

On the Quality of an EAP Course over Four Semesters of Online Education During Covid-19 Pandemic

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Abstract

Upholding the same standards, if not higher, in online courses as those in the face-to-face mode is crucial particularly during the time when online education is the only possibility due to the pandemic. The present study was an attempt to evaluate and compare the quality of an English for Academic Purposes (EAP) course over five consecutive academic semesters (one face-to-face and four online semesters) at Amirkabir University of Technology (AUT) to find out if the quality of the online instruction during the Covid-19 pandemic was comparable to that of the face-to-face mode before the pandemic. In so doing, three course components were checked; vocabulary, grammar, and reading comprehension. 213 students studying *English I* at AUT were studied. The results of SPANOVAs run indicated that for the vocabulary and grammar components, the only group experiencing a significant disadvantage was the Feb.2020 group undergoing the online instruction right after the outbreak. However, for the reading comprehension component, no online group could reach a level of performance similar to that of the face-to-face group, indicating that the quality of online instruction could not uphold the same standards as those of face-to-face instruction. The possible reasons and implications are further discussed in the rest of the article.

Keywords: Online, Face-to-face, Grammar, Reading Comprehension, Vocabulary

1. Introduction

The use of technology in language learning and teaching has a long history, but while many claim that the integration of technology with classroom teaching has considerably altered the practice of teaching for better, not much evidence is available backing them up (Stern & Willits, 2011). It is believed that the lack of an adequate uptake in the use of technology in the classroom practices can be attributed to the teachers' need for professional development and training programs in this regard (Littlejohn, 2003; Palikat, 2019). In order to successfully integrate technology into teaching and have a sustainable blended learning, teachers need to receive continuous training in the use and application of the related technology in their teaching practices (Bennet et al., 2018; Hinkelman, 2018; Niederhauser, et al., 2018).

The need for such programs is more tangible in the Iranian context in which Computer Assisted Language Learning or CALL has been rarely employed in most fields. Before the pandemic struck Iran, most university instructors, especially the aged ones, had a strong tendency to avoid blended learning or virtual education in any form as they were not able to employ the related technology. They were also unwilling to learn how to do so. For instance, in Amirkabir University of Technology (AUT), although virtual teaching platforms had been available for a long time, very few instructors had ever benefited from them. Even the ones who did make use of them did it to upload files for the students, collect assignments, or inform students of some upcoming event but not for online teaching.

When the Covid-19 pandemic reached Iran, instructors had to turn to a mode of instruction with which they were not familiar. In so doing, they tried to render their face-to-face teaching practices into

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an online mode without considering the subtleties of the new mode. This could significantly affect the quality of their classroom practices as well as students' learning. The present study intended to investigate such an impact in the case of an EAP course at AUT over the past two years of online teaching during the pandemic against the more conventional, face-to-face mode of instruction for the same program.

2. Literature Review

Online classes or distant learning programs have long been part of the educational programs offered by different institutions (Allen & Seaman, 2016). Such programs, however, have particularly been offered in contexts where the distance was a determining factor, or in fields in which the online mode could uphold the same standards, if not higher, as those set for the face-to-face programs (Baranik et al., 2017).

As the technology advances, higher education institutions try to integrate it into their more conventional teaching practices (Raes, et al., 2020) so that they may address learners' emerging needs for a less location and time-bound education (Lakhali et al., 2017). This integration has largely transformed education and more particularly higher education over the past decade (Altbach et al., 2019).

While blended learning has been there for a longer time, the use of Virtual Reality (VR) in education, for instance, has and still can revolutionize the learning and teaching practices as it can stimulate the feeling of presence and immersion in the learners (Vesisenaho et al., 2019). As such, its use has been extended from the entertainment industry to education and vocational training programs (Baranik et al., 2017; Chen & Hsu, 2017). In the case of language education, VR is believed to be beneficial to the learners as it can help develop learner autonomy and offer a profound contextualization via simulation and meaning-form enhancement using multimodal input (Tseng et al., 2020).

As a result of such advances, the number of students enrolling in online courses has been on a rise over the past few years. In 2008 in the U.S., for example, about 4.6 million students enrolled in at least one online course. This number increased to 5.6 million in 2009 and reached 7.1 million by 2012 (Allen & Seaman, 2014). During the same time, 14% of higher education students were exclusively studying in online programs (Allen & Seaman, 2016). This has encouraged higher education institutions to consider online programs as an integral part of their strategic plans and increase the number of such courses and programs. During the time between 2007 and 2013, the number of higher education institutes offering online courses experienced a rise by 43% (Allen & Seaman, 2014).

This embracement of online courses and programs by both the students and the institutions could be attributed to the merits such courses may enjoy. Online courses, unlike the face-to-face ones, are more flexible in timing. They are also not location-bound, i.e., students from all over the world can attend an online course, which can help provide most students with more equal and fair opportunities to access high quality education (Fischer et al., 2020). They are also believed to be richer and more efficient as well as cost-effective (Rasheed et al., 2020).

Although online programs may enjoy a number of advantages over the more conventional modes of instruction, they are not without flaws. In fact, the implementation of such courses and programs can be quite challenging. Students attending online courses often fail to demonstrate a performance of similar level and standards to those in face-to-face courses (Xu & Jaggars, 2013). The course completion rates and course grades are often lower (Bettinger et al., 2017; Jaggars & Xu, 2016). Such flaws are often attributed to the learner autonomy and self-directed learning skills playing a crucial role in online education (Cho et al., 2017; Fischer et al., 2020; Rasheed et al., 2020).

Interpersonal communication between the instructor and the learners and among peers is a very crucial factor affecting the learning process, which is also highly valued by the learners (Ramsey et al.,

2016). In the case of the personal contact and communication between the teacher and the learners, research emphasizes on the importance of self-disclosure on the part of the teacher (Soltz & Bryant, 2013) as well as *immediacy* practices, which are the “verbal and non-verbal communication behaviors reducing the social and psychological distance between people” (Song et al., 2016, p. 436). Such behaviors are known to have a positive impact on learners’ motivation and can help facilitate their learning experiences (Song et al., 2016). A second factor heavily affecting the learning process is the teacher-student as well as student-student interaction as it can provide learners with unique opportunities for the negotiation of meaning (Guo & Mollering, 2016). This negotiation can in turn lead to learning especially when the learners attempt to resolve the difficulties they have encountered in communicating with others, especially the more competent ones (Ellis, 1999).

In an online teaching environment, however, holding the same levels of interaction and personal communication as in the face-to-face programs is a great challenge. Due to the nature and structure of the online teaching environment, the non-verbal communication behaviors demonstrated by teachers are very restricted. This can adversely affect the teacher-student relationship. In these programs, the students often know little about their instructor as the instructors are often unwilling to practice adequate self-disclosure (Song et al., 2016). As the usual non-verbal communication behaviors such as smiling and eye contact are absent in online courses, in order to foster *e-immediacy* (Al Ghadami et al., 2016) in online classes, researchers suggest the use of other useful remedies such as emoticons (Gunter, 2007) and humor (Kucuk, 2009) as they can enhance students’ learning experience and participation (Al Ghadami et al., 2016).

Still a third important variable having a strong impact on students’ learning is the extent to which they are engaged with the learning process. Student engagement is believed to be linked with positive learning outcomes and better retention rates (Boto-Lorenzo & Gomez-Sanchez, 2017). Therefore, it is of utmost importance to keep students interested and engaged during the class time. However, upholding the same level of engagement and active participation as those in face-to-face programs is a challenging task (Raes et al., 2020). The main reason could be the lack of adequate teacher-student personal contact and interaction as well as teachers’ often monologue-like teaching practices, which make students feel as if they were watching TV (Weitze, 2015). That could also explain why online students are often reported to be less active, learn less in comparison with the face-to-face students, feel frustrated and unmotivated, and be unwilling to attend the classes (Raes et al., 2020; Weitze, 2015).

The online students also feel less attached to their institution and do not enjoy the same feeling of connectedness to their instructors (Ramsey et al., 2016). The situation gets more complicated when one learns that students coming from less advantaged backgrounds are more at harm in online courses than face-to-face ones (Baranik et al., 2017). These students often lack the necessary skills in self-directed learning, necessary for dealing with the complications of the online programs (Fischer et al., 2020) and face extra performance penalties in online courses (Xu & Jaggars, 2014).

Considering the above points, one learns that online courses have a lot of intricacies and can pose a number of challenges for the learners, instructors, and educational institutions. Holding similar standards, teaching quality, and learning outcomes comparable to those in face-to-face programs is very crucial if the institutions intend to pursue the development of online education and keep up with the technological advances in the field of education worldwide.

Before Feb. 2020, in Iran, the implementation of educational technology in teaching practices especially in the form of virtual and blended learning was proceeding very deliberately. The necessary infrastructures were not available in most contexts and where they were, instructors were not trained on how to benefit from them. In addition, the majority of the instructors, more particularly the aged ones, were unwilling to learn or employ such platforms in their teaching practices as they felt safer and more comfortable with their old teaching habits (Azizi, 2020).

However, when the Covid-19 pandemic hit every educational institution by surprise, the same instructors had no choice but to turn to the online mode of instruction for which they were not prepared. This often resulted in the translation of their conventional teaching practices into an online mode using the limited survival skills they had to develop shortly via training crash courses on how to use the available virtual learning platforms (Azizi, 2020).

All these indicate that in such a situation the quality of the student learning and the instructors' teaching practices could be at risk. Now that universities have had four academic semesters of online instruction, it seems to be a good time to evaluate the quality of teaching and learning in such programs and compare it with that of the face-to-face courses before the pandemic to see if they could uphold the same standards or remedies need to be in place. To the best of the author's knowledge, very few studies, if any, have so far done so at this scale. In so doing, an EAP course in Amirkabir University of Technology was selected, and students' achievements in three course components were evaluated over five consecutive academic semesters including one face-to-face and four online semesters during the pandemic. To do so, the following research question was stated:

Research Question One: Is there any significant difference in students' achievements in an EAP online course over four semesters of online classes during the pandemic and those of students in the face-to-face classes before the pandemic in terms of three course components of Vocabulary, Grammar, and Reading Comprehension?

3. Method

3.1. Participants

A total number of 372 students of engineering and basic sciences, enrolling in 10 classes of 'English I' course over five consecutive semesters at Amirkabir University of Technology (AUT), were initially selected for participation in the present study. As some of the students did not meet the study criteria or complete all phases of data collection, the study was completed with the participation of 213 students (117 male and 96 female) who were mainly freshman students taking the course as part of the curriculum offered by the university on their first year at the university. Their age ranged from 18 to 23 with a mean of 20.34 (SD = 2.54).

3.2. Instruments

In order to check the homogeneity of the groups at the study onset, an Oxford Quick Placement test (OPT) was used. In addition, a 70 item test of English comprising of 30 items of vocabulary, 20 items of grammar, and 20 items of reading comprehension was used as the pretest. Based on the table of specification used for the pretest, a parallel form of the test was constructed and used as the posttest. Both tests had already been piloted with a group of students other than the participants, but with similar characteristics, to ensure comparability. The vocabulary and grammar section of the test was constructed based on the course textbook, titled *English Dynamo*, which is written and compiled by the members of the English Language Department at AUT. The book encompasses 10 units, each starting with a text of about 1,000 words on an engineering-related subject followed by different types of reading comprehension questions. A section on vocabulary with different types of exercises is also included. Next comes the grammar lesson followed by the related exercises. Finally, a short lesson on writing is presented.

3.3. Data Collection Procedure

The present study was an attempt to investigate the quality of an EAP course over five consecutive semesters starting with the last semester before the COVID-19 pandemic and including the four semesters of virtual learning during the pandemic so far. *English I*, a one-credit course but presented for two hours per week, is the first general English course students have to pass before they move to

English II, which is a two-credit course. Both courses are intended to help students of engineering and basic sciences develop their English mainly in the reading skill, with a focus on texts and subjects mainly related to their fields of study. While the texts in both courses are selected from among the authentic texts in the related fields, *English I* enjoys a more general nature in comparison with the materials employed in *English II*. The books entitled 'English Dynamo' and 'English Turbo,' both authored by the faculty members of the English Department at AUT are used for the *English I* and *English II* programs, respectively.

Due to the limitations in time and the course objectives, the instruction in both courses is mainly centered on the reading skill, with a focus on the three components of vocabulary, grammar, and reading comprehension. As such, two parallel forms of an achievement test, with 70 items each, were devised. The tests, constructed based on a table specification made for the purpose of the study, covered the vocabulary used in the course book '*English Dynamo*' with 30 items as well as the grammar component of the book with another 20 items. However, for the reading section, 20 items in the form of 4 passages were employed. The passages were unseen and selected from among the available texts for the TOEFL pbt course books. As the tests were originally intended for a different study before the Covid-19 pandemic struck, they had been piloted with a different group of students of the same level and similar characteristics to ensure consistency and reliability. The Cronbach alpha for the pooled items was found to be .85 for the pretest and .89 for the posttest.

The data collection began in September, 2019 when Covid-19 pandemic had not struck yet, and continued over the next four semesters of online teaching due to the official announcement of the pandemic in February, 2020. The data collection for the first group, including the test sessions and the instruction, was done in a face-to-face mode. For the second semester, which coincided with the pandemic, the OPT and the pretest were administered in face-to-face sessions before all classes were cancelled in February 17. The students had attended one face-to-face session of the instruction as well by that time. The instruction and the posttest for this group and the rest of the data collection for the other three groups were all done online.

Each semester, about 20 classes of *English I* and 20 classes of *English II* are offered by the English Department at AUT. For the purpose of data collection, two classes were randomly selected from among the *English I* classes and assigned to the researcher for instruction and data collection. While the maximum number of the students enrolled in each class ranged from 30 to 35 in the face-to-face classes in the first two semesters of data collection, it was between 45 and 50 for the online classes in the last three semesters.

Only the participants falling into the three groups of elementary, lower intermediate, and upper intermediate levels, based on the results of the OPT, were included in the study, leaving out those with more extreme scores. In addition, only the data coming from the participants attending at least 75% of classes during a semester were included in the data analysis. This left us with only 213 participants at the end, with 44 participants (26 male and 18 female) in the face-to-face group, 46 participants (22 male and 24 female) in the Feb, 2020 semester, 42 participants (25 male and 17 female) in the Sep. 2020 semester, 39 (22 male and 17 female) in the Feb. 2021 semester, and 42 (22 male and 20 female) in the Sep. 2021 group.

At the beginning of each semester, the pretest was administered, and posttest was given right before the students' final exam. Students were told that the test could help them evaluate their preparedness for the final exam and attendance was necessary as it was part of their class participation requirements. There are two alternatives available to instructors at AUT for holding online classes: Big Blue Button (bbb) and NIMA. NIMA is a local platform exclusive to AUT which has evolved and updated over years especially during the pandemic. It is very similar to other platforms such as Skyroom or BBB in terms of options and capabilities. These two platforms are used for online classes while a

third platform is available for offline teaching allowing the instructor to publish announcements, upload files and videos, give quizzes and tests, and many other possibilities some of which also available in the online platforms as well.

3.4. Data Analysis

In order to compare the homogeneity of the groups, a one-way ANOVA test was run among their scores in OPT. The same test was used to check the groups' comparability on the pretest for the three components of Vocabulary, Grammar, and Reading Comprehension. In addition, in order to check if the five study groups differed in their progress from pretest to posttest in each test component, a number of Within-Between Subjects ANOVA, also known as SPANOVA or Split ANOVA, together with pairwise comparisons were run.

4. Results

In order to make sure that all groups were comparable at the outset of the study, an OPT was used. The results of the One-Way ANOVA run among the five groups showed no significant difference, $F(4, 218) = .21, p = .93$, as the percentage of the participants in different proficiency level was kept equal in each group. About 55 % of the participants in each group were those falling into the elementary level (A2) with a score of 18 to 29 in the 60-item version of the OPT; about 30 % fell into the lower-intermediate level (B1) with a score between 30 and 39, and about 15 % of the them fell into the upper-intermediate level (B2) with a score of 40 to 49. The data for the rest of the participants were not included in the analysis as they were considered outliers.

The next step was to compare the five groups in terms of the level they started the program with regarding the three components of vocabulary, grammar, and reading comprehension. The results of the one-way ANOVA tests run showed no significant difference among the five groups in the pretest for the Vocabulary, $F(4, 218) = .40, p = .81$, Grammar, $F(4, 218) = 1.11, p = .36$, and Reading Comprehension components, $F(4, 218) = 1.03, p = .39$. This was not of any surprise as participants in each group were matched in terms of proficiency. The related descriptive statistics are presented in tables 1 to 3 respectively.

In order to check if there was any significant difference among the five groups in their improvement over time, a SPANOVA test was run for each component. Table 1 presents the related descriptive statistics for the vocabulary component of the test.

Table 1: Descriptive Statistics for the Groups' Performance in the Vocabulary Component

Group	Vocabulary	N	Min.	Max.	Mean	SD
G1 Face-to-Face	Pretest	44	6	19	11.45	3.23
	Posttest	44	14	29	22.52	4.16
G2 Feb. 2020	Pretest	46	6	19	11.28	2.99
	Posttest	46	12	26	18.26	3.21
G3 Sep. 2020	Pretest	42	6	20	11.62	3.04
	Posttest	42	15	30	22.02	3.38
G4 Feb. 2021	Pretest	39	7	21	11.97	3.19
	Posttest	39	15	30	21.51	3.75
G5 Sep. 2021	Pretest	42	7	19	11.93	3.02
	Posttest	42	16	29	21.76	3.2

As it is evident in Table 1, all groups had started the program almost at the same level with a mean ranging from 11.28 to 11.97. However, the improvement over time from the pretest to posttest was not the same for all groups. The five groups' mean scores at the posttest ranged from 18.26 (G2) to 22.52 (G1).

The results of the SPANOVA indicated a statistically significant interaction between *Time* and *Group*, Wilks' Lambda = .58, $F(4, 208) = 37.27, p < .005$, partial Eta squared = .42. There was also a substantial effect for *Time*, Wilks' Lambda = .03, $F(1, 208) = 6763.70, p < .005$, partial Eta squared = .97. More importantly, the main effect for *Group*, comparing the effect of the mode of presentation, was found statistically significant, $F(4, 208) = 3.79, p = .00$, partial Eta squared = .07. The results of the multiple comparisons, using Tukey HSD, showed a significant difference between Group 2 (Feb. 2020) and all other groups but not among other groups (G2vsG1, $p = .01$; G2vsG3, $p = .03$; G2vsG4, $p = .04$; G2vsG5, $p = .02$).

Regarding the grammar component of the program, as evident in table 2, the participants' mean score at the pretest ranged from 8.54 (G2) to 9.59 (G4) while it was between 12.48 (G2) and 15.07 (G1) at the posttest, which shows a larger variation in scores in the posttest than the pretest.

The results of the SPANOVA run to test the five groups' differences in their improvement over time showed a similar pattern to that of the vocabulary component as the interaction between *Time* and *Group* was found statistically significant, Wilks' Lambda = .66, $F(4, 208) = 26.68, p < .005$, partial Eta squared = .34. There was also a substantial effect for *Time*, Wilks' Lambda = .04, $F(1, 208) = 4656.58, p < .005$, partial Eta squared = .96. The main effect for *Group*, comparing the effect of the mode of presentation, was also found statistically significant, $F(4, 208) = 2.75, p = .03$, partial Eta squared = .05. The results of the multiple comparisons, however, showed a significant difference only between Group 2 (Feb. 2020) and group 1 (face-to-face mode) but not any other group ($p = .03$).

Table 2: Descriptive Statistics for the Groups' Performance in the Grammar Component

Group	Grammar	N	Min.	Max.	Mean	SD
G1 Face-to-Face	Pretest	44	5	15	8.98	2.65
	Posttest	44	10	20	15.07	2.44
G2 Feb. 2020	Pretest	46	5	15	8.54	2.46
	Posttest	46	9	19	12.48	2.51
G3 Sep. 2020	Pretest	42	4	15	9.12	2.62
	Posttest	42	9	20	14.10	2.48
G4 Feb. 2021	Pretest	39	5	16	9.59	2.72
	Posttest	39	10	19	14.21	2.33
G5 Sep. 2021	Pretest	42	6	15	9.43	2.32
	Posttest	42	9	20	13.95	2.31

On the other hand, the pattern of results in the case of the reading comprehension test was completely different from those of the other components. While the changes in the scores from the pretest to the posttest were not much different among the online groups as well as between the face-to-face group and most of the online groups in the case of the vocabulary and the grammar components, a noticeable

difference was observed between the face-to-face group and all the online groups in the reading comprehension test. Table 3 presents the related descriptive statistics.

As table 3 indicates, while all groups started the program at a similar level (mean score ranging between 7.11 and 7.82), a dramatic difference is observed between the face-to-face group and the other four groups at the posttest, with G1 reaching a mean score of 13.09 out of 20 while other groups reaching a mean score between 8.57 (G2) and 9.57 (G4).

Table 3: Descriptive Statistics for the Groups' performance in the Reading Component

Group	Reading	N	Min.	Max.	Mean	SD
G1	Pretest	44	4	16	7.14	2.30
Face-to-Face	Posttest	44	8	19	13.09	2.65
G2	Pretest	46	5	15	7.11	2.15
Feb. 2020	Posttest	46	5	18	8.57	2.62
G3	Pretest	42	4	16	7.60	2.67
Sep. 2020	Posttest	42	7	18	9.57	2.21
G4	Pretest	39	5	16	7.82	2.80
Feb. 2021	Posttest	39	7	16	9.38	2.35
G5	Pretest	42	5	16	7.71	2.47
Sep. 2021	Posttest	42	6	17	9.48	2.50

The interaction between *Time* and *Group* was found statistically significant, Wilks' Lambda = .23, $F(4, 208) = 174.53, p < .005$, partial Eta squared = .77. There was also a substantial effect for *Time*, Wilks' Lambda = .12, $F(1, 208) = 1491.14, p < .005$, partial Eta squared = .88. More interestingly, the main effect for *Group* was found statistically significant, $F(4, 208) = 5.21, p = .00$, partial Eta squared = .09. The results of the multiple comparisons showed a significant difference between Group 1 (face-to-face mode) and all online groups (G1vsG2, $p < .005$; G1vsG3, $p = .03$, G1vsG4, $p = .04$; G1vsG5, $p = .03$) but not among the online groups, which indicates a disadvantage for the online groups in comparison with students undergoing a face-to-face instruction before the pandemic.

5. Discussion

While all groups started the program at a similar level and went through the same instruction, the extent to which they improved over time was quite different from each other. Even the pattern of change was not the same for all online groups. In the case of the vocabulary component, while all groups improved from the pretest to the posttest, this improvement was significantly less for the second group, which was the group undergoing an online instruction in February, 2020 when the pandemic started. Interestingly enough, no significant difference was observed between the face-to-face group and all other online classes as well as among the other three online groups starting the online instruction in September 2020 and onwards. In the case of the grammar component, a similar pattern of results was observed but for the fact that the only difference was observed between the face-to-face group and the first online group (Feb. 2020). On the other hand, a completely different picture was observed in the case of the reading comprehension component. A significant difference was observed between the face-to-face group and all the online groups, with the face-to-face group significantly outperforming them all.

The first issue to be considered is why the first group undergoing an online instruction experienced a disadvantage in the case of the vocabulary in comparison with all other groups, both the face-to-face and the online ones, as well as a disadvantage against the face-to-face group in the grammar component. It seems that the Feb. 2020 online group has been in an underprivileged position. There could be a number of speculations. However, in the most plausible one, everything could be attributed

to the conditions under which they experienced the online instruction. This groups' instruction coincided with the beginning of Covid-19 pandemic. It started the program in the face-of-face mode but after one session, all universities were officially closed until further notice. For the next 4 weeks before Nowruz holiday, all university officials and professors hoped it would be over soon and they could resume their instruction.

When the pandemic struck, the majority of the professors had little or no experience in teaching any online classes. As a result, they resisted moving from a face-to-face mode of instruction to a virtual one. The majority of them needed a training program on how to use the available virtual learning platforms. As such, they delayed the instruction with the hope that soon the conditions would be back to normal, and they could fall back on their traditional methods of teaching. It was not until after Nowruz when the university officials announced it a must for instructors to resume the instruction in the form of either online or offline classes. Before that, the instructors were only encouraged to continue their teaching using the virtual platforms available, but it was not mandatory and the professors, more particularly the aged ones, preferred to evade it. Even the ones who did not delay the instruction, preferred the offline mode. In the offline mode, the instructors had to record their teaching and upload the video for the students to watch. This was mainly done using desktop recording software in the case of English classes.

In the case of the Feb. 2020 group, the instruction had started with uploading videos of teaching soon after the universities were closed. This continued until May 2020 when the instructor started holding the rest of the classes online rather than offline. Overall, a total number of 17 sessions were held for this group; a face-to-face session, 11 offline sessions, and 5 online sessions. However, for the Sep. 2020 group, the majority of classes were held online with rare offline sessions. For the Feb. 2021 academic semester onward, all sessions were held online, with offline classes being used to back up the online instruction when necessary.

In addition, as the pandemic had caught everyone by surprise, no formative evaluation was carried out during the Feb. 2020 semester, and the course evaluation was only limited to the final exam which was held online with little, if no, supervision on the examinees. During this semester, the English Department, like all other departments at the university, was much more lenient in its standards due to the extraordinary conditions students were in. This leniency had also been extended to other educational regulations at the university including the obligation to attend the majority if not all the sessions during a semester.

Since Sep. 2020, however, the situation started to change. Classes were held online rather than offline, students' attendance in online sessions was recorded and monitored systematically (though there were still ways to evade it), and continuous and formative assessment was employed (including two quizzes, one midterm exam, and a final exam as well as class participation checks). Moreover, more stringent measures were taken to minimize students' dishonesty at the exams though it could not be completely eradicated. As the classes were online, the teacher-student interaction was enhanced in comparison with the Feb. 2020 courses, but it was still limited to the chat box available on the platform. It has remained so until today as the high number of students in each class, the limited class time, and the low speed and quality internet connection could not allow sharing video or sound feeds on the part of the students. The instructors also did not share any video feeds as it could affect the quality of connection more particularly for the students living in areas with poor internet access.

All these can explain why the Feb. 2020 group lagged behind other groups in almost all cases in comparison with the face-to-face group. The pattern of results in the case of other online groups, however, shows that they enjoyed a more normal situation in comparison with the Feb. 2020 group as no difference was observed among them and in the case of the vocabulary and grammar components, no significant difference was observed between the face-to-face group and these online ones.

Since the test was an achievement test evaluating students' mastery of the vocabulary presented in *English Dynamo* textbook, what students needed to do was simply to study the vocabulary used in the textbook. Therefore, in case students had invested enough time in the review and practice of such words, they could have fulfilled the program objectives. This could be done independent of the instructors' attempts to teach the course. It is logical to assume that learning vocabulary is not much dependent on teacher-student interaction in comparison with other subskills, and if enough time is spent on it, it can be adequately mastered. That could be why such a pattern of results was observed in the case of the vocabulary component. This is in line with the self-regulated learning objectives expected of online or distant learning (Broadbent, 2017; Fischer et al., 2020; Rasheed et al., 2020).

Learning grammar, on the other hand, is not much comparable with learning vocabulary as it is heavily dependent on the learners' cognitive ability due to its rule-governed nature. However, no significant difference was observed between the face-to-face group and the online groups except for the Feb. 2020 group. The lack of difference in most online groups' performance both in vocabulary and grammar does not match what some scholars (e.g., Bettinger et al., 2017; Cho et al., 2017; Jaggars & Xu, 2016; Xu & Jaggars, 2013, 2014) have reported and expected. This observation also directly contradicts that of Azizi (2020) in which a significant difference was observed between the online group and the face-to-face group in the case of learning grammar. The key seems to lie in the kind of grammatical structures taught and tested in the present study and that of Azizi (2020). The grammatical structures covered in the first 6 units of *English Dynamo* book which are taught every semester are limited to the topics of adverbs, adjectives, nouns, and some of the tenses, which are also taught at high schools. It is plausible to assume that the majority of the students had a relatively good mastery of such structures and simply needed a review of such points with or without the help of the instructor. However, when it comes to more complicated structures such as subordination clauses, as covered in *English II* in Azizi (2020), the situation will be completely different. They require a much higher cognitive ability as well as practice for an adequate mastery. Moreover, they are not presented in high schools, and they look quite new to the students when they encounter them in *English II*.

The most intriguing observation, however, relates to that in the reading comprehension section of the program. While no significant difference was observed among the online groups, there was one between the face-to-face group and every single one of the online groups, which is in line with Weitze's (2015) study as well as those mentioned above. For the vocabulary and grammar subskills, the program evaluation was of an achievement type, but for the reading comprehension component, it was more of a proficiency test. As the reading comprehension passages were unseen for the students, the tests were intended to evaluate the participants' mastery of the reading comprehension skill rather than a set of materials covered during the program. As such, unlike the other two components, it heavily relied on the quality of instruction, students' engagement, as well as the teacher-student interaction during the program which included teaching students how to recognize the structure of the text, use contextual clues to guess the meaning of unknown words, notice the logical relations between different parts of the text, use their background knowledge as well as their common sense to help them understand the text, identify the authors' intended meaning, predict the text using any available textual and visual clues before as well as during reading, and use their knowledge of grammar and the English writing system together with their knowledge of vocabulary to decipher the text.

Mastery of such skills requires a great amount of effort on the part of the instructor and the students. It also necessitates a great deal of interaction between the two, which is not much possible in an online mode of instruction like the one employed in the present study. This confirms Ellis (1999) and Guo and Mollerning's (2016) concerns for the importance of interaction in learning a second language. Moreover, the researcher's observation indicates that, in the online classes, not all those designated as present in the session were actually attending the class. Only a small portion of the students did really attend the class and had participation in the class discussions through the chat box available. Only those

could demonstrate a level of engagement as that observed in a face-to-face class. The rest simply logged into the system in order to record their presence and when called upon, they provided no response. This could to a large extent explain why such a discrepancy was observed between the face-to-face and online groups in the present study. This confirms Raes et al. (2020) observation regarding the significant role of students' engagement in online programs.

6. Conclusion

The Corona virus has changed most of the conventions regarding the notion of teaching and learning. While very few teachers thought about teaching online before the pandemic, now convincing them to go back to the more traditional and face-to-face teaching mode seems to be a new challenge. It is projected that, even after the pandemic, teaching will not be the same as the time before it. Virtual learning will play a stronger role than it did before February 2020. However it should be noted that virtual learning is not without flaws. Students undergoing online classes may not enjoy the same quality of learning and teaching as those in a face-to-face program. Part of this could be attributed to the limited capacity of the virtual learning platforms in the country which can adversely affect the amount and quality of teacher-student interaction and the quality of teaching and learning as a result.

Another factor affecting the teaching learning process in an EAP program at a university like the one studied is the impossibility of checking students' attendance. A high number of students (up to 50) are often enrolled in each class and the monitoring of their presence or attendance is often limited to the system logs indicating if they were online in a session or not, but it cannot guarantee their actual attendance and participation in the program. The instructor might do her job adequately, but the learners might not be there to benefit.

In addition, the intricacies of an online instruction indicate that teachers need to be trained and prepared for it. When the pandemic struck, the teachers, at best, tried to translate their teaching methods in a face-to-face class into an online one as if they were the same. Over the past two years, they might have learnt more about how to handle an online program, but for the majority of them, more particularly the aged ones, it has not been more than the mystery of survival skills in such programs. It is of utmost importance that the authorities provide the instructors with the opportunity to receive the appropriate training in implementing and benefiting from the available technology in the service of their teaching in order to enhance the quality of their practice.

Teachers also need to be made aware of the importance of interaction in learning a second language, as well. We learn a language mainly through communication and interaction with each other; a one-way flow of information can never result in an adequate mastery of a foreign or second language. As a result, instructors need to take the necessary measures to maximize teacher-student and student-student interaction in their teaching practices.

What needs to be noticed about the results of the present study is that the observed results are quite context-specific, that is, under different conditions, for a different program, with a different set of materials, or different course objectives, different results could be obtained. However, the obtained results indicate that online teaching has its own particulars as well as flaws which may cause students not to enjoy the same quality of learning and teaching in comparison with the face-to-face mode of instruction. In addition, it clearly implies that the students undergoing an online instruction during the February 2020 academic semester experienced the lowest quality of instruction in English, and most probably any other subject, during the past two years of online teaching. Therefore, it is of great significance to take the necessary measures to compensate for that in one way or another.

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