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Research Article

# A Comparison of Conventional Face-to-Face, Online and Hybrid Methods of Course Delivery in the `English as a Foreign Language' Classroom

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**Abstract.**

The advent of online and hybrid learning in the *English as a Foreign Language* classroom has sparked an extended debate. This paper aims to contribute to this ongoing debate by scrutinizing the effectiveness of the three different instructional methods: online, hybrid, and conventional face-to-face classrooms for the teaching of English grammar in the EFL setting. Students in online sections reported more challenges than those in the hybrid and face-to-face sections. The implications of this study are discussed in this paper.

**Keywords:** Face-to-face, Hybrid, Instruction, Learning, Online

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## 1. Introduction

Online learning has been mushrooming at higher education and so has hybrid learning[1], also known as blended learning, which is a mixture of online and conventional face-to-face classroom tuition. As a result, three different instructional methods (online, hybrid, and conventional face-to-face classroom instruction) are currently employed for teaching courses at universities. However, as numerous educational institutions across the globe are rushing to embrace this new cutting-edge technology, researchers and educators begin to voice their concerns over the effectiveness of these newly introduced modes of course delivery relative to conventional tuition. In fact, it has been argued that the effect of these learning environments on students' learning and learning experience is still poorly understood[2]. The crux of the debate, as mentioned earlier, lies in the 'effectiveness' of these modes of learning compared to conventional instruction[3]. The term 'effective' is generally defined as students' learning outcomes, as indicated by test scores, and students' learning experience. Not only is this debate relevant at the first inception of online learning; it is still relevant amidst the ubiquity of online course offerings[2].

As part of this extended debate, research studies have been conducted to scrutinize the effectiveness of conventional instruction relative to both online and hybrid tuition. Needless to say, only by collecting hard empirical evidence can the practice of both online and hybrid learning be justified empirically. However, as discussed below, research findings pertaining to the effectiveness of these three modes of learning appear to be inconsistent in the literature, which even makes the debate more intricate than ever. Additionally, much previous research was notably conducted in western and European countries. Relatively little well-designed research, if any, has been conducted in an Indonesian context.

Conducted in a sociocultural educational context which is under-represented in the international literature, the study reported here aims to contribute to the extended debate pertaining to the viability of technology-enhanced language learning[4] relative to conventional instruction.

## 2. Literature Review

As mentioned earlier, three different modes of course delivery are currently being employed for teaching courses at universities: conventional face-to-face, online, and hybrid each with its own strengths and weaknesses. When compared to online format, for example, conventional face-to-face tuition provides 'unique benefits' such as personal group interaction and communication among classroom community members[5]. Online learning, however, enables access to education to those who would otherwise be unable to go to university[6], primarily owing to geographic constraints and to other commitments.

With a sharp increase in the trends of online learning programs across the globe over the past two decades or so, the quality of such instructional method has always been a major concern of relevant stakeholders[6]. This, in turn, necessitates the need for comparing students' learning outcomes and learning experience as a result of experiencing online versus conventional face-to-face instruction[7].

However, as mentioned earlier, research studies have yielded conflicting findings. In fact, some research shows that online learning is as effective as conventional instruction as measured by students' test scores[8, 9]. Other studies indicate that students experiencing conventional instruction outperformed those in online section[10, 11]. Still, in other studies, students learning online perform better that those learning conventionally[3, 12]. What is more, completion rate in online class is lower than that in a conventional

classroom[13]. In fact, when asked, students generally opt for conventional face-to-face classroom instruction, but they also provide positive response to the use of instructional technology, primarily due to its reliability, ease of use, and immediate feedback, and improved problem-solving skills[7].

In response to the debate regarding the effectiveness of online versus conventional teaching, some scholars have recommended the implementation of hybrid or blended instruction[14, 15]. This mode of delivery is believed to bring together the strengths of both online and conventional instruction and, at the same time, to put the extended debate to an end. However, hybrid instruction would not necessarily combine the strengths of both modes of instruction as generally cited in the literature. On the contrary, it could well combine the weaknesses[16], rather than the strengths, if its implementation is not grounded on strong and sound theoretical underpinnings.

Thus, it is important to understand that teaching effectiveness, with or without technology, hinges primarily on pedagogy and instructional design. With this understanding, use of instructional technology should go hand in hand with pedagogy[17] as technology is a means to an end, rather than an end in itself. Hence, a good hybrid instruction takes such a question as 'what' learning activities are conducted 'where' on board by optimizing the benefit of both face-to-face meeting and technology. Only then, can "the best of both worlds" be achieved[15].

Since its first inception, hybrid learning has attracted a great deal of research into the effect of this newly introduced mode of delivery on students' learning and learning experience by comparing learning outcomes of students attending hybrid instruction and those experiencing pure online or conventional instruction. In a study by Abdullat and Terry[16], for example, it was reported that hybrid students outperformed those in both online and conventional class and that conventional class outperformed those in online section, albeit insignificantly. What is more, students in online section were also reported to be less satisfied with both the course and the teacher.

A similar study comparing online, hybrid, and face-to-face tuition for the teaching of International Economics was conducted by Terry and Lewer[18]. The study found that students attending conventional instruction significantly outperformed those experiencing online class, but the performance of those in a hybrid section and that in a conventional class was relatively comparable. Still, in other study, Gutierrez and Russo[19] found that hybrid students outperformed both online students and students attending conventional instruction for the teaching of An Introduction to Business, but students experiencing

conventional tuition exhibited more positive attitudes. One major limitation of this study concerns a small sample size, which is conceded by the authors.

Thus, it is clear that research studies on the effectiveness of hybrid relative to online and conventional classroom instruction, just like studies comparing online and face-to-face, have yielded inconsistent findings. These conflicting findings can be attributed to a number of factors. To begin with, there seems to be differences in the learning activities conducted in online and conventional classroom employed in previous studies. In some studies, for example, quizzes, lectures and assignments were conducted face-to-face, whereas online section was used for discussion and sharing course materials[20]. In other studies, however, different design may be introduced resulting in different findings.

Additionally, the proportion of online and in-class activities varies considerably across studies. Thus, examining how different formats of hybrid tuition affect students' learning should constitute another avenue for further research. Another factor that is responsible for conflicting findings in research may be attributed to differences in the nature of course types and characteristics[21–24]. Obviously, while some courses can be delivered entirely online, others may be more appropriately conducted face-to-face. Unfortunately, much research in the field focused almost exclusively on science-related subject and relatively little research has been conducted with language teaching and learning[2, 25], especially as far as the teaching of grammar is concerned.

In a nut shell, the effectiveness of conventional teaching relative to online and hybrid instruction in the context of foreign language teaching and learning, as measured by students' test scores, remains an open question. Further studies are required to better understand how these three different modes of instruction could impact on students' learning and learning experience.

## 3. Research Questions

The following research questions guided the study:

1. Do significant differences exist in students' test scores as a result of experiencing online, hybrid, and conventional face-to-face classroom tuition?
2. What are the perceived benefits and drawbacks of each mode of learning from the standpoint of the learners?

# 4. Methods

## 4.1. The Course

This study was conducted with English Grammar I offered at the English study program at Halu Oleo University in Kendari, Indonesia. Offered in the second semester, English Grammar I was a three-credit unit and was one of the compulsory units. The course was taught by the researcher.

## 4.2. Participants

A total of 165 students participated in this study. These students were taking English Grammar at the Department of English Language Education of Halu Oleo University. Participants were placed into one of the three groups. The first group, comprising 58 students (male 15, female 43) experienced online instruction. The second group encompassing a total of 51 students (male 16, female 35) attended hybrid instruction, and the third group comprising a total of 56 students (male 20, female 36) attended conventional face-to-face classroom instruction over the course of the semester.

## 4.3. Procedure

To begin with, as stated earlier, participants were placed into one of the three groups. Each participant only attended one mode throughout the semester. All participants sat the pre-test prior to the experiment and the post-test following the intervention. Participants were told that participation was voluntary and that they could withdraw anytime from the study, in which case justification for withdrawal was not necessary. The learning activities for each group are presented in the following table:

## 4.4. Data Analysis

Two types of analyses were conducted. To examine whether significant differences existed in students' test scores as a result of experiencing online, hybrid, and conventional tuition, a one-way analysis of covariance was run. To examine students' perception, in-depth interview sessions were conducted with a number of voluntary participants and thematic coding was performed to student responses to find emerging

Table 1: Learning activities across the three groups.

| Mode | Activities | Time |
|---|---|---|
| *Face-to-face* | Lectures Discussion Presentation Quizzes (paper-and-pencil) | 3 hours |
| *Online* | Accessing learning resources Discussion using both synchronous and asynchronous communication Quizzes (online) | No time allocation |
| *Hybrid* | Face-to-face component: Lectures Consultation Discussion/ Clarification | 1.5 hours |
| | Online component: Accessing online materials Discussion using both synchronous and asynchronous communication Quizzes (online) | No time allocation |

themes. This way, students' learning experience within each mode can be put under intense scrutiny.

## 5. Findings and Discussion

### 5.1. Findings

To examine the effect of group (different modes of learning) on test scores, a one-way between-groups analysis of covariance (ANCOVA) was run. In this case, post-test scores served as the dependent variable, pre-test scores as covariate, and group as a fixed-factor. This way, possible pre-existing differences in students' pre-test scores can be held constant and the extent to which group membership could affect post-test scores could be shown[26]. However, it is important that the classical statistical assumptions of ANCOVA such as normal distribution, linearity, homogeneity of variance and homogeneity of regression slope[27] be checked to ensure that none is violated. Examining these assumptions, it is clear that all relevant assumptions were met and use of ANCOVA with this data were, therefore, justified.

A one-way between-groups ANCOVA suggests that the performance of the students across the three different groups is comparable, $F$ (2,146) = .991, $p$ (.374) > .05 (adjusted post-test scores for group one $M$ = 69.52, group two $M$ = 69.49 and group three $M$ = 72.08. In other words, no significant differences were observed. Partial eta squared ($\eta^2$) equals 0.013, which is a small effect size according to Cohen (28). As much as 40.7 per cent of the total variance in the post-test is accounted for by the covariate. The results

of pre- and post-test along with information on gain scores and are presented in the following figures:

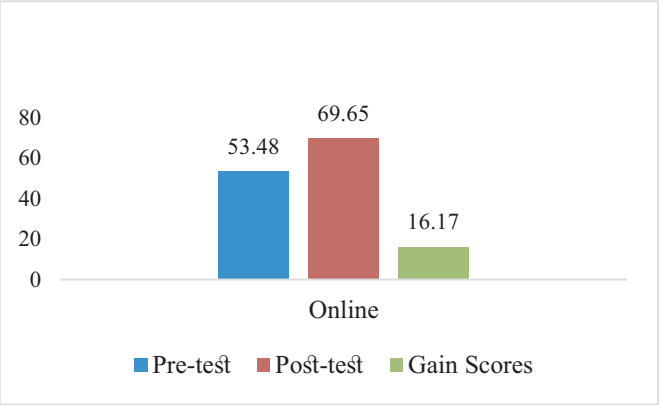


**Figure** 1: Pre-test, Post-test and Gain scores for Online group.

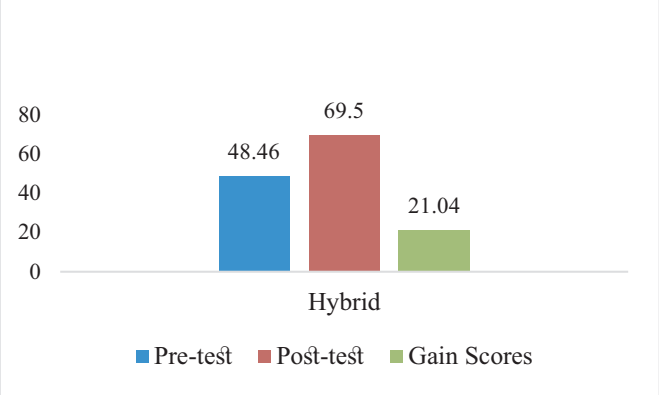


**Figure** 2: Pre-test, Post-test and Gain scores for Hybrid group.

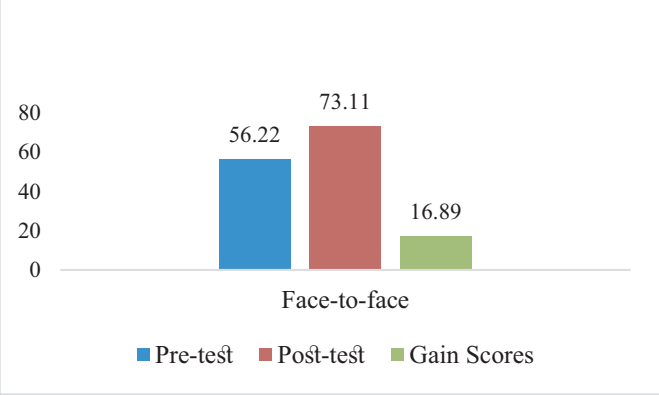


**Figure** 3: Pre-test, Post-test and Gain scores for Face-to-face group.

Note that although all groups perform equally well, as statistics fails to detect significant differences, hybrid group achieves the highest gain scores of 21.04, trailed by conventional face-to-face 16.89 and online 16.17 groups respectively.

Furthermore, participants were also interviewed regarding the perceived advantages and disadvantages of each of the class they attended. This way, the strengths and weaknesses of each mode of learning so far as the participants are concerned could be demonstrated. Reported advantages of each mode are presented in table 3 below followed immediately by reported disadvantages in table 4:

Table 2: Reported advantages of each mode.

| Online (frequency 101) | Hybrid (frequency 82) | Face-to-face (frequency 152) |
|---|---|---|
| enjoyable learning acquiring computer skills interactivity enabling self-evaluation quality learning shy students are inclined to participate flexibility the absence of face-to-face meeting making friends easy access to learning resources absence of noise | enjoyable learning acquiring computer skills quality learning interactivity course satisfaction flexibility making friends easy access to learning resources enabling self-evaluation time efficiency improved self-confidence | teacher immediacy fun learning quality learning classroom community direct access to teacher improved confidence interactivity preference for face-to-face equal participation |

Table 3: Reported disadvantages of each mode.

| Online (frequency 42) | Hybrid (frequency 8) | Face-to-face (frequency 2) |
|---|---|---|
| absence of face-to-face interaction technical difficulties computer skills required teacher's supervision is lacking declined participation overtime delayed feedback access to a computer can be a challenge hard to tell whether the online person is real non-participation | technical difficulties preference for face-to-face interaction computer skills required weakened social relations | Workload |

## 5.2. Discussion

The primary goal of this paper is to examine the extent to which online and hybrid instruction are comparable to face-to-face conventional classroom tuition. In doing this, students' learning outcomes, as indicated by test scores, were compared and their perception was elicited by means of in-depth interviews. As seen earlier, students' test scores are generally comparable across the three cohorts as statistics fails to show significant differences. This finding provides further support for a study conducted by

Gutierrez and Russo[19] and partial support for a study conducted by Terry and Lewer[18]. Note that, as seen in table 2, students experiencing hybrid instruction achieved the highest gain scores of all. This, in turn, leads to the conclusion that, in terms of students' learning outcomes, the three different modes of learning appear to be equally effective with a hybrid mode of delivery being probably the most recommended if one wants to integrate some components of online learning in his/her teaching. This finding appears to support the widely cited "the best of both worlds" proposed by Young[15].

However, effective hybrid learning is not just a matter of mixing face-to-face and online components. Careful decision needs to be made regarding which learning activities are best conducted online and which activities thrive in a conventional classroom[29]. In other words, the pedagogical aspect is critical to the success of any learning regardless of its mode of delivery[30], with or without technology.

Furthermore, students' learning experience deserves more commentary. To begin with, whereas students across the three cohorts reported to have experienced fun and quality learning and interactivity, there are also themes which are cohort-specific. For example, only online and hybrid students reported to have acquired computer literacy and to have benefited from self-testing, although quizzes were actually provided to all cohorts.

What is more, students in a conventional face-to-face classroom expressed their appreciation for teacher immediacy and classroom community, which is similar to the benefit of making friends reported by both online and hybrid students. Interestingly, online mode of delivery appears to be the most challenging of all modes. This finding lends support from findings of other studies conducted elsewhere[31, 32]. As seen from participants' comments in table 4, online students reported the most perceived drawbacks (frequency 42) compared to hybrid (frequency 8) and face-to-face (frequency 2). There are also more themes regarding the disadvantages of online learning (9 themes) compared to the themes reported by students in hybrid (4 themes) and conventional modes of delivery (1 theme).

However, when it comes to perceived advantages of each mode, students experiencing face-to-face tuition reported the most advantages (frequency 152), followed by online students (frequency 101), and hybrid students (frequency 82). Both online and hybrid groups reported 11 themes of advantages, whereas there were only 9 themes reported by conventional students. Thus, it appears that whereas online learning is quite challenging, there are also various benefits so far as the students are concerned. In fact, there are perceived benefits that are only reported by online students.

Of all these benefits, perhaps the most striking one concerns enabling of shy students to participate in class discussion. During in-class discussion, some highly confident students would normally dominate the discussion, leaving little or even no time for shy and reluctant students to voice their opinions. In online discussion, however, these shy students can express their opinions freely[33] without being interrupted, intimidated or dominated by more able, more confident students. In a sense, online learning provides opportunities for both confident and less confident or shy students to participate in class discussion[34], thus promoting more equal participation among the students.

Nonetheless, as the debate pertaining to the merit of the new learning environments continues, the present study clearly provides further evidence regarding the comparability of online, hybrid, and conventional instruction. However, whereas online learning could be a viable teaching/learning method, it is important to realize that this mode of delivery is more challenging[35] and requires careful preparation and implementation since, in the physical absence of the teacher, it is easy for the students to get frustrated when encountering problems. Thus, provision of support to online students is also key to the success of online learning.

Furthermore, what is often underestimated is the role of pedagogy. Online learning can be an interesting and engaging learning environment if its implementation is grounded on sound pedagogy. In the absence of firm instructional design, an online mode of delivery can even turn to be a dull and tedious learning environment. In this case, Clark[36] is correct when he argues that “media are mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition” (p. 445). At the end of the day, it is the instructional design developed by the teacher that would make online learning a success or failure.

## 6. Conclusion

The effectiveness of online tuition versus conventional instruction has long been hotly debated among researchers and educators. Some researchers have even recommended that its effectiveness be examined on a subject-by-subject basis, simply because while it may work for some subjects, it may not be the case with others. Overall, both students’ comments and their learning outcomes, as measured by test scores, appear to suggest that online tuition is, indeed, a viable mode of instruction for teaching/learning English Grammar in this particular context with these student

populations. However, a hybrid mode appears to be more viable as less perceived drawbacks are reported by the participants. This is understandable since hybrid learning also integrates some components of face-to-face meeting in addition to online components. Thus, the need for face-to-face meeting with the teacher and classmates for some students can be met. Throughout this paper, it has been argued that the role of pedagogy in teaching, with or without technology, should not be underestimated. At the end of the day, it is the instructional design that dictates students' learning outcomes and learning experience, with or without technology. Use of technology in education should thus be informed by sound pedagogy and instructional design, rather than by mere omnipresence of the technology.

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