L2 Learning of English Conditionals: Online Versus Traditional Classroom Teaching

Abdulrahman Alzamil
Taif University, Taif, Saudi Arabia

The issue of whether online teaching could replace traditional classroom (TC) teaching has attracted the attention of researchers in the applied linguistics literature. The current study attempted to shed light on this proposition by testing it on the difficult linguistic target of conditional if-clauses in English. The difficulty of these clauses stems from the fact that different tenses are used to express meanings that are sometimes not related to the tense used. The study recruited 49 participants, who were divided into two groups (23 in the online group, 26 in the TC teaching group) and given a multiple-choice task containing 20 items. The study adopted a longitudinal research design (pretest and posttest). Each group was pretested before receiving just one two-hour treatment session. Then both groups were posttested. The results showed that both groups struggled with the second and third types of conditionals more than the zero and first types. The TC teaching group improved in the posttest in all types of conditionals. The online group improved in only two types of conditionals (zero and first). The TC teaching group outperformed the online group in the second and third conditionals. The findings indicate that classroom learning is superior to online learning and that, depending on their type, some conditionals in English are more difficult to learn than others.

Keywords: online, traditional teaching, L2 English, conditionals, Arabic

Introduction

Online learning has been widely investigated over the last 20 years (Gulnaz, Althomali, & Alzeer, 2020) and is now considered to be an alternative to traditional classroom (TC) learning, especially since the global onset of the COVID-19 pandemic (Dvorianychkova, Bondarchuk, Syniavska, & Vyshnevskya, 2021; Khodabandeh & Tharirian, 2020). In its simplest form, online learning is the use of the internet in learning (Güzer & Caner, 2014). Prior to the pandemic, which has caused unprecedented disruption in schools as well as almost all other aspects of life (Al-Samiri, 2021), many people consider online learning to be a response to rapid advances in technology from which the education sector could benefit. It is now seen as a safer alternative to TC learning. However, its effectiveness in comparison to TC learning has been under scrutiny.

The present study addresses the effectiveness of online learning vs. TC learning in second language (L2) learning of English conditionals, which are considered to be difficult for L2 learners (Badger & Mellanby, 2018). Since online learning has now been adopted to different extents in Saudi Arabia as well as other countries, it is important to examine its effectiveness to see if it can be used instead of, or in addition to, TC learning. The study attempts to answer the following questions:
1. Do first language (L1) Saudi Arabic speakers use English conditionals accurately?
2. Do online and TC teaching have an impact on the accuracy of English conditionals?
3. Do the TC and online groups differ from each other in the use of English conditionals in the posttest?
4. Does the type of conditional affect accuracy levels?

The use of conditionals in English and Arabic is illustrated below, followed by a discussion of the literature on online versus TC teaching methods.

### Conditionals

The section has been designed to provide a general overview of the use of conditionals, rather than a detailed description, which is unnecessary in this context. Conditional clauses in English are dependent clauses that contain the adverb *if*. The *if*-conditional clause states a condition on which other actions depend. In English, there are four main types of conditionals. The tense in these types is linked to the meaning a speaker wants to express. The four conditionals in English vary according to tense. According to Swan (2016), there are other types that use other combinations of tenses, but native English speakers use these four types of conditionals most of the time.

Arabic is similar to English in that there are conditional clauses that contain *إذا* or *إذا* or *لَو* (Ryding, 2005). English conditionals are illustrated below, followed by their Saudi Arabic counterparts.

#### English

1. Ice melts if you heat it. (zero conditional)
2. If it doesn’t rain tomorrow, we’ll go to the beach. (first conditional)
3. If I had a lot of money, I’d buy a castle. (second conditional)
4. If I had had a lot of money last year, I would have bought a castle. (third conditional)

It can be seen from the English examples that tenses shift according to the conditional type; they do not reflect the real meaning of a sentence. This can be seen, for example, in Sentence 3 where the simple past tense is used even though the meaning is related to the present tense.

#### Saudi Arabic

1. *الْيَد صَبِبَ الْحَدَّ صَبَبَ نُحَر*  
   Ice melts if you heat it.
2. *لَا يَطَأ رَمَي مَا أَيُّهْ السَّبِيْل*  
   If it doesn’t rain tomorrow, we’ll go to the beach.
3. *إِنِّي فِي مِثَالِ الْمَوْتُ ىَفْتَرِي ىُبْرَأِر*  
   If I had a lot of money, I’d buy a castle.
4. *إِنِّي فِي مِثَالِ الْمَوْتُ ىَفْتَرِي ىُبْرَأِر*  
   If I had had a lot of money last year, I would have bought a castle.

Similar to English, tenses in Saudi Arabic conditionals do not reflect time. This can be observed in
Sentence 2 where the simple past tense refers to the future tense. In general, Arabic conditionals may not be categorised in the same way as in English.

**Online vs. TC Teaching**

The role of instruction in teaching has been debated for many decades. Krashen (1981; 1985) proposed that for learning to take place, L2 learners only need an adequate amount of exposure to L2 input slightly above their current proficiency level. This position was supported by other influential researchers (e.g., Schwartz & Gubala-Ryzak, 1992). However, other researchers have found that teaching is effective for L2 learners (e.g., Alzahrani, 2017; Bataineh & Mayyas, 2017; Brandel, 2018; Rajabi & Dezhkam, 2014).

Online teaching uses different methods from TC teaching. In an online classroom, a teacher is supposed to be a facilitator, but in a traditional classroom a teacher is considered a lecturer (Ryan, Scott, & Walsh, 2010). An online classroom allows the teacher to contact students using video or other online tools. On the other hand, the TC method dedicates a specific time-slot to teaching; teachers give students lessons and feedback, make direct eye contact with them, and answer their questions (Graham, 2019).

Yusof and Saadon (2012) looked at the potential effects of online teaching, TC teaching, and a combination of both in the learning of passive voices. The study followed a pretest-posttest design. The sample was 93 university students (52 female and 41 male) whose L1 was Malay. The study was conducted over four weeks. Each group was taught using only one of the methods under investigation. The results indicated that all three groups improved significantly in the posttest, but that combined online and TC teaching was the most effective teaching method. Apart from this, gender had no effect on the students’ performance.

Hassan, Abiddin, and Yew’s (2014) study looked to see if there were significant differences in students’ listening skills as a result of receiving online or TC teaching. Using a pretest-posttest design, they conducted a month-long study with 44 L1 Malay-speaking university students, who were divided equally into two groups. They found that online teaching was less effective than TC teaching at improving student’s listening skills.

Chamorro (2018) conducted a study to investigate whether there were differences between online teaching and TC teaching with a mix of 58 undergraduate and graduate students (aged 18-46) whose L1 was Spanish. There were 36 students in the online classes and 27 students in the TC classes. The participants in both groups were provided with about 10 hours instruction a week for nine weeks. The results showed that there were no differences in the use of the four skills, and no difference in the scores overall. The study took both time and students’ backgrounds into consideration. Based on a survey, online students stated that there was too much content to complete the course in the period of time they were given.

Khodabandeh and Tharirian (2020) compared TC teaching with blended instruction (a combination of TC and online instruction). Drawing on a sample of 60 intermediate level Iranian EFL students (aged between 18 and 35), they divided the participants into three groups of equal size (a control group, a TC group, and a blended teaching group). They used a pretest-posttest design in which the treatment sessions and materials were given to both experimental groups, while the control group was given only traditional instruction. Both experimental groups were found to outperform the control group, whose performance also improved at the posttest stage as a result of having been given explicit instruction.

The studies presented above generally indicate that both online and TC teaching are beneficial for students, but do not agree about which of the two is more effective. The present study addresses this by using the methods described below to look at Saudi students’ learning of English conditionals.
Methodology

The study was conducted with 49 male Saudi undergraduates who majored in English, studying at a Saudi university and with Saudi Arabic as their L1. The participants were grouped according to teaching style: 26 participants in the TC teaching group and 23 in the online teaching group.

The TC group received explicit instruction in the use of English conditionals in a classroom setting, attending one session that lasted for around two hours. They were provided with examples of the tenses used in each of the four types of English conditional and every participant was given the chance to do exercises in each of the types.

On the other hand, the online group received explicit instruction in the use of English conditionals online, attending a two-hour session on the use of conditionals. The researcher used the virtual learning platform Blackboard to deliver the treatment sessions. Blackboard is now one of the most popular learning tools used in higher education globally (Pereira, Manaf, & Thayalan, 2020). Neither the participants nor the researcher could see one another because the video function was disabled, although the audio function remained in use. Videos were not used because some participants lived in areas where the internet connection is weak. The researcher wanted to know whether online learning, in its simplest form, is beneficial. The participants were allowed to join in by turning on their microphones whenever they wanted to interact with the researcher. A few of them experienced disconnection from the internet, sometimes lasting for a few minutes, and had to log in again. The researcher asked whether he needed to re-explain some of the rules, but participants said that the disconnections had not affected their understanding.

The experiment was carried out in two phases, the first of which took place before the COVID-19 pandemic, at which time the researcher had planned to compare the role of instruction on different types of linguistic targets. However, the research direction changed as a result of the pandemic, and study’s second phase took place during the pandemic, when online learning became the norm.

The test was multiple choice and consisted of 20 items, of which four groups of five items each addressed the four types of conditionals. The TC group completed the test using a pen and paper, while the online group completed it online. The study was longitudinal and all participants were pretested on the use of conditionals and then received the treatment sessions, followed by a posttest. A delayed post-test was not conducted because the researcher was unable to complete the TC experiment at the time because of the pandemic.

Results

This section reports the results of the pretest and posttest for the TC and online groups. The results were not normally distributed ($p < 0.05$). Non-parametric tests were therefore used. The section is divided into three main parts. The first examines the results of the pretest. The second reports the results of the posttest, and the third examines the potential effects of conditional type.

Pretest

The graph below illustrates the accurate use of conditionals by both experimental groups.
Figure 1. TC vs. online (pretest).

The graph shows that the participants did not use the conditionals accurately, especially the second and third where accuracy rates were as low as 46.1%. Multiple Mann-Whitney tests did not find significant differences between the two groups in any type of conditional or in the total results.

Posttest

The post-treatment session results for both groups are reported in the graph below.

Figure 2. TC and online groups’ use of conditionals (pretest and posttest).

It can be seen that the treatment sessions had a clear positive impact on participants’ accuracy levels across the four conditional types. These raw results are examined statistically below.
Table 1
Comparisons of Pretest vs. Posttest Results for TC and Online Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Zero conditional</th>
<th>First conditional</th>
<th>Second conditional</th>
<th>Third conditional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$p &lt; 0.001$</td>
<td>$p &lt; 0.001$</td>
<td>$p = 0.001$</td>
<td>$p &lt; 0.001$</td>
<td>$p &lt; 0.001$</td>
</tr>
<tr>
<td>Online</td>
<td>$Z = -2.594$</td>
<td>$Z = -2.812$</td>
<td>$p &gt; 0.05$</td>
<td>$p &gt; 0.05$</td>
<td>$Z = -3.666$</td>
</tr>
<tr>
<td></td>
<td>$p = 0.009$</td>
<td>$p = 0.005$</td>
<td></td>
<td></td>
<td>$p &lt; 0.001$</td>
</tr>
</tbody>
</table>

Wilcoxon Signed-Ranks tests revealed that the TC group improved in all conditional types. For the online group, they improved in the zero and first conditionals as well as in their overall results.

Table 2
Comparisons Between TC vs. Online (Posttest)

<table>
<thead>
<tr>
<th>Group</th>
<th>Zero conditional</th>
<th>First conditional</th>
<th>Second conditional</th>
<th>Third conditional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td></td>
<td></td>
<td>$U = 153.500$</td>
<td>$U = 157.000$</td>
<td>$U = 176.500$</td>
</tr>
<tr>
<td></td>
<td>$p &gt; 0.05$</td>
<td>$p &gt; 0.05$</td>
<td>$Z = -3.130$</td>
<td>$Z = -2.990$</td>
<td>$Z = -2.498$</td>
</tr>
<tr>
<td>Online</td>
<td>$p = 0.002$</td>
<td></td>
<td>$p = 0.003$</td>
<td>$p = 0.013$</td>
<td></td>
</tr>
</tbody>
</table>

Mann-Whitney tests were used to compare the results of both groups. The tests found significant differences in the second and third conditionals and in the overall results.

Comparing Conditional Types

It can be seen from the results reported above that there seemed to be sensitivity to conditional types.

Table 3
Conditional Comparisons (Pretest)

<table>
<thead>
<tr>
<th>Group</th>
<th>Friedman results</th>
<th>Zero vs. first</th>
<th>Zero vs. second</th>
<th>Zero vs. third</th>
<th>First vs. second</th>
<th>First vs. third</th>
<th>Second vs. third</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>$\chi^2(3) = 10.679$</td>
<td>$p &lt; 0.014$</td>
<td>$p &gt; 0.008$</td>
<td>$p &gt; 0.008$</td>
<td>$Z = -2.977$</td>
<td>$Z = -2.815$</td>
<td>$p &gt; 0.005$</td>
</tr>
<tr>
<td>Online</td>
<td>$\chi^2(3) = 25.525$</td>
<td>$p &lt; 0.001$</td>
<td>$p &gt; 0.008$</td>
<td>$p &gt; 0.008$</td>
<td>$Z = -2.582$</td>
<td>$Z = -3.713$</td>
<td>$Z = -3.469$</td>
</tr>
</tbody>
</table>

Friedman tests showed that the accuracy rates of the two groups varied significantly across the four conditional types. Because running multiple Wilcoxon Signed-Ranks tests could increase the chances of finding false significant differences, significance was accepted at $p < 0.008$. Wilcoxon Signed-Ranks tests showed that both groups were significantly more accurate in using the first conditional than in using the second and third conditionals. The online group was more accurate in zero conditionals than third conditionals.

Table 4
Conditional Comparisons (Posttest)

<table>
<thead>
<tr>
<th>Group</th>
<th>Friedman results</th>
<th>Zero vs. first</th>
<th>Zero vs. second</th>
<th>Zero vs. third</th>
<th>First vs. second</th>
<th>First vs. third</th>
<th>Second vs. third</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>$\chi^2(3) = 18.979$</td>
<td>$p &lt; 0.001$</td>
<td>$Z = -3.346$</td>
<td>$p &gt; 0.008$</td>
<td>$Z = -3.827$</td>
<td>$p &gt; 0.008$</td>
<td>$p &gt; 0.008$</td>
</tr>
<tr>
<td>Online</td>
<td>$\chi^2(3) = 28.397$</td>
<td>$p &lt; 0.001$</td>
<td>$Z = -3.386$</td>
<td>$p &gt; 0.008$</td>
<td>$Z = -3.604$</td>
<td>$Z = -3.414$</td>
<td>$p &gt; 0.008$</td>
</tr>
</tbody>
</table>
L2 Learning of English Conditionals

The TC group was more accurate in the use of zero and first conditionals than in the use of second conditionals. The online group was more accurate in the use of zero and first conditionals than in the use of second and third conditionals.

Discussion

This section discusses each of the study’s four research questions:

1. Do L1 Saudi Arabic speakers use English conditionals accurately?
2. Do online and TC teaching have an impact on the accuracy of English conditionals?
3. Do the TC and online groups differ from each other in the use of English conditionals in the posttest?
4. Does the type of conditional affect accuracy levels?

The pretest results showed that L1 Arabic speakers who were studying English at university-level found it difficult to use English conditionals correctly. This can be seen clearly in their scores for the use of the second and third conditionals. This supports Badger and Mellanby’s (2018) statement that conditionals are challenging for L2 learners.

For the second and third questions, the results indicated that both groups benefited from both forms of teaching to different extents depending on conditional types (this will be discussed later, in the light of question four, below). The results support the studies that found teaching to be beneficial (i.e., Hassan et al., 2014; Khodabandeh & Tharirian, 2020; Yusof & Saadon, 2012), but not Chamorro’s (2018) study. Apart from this, the TC group outperformed the online group in the use of second and third conditionals and in their total score for all the conditionals combined. This was confirmed by the pretest versus posttest results, where both TC and online groups were found to have improved in all the conditionals, except in the case of the online group’s use of the second and third conditionals. This was confirmed by the pretest versus posttest results, where both TC and online groups were found to have improved in all the conditionals, except in the case of the online group’s use of the second and third conditionals. The variation between the groups supports the assumption that TC teaching is more beneficial than online teaching, which in turn supports Hassan et al. (2014) but not Khodabandeh and Tharirian (2020) or Yusof and Saadon (2012), whose studies found that a mixture of both online and TC teaching is effective. The present study is different as it examined online teaching on its own, whereas the other studies, which looked at a combination of both modes of teaching, could not distinguish between one form and the other in terms of which was more responsible for improvement than the other.

In response to the fourth question, the TC group showed improvements in the use of all types of conditionals, which was not the case with the online group. This proves that conditionals have different levels of difficulty. It can be seen that L1 Arabic speakers struggle more with second and third conditionals than with zero and first conditionals. This could be because the simple past tense is used to refer to the present, and the past perfect is used to refer to the past. This means that L1 Arabic speakers have more difficulties with the past tense than with the present tense. It also provides greater support for the superiority of TC teaching over online teaching. However, it should be pointed out here that the online mode used here did not use videos or other advanced technology features in the teaching session, as the purpose of the study was to explore whether the simplest form of online teaching can be effective. It is difficult to conclude that online teaching is less effective than TC teaching or vice versa because of this omission, and because the treatment session was only two hours long.

The major limitation of the present study is that it did not conduct a delayed posttest. This would have provided more insight into the results. The study used only one data collection method and examined a simple type of online teaching. Future studies should use other more advanced types of online teaching, including
Conclusion

The study addressed the role of online and TC teaching in the accurate use of English conditionals. Conducted with 49 Saudi Arabic learners of English, the study followed a pretest-posttest design in which groups received one treatment session in the use of English conditionals. The results showed that L1 Arabic speakers were sensitive to types of English conditionals and that the TC group outperformed the online group in the use of some conditionals. Both the online group and TC group benefited from the treatment session, though the TC group outperformed the other group, indicating that online learning is not as effective as TC learning.

References


