



UNIVERSIDAD  
DE PIURA

FACULTAD DE CIENCIAS DE LA EDUCACIÓN

**The effects of scaffolded instructional material on student  
productivity synchronous English online classes at  
Universidad Peruana de Ciencias Aplicadas**

Tesis para optar el Grado de  
Magíster en Educación con mención en Enseñanza de Inglés como Lengua  
Extranjera

**Iriana Milagros Valdivia Bravo**

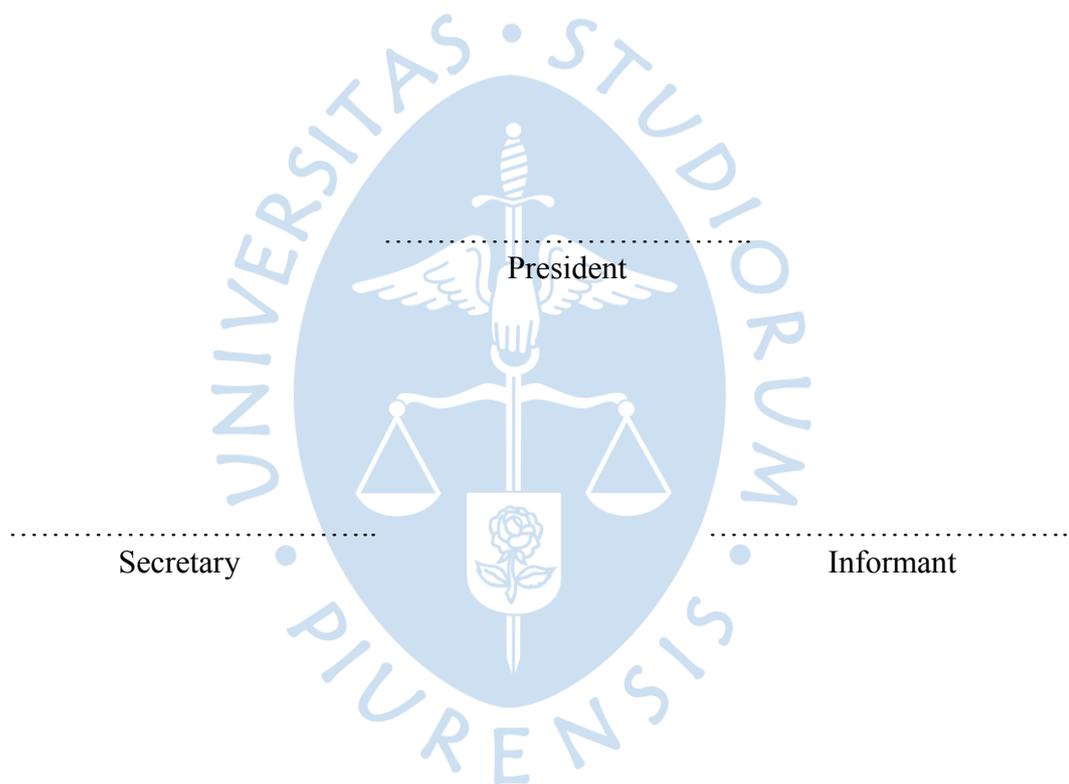
**Asesor(es):  
Dr. Majid Safadaran Mosazadeh**

**Lima, octubre de 2019**



## Approval

The thesis entitled, “*The effects of scaffolded instructional material on student productivity synchronous English online classes at Universidad Peruana de Ciencias Aplicadas*”, presented by Iriana Milagros Valdivia Bravo, in accordance with the requirements of being awarded the degree of Master in Education with a mention in Teaching English as a Second/Foreign Language, was approved by the thesis director: Dr. Majid Safadaran Mosazadeh, and defended on ..... before a Jury with the following members:





*To my parents and Grandpa*





## Acknowledgements

I would like to express my deep gratitude to my superiors, colleagues and friends at *Universidad Peruana de Ciencias Aplicadas* for their endless support and motivation to pursue this opportunity for personal and professional development. In particular, I acknowledge Mrs Claudia Marin for the great opportunity of professional growth she has given me over the years. I genuinely hope this piece of work serves as a contribution to the continuing process of improvement seeking academic excellence for our students.

To my research collaborators: online instructors and participants; mentors and advisors for their support and encouragement to make this dissertation possible.

To my friends and family for accompanying me in every stage of this journey. Their ongoing love and advice have always been my greatest support.





## Resumen Analítico-Informativo

**The effects of scaffolded instructional material on student productivity synchronous English online classes at Universidad Peruana de Ciencias Aplicadas.**

**Iriana Milagros Valdivia Bravo**

**Asesor(es): Dr. Majid Safadaran Mosazadeh**

**Tesis.**

**Magister en Educación con Mención en Enseñanza de Inglés Como Lengua Extranjera**

**Universidad de Piura. Facultad de Ciencias de la Educación.**

**Lima, 15 octubre de 2019**

**Palabras claves:** Scaffolding/ Instructional material/ English online / Interaction / Student productivity

**Introducción:** La tecnología y el internet tienen un efecto en prácticamente todos los aspectos de la vida moderna. En educación, especialmente en el campo de la enseñanza de inglés, la tecnología y el internet han desempeñado un papel fundamental, lo que ha dado lugar a una pedagogía emergente: la enseñanza de inglés 100% en línea. Esto implica diferentes desafíos tanto para los profesores como para los estudiantes, ya que ambos deben cumplir diferentes roles. Uno de estos roles para los maestros, está estrechamente relacionado con el diseño de material instructivo. Esta investigación pretende explorar los efectos del *scaffolding* (andamiaje pedagógico) aplicados al material instructivo utilizado en las clases de Inglés Online en una universidad privada de Lima, Perú en el 2017.

**Metodología:** Esta investigación es cuantitativa de orientación analítica. Para la realización de este estudio se reclutaron 63 participantes, los cuales se dividieron en un grupo experimental y un grupo de control. El remedio aplicado al grupo experimental fue el material instructivo con *scaffolding*, impartido en las clases síncronas virtuales. Diversos instrumentos fueron diseñados para medir las diferentes dimensiones de la productividad de inglés de los estudiantes. La data recogida fue analizada con estadística inferencial. Además, se recogieron las percepciones de los estudiantes sobre el curso de inglés para hacer un cruce referencial de datos.

**Resultados:** Se puede establecer que existe una correlación positiva entre el empleo del *scaffolding* aplicado a material instructivo y la producción de inglés en clases virtuales.

**Conclusiones:** Este estudio ha demostrado que los participantes del grupo experimental evidenciaron un uso más efectivo de inglés, ya que aumentaron su producción oral y escrita, interactuaron más entre sí, y mejoraron su participación. Aunque no podemos afirmar con certeza que nuestra evidencia se aplique a todos los contextos de enseñanza *online*, podemos afirmar que nuestros hallazgos son válidos y que, en condiciones similares, este estudio es replicable. Por lo tanto, podemos afirmar que los resultados de la presente investigación establecen una correlación directa entre el material de instructivo con *scaffolding* y la producción de inglés de los estudiantes en clases virtuales.

**Fecha de elaboración del resumen:** 04 de octubre de 2019

## Analytical-Informative Summary

**The effects of scaffolded instructional material on student productivity synchronous English online classes at Universidad Peruana de Ciencias Aplicadas.**

**Iriana Milagros Valdivia Bravo**

**Advisor: Dr. Majid Safadaran Mosazadeh**

**Thesis**

**Master in Education with mention in Teaching English as a Foreign Language.**

**Universidad de Piura. Facultad de Ciencias de la Educación.**

**Lima, October 15, 2019**

**Keywords:** Scaffolding/ Instructional material/ English online / Interaction / Student productivity

**Introduction:** Nowadays, the eminent use of technology and the Internet have had an effect on virtually all aspects of modern life. In education, especially in the field of teaching English, technology and the Internet have played a fundamental role, which have led to an emerging pedagogy, that of *teaching English fully online*. This pedagogy implies different challenges for both teachers and learners, since they both must fulfill different roles. One of these roles for teachers is closely related to the design of instructional material that promotes active participation in the online class. The purpose of this investigation is to explore the existing relationship between scaffolding applied to instructional material and students' English production in synchronous online classes at a private university in Lima, Peru in 2017.

**Methodology:** Quantitative methodology of analytic orientation. This study surveyed 63 participants of English 5 who were divided into an experimental group and a control group. The remedy applied to the experimental group was the scaffolded instructional material received in the live online classes. Instruments were devised to measure the different dimensions of student productivity of English. The data was analysed using inferential statistics. Additionally, students' perceptions of the English course were also gathered to cross reference data.

**Results:** Findings suggest that scaffolded instructional material had a positive effect on students' production of the English language in online classes.

**Conclusions:** The hypotheses in the present investigation were all proved to be correct. In addition, all of the objectives were reached. The participants who received treatment evidenced a more effective use of L2, as they increased their oral and written production, interacted more with one another and scored higher in terms of quality of participation.

Although we cannot conclusively say that our evidence applies to all online contexts, we can assert that our findings are valid, and under similar conditions, this study is replicable. Therefore, it can be stated that findings of the current research establish a direct relationship between scaffolded instructional material and students' production of L2 in online settings.

**Summary date:** October 4<sup>th</sup>, 2019

## Table of Contents

<b>Introduction</b> .....	1
<b>Chapter 1 Investigation Outline</b> .....	3
1 Formulation of the problem .....	3
2. Hypothesis .....	6
2.1. General Hypothesis .....	6
2.2. Specific Hypotheses .....	6
3. Delimitations of the objectives .....	6
3.1. General Objective .....	6
3.2. Specific Objectives .....	6
4. Justification of the investigation .....	7
5. Limitations of the investigation .....	7
6. Antecedents of the investigation .....	8
<b>Chapter 2 Theoretical Framework</b> .....	17
1 Second Language Acquisition .....	17
1.1. The role of input and interaction in SLA .....	17
1.2. The role of output in SLA .....	19
2. The Sociocultural Theory – implications in SLA .....	20
2.1. Vygotsky’s legacy to SLA .....	20
2.1.1. Mediation in L2 .....	21
2.1.2. Internalisation .....	22
2.1.3. Imitation .....	22
2.1.4. Scaffolding and The Zone of Proximal Development .....	22
3. Computer-Mediated Communication .....	24
3.1. Telecollaboration .....	25
3.2. Online courses – how much online? .....	26
4. Principles of material design within online settings .....	27
<b>Chapter 3 Methodology of the investigation</b> .....	31
1. Investigation type .....	31
2. Design of the investigation .....	31

3.	Population and study sample .....	31
4.	Variables .....	33
5.	Techniques and instruments for data collection .....	34
6.	Techniques and instruments for data processing .....	37
7.	Validity and Reliability.....	38
7.1.	Schedule of activities.....	38
<b>Chapter 4 Discussion of results .....</b>		<b>41</b>
1.	Results.....	41
1.1.	Structured Observation Sheet (SOS).....	41
1.2.	Pre- and Post-Tests .....	48
1.3.	Students' Performance Rubric (SPR).....	52
1.4.	Questionnaire.....	54
2.	Discussion.....	60
2.1.	Specific hypotheses .....	60
2.2.	General Hypothesis .....	62
2.3.	Students' perceptions .....	62
<b>Conclusions .....</b>		<b>65</b>
<b>Recommendations .....</b>		<b>69</b>
<b>Bibliographical references .....</b>		<b>71</b>
<b>Appendices .....</b>		<b>77</b>
Appendix 1:	A Sample of the scaffolded instructional material .....	79
Appendix 2:	Invitation to collaborate in research project – participants (Spanish/ English).....	87
Appendix 3:	Structured Observation Sheet (SOS) .....	90
Appendix 4:	A sample of Pre- & Post-Test .....	91
Appendix 5:	Student Performance Rubric (SPR) .....	95
Appendix 6:	Questionnaire .....	96
Appendix 7:	SOS conglomerate sheet .....	97
Appendix 8:	Test raw scores.....	100
Appendix 9:	SPR conglomerate scores.....	101
Appendix 10:	Samples of online synchronous classes .....	103

Appendix 11: Samples of students' responses to questionnaire ..... 105  
Appendix 12: Rationale design for scaffolded instructional material..... 110  
Appendix 13: Test: pool of questions ..... 112  
Appendix 14: Setting tests on Blackboard Learn..... 127



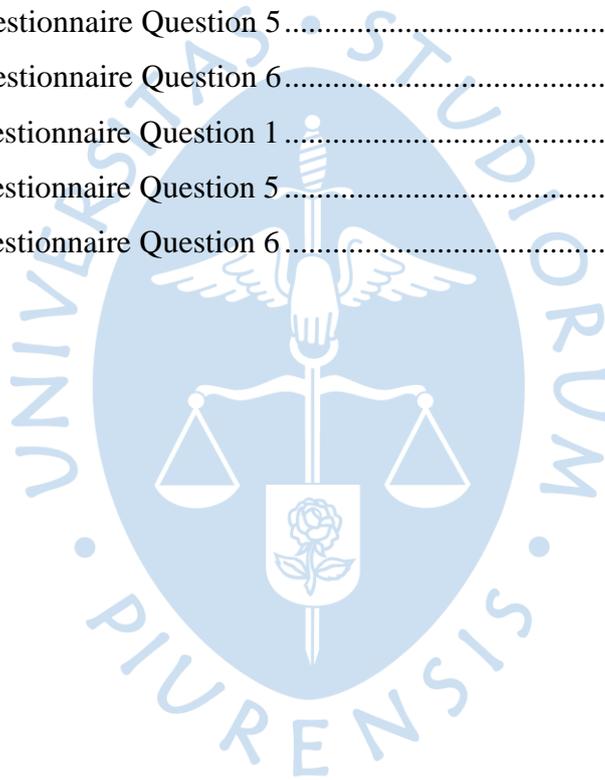


## List of Tables

Table 1.	Key words and definitions in online settings.....	4
Table 2.	Taxonomy of terms related to blended learning.....	26
Table 3.	Demographics and distribution of participants in the study.....	32
Table 4.	Observational instrument dimensions.....	35
Table 5.	Participants who took Pre- and Post-Tests.....	36
Table 6.	Students Performance Rubric – Five-point scale.....	36
Table 7.	Schedule of research activities.....	40
Table 8.	Summary of Descriptive Statistics SOS.....	41
Table 9.	SSR Statistics.....	52
Table 10.	SSR Independent Samples Test.....	43
Table 11.	ESR Statistics.....	43
Table 12.	ESR Independent Samples Test.....	44
Table 13.	SWR Statistics.....	44
Table 14.	SWR Independent Samples Test.....	45
Table 15.	EWR Statistics.....	45
Table 16.	EWR Independent Samples Test.....	46
Table 17.	NVR Statistics.....	46
Table 18.	NVR Independent Samples Test.....	47
Table 19.	SSI Statistics.....	47
Table 20.	SSI Independent Samples Test.....	48
Table 21.	EG Pre-and Post-Test Descriptive Statistics.....	49
Table 22.	EG Paired-Samples Correlations.....	49
Table 23.	EG Paired-Samples Test.....	49
Table 24.	CG Descriptive Pre-and Post-Test Statistics.....	50
Table 25.	CG Paired-Samples Correlations.....	50
Table 26.	CG Paired-Samples Test.....	50
Table 27.	EG & CG Post-Test Statistics.....	51
Table 28.	EG & CG Post-Test Independent Samples Test.....	52
Table 29.	EG & CG SPR Scores Statistics.....	53
Table 30.	EG & CG SPR Independent Samples Test.....	53
Table 31.	CG Questionnaire Results.....	54
Table 32.	EG Questionnaire Results.....	57

## List of Figures

Figure 1.	Zone of Proximal Development .....	24
Figure 2.	Investigation variables .....	34
Figure 3.	Comparison of results – Structured observations .....	42
Figure 4.	Descriptive statistics for EG test results .....	49
Figure 5.	Descriptive statistics for CG test results .....	51
Figure 6.	Descriptive statistics for EG and CG post-test results .....	52
Figure 7.	Descriptive statistics for EG and CG SPR.....	53
Figure 8.	CG Questionnaire Question 1 .....	54
Figure 9.	CG Questionnaire Question 5 .....	56
Figure 10.	CG Questionnaire Question 6 .....	56
Figure 11.	EG Questionnaire Question 1 .....	57
Figure 12.	EG Questionnaire Question 5 .....	59
Figure 13.	EG Questionnaire Question 6 .....	59



## Introduction

In the era of information and communication technology (ICT), online learning has become a viable option to deliver course content by educational institutions (Yang and Durrington, 2010). This holds true within the field of teaching the English language. Crystal (2010) asserts that teaching English as a foreign language (EFL) has undergone a process of constant iteration. As such, the online aspect has also become increasingly popular in EFL, initially mainly as a component of the overall course delivery. Quite recently, however, due to different reasons, institutions have introduced fully online delivery of their courses, which led to *formal fully online courses*. Considerable research has been done comparing online learning with traditional classroom-based instruction. Nevertheless, Blake (2009, in Hockly 2015) suggests that research should now focus on “*how to make online courses more effective*”. Furthermore, recent research within the field of Second Language Acquisition (SLA) (Schmidt, 2001 in Lee 2008; Warschauer and Liaw 2011; Tomlinson and Whittaker, 2013; Caws and Heift, 2016) reveals that for learners to acquire the second language (L2), a number of factors such as interaction, scaffolding, noticing, and output, among others, need to come into play. Therefore, high quality online formal courses ought to consider these factors to deliver optimal learning outcomes for the students.

The purpose of this investigation is to explore the existing relationship between scaffolding applied to instructional material and students' L2 production in synchronous online classes. Observational techniques as well as three other instruments were used to gather data, which were later analysed using inferential statistics. The findings of this investigation are particularly relevant for institutions that are currently or will soon deliver formal English online courses, since the findings provide with insightful and systematically gathered data that could be utilised in course design and course implementation.

The present investigation has been divided into four chapters. The first chapter outlines the research study. Chapter 2 introduces the theoretical framework upon which this investigation was grounded. The third chapter deals with the methodological aspects of the study. Chapter 4 presents the discussion of results. Conclusions and recommendations are also explored.



## Chapter 1

### Investigation Outline

#### 1. Formulation of the problem

Nowadays, the pursuit of constant innovation is a characteristic of modern educational institutions. In this context, the English Language Programme at *Universidad Peruana de Ciencias Aplicadas (UPC)*, a private university in Lima, Peru, launched a pilot of fully online English courses in 2014. The fully online delivery has progressively grown resulting, to date, in all of the General English courses being offered in this modality. This transition started with face-to-face regular English classes; then, the courses were offered in a blended fashion; that is, face-to-face combined with an online component. Finally, all of the courses are now delivered in fully online settings.

Let us briefly set the context for the fully online course delivery scenario upon which this investigation takes place. With this purpose in mind, we introduce key definitions in *Table 1* that will illustrate the online setting. The fully online English classes at *Universidad Peruana de Ciencias Aplicadas (UPC)* consist of both *synchronous* and *asynchronous* work, where the *flipped learning* approach is employed (see *Table 1*). The synchronous component consists of weekly videoconferences – real time live classes – that are mandatory to attend in order to pass the course.

Table 1. Key words and definitions in online settings

<b>Asynchronous work</b>	involves all of the activities in which participants complete a task in their own time. (Clandfield and Hadfield 2017: 19)
<b>Cooperative learning</b>	is a teaching strategy that requires helping one another to create an atmosphere of mutual achievement, collaboration, support, encouragement, and praise in order to increase proficiency and reduce anxiety in an EFL course (Awan et al., 2010; Swantarathip & Wichadee, 2010 in Johnson 2013)
<b>Learner autonomy</b>	is a multifaceted capacity addressed by the EFL specialist in the particular social context of English as a foreign language (EFL) courses at the university level (Dang & Robertson, 2010 in Johnson 2013). Learner autonomy has much to do with an individual student's innate-personal cognitive and learning style for EFL and clearly, as is often the case, better students make for better results (Srichanyachon 2011 in Johnson 2013)

Table 1 Key words and definitions in online settings (continued)

<b>Learning Management System (LMS)</b>	is an online platform used for content delivery and assessment as part of a blended learning course. An LMS provides “ample opportunities for promoting student engagement with learning activities ... and to provide students with immediate feedback on their learning process”. (Ocak, 2011 in Johnson 2013)
<b>Flipped learning approach</b>	is a pedagogical approach in which the conventional notion of classroom-based learning is inverted, so that students are introduced to the learning material before class, with classroom time then being used to deepen understanding through discussion with peers and problem-solving activities facilitated by teachers. (Higher Education Academy. Retrieved from: <a href="https://www.heacademy.ac.uk">https://www.heacademy.ac.uk</a> )
<b>Synchronous work</b>	is the work in which all participants engage in activities at the same time, in real time. (Clandfield & Hadfield. Ibid)
<b>Videoconferencing</b>	or video conference is a synchronous event typically offered via a synchronous online platform, so that participants can hear and see the speakers, as well as their PowerPoint slides. Depending on the platform used: <ul style="list-style-type: none"> <li>● A speaker may be able to show web pages to participants.</li> <li>● There may also be a collaborative whiteboard, to which participants can contribute.</li> <li>● There is usually as well a chat window for synchronous text chat, where participants can interact with the speaker and with one another.</li> <li>● There may be breakout rooms or sub rooms where participants can interact and collaborate in a private fashion.</li> </ul> (Hockly and Clandfield 2010: 98)
<b>Virtual Learning Environment (VLE)</b>	is an online platform that is accessible to learners and in which course resources, such as documents, video, audio, among others, can be stored. (Hockly and Clandfield. Ibid)

Source: Adapted from Awan et al., 2010 in Johnson 2013, Clandfield & Hadfield (2017), Hockly and Clandfield (2019), Ocak, 2011 in Johnson 2013, Srichanyachon 2011 in Johnson 2013,; Swantarathip & Wichadee, 2010 in Johnson 2013, <https://www.heacademy.ac.uk>,

**Class characteristics.** The General English (GE) classes at *Universidad Peruana de Ciencias Aplicadas*, have 16 students. The classes, which are fully online, are divided into two groups to maximize interaction. There is one online instructor, the English teacher, who conducts the synchronous session.

**Instructional material.** Following the *Flipped Learning* model, students do, asynchronously and prior to the live classes, interactive activities using the *Cambridge Learning Management System* (CLMS) of *Touchstone*<sup>TM</sup>. During the synchronous session, teachers use PowerPoint presentations based upon the content of *Touchstone*. This material is intended to have learners put into practice what they learnt in the CLMS.

Emerging pedagogies imply new challenges for both teachers and learners. In an online environment, careful adjustments must be made in order to ensure effective learning (Yang and Durrington 2010). Karsley (2000) points out that designing activities that promote a high degree of interaction and participation are essential skills for online instructors. Students, then, should take a very active role in the learning process, as they cannot longer be passive knowledge-absorbers who just rely on the instructor to feed information to them (Conrad and Donaldson 2004).

It is in this regard that the *Flipped Learning* approach comes to play, as it allows students to do the learning part first, and then put it into practice in class interacting with peers and the instructor. The instructional material used in the live sessions should include both activities and tasks that foster interactivity and participation. This is of paramount importance considering that research findings reveal that high interaction in online courses leads directly to student motivation, improved learning objectives and student satisfaction (Croxtton, 2014; Espasa & Meneses, 2010; Liu et al., 2007; Mahle, 2011; Park & Choi, 2009; Thurmond et al., 2002). Further, ELT experts' advice (Conrad & Donaldson, 2004; Hockly & Clandfield, 2010; Clandfield & Hadfield, 2017) suggests that instructional material for online settings ought to be designed under a principled framework. These authors concur on the following aspects to consider when designing instructional material: (a) clear objectives; (b) appropriate sequencing; and (c) scaffolding principles.

By taking these key points into consideration, English teachers should have no difficulty in creating class material to be used in their online class. On a number of occasions, as part of the regular class observations for Teacher Appraisals at the University, it was noticed, though, that designing such material was not a simple task, as it resulted in instructional material that favoured a *teacher-student interaction pattern*, which consequently did not maximise student

productivity. Accordingly, special attention was paid to the last aspect signalled by ELT experts: *scaffolding*. Following Vygotsky's (1981) principles of *scaffolding* and the *zone of proximal development (ZPD)* (see *Chapter 2*), one may be able to design tasks rather than simply short activities (see *Chapter 2*), which are bound to increase learners' production and interaction in class.

In light of the above, the research question of this investigation is: *To what extent does scaffolded instructional material increase students' English production in online classes?*

## 2. Hypothesis

**2.1. General Hypothesis.** The general hypothesis of the present study is: scaffolded instructional material increases students' English production in live online classes.

### 2.2. Specific Hypotheses.

- a. Scaffolded instructional material expands students' oral production in live online classes.
- b. Scaffolded instructional material increases students' written production in live online classes
- c. Scaffolded instructional material expands student-student interaction in live online classes.
- d. Scaffolded instructional material improves students' achievement in live online classes.
- e. Scaffolded instructional material improves students' use of grammar and vocabulary.

## 3. Delimitations of the objectives

**3.1. General Objective.** The general objective of the present investigation is to determine to what extent scaffolded instructional material increases students' production in synchronous online classes.

### 3.2. Specific Objectives

- a. To analyse whether or not scaffolded instructional material increases students' oral production in live online classes.
- b. To determine the existing relationship between the use of scaffolded instructional material and students' written production in live online classes.
- c. To examine whether or not the employment of scaffolded instructional material promotes student-student interaction in live online classes.

- d. To analyse whether or not scaffolded instructional material aids in improving students' achievement in live online classes.
- e. To survey the effect of scaffolded instructional material on students' grammar and vocabulary.

#### **4. Justification of the investigation**

The pervasive use of technology and the Internet has an effect on virtually every aspect of modern life. In education, particularly in the field of teaching English as a foreign language (TEFL), technology and the Internet have played a major role, resulting in an emerging pedagogy: that of teaching English in online settings. This implies different challenges for both teachers and learners, since they both have to fulfil different roles (Conrad and Donaldson, 2004). One such role for teachers is closely related to material design. As stated earlier, we propose the use of instructional material that is grounded on scaffolding principles and conventions based on task-based approaches (Nunan, 1989; Ellis, 1993) that increase students' production and prompt student-student interaction in the online class.

For years, it has been claimed that a student-centred approach is more beneficial to the learning process. In this sense, most online experts agree that students' active participation is essential in an online environment. By the same token, in the field of Second Language Acquisition (SLA), the Comprehensible Output Hypothesis (Swain 1985) states that learning is enhanced when students encounter a gap in their linguistic knowledge of the second language (L2). This is only possible to occur when students have opportunities to actually produce stretches of L2, and the students are engaged in interaction. Thus, one way of providing such opportunities is the instructional material to be used in the online environment, particularly in the synchronous session.

In the light of the above, this investigation aims at studying the existing relationship between principled material design and students' production or output in online settings. Furthermore, it is also hoped that this investigation provides online teachers or instructors with a framework upon which they can design instructional material that boosts students' production, as well as opportunities to trigger effective learning of L2 within an online environment.

#### **5. Limitations of the investigation**

All research studies present limitations. This section will discuss the limitations of this investigation, which were mostly related to the online nature of the English classes. Given the

fact that the researcher did not have direct face-to-face contact with the participants, the only medium to extend the participants an invitation to take part in the data collection instruments was through requests issued via their teachers' academic email account. Due to the fact that the learners are young adults, they prefer not to use the academic email provided by the University, which in a way delayed communication and the overall course of action. For instance, some learners had to be contacted more than once to be invited to take the *pre-* and *post-tests*.

As will be detailed later, this investigation used an observational instrument to collect data from recorded classes. While the strength of this was the recording itself – as it allowed the researcher to observe a class multiple times – the downside was the small class size due to the group split<sup>1</sup>, which made the overall data collection a lengthy process.

From the technological aspect itself, the limitations revolved around technical glitches for both students and teachers. For instance, on a few occasions during the live classes, certain learners encountered connectivity problems, and they were forced to leave the session, and then they tried to join in again. While in some cases the problem was solved, in others it hindered the learners' participation. In addition, data collection was mostly carried out through class observation using recorded sessions: it was the case, a few times, that the recordings were cut off and then resumed again. Another setback was that, on a small number of times, it was not possible to identify the student participating in a given moment; this was due to the fact that the recording only showed the whiteboard and sometimes the chatbox. Therefore, if a student participated without identifying themselves or without the teacher calling out their name, it was not possible for the researcher to identify and code that particular student.

Despite all these challenges, data collection was possible, and thus we were able to carry out this research study.

## **6. Antecedents of the investigation**

The following research studies in this section all provide relevant information in support of different areas of this investigation. Nonetheless, they may not have been written directly to address the hypothesis of the present piece of work. Below, each study is presented

---

<sup>1</sup> Classes, sized 16 learners, are divided into two groups resulting in 8 students in each sub group (See *Class Characteristics* in *Section 1.1*). This means that it took twice as much to observe each class for both the control and experimental groups.

summarising apposite information. In addition, the connection and relevance to the current investigation are analysed and presented as well.

**Study 1.** Lina Lee, in her article: Focus-on-Form through Collaborative Scaffolding in Expert-to-Novice Online Interaction, describes how 30 students, divided into two groups: experts and novice, engaged in online interaction using collaborative efforts as well as corrective feedback to establish communication. The study was conducted in 2006. Lee used Microgenetic analysis<sup>2</sup>, which she applied to the five transitional levels<sup>3</sup> of scaffolding strategy, developed by Aljaafreh and Lantolf (1994), to examine moment-by-moment scaffolding in order to help the learner first to notice and then to correct an error. The research involved 30 students of Spanish in a large public North American university. Lee organised the expert-novice pairs according to the results of a standardised placement test. The online interaction was carried out via chat on Blackboard. The students engaged in three types of two-way exchange tasks that elicited collaborative interaction. The results revealed that online settings provided favourable conditions for feedback and negotiation between the expert-to-novice pairs and that scaffolding aided novice learners in focusing attention on their linguistic errors. Furthermore, the visually displayed (on the screen) corrective feedback made error correction easier for the novice speaker group affecting positively the self-repair moves in their follow-up interventions. Another important finding from this investigation indicates that the type of task had a clear effect on the amount of self-repair generated by the novice learners, being open-ended questions the type of task that resulted in the highest rate of self-repairs (42%), whereas spot-the-differences activities obtained the lowest rate (20%). By the same token, the findings show that open-ended questions promoted the use of L2 for corrective feedback on both lexical and structural errors; conversely the spot-the-differences triggered the use of L1. Finally, Lee concluded that the novice learners found it difficult to focus on meaning and form at the same time. Thus, the researcher proposes that the long-term effect of focus-on-form techniques be further explored in future studies.

---

<sup>2</sup> Microgenetic analysis, a direct means for studying cognitive development, allows the researcher to closely observe processes of change in a collaborative task in short periods of time. Such observed occurrences are analysed to justify the findings of the study. (Lantolf, 2000 in Lee 2008)

<sup>3</sup> Aljaafreh and Lantolf (1994) elaborated five transitional levels of scaffolding strategies to measure effective scaffolding within the ZPD. Lee (2008) adapted such levels for her study.

**Connection and relevance.** Lee's investigation provided us with important insights related to student-student interaction triggered by scaffolding in online settings. Furthermore, from Lee's research it can be inferred that open-ended questions are a meaningful tool to promote self-repair and use of L2 during online instruction. This was definitely taken as an insightful contribution when designing the remedy for our investigation.

**Study 2.** Another relevant study to consider in this section is *The Effect of High-Structured Scaffolding versus Low-Structured Scaffolding on the Writing Ability of EFL Learners* by Sasan Baleghizadeh, Abbas Timcheh Memar and Hossein Timcheh Memar carried out in 2010. In spite of the fact that this study is not related to online education, it does provide insightful information on scaffolding applied to instructional material, which is of paramount importance for the present investigation. The researchers selected 114 students of elementary English in English Language institute in Tehran. The students were distributed into a control group (CG), comprised of forty-four students, and two experimental groups: a) high-structured scaffolding group (HSSG), thirty-eight students, and b) low-structured scaffolding group (LSSG) with thirty-two students. All three groups worked with writing exercises over 25 sessions. The CG students did not receive any additional treatment and performed the exercises and reviewed the in-class paragraphs the same way they were presented in the textbooks<sup>4</sup>. Conversely, the HSSG were provided with highly guided templates for their writing work. Finally, the LSSG, received low-structured templates with just an example of a similar writing task. The instruments used to capture change in this study were a pre-test and a post-test that consisted of paragraphs scored independently by the researchers. Subsequently, the investigators used three different statistical procedures to analyse the data. The findings reveal that there is significant progress in the LSSG, whereas the opposite occurs both in the CG and the HSSG. In the authors' words:

"...the results of the present study correspond to the general paradigm of scaffolding and cast more light on the nature of ZPD, stressing the importance of contingent and gradual help."

(Baleghizadeh, Memar and Memar, 2011).

**Connection and relevance.** Baleghizadeh, Memar & Memar's piece of study confirms that scaffolding applied to instructional material needs to be carefully and gradually measured

during the design stage. This was indeed an addition to the notion of scaffolding being implemented in a gradual fashion, which was a foundation on the design stage of the remedy for our investigation.

**Study 3.** Maryam Tayebinik and Marlia Puteh in their article *Does greater participation in online courses lead to passing grade? An EFL learning context*, carried out in 2011, intended to investigate whether a high degree of interaction in online settings translated into passing grades at the end of the course. To this end, Tayebinik and Puteh sampled 112 undergraduate English students enrolled in EFL courses: the participants were those who obtained a pass grade at the end of the semester. Students' participation in the online courses was measured with rubrics used by the online instructors. The principal criteria to assess class participation in the Tayebinik and Puteh's study involved interactive activities such as the amount of student-teacher interactions (STI), student-student interaction (SSI) and group discussion (GD). The researchers used multiple regression analysis to find the relationship between online interaction and the pass grades. The findings showed that there is a significant co-relationship between students' passing grades and participation in online interactions. The results further revealed that achieving a pass grade in online courses could be predicted by the frequency of online participation. In this study GD was the stronger predictor, but STI and SSI were also found to predict students' success. To sum up, the results in this research study indicate that greater participation and interaction in online classes may either lead to obtaining a pass grade or to predict students' favourable outcomes in online settings.

**Connection and relevance.** As it can be noted, this article provided valuable information regarding interaction and students' performance in online settings. Such elements were key factors when considering and devising the research questions in the present investigation.

**Study 4.** An interesting study that focuses on quality in online educational settings is that by Yi Yang and Vance Durrington, carried out in 2009. In their research work, *Investigation of Students' Perceptions of Online Course Quality*, they investigated how 176 students in the Colleges of Business, Education and Arts and Sciences in a university in the United States of America conceived quality in online courses; the researchers also intended to establish which were the principal factors that led to those perceptions. The study focused on online course

---

<sup>4</sup> For this study, the researchers utilized *True to Life* and *Pace Setter*.

quality, teaching quality and course structure. Among the factors leading to students' perception of online course quality, Yang and Durrington surveyed: (a) peer interaction; (b) feedback from instructors; (c) course structure; and (d) student support services. In order to collect data, their study used an online survey that consisted of three versions of the benchmarks published by Institution of Higher Education Policy (IHEP)<sup>5</sup>. They used descriptive statistics and multiple regressions to process the data. The findings of the study indicate that students perceive the quality of online learning (97.1%) as the most salient component of online course quality while also recognizing the prominence of online teaching (94.9%), online course structure (94.9%) and online student support (93.7%). These results reveal that while the convenience of online courses is a factor that attracts students, they are still interested in the learning aspect. The equally distributed online teaching quality and online course structure quality (94.9%) in students' perceptions reveal their aspirations and expectations for both quality online instruction and online course structure. Finally, as per the factors studied in this research, peer interactions, feedback from instructors and course structure were found to be positive predictors of students' perceptions related to online course quality. Among these three predictors, course structure had the greatest effect on students' perceptions. These findings prove that students aspire to and expect quality teaching in online settings. Furthermore, it is interesting to note that students' perceptions of online instruction are built upon quality teaching and sound course structure.

**Connection and relevance.** This article provided our research with relevant information regarding course structure and students' overall perception of online instruction. It should also be noted that course structure is the supra-order term that encompasses material design, which is the area upon which scaffolding was employed in our investigation.

**Study 5.** Interactive structures in flipped online classrooms were surveyed by Nancy Flanagan at the University of Georgia. Her paper, *Increasing Interaction in a Flipped Online Classroom through Video Conferencing* describes six interactive schemes in fully online courses at a Master's level at the University of Georgia in 2017. She analysed the advantages and disadvantages of the six interactive structures, and also measured student response. Flanagan intended to increase student interaction as a means to decrease high levels of

---

<sup>5</sup> The IHEP, based in Washington D. C., is a non-profit organization aimed at promoting research opportunities to guide education leaders to grant access to higher education for all students in the U. S. The IHEP has developed 24 benchmarks to measure education quality.

attrition in online courses. To such end, Flanagan implemented two video conferencing programmes, namely *Google Hangouts* and *Big Blue Button* through the free *Canvas LMS*, in her fully online *School Library Media, Instructional Technology, Instructional Development, Designed Programs* courses. The courses followed a flipped learning approach where students were expected to use the LMS provided by the University to access material prior to the live session, in which students would use one or more of the six interactive structures designed by Flanagan. Such structures were all aimed at incrementing student interaction. They are briefly described now.

- *Whole Group Discussion* is based on a foundational question that all participants may answer using the different features the video conferencing programme provides.
- *Small Break-Out Groups*. This scheme is set in either of the video conferencing programmes by using a second device that allows to split the whole group into smaller ones. By having smaller groups, students can discuss or solve case study problems more deeply and then return to the whole group setting to discuss or present in plenary.
- *Virtual Show-and-Tell*. These sessions promote student's quick presentation skills, since they have to use the screencast feature of the videoconferencing programme to present or show in about thirty seconds a particular item asked by the instructor.
- *Independent Small Groups*. This structure allows students to meet in groups independently using other video conferencing programmes to complete assignments or discuss projects.
- *Individual Student Conferences*. In these conferences, students present their final product, which is related to the class topic and to their own research project. The conferences allow students to discuss comments and progress with the professor using screen sharing and *Google Docs*.
- *The Virtual Poster Session*. This structure gives students the opportunity to present the results of their final projects to a small group of fellow students interested in the topic.

The regular End-of-course evaluations for the online courses were highly positive showing a mean of 4.7 on a 1-5 scale (5 is best). Furthermore, most students (ranging from 62% to 87%) strongly agreed that the video conferencing had really helped their learning. Flanagan also analysed the advantages and disadvantages of the six interactive structures. As per the later, the few negative comments in her End-of-course evaluations revolved around technical issues with the conferencing programmes and personal views on interacting with others. As Flanagan puts it, online instructors should be ready to deal with these interaction-related

situations in online settings, as they are in traditional F2F classes. Regarding the advantages, students' comments highlighted the importance of interacting with peers, and how feedback and collaborative work in small sessions benefitted their learning. Interestingly, some students pointed out that being able to see their classmates' faces had a positive effect on class interaction. In short, this piece of research evidences that course design aimed at increasing interaction in online flipped classes has a positive effect on student-end-of-term response.

**Connection and relevance.** This investigation portrays different interactive structures employed in flipped online classes that proved to be beneficial for students' learning. This is particularly relevant for the current study, since most of the schemes described earlier (or their foundational principles) were used at different moments as elements of the instructional material in the synchronous classes in our investigation.

**Study 6.** Another piece of study that focuses on course quality is that by Shanna Smith Jaggars and Di Xu, entitled *How do online course design features influence student performance?* Their research, carried out in 2011 in two community colleges in the USA, aimed to establish a relationship between specific course design features and concrete student-level course outcomes. Jaggars and Xu designed a four-area-quality rubric based on literature review that focussed on 1) organisation and presentation; 2) learning objectives and assessments; 3) interpersonal interaction; and 4) use of technology. The authors measured the impact of each of the four areas on student performance in 23 online courses in two community colleges. They also gathered qualitative data through course observation and interviews to both professors and students. The participants were 19 instructors and 678 students enrolled 23 online courses. The End-of-semester results were anonymised and converted to a 0-4 scale (being 0 = F, and 4 = A), for analysis. In order to measure the impact of the four areas on student performance, the authors created a quality rubric with the four quality areas described above. Then, the research team logged into the online courses several times to assess a course's quality in each area by comparing each area of the rubric against course documents and course elements such as postings. As a consequence, numeral data was generated and scoring guidelines were agreed amongst the research raters. On a descriptive basis, across the 23 online courses, interaction and objectives tended to show higher intercorrelations with score means of 2.04 (0.77 SD) and 2.00 (0.74 SD) respectively. The scoring criteria the raters concurred with after trials was 1 – 3. These rubric scores were measured against the student outcomes through a multi-level model approach that controlled

variations on student-level and course-level baseline characteristics. The researchers correlated each of the four ratings with student end-of-term grades on a bivariate basis ( $N = 678$  students). The findings revealed that interaction ( $r = 0.15, p < 0.001$ ) and technology ( $r = 0.12, p < 0.001$ ) were significantly associated with student grades, whereas the correlations for organisation ( $r = -0.05, n.s.$ ) and objectives ( $r = 0.05, n.s.$ ) were negligible. Qualitative data revealed that instructor-student interaction had a stronger impact on student performance than that of student-student-interaction. However, it is important to note that this evidence does not correspond to synchronous, but to asynchronous activities in the online courses. To sum up, this study shows evidence that the quality of interaction yields positive and significant correlation to student performance, and that instructor-student interaction in asynchronous activities lead to students' higher performance scores.

**Connection and relevance.** Jaggars and Xu's investigation provide with insightful input regarding course design. As it was noted, interaction correlated positively among the 23 online courses. By the same token, interaction was significantly associated with students' grades. This specific feature of course design, i.e. interpersonal interaction, was carefully considered when designing the instructional material for the present study.

As detailed in this section, the following pieces of research study (see below) yield insightful contributions to the present investigation in the areas of (a) student-student interaction in online settings; (b) scaffolded instructional material; (c) online student performance; and (d) online instruction quality.

- Focus-on-Form through Collaborative Scaffolding in Expert-to-Novice Online Interaction by Lina Lee (2006);
- The Effect of High-Structured Scaffolding versus Low-Structured Scaffolding on the Writing Ability of EFL Learners by Sasan Baleghizadeh, Abbas Timcheh Memar and Hossein Timcheh Memar (2010);
- Does greater participation in online courses lead to passing grade? An EFL learning context by Maryam Tayebinik and Marlia Puteh (2011);
- Investigation of Students' Perceptions of Online Course Quality by Yi Yang and Vance Durrington (2009);
- Increasing Interaction in a Flipped Online Classroom through Video Conferencing by Nancy Flanagan (2018);

- How do online course design features influence student performance? by Shanna Smith Jaggars and Di Xu (2016).



## Chapter 2

### Theoretical Framework

This chapter will present the theoretical foundations for the present investigation. The first part will explore relevant aspects of SLA that serve as the bases for this research. The second part will discuss the sociocultural theory and its practical application in the EFL classroom. The third part will explore computer-mediated communication (CMC), and finally the last part will address principles of material design within online settings.

#### 1. Second Language Acquisition

Ellis (2003:3) asserts that the systematic study of how people acquire a second language, being a foreign language or actually the language one is learning in the country they live, has grown interest amongst researchers ever since its origins in the second half of the twentieth century. Ellis points out that this is closely related to the modern times we live in, the times of the *global village* and the Internet. As Ellis (ibid) suggests, it is not surprising, then, that there has been ever-growing attention to research into how second languages are learnt. Ellis (ibid) provides the following definition for SLA:

“*L2 acquisition* can be defined as the way in which people learn a language other than their mother tongue, inside or outside of a classroom, *Second Language Acquisition* (SLA) as the study of this.”

This definition is particularly relevant for the present study, since it provides the framework under which other aspects will be examined.

**1.1. The role of input and interaction in SLA.** Quite recent pedagogical theories have shifted their attention from teaching to learning. In that way, current views of SLA are mainly interested in understanding language learners as autonomous individuals who not only receive, but also generate L2 in a learning environment<sup>6</sup> (Mitchell and Myles, 2004).

In order to understand the recent theorists of SLA, it is necessary to explore Krashen's Input Hypothesis. Originally, Krashen (1980, 1982, 1985 in Gass and Mackey (eds.), 2012)

---

<sup>6</sup> Learning environment refers to the diverse physical locations, contexts, and cultures in which students learn. Since students may learn in a wide variety of settings, such as outside-of-school locations and outdoor environments, the term is often used as a more accurate or preferred alternative to classroom, which has more limited and traditional connotations—a room with rows of desks and a chalkboard, for example. (The Glossary of Education Reform, 2014)

proposed that for learners to acquire L2, they needed to be exposed to what he defined as *comprehensible input*. Furthermore, he pointed out that such input had to be slightly above the learner's level of proficiency: ( $i+1$ ), and that at the same time, the learner had a low affective filter (that is, low levels of anxiety and negative feelings due to learning L2). The hypothesis states that:

“Humans acquire language in only one way – by understanding messages, or by receiving ‘comprehensible input’ ... We move from I, our current level, to  $i+1$ , the next level along the natural order, by understanding input containing  $i+1$ ”

(Krashen, 1985:2).

In other words, Krashen suggested that the more comprehensible input, considering the ( $i+1$ ) factor, the learner is exposed to, the more they will learn L2. He also added that formal aspects of language such as grammar would look after themselves in this acquisition process. This initial view was put into question years later as there was rather little empirical evidence to support Krashen's theory. In the late 1970s researchers (Wagner Cough and Hatch, 1975; Hatch, 1978a, 1978b in Gass and Mackey (eds.), 2012) began to pay closer attention to interaction, which led to the *interactionist approach*.

In the early 1980s, Michael Long conducted a research (Long, 1980, 1981, 1983a in Mitchell and Myles, 2004) in which he found that both comprehensible input and L2 expansion resulted from negotiation for meaning between native speakers and non-native speakers. To elaborate, Long's study involved work with sixteen pairs of native—native speakers and sixteen native—non-native speakers. His evidence revealed that there was little linguistic difference between the speech produced by the native—native pairs and the native—non-native pairs. However, there were significant differences when the sets of exchanges were examined from a conversational management point of view of and the language functions employed by the participants (Mitchell and Myles, 2004). The native—non-native pairs used strategies to negotiate for meaning. Larsen-Freeman and Long (1991, in Gass and Mackey (eds.) 2012) in a later study showed more evidence that suggested that interaction played an important role in SLA. Following this, other studies were conducted indicating that negotiation for meaning was present when there was interaction between native and non-native speakers (Pica et al, 1987 in Mitchell and Myles, 2004).

Long reformulated his interaction hypothesis in 1996 and he placed more emphasis to factors such as the linguistic environment and the learner's L2 processing capacity. In his own words:

“It is proposed that environmental contributions to acquisition are mediated by selective attention and the learner’s developing L2 processing capacity, and that these resources are brought together more usefully, although not exclusively, during negotiation for meaning. Negative feedback obtained during negotiation work may be facilitative of L2 development, at least for vocabulary, morphology and language-specific syntax, and essential for learning certain specifiable L1-- L2 contrasts.”

(Long, 1996 :414 in Gass and Mackey, 2012)

To date, it is widely accepted that interaction plays a major role to developing L2 proficiency, principally because during interaction and in order to establish communication with natives or more proficient non-native speakers, learners need to make use of strategies such as clarification requests, noticing, consciousness raising, repetition, recasts, amongst others. All of these factors (that is, comprehensible input, learner’s attention to their own interlanguage, opportunities to produce output and opportunities to receive different types of feedback) make the strong version of the interactionist approach to L2 acquisition.

**1.2. The role of output in SLA.** Along with the *interactionist approach*, the *output hypothesis* or *comprehensible output hypothesis* (COH), developed by Merrill Swain, has enhanced the field of SLA. Her initial assertion that output played a role in SLA was her research (Swain, 1985) with French immersion students. The findings showed that despite of being engaged in studying French for several years — six or seven years— the written and spoken French of the students evidenced numerous grammatical and syntactic diversions from native speaker usage (Swain, 2000). Hence, the exposure to comprehensible input did not suffice to make L2 learning happen. According to Swain (1985), “the output hypothesis claims that the act of producing language (speaking or writing) constitutes under certain circumstances, part of the process of second language learning.” Another important notion she added is that learners notice a gap in their linguistic knowledge of L2; and therefore, they need to adjust their output or L2 production and, as a result, learning occurs, which leads to achieving communicative goals.

Merrill Swain (1995 in Gass and Mackey (eds.), 2012) proposed three other functions to learner *output* that contribute to the development of L2.

- a. **Noticing function.** Learners find gaps between what they want to say and what they are actually able to say, in this way they notice their linguistic limitations in L2.
- b. **Hypothesis-testing function.** When a learner produces discourse, there is an at least tacit hypothesis underlying their utterance. By producing this utterance, the learner tests this

hypothesis and receives feedback from an interlocutor. Such feedback enables reprocessing of the hypothesis if necessary.

- c. **Metalinguistic function.** Learners reflect on the language they learn; as a consequence, their output enables them to control and internalize linguistic knowledge. It is in other words the reflective role of output.

Rooted in Swain's COP, nowadays it is commonly accepted that learner output or production of L2 is important to increase fluency, that is, learners making use of their interlanguage confidently and routinely (Mitchell and Myles, 2004).

## 2. The Sociocultural Theory – implications in SLA

The sociocultural theory (SCT) in SLA is rooted in the view of language learning in essentially social terms. Theorists who advocate this approach claim that target language interaction has a central role to play in learning. This is in opposition to the view of interaction as a “source of input for autonomous and internal mechanisms” (Mitchell and Myles, 2004:193). In the field of SLA, James Lantolf ever since the 1980s has fruitfully contributed to enrich the grounds of SCT, which has its origins in the writings of the Russian psychologist Lev Vygotsky. Basically, SCT argues that human mental functioning is fundamentally a *mediated* process that is organised by cultural artefacts, activities and concepts (Ratner, 2002 in Lantolf and Thorne, 2007).

**2.1. Vygotsky's legacy to SLA.** Lev Semyonovich Vygotsky was born in November 1896 in Orsha, a Soviet province located now in Belarus, southwest of Russia<sup>7</sup>. Vygotsky was a psychologist, researcher and theorist of child development until his early death in Moscow in 1934. His ideas were disesteemed in Soviet Russia, consequently his first writings were only translated into English in 1962 (Mitchell & Myles, 2004). Up to the early 1980s Vygotsky remained fairly unknown to the West, time at which the psychologist Jean Piaget's— who was born in Switzerland coincidentally also in 1896—views on developmental theory started to decline among educators, and, conversely, Vygotsky's proposal of the Zone of Proximal Development became the focus of developmental psychology and education. Some of Vygotsky's ideas that have had an impact on SLA will be briefly explored now.

---

<sup>7</sup> See: *Vygotsky* Retrieved from: <https://www.britannica.com/biography/L-S-Vygotsky>

**2.1.1. Mediation in L2.** This theory has its origins in the descriptive branch of psychology, whose main concern was on what Vygotsky named higher mental processes (that is, problem-solving, voluntary memory, attention, rational thought, planning, among others). According to Vygotsky, the human mind has a lower-level neuro-biological base, but the distinguishing characteristic humans have known as consciousness, in other words voluntary control over biology, is done through higher-level cultural artefacts such as literacy, numeracy, memory, categorization, rationality, logic, among others. These artefacts serve to mediate the relationship between the person and the environment (Lantolf and Thorne, 2007).

In order to better comprehend the mediation process of our mental activity using L2, it is necessary to understand the notion of *private speech*. *Private speech* is the speech one uses with oneself, as opposed to the speech one uses in social interaction<sup>8</sup>. To put it in another way, one appropriates the patterns and meanings of social speech inwardly and puts them on use to mediate one's mental activity. Two of the most salient characteristics of private speech are its abbreviation and the meanings it conveys. According to Vygotsky (Lantolf and Thorne, *ibid*), in private speech used within a social context, as when one shares a great deal of social knowledge with another person, say for instance a friend, the linguistic communication need not be highly syntactic in its form. Lantolf illustrates this with the following dialogue as an example.

A: "Eat, yet?"

B: "No, you?"

(Lantolf and Thorne, 2007)

In the exchange above, it was not necessary to fully formulate the question and answer as "Have you eaten yet?" / "No, I haven't" Because in private speech one assumes that other person knows the topic being addressed and there should be no difficulty in decoding the meaning. Lantolf further points out that each language has its own system of utterances that impart underlying meaning. For instance, in English, L1 speakers may use "Oh" to signal they have discovered something they are to do or that they have remembered a word from memory. Such linguistic options, as asserted by Frawley (in Lantolf and Thorne, *ibid*) are all derived from their use in social interaction

---

<sup>8</sup> See: *Private speech*. Retrieved from: <https://www.simplypsychology.org/vygotsky.html>

**2.1.2. Internalisation.** As previously mentioned, SCT sees language as a tool or artefact not only for communicative processes, but also to enable the process of thought, in its functional aspect itself. In view of this, internalisation is the process through which a person reorganises their relationship with the environment and transfers it to future performance. Internalisation is accountable for the living connection between social communication and mental activity, which makes it possible for a person to gain control over their brain, their biological organ of thinking. In this process, the person transitions from the interpsychological to the intrapsychological plane: first socially and then at the personal level. As stated by Lightbown and Spada (Lightbown and Spada, 2006 in Bankovic, 2015), speaking and thinking are tightly interwoven. People internalise what they themselves or others say in the communicative process, and by this means people gain control over their mental processes. Put it another way, “speaking mediates thinking” (Bankovic, 2015).

**2.1.3. Imitation.** Imitation in Vygotsky’s thought differs from the plain process of mimicking associated with the behaviourist approach in psychology and the audiolingual method in language pedagogy. By contrast, it implies goal oriented cognitive activity that results in the variation of the original model. Stated by Vygotsky, “development based on collaboration and imitation is the source of all the specifically human characteristics of consciousness that develop in the child” (Vygotsky, 1987 in Lantolf and Thorne, 2007). In the L2 learning context, imitation allows learners to construct collections of linguistic resources for future performances, yet these performances need not be identical replicas of the original version (Lantolf, 2004 in Mitchell and Myles, 2004).

Among the different applications of imitation in the L2 classroom, recasting has grown popularity amongst English teachers. Recasting is also referred to as corrective feedback. Recasting has been proven effective to help learners improve their linguistic accuracy in meaning-oriented settings (Saito, 2018).

**2.1.4. Scaffolding and The Zone of Proximal Development.** When erecting a construction, scaffolds are necessary. Scaffolding is a temporary structure outside of the building whose purpose is to assist in the construction. This metaphor, *scaffolding*, has been used in pedagogy since Wood introduced in 1976. In his work (Wood *et al*, 1976), he offers the following definition of *scaffolding*:

'Those elements of the task that are initially beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence.'

Scaffolding has closely been associated to, if not inspired by, the Vygotskian thought, especially to the concepts of the *More Knowledgeable Other* (MKO) and the *Zone of Proximal Development* (ZPD). The first, MKO, refers to an adult or someone who has a better understanding or a higher ability level than the child or learner, regarding a particular concept, task or notion<sup>9</sup>. Initially, the view of MKO was restricted to a parent or older adult. However, this has evolved into a wider concept. In the classroom, for instance, it could be the teacher or the learner's peer(s) who play the role of MKO. To go beyond, it could be the case that a child assumes the role of MKO with respect to an adult (his or her parent, for example). This holds true with aspects related to technology and electronic-gadget handling. Escalating further, nowadays in some companies, it is no human that acts as the MKO, but electronic systems that offer support to employees in their learning process. Likewise, in the educational arena, LMS systems that offer electronic tutors to learners are grounded on the Vygotskian MKO foundation (McLeod, 2014).

As stated above, scaffolding is associated with ZPD. ZPD is the domain in which learning can most productively occur. In other words, it is the area of knowledge or skill where the learner does not have the capability yet of functioning independently but may achieve the desired outcome if scaffolded help is provided (Mitchell and Myles, 2004). As defined by Vygotsky, ZPD is:

“the difference between the child's developmental level as determined as determined by independent problem solving and the higher level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.”

(Vygotsky, 1978:5 in Mitchell and Myles, 2004)

*Figure 1* is a visual representation of ZPD, where it can be seen that for the learner to arrive at the desired results, a *more knowledgeable other's* assistance is required. This assistance, if gradually removed, is the scaffolding that supposedly aids learning most effectively to take place.

---

<sup>9</sup> See: *Lev Vygotsky*. Retrieved from: <https://www.simplypsychology.org/vygotsky.html>

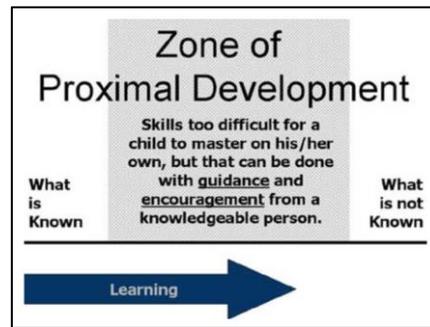


Figure 1 Zone of Proximal Development

Source: McLeod, S. (2014). Zone of Proximal Development. Retrieved from: <https://www.simplypsychology.org>

According to Wood *et al.* (1976 in Mitchell and Myles, 2004), scaffolding plays the following roles:

- recruiting interest in the task;
- simplifying the task;
- maintaining pursuit of the goal;
- marking critical features and discrepancies between what has been produced, and the ideal solution;
- controlling frustration during problem solving;
- demonstrating an ideal version of the act to be performed.

### 3. Computer-Mediated Communication

“Online learning, or e-learning, is learning and teaching which are supported via electronic means” is a definition of online instruction given by Nicole Bruland (2013). Online learning has its origins in *distance learning* and its genesis can be traced back to the early 1990s, time in which there was a slight increase of access to hardware and to the internet (Hockly, 2015).

It was the Open University in the United Kingdom that pioneered the instruction of a language course, French, mediated by computers in 1995. This generated robust material of early research in the field of ELT and SLA (White, 2003: 18-19). The Department of Languages at Open University started using the telephone to supplement the face-to-face tutorials. What the tutors did was basically mirroring the activities developed in the face-to-face tutorials, mainly focusing on accuracy of form in an attempt to provide the students with opportunities to practise L2 and gain fluency. Researchers observed the recordings of these

first trials and reported that most of the learners were likely to over-prepare and read out their answers, which led to a lack of spontaneity and reluctance to take risks (Stevens and Hewer, 1998 in Hampel & de los Arcos, 2013).

The next edition of the course, in 1996, combined telephone conferencing and email, and tutors were invited to promote more spontaneous exchanges amongst students. The results collected from surveys evidenced that learners felt more motivated, less isolated and that felt they improved their pronunciation (Shield and Hewer, 1999 in Hampel & de los Arcos, 2013). Certainly, there was some improvement compared to the earlier findings. However, the telephone-email combination still appeared to be a comprised version of the face-to-face classes and “gave the impression of being a bit bitty and disjointed” (Hewer, 2000:3 in Hampel & de los Arcos, 2013).

Ongoing innovation was implemented at the Open University, and in 2002 they devised *Lyceum*<sup>10</sup>, which became the first online medium for interaction for mainstream courses. Later, in 2009, *Elluminate* (a synchronous audio-conferencing tool) was implemented for foreign language courses, and then it became a complement of the VLE adopted by the Open University: *Moodle*<sup>TM</sup>. In these later editions of the courses, a task-based model was employed where students’ roles were allocated in sub-groups that involved collaborative work in preparation for a final plenary. The findings of these pilots revealed that there were fewer read responses and more spontaneous talk. (Hampel & de los Arcos, 2013)

**3.1. Telecollaboration.** Another practical application of CMC is that of *Telecollaboration*. Belz (2003) defines *Telecollaboration* as follows:

Telecollaboration involves the application of global computer networks to foreign (and second) language learning and teaching in institutionalized settings. In telecollaborative partnerships, internationally-dispersed learners in parallel language classes use Internet communication tools such as e-mail, synchronous chat, threaded discussion, and MOOs (as well as other forms of electronically mediated communication), in order to support social interaction, dialogue, debate, and intercultural exchange.

Belz, 2003: 2

Recent investigation has evidenced that telecollaboration “can be used as a viable classroom alternative for meeting a range of pedagogical goals.” (Ware, 2005). Telecollaboration can expand student motivation and promote greater target language output (Beauvois, 1998; Kelm, 1996; Kern, 1995, 1996; Meagher & Castaños, 1996; Toyoda &

Harrison, 2002; Warschauer, 1996a, 1996b, 1998 in Ware 2005). Both the cultural and intercultural dimensions of telecollaboration have also been investigated in order to establish the extent to which international online experiences promote cultural and intercultural awareness and competencies (Furstenberg, Levet, English, & Maillet, 2001; Kramsch & Thorne, 2002; Warschauer, 1999, Belz, 2003; Brammerts, 1995; Müller-Hartmann, 2000; O'Dowd, 2003 in Ware, 2005). In terms of the linguistic dimension, Belz (2003) provided proof that certain factors led to miscommunication. Such factors include “culturally contingent differences in conversational style, in appraisals patterns, and in the use of language-specific features for indexing of speaker attitude” (Ware, 2005). From this robust evidence, it can be concluded that research problematises the notion of online communication being automatically suitable for language acquisition. In other words, it is not the medium but other factors, such as instructional material, course design, course implementation, trained online instructors, among others, that promote successful L2 acquisition.

**3.2. Online courses – how much online?** The concept of blended learning has been used in corporate training, higher education and the field of ELT for some time now. Yet, there is still no common consensus as to find a precise definition for blended learning, given that the online component could be present in different ratios. Smith and Kurthen (2007 in Whittaker, 2013) proposed a taxonomy to define the terms related to blended learning using percentages. *Table 2* shows this taxonomy.

*Table 2 Taxonomy of terms related to blended learning*

<b>Term</b>	<b>Definition</b>
Web-enhanced	Subjects that make use of a minimal amount of online materials, such as posting a syllabus and course announcements.
Blended	Subjects that utilise some significant online activities in otherwise face-to-face learning, but less than 45 per cent.
Hybrid	Subjects in which online activities replace 45- 80 percent of face-to-face class meetings.
Fully online	Subjects in which 80 per cent or more of learning materials are conducted online.

Source: Smith and Kurthen, 2007 in Whittaker, 2013

<sup>10</sup> See: *Lyceum Voice Groupware*. Retrieved from <http://projects.kmi.open.ac.uk/lyceum/>

Hockly and Dudney (2007, in Whittaker 2013) also suggest different designs within blended courses. Similar to the aforementioned distinction made by Smith and Kurthen, Hockly and Dudney make use of percentages in their proposal for online courses:

- “A face-to-face language learning course with additional online materials, where online tools are used to support and extend face-face lessons.
- A blended language learning course, where 75 per cent is delivered online and 25 per cent face-to-face.
- A 100 per cent online language learning course, where the course is not unlike a coursebook online.”

Hockly and Dudney, 2007 in Whittaker, 2013.

#### 4. Principles of material design within online settings

*“Teaching in the cyberspace classroom requires that we move beyond traditional models of pedagogy into new practices that are more facilitative.*

*Teaching in the cyberspace involves much more than simply taking old, “tried and true” models of pedagogy and transferring them to a different medium.”*

Paloff and Pratt, 2001:20

As stated by the aforementioned authors, material design in an online environment implies having an understanding of teaching practices that allow the student to engage in their own learning by taking a more active role in class. Furthermore, authors and researchers agree that instructional material has to be carefully designed for learning to be successful. In online settings, material design, especially for the synchronous component, is of vital import, as it will allow students to take an active role in their learning. Literature suggests the following principles should be considered when designing instructional material for online delivery.

Minimum lecturing. Learner-centred approach sees learners as the key agent of the learning process (White, 2003). In the twenty-first century, the emerging pedagogy of personalized learning proposes a “learning landscape transformed and shaped by digital communication tools and ubiquitous networked applications.” (Sun, 2011). Further, Conrad and Donaldson (2006), define engaged learning as “a collaborative learning process in which the teacher and student are partners in constructing knowledge and answering essential questions.” All these three proposals are grounded upon constructivist and Vygotskian principles that see learners no longer as passive receivers of knowledge. Some key elements

to pursue successful learning in an online environment proposed by the above-mentioned authors are the following:

- Students establishing their own learning goals;
- Students working together in groups;
- Exploring appropriate resources to answer meaningful questions;
- Tasks that are multidisciplinary and authentic, with connections to the real world;
- Assessment that is ongoing and performance-based;
- Products that are shared with an audience beyond the classroom, so students are able to add value outside of the learning environment;
- Promoting learner participation and engagement;
- Facilitating multi-dimensional interactions;
- Fostering the building of learner community;
- Viewing learning as a process;
- Viewing group-work and project as important part of learning;
- Encouraging group discussion initiatives;
- Encouraging learners to construct their own understanding, co-constructing class resources and the learning environment, co-creating new learning and knowledge;
- Learning in small groups;
- Favouring task-based instruction;
- Emphasising learner cooperation and collaboration;
- Fostering real-life problem-solving and critical thinking skills;
- Asserting learner control;
- Promoting self-direct learning, self-regulated learning, individualized learning, personalised learning;
- Encouraging learning creativity;
- Using authentic learning materials

In view of this, lecturing, if done at all, should be kept minimum so as to promote active, engaged, student-fronted learning. As Hockly and Clandfield (2010) put it, the online teacher should carry out *revision* (of target language) rather than *presentation* in the synchronous class. Doing revision presupposes that learners have been exposed to the target language prior to the synchronous session. This practice is known nowadays as *flipped learning*.

**Flipped learning.** The flipped learning model has been used for years in certain disciplines. Barbara Walvoord and Virginia Johnson Anderson propose a model in which students gain first-exposure learning prior to class and focus on the processing part of learning (synthesizing, analysing, problem-solving, etc.) in class.<sup>11</sup>

Furthermore, Walvoord and Anderson propose an assignment-based model in which students produce work (writing, problems, etc.) prior to class, in order to promote and verify that students actually do the learning part before class. The students receive meaningful feedback for the processing activities that take place during class, reducing the need for the instructor to provide extensive written feedback on the students' work. Walvoord and Anderson report instances of how this approach has been employed in history, physics, and biology classes, suggesting its broad applicability.

**Task-Based Learning.** Harper (2006) introduces a definition of task that has been widely advocated by a number of researchers summarised by Kappler (Nunan, 1989; Skehan, 1998, Yule, 1997, Kappler, 2003 in Hampel, 2006) as follows:

“Tasks are meaning-based activities closely to learners’ actual communicative needs and with some real-world relationship, in which learners have to achieve a genuine outcome (solve a problem, reach a consensus, complete a puzzle, play a game, etc.) and in which effective completion of the tasks is accorded priority.”

Kappler, 2003 in Hampel, 2006

Therefore, it can be said that for purposes of instructional material design a distinction has to be made between *activities* and *tasks*. Whilst the first are single, smaller events, the latter involve a series of activities that are geared to accomplish an outcome.

According to Gass and Mackey, Task-based learning refers to a communicative teaching approach “in which the primary emphasis is not on decontextualized grammar drills or rote memorization, but it proposes to give learners abundant opportunities to receive meaningful input, produce output using the target language in context, receive feedback on their efforts by working collaboratively on a task” (Ellis, 2003, 2009; Long, 2000; Samuda and Bygate, 2008 in Gass and Mackey (eds.) 2012)

---

<sup>11</sup> *Flipped classroom*. Retrieved from <https://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/>



## Chapter 3

### Methodology of the Investigation

#### 1. Investigation type

Various contemporary research authors make a distinction that goes beyond the methodological quantitative/qualitative continuum. Nunan (2008) details that a psychometric research is “*a research carried out by the collection of data through an experiment, and the analysis of that data through the use of inferential statistics*”. Hence, this investigation is a basic psychometric research project, as it records data in a numeric form. In essence, the present investigation uses a quantitative methodology of empiric analytic orientation.

#### 2. Design of the investigation

This investigation was designed following Nunan’s definition of a quasi-experiment.<sup>12</sup> Both a *control* and an *experimental* group were set up, with *pre-test* and *post-tests* administered to both groups. Given that the participants were university students, and that this investigation was carried out during an academic semester at the private University, no random selection of subjects was assigned to the groups.

While the control group received no treatment, the remedy applied to the experimental group was basically the instructional material used in the live sessions. The aforementioned material consisted of PowerPoint presentations based on the textbook content (*Touchstone*<sup>TM</sup>), whose design follows a framework based on scaffolding principles aimed at having the student put into practice what they learnt in the LMS. A copy of the instructional material for the experimental group is given in *Appendix 1*. The rationale for the design of such material is given in *Appendix 12*.

#### 3. Population and study sample

The population selected for this study was students enrolled in English 5 (B1+ CEFR<sup>13</sup>) at *Universidad Privada de Ciencias Aplicadas (UPC)* in the first semester of the academic year 2017. English 5 is a General English course, which is delivered in a fully online setting. English 5 is the highest-level course offered at the University, therefore it is expected that

---

<sup>12</sup> A quasi-experiment has both pre-and post-tests, and experimental and control groups, but no random assignment of subjects. (Nunan, 2008)

<sup>13</sup> Common European Framework of References

students taking the course have some experience of learning online. This was the underlying reason for selecting the population.

Due to the relatively small size of classes in the English Programme at the University ( $N=16$ ), two classes were selected to comprise the control groups and two other classes were elected to constitute the experimental groups. In other words, this investigation has two control groups (CG1 and CG2) ( $n=32$ ) and two experimental groups (EG1 and EG2) ( $n=31$ ), making the sample with a total of 63 participants ( $n=63$ ). This measure was taken to preserve reliability and internal validity. The selection of study sample was based on the instructors' experience teaching online and the actual class size. The criteria employed for lecturer selection was (a) having over one year's experience teaching online at UPC; and (b) having a class of over 10 enrolled students. Three different instructors were contacted to contribute to this study: (a) one instructor for EG1 and EG2, and (b) two instructors for CG1 and CG2 respectively. Once the instructors accepted participating in the investigation, they extended the invitation to their students. The student invitation (see *Appendix 2*) contained: (a) a description of the research work; (b) the role of the students as participants; and (c) the possibility to accept or decline taking part in the investigation. No student rejected their participation. Nonetheless, out of the 63 students that comprise the sample, some students did not take part in some aspects of the investigation. This will be fully detailed in *Section 3.5*.

*Table 3* represents the participants' demographics as well as their distribution in this study. CG1 ( $n=16$ ) had eight male students (50%) and eight female students (50%). CG2 ( $n=16$ ) had 9 male students (66%) and 7 female students (44%). The data for the experimental groups goes as follows. EG1 ( $n=16$ ) consisted of eight male students (50%) and eight female students (50%). EG2 ( $n=15$ ) consisted of eight male students (53%) and seven female students (47%).

*Table 3 Demographics and distribution of participants in the study*

	Male		Female		Total
	(n)	(%)	(n)	(%)	(n)
CG1	8	50	8	50	16
CG2	9	66	7	44	16
EG1	8	50	8	50	16
EG2	8	53	7	47	15

Source: Personal collection

Finally, all the subjects are undergraduate students at *Universidad Peruana de Ciencias Aplicadas* with ages ranging from 19 to 23 years. EG1 and EG 2 are hereafter referred to as *EG* for practical purposes. CG1 and CG2 are hereafter referred to as *CG* for practical purposes.

#### 4. Variables

This study presents an *independent variable* and a *multi-dimension dependent variable*. The independent variable in this investigation is the *scaffolded instructional material* utilised in synchronous online English classes. The dependent variable is *students' production of English* in synchronous online English classes. It is widely agreed that while receiving instruction, learners may be able to produce L2 in a wide array of manners. Hence, it can be concluded that *students' production* is a broad concept, which needs to be categorised properly. Typically, when one thinks of classifying learners' production the following distinction can be conceived: *oral production* and *written production*. Given the nature of online instruction, *oral production* is generally favoured in synchronous work (Clandfield & Hadfield, 2017:2; Conrad & Donaldson, 2004:17). In view of all these considerations, the present study devises three dimensions of the dependent variable: (a) oral production; (b) written production; and (c) student-student interaction. Out of the three dimensions, the first two are still quite broad; hence they were sub-categorised so as to maintain a degree of precision for measurement. Thus, both oral and written productions were sub-classified into *simple responses* and *elaborated responses* (see *Table 4* for further details). *Figure 2* illustrates the variables of this piece of research work.

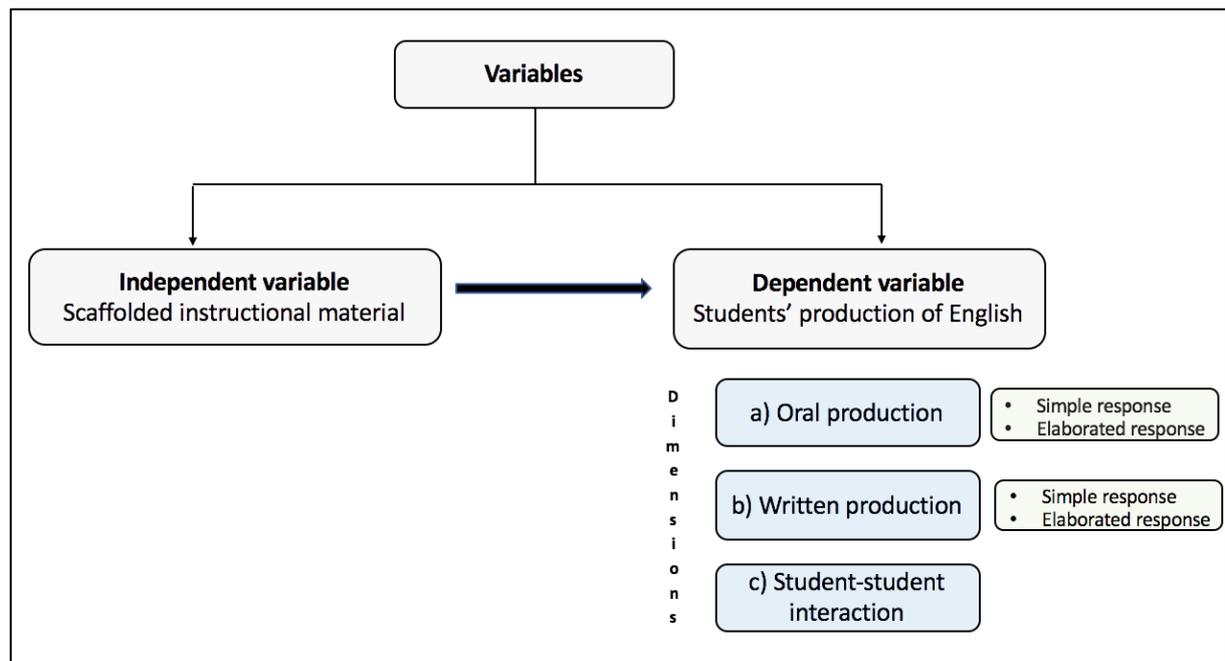


Figure 2 Investigation variables

Source: Personal collection

## 5. Techniques and instruments for data collection

Considering the research questions as well as the hypotheses in this study, four instruments were devised for collecting data: (a) *structured observations*, (b) *pre* and *post-tests*, (c) a *students' performance rubric*, and (d) a *questionnaire*. The main instrument used was *structured observations*, whereas the secondary instruments were the *pre* and *post-tests*, the *students' performance rubric* and the *questionnaire*.

Wallace (2002: 110) states that structured approaches to observe data to be analysed could be *system-based* or *ad-hoc*. While the first uses a pre-existing system to analyse data, the latter allows the researcher to collect data catering for a specific purpose or research problem. Upon revision of prior research (Beschomer, 2013; Bruland, 2013; Dockrell et al, 2012; Fifer, 1998; Rollins, 2011) using observational instruments, the researcher was able to develop pilot observation sheets for trials. After a process of iteration and refinement, a systematic observation sheet was carefully and specifically developed for this study. The observation phase was carried out utilising the recording of the live sessions or classes, which allowed the researcher to focus on specific aspects relevant to the present investigation; that is to say students' production of English. The Structured Observation Sheet (SOS) in this study was devised to collect students' production of English in synchronous sessions. After performing a

blind coding<sup>14</sup> stage, the following dimensions were developed to collect data: (a) Simple spoken response (SSR); (b) Elaborated spoken response (ESR); (c) Simple written response (SWR); (d) Elaborated written response (EWR); (e) Non-verbal response; and (f) Student-student interaction (SSI). *Table 4* further elaborates these dimensions.

Table 4. Observational instrument dimensions

Codes	Dimensions
SSR	<i>Simple spoken response</i> refers to utterances or a simple sentence produced orally. <i>Example: Only two days, teacher.</i>
ESR	<i>Elaborated spoken response</i> refers to a sentence that includes a conjunction produced orally. <i>Example: I prefer the red jacket because it looks more comfortable.</i>
SWR	<i>Simple written response</i> denotes: (a) words or phrases produced in a written fashion usually to complete sentences; (b) ordering words to make sentences. <i>Example: as much as</i>
EWR	<i>Elaborated written response</i> records complete sentences written with no cues given. <i>Example: My mum took centre stage when we went to karaoke last week.</i>
NVR	<i>Non-verbal response</i> corresponds to responses made with videoconferencing platform tool, for instance the thumbs up/down tool or using the whiteboard tools (circles, boxes, lines).
SSI	<i>Student-student interaction</i> logs the occurrences when a student interacted directly with another student.

Source: Personal collection

The second instrument for gathering data was *pre* and *post-tests*. The tests were administered online via *Blackboard*. They consisted of sixteen grammar and vocabulary questions for a total of twenty points. Full details are given in *Appendix 4*. The grammar and

<sup>14</sup> Blind coding an exercise where two people use the same instrument to observe the same event.

vocabulary content were extracted from *Touchstone*. Table 5 illustrates how many participants took the tests.

Table 5. Participants who took pre and post-tests

	<b>Pre-Test</b>	<b>Post-Test</b>	<b>Pre and Post-Test</b>	<b>Pre and Post-Test</b>
	(n)	(n)	(n)	(%)
CG (n=32)	22	22	19	59
EG (n=31)	24	21	18	58

Source: Personal collection

In CG, 22 students took the pre-test and another 22 students took the post-test. Only 19 students took both the pre and post-tests, which constitutes 59% of CG. In EG, 24 learners did the pre-test and another 21 students took the post-test. In this group, 18 students took both tests, which constitutes 58% of the total for EG.

The third instrument devised for data collection was the *Student Performance Rubric (SPR)*. This rubric, utilised on the Review Day session<sup>15</sup>, measured the participants' level of achievement in L2. In a similar way that data was collected for SOS, SPR data collection was performed with a recording of the class or live synchronous session. On Review Day, students take part in different, mostly oral, activities. Three moments were selected in each group; that is CG and EG, and participants' oral production was measured using a five-point scale. Table 6 details these values.

Table 6. Students' Performance Rubric Five-Point Scale

<b>Students Performance Rubric (SPR)</b>	
<b>5 = excellent</b>	Sentence with two clauses (joined by a conjunction) with no errors.
<b>4 = very good</b>	Short sentence with no errors.
<b>3 = good</b>	Sentence with 1 error.
<b>2 = average</b>	Sentence with 2 errors.
<b>1 = poor</b>	Incomplete or unintelligible due to errors.

Source: Personal collection

<sup>15</sup> In the *English Programme* at UPC, there is a *Review Session* before the *midterm exam* and the *final exam*. On such day, students do activities that allow them to revise for their upcoming examinations. *Review Sessions* are done synchronously on *Blackboard Collaborate Ultra*.

The last instrument used to collect data was a questionnaire. This questionnaire was designed to record students' perceptions of the online English course. It consisted of 6 questions and was administered online via *SurveyMonkey*<sup>TM</sup>.

## 6. Techniques and instruments for data processing

This section details by instrument how data was processed in the current investigation.

**Structured Observation Sheet.** During the observed sessions, the number of occurrences of behaviour in each category was collected by hand using tallies. Afterwards, these data were transferred first to *Numbers*<sup>16</sup> and then data were fed into *IBM SPSS (Statistical Package for the Social Sciences)* for further calculations and analysis. The structured observations were carried out in six classes in both the control group and the experimental group. Each observation lasted approximately 55 minutes. A copy of SOS utilised in this investigation is given in *Appendix 3*.

**Pre and post-tests.** The *pre-test* was administered in Week 2; that is to say when actual lessons started, as Week 1 serves as an *orientation week*. The *post-test* was administered in Week 7, the week before the midterm break, when data collection for this study ended. The tests scores were collected and transferred to *Numbers* and then to *IBM SPSS* for calculations and analysis.

**Student Performance Rubric.** Data was collected by hand, and then transferred to *Numbers* and *IBM SPSS* for calculations and analysis. The sample for this instrument was 22 participants in CG and 23 participants in EG. A copy of SPR is provided in *Appendix 5*.

**Questionnaire.** Whilst quantitative answers were directly transferred to *Numbers* for processing, qualitative answers needed a filter for inspection. Therefore, after *text analysis* and later *coding*, qualitative results were also transferred to *Numbers* for processing. The sample for this instrument was 12 participants in CG and 22 participants in EG. The questions for this instrument are provided in *Appendix 6*.

---

<sup>16</sup> *Numbers* is a spreadsheet program similar to *Excel*.

## 7. Validity and Reliability

Key indicators of the quality of a research study are the validity and reliability of the measuring instruments. Validity is the extent to which the results of a test are warranted: in other words, the test or instrument measures what is supposed to measure. Reliability is focused on the stability of measures, the consistency and repeatability of the test results. (Kimberlin & Winterstain, 2008). This section will discuss the validity and reliability of the present study beginning with the sampling, and then continuing with the instruments. Finally, a schedule of activities is also introduced to detail what was done in each stage of this investigation.

Firstly, the sampling was carried out within a principled framework of criteria, which is detailed in *3.3 Population and sample*. Secondly, the instruments utilised in this study were devised with the aim of preserving both validity and reliability. This study presents quantitative and qualitative measuring instruments that facilitate the cross verification of data, which is known as *triangulation*. Triangulation is a powerful technique that enables the validity of data by combining multiple data sources to produce understanding (Seale, 2017). The diversity of instruments specified in 3.5 above originated multiple data sources that were later analysed, and whose results showed consistency. Furthermore, the instruments were carefully designed so that each variable could be measured individually. That is to say that each instrument allowed for the measurement of specificity of variables. This was only possible after an iteration process of trial and error and in-depth literature review, which resulted in the final version of instruments utilised in this investigation. It is of great import to state that each instrument was reviewed and validated by research authorities at *Universidad Peruana de Ciencias Aplicadas*. In addition, the results from the qualitative component were properly coded for analysis. By the same token, the identity of the participants was preserved and carefully anonymised via systematic coding. Finally, samples of the participants' work during the study can be found in *Appendices 10 & 11*.

**7.1. Schedule of activities.** This section details the timetable for this research project. *Table 7* below illustrates the information in a timeline.

***Stage 1 - Setting out the research question (Dec. 2016).*** The researcher was a coordinator in the Fully Online English Programme at the University. As part of the class observations for Teachers' Appraisals, the researcher noticed that students' English production was minimal during classes. Hence, possible reasons for this situation were charted, being the most salient the instructional material teachers were using. Thus, preliminary research questions were

formulated. After an iteration process and an initial literature review the research question was set out.

**Stage 2 – Literature Review (Jan. – Feb. 2017).** A great deal of sources was reviewed to gather information related to the investigation.

**Stage 3 – Design of instruments, phase I (Jan. 2017).** Based upon the research question some instruments for data collection were designed and validated.

**Stage 4 – Data collection, phase I (Jan. – Feb. 2017).** After selecting the sample, inviting participants and delimiting the variables, data collection was carried out. Data collection consisted of: (a) structured observations of recorded classes on videoconferencing; (b) administering pre and post-study tests; and (c) giving a questionnaire. Structural problems on the observational instrument were identified, therefore, data collection was interrupted, and data processing was not performed. However, it was confirmed at this stage that the main instrument for data collection had to be structured observations, and that the other instruments gathered data consistently.

**Stage 5. Data collection, phase II (Mar. – May 2017).** Another sampling was performed following refined criteria. After inviting participants, data collection was carried out. Data collection in phase II consisted of: (a) collecting recording of the synchronous classes, which was later processed; (b) administering pre and post-tests to participants; and (c) giving a questionnaire to participants.

**Stage 6. Redesign of observational instrument (July 2017).** After further literature review and interviews with researchers, the observational instruments were redesigned, and first trials using the recorded classes were carried out. Blind coding was performed. Finally, the instruments were validated.

**Stage 7. Data processing. (Jan. – Feb. 2018).** Data was processed, as detailed in section 3.6.

**Stage 8. Writing of dissertation. (Feb. 2017 – Apr. 2018).** The entirety of this dissertation was written in over a year, taking some pauses for reflection, iteration, revision and redesign. It was finalised and submitted for approval.

Table 7. Schedule of research activities

	2016	2017						2018			
	Dec	Jan	Feb	Mar	Apr	May	July	Jan	Feb	Mar	Apr
<b>Stage 1.</b> Setting out research question											
<b>Stage 2.</b> Literature Review											
<b>Stage 3.</b> Design of instruments, phase 1											
<b>Stage 4.</b> Data collection, phase I											
<b>Stage 5.</b> Data collection, phase II											
<b>Stage 6.</b> Redesign of observational instrument											
<b>Stage 7.</b> Data processing											
<b>Stage 8.</b> Writing of dissertation											

Source: Personal collection

## Chapter 4

### Discussion of results

This chapter is divided into two major sections. The first section will introduce the results of the present investigation by the instruments used for data collection. Then, these results will be examined by the hypotheses of the research study.

#### 1. Results

**1.1. Structured Observation Sheet (SOS).** *Table 8* shows the summary of the descriptive statistics for the six dimensions of *SOS* for both *CG* and *EG*. The mean for *SSR* in the *CG* ( $M = 21.7$ ,  $SD = 4.96$ ) is higher than that in the *EG* ( $M=15.4$ ,  $SD = 4.66$ ). In all the other dimensions, however, the means are higher in the *EG*. The dimensions that show the numerically biggest differences are *ESR* and *SSI*. In *ESR* the mean for *CG* is 9.7 ( $SD = 3.46$ ), whereas in *EG* it is 26.4 ( $SD = 3.32$ ). While the mean in *SSI* for *CG* is 15.8 ( $SD = 2.30$ ), it is 43.1 ( $SD = 4.85$ ) for *EG*. These data are also visually represented in *Figure 3*. The conglomerate number of occurrences for *SOS* is given in *Appendix 7*.

Table 8. Summary of Descriptive Statistics SOS

	CG		EG	
	Mean	SD	Mean	SD
<b>SSR</b>	21.66	4.96	15.35	4.66
<b>ESR</b>	9.66	3.46	26.42	3.32
<b>SWR</b>	11.47	5.56	15.45	4.38
<b>EWR</b>	1.06	0.98	2.71	0.74
<b>NVR</b>	7.66	5.56	10.61	2.91
<b>SSI</b>	15.84	2.30	43.13	4.85

Source: Personal collection

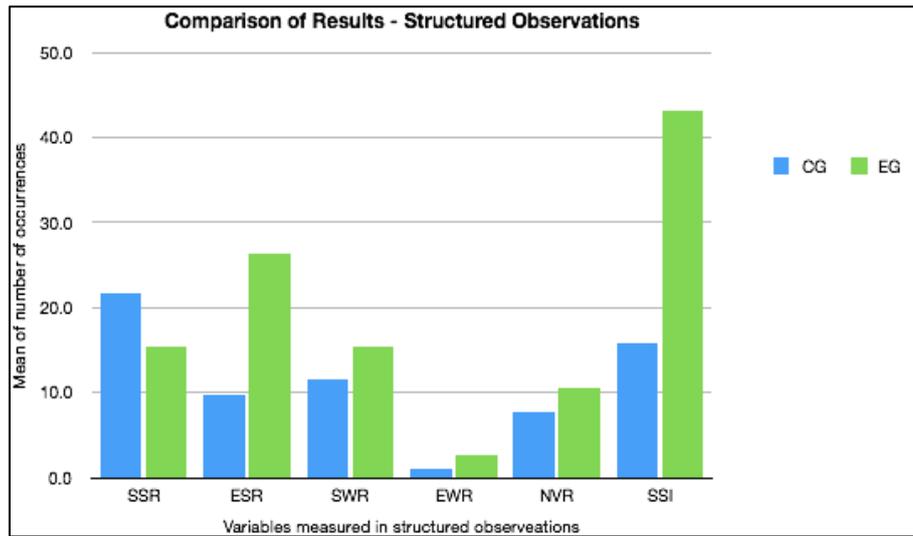


Figure 3 Comparison of results – Structured Observations

Source: Personal collection

CG (N=32) and EG (N=31) were associated with the six variables (SSR, ESR, SWR, EWR, NVR & SSI) shown in *Figure 3*. In order to test the hypothesis that CG and EG were associated with statistically significantly different means for each variable, an independent samples t-test was performed for each variable.

***Results Related to Simple Spoken Response (SSR).*** *Table 9* shows the statistical results for SSR. *Table 10* shows the independent samples *t*- test results

Table 9. SSR Statistics

Groups		N	Mean	Std. Deviation	Std. Error Mean
SSR	Control	32	21.66	4.96	.88
	Experimental	31	15.35	4.66	.84

Source: Personal collection

Table 10. SSR Independent Samples Test

	Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means				
	F	Sig.	t	df	Sig. (2tailed)	Mean Difference	Std. Error Difference
SSR Equal variances assumed	.16	.689	5.20	61	.000	6.30	1.21
Equal variances not assumed			5.20	60.95	.000	6.30	1.21

Source: Personal collection

CG ( $N = 32$ ) was associated with an SSR  $M = 21.66$  ( $SD = 4.96$ ). Similarly, EG ( $N = 31$ ) was associated with an SSR  $M = 15.35$  ( $SD = 4.66$ ). The equality of variances assumption was tested and satisfied with Levene's  $F$  test,  $F(61) = .16$ ,  $p = .689$ . Further, the independent samples  $t$ -test was associated with a statistically significant effect,  $t(61) = 5.20$ ,  $p < .001$  (2-tailed). Thus, CG was associated with a statistically significantly larger SSR mean than EG.

***Results Related to Elaborated Spoken Response (ESR).*** Table 11 shows the statistical results for ESR. Table 12 shows the independent samples  $t$ -test results.

Table 11. ESR Statistics

Groups		N	Mean	Std. Deviation	Std. Error Mean
ESR	Control	32	9.66	3.46	.61
	Experimental	31	26.42	3.32	.60

Source: Personal collection

Table 12. ESR Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
ESR	Equal variances assumed	.003	.953	-19.60	61	.000	-16.76	.855
	Equal variances not assumed			-19.61	60.99	.000	-16.76	.855

Source: Personal collection

CG ( $N = 32$ ) was associated with an ESR  $M = 9.66$  ( $SD = 3.46$ ). By comparison EG ( $N = 31$ ) was associated with an ESR  $M = 26.42$  ( $SD = 3.32$ ). The assumption of homogeneity of variances was tested and satisfied via Levene's  $F$  test,  $F(61) = .003$ ,  $p = .953$ . In addition, the independent samples  $t$ -test was associated with a statistically significant effect,  $t(61) = -19.60$ ,  $p < .001$  (2-tailed). Thus, EG was associated with a statistically significantly larger ESR mean than CG.

**Results Related to Simple Written Response (SWR).** Table 13 shows the statistical results for SWR. Table 14 shows the independent samples  $t$ -test results.

Table 13. SWR Statistics

Groups		N	Mean	Std. Deviation	Std. Error Mean
SWR	Control	32	11.47	5.60	.98
	Experimental	31	15.45	4.39	.79

Source: Personal collection

Table 14. SWR Independent Samples Test

	Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means				
	F	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
SWR Equal variances assumed	2.75	.103	-3.15	61	.003	-3.98	1.26
Equal variances not assumed			-3.16	58.60	.002	-3.98	1.26

Source: Personal collection

CG ( $N = 32$ ) was associated with an SWR  $M = 11.47$  ( $SD = 5.60$ ). By comparison EG ( $N = 31$ ) was associated with an SWR  $M = 15.45$  ( $SD = 4.39$ ). The assumption of equal variances was tested and satisfied via Levene's  $F$ ,  $F(61) = 2.75$ ,  $p = .103$ . Additionally the independent samples  $t$ -test was associated with a statistically significant effect,  $t(61) = -3.15$ ,  $p = .003$  (2-tailed). Thus, EG was associated with a statistically significantly larger SWR mean than CG.

***Results Related to Elaborated Written Response (EWR).*** Table 15 shows the statistical results for EWR. Table 16 shows the independent samples  $t$ -test results.

Table 15. EWR Statistics

Groups	N	Mean	Std. Deviation	Std. Error Mean
EWR Control	32	1.06	.98	.17
Experimental	31	2.71	.74	.13

Source: Personal collection

Table 16. EWR Independent Samples Test

	Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means				
	F	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
EWR Equal variances assumed	1.14	.29	-7.50	61	.000	-1.65	.22
Equal variances not assumed			-7.54	57.53	.000	-1.64	.22

Source: Personal collection

CG ( $N = 32$ ) was associated with an EWR  $M = 1.06$  ( $SD = .98$ ). By comparison EG ( $N = 31$ ) was associated with an EWR  $M = 2.71$  ( $SD = .74$ ). The equality of variances assumption was tested and satisfied with Levene's  $F$ ,  $F(61) = 1.14$ ,  $p = .29$ . Additionally the independent samples  $t$ -test was associated with a statistically significant result,  $t(61) = -7.50$ ,  $p < .001$  (2-tailed). Thus, EG was associated with a statistically significantly larger EWR mean than CG.

***Results Related to Non-Verbal Response (NVR).*** Table 17 shows the statistical results for NVR. Table 18 shows the independent samples  $t$ -test results.

Table 17. NVR Statistics

Groups		N	Mean	Std. Deviation	Std. Error Mean
NVR	Control	32	7.66	5.56	.98
	Experimental	31	10.61	2.91	.52

Source: Personal collection

Table 18. NVR Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
NVR Equal variances assumed	8.59	.005	-2.63	61	.011	-2.96	1.12
Equal variances not assumed			-2.65	47.09	.011	-2.96	1.11

Source: Personal collection

CG (N = 32) was associated with an NVR  $M = 7.66$  ( $SD = 5.56$ ). Similarly, EG (N = 31) was associated with an NVR  $M = 10.61$  ( $SD = 2.91$ ). The assumption of equality of variances was tested and rejected via Levene's  $F$ ,  $F(61) = 8.59$ ,  $p = .005$ . For this variable, the independent samples  $t$ -test was associated with a statistically significant effect,  $t(47.09) = -2.65$ ,  $p = .011$  (2-tailed). Thus, EG was associated with a statistically significantly different NVR mean than CG.

**Results Related to Student-Student Interaction (SSI).** Table 19 shows the statistical results for SSI. Table 20 shows the independent samples  $t$ -test results.

Table 19. SSI Statistics

Groups	N	Mean	Std. Deviation	Std. Error Mean
SSI Control	32	15.84	2.30	.41
Experimental	31	43.13	4.83	.87

Source: Personal collection

Table 20. SSI Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
SSI Equal variances assumed	26.42	.000	-28.77	61	.000	-27.29	.948
Equal variances not assumed			-28.48	42.66	.000	-27.29	.958

Source: Personal collection

CG ( $N = 32$ ) was associated with an SSI  $M = 15.84$  ( $SD = 2.30$ ). By comparison EG ( $N = 31$ ) was associated with an SSI  $M = 43.13$  ( $SD = 4.83$ ). The not homogeneity of variances assumption was tested and adopted via Levene's  $F$ ,  $F(61) = 26.42$ ,  $p < .001$ . Further the independent samples  $t$ -test was associated with a statistically significant result,  $t(61) = -28.77$ ,  $p < .001$  (2-tailed). Thus, EG was associated with a statistically significantly larger SSI mean than CG.

**1.2.Pre- and Post-Tests.** This section will examine the results of the *Pre-* and *Post-Tests* administered to both CG and EG. The raw tests scores obtained in the tests are given in *Appendix H*. Mean scores were compared in order to test the statistical significance of results. A paired sample  $t$ -test was run to determine if the mean score in the pre-test is statistically significantly different from the post-test mean score in CG and EG. Additionally, an independent samples  $t$ -test was performed to test the statistical significance of the comparison of post-test means for CG and EG.

**Results Related to EG.** A dependent samples  $t$ -test was conducted to test the hypothesis that the pre-test ( $M = 13.99$ ,  $SD = 2.43$ ) and post-test score means ( $M = 16.15$ ,  $SD = 2.21$ ) were equal. Further, the correlation between the two conditions was estimated at  $r = .807$ ,  $p < .001$ , suggesting that the dependent samples  $t$ -test is appropriate in this case. The null hypothesis of equal test score means was rejected,  $t(17) = -6.31$ ,  $p < .001$ . Thus, the post-test score mean was statistically significantly larger than the pre-test score mean.

Table 21 shows the descriptive statistics for EG pre- and post-test. Table 22 shows the paired samples correlations. Table 23 shows the dependent samples *t*-test results. Finally, Figure 4 displays the graphic representation of the descriptive statistics for the EG tests results.

Table 21. EG Pre& Post-Test Descriptive Statistics

EG	Mean	N	Std. Deviation	Std. Error Mean
PRE-Test	13.99	18	2.43	.57
POST-Test	16.15	18	2.21	.52

Source: Personal collection

Table 22. EG Paired Samples Correlations

EG	N	Correlation	Sig.
PRE-Test & POST-Test	18	.807	.000

Source: Personal collection

Table 23. EG Paired Samples Test

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
EG PRE-Test – POST Test	-2.17	1.46	.34	-6.31	17	.000

Source: Personal collection

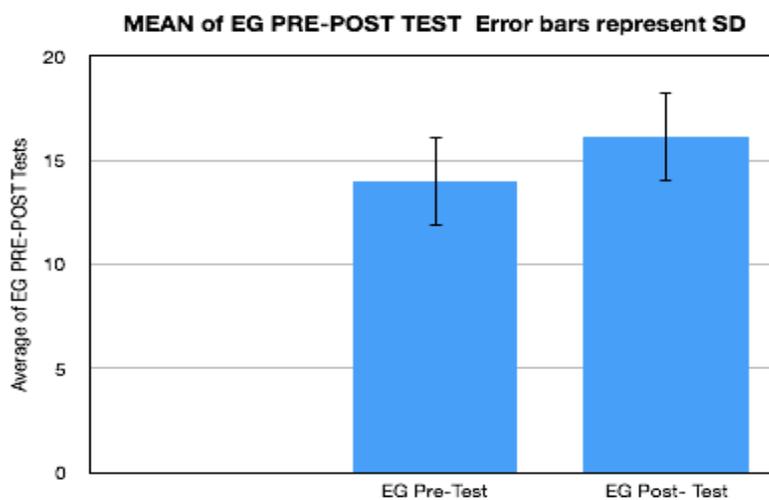


Figure 4 Descriptive Statistics for EG Tests Results

Source: Personal collection

**Results Related to CG.** A dependent samples *t*-test was conducted to test the hypothesis that the pre-test ( $M = 13.44$ ,  $SD = 2.75$ ) and post-test score means ( $M = 14.63$ ,  $SD = 2.94$ ) were equal. Further, the correlation between the two conditions was estimated at  $r = .839$ ,  $p < .001$ , corroborating that the dependent samples *t*-test is appropriate in this case. The null hypothesis of equal test score means was accepted,  $t(17) = -3.09$ ,

$p = .007$ . Thus, the post-test score mean was not statistically significantly higher than the pre-test score mean.

Table 24 shows the descriptive statistics for CG pre- and post-test. Table 25 shows the paired samples correlations. Table 26 shows the dependent samples *t*-test results. Finally, Figure 5 displays the descriptive statistics graphic representation of the CG tests results.

Table 24. CG Descriptive Pre-and Post-Test Statistics

CG	Mean	N	Std. Deviation	Std. Error Mean
PRE_Test	13.44	18	2.749	.648
POST-Test	14.63	18	2.938	.693

Source: Personal collection

Table 25. CG Paired Samples Correlations

	N	Correlation	Sig.
CG PRE_Test & POST-Test	18	.839	.000

Source: Personal collection

Table 26. CG Paired Samples Test

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
CG PRE_Test - POST-Test	-1.181	1.622	.382	-3.088	17	.007

Source: Personal collection

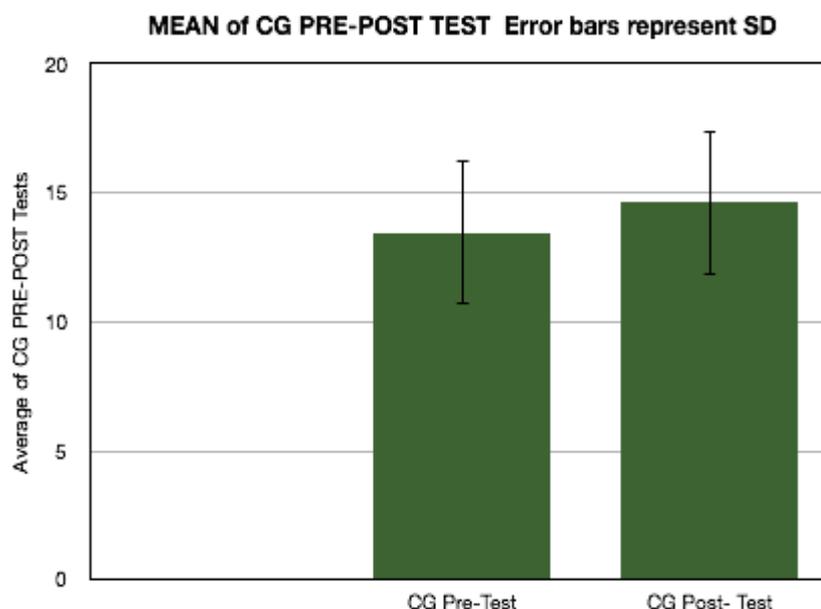


Figure 5 Descriptive Statistics for CG Tests Results

Source: Personal collection

**Results Related to CG and EG.** CG (N = 19) was associated with a post-test  $M = 14.57$  ( $SD = 2.87$ ). By comparison EG (N = 18) was associated with a post-test  $M = 16.15$  ( $SD = 2.21$ ). Levene's  $F$ ,  $F(33.65) = 2.86$ ,  $p = .100$  indicated that variances were not equal. Further, for this variable, the independent samples  $t$ -test was associated with no statistically significant effect,  $t(33.65) = -1.89$ ,  $p = .067$  (2-tailed). Thus, EG was not associated with a statistically significantly higher post-test mean than CG.

Table 27 displays the descriptive statistics for EG and CG post-tests. Table 28 shows the independent samples  $t$ -test results for this variable. Figure 6 displays the graphic representation of the descriptive statistics.

Table 27. EG& CG Post- Test Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
POST	Control	19	14.57	2.87	.66
TEST	Experimental	18	16.15	2.21	.52

Source: Personal collection

Table 28. EG&amp;CG Post-Test Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
POST TEST Equal variances assumed	2.86	.100	-1.88	35	.069	-1.59	.85
Equal variances not assumed			-1.89	33.65	.067	-1.59	.84

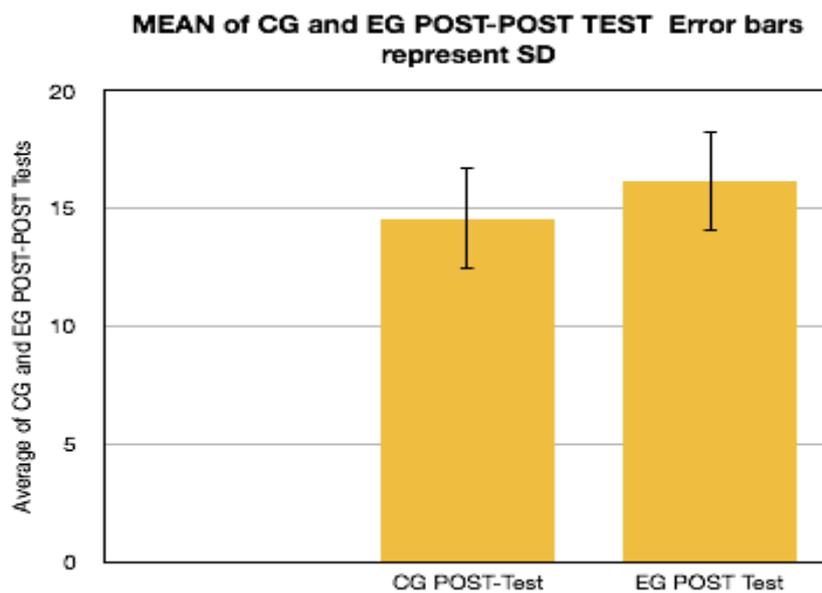


Figure 6. Descriptive Statistics for EG and CG Post- Tests Results

Source: Personal collection

**1.3. Students' Performance Rubric (SPR).** An independent samples *t*-test was conducted to compare the mean scores of EG and CG. The conglomerate sheet of scores is given in *Appendix 9*.

CG (N = 22) was associated with an SPR  $M = 2.96$  ( $SD = .54$ ). By comparison EG (N = 23) was associated with an SPR  $M = 3.49$  ( $SD = .44$ ). The equality of variances assumption was tested and satisfied via Levene's  $F$ ,  $F(43) = .300$ ,  $p = .587$ . In addition, the independent samples *t*-test was associated with a statistically significant effect,  $t(43) = -7.03$ ,  $p < .001$  (2-tailed). Thus, EG was associated with a statistically significantly higher SPR mean than CG.

Table 29 displays the descriptive statistics for EG and CG SPR scores. Table 30 shows the independent samples t-test results. Figure 7 displays the graphic representation of the descriptive statistics.

Table 29. EG & CG SPR Scores Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
SCORE	Control	22	2.96	.54	.11
	Experimental	23	3.99	.44	.09

Source: Personal collection

Table 30. EG & CG SPR Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
SCORE	Equal variances assumed	.300	.587	-7.03	43	.000	-1.03	.14
	Equal variances not assumed			-7.00	40.76	.000	-1.03	.14

Source: Personal collection

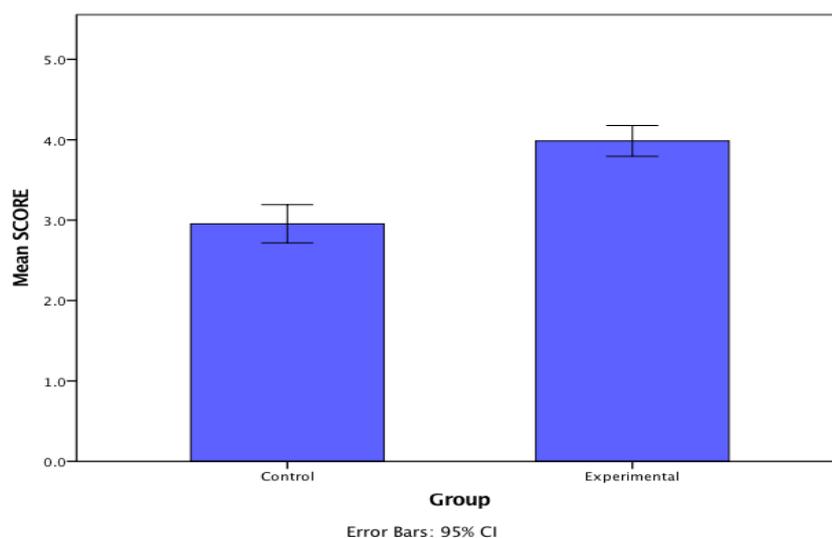


Figure 7. Descriptive Statistics for EG and CG SPR

Source: Personal collection

**1.4. Questionnaire.** *Table 31* displays the summary results for the questionnaire CG participants answered. *Table 32* shows the summary findings for the questionnaire EG participants answered. While questions 1, 5 and 6 give quantitative data, questions 2, 3 and 4 are of qualitative nature. Text analysis was conducted to show the results.

Table 31. CG Questionnaire Results

<b>CG Questionnaire</b>		
(N = 32)		
<b>Question 1: How long have you been studying English online at UPC?</b>		
	(%)	(n)
a) First time	25 %	3
b) Less than 6 m.	33 %	4
c) 6m -1y.	42 %	5
Total	100	12

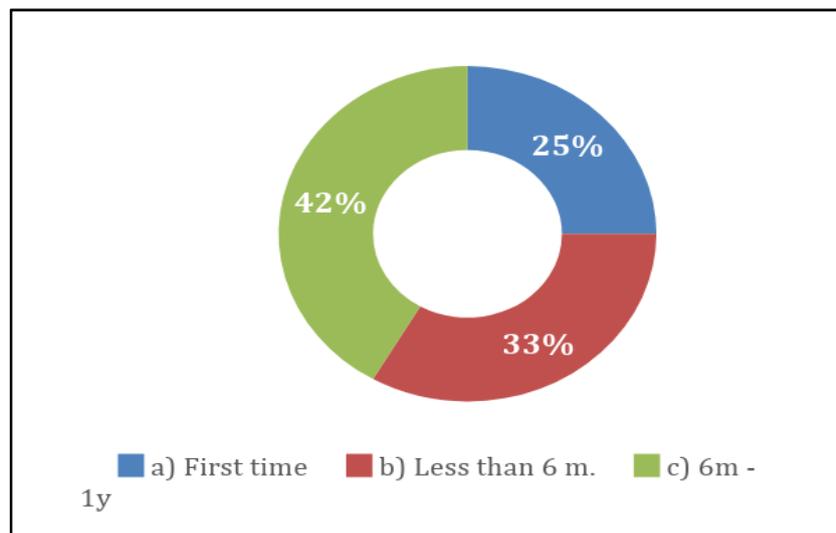


Figure 8. CG Questionnaire Question 1

Source: Personal collection

**Question 2: What do you find most enjoyable about learning English online?**

	(n)	
a) FLEX	7	Flexibility. I can take the class from home.
b) PRCT	1	Practical classes.

- 
- |         |   |                        |
|---------|---|------------------------|
| c) ORDE | 1 | More orderly than f2f. |
| d) FAST | 1 | Faster than f2f.       |
| e) PF2F | 1 | I prefer f2f.          |

This question had 11 valid answers. The others were not intelligible or not related to the question

---

**Question 3: What do you find most challenging about learning English online?**

(n)

- |         |   |                         |
|---------|---|-------------------------|
| a) CONN | 3 | Connectivity issues.    |
| b) AUTO | 1 | Autonomous learning.    |
| c) SHOR | 1 | Short time to do tasks. |

This question had 5 valid answers. The others were not intelligible or not related to the question.

---

**Question 4: What do like/dislike about the live classes with your teacher?**

(n)

- |         |   |  |
|---------|---|--|
| a) FUNP | 2 | (Like) Fun, practical & participative.               |
| b) INTE | 1 | (Like) Interactive.                                  |
| c) PRCE | 1 | (Like) I can practice my English.                    |
| d) BASI | 1 | (Do not like) You need some basis to take the class. |
| e) BANO | 1 | (Do not like) Background noise.                      |
| f) SHOR | 1 | (Do not like) Short time to do activities.           |
| g) CONN | 1 | (Do not like) Connectivity problems.                 |

This question had 5 valid answers. The others were not intelligible or not related to the question.

---

**Question 5: Do you feel the activities during the live classes helped you improve your language use?**

	(%)	(n)
a) Yes	92%	11
b) No	8%	1
Total	100	12

---

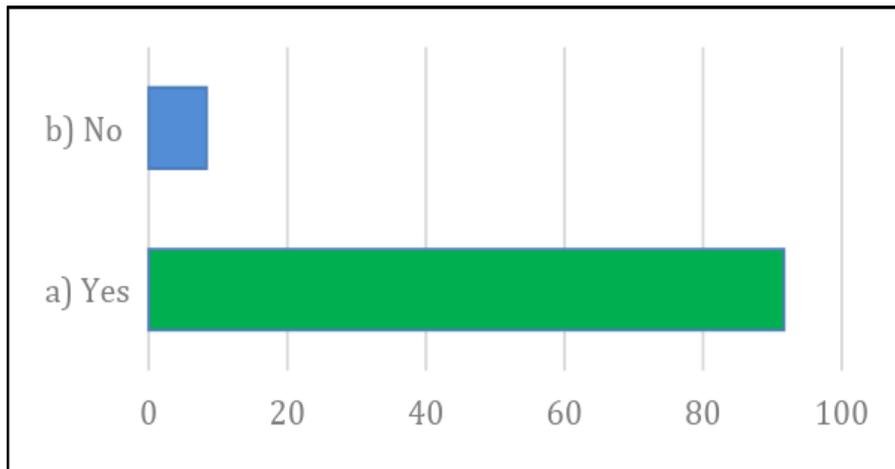


Figure 9. CG Questionnaire Question 5

Source: Personal collection

**Question 6: How effective do you think learning English online is, overall? (1= not effective at all; 100=very effective)**

S1 79	S2 80	S3 72	S4 75
S5 1	S6 65	S7 80	S8 85
S9 100	S10 72	S11 87	S12 70

Source: Personal collection

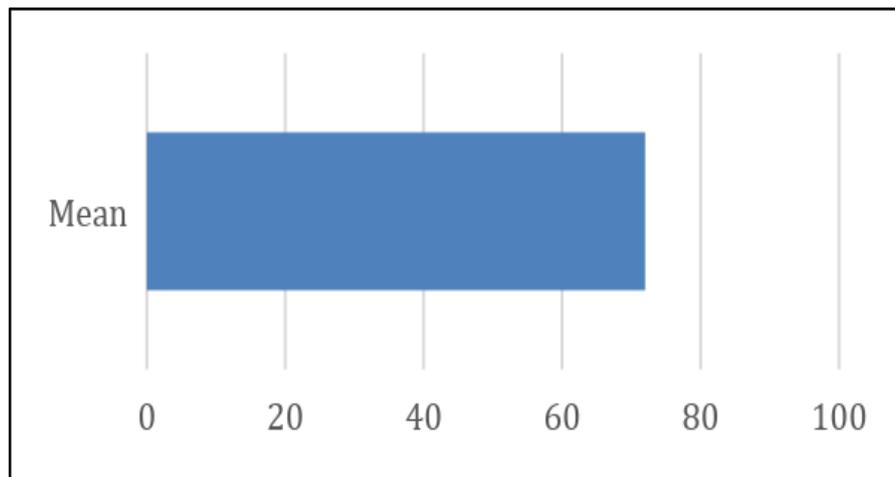


Figure 10 CG Questionnaire Question 6

Source: Personal collection

Table 32. EG Questionnaire Results

EG Questionnaire		
(N = 31)		
<b>Question 1: How long have you been studying English online at UPC?</b>		
	(%)	(n)
a) First time	32 %	7
b) Less than 6m.	23 %	5
c) 6m -1y.	45 %	10
Total	100	22

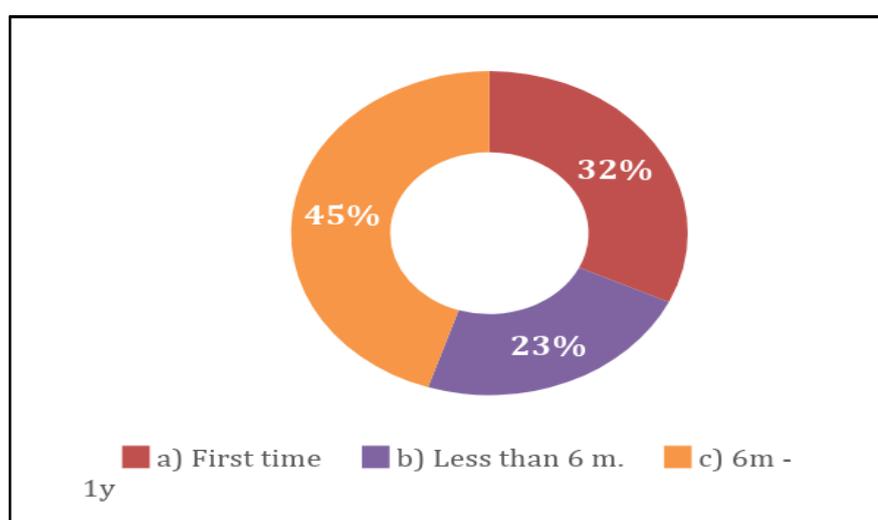


Figure 11. EG Questionnaire Question 1

Source: Personal collection

Table 32. EG Questionnaire Results (continued)

**Question 2: What do you find most enjoyable about learning English online?**

	(n)	
a) FLEX	12	Flexibility. I can take it from home.
b) INTE	1	Interactive nature.
c) SPEA	1	I can speak English with classmates.
d) FAST	1	Faster than f2f.
e) INNO	1	Innovative
f) NOTL	1	I don't like it.

This question had 17 valid answers. The others were not intelligible or not related to the question

---

**Question 3: What do you find most challenging about learning English online?**

	(n)	
a) SHOR	2	Short time to do tasks.
b) AMOU	2	Complete all the assignments
c) CONN	2	Connectivity issues.
d) GRVO	2	Grammar and vocabulary
e) DOUB	1	Slower time response (via email) if I have doubts.
f) NOLE	1	I don't learn much.
g) NOTT	1	Not much theory
h) NOTD	1	Not much direct contact with teacher and classmates.
i) PREP	1	Preparation before class.

This question had 13 valid answers. The others were not intelligible or not related to the question.

---

**Question 4: What do like/dislike about the live classes with your teacher?**

	(n)	
a) INTF	4	(Like) Interactive and fun.
b) GREA	4	(Like) I like it. Great.
c) SHOR	2	(Like) Classes are not long.
d) PRES	1	(Do not like) Pressure to do activities.
e) IF2F	1	(Do not like) I prefer f2f.
f) NOTT	1	(Do not like) Not much theory.
g) INTX	1	(Do not like) Interesting but I prefer f2f.
h) CONN	1	(Do not like) Connectivity problems.

This question had 15 valid answers. The others were not intelligible or not related to the question.

---

**Question 5: Do you feel the activities during the live classes helped you improve your language use?**

	(%)	(n)
a) Yes	86%	19
b) No	14%	3
Total	100	22

---

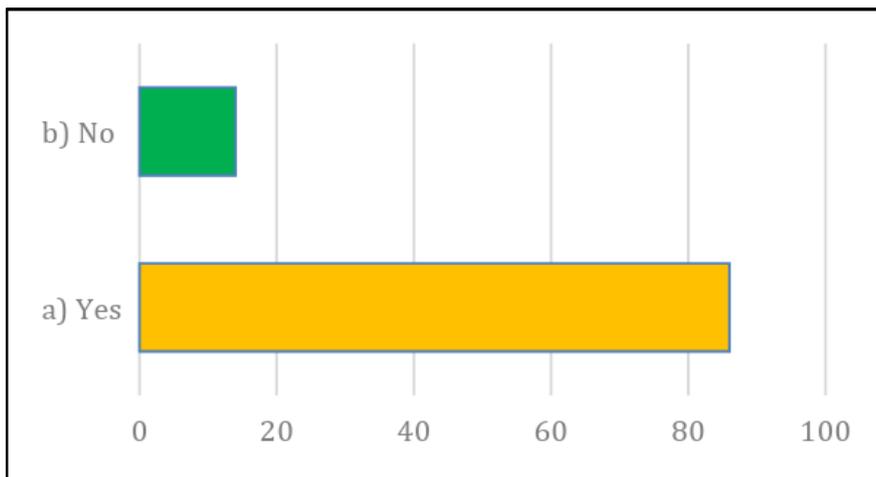


Figure 12. EG Questionnaire Question 5

Source: Personal collection

Table 32. EG Questionnaire Results (continued)

**Question 6: How effective do you think learning English online is, overall? (1= not effective at all; 100=very effective)**

S1 66	S2 78	S3 75	S4 62
S5 88	S6 87	S7 0	S8 90
S9 85	S10 51	S11 95	S12 82
S13 49	S14 22	S15 72	S16 50
S17 50	S18 83	S19 80	S20 70
S21 80	S22 84		

Source: Personal collection

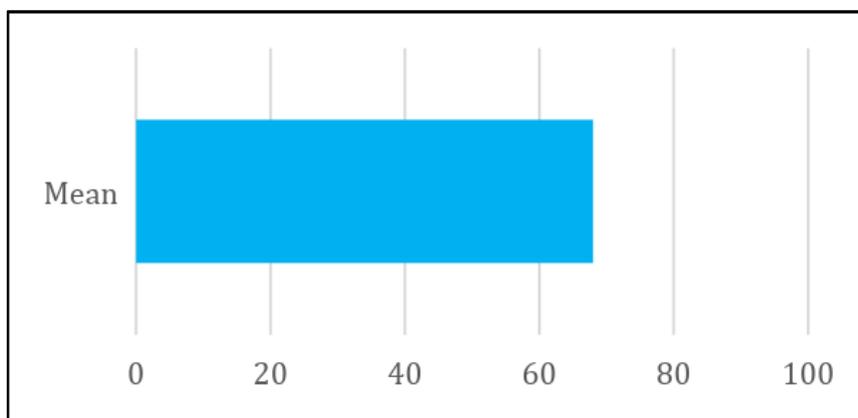


Figure 13 EG Questionnaire Question 6

Source: Personal collection

## 2. Discussion

This section will discuss the results presented in the previous section. First, the results will be examined by the specific hypotheses stated in *Section 1.2.2*. This will constitute the basis upon which the general hypothesis will be discussed. Finally, the participants' perceptions of the English online classes will be surveyed via the questionnaire answers.

### 2.1. Specific hypotheses

*a) Scaffolded instructional material expands students' oral production in live online classes.* This hypothesis was tested via the SOS, specifically via the variables SSR and ESR. The results determined statistically significant differences ( $p < .05$ ) between CG and EG for both variables. Interestingly, though, as per SSR the mean was statistically significantly higher in CG, which revealed that CG students engaged more in simple responses than EG in the live classes (see *Section 4.1*). Regarding ESR, the findings confirmed that EG produced statistically significantly more than CG (see *Section 4.1*). In other words, participants who received the remedy expanded their oral production in live online classes. Such increment consisted not only of simple responses, but also of more complex language constructions. Thus, the evidence revealed that the present specific hypothesis has been proved: scaffolded instructional material expands students' oral production in live online classes.

*b) Scaffolded instructional material increases students' written production in live online classes.* The second specific hypothesis was tested via the SOS, specifically via the variables SWR and EWR. The evidence revealed statistically significant differences ( $p < .05$ ) between CG and EG for the two variables. In both cases (SWR and EWR) the results were statistically significantly higher in EG (see *Section 4.1*). This suggests that the participants who received the remedy increased their written production in live online classes. Hence, the evidence revealed that the present hypothesis has been proved: scaffolded instructional material increases students' written production in live online classes.

**c) Scaffolded instructional material expands student-student interaction in live online classes.** This specific hypothesis was examined via the SOS, specifically via SSI. The findings revealed statistically significant differences ( $p < .05$ ) between CG and EG. The results were statistically significantly higher in EG (see *Section 4.1*). This confirms that participants who received the remedy interacted more with one another than those who did not receive the remedy. Thus, the evidence revealed that the present hypothesis has been proved: scaffolded instructional material expands student-student interaction in live online classes.

**d) Scaffolded instructional material improves students' achievement in live online classes.** This specific hypothesis was tested via SPR. The results showed statistically significant differences ( $p < .05$ ) between CG and EG. The findings (see *Section 4.1*) were statistically significantly higher in EG. This indicates that participants who received the remedy achieved higher in the online classes than those who did not receive the remedy. Thus, the evidence revealed that the present hypothesis has been proved: scaffolded instructional material improves students' achievement in live online classes.

**e) Scaffolded instructional material improves students' use of grammar and vocabulary.**

The last specific hypothesis was tested via *pre-* and *post-tests*. The results consist of three sections: (a) EG *pre-* and *post-tests*, (b) CG *pre-* and *post-tests*, and (c) EG and CG *post-tests*. Firstly, the results on the EG *pre-* and *post-tests* revealed statistically significant differences ( $p < .05$ ). The scores were statistically significantly higher in the EG *post-test* (see *Section 4.1*). This indicates that EG improved their grammar and vocabulary. Secondly, the results on the CG *pre-* and *post-tests* revealed there were no statistically significant differences ( $p < .05$ ). The scores were not statistically significantly higher in the CG *post-test* (see *Section 4.1*). This suggests that CG's improvement of grammar and vocabulary had no statistically significant effect. Thirdly, the results on the CG and EG *post-tests* revealed there were no statistically significant differences ( $p < .05$ ). The *post-tests* scores were not statistically significantly higher in EG (see *Section 4.1*). This would suggest that, when comparing both groups post-experimentally, there were no really statistically significant differences between one another. Despite this, EG did improve statistically significantly their grammar and vocabulary. Thus, it can be concluded that the present hypothesis has been proved: scaffolded instructional material improves students' use of grammar and vocabulary.

**2.2. General hypothesis.** In the present investigation, the dependent variable; that is, students' production, comprises two major categories: (a) *oral production*; and (b) *written production*. These categories are the broad terms associated with the specific hypotheses discussed in the previous section, particularly *specific hypotheses a, b, c and d*. As stated in the previous section, the evidence revealed that EG expanded their oral and written production in live online classes; further it was shown that EG increased their student-student interaction in live online classes. In addition, within the SOS, the dimension categorised as NVR (non-verbal response) showed as well statistically significantly higher ( $p < .05$ ) results in EG than those in CG. That is to say, EG non-verbal responses were larger than CG in live online classes (see *Chapter 4, page 40*).

Thus, it can be concluded that the general hypothesis has been proved: scaffolded instructional material increases students' production in live online classes.

**2.3. Students' perceptions.** The results in this section will be discussed by the questions in the questionnaire.

**Question 1.** Most students (CG = 42%, EG = 45%) studied English online longer than 6 months. This validates the assumption under which the population for the present study was selected: English 5 students are familiar with (or have some experience taking) English online courses at *Universidad Peruana de Ciencias Aplicadas*.

**Question 2.** The majority of participants (CG = 7, EG = 12) stated that what they found most enjoyable about the English online course was how flexible it was due to its online nature and the facility of not having to go to campus to take the class.

**Question 3.** Answers varied for this question. Points of coincidence will be analysed. While CG (n = 3) indicated that connectivity difficulty was what they found most challenging, EG asserted that it was brief time to do tasks (n = 2); and completing all assignments (n = 2).

**Question 4.** Answers varied for this question. Points of coincidence will be analysed. CG (n = 2) indicated that they liked online classes as they were fun and participative, whereas EG expressed (n = 4) classes were interactive and fun, and (n = 4) that they liked and found the English online classes great.

**Question 5.** A clear majority of participants (CG = 92%, EG = 86%) asserted that English online classes helped them improve their language use.

**Question 6.** Most student participants (CG M= 72, EG M= 69) stated that taking online classes was an effective way of learning English.





## Conclusions

The purpose of the present investigation was to explore the existing relationship between scaffolded instructional material and students' production in synchronous online classes. As outlined previously, students' production was sub-categorised into oral production, written production, student-student interaction and student performance. Evidence revealed that scaffolding used in instructional material had a positive effect on learners' production of L2 in live online classes. That is, the results lent some support to the hypotheses formulated in this study, as will be detailed below.

**First**, results revealed that participants in EG, compared to those in CG, increased their oral production, principally their complex oral production in the synchronous online class, which leads us to state that scaffolded instructional material expanded students' L2 oral production. This result is particularly significant for the ELT community, since it shows a direct correlation between a pedagogic strategy; i.e. scaffolding, and student output in L2. In addition, this result provides direct evidence of such strategy used in online settings, given that the study focused on that particular delivery of instruction. Therefore, these findings might be helpful to those interested in implementing fully online programmes that promote meaningful L2 oral production in learners.

**Second**, subjects in EG, in comparison with those in CG, expanded their written production in the live online classes. Hence, it can be concluded that scaffolded instructional material had a positive effect on students' L2 written production in synchronous online classes. Although it is not customary to practise writing in synchronous online sessions in as much detail as in face-face classes, this ability should not be ignored in online instruction. Consequently, this particular finding provides with an interesting resource when designing effective instructional material.

**Third**, individuals in EG interacted far more with one another than individuals in CG. To elaborate, participants in EG used L2 meaningfully with one another during class in greater occasions than those students in CG. This suggests that there might have been fewer opportunities for student-teacher interaction and, more importantly, less teacher talking time (TTT) in EG. Thus, it can be stated that scaffolded instructional material increased student-student interaction. This is particularly important in online settings, as interaction along with collaboration are pivoting factors for successful instruction. Consequently, this result lends

significance to the implementation of online English courses that have a synchronous component.

**Fourth**, in terms of quality of participation in the live classes, EG participants scored higher than participants in CG. Therefore, it can be asserted that scaffolded instructional material helped improve students' achievement in synchronous online classes. One possible explanation for this positive result might be the opportunities EG learners had to use L2 during instruction. Another reasonable explanation might be the treatment itself. To further elaborate, the instructional material was designed based upon scaffolding principles as well as the data obtained from previous research (Lee, 2008), hence the outcome might have had a positive effect on the learners' quality of participation.

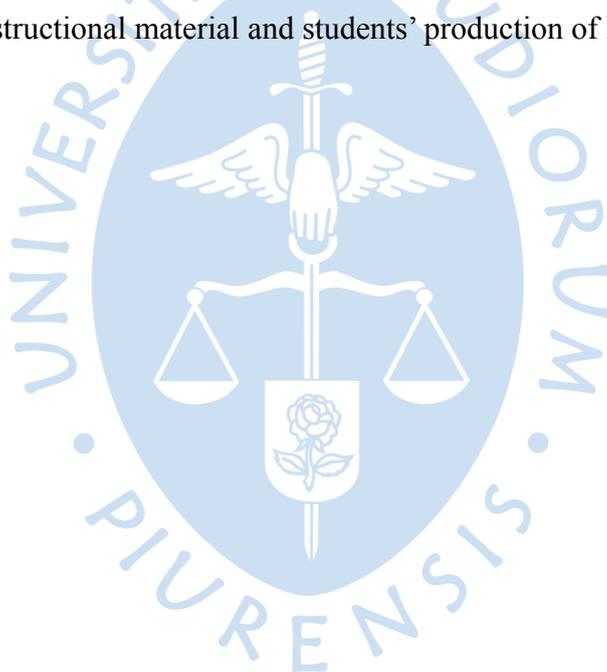
**Fifth**, grammar and vocabulary were measured in both EG and CG. EG students showed higher improvement than CG learners. Nonetheless, it should be noted that there were no significant differences between EG and CG after treatment. This could be due to the dispersion of scores within the groups, considering that not all participants did the *post-test*. In spite of this, EG's results revealed that there was significant improvement in their vocabulary and grammar. Thus, it can be concluded that scaffolded instructional material had a positive effect on improving students' use of grammar and vocabulary.

**Sixth**, students' perceptions of online learning were mostly positive. The majority of participants in the study stated that they found learning English online effective. They also indicated that the online nature of the English course was very convenient for them, as university students, given the flexibility of its nature. Among the aspects that they found challenging were connectivity issues and the number of tasks to complete. These results, which facilitate cross verification of data, provide insightful information from the participants' perspective. The participants asserted that the online English course was effective, which might suggest that meaningful learning did occur when they received online instruction.

In light of the aforementioned, it can be asserted that the hypotheses in the present investigation were all proved to be correct, and that the objectives were all reached. In addition, we consider that this study offers some contributions to the English language teaching (ELT) community: (a) systematic and scientific evidence that instructional material

needs to be adapted for successful and effective online instruction; (b) a principled framework to design scaffolded instructional material that has proved to be effective in online settings; and (c) students' insights on learning English online: most participants stated that they were satisfied with the online modality. In addition, we consider that the evidence from this study might help to explain a real-life pedagogic phenomenon: that of *learning by doing*. For our purposes this should be understood as *active learning*. As previously outlined, the participants who received treatment evidenced a more effective use of L2, as they increased their oral and written production, interacted more with one another and scored higher in terms of quality of participation.

Although we cannot conclusively say that our evidence applies to all online context, we can assert that our findings are valid, and under similar conditions, this study is replicable. Therefore, we can state that findings of the current research establish a direct relationship between scaffolded instructional material and students' production of L2 in online settings.





## Recommendations

There is a wealth of opportunities for future research into students' L2 output in online settings. The following recommendations resulted from reflection on the present investigation and how future studies could further contribute to enriching the emerging pedagogy of online instruction.

**First**, the present study did not consider students' wrong answers in the observational phase, which could be an interesting addition to the observation rubric, so that analysis could be made on the ratio of learner's correct/incorrect responses in the live online classes. Another plausible addition could be that of surveying the kinds of errors students make and propose strategies for self-repair.

**Second**, the *pre-* and *post-tests* could be longer, and they could include other areas to be measured such as reading and listening. However, it is paramount to design the tests in alignment to the course content, especially if the course has a synchronous component. In other words, the instructional material could contemplate specific tasks of listening and reading, which could be evaluated with tests to see whether or not they contribute to the improvement of such abilities.

**Third**, the *questionnaire* could contemplate more questions that provide data about students' satisfaction on different aspects of the online course. By the same token, questions could be asked in order to collect information about course quality. This would be of particular significance to design sound policies for the implementation of online courses, especially in formal contexts.

**Fourth**, future studies could be conducted into interaction patterns in the online class. As it is well known, interaction is a crucial aspect in online instruction. Therefore, course designers would benefit from scientific data that evidence which interaction patterns are favoured in online classes, so that decisions could be made in order to promote learners' active participation in class.

Finally, this study focused on the learner domain. Future investigations could consider the teacher domain so as to examine to what extent teachers or online instructors may or may not have an effect on increasing student's L2 productivity in the online class. Similarly, TTT could be measured and analysed, so that certain pedagogic phenomena can be explained by the results.



## Bibliographical References

### Books and Articles

- Boettcher, J. & Conrad, R. (2010). *The Online Teaching Survival Guide: Simple and Practical Pedagogical Tips*. San Francisco: Jossey-Bass.
- Caws, C. & Heift, T. (2016) Evaluation in CALL: Tools, interactions, outcomes. In F. Farr & Murray, L. (eds). *The Routledge handbook of language learning and technology* (127-140). New York: Routledge.
- Clandfield, L. & Hadfield, J. (2017). *Interaction Online: Creative activities for blended learning*. Cambridge: Cambridge University Press
- Conrad, R. & Donaldson, A. (2004). *Engaging the Online Learner: Activities and Resources for Creative Instruction*. San Francisco, CA: Jossey-Bass.
- Crystal, D. (2010). *The Cambridge encyclopedia of language*. (3<sup>rd</sup> ed.). Cambridge: Cambridge University Press.
- Ellis, R. (2003). *Second Language Acquisition*. Oxford: Oxford University Press.
- Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics: And sex and drugs and rock 'n' roll*. (4<sup>th</sup> ed.) London: SAGE Publications.
- Fifer, F. (1998). *Systematic Methodologies and Strategies for Monitoring Classroom Interactions with a Focus toward Improved Learning and Teaching*. Dallas: SCE Associates.
- Gass, S. & Mackey, A. (2012). (eds). *The Routledge Handbook of Second Language Acquisition*. New York: Routledge.
- Hockly, N. & Clandfield, L. (2010). *Teaching Online: Tools and techniques, options and opportunities*. Surrey: Delta Publishing.
- Hopkins, D. (2008). *A teacher's guide to classroom research*. (4<sup>th</sup> ed.). Berkshire: Open University Press
- Karsley, G. (2000). *Online education: Learning and teaching in cyberspace*. Belmont, CA: Warsworth/Thomson Learning.
- Lantolf, J. & Thorne, S. L. (2007). Sociocultural Theory and Second Language Learning. In B. van Patten & J. Williams (eds.), *Theories in Second Language Acquisition* (201-224). Mahwah, NJ: Lawrence Erlbaum.
- Mitchell, R. & Myles, F. (2004). *Second Language Theories*. (2<sup>nd</sup> ed.). London: Hodder Arnold.
- McCarthy, J. & Carter, J. & Sandiford, H. (2012). *Touchstone*<sup>TM</sup>. New York: Cambridge University Press.

- Nunan, D. (1989). *Designing Tasks for the Communicative Classroom*. Cambridge: Cambridge University Press.
- Nunan (2008). *Research Methods in Language Learning*. New York: Cambridge University Press.
- Palloff, R. & Pratt, K. (2001). *Lessons from the cyberspace: The realities of online teaching*. San Francisco: Jossey- Bass.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass, & C. Madden (Eds.). *Input in second language acquisition*. (235-253). Rowley, MA: Newbury House.
- Swain, M. (2004). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. Lantolf (Ed.). *Sociocultural Theory and Second Language Learning*. (97 – 114). Oxford: Oxford University Press.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. (1987). *The collected works of L.S. Vygotsky: Volume 1. Thinking and Speaking*. New York: Plenum Press.
- Wallace, M. (2002) *Action Research for Language Teachers*. Cambridge: Cambridge University Press.
- White, C. (2003). *Language Learning in Distance Education*. Cambridge: Cambridge University Press.
- Whittaker, C. (2013). 'Introduction' in B. Tomlinson and C. Whittaker (Eds.). *Blended Learning in English Language Teaching: Course Design and Implementation*. London: British Council.
- Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Child Psychiatry*, 17(1), 89–100.

### **Electronic Bibliographical References**

- Bankovic, I. (2015). *Sociocultural Theory and Second Language Acquisition*. Retrieved from: <http://elta.org.rs/kio/nl/02-2015/serbia-elta-newsletter-Feature%20article%20Socio%20cultural%20Theory.pdf>
- Baleghizadeh, Memar and Memar, (2011). A Sociocultural Perception on Second Language Acquisition: The effects of high-structured scaffolding versus low structured scaffolding on the writing ability of EFL learners. *Reflections on English language Teaching*, (10)1, 43-54. Retrieved from: <http://www.nus.edu.sg/celc/research/books/reft/vol10/43to54-baleghizadeh.pdf>

- Beschorner, B. (2013): Parent education for dialogic reading during shared book reading: Multiple case study of online and face-face delivery models (Doctoral dissertation). Retrieved from <https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=4498&context=etd>
- Britannica, Encyclopedia (n.d.) *Vygotsky*. Retrieved from: <https://www.britannica.com/biography/L-S-Vygotsky>
- Bruland, N. (2013): Examining the Relationship between Interaction and Linguistic Outcomes: Is the Online Learning Environment a Viable Alternative to Traditional Classroom Instruction for Beginning Language Learners? (Doctoral dissertation). Retrieved from: <http://diginole.lib.fsu.edu/islandora/object/fsu:185099/datastream/PDF/view>
- Croxton, R. (2014). The Role of Interactivity in Student Satisfaction and Persistence in Online Learning. *MERLOT Journal of Online Learning and Teaching*. doi:10(2): 314-325.
- Dockrell, J.E.; Bakopoulou, I.; Law, J.; Spencer, S. & Lindsay, G. (2012): *The Communication Trust: Communication Supporting Classroom Observation Tool*. Retrieved from: [https://www.thecommunicationtrust.org.uk/media/93866/tct\\_bcrp\\_csc\\_final.pdf](https://www.thecommunicationtrust.org.uk/media/93866/tct_bcrp_csc_final.pdf)
- Ellis, R. (1993). Second language acquisition research: how does it help teachers? *ELT Journal* (47)1, pp. 3-11. Retrieved from: <https://academic.oup.com/eltj/articleabstract/47/1/3/618460?redirectedFrom=fulltext>
- Espasa, A., & Meneses, J. (2010). Analyzing feedback processes in an online teaching and learning environment: An exploratory study. *Higher Education*, 59(3), 277-292. doi:10.1007/s10734-009-9247-4
- Flanagan, N. (2018). Increasing Interaction in a Flipped Online Classroom through Video Conferencing. *TechTrends*, 62(1), 618-624. doi:10.1007/s11528-018-0336-z
- Hampel, R. (2006). Rethinking task design for the digital age: A framework for language teaching and learning in a synchronous online environment. *ReCALL*, 18(1), 105 -121. doi:10.1017/S0958344006000711
- Hampel, R. & de los Arcos, B.(2013). Interacting at a distance: a critical review of the role of ICT in developing the learner–context interface in a university language programme. *Innovation in Language Learning and Teaching*, 7(2), 158–178. doi:10.1080/17501229.2013.776051
- Higher Education Academy (n.d.): *Flipped Learning*. Retrieved from: <https://www.heacademy.ac.uk/knowledge-hub/flipped-learning-0>
- Hockly, N. (2015). Developments in online language learning. *ELT Journal*, (69)3, 308-313. doi: 10. 1093/elt/ccv020.

- Hockly, N. (2016). *Focus on Learning Technologies*. (eBook). Retrieved from: [https://elt.oup.com/catalogue/items/global/teacher\\_development/oxford\\_key\\_concepts\\_for\\_the\\_language\\_classroom/9780194002929?cc=gb&selLanguage=en&mode=hub](https://elt.oup.com/catalogue/items/global/teacher_development/oxford_key_concepts_for_the_language_classroom/9780194002929?cc=gb&selLanguage=en&mode=hub)
- Institute for Higher Education Policy. (2000). *Quality on the line: benchmarks for success in Internet-base distance education*. Retrieved from: <http://www.ihep.org/research/publications/quality-line-benchmarks-success-internet-based-distance-education>
- Johnson, C. (2013). Increasing Students' Academic Involvement: Chilean Teacher Engagement with Learners in Blended English as a Foreign Language Courses. (Doctoral dissertation). Retrieved from: <https://search.proquest.com/openview/fbbc46063465d4d42a4e0904726fed06/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Kimberlin, C., Winterstain, A. (2008). Validity and reliability of measurement instruments used in research, *American Journal of Health System Pharmacy*, 65(23)2276-2284. doi: <https://doi.org/10.2146/ajhp070364>
- Lee, L. (2000). Evaluating intermediate Spanish students' speaking skills through a taped test: A pilot study, *Hispania*, 83(2), 127-138. doi:10.2307/346151.
- Lee, L. (2008). Focus-on-form through collaborative scaffolding on expert-to-novice online interaction, *Language Learning and Technology*, (12)3, 53-72. doi:10.1.1.563.4698
- Liu, X., Magjuka, R. J., Bonk, C. J., & Lee, S.-H. (2007). Does sense of community matter? An examination of participants' perceptions of building learning communities in online courses. *Quarterly Review of Distance Education*, 8(1), 9-24. Retrieved from: <https://eric.ed.gov/?id=EJ875048>
- Mahle, M. (2011). Effects of interactivity on student achievement and motivation in distance education. *Quarterly Review of Distance Education*, 12(3), 207-215. Retrieved from: <http://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15283518&AN=70303055&h=blw%2bOLZISGa5qCII%2fItpTx6PVwHRSyF4hjCccVwZN7PzEGMMQ4T0IBn5puJ9YviMzG%2fnjNYUy%2bmJbmk8uL9UQ%3d%3d&crl=f&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlh=ashurl%3dlogin.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authype%3dcrawler%26jrnl%3d15283518%26AN%3d70303055>
- McLeod, S. (2014). *Simply Psychology: Private Speech*. Retrieved from: <https://www.simplypsychology.org/vygotsky.html>
- Open University (n.d.). *Lyceum Voice Groupware*. Retrieved from: <http://projects.kmi.open.ac.uk/lyceum/>
- Park, J.-H., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Educational Technology & Society*, 12(4), 207-217. Retrieved from [http://www.ifets.info/journals/12\\_4/18.pdf](http://www.ifets.info/journals/12_4/18.pdf)
- Rollins, K. (2011). Classroom Observations of Instructional Practices and Technology Used by Elementary School Teachers and Students in an Ethnically-and Economically-Diverse School District (Doctoral dissertation). Retrieved from:

<http://oaktrust.library.tamu.edu/bitstream/handle/1969.1/ETD-TAMU-2011-08-10055/ROLLINS-DISSERTATION.pdf?sequence=2>

- Saito, K. 2018. *Recasting*. The TESOL Encyclopaedia of English Language Teaching. 1–6. doi: 10.1002/9781118784235.eelt0097
- Jaggars, S. and Xu, D. (2016). How do online course design features influence student performance?. *Computers & Education*, 95(1), 270-284. doi: 10.1016/j.compedu.2016.01.014
- Tayebinik, M. and Puteh, M. (2013). Does greater participation in online courses lead to passing grade? An EFL learning context. *British Journal of Educational Technology*. doi: 10.1111/bjet.12095
- The Glossary of Education Reform. (2014). *Learning environment*. Retrieved from: <https://www.edglossary.org/learning-environment/>
- Thornbury, S. (n.d.). An A-Z of ELT. Scott Thornbury's blog. Retrieved from: <https://scottthornbury.wordpress.com/tag/output-hypothesis/>
- Thurmond, V. A., Wambach, K., Connors, H. R., & Frey, B. B. (2002). Evaluation of student satisfaction: Determining the impact of a web-based environment by controlling for student characteristics. *American Journal of Distance Education*, 16(3), 169-190. doi:10.1207/S15389286AJDE1603\_4
- Tomlinson, B. & Whittaker, C. (2015). Blended Learning in English Language Teaching: Course and Implementation. *TESOL Quarterly*, (49)1, (210 - 212). doi: 10.1002/tesq.215.
- Seale, C. (2017). *Researching Society and Culture* (4th ed). [Kindle version]. London: SAGE Publications.
- Sun, S. (2011). Online Language Teaching: The Pedagogical Challenges. *Knowledge Management & E-Learning: An International Journal*, 3(3), (428 – 447). Retrieved from: <http://kmel-journal.org/ojs/index.php/online-publication/article/viewArticle/89>
- Ware, P. (2005). “Missed” Communication in online communication: tensions in a German-American Telecollaboration. *Language Learning and Technology*, 9(2), (64 -89). Retrieved from: [https://scholarspace.manoa.hawaii.edu/bitstream/10125/44020/1/09\\_02\\_ware.pdf](https://scholarspace.manoa.hawaii.edu/bitstream/10125/44020/1/09_02_ware.pdf)
- Warschauer, M., & Liaw, M. (2011). Emerging technologies for autonomous language learning. *Studies in Self-Access Learning Journal*, 2(3), (107-118). Retrieved from: [https://sisaljournal.org/archives/sep11/warschauer\\_liaw/](https://sisaljournal.org/archives/sep11/warschauer_liaw/)
- Yang, Y., & Durrington, V. (2010). Investigation of Students' Perceptions of Online Course Quality. *International Journal On E-Learning*, 9(3), 341-361. Retrieved from: <http://ezproxy.lib.ryerson.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric &AN=EJ895734&site=ehost-live>



## Appendices





## Appendix 1

### A Sample of the scaffolded instructional material

Welcome

# English 5

**Unit 2: Personal Tastes – Lesson C**  
Synch Session #7

Cover slide

Agenda

**Session Objective:** By the end of the session the student talks about their tastes in music.

**WARMUP**  
Music knowledge quiz

**PRODUCTION WORK**  
know-it's-like poetry    Completing expressions    Musical tastes

**WRAPUP**  
Summary    Self-Evaluation

Agenda slide

Warm up

## Music knowledge Quiz

<ol style="list-style-type: none"> <li>1. genre _____</li> <li>2. lyrics _____</li> <li>3. band _____</li> <li>4. beat _____</li> <li>5. musical instrument _____</li> </ol>	<ol style="list-style-type: none"> <li>a. a strong rhythm in popular music</li> <li>b. musicians who play popular music together, often with a singer or singers</li> <li>c. the words of a song</li> <li>d. an object to produce musical sounds</li> <li>e. a particular type or style of music</li> </ol>
--	---



Slide 1

Production 1

## I know! It's like poetry.

<ol style="list-style-type: none"> <li>1. I just hate listening to music on the radio – they always play the same stuff! _____</li> <li>2. Rap is very clever, the way it rhymes and tells a story. _____</li> <li>3. I like music with a good rhythm, something catchy. _____</li> <li>4. I have every song The Beatles ever made. _____</li> <li>5. I like songs that mean something, with words you can remember. _____</li> </ol>	<ol style="list-style-type: none"> <li>a. Uh-huh. You like a good beat.</li> <li>b. I know. It's like poetry.</li> <li>c. Yeah. Good lyrics are important.</li> <li>d. Wow. That's a big collection!</li> <li>e. Right. There's not much variety.</li> </ol>
---	--



Slide 2

## Production 2

**Do you remember the expressions?**

1. \_\_\_\_\_. You like a good beat.
2. I \_\_\_\_\_. It's like poetry.
3. \_\_\_\_\_. Good lyrics are important.
4. \_\_\_\_\_. That's a big collection!
5. \_\_\_\_\_. There's not much variety.



Slide 3

## Production 2

**These responses help us...**

1. Uh-huh. You like a good beat.
2. I know. It's like poetry.
3. Yeah. Good lyrics are important.
4. Wow! That's a big collection!
5. Right. There's not much variety.

a) offer support    b) agree with the other person

c) summarize things people say



Slide 4

Production



**Breakout Rooms**  
**Musical tastes**

Created by Edward Boatman  
from the Noun Project

In pairs, make up a short conversation about your tastes in music.  
Make sure you both use expressions to summarize what people say.



Slide 5

Production



**Feedback: Musical tastes**

Created by Edward Boatman  
from the Noun Project



Slide 6

Summary

- I can complete sentences.
- I can use expressions to summarize what people say.
- I can have short conversations about music.



Slide 7

Wrap Up

**Music genres?**

☐  
☐



Created by Chamaquito Pan de Dulce  
from the Noun Project

Thank you!



Slide 8

Image credits

- *Blog icon* designed by Edward Boatman from the thenounproject.com
- *Music icon* by Edward Boatman from the thenounproject.com
- *Hand icon* designed by Chamaquito Pan de Dulce from the thenounproject.com



Slide 9

### Instructions – teaching notes

**Slide 1** Students will test their knowledge of music. They have to match the music words (1-5) with their definitions (a-e).

Give them one minute to read and match. Students may be assigned a colour each, so they can easily be identified. The student who finishes first is the winner.

Nominate different students to read each word and its definition. Provide feedback on pronunciation where necessary.

Answers

1. e
2. c
3. b
4. a
5. d

**Slide 2** Students have to match each statement with the best response.

Give them one minute as prep time and tell them they have to be ready to give the answers.

Nominate different students to give the answers as the rest votes right/wrong. This can be done with the students drawing lines, writing the letters or simply saying the letters. Notice that this part has to be fast. It's just giving/checking answers.

Then have a student read a green statement and another student replies reading the blue response. This is an opportunity to practice intonation.

Answers

e  
b  
a  
d  
c

**Slide 3** Students have to complete the ideas with the expressions they used in the previous activity.

Give them 30 seconds as prep time. Then nominate a student to participate. This student invites another and so on and so forth.

You might want to remind them to keep the right intonation. Help them when necessary.

Possible answers

1. Uh-huh.
2. I know.
3. Yeah.
4. Wow.
5. Right.

**Slide 4** Students have to vote for the correct option.  
Have a student read all the statements as the rest votes: a, b or c.

Answer: c

**Slide 5** Have a student read the instructions. Make sure they all understood by voting yes/no.

Take students to the private rooms in pairs.

Allow a good 10 – 12 min.

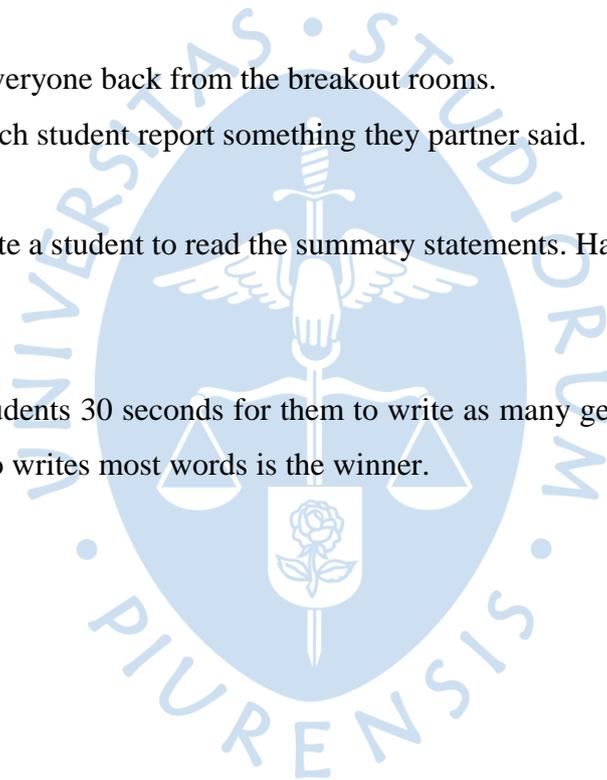
Visit the rooms to assist and monitor as necessary.

**Slide 6** Bring everyone back from the breakout rooms.

Have each student report something they partner said.

**Slide 7** Nominate a student to read the summary statements. Have the others vote: yes/no.

**Slide 8** Give students 30 seconds for them to write as many genres as they know. The one who writes most words is the winner.



## Appendix 2

### Invitation to collaborate in research project – participants

(Spanish/ English)

#### A Research Project Investigating Whether Scaffolding Aids and Improves Students Achievement in Online Classes

# HELLO!

Estimados estudiantes,

Mi nombre es Iriana Valdivia, Docente a Tiempo a Completo de la Carrera de Traducción e Interpretación Profesional y Coordinadora de los cursos de Inglés Online de UPC. Quisiera invitarlos a participar en el proyecto de investigación titulado “*An Investigation into Whether Scaffolding Aids and Improves Students Performance in English Online Classes at Universidad Peruana de Ciencias Aplicadas – UPC*”.

El enfoque de este proyecto es investigar la relevancia que tiene el diseño de material en la participación y performance de los estudiantes en los cursos de inglés 100% online. Así mismo, me interesa indagar que tan seguros se sienten ustedes al realizar las diferentes actividades en las clases por videoconferencia que están llevando en el curso de inglés online.

En esta parte del documento, que está en español, les explico en qué consiste la participación en el proyecto. Luego, en la página 3, encontrarán el documento oficial en inglés.



[iriana.valdivia@upc.edu.pe](mailto:iriana.valdivia@upc.edu.pe)

#### ¿Por qué estoy realizando este proyecto?

Esta investigación es mi trabajo de tesis para obtener el título de Maestría en Educación con Mención en Enseñanza de Inglés Como Lengua Extranjera; con los resultados de mi investigación espero aportar información valiosa para el área de diseño curricular, no solo en UPC sino también en la comunidad global de enseñanza de inglés como lengua extranjera

#### ¿Qué es lo que implica tu participación?

Mi recolección de datos implica lo siguiente:

1. Test diagnóstico
2. Observaciones de clase
3. Cuestionario
4. Test de salida

Los *tests* (semana 2 y semana 6) serán aplicados online en Blackboard; no se considerarán como parte de tu evaluación del curso; ¡pero te servirán como preparación para el examen parcial!

Las observaciones las realizaré con las grabaciones de clase durante las semanas 3 – 6, tu contribución implica asistir a clase y participar de forma natural. Finalmente, el cuestionario será aplicado online en la semana 6; este cuestionario es bastante corto, así que no te tomará más de cinco minutos llenarlo. ;)

### ¿Estás obligado a participar?

No. Tu participación es completamente voluntaria y si no quisieras participar; por favor, avísale a tu profesora para que me lo haga saber.

### ¿Mi nombre aparecerá en la investigación?

No. La identidad de los participantes es completamente confidencial. Todos los nombres serán debidamente codificados.



### Introduction

I would like to invite you to participate in this project, which is concerned with how material design is relevant to your progress and performance in the English Online courses at UPC. I'm also interested in how much confidence you feel you have doing the activities in the English Online course you are taking now.

### Why am I doing the project?

The project is the action research for the thesis to get my Master's degree in Teaching English as a Foreign Language. It is hoped that the project could provide useful information for curricular design in English Online courses not only at UPC, but also at a global scale.

### Are you obliged to participate?

No. Participation is entirely voluntary. If you do not wish to take part in the project, please contact your English teacher.

**What will you have to do if you agree to take part?**

Your participation involves: a) taking a pre-study and a post-study test; b) doing the normal activities you do in the English Online course, as I will observe the class recordings during Weeks 3 - 6; and c) fill out a questionnaire. The instruments I'll use; i.e. the tests, observations and questionnaire will help me collect data in order to analyse it and obtain the results of my research study.

**Will my name appear in the research study?**

No. This project is entirely confidential. Your name will be anonymised and your identity will be properly coded.

**What do I do if I have questions about my participation?**

Please contact me at [iriana.valdivia@upc.edu.pe](mailto:iriana.valdivia@upc.edu.pe)





## Appendix 4

### A sample of Pre- & Post-Test

#### Continue: English 5 Online: Pre-Study Test

---

**1. Instructions**

Timed Test	This test has a time limit of 20 minutes. Your remaining time is approximately 06 minutes, 41 seconds.
Timer Setting	You will be notified when time expires, and you may continue or submit.
Force Completion	This test can be saved and resumed later. The timer will continue to run if you leave the test.

Click **Continue** to continue: English 5 Online: Pre-Study Test. Click **Cancel** to go back.  
You will be previewing this assessment and your results will not be recorded.

---

**2. Submit**

*Click Begin to start. Click Cancel to quit.*

#### Preview Test: English 5 Online: Pre-Study Test

**^ Test Information**

**Description** Thank you for taking this test. It will diagnose your English level. It is not part of the official evaluation in the course, but it's very important for us to know your real English level before you start the course.

The test lasts 20 minutes. You will answer grammar and vocabulary questions to get a total of 20 points.

---

**Instructions**

**Timed Test** This test has a time limit of 20 minutes. You will be notified when time expires, and you may continue or submit. Warnings appear when **half the time, 5 minutes, 1 minute, and 30 seconds** remain. *[The timer does not appear when previewing this test]*

**Multiple Attempts** Not allowed. This test can only be taken once.

**Force Completion** This test can be saved and resumed later. The timer will continue to run if you leave the test.

This test does not allow backtracking. Changes to the answer after submission are prohibited.

∨ **Question Completion Status:**

**Question 1**

Is the following sentence **Right** or **Wrong**?

I've known Mark for ten years.

- Right  
 Wrong

1 points [Save Answer](#)

**Question 2**

Is the following sentence **Right** or **Wrong**?

I'm watching a great TV show on Netflix.

- Right  
 Wrong

1 points [Save Answer](#)

**Question 3**

Please choose the best option to complete the question.

What kind of TV shows \_\_\_\_\_ you watch?

- a. do  
 b. does  
 c. are  
 d. have

1 points [Save Answer](#)

**Question 4**

The following sentence is grammatically **correct**.

We agreed paying the full price.

- True  
 False

1 points [Save Answer](#)

**Question 5**

Please choose the best option to complete the sentence.

Tom finished \_\_\_\_\_ the text for the assignment.

- a. read  
 b. reading  
 c. reads  
 d. to read

1 points [Save Answer](#)

**Question 6**

Please choose the best option to complete the sentence.

Paul wanted to study Law, but ended up \_\_\_\_\_ Business Administration.

- a. to study  
 b. studying  
 c. study  
 d. studies

1 points [Save Answer](#)

**Question 7**

The following sentence is grammatically **correct**.

I've always loved travelling by plane.

- True  
 False

1 points [Save Answer](#)

**Question 8**

Please choose the best option to complete the sentence.

I was \_\_\_\_\_ on a bus at this time yesterday.

- a. to sit
- b. sat
- c. sit
- d. sitting

1 points [Save Answer](#)**Question 9**

The following sentence is grammatically **correct**.

Joshua spent three weeks looking for an apartment.

- True
- False

1 points [Save Answer](#)**Question 10**

Please choose the best option to complete the sentence.

Last weekend I \_\_\_\_\_ to the movies with a couple of friends.

- a. have gone
- b. went
- c. going
- d. gone

1 points [Save Answer](#)**Question 11**

The two sentences below (a and b) have similar meaning.

- a) You're more interested in art than me.
- b) You're as interested in art as I am.

- Yes
- No

1 points [Save Answer](#)**Question 12**

The two sentences below (a and b) have similar meanings.

- a) I would like to have more shoes.
- b) I have as many shoes as I want.

- Yes
- No

1 points [Save Answer](#)**Question 13**

Please choose the best option to complete the sentence.

Jenny, you look as \_\_\_\_\_ as your sister.

- a. best
- b. better
- c. good
- d. just

1 points [Save Answer](#)**Question 14**

The following question is grammatically **correct**.

Wasn't the movie a bit boring?

- True
- False

1 points [Save Answer](#)**Question 15**

Please choose the best option to complete the question.

\_\_\_\_\_ Tom like this perfect jacket?

- a. Isn't
- b. Is
- c. Aren't
- d. Doesn't

1 points [Save Answer](#)

**Question 16**5 points [Save Answer](#)

Match each type of clothing with the most suitable material (A - E).

- 
- 
- 
- 
- 

- A. silk
- B. denim
- C. cotton
- D. suede
- E. wool

**Save and Submit**

*Click Save and Submit to save and submit. Click Save All Answers to save all answers.*

[Save All Answers](#)[Save and Submit](#)



## Appendix 6

### Questionnaire

#### Instrument: Questionnaire

Via *Survey Monkey*

We'd like to find out what you think about learning English online, so please take a few minutes to fill out the survey below. Please note that the survey is anonymous - we do not need your name. Thank you!

#### 1 How long have you been studying English *online* at UPC?

- a) It is the first time I have studied English *online* at UPC.
- b) Less than 6 months
- c) 6 months – 1 year

#### 2 What do you find most enjoyable about learning English online?

[Textbox]

#### 3 What do you find most challenging about learning English online?

[Textbox]

#### 4 What is your opinion of the real-time videoconferencing classes you had with your teacher?

What did you like/dislike about these classes? Why?

[text box]

#### 5 Do you feel the activities during real-time classes helped you improve your language use?

- a) Yes
- b) No

Please explain your choice.

[text box]

#### 6 How effective do you think learning English online is, overall? (1= not effective at all; 100=very effective)

[Choose 1-100]

Thank you for your comments.

**Appendix7**  
**SOS conglomerate sheet**

Groups (CG=1, EG=2)	SSR	ESR	SWR	EWR	NVR	SSI
1	19	16	16	1	10	18
1	19	16	19	0	19	17
1	21	13	22	1	13	21
1	10	10	14	0	11	15
1	21	12	14	1	26	21
1	19	17	13	0	15	19
1	16	11	15	2	13	14
1	26	16	23	0	14	17
1	22	9	12	0	5	17
1	29	14	23	0	11	17
1	17	5	10	4	8	15
1	17	7	9	1	8	15
1	18	7	7	0	4	15
1	22	15	21	1	9	16
1	16	10	20	0	12	17
1	27	11	10	1	5	13
1	22	9	8	1	2	19
1	23	7	6	1	4	18
1	29	9	7	2	5	16

1	17	7	7	1	7	15
1	27	8	9	1	3	17
1	34	8	7	2	7	14
1	28	7	8	2	6	15
1	20	7	8	0	3	14
1	16	8	8	3	3	15
1	23	7	10	1	3	13
1	28	6	6	2	3	12
1	22	9	8	0	4	15
1	21	5	8	2	3	14
1	20	7	5	1	3	16
1	21	8	7	2	3	11
1	23	8	7	1	3	16
2	16	26	18	3	16	39
2	13	29	21	3	15	41
2	16	25	20	3	13	40
2	11	29	20	3	12	43
2	12	26	19	2	11	42
2	10	31	17	3	13	41
2	10	24	14	2	12	39
2	10	23	11	3	9	39
2	11	21	14	2	8	41
2	12	21	19	3	8	39

2	9	23	8	1	8	37
2	11	25	15	4	10	39
2	15	19	8	1	8	39
2	14	22	9	3	7	40
2	15	24	13	3	10	34
2	15	23	8	3	6	36
2	27	30	15	3	11	48
2	24	29	13	3	13	52
2	21	25	16	1	17	48
2	15	29	17	3	13	48
2	16	29	15	3	8	48
2	17	29	21	3	10	47
2	25	32	26	3	14	47
2	13	29	12	3	8	47
2	16	27	18	3	7	45
2	13	26	21	4	11	47
2	24	31	14	2	11	47
2	16	28	17	3	14	48
2	14	29	11	3	6	44
2	18	27	16	3	10	53
2	17	28	13	2	10	39

**Appendix 8**  
**Test raw scores**

CG (n =19)			EG (n = 18)		
	Pre-Test	Post- Test		Pre-Test	Post-Test
S1	08	10.50	S1	13	16
S2	12	13	S2	17	18
S3	14	15.75	S3	12	12.5
S4	15	16	S4	17	20
S5	15	17	S5	10	14
S6	15	17.5	S6	14	17
S7	13	11	S7	16	16
S8	11	13	S8	16	15
S9	15	14	S9	16	18
S10	12	14	S10	14	16
S11	16	18	S11	16	19
S12	15	13	S12	11	14
S13	11	11.5	S13	9	11.5
S14	12	16	S14	16	16
S15	17	17	S15	13	17
S16	17	17	S16	12.75	16
S17	08	09	S17	13	15.5
S18	16	19	S18	16	19
S19	10	13.5			

**Appendix 9**  
**SPR conglomerate scores**

	<b>Group (CG=1, EG=2)</b>	<b>ID</b>	<b>SCORE</b>
<b>1</b>	1	S1	3.3
<b>2</b>	1	S3	3.3
<b>3</b>	1	S5	2.7
<b>4</b>	1	S6	3.3
<b>5</b>	1	S8	3.3
<b>6</b>	1	S9	3.0
<b>7</b>	1	S10	4.0
<b>8</b>	1	S11	1.3
<b>9</b>	1	S15	2.3
<b>10</b>	1	S1B	3.3
<b>11</b>	1	S4B	3.0
<b>12</b>	1	S5B	3.0
<b>13</b>	1	S6B	3.0
<b>14</b>	1	S7B	3.0
<b>15</b>	1	S8B	3.3
<b>16</b>	1	S9B	3.3
<b>17</b>	1	S10B	3.3
<b>18</b>	1	S11B	2.3
<b>19</b>	1	S12B	2.7
<b>20</b>	1	S13B	2.7
<b>21</b>	1	S14B	2.7
<b>22</b>	1	S16B	2.7

23	2	S1	4.0
24	2	S2	3.7
25	2	S3	4.0
26	2	S4	4.0
27	2	S5	3.7
28	2	S6	3.7
29	2	S7	4.3
30	2	S9	4.3
31	2	S10	4.3
32	2	S11	4.3
33	2	S12	3.3
34	2	S15	2.7
35	2	S16	3.7
36	2	S1B	3.3
37	2	S2B	4.3
38	2	S3B	4.3
39	2	S7B	4.3
40	2	S8B	4.3
41	2	S10B	4.3
42	2	S11B	4.0
43	2	S12B	4.3
44	2	S14B	4.0
45	2	S15B	4.3

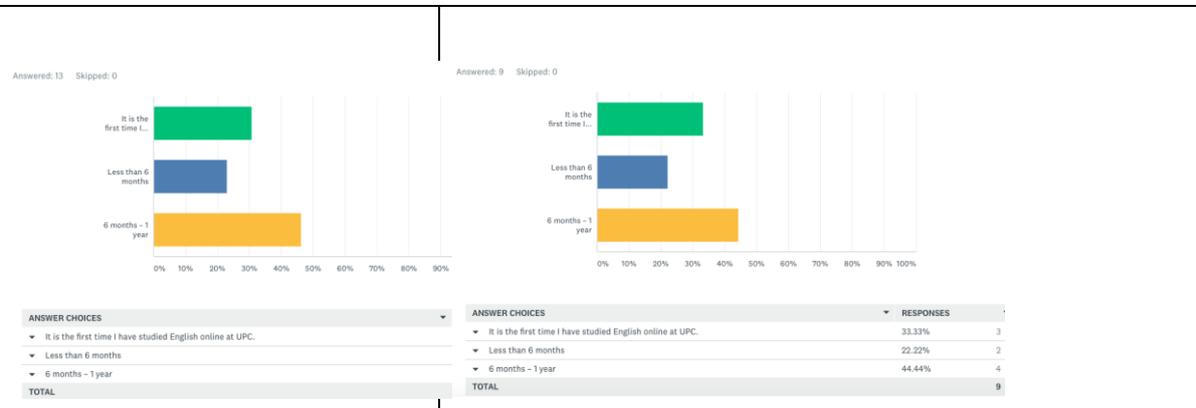




## Appendix 11

### Samples of students' responses to questionnaire

#### Question 1: How long have you been studying English Online at UPC?



#### Question 2: What do you find most enjoyable about learning English online? You may answer in Spanish.

<p>5/5/2017 5:57 PM <a href="#">View respondent's answers</a></p> <p>The most enjoyable thing to learning English online, is that I can be in my house at the same time.</p>	<p>5/5/2017 5:57 PM <a href="#">View respondent's answers</a></p> <p>Las clases son muy prácticas y las puedes recibir cómodamente desde casa.</p>
<p>5/2/2017 6:58 PM <a href="#">View respondent's answers</a></p> <p>You can express yourself better, since it is more orderly than in a classroom.</p>	<p>5/2/2017 6:58 PM <a href="#">View respondent's answers</a></p> <p>El corto tiempo que dura la clase y la facilidad de ser online.</p>
<p>5/2/2017 6:58 PM <a href="#">View respondent's answers</a></p> <p>me permite llevar el curso en un horario desde la oficina sin necesidad de ir a la universidad y perder el horario. si tuviera que ir a la universidad a clases presenciales no podría llevar el curso por fata de tiempo porque trabajo hasta las 5pm</p>	<p>5/3/2017 7:58 AM <a href="#">View respondent's answers</a></p> <p>Aprender desde la comodidad de mi casa.</p>
<p>5/3/2017 7:57 AM <a href="#">View respondent's answers</a></p> <p>Is a new method and better than classroom.</p>	<p>5/3/2017 11:01 AM <a href="#">View respondent's answers</a></p> <p>no, prefiero que sea presencial, es mucho mejor porque hay mas participación, tiempo e interacción.</p>
<p>5/3/2017 7:57 AM <a href="#">View respondent's answers</a></p> <p>Puedo tener horarios más flexibles. No es necesario viajar hasta la universidad.</p>	<p>5/3/2017 11:01 AM <a href="#">View respondent's answers</a></p> <p>ME PARECE MUY AGRADABLE LAS CLASES Y ES UNA DE LAS MEJORES MANERAS DE NO PERDER TANTO TIEMPO EN EL TRAFICO</p>
<p>5/3/2017 7:56 AM <a href="#">View respondent's answers</a></p> <p>Me parece más rápido.</p>	<p>5/3/2017 11:00 AM <a href="#">View respondent's answers</a></p> <p>que puedo hacerlo desde mi casa</p>
<p>5/3/2017 7:55 AM <a href="#">View respondent's answers</a></p> <p>que puedo estar en clase desde mi casa.</p>	<p>5/3/2017 11:00 AM <a href="#">View respondent's answers</a></p> <p>nada</p>
	<p>5/3/2017 9:58 AM <a href="#">View respondent's answers</a></p> <p>Lo mas agradable es la facilidad de las clases online</p>
	<p>5/3/2017 7:55 AM <a href="#">View respondent's answers</a></p> <p>Que puedo estudiar desde la comodidad de mi casa.</p>

**Question 3: What do you find most challenging about learning English online? You may answer in Spanish.**

Innovación en contenido y formato virtual.

5/3/2017 9:08 AM

Poder hablar en ingles con otras personas

5/3/2017 9:02 AM

a veces no hay mucho tiempo para entender todas las cosas

5/3/2017 9:02 AM

Ammm , lo que es la gramática y tambien algunas partes del vocabulario.

5/3/2017 9:01 AM

Cumplir con todas las tareas, eso es lo más desafiante.

5/3/2017 9:01 AM

Es dificil poder escuchar los audios.

5/5/2017 6:05 PM

[View](#)

Me es un poco dificil el listening, porque aun hay palabras que me confunden un poco en el sonido de la pronunciación.

5/5/2017 5:57 PM

[View](#)

The most challenging about learning English online is that you learning alone and you need to be responsible with that.

5/5/2017 5:57 PM

[View](#)

Aprender y estudiar por uno mismo.

5/2/2017 6:58 PM

[View](#)

The most difficult is sometimes to listen to the partners because sometimes it is not heard well

5/2/2017 6:58 PM

[View](#)

me parece que no se aprende bien la teoría

5/3/2017 11:00 AM

[View respondent's answer](#)

vocabulario

5/3/2017 11:00 AM

[View respondent's answer](#)

No tener el contacto mas directo con la profesora y compañeros

5/3/2017 9:58 AM

[View respondent's answer](#)

La conexión a internet a veces falla

5/3/2017 9:57 AM

[View respondent's answer](#)

El problema es con la conexión a veces y me gustaria que la versión para celular de las synch sessions fuera mejor, la app Bb Student es muy pobre

#### Question 4: What do you like/dislike about the live classes with your teacher?

Es novedoso e igual de efectivo que las clases presenciales

5/3/2017 7:58 AM

I like the class.

5/3/2017 7:57 AM

a mí me gustan porque aprendo rápido y desarrollo todas las actividades.

5/3/2017 7:56 AM

sí me han gustado

5/3/2017 7:55 AM

no me gusta mucho, prefiero las clases presenciales

5/3/2017 7:55 AM

No me gusta que siempre haya bulla y que muchos alumnos tengan problemas de conexión.

5/5/2017 6:05 PM

Vi

No me disgusta nada, solo que a veces la conexión falla y es un poco molesto perderte minutos de clases.

5/5/2017 5:57 PM

Vi

For me the real-time videoconferencing classes are good because I can speak in English and practice my pronunciation.

5/5/2017 5:57 PM

Vi

Son muy prácticas y entretenidas, me gusta participar con los compañeros y desarrollar el léxico.

5/2/2017 6:58 PM

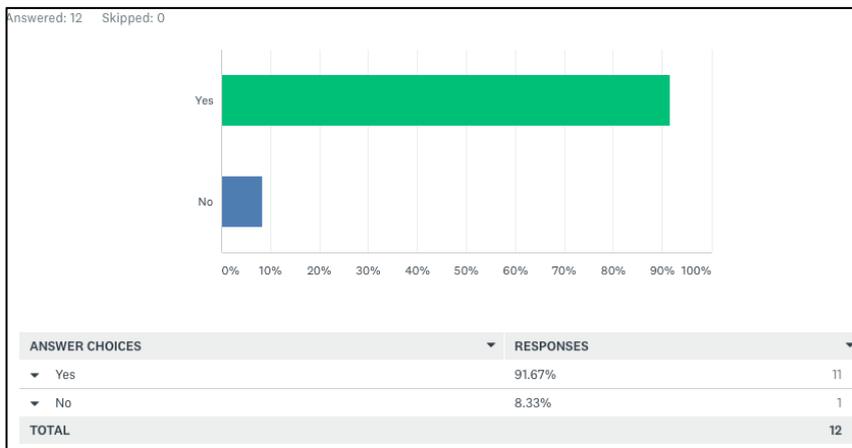
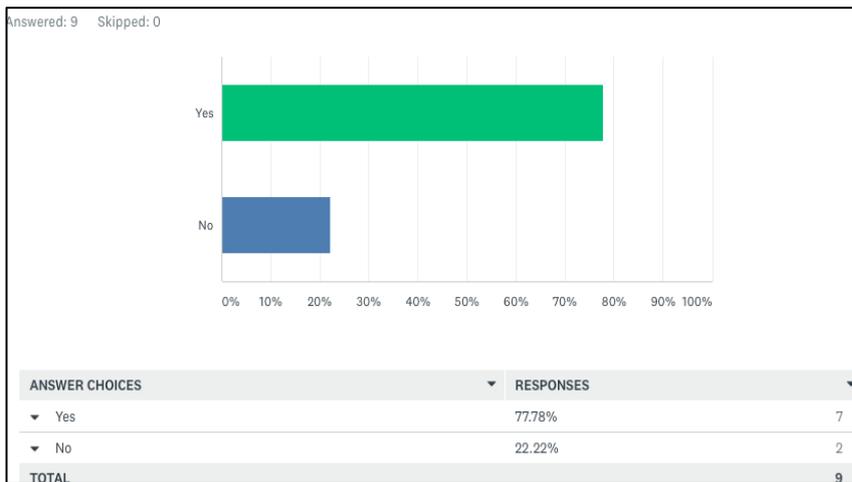
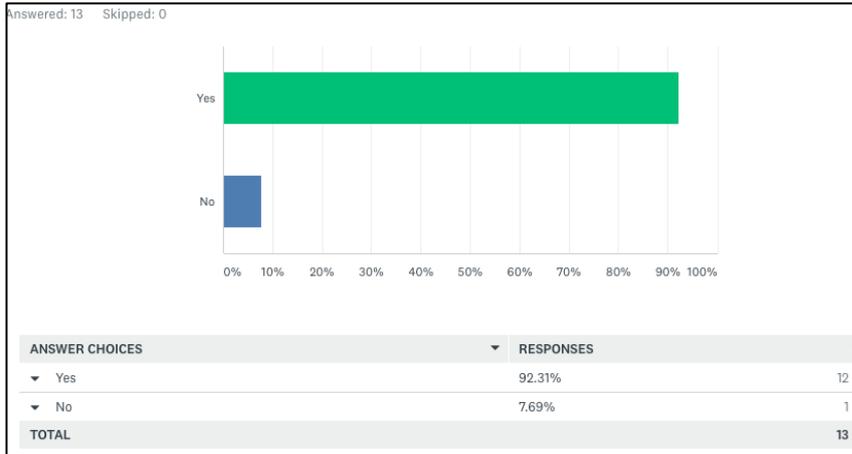
Vi

I like the teacher understands us and pays attention

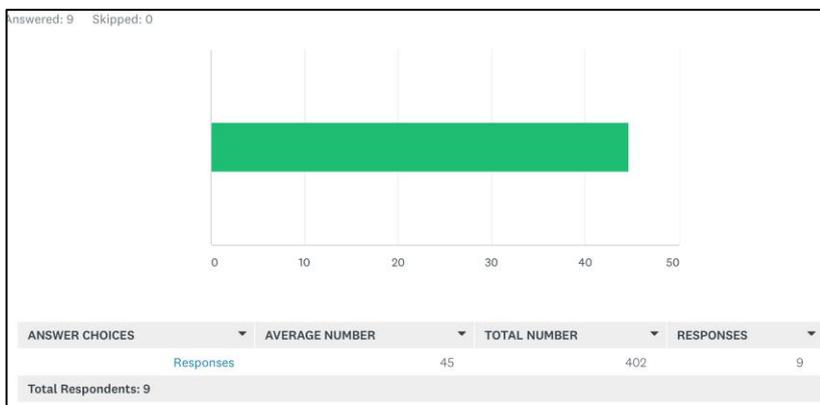
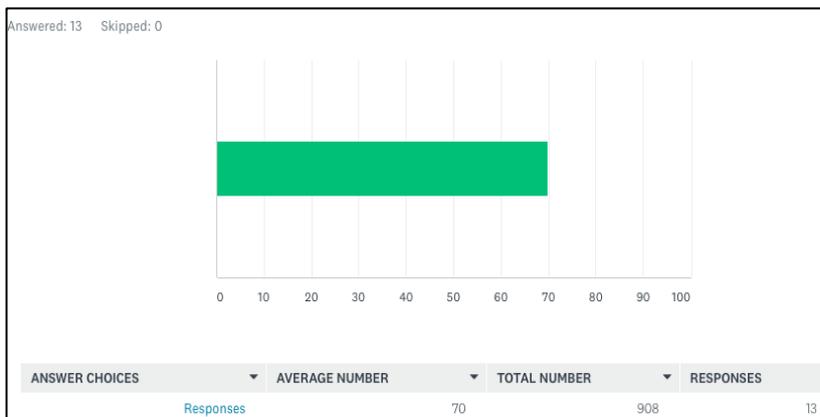
5/2/2017 6:58 PM

Vi

Question 5: Do you feel the activities during real-time classes helped you improve your language use?



Question 6: How effective do you think learning English online is, overall? (1= not effective at all; 100=very effective)



## Appendix 12

### Rationale design for scaffolded instructional material

#### Cover slide

- Course name
- Lesson name / number
- Institution logo

#### Agenda slide

- Clearly indicate your intended learning objective (ILO). Use an action verb. Focus on the outcome students will produce. Prevent from stating the outcome based on grammar points.
- Clearly indicate the lesson stages. In general, aim to divide it into: warmer, production work, wrap up and summary.

#### Warmer slide

- Very brief activity just to get learners to work. Ideally no longer than 5 minutes.

#### Production slides

- Start by including high to medium-degree scaffolding (depending on the course level) so students do somewhat controlled production.
- Gradually remove the scaffolding/ assistance so that learners produce L2 more independently.
- Mind sequencing.
- Focus on revision of language items rather than presentation.
- Provide clear opportunities for students to interact with another. Ideally this should be done in breakout rooms.
- Consider feedback time, where students demonstrate what they did in the interaction stage.
- All slides must be properly labelled indicating which stage learners are in.

### Wrap up slide

- Quick activity that allows students to wrap up the lesson.

### Summary slide

- List of *can-do* statements that are aligned with agenda/ ILO



**Appendix 13****Test: pool of questions**

Pool of 49 questions based on grammar and vocabulary items of *Touchstone 4*, Units 1 -3. Correct answers are highlighted. In Blackboard, the multiple-choice options shall be presented randomly.

**Question 1**

Please choose the best option to complete the sentence.

Tom finished \_\_\_\_\_ the text for the assignment.

a. reading

b. reads

c. to read

d. read

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 2**

Please choose the best option to complete the sentence.

Have you ever considered \_\_\_\_\_ to Egypt?

a. travelling

b. travel

c. to travel

d. travels

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 3**

Please choose the best option to complete the sentence.

Paul wanted to study Law, but ended up \_\_\_\_\_ Business Administration.

a. studying

b. study

c. studies

d. to study

Correct feedback: Well done!

Incorrect feedback: Oops!

#### Question 4

Please choose the best option to complete the sentence.

Megan offered \_\_\_\_\_ me with the project.

a. to help

b. helping

c. helps

d. help

Correct feedback: Well done!

Incorrect feedback: Oops!

#### Question 5

Please choose the best option to complete the sentence.

I was expected \_\_\_\_\_ all the questions, but I missed three at the end of the test.

a. to answer

b. answers

c. answering

d. answer

Correct feedback: Well done!

Incorrect feedback: Oops!

#### Question 6

The following sentence is grammatically **correct**.

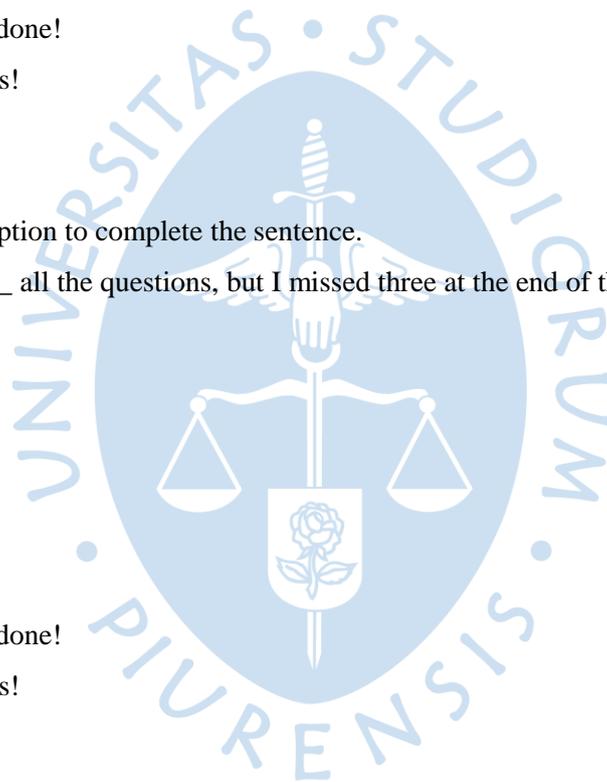
Joshua spent three weeks looking for an apartment.

True

False

Correct feedback: Well done!

Incorrect feedback: Oops!



**Question 7**

The following sentence is grammatically **correct**.

I've always loved travelling by plane.

**True**

False

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 8**

The following sentence is grammatically correct.

We agreed paying the full price.

True

**False**

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 9**

Please choose the best option to complete the question.

What kind of TV shows \_\_\_\_\_ you watch?

**a. do**

b. does

c. are

d. have

Correct feedback: Well done!

Incorrect feedback: Oops!

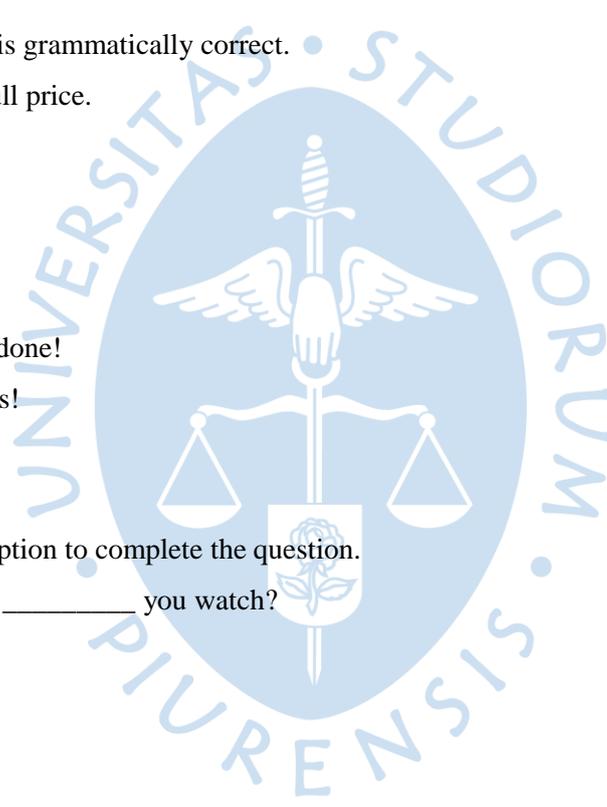
**Question 10**

Please choose the best option to complete the sentence.

I was \_\_\_\_\_ on a bus at this time yesterday.

**a. sitting**

b. sit



- c. sat
- d. to sit

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 11

Please choose the best option to complete the sentence.

Last weekend I \_\_\_\_\_ to the movies with a couple of friends.

- a. went
- b. have gone
- c. going
- d. gone

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 12

Is the following sentence **Right** or **Wrong**?

I have never been living abroad.

Right

**Wrong**

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 13

Is the following sentence **Right** or **Wrong**?

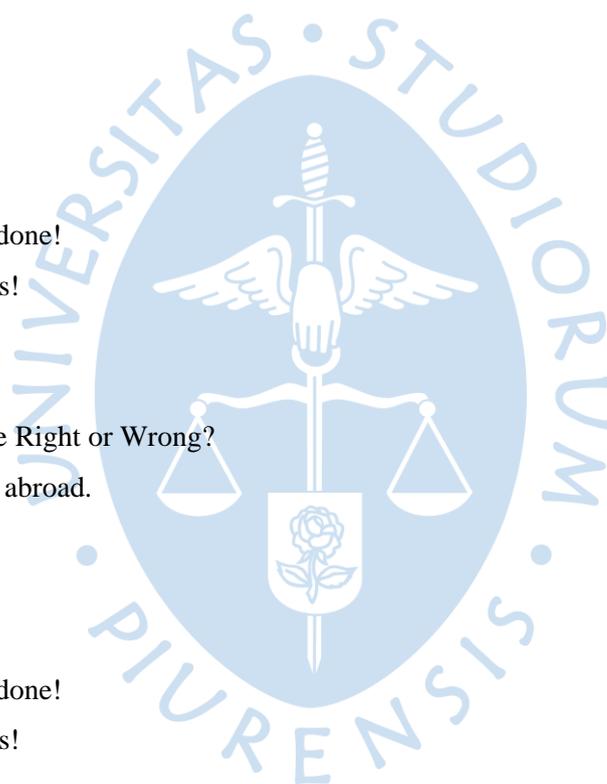
Tom haven't called me yet.

Right

**Wrong**

Correct feedback: Well done!

Incorrect feedback: Oops!



**Question 14**

Is the following sentence **Right** or **Wrong**?

I'm watching a great TV show on Netflix.

**Right**

Wrong

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 15**

Is the following sentence **Right** or **Wrong**?

I've known Mark for ten years.

**Right**

Wrong

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 16**

Is the following question **Right** or **Wrong**?

What were you doing this time yesterday?

**Right**

Wrong

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 17**

Please choose the best option to complete the sentence.

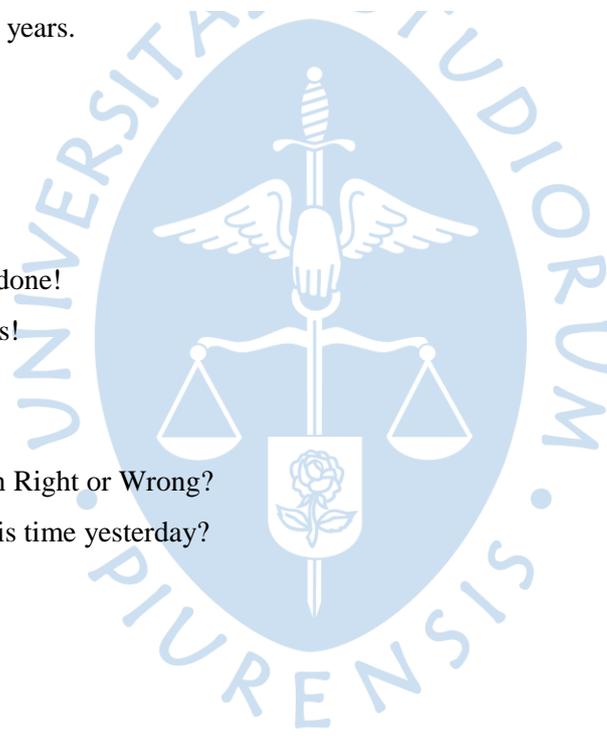
Jenny, you look as \_\_\_\_\_ as your sister.

**a. good**

b. better

c. just

b. best



Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 18

Please choose the best option to complete the sentence.

Jim is not \_\_\_\_\_ Joe.

a. as tall as

b. tall

c. tall than

b. taller

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 19

Please choose the best option to complete the sentence.

I don't like short hair \_\_\_\_\_ long hair.

a. as much as

b. much

c. as much

b. as many as

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 20

Please choose the best option to complete the sentence.

Joan spends as little \_\_\_\_\_ possible on makeup.

a. money as

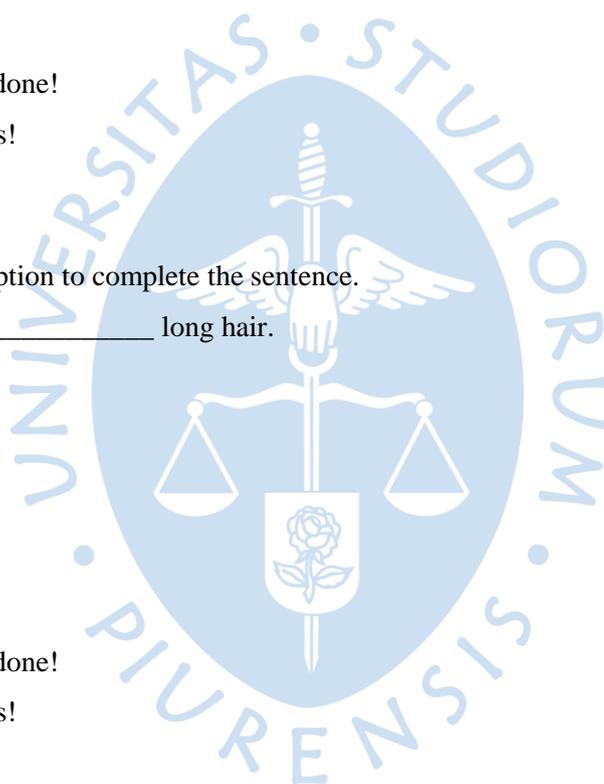
b. as

c. money

b. as money as

Correct feedback: Well done!

Incorrect feedback: Oops!



**Question 21**

The two sentences below (a and b) have similar meaning.

- a) Silvie is very tall. Sonya is also very tall.
- b) Silvie is as tall as Sonya.

Yes

No

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 22**

The two sentences below (a and b) have similar meaning.

- a) You're more interested in art than me.
- b) You're as interested in art as I am.

Yes

No

Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 23**

The two sentences below (a and b) have similar meaning.

- a) Both these jeans and these pants are comfortable.
- b) These jeans are comfortable as these pants.

Yes

No

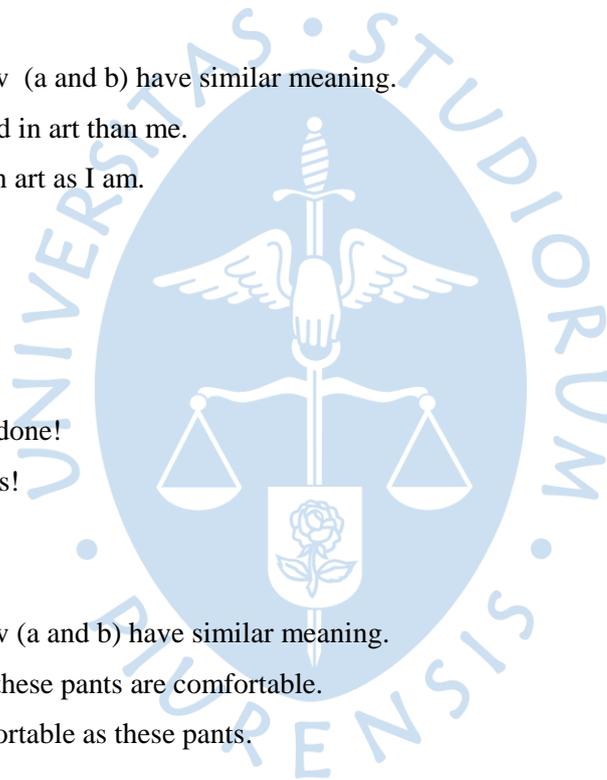
Correct feedback: Well done!

Incorrect feedback: Oops!

**Question 24**

The two sentences below (a and b) have similar meaning.

- a) I would like to have more shoes.
- b) I have as many shoes as I want.



Yes

No

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 25

Please choose the best option to complete the question.

\_\_\_\_\_ this T-shirt awesome?

a. Isn't

b. Aren't

c. Does

d. Doesn't

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 26

Please choose the best option to complete the question.

\_\_\_\_\_ Tom like this perfect jacket?

a. Doesn't

b. Isn't

c. Aren't

d. Is

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 27

Please choose the best option to complete the question.

\_\_\_\_\_ it a little big for you?

a. Isn't

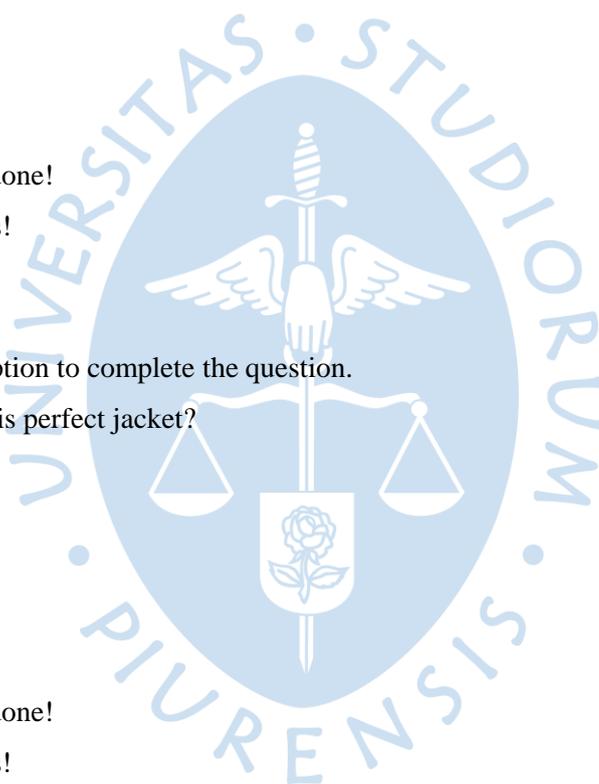
b. Aren't

c. Doesn't

d. Are

Correct feedback: Well done!

Incorrect feedback: Oops!



**Question 28**

Please choose the best option to complete the question.

It'd look great on you, \_\_\_\_\_ you think?

a. don't

b. does

c. isn't

d. aren't

Correct feedback: Well done!

Incorrect feedback: Oops!

Question 29

The following question is grammatically correct.

Don't you find it annoying?

True

False

Correct feedback: Well done!

Incorrect feedback: Oops!

Question 30

The following question is grammatically correct.

Doesn't you think it's too expensive?

True

False

Correct feedback: Well done!

Incorrect feedback: Oops!

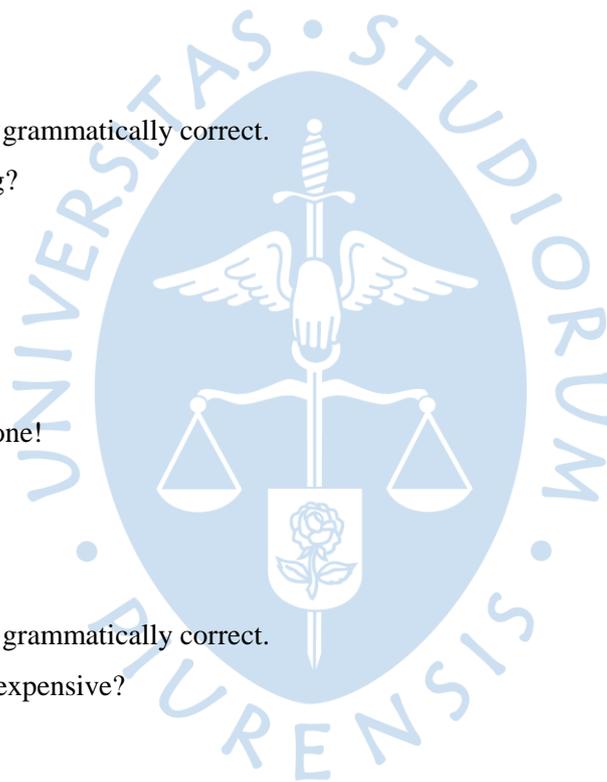
**Question 31**

The following question is grammatically **correct**.

Wasn't the movie a bit boring?

True

False



Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 32

The following question is grammatically **correct**.

Don't you think Regina is a great student?

**True**

False

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 33

Please choose the correct option to complete the sentence.

The Marsellaise is the national anthem in France. When \_\_\_\_\_?

**a. is it sung**

b. it sing

c. sang

d. it's sing

Correct feedback: Well done!

Incorrect feedback: Oops! Please check the passive voice.

### Question 34

Please type in the verb in parenthesis in present simple passive to complete the sentence/question.

Ceviche \_\_\_\_\_ (make) with raw fish and lemon juice.

Answer (Exact match – case sensitive): is made

Correct feedback: Well done! Ceviche is made with raw fish and lemon juice.

Incorrect feedback: Oops! Please check the simple present passive. Ceviche is made with raw fish and lemon juice.

### Question 35

Please type in the verb in parenthesis in present simple passive to complete the sentence/question.

Rugby is a popular sport in New Zealand. It \_\_\_\_\_ (play) with a special kind of ball.

Answer (Exact match – case sensitive): is played

Correct feedback: Well done! It is played with a special kind of ball.

Incorrect feedback: Oops! Please check the simple present passive. It is played with a special kind of ball.

### Question 36

Please type in the verb in parenthesis in present simple passive to complete the sentence/question.

These are handbok. They're traditional dresses from Korea. They \_\_\_\_\_ (make) by hand.

Answer (Exact match – case sensitive): are made

Correct feedback: Well done! They are made by hand.

Incorrect feedback: Oops! Please check the simple present passive. They are made by hand.

### Question 37

Please type in the verb in parenthesis in present simple passive to complete the sentence/question.

Special shows \_\_\_\_\_ (perform) to celebrate Independence Day in my country.

Answer (Exact match – case sensitive): are performed

Correct feedback: Well done! Special shows are performed to celebrate Independence Day in my country.

Incorrect feedback: Oops! Please check the simple present passive. Special shows are performed to celebrate Independence Day in my country.

### Question 38

The following sentence is grammatically correct.

Make loud noise is considered impolite in most countries.

True

**False**

Correct feedback: Well done! **Making** loud noises is considered impolite in most countries. *verb + ing* to start a sentence.

Incorrect feedback: Oops! Please check the use of verb+ing.

**Question 39**

The following sentence is **grammatically correct**.

It's rude for a stranger to pat a child on the head.

**True**

False

Correct feedback: Well done! adjective + to+verb

Incorrect feedback: Oops! Please check the use of adjective + to+verb

**Question 40**

The following sentence is grammatically correct.

Asking someone about his or her salary is considered rude.

**True**

False

Correct feedback: Well done! Verb+ing to start a sentence.

Incorrect feedback: Oops! Please check the use of verb+ing

**Question 41**

The following sentence is grammatically correct.

To show affection in public places is acceptable in most countries.

True

**False**

Correct feedback: Well done! Verb+ing to start a sentence.

Incorrect feedback: Oops! Please check the use of verb+ing

**Question 42**

The following sentence is **grammatically correct**.

You can offend people by don't accept a dinner invitation in some countries.

True

**False**

Correct feedback: Well done! by + verb+ing.

Incorrect feedback: Oops! Please check the use of by + verb+ing.

### Question 43

Match each type of clothing with the most suitable material (A-E).

Match	Question items	Answer items
A	A jeans	A denim
B	B T-shirt	B cotton
C	C shoes	C suede
D	D tie	D silk
E	E turtleneck	E wool

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 44

Match each category on the left with the correct word on the right.

Match	Question items	Answer items
A	A Pattern	A floral print
B	B Material	B cashmere
C	C Style	C V-neck
D	D Women's clothing	D skirt
E	E Colour	E dark

Correct feedback: Well done!

Incorrect feedback: Oops!

### Question 45

Manners. Please complete the sentence with the correct option.

It's rude to cut in \_\_\_\_\_ .

a. line

b. the line

c. people

d. a line

Correct feedback: Well done! The expression is **cut in line**.

Incorrect feedback: Oops! Please check Unit 3, Lesson B.

**Question 46**

Manners. Please complete the sentence with the correct option.

People might stare at you for walking around \_\_\_\_\_.

a. around barefoot

b. no shoes

c. in no shoes

d. around hands

Correct feedback: Well done! The expression is **walking around barefoot**.

Incorrect feedback: Oops! Please revise Unit 3, Lesson B.

**Question 47**

Manners. Please complete the sentence with the correct option.

In Japan it's impolite to walk into someone's home without taking \_\_\_\_\_ your shoes.

a. off

b. in

c. at

d. on

Correct feedback: Well done! The expression is "take off your shoes."

Incorrect feedback: Oops! Please check Unit 3, Lesson B.

**Question 48**

Manners. Please complete the sentence with the correct option.

It's acceptable not to \_\_\_\_\_ cab drivers.

a. tip

b. bargain

c. meet

d. have an argument

Correct feedback: Well done! The expression is *tip someone (cab drivers)*.

Incorrect feedback: Oops! Please check Unit 3, Lesson B.

**Question 49**

Manners. Please complete the sentence with the correct option.

It's customary to \_\_\_\_\_ with street vendors to get something cheaper.

- a. bargain
- b. tip
- c. shake hands
- d. bow

Correct feedback: Well done! "*bargain* = negotiate the price of something to get a cheaper price"

Incorrect feedback: Oops! Please revise Unit 3, Lesson B.



**Appendix 14**  
**Setting tests on *Blackboard Learn***

**Tutorial video**

URL: <https://www.youtube.com/watch?v=ef08mqN4rIY>

