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Facultad de Filosofía, Letras y Ciencias de la Educación

Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros

The Effects of Providing EFL Students with Asynchronous and Online Instant Feedback

Trabajo de titulación previo a la obtención del título de licenciada en Ciencias de la Educación en Pedagogía de los Idiomas Nacionales y Extranjeros

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Resumen:

Esta síntesis de investigación tuvo como objetivo el analizar los efectos de utilizar retroalimentación asíncrona y retroalimentación instantánea en línea con estudiantes universitarios de inglés como lengua extranjera. Este estudio exploró las ventajas y desventajas de usar cada tipo de retroalimentación y los factores que los profesores de inglés toman en cuenta para elegir si usar retroalimentación asíncrona o retroalimentación instantánea en línea. Se seleccionaron veinte estudios empíricos realizados entre 2008 y 2021 para el análisis de datos de esta investigación. Los resultados de esta investigación indicaron que la retroalimentación instantánea en línea incrementa la motivación y las calificaciones de los estudiantes universitarios mientras que la retroalimentación asíncrona tiene efectos positivos en el rendimiento académico de los estudiantes en las cuatro principales áreas del lenguaje. Además, los estudiantes que recibieron retroalimentación asíncrona superaron a los estudiantes que recibieron retroalimentación instantánea en línea. Una limitación de este estudio es la falta de información sobre el uso de retroalimentación asíncrona y retroalimentación instantánea en línea en Latino América, por lo que se sugiere más investigación empírica sobre el tema en esta área.

Palabras claves: Retroalimentación asíncrona. Retroalimentación instantánea en línea. Métodos de retroalimentación. EFL.

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Abstract:

This research synthesis aimed to investigate and analyze the effects of using asynchronous and online instant feedback with EFL college students. This research also explored the advantages and disadvantages of each feedback method and the factors that influence teachers to consider using online instant feedback or asynchronous feedback. Twenty empirical studies from 2008 to 2021 were selected for the data analysis. The results of this research show that online instant feedback improves EFL college students' motivation and grades while asynchronous feedback has a positive effect on learners' academic performance in the four language skills areas, that EFL students who received asynchronous feedback can outperform the learners who got online instant feedback, and that EFL teachers prefer asynchronous feedback over online instant feedback. A limitation of this study is the lack of information about the use of asynchronous and online instant feedback in Latin American countries; consequently, further research in such contexts is being suggested.

Keywords: Online instant feedback. Asynchronous feedback. Feedback methods. EFL

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Dedication

I dedicate all the hours and effort put into this work to my best friend, my grandmother, and my brother. To my best friend Priscila who is the most important person in my life since she makes my world a little bit more purple and better. To my brother Pablo and my grandma Mariana, who have always been my reason to pursue this major.

Introduction

Feedback provision is a process through which a teacher gives information regarding a student's performance and knowledge (Hattie & Timperley, 2007). Asynchronous feedback and online instant feedback are two approaches that have been developed to provide feedback in EFL classrooms (Cheng, 2017). These methods have been studied and supported by many authors because of their benefits for teaching EFL. However, there have been inquiries regarding which type of feedback is the most efficient to support EFL students' learning. Therefore, this research synthesis focuses on the effects of providing university EFL learners with asynchronous and online instant feedback, and the advantages and disadvantages of these feedback methods. To achieve this goal, a thorough analysis of twenty studies that examined the impact of asynchronous and online instant feedback with EFL students was conducted.

There are six chapters in this research synthesis. The research description, background information, problem statement, justification, objectives, and research questions are all included in chapter one.

The theoretical framework, which presents important concepts and key terms used throughout the study, is included in the second chapter.

The third chapter provides a summary of the literature on the use of instant and asynchronous online feedback for EFL teaching.

The study methodology and the standards used for data collection are covered in detail in the fourth chapter.

Twenty research articles that helped address the research questions are categorized and examined in chapter five according to four different categories.

Finally, in chapter six, overall findings and recommendations are provided.

Chapter 1

Description of the study

1.1. Background

"The computer's ability to present multiple forms of media according to specialized and highly adaptable protocols coupled with its capacity for dynamic interaction with users substantiates its enormous potential as a mechanism for language learning" (Askildson, 2011, p. 1). Consequently, teachers have developed different teaching methods using computer technologies to improve their students' learning and skill development techniques; furthermore, these methods have allowed them to provide feedback in different ways (Hashemi, 2013; Ki, 2011; Matsumura & Hann, 2004). For instance, EFL teachers provide Asynchronous Feedback (AF) after students have completed a task in online or face-to-face classes. On the other hand, Synchronous Feedback (SF) happens when EFL teachers give feedback while students perform a task (Fazilatfar et al., 2017; Shintani & Aubrey, 2016).

The use of these two feedback methods has been studied by many researchers (Charbonneau et al., 2017; Hashemi, 2013; Tian & Zhou, 2020). Therefore, questions about which method is the most effective to help students during their learning process have come up (Pham, 2021; Shang, 2019; Tian & Zhou, 2020). Even though there is no clear answer and it is not possible to ascertain that one method is better than the other, researchers found out that the effectiveness of feedback is closely connected to the immediateness to which is given (Damen, 2020; Tian & Zhou, 2020). Online instant feedback is an example of synchronous feedback because teachers provide it at the moment or immediately after

students participate in different class activities in an online environment (Shintani & Aubrey, 2016).

Some academics suggested that online instant feedback is a reliable and effective method in EFL classes. Moreover, researchers discovered that receiving synchronous feedback leads students to gradually stop needing teacher corrections and correct their mistakes by themselves (Charbonneau et al., 2017; Shintani, 2015; Shintani & Aubrey, 2016). For instance, Odo and Yi (2014) reported that synchronous feedback provided via Skype allows students to have collaborative dialogs with their teacher, which make them feel more personally attached to their work, let them review and clarify the given feedback immediately with the teacher, and prevent them from making the same mistakes in future tasks.

1.2. Problem Statement

Feedback provision has always played an important role in the process of learning an L2 (Matsumura & Hann, 2004; Yeh et al., 2009). Moreover, feedback provision has evolved and multiple strategies and methods that can be useful in EFL classrooms have been developed, such as asynchronous feedback, synchronous feedback, and online instant feedback (Fazilatfar, 2017; Cheng, 2017). Above all, Huachizaca (2018) suggests that asynchronous feedback, the oldest feedback provision method, seems to be the most commonly used type of feedback in Ecuadorian EFL classrooms. However, the same study suggests that sometimes EFL teachers find it difficult to provide individual asynchronous feedback, either for the short quantity of time that they have for every class or for all the mistakes that students may make while performing tasks.

Furthermore, it has been found in studies carried out in contexts similar to Ecuador that EFL teachers provide asynchronous feedback because they do not have the time to give feedback to every student during or after most of their classes. So they have to provide general feedback to the whole classroom, which is considered less effective than individual feedback (Pham, 2021; Fazilatfar et al., 2017; Tamayo & Cajas, 2017).

Therefore, I decided to do this research synthesis to analyze the effects of online instant feedback as an alternative to asynchronous feedback because researchers have not agreed on which feedback method is more effective and under which circumstances one method works better than the other in EFL classes.

1.3. Justification

The effects of online instant and asynchronous feedback in EFL classes have been studied in recent investigations inside and outside the country (Benitez et al., 2020; Pham, 2021; Shang, 2019). For instance, Shintani and Aubrey (2016) reported that online synchronous feedback benefited students in producing increasingly accurate grammatical forms while performing tasks. Likewise, the study carried out by Shintani (2015) showed that the time between completing a task, receiving asynchronous feedback, and using the provided feedback allowed students to understand and internalize the given feedback.

In contrast, Nakata (2014) suggested that asynchronous feedback is less effective than immediate feedback because students may repeat their mistakes in future tasks and learn incorrect information if feedback is provided after a long time. Moreover, it has been found that online synchronous feedback presented some challenges because sometimes neither the teachers nor the students received the correct training to learn how to use the

different software and platforms that they needed to know to use these two methods (Damen, 2020; Fazilatfar et al., 2017).

Therefore, the purpose of this research synthesis is to analyze the advantages and disadvantages of these feedback methods in order to determine their effectiveness and the contexts under which they are effective. This research synthesis might help Ecuadorian EFL teachers to choose which feedback method will work better in their classrooms to improve their feedback provision techniques. This paper will analyze the effects of providing university EFL learners with asynchronous and online instant feedback.

1.4. Research Questions

1. What are the effects of providing university EFL students with online instant feedback?
2. What are the effects of providing university EFL students with asynchronous feedback?

1.5. Objectives.

General objective

To analyze the effects of using online instant and asynchronous feedback with EFL college students.

Specific objectives

- To identify the factors that lead teachers to choose online instant feedback or asynchronous feedback.

- To determine the advantages and disadvantages of providing EFL students with asynchronous and online instant feedback.

Chapter 2

Theoretical Framework

This chapter includes definitions and descriptions of key concepts which will help readers to have a better understanding of the topics discussed in the following chapters.

2.1 Error and Feedback.

2.1.1 Error

The word error can have multiple definitions depending on the context in which the word is used. However, Streimelweger et al. (2016) pointed out that all the descriptions of errors have something in common: "an error is a variation from what is considered an accepted behavior" (p. 19). Regarding language teaching, an error is "an utterance, form, or structure that a particular language teacher deems unacceptable because of its inappropriate use or its absence in real-life discourse" (Hendrickson, 1978, p. 387). Furthermore, Ellis (1994) has offered more information on what an error is in an EFL or ESL class: "an error is an unintended deviation from the imminent rules of a language variety made by a second language learner" (p. 700).

2.1.2 Feedback

Hattie and Timperley (2007) stated that feedback is the information given by an external agent regarding aspects of someone else's performance. Likewise, in the words of Richards and Schmidt (2010), the feedback provision process refers to the "comments or other information that learners receive concerning their success on learning tasks or tests,

either from the teacher or other persons" (p. 217). Furthermore, Sadler (1989) pointed out that feedback needs an instructional purpose, so the given feedback fills a gap between what is understood and what the teacher wants to be understood by the learners (p. 121).

2.2 Types of Interaction

2.2.1 Face-to-face interaction

According to Crowley and Mitchell (1994), face-to-face interaction can be defined as the "social interaction carried out without any mediating technology" (p. 35). Analogously, Goffman (1980) defined face-to-face interaction in an EFL class as "the reciprocal influence of individuals upon one another's actions when in one another's immediate physical presence" (p. 15).

2.2.2 Computer-mediated interaction

Jung et al. (2019) defined computer-mediated interaction as "real time interaction between people over a computer network, which includes modes such as text-based instant messaging, audioconferencing, or videoconferencing" (p. 2). This type of interaction is also called computer-mediated communication and can be divided into two types of communication. As Thurlow et al. (2004) have explained, synchronous-computer communication refers to the interactions that happen simultaneously in real-time over a computer web. In contrast, asynchronous-computer communication is the type of communication between two or more individuals that are not communicating simultaneously over a computer using information and communication technology (ICT) or a personal server with networking hardware.

2.3 Feedback methods

2.3.1 Asynchronous feedback

According to Damen (2020), asynchronous feedback is "given to students after they submit their assignments electronically using different techniques such as track changes in Google Docs and Word, e-mails, voice comments, chats on WhatsApp and Remind, etc." (p. 67). Nevertheless, research by Price et al. (2010) claimed that asynchronous feedback provision also occurs after students perform activities in face-to-face classes (p. 279). Wong and Yang (2017) pointed out the importance of the "gap in time between the students' responses/products and the provision of feedback" that allow students to internalize the information provided by the teacher during the feedback provision process (p. 292).

2.3.2 Synchronous feedback

In the words of Shintani (2015), synchronous feedback provided in EFL classes takes place online while the students are in the process of composing their texts. That is, both students and teacher are online at the same time, enabling the teacher to observe the students' composition process and provide instant corrections of their linguistic errors." (p. 3)

Although this definition only refers to the composition of texts in a language class, it gives a clear description of the meaning of synchronous feedback in an EFL classroom.

2.3.3.1 Online-instant feedback

As researchers Narciss and Huth (2006) have explained, online-instant feedback or automated electronic feedback is a type of feedback provided electronically by intelligent tutoring systems immediately after students make an error (p. 310). Likewise, Chang et al. (2018) stated that online instant feedback is provided by networks or websites such as Google Docs, Duolingo, Grammarly, and Microsoft Word which are equipped with commentary and editing features that can correct errors while students do an activity in an EFL class (p. 410).

Chapter 3

Literature Review.

This chapter analyzes studies that have been carried out on the effects of using asynchronous and synchronous feedback with L2 learners in order to gain understanding on the existing research and the debates that have been generated in this area of knowledge.

3.1. Advantages and Disadvantages of Asynchronous Feedback

3.1.1. Advantages of Asynchronous Feedback.

Asynchronous feedback for EFL learners has been studied by some researchers like Ene and Upton (2014), Mahfoodh and Pandian (2011), Sun and Yang (2021), and Van Beuningen et al. (2011). These studies have concluded that using asynchronous feedback in EFL classes has numerous benefits for both teachers and students.

For instance, Van Beuningen et al. (2011) conducted a study using direct and indirect comprehensive asynchronous feedback with two experimental groups and two control groups of high school EFL students in The Netherlands. Pretests, control tests, posttests, and delayed posttests to collect data were used. The analysis of the tests shows that the participants of the experimental groups made fewer errors in future tasks than the participants of the control groups. Moreover, the researchers noted that providing different types of comprehensive asynchronous feedback enabled students to enhance the linguistic correctness of their texts, self-correct their grammatical mistakes, and use target forms more accurately in future tasks.

Likewise, Ene and Upton (2014) suggested that asynchronous feedback helped students correct their grammatical and syntactic mistakes and improve the content and organization of their written tasks. Besides, students found the handwritten and electronic feedback more helpful than the general comments about the overall quality of the class performance they used to receive before the study began. Sun and Yang (2021) also conducted research on the effects of using asynchronous and synchronous feedback with learners on a speaking skills course. The findings show that asynchronous feedback enabled teachers to provide more accurate feedback and students to better understand the recorded feedback.

Similarly, a case study led by Mahfoodh and Pandian (2011) in Yemen showed that the majority of the English-major participants improved their writing skills after receiving asynchronous feedback. The results of this study revealed that students found the written feedback given by their teacher very useful. They thought that the feedback helped them develop their writing skills and build their confidence in English writing. The results of the semi-structured interviews also revealed that the feedback provision process was helpful for teachers because the affective reactions of their students to the feedback allowed them to decide which type of comments and techniques work better with each student.

3.1.2. Disadvantages of Asynchronous Feedback

Authors like Agbayahoun (2016) and Wang (2017) have found some weaknesses and downsides in the use of asynchronous feedback in EFL classrooms. They suggest that asynchronous feedback can have negative outcomes if the context and learners' English proficiency are not considered.

For instance, the study conducted by Agbayahoun (2016), which focused on the students' and teachers' perspectives of asynchronous electronic feedback in an EFL class in the Republic of Benin and used questionnaires and interviews, indicated that 65% of the participants were not able to use the provided feedback because it was too difficult to decode and understand. However, the authors noted that this drawback may have emerged because the teachers only offered feedback that highlighted the students' writing weaknesses and errors instead of feedback that encouraged them to improve. Furthermore, the researchers suggested that this type of feedback provision had a negative impact on students' motivation, so they do not recommend using it with high school students with average levels of English.

In addition, Wang (2017) conducted a quasi-experimental study using asynchronous feedback to improve EFL students' grammatical accuracy in writing performance. The researcher used a pretest, posttest, and post-delayed test with 105 participants from three different classes that were divided into one control group and two comparison groups. The results do not show a significant difference between the outcomes of the control group and the comparison groups. Besides, the slight difference in the improved accuracy that favored the comparison groups could not be attributed to the provision of feedback because the control group also improved its grammatical accuracy. The authors pointed out that the advanced English proficiency of all the participants could have affected their perception of the given feedback because they were not interested in considering how corrective asynchronous feedback can help them to improve their work.

3.2. Advantages and Disadvantages of Synchronous Feedback

3.2.1. Advantages of Synchronous Feedback

The study of synchronous feedback in EFL classes has led some authors like AbuSeileek (2013), Elola and Oskoz (2016), Kato et al. (2016), Odo and Yi (2014), and Yeh and Lo (2009) to conclude that this feedback method can be beneficial for learners.

The study directed by AbuSeileek (2013) took place in an EFL class with 64 English-major students divided into three experimental groups and one control group. The author used a pretest, posttest, and delayed posttest. The results show that the participants who received synchronous feedback performed significantly better than the learners from the control group. The author pointed out that synchronous feedback helped students to find and correct the errors they committed at the beginning of the study. Furthermore, the participants made fewer errors while writing, indicating that their writing skills improved.

Odo and Yi (2014) used a voice-over-internet-protocol (VoIP) to provide three TESOL students with synchronous corrective feedback to improve their writing skills. The researchers used observations, interviews, and writing samples to collect data. The results revealed that synchronous feedback enabled teachers and students to clarify doubts about the given feedback immediately, which led participants to feel more comfortable with the teachers and provide comments about their feedback provision techniques. Moreover, the authors noticed that this method allowed them to provide feedback that adapted to the specific needs of every participant.

Another advantage of synchronous feedback is that EFL students were given a variety of strategies to help them become more independent learners (Elola & Oskoz, 2016). For instance, a study led by Yeh and Lo (2009) indicated that the use of an online

annotator to provide synchronous feedback on written tasks allowed teachers to assign codes to common errors found in their students' previous tasks so the annotation tool could predict and correct these mistakes in the future. The authors also noted that synchronous feedback helped to enhance students' metacognitive awareness of linguistic form and function in their written essays.

Furthermore, Kato et al. (2016) conducted a study about using synchronous peer-feedback through skype with L2 Japanese and English learners divided into control and experimental groups. The results of the pre-test and post-tests reveal that synchronous feedback had a positive impact on the acquisition of speaking and listening skills of Japanese learners of English. Besides, the American students of Japanese from the experimental group presented a significant improvement in their speaking skills after receiving synchronous feedback from their peers.

3.2.2. Disadvantages of Synchronous Feedback

Some researchers like Ene and Upton (2018), Kim et al. (2020), and Sun and Yang (2021) pointed out some disadvantages of using synchronous feedback with EFL students.

For instance, Kim et al. (2020) researched the effects of using task repetition and synchronous corrective feedback with second language learners in collaborative writing classes. The researchers used pretests, posttests, and surveys to collect data. The findings revealed that synchronous feedback had a negative impact on participants' writing fluency and no effect on students' syntactic complexity.

Another disadvantage found by Ene and Upton (2018) in their study about using asynchronous feedback and synchronous feedback with ESL students was that the

effectiveness of these methods was closely related to numerous external factors like the teachers' level of expertise with electronic feedback, affective factors, the instructors' philosophy, and the teaching methodology used. Therefore, these types of feedback need a very specific environment to function properly. Likewise, Sun and Yang (2021) conducted a study to compare the effects of asynchronous and synchronous feedback with L2 learners during an EAP speaking skills course. The results of the semi-structured interviews show that participants perceived synchronous feedback as less effective than synchronous feedback due to both teachers' and students' lack of preparation for online learning.

Chapter 4

Methodology

A research synthesis or secondary research is the analysis of data already collected through primary research to create new knowledge and provide more evidence about a specific topic (Wyborn et al., 2018). In order to gather relevant and reliable data, the following databases were taken into consideration: ERIC, DOAJ, Google Scholar, ResearchGate, and ProQuest because these databases include peer-reviewed academic articles with trustworthy information. The keywords used for searching the papers were the following: 1. Online-instant feedback, 2. Asynchronous feedback, 3. Synchronous feedback. 4. EFL, 5. Computer-mediated feedback, 6. Feedback provision strategies, 7. Face-to-face feedback, 8. English skills. There were no restrictions regarding the design type; therefore, qualitative, quantitative, and mixed-method studies were included. Because of the difficulty for locating physical sources, only digital sources were used.

The sources were chosen based on the following criteria. First, the studies needed to be empirical and have a quantitative, qualitative, and mixed method research design. Second, they needed to be carried out in EFL or ESL classrooms. The majority of the articles considered were written in English except for the ones that fulfilled all the other criteria but were written in Spanish. Finally, only academic articles published between 2008 and 2021 were considered in order to have updated information. Because the results of unpublished articles or dissertations can be unreliable, they were excluded.

The following journals were reviewed for this study: Journal On English as a

Foreign Language, Edulite: Journal of English Education, Literature, and Culture,

International Journal of Computer-Assisted Language Learning and Teaching.

Chapter 5

Data Analysis

This chapter focuses on answering the research questions stated in chapter 1 that deal with the effects of providing university EFL students with online instant feedback and asynchronous feedback. Twenty research articles were selected for the analysis and classified as follows: research design, research location, participants' level of instruction, language skills, and the effect of each type of feedback on learners' performance.

5.1. Research Design

The 20 studies were classified according to the research design, including the data collection instruments (see Table 1).

Table 1

Research Design

Design	Instruments	Author/ year	*n*	*%*
Quantitative	Pre-test, post-test, delayed posttest, questionnaire	Pérez et al. (2020); Kartushina et al. (2015); Lantz & Stawiski (2014); Lotfi & Pozveh (2019); Fathi & Jelani (2017); Gao & Ma (2020); Lavolette et al. (2015); Satar & Özdener (2008); Johnson et al. (2010); Guo	13	65

		& Yang (2018); Rassaei (2017); AbuSeileek (2013); Rassaei (2019).		
Qualitative	Observations, semi-structured interviews, interviews	Pedrazzin (2017); Lee (2020).	2	10
Mixed Methods	Pre, mid, post-tests, interviews observations, questionnaires	Shang (2017); Ciftci & Kocoglu (2012); Alastuey (2011); Yang et al. (2012); Pourdana et al. (2021).	5	25
Total			**20**	**100**

As shown in the table, the majority of the studies used a quantitative design (65%), while only 10% used a qualitative design, and the other 25% studies used a mixed method design.

The mixed method and quantitative studies show that EFL students found the provision of either asynchronous or online instant feedback helpful during class and pointed out that they felt more motivated to learn English after engaging with any of the feedback provision methods. For instance, Shang (2017) concluded that using asynchronous feedback in virtual classes allowed students to develop a more encouraging attitude toward receiving feedback, recognizing errors, collaborative learning, and learning English in general. However, the findings of Lotfi and Pozveh's (2019) experimental study show that providing asynchronous feedback via email can be detrimental to students because they are unable to ask their instructor questions at the time they have them.

The experimental study carried out by Satar and Özdener (2008) revealed that using programs like Macromedia Flash 8 and Flash Media Server 2 to provide students with online instant feedback can be complicated and confusing for both teachers and students.

Although the results show that the participants overcame this problem with time and practice, the authors reported that the majority of the problems they had during research were caused by external factors such as the participants' economic circumstances and lack of internet access at home and inside the institution. Furthermore, the diary entries from Lee's (2020) study indicated that online instant feedback met students' personal needs and helped them understand why they should not make the same mistakes again. However, both studies focused on the participants' perceptions about the feedback method and not on their skills improvement.

5.2. Research Location

The twenty studies were also grouped according to the place where the research took place (see Table 2)

Table 2

Research Location

Location	Author/ year	*n*	*%*
Asia	Shang (2017); Ciftci & Kocoglu (2012); Lotfi & Pozveh (2019); Fathi & Jelani (2017); Yang et al. (2012); Gao & Ma (2020); Satar & Özdener (2008); Rassaei (2019); Pourdana et al. (2021); Guo & Yang (2018); Rassaei (2017); AbuSeileek (2013); Lee (2020)	13	65
Europe	Kartushina et al. (2015); Pérez et al. (2020); Alastuey (2011); Pedrazzin. (2017)	4	20
North America	Lantz & Stawiski (2014); Lavolette et al. (2015); Johnson et al. (2010)	3	15
Total		**20**	**100**

Thirteen studies were conducted in Asian countries such as Iran, Taiwan, Turkey, Iraq, and China; four studies took place in European countries like Italy, Switzerland, and Spain; and only three in the U.S.

According to research on the use of online instant feedback in Asian countries such as Iran and China, the results may vary depending on the contexts of the participants. For instance, Lotfi and Pozveh (2019) concluded that the time spent in providing online instant feedback during class is more efficient than the time spent providing asynchronous feedback after class. Nonetheless, Gao and Ma (2020) stated that students avoided using the words corrected by the online instant feedback app in future tasks and that students perceived that asynchronous feedback was more useful than online instant feedback.

Table 2 above shows that only two studies were found in North America. Lantz and Stawiski (2014) and Lavolette et al. (2015) compared the use of asynchronous and online instant feedback in the states of Connecticut and Hawaii respectively. These authors agreed that asynchronous feedback was more effective than online instant feedback and asynchronous feedback had a greater impact on participants' test scores and performance in class.

Pedrazzin (2017) conducted her study in Italy and concluded that asynchronous feedback assisted students in reconsidering their ideas and recognizing their errors in future tasks. Moreover, Kartushina et al. (2015) conducted research in Geneva, Switzerland, and found that the experimental group that received asynchronous feedback outperformed the control group and improved the production accuracy of foreign vowels.

5.3. Participants' level of instruction

The twenty studies were also classified based on the participants' level of education (see Table 3)

Table 3

Participants' level of instruction

Instruction level	Author/ year	*n*	%
Primary school	Pérez et al. (2020); Yang et al. (2012); Pedrazzin (2017)	3	15
High school	Lee (2020); Satar & Özdener (2008); Lotfi & Pozveh (2019)	3	15
University	Johnson et al. (2010); Lavolette et al. (2015); Lantz & Stawiski (2014); Alastuey (2011); Kartushina et al. (2015); Rassaei (2017); Guo & Yang (2018); Pourdana et al. (2021); Rassaei (2019); Gao & Ma (2020); Fathi & Jelani (2017); Ciftci & Kocoglu (2012); Shang (2017); AbuSeileek (2013)	14	70
Total		**20**	**100**

As shown in Table 3, the majority of the studies (70%) were conducted with university students as participants, while only 15% included high school students, and the remaining 15% primary school students.

The impact of using asynchronous feedback with university students has been investigated by authors like Ciftci and Kocoglu (2012), Guo and Yang (2018), Johnson et al. (2010), Pourdana et al. (2021), and Rassaei (2019). For example, Ciftci & Kocoglu (2012) and Guo and Yang (2018) concluded that students had positive perceptions of asynchronous feedback because it helps them improve their performance and restructure their mistakes into correct English sentences. However, Johnson et al. (2010) and Pourdana

et al. (2021) reported that asynchronous feedback had no impact on university students' performance. Additionally, Alastuey (2011) and Shang (2017) concluded that using online instant feedback with university students motivated them to learn English, and helped them find errors and correct them.

Lee (2020) and Satar and Özdener (2008) studied the effects of online instant feedback on high school students and found out that this type of feedback improved students' proficiency and helped them to feel less anxious during class. Moreover, Lotfi & Pozveh (2019) compared online instant and asynchronous feedback and reported that high school students benefited from both feedback methods. However, the group that received online instant feedback significantly outperformed the asynchronous feedback group.

The remaining three studies chose primary school students as participants. Pedrazzin (2017) and Yang et al. (2012) found that asynchronous feedback assisted students in reconsidering their ideas and recognizing their past errors in future tasks. Besides, Perez et al. (2020) concluded that providing primary school students with personalized asynchronous feedback was beneficial because their performance and grades improved. However, the results of this study cannot be generalized because the context and environment of the students contributed to the type of feedback they received.

5.4. Language skills

The twenty studies were also grouped according to the effects that asynchronous and online instant feedback have on the development of listening, speaking, writing, reading, grammar and vocabulary (see Table 4)

Table 4

Language Skills

Language skills	Author/ year	*N*	%
Listening	Rassaei (2019)	1	5
Speaking	Kartushina et al. (2015); Lantz & Stawiski (2014); Alastuey (2011); Satar & Özdener (2008); Fathi & Jelani (2017)	5	25
Writing	Shang (2017); Ciftci & Kocoglu (2012); Gao & Ma (2020); Lavolette et al. (2015)	4	20
Reading	Yang et al. (2012); Johnson et al. (2010)	2	10
Grammar & vocabulary	Lotfi & Pozveh (2019); Pourdana et al. (2021); Guo & Yang (2018); Rassaei (2017); Pedrazzin (2017)	5	25
More than one skill	Pérez et al. (2020); AbuSeileek (2013); Lee (2020)	3	15
Total		**20**	**100**

Table 4 presents the 20 studies divided into six categories: listening (5%), speaking (25%), writing (20%), reading (10%), grammar and vocabulary (25%), and studies that researched about more than one skill (15%).

As shown in Table 4 just one study has researched about feedback for teaching listening skills. Rassaei (2019) investigated the effects of audio based and computer mediated asynchronous feedback on EFL learners. Her findings revealed that using different types of asynchronous feedback allowed students to choose which type of feedback adapted better to their learning style preferences and helped them get higher scores.

Regarding speaking skills, Kartushina et al. (2015) found that providing students with asynchronous visual articulatory feedback about tongue position and mouth openness significantly helped them to improve their sound production. Moreover, according to Fathi and Jelani (2017) using an automatic speech recognition software (ASR) as a support tool in an EFL class helped students have a more accurate English pronunciation and speak more fluently. Since both studies focused on the production of foreign vowels and consonants in isolation, the results cannot be generalized to the production of these vowels in the context of syllables or words.

Shang (2017), Ciftci and Kocoglu (2012), Gao and Ma (2020), and Lavolette et al. (2015) have conducted studies on the use of feedback for teaching writing skills. For instance, Shang (2017) compared the use of asynchronous and online instant feedback in a writing class focused on syntactic complexity. He concluded that online instant feedback helped students write more words while asynchronous feedback made them write more sentences, feel more motivated, and get better writing scores. However, Gao and Ma (2020) concluded that students did not feel comfortable with any feedback method and decided to ignore the given feedback and avoid using the corrected words in future written tasks.

Yang et al. (2012) and Johnson et al. (2010) have conducted studies about using asynchronous feedback for teaching reading. The investigation made by Yang et al. (2012) found that asynchronous feedback given after students summarize or answer comprehension questions about a reading passage helped them develop their higher level cognitive abilities. In addition, only two studies have researched the effects of using feedback for teaching grammar and vocabulary. In contrast, Rassaei (2017) compared

online instant and asynchronous feedback and concluded that while asynchronous feedback gives students time to process the given feedback as written forms of input that learners can check whenever they need, online instant feedback provided during video conferences highlights the differences between learners' grammatical and structure errors.

Finally, Lee (2020) researched online instant feedback to teach reading and writing. He concluded that the automated content feedback system adapted to the students' needs and proficiency level and helped them improve their academic and argumentative writing skills but did not influence their reading skills. In contrast, the study made by Rassaei (2019) compared text based and audio based asynchronous corrective feedback for developing speaking and writing skills. His study showed that audio based corrective feedback has more benefits than text based feedback and both asynchronous feedback types help students improve their writing and speaking skills.

5.5 Effect of each type of feedback on learners' performance

Finally, the 20 studies were classified according to the effects that each type of feedback have on learners' performance (see Table 5).

Table 5

Effects on students' performance

Feedback types	Author/ year	*n*	%
Online instant feedback	Fathi & Jelani (2017); Alastuey (2011); Satar & Özdener (2008); AbuSeileek (2013); Lee (2020)	5	25

Asynchronous feedback	Kartushina et al. (2015); Pérez et al. (2020); Ciftci & Kocoglu (2012); Yang et al. (2012); Johnson et al. (2010); Rassaei (2019); Pourdana et al. (2021); Guo & Yang (2018); Pedrazzin (2017)	9	45
Both types of feedback	Lantz & Stawiski (2014); Shang (2017); Lotfi & Pozveh (2019); Gao & Ma (2020); Lavolette et al. (2015); Rassaei (2017)	6	30
Total		**20**	**100**

Table 5 shows that the majority of the studies (45%) investigated the effects of asynchronous feedback on EFL learners' performance, while 30% investigated the effects of online instant feedback, and the remaining 25% investigated the effects of both asynchronous and online instant feedback.

AbuSeileek (2013) found that providing online instant feedback to EFL students in a writing course helped them notice and correct common spelling and punctuation errors. Moreover, the given feedback assisted them in using more appropriate words that expressed the meaning they wanted to convey in their writing. Furthermore, Satar and Özdener (2008) concluded that providing online instant feedback via texts and voice chats helped students gain confidence through a computer mediated environment where they could practice and master their pronunciation at home alone or during class with the help of their teachers.

Researchers like Ciftci & Kocoglu (2012), Guo & Yang (2018), Johnson et al. (2010), Kartushina et al. (2015), Pedrazzin (2017), Pérez et al. (2020), Pourdana et al. (2021), Rassaei (2019), and Yang et al. (2012), investigated the effects of asynchronous feedback on EFL students' performance. For example, Guo & Yang (2018) concluded that using prompts and recasts to provide asynchronous feedback motivated students to notice

their errors, consolidate their knowledge of the topic, and promoted automaticity. In addition, Pedrazzin (2017) concluded that providing asynchronous feedback by reformulating learners incorrect words and sentences motivated them to use that feedback in future tasks and correct their mistakes by themselves.

Finally, the remaining studies compared the effects of asynchronous and online instant feedback on EFL learners' performance. Lantz and Stawiski (2014) compared the two types of feedback and concluded that students who received online instant feedback outperformed those who received asynchronous feedback. However, the researchers found that asynchronous feedback enabled students to correct misconceptions about lecture information. Besides that, Gao and Ma (2020) concluded that learners found both types of feedback useful and feedback was converted to subsequent written production. However, both studies suggest that online instant feedback is ineffective if the target topic is partially acquired.

Chapter 6

Conclusions and Recommendations

6.1. Conclusions

The purpose of this research synthesis was to examine the effects of asynchronous and online instant feedback on EFL college students, the factors that influence teachers' decisions to use online instant feedback or asynchronous feedback, and the advantages and disadvantages of each type of feedback.

Regarding the first research question, which inquires about the effects of providing online instant feedback to university EFL students, the data analysis shows that online instant feedback has a positive impact on EFL students' grades and performance. For instance, the majority of the revised studies pointed out that the students who received online instant feedback outperformed the learners who did not receive any type of feedback (AbuSeileek, 2013). In addition, online instant feedback has a positive effect on learners' academic behavior because it fosters students' motivation to learn and engage with the language, helps to develop automaticity to correct their mistakes, and contributes to the improvement of their speaking, listening and reading skills (Fathi & Jelani, 2017; Lee, 2020).

Concerning the second research question that deals with the effects of providing asynchronous feedback to university EFL students, the results show that asynchronous feedback improves EFL college students' performance because it allows them to revise the given feedback whenever they need it, restructure their mistakes into correct expressions, and improve their performance in the four language skills areas (Lavolette et al., 2015;

Rassaei, 2019; Yang et al., 2012), especially, in writing and speaking skills. When comparing asynchronous and online instant feedback, learners who received asynchronous feedback outperformed the ones that got online instant feedback (Shang, 2017; Lantz & Stawiski, 2014).

Moreover, most of the studies showed that teachers preferred asynchronous feedback over online instant feedback. For instance, in Gao and Ma's (2020) study the teachers preferred asynchronous feedback since it can be used with beginner, intermediate, and advanced EFL students, whereas online instant feedback only worked with advanced students with a skilled understanding of the themes previously taught. Other researchers back up this idea, claiming that learning how to deliver online instant feedback effectively requires guidance or prior training, whereas providing asynchronous feedback is more familiar to them and does not require prior training (Rassaei, 2017; Lavolette et al., 2015).

Finally, the results of this research show that both feedback methods have their advantages and disadvantages depending on the students' learning context. For example, online instant feedback can be confusing for teachers and students if they do not receive the right guidance, but it can help students to develop automaticity and obtain higher grades (Satar & Özdener, 2008). Nonetheless, asynchronous feedback does not require any extracurricular instruction and has been shown to have a positive impact on students' performance and grades; however, providing individual feedback to each student is more difficult and time consuming (Pedrazzin, 2017; Perez et al, 2020)

6.2. Recommendations

The following recommendations can be made based on the findings of this research synthesis. First, teachers should get acquainted with the characteristics and usability of each type of feedback and consider their students' context, learning styles, language skill focus, and level of English before choosing the feedback method they want to implement in their classes. Second, since none of the analyzed studies were conducted in a Latin American context carrying empirical investigation into the use of asynchronous and online instant feedback in Latin America, especially, in the Ecuadorian context would be highly beneficial to address the effects of these types of feedback in this context. Finally, because no studies were found on the use of online instant feedback to improve listening skills in this research synthesis, it would be advisable to carry out research on this area.

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