, semi-synchronously, or synchronously (Stavredes, 2011). Asynchronous interaction is commonly facilitated by email or discussion forums (which today also includes embeddable multimedia) (Ko & Rossen, 2010), allowing students and instructors to connect with one another in a manner and time that is flexible and personally convenient (Stavredes, 2011). Asynchronous interaction and communication provide the opportunity to “think about course content and to address a diverse set of topics in more depth” (Stavredes, 2011, p. 169). By contrast, synchronous methods (e.g., instant messengers, VoIP technology, video conferencing, interactive whiteboards, and even virtual worlds) can be used to support real-time instruction and collaboration, and foster dynamic communication and immediacy (Finkelstein, 2006). Students and instructors can also interact and communicate today using other tools and/or practices that fall somewhere in between and are referred to as a semi-synchronous form of interaction, such as conversing via pre-recorded messages in an instant messenger for language exchange (Wang et al., 2016). In any case, the distinction between interaction modes is not to imply that one method is superior or inferior, but rather that each interaction mode may be more appropriate/effective in certain circumstances over others (Stavredes, 2011; Watts, 2016) and must be thoughtfully aligned with one’s course objectives and activities. Furthermore, other contextual dimensions (e.g., formality, setting, synchronicity, pacing) and course characteristics (e.g., teacher and learner roles, class size, learner demographics) can help frame our understanding of the differing contexts of online courses (Lowenthal et al., 2009). This is important since these dimensions affect how students consequently perceive their courses. For better or worse, student and instructor experiences with ERT during the pandemic will likely influence how they perceive distance education for years to come. And this is in addition to students’ perceptions of online learning which vary greatly (Means et al., 2014) irrespective of COVID-19.

Sources of Perception

Differing perceptions of learning at a distance can stem from demographics. For instance, research suggests that highly motivated graduate students often think differently about learning online than non-traditional community college students (Colorado & Eberle, 2010). The degree and manner in which students are engaged in their courses also influence how students perceive them (Martin & Bolliger, 2018; Xie et al., 2019). In addition to engagement, pedagogical approaches also influence how students perceive courses. For example, whether courses are expository in nature (knowledge transmission), interactive (collaborative with classmates/instructors), or independent task oriented also influence what students think of them (Means et al., 2014). Pedagogical approaches (Germain-Rutherford & Kerr, 2008), course content, and the cultural backgrounds of students/instructors (Jayatilleke & Gunawardena, 2016) also affect not only how students perceive online courses, but also how students perform in them (Kaupp, 2012). There are often notable differences in achievement where minority students too often perform worse than their majority counterparts (Kaupp, 2012; Stoessel et al., 2015; Xu & Jaggars, 2014). Distance education is also often touted as flexible, any time, any place learning and assumes that learners possess a high degree of self-directedness, though this is often not the case (Means et al., 2014). Realistically, distance courses typically require rigid and fixed routines in order for students to be successful (Selwyn, 2011). Proponents of distance education often champion the practice as a democratizing force in education (Bower & Hardy, 2004; Casey, 2008), yet the online learning landscape is not a neutral space or level playing field for all (Beaunoyer et al., 2020; Means et al., 2014; Stoessel et al., 2015).

In the case of COVID-19, schools, students, and instructors have all been affected differently due to the sudden switch to remote learning, and there will no doubt be different experiences and perceptions therein (see Bond, 2020; Stewart, 2021). International students are often already positioned at a disadvantage when it comes to learning online under normal conditions since they often experience more loneliness and isolation (Erichsen & Bolliger, 2011), difficulties with the digital learning environment
(Habib et al., 2014), as well as socio-cultural differences (Lee, 2011). The purpose of this study was to investigate exchange students’ experiences learning online during the COVID19 pandemic at one university in the Republic of Korea.

Methodology

Context of Study

This study was undertaken at a large, private research institute in northern Seoul during the Spring 2020 semester (early March to late June) which coincided with the start of the COVID-19 epidemic in Korea. The university, like most if not all universities in Korea, conducted its entire Spring semester online and has a student population of approximately 20,000 students, 3,300 of whom are “international.” In Korea, the majority of degree-seeking students (i.e., long-term student international student mobility) tend to originate from East Asia (Krechetnikov & Pestereva, 2017; S. Lee, 2017) whereas exchange students are diverse by nationality; motivations for conducting academic exchanges often revolve around not only an interest in Korea, but new international and cross-cultural experiences as well (Stewart, 2020). Further, these experiences hinge upon physical mobility, residential education, and co-presence, all of which were greatly reduced or absent as a consequence of social distancing and the closure of campus/local amenities (Stewart & Lowenthal, 2021).

Key Research Objectives

A student exchange experience can vary depending on the university the student attends, in addition to the specifics of any Memorandum of Understanding (MOU) between universities. Exchange students at our university are allowed to enroll in courses across almost all departments with three exceptions: Law School, Department of Language and Trade, Department of Language and Diplomacy. The ability to take courses across departments is seen as a curricular advantage as students are not limited to any one particular subject matter or faculty. As a function of ERT, this also exposed the students in this sample to a greater variety of ERT delivery methods and approaches. Moreover, student experiences and perceptions were expected to be heterogeneous since they represent numerous nationalities and have diverse socio-cultural as well as linguistics backgrounds. At the start of the spring semester, it was not known how the courses would be delivered nor how students would perceive teaching and learning via ERT. Thus, this study sought to answer the following research questions:

1. How did the online courses manifest for exchange students during the COVID-19 pandemic?
2. How did exchange students perceive Teaching and Learning Processes, Student Support, and Course Structure of their emergency online courses during the COVID-19 pandemic?
3. Did exchange students with prior online course experience perceive Teaching and Learning Processes, Student Support, and Course Structure of ERT courses differently (i.e., more negatively) from students with no prior experience?

Research Design and Data Collection

An exploratory descriptive design was used to investigate student experiences of online learning during the COVID-19 pandemic using a survey to collect data from students about their experiences and perceptions of learning online during the pandemic. The survey included 33 items-consisting of 7 demographic questions, 5 questions about the characteristics of online courses, and 20 Likert items on student perceptions of Teaching and Learning Processes, Student Support, and Course Structure, which were adapted from the Institute for Higher Education Policy (iHEP) benchmarks for success in internet-based distance education (Phipps & Merisotis, 2000). One open-ended question was then included at the end of the survey, inviting students to share their experiences learning online in their own words, as well as to share screenshots of their online courses that highlighted experiences throughout the semester as complementary qualitative data.
The questionnaire was first piloted in a private social media group managed by the Office of International Admissions and Management. Five students participated in the formative evaluation for clarity and to point out any discrepancies or errors to ensure the content validity of the survey (Bennett & Nair, 2010). We noted how long it took students to complete the survey (about 5 minutes) and included that in the email invitation to promote participation (Trouteaud, 2014). No incentives were offered for participation.

Participants

Participants for this study came from the Spring 2020 exchange student body which consisted of 263 students from both bilateral MOUs/multilateral consortium agreements and fee-paying study abroad students. The entire participant pool consisted of 41 nationalities and was approximately 85% female. Exchange students’ fields of study often include (but are not limited to) international studies, business, foreign language, northeast Asia and Korean studies, translation and interpretation, etc. The entire exchange student body was surveyed, and students were presented an electronic informed consent form that required an affirmative response to participate after reviewing information about the study, the investigators, the right to stop participating at any time, etc. Reminder emails were automated at various intervals during the data collection period by cross-referencing non and incomplete responses with a mailing list database in Survey Monkey. Data was collected for approximately one month toward the end of the Spring 2020 semester. When examining survey response characteristics, there were 12 “no” participation responses, 9 incomplete responses, and 140 complete responses, yielding a 53.23% response rate. Respondent demographics are presented in Table 1.

Table 1. Respondent Demographics and Exchange Characteristics

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Value</th>
<th>% (n=140)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (M=22.2)</td>
<td>18-22</td>
<td>62.83%</td>
</tr>
<tr>
<td></td>
<td>23-30</td>
<td>37.17%</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>13.6%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>86.4%</td>
</tr>
<tr>
<td>Primary Study Level</td>
<td>Undergraduate</td>
<td>72.2%</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>16.4%</td>
</tr>
<tr>
<td></td>
<td>Certificate*</td>
<td>11.4%</td>
</tr>
<tr>
<td>Exchange Length</td>
<td>4 months</td>
<td>47.1%</td>
</tr>
<tr>
<td></td>
<td>6 months</td>
<td>11.4%</td>
</tr>
<tr>
<td></td>
<td>10 months</td>
<td>32.1%</td>
</tr>
<tr>
<td></td>
<td>12 months</td>
<td>9.4%</td>
</tr>
<tr>
<td>Campus</td>
<td>Seoul</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>Satellite</td>
<td>10%</td>
</tr>
<tr>
<td>Prior Online Course Experience</td>
<td>Yes</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>83%</td>
</tr>
</tbody>
</table>

Note: *Certificate refers to an intensive Korean language certificate program

A comparison of the target exchange student population by nationality and survey respondent nationality is presented in Figure A in the Appendix for reference. Generally speaking, nationalities were representative of the population with a slightly higher proportion of German respondents (5.6%), whereas the rest varied from one to three percent. Other demographics such as age (M=22.2 years old), gender (86% female), campus location (90% Seoul Campus), and level of study (72% undergraduate) are consistent with the exchange program’s characteristics. However, 83% of respondents reported having no prior online course experience.
Results

Quantitative Results

All statistics were calculated using the statistics software Jamovi (see Jamovi, n.d.). Details of course characteristics and students’ perceptions of Teaching and Learning Processes, Student Support, and Course Structure are presented in Table 2, 4, 5, and 6. iHEP benchmarks are listed in ranked-order from highest to lowest in Table 4, 5, and 6, and include frequency counts and percentages for each individual benchmark’s rating. A score for each iHEP dimension was calculated by aggregating all scores for the respective benchmarks and calculating their means and standard deviations, as well as Cronbach’s alpha (a scale reliability estimate). These are presented in Table 3.

Emergency Online Course Characteristics

Results show that the majority of students were taking typical undergraduate course loads of three to five courses (60.71%). Then when it came to the delivery formats, 62.9% of the students reported taking courses using both asynchronous and synchronous course formats. When asked where they engaged in their courses, 65.7% of students reported doing so from their dormitories, which is not surprising given social distancing and the closure of campus facilities, as well as their status as short-term students (see Table 2). By contrast, most regular degree students (locals/nationals) could engage in their courses from their homes or apartments.

Table 2. Emergency Online Course Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
<th>% (n=140)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Load (M=3.68)</td>
<td>1-2</td>
<td>26.42%</td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>60.71%</td>
</tr>
<tr>
<td></td>
<td>6-9</td>
<td>12.84%</td>
</tr>
<tr>
<td>Course Size</td>
<td>1-20</td>
<td>39.5%</td>
</tr>
<tr>
<td></td>
<td>21-40</td>
<td>44.3%</td>
</tr>
<tr>
<td></td>
<td>41-60</td>
<td>15.7%</td>
</tr>
<tr>
<td></td>
<td>61+</td>
<td>0.5%</td>
</tr>
<tr>
<td>Course Type</td>
<td>Asynchronous</td>
<td>8.6%</td>
</tr>
<tr>
<td></td>
<td>Synchronous</td>
<td>28.6%</td>
</tr>
<tr>
<td></td>
<td>Both Types</td>
<td>62.9%</td>
</tr>
<tr>
<td>Course Activities</td>
<td>Discussion Forums</td>
<td>10.7%</td>
</tr>
<tr>
<td></td>
<td>Small Group Projects</td>
<td>12.9%</td>
</tr>
<tr>
<td></td>
<td>Self-study Assignments</td>
<td>19.7%</td>
</tr>
<tr>
<td></td>
<td>Live Group (text) Chats</td>
<td>9.2%</td>
</tr>
<tr>
<td></td>
<td>Video Conferencing (Live Lectures)</td>
<td>27.9%</td>
</tr>
<tr>
<td></td>
<td>Pre-recorded Lectures</td>
<td>19.7%</td>
</tr>
<tr>
<td>Location of Course Engagement</td>
<td>Dormitory</td>
<td>65.7%</td>
</tr>
<tr>
<td></td>
<td>Apartment</td>
<td>14.3%</td>
</tr>
<tr>
<td></td>
<td>Cafe</td>
<td>12.9%</td>
</tr>
<tr>
<td></td>
<td>Goshiwon*</td>
<td>4.3%</td>
</tr>
<tr>
<td></td>
<td>Study Room</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Note: *Goshiwon is a common housing option available to students unique to Korea

The overall scores for the survey’s three dimensions and scale reliability are presented in Table 3. Each dimension’s Cronbach’s alpha score is greater than 0.7, representing internal data consistency and is considered reliable. All three dimensions can be characterized as neutral overall, though the standard deviations indicate variety among student experiences and perceptions. A detailed presentation of each dimension follows.
Table 3. iHEP Dimensions Scores

<table>
<thead>
<tr>
<th>Dimension Score</th>
<th>$\alpha$</th>
<th>$M$</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching and Learning Processes</strong></td>
<td>.839</td>
<td>3.294</td>
<td>.624</td>
</tr>
<tr>
<td><strong>Student Support</strong></td>
<td>.728</td>
<td>3.270</td>
<td>.841</td>
</tr>
<tr>
<td><strong>Course Structure</strong></td>
<td>.746</td>
<td>3.508</td>
<td>.656</td>
</tr>
</tbody>
</table>

**Teaching and Learning Processes**

When it came to *Teaching and Learning Processes*, results showed that overall, nearly 50% of responses were positive (agree or strongly agree) but individual benchmarks provide a more nuanced picture (see Table 4). For example, 65% of students had positive perceptions that faculty provided feedback on their assignments or answered their questions, yet when it came to course materials (25%), group work (38%), or interaction methods (32%), positive perceptions notably declined.

Table 4. Perceptions of Teaching and Learning Processes

<table>
<thead>
<tr>
<th>Benchmarks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty provide feedback on student assignments and answer questions in a timely manner.</td>
<td>3 (2.1%)</td>
<td>19 (13.6%)</td>
<td>27 (19.3%)</td>
<td>68 (48.6%)</td>
<td>23 (16.4%)</td>
<td>3.64</td>
<td>.983</td>
</tr>
<tr>
<td>Feedback to students is provided in a manner that is constructive and helpful.</td>
<td>4 (2.9%)</td>
<td>13 (9.3%)</td>
<td>34 (24.3%)</td>
<td>68 (48.6%)</td>
<td>21 (15.0%)</td>
<td>3.64</td>
<td>.946</td>
</tr>
<tr>
<td>Courses are well organized into units and allows students to master objectives before moving on to the next unit.</td>
<td>4 (2.9%)</td>
<td>11 (7.9%)</td>
<td>39 (27.9%)</td>
<td>72 (51.4%)</td>
<td>14 (10.0%)</td>
<td>3.58</td>
<td>.862</td>
</tr>
<tr>
<td>Student interaction with faculty is facilitated through a variety (e.g., chat, email, office hours, class postings, etc.) of ways.</td>
<td>2 (1.4%)</td>
<td>11 (7.9%)</td>
<td>45 (32.1%)</td>
<td>70 (50.0%)</td>
<td>12 (8.6%)</td>
<td>3.56</td>
<td>.815</td>
</tr>
<tr>
<td>The course units are of varying lengths determined by the complexity of the learning objectives.</td>
<td>5 (3.6%)</td>
<td>13 (9.3%)</td>
<td>46 (32.9%)</td>
<td>63 (45.0%)</td>
<td>13 (9.3%)</td>
<td>3.47</td>
<td>.917</td>
</tr>
<tr>
<td>Each unit requires students to engage themselves in analysis, synthesis, and evaluation as part of their course assignments.</td>
<td>6 (4.3%)</td>
<td>11 (7.9%)</td>
<td>48 (34.3%)</td>
<td>62 (44.3%)</td>
<td>13 (9.3%)</td>
<td>3.46</td>
<td>.924</td>
</tr>
<tr>
<td>Class voice-mail, video conferencing, and/or e-mail systems are provided to encourage students to work with each other and their instructor(s).</td>
<td>7 (5.0%)</td>
<td>32 (22.9%)</td>
<td>41 (29.3%)</td>
<td>53 (37.9%)</td>
<td>7 (5.0%)</td>
<td>3.15</td>
<td>.996</td>
</tr>
<tr>
<td>Courses are designed to require students to work in groups utilizing problem-solving activities in order to develop an understanding of the topic.</td>
<td>11 (7.9%)</td>
<td>41 (29.3%)</td>
<td>34 (24.3%)</td>
<td>50 (35.7%)</td>
<td>4 (2.9%)</td>
<td>2.96</td>
<td>1.04</td>
</tr>
<tr>
<td>Student interaction with other students is facilitated through a variety (e.g., 1:1, group activities, projects, discussions, etc.) of ways.</td>
<td>21 (15.0%)</td>
<td>37 (26.4%)</td>
<td>37 (26.4%)</td>
<td>36 (25.7%)</td>
<td>9 (6.4%)</td>
<td>2.82</td>
<td>1.05</td>
</tr>
<tr>
<td>Course materials (i.e., books, PowerPoints, videos, software, etc.) promote collaboration among students.</td>
<td>20 (14.3%)</td>
<td>46 (32.9%)</td>
<td>39 (27.9%)</td>
<td>32 (22.9%)</td>
<td>3 (2.1%)</td>
<td>2.66</td>
<td>1.05</td>
</tr>
</tbody>
</table>

*Note: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, M=Mean, SD=Standard Deviation*
**Student Support**

When examining perceptions of Student Support, 46.1% of responses were slightly less positive overall (see Table 5) compared to Teaching and Learning Processes.

Table 5. Student Perceptions of Student Support

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information (e.g., syllabus, software guides, tutorials, etc.) is supplied to students about their courses.</td>
<td>2</td>
<td>12</td>
<td>29</td>
<td>79</td>
<td>18</td>
<td>3.71</td>
<td>0.852</td>
</tr>
<tr>
<td>Students can obtain assistance to help them use the course software (e.g., E-Class, WebEx, Zoom, etc.).</td>
<td>4</td>
<td>18</td>
<td>42</td>
<td>69</td>
<td>7</td>
<td>3.41</td>
<td>0.881</td>
</tr>
<tr>
<td>A system is in place to address student complaints or difficulties with the course.</td>
<td>5</td>
<td>29</td>
<td>48</td>
<td>53</td>
<td>5</td>
<td>3.17</td>
<td>0.921</td>
</tr>
<tr>
<td>Easily accessible technical support is available to students throughout the course.</td>
<td>6</td>
<td>29</td>
<td>59</td>
<td>39</td>
<td>7</td>
<td>3.09</td>
<td>0.925</td>
</tr>
<tr>
<td>Students are provided with training or information to help them use course software, digital tools, apply, electronic databases, websites, etc.</td>
<td>14</td>
<td>33</td>
<td>40</td>
<td>48</td>
<td>5</td>
<td>2.98</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Note: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, M=Mean, SD=Standard Deviation

**Course Structure**

For Course Structure, 58.7% of responses were positive (agree or strongly agree) with similar percentages across the top three benchmarks. For the last two items, the positive perceptions dropped by roughly 10% due to more negative ratings (see Table 6).

Table 6. Student Perceptions of Course Structure

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are provided with basic course information that outlines course objectives, concepts, and ideas.</td>
<td>1</td>
<td>3</td>
<td>32</td>
<td>82</td>
<td>22</td>
<td>3.86</td>
<td>0.721</td>
</tr>
<tr>
<td>Sufficient resources are made available to the students to complete class assignments, tasks, projects, etc.</td>
<td>5</td>
<td>13</td>
<td>37</td>
<td>71</td>
<td>14</td>
<td>3.54</td>
<td>0.924</td>
</tr>
<tr>
<td>Specific expectations are set for students with respect to a minimum amount of time per week for study and homework assignments.</td>
<td>2</td>
<td>25</td>
<td>31</td>
<td>70</td>
<td>12</td>
<td>3.46</td>
<td>0.932</td>
</tr>
<tr>
<td>Learning outcomes for each course are summarized in clearly written, straightforward statements.</td>
<td>5</td>
<td>20</td>
<td>46</td>
<td>59</td>
<td>10</td>
<td>3.35</td>
<td>0.936</td>
</tr>
<tr>
<td>Faculty are required to grade and return all assignments within a certain time period.</td>
<td>9</td>
<td>25</td>
<td>35</td>
<td>54</td>
<td>17</td>
<td>3.32</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Note: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, M=Mean, SD=Standard Deviation
Qualitative Results

We also wanted to provide students with the opportunity to share their experiences in their own words. We included a single open-ended question where we asked “If you would like to share any thoughts/experiences and screen captures of your online classes this semester that you think are important, please add them here.” Overall, 35 students (25%) provided written responses and 25 screenshots of online courses were shared. Images represented simple characteristics such as course organization/layout, what pre-recorded lectures looked like, as well as instructor communiques explaining how to use various course tools, in addition to issues with course attendance and communication. We analyzed both the written responses and images for commonly occurring thoughts and experiences and were able to triangulate various written responses with images (Creswell, 2015; Lincoln & Guba, 1985) in certain cases. For example, students’ descriptions of participating in asynchronous online courses with mandatory synchronous attendance components (e.g., being required to log in at a certain time to watch a recorded lecture) were better understood with screenshots. In another case, a lack of instructor communication was showcased in a photo of a discussion thread over a 10-week period. We conducted a thematic analysis by codifying ideas in the data and then refined and aggregated the codes into larger themes (Braun & Clarke, 2006). The researchers discussed codes and themes until consensus was reached. We present the major themes that emerged from the data through our co-analysis and discussion in Table 7. These are discussed in more detail throughout the rest of the paper.

Table 7. Themes from Written Responses and Images

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
<th>Representative Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Course Isolation</td>
<td>Students described being unable to connect with their peers or instructors, often feeling “alone” and not having ways to interact online with classmates.</td>
<td>“We don’t really get to know either the professors and the classmates. I felt really alone this semester because if I have doubts about the assignments I just could use the internet to solve them.”</td>
</tr>
<tr>
<td>Absentee Instructors</td>
<td>Students felt that instructors were absent due to a lack of communication through email, assignment feedback, as well as infrequent responses to questions.</td>
<td>“I feel like I am going in blind, not too sure if what I am doing is right or wrong. While my teachers have done amazing lectures, I have no understanding as to whether or not my essays or assignments meet their standards.”</td>
</tr>
<tr>
<td>Course Confusion and Disorientation</td>
<td>Students described being confused and disoriented since information was not accurate in course syllabi, or that directions were unclear. This caused students to miss live lectures, fail assignments, and otherwise struggle with coursework.</td>
<td>“We don’t get proper instructions on our assignments nor a working email for contact purposes. I feel like I shouldn’t be worried about passing a course just because the professor is unable to use online-tools for his own course. This problem has also led to the professor saying that over half of the students have failed the midterm assignment for not meeting the requirements which were never given in a proper manner.”</td>
</tr>
<tr>
<td>Good and Bad Experiences Learning Online</td>
<td>Some students appreciated the flexibility of learning online at their own convenience, and some courses were interactive and engaging. “Bad” experiences were often absent instructor-student or student-student interaction.</td>
<td>“One of my professors does his best to make lessons as engaging as possible and uses live lectures. On the other end of the spectrum, a different professor seems to struggle a lot. He doesn’t answer comments in the Q&amp;A section, has provided three different emails, and only one of which works.”</td>
</tr>
</tbody>
</table>
Findings and Discussions

Experiences with Online Courses during COVID-19

Students had to learn how to take courses in multiple formats. For instance, the results showed that students’ course loads typically consisted of courses using both synchronous and asynchronous class formats (62.9%) versus having only a single format only as they normally experienced when taking face-to-face courses. The qualitative data (i.e., images, written responses), however, also yielded more insight into a third semi-synchronous format where students interacted with content asynchronously (i.e., watching pre-recorded lectures), but needed to login to the learning management system (LMS) to interact with that content at the same time the class was originally scheduled to meet on campus. This was displayed in the LMS as “View lecture during the valid period / Attendance Time”. Instructors did this as a way to keep attendance but perhaps it could have also been done as a way to help students not fall behind. We also found that some instructors presented warnings to students indicating “90% and more progress rate within recognized attendance period will consider complete attendance” and “You must click ‘exit’ button to get credit for attendance” as shown in Figure 1. One student complained about the activity threshold of 90%: “The amount of assignments that are needed to get the ‘attendance’ for a week is ridiculously high in some courses.”

Distance education in general, and online learning in particular, has often been marketed to nontraditional students and working adults who are unable to attend courses on campus at a given time (Means et al., 2014). These students are typically attracted to the flexibility of taking courses online that use asynchronous interaction and communication because it enables them to attend class at a time and place that is most convenient for them (Ko & Rossen, 2010). However, many students in our sample, who were largely traditional undergraduate college students, actually preferred the conventional fixed schedule that more closely aligned with what they expected in their face-to-face courses as one a student explained: “For me personally pre-recorded classes with a set attendance time are way more efficient because they allow me to have a bit more flexibility and I don’t have to stay locked up in my dorm.”
At the same time, other students pointed out that despite the logic and efficiency of this semi-synchronous approach, they still found learning online challenging due to the nature of ERT as captured in this quote: *"I am being sent a voice recording, and a PowerPoint, which can be very demotivating for studying, as it gets quite exhausting."* Roughly 61% of students were taking 3-5 courses (M=3.68) remotely, while around 12% had an overload of 6-9 courses. While some courses might be perceived as demotivating and exhausting, this might have been amplified by having both full course loads and/or multiple courses of ERT quality. In general, COVID-19 has been a source of anxiety stress among students (Sundarasen et al., 2020), and ERT has added insult to injury by enabling more stress, frustration, and exhaustion (Petillion & McNeil, 2020). Moreover, traditional undergraduate students do not typically take this many courses online per semester (Seamen et al., 2018). Nevertheless, different assumptions about how online courses operated, a lack of standardized practices, and a lack of communication (at least as perceived by some students) from faculty, and the sudden transition to learning online contributed to misunderstandings with scheduling:

*One professor never made it clear that there would be live online class every week-only that he would be available for questions. There was nothing mentioned of mandatory [online] attendance for what turned out to be the lecture, so I had gone a whole 5 weeks with just [doing] the assignments and PowerPoints and not the lecture.*

As described in Table 3, 50.1% of course activities consisted of asynchronous interaction modes. One student mentioned that "I personally think students weren't enough engaged in discussions or projects. They may be afraid of posting their thoughts or not used to do so." This sentiment can be indicative of underlying cultural differences where students from Confucian heritage cultures often view time in the classroom as equivalent to the instructor’s time to transmit knowledge, or where “challenging” an instructor is inappropriate (Lee, 2011). Student-to-student interaction in the form of group work was relatively small (12.9%), something which students missed: "I only had one class where I was required to interact with other students, and it was only for one group project.” In a broader view, it is also likely that some students may simply have been less engaged in their course activities as a consequence of ERT and the realities of the COVID-19 pandemic.

**Perceptions of Online Learning during COVID-19**

The aggregated results suggest that students had neutral or ambivalent perceptions of their online courses. For instance, when asked about the degree to which they agreed with various traditional quality indicators of *Teaching and Learning Processes* (e.g., Courses are designed to require students to work in groups utilizing problem-solving activities in order to develop an understanding of the topic) in Table 4, *Student Support* (e.g., A system is in place to address student complaints or difficulties with the course) in Table 5, and *Course Structure* (e.g., Learning outcomes for each course are summarized in clearly written, straightforward statements) in Table 6, larger standard deviations suggest both a more negative and positive experience. This variance likely results from differing combinations of students’ own preferences, personalities, individual course designs, content, and activities, as well as each instructors’ ability to facilitate the course and interact with students at a distance. For *Teaching and Learning Processes* (M=3.29, SD=.624) dimension, 50% of respondents rated individual benchmarks as Agree or Strongly Agree whereas 25% were neutral, and 15.5% disagreed with these benchmarks reflecting their experiences. Students highlighted not only idiosyncratic online practices from instructors, but more consistently a lack of communication (M=3.56, SD=.815), and the lack of classroom interaction (M=2.82, SD=1.16) or intentionally designed group work scenarios (M=2.96, SD=1.04). The *Student Support* (M=3.270, SD=.841) dimension was similarly split with about 46% of respondents agreeing that the benchmarks were accurate, 31.1% neutral, and 21.7% disagreeing. While *Course Structure* was rated the highest (M=3.508, SD=.656) among the three dimensions with nearly 60% of respondents agreeing or strongly agreeing that the *Course Structure* quality indicators being accurate, 40% did not. One still might expect this to be higher overall since a course’s underlying instructional design exists irrespective of its delivery medium, highlighting difficulties inherent in the sudden transition to ERT, and the
translation of face-to-face courses into an online format. The themes derived from written responses and images are consistent with the quantitative data in this respect. For example, students were frustrated by idiosyncratic practices:

I’d like to point out that it is not okay for a course that is supposed to be 2 hours, the teacher simply decides, without even asking, to make it a 3 hour course at times “when the content is too much for 2 hours”. That is something which would not happen offline, and I find it inappropriate to do that online, considering that the teacher does not even know if I might have another course after his course.

Another student recounted the use of electronic text-to-speech software: “The professor is using a robot voice to record the class. It is impossible to focus on a ‘Google Translate Voice’ of course, and the professor is absolutely not communicating with the students.” Other students frequently complained about the lack of communication in relation to feedback on assignments and exams (M=3.32, SD=1.10):

He doesn’t answer comments or in the Q&A section, has provided three different emails, only one of which works, and only for some students. I have received a small comment on my midterm paper but no actual grade. Other fellow students only got told they missed the topic when there was little to no guidance on the topic to begin with.

As exchange/visiting students, they often compared their experiences at the host university with those of their home university, as well with prior formal experience learning online:

Most of my teachers haven’t been able to communicate to me about my grade while the online courses I take in my home university update the grade book every other week so I know and understand what I am doing right or wrong. Right now in most of my classes I feel like I am going in blind, not too sure if what I am doing is right or wrong.

Other students, depending on the country of origin, found the courses to be satisfactory, reminding us of the diversity of socio-economic conditions around the world and how this can play into issues of the digital divide (Beaunoyer et al., 2020) as represented in the following quote: “I think it also depends on your expectations, compared to my country, in Korea they planned very well [the] online classes.”

The lack of communication, and an extreme example of absenteeism, was also seen in a classroom discussion board in Figure 2 where 10 weeks had passed without any communication from the instructor. Some students also found conventional forms of information delivery lacking: “Sometimes the syllabus is not updated, and some important information are not given clearly, which makes it hard to organize study times.” This sentiment was reflected to a certain extent on the perceptions of Course Structure items concerning basic course information (M=3.86, SD=.721) and unit or lesson learning objectives (M=3.35, SD=.936) though the SD is comparatively large, suggesting a diverse experience.

The results revealed that some students perceived faculty members as being unable to use “technology” to teach effectively at a distance. For example:

I think most professors do not know how to use online resources for facilitating the lectures. Most of my classes is not because the students do not know how to deal with technological difficulties, but because the faculty is not trained to do so.

Another student recognized the variability of expertise and skill among faculty members and stated that:

The level of the online classes depends a lot on the professor. Some of them are really good at that, and you can see their efforts. But others have many difficulties to bring a good class in the online platforms. Maybe you could have a course for the professors so all could have a standardized level of class quality.

One student attributed the difficulties or poor quality of courses directly with instructor behavior which may have roots in different cultural perceptions of classroom roles, as well as less familiarity, as an exchange student, with university policy and departmental practices:

What is really disappointing about the online classes, is that the professors just do what they want. Some professors give way more assignments and take more time for
their classes then they could if it was normal classes. It is really hard for students to say something about it and I see some of my friends suffering this kind of treatment. Other professors just let you write an assignment every week and don’t upload any teaching content at all.

Figure 2. Classroom Discussion Forum

Ultimately this finding is not surprising. Even prior to COVID-19, research has suggested that teaching online requires a different skill set, part of which requires a basic comfort and ability with using technology (Flores, 2017); unfortunately, some faculty simply do not possess this technical expertise, or are unable to overcome various barriers to effective technology usage (Ertmer et al., 2015).

When viewed holistically, the makeshift nature of ERT, lack of training in distance education pedagogy, lack of “technological” expertise, different socio-cultural backgrounds, and the stresses of the pandemic all generally combined to create an understandably sub-par experience. However, one might expect the benchmarks of perceptions of Course Structure to be higher as the literature has suggested that indicators such as learning objectives should be the same regardless of delivery medium (Ko & Rossen, 2010; Means et al., 2014; Morrison et al., 2011), yet nearly 26% of students viewed Course Structure benchmarks neutrally, with another 15.4% disagreeing they were reflective of their experiences. Prior research comparing the delivery medium’s effect on learning has consistently shown that there are no significant statistical differences when conditions (e.g., experienced/qualified instructors, developed curriculum, equivalent instructional/intervention methods) are equal (Jhang et al., 2007). In simpler terms, distance courses do produce the same outcomes as their traditional face-to-face counterparts, yet Course Structure did not seem to be translated consistently in the sudden shift to ERT. Evidence for this comes from both positive and negative student experiences, which is also reflected in large standard deviations. One student described that “3/4 classes worked really well. But one class was really messy, we didn’t know what to do and the teacher seldom replied.”

Prior Online Learning Experience and Student Perceptions

It was likely that some students would have prior online course experience (Seaman et al., 2018), thus we needed to account for how these respondents’ perceptions of ERT could potentially negatively skew the results of the survey. Since 17% of the exchange students in the study reported having taken online
courses before, we conducted a Mann Whitney test on each individual item of the iHEP dimensions, as well as on the overall dimension scores to test this hypothesis. No statistically significant differences between the two groups were found. Thus, students with prior online experience seem to be balanced in their perceptions of ERT.

Implications

The data in this study present varying student perceptions of the quality of Teaching and Learning Processes, Student Support, and Course Structure with ERT during COVID-19. Whether these views and experiences were positive or negative were influenced by factors often outside of students’ control such as an instructor’s skill in facilitating a course remotely, in addition to students’ own dispositions and characteristics. How the confluence of these contextual traits result in positive/negative perceptions is difficult to know under the best of circumstances, however, the overall neutral perception students had of learning online through ERT, all things considered, are not particularly disastrous. One possible explanation for this may be that the vast majority of students (83%) had no prior formal experience with online courses as a point of comparison. However, students with prior online course experience in this study did not view courses differently (i.e., more negatively). The qualitative data suggested that the exchange students wanted/missed interacting and communicating the most with their instructors and peers. Future ERT practices might focus on ensuring these two outcomes, which might be achieved by standardizing these two practices during ERT. Similarly, implementing effective synchronous and asynchronous communication strategies, as well as basic distance education pedagogy training, may help instructors facilitate a greater variety of interaction modes and foster social presence. Socialization, in general, is an important aspect of residential undergraduate education, and in some ways even more vital when it involves international students. Exchange students in particular are short-term sojourners (i.e., typically 4-6 months), thus socialization is likely even more critical given limited time to develop relationships with peers, faculty, and the host university.

Conclusion and Suggestions

Evaluating ERT by conventional distance education quality indicators is not entirely fair or appropriate. We do not intend to judge the quality of teaching and learning online under crisis conditions where institutions and faculty were asked to do their best with limited resources, time, and experience. Our goal instead was to document students’ perceptions and experiences so that ongoing emergency remote learning can be improved while the pandemic continues, as well as for if/when ERT becomes necessary again - a reality that is likely due to the fact that COVID-19 outbreaks can result in campus closures at any time. The results of this study document how ERT manifested online at one university in South Korea at the onset of the COVID-19 epidemic and illustrate a diversity of course formats resulting from the sudden transition to remote learning. The quantitative results in this study show a relatively ambivalent experience in terms of quality Teaching and Learning Processes, Course Structure, and Student Support, but it also showed that students had both good and bad experiences, which is common in a traditional semester. Moreover, the complementary qualitative data provides detail into the most desired but missing aspects of their ERT experiences: communication from faculty, interaction with other students, and feedback on their work. Nevertheless, there are limitations. First and foremost is that the sampling is from a single institution with a diverse exchange student body. Further, it did not sample local students whose experiences may differ as both regular degree students, and as locals with traditional academic support structures (e.g., friends, family) in the country, in addition to the majority sharing the same socio-cultural heritage as that of the institution and the vast majority of its instructors. Moreover, as short-term students at the host university, they are less familiar with institutional/departmental policies and practices, which may amplify negative perceptions. Lastly, the potential exists for students to be more favorable in their responses since it was self-administered. Other distance education quality frameworks (e.g., Quality Matters, International Council for Open and Distance Education, Online Learning Consortium) might present students’ perceptions in a different light.
Additional research is needed to compare students’ experiences with ERT, as well as to see if ongoing ERT practices, with lessons-learned from the first half of 2020, have improved when/where still in use. There is so much diversity in formal online courses which makes direct comparisons among the multiple contextual dimensions of online courses no easy task, though one would suspect that many instructors and students, who are new to online learning, might have similar experiences. Future research can investigate how students and instructors' past experiences teaching and learning online might influence their experiences with ERT, as well as how their experiences with ERT influence their perceptions of online courses. The diversity of student backgrounds and comparisons to formal "proper" online courses in their home countries and home universities reminds us that there is no universal standard to judge the quality of courses with, or the multiplicity of formats in which they can manifest. An inventory of novel online course formats that surfaced through ERT may further broaden how online courses have traditionally been conceived of by both distance education scholars and practitioners.
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Suggested citation:

Appendix

Figure A: Survey Population Nationality vs. Respondent Nationality by %

![Survey Population Nationality vs. Respondent Nationality by %](image-url)