

The Impact of Flipped Learning on the Language Performance of Beginning Spanish as a Second Language Learners

El Impacto del Aprendizaje Invertido en el Desempeño Lingüístico de Estudiantes Principiantes de Español como Segunda Lengua

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ABSTRACT

The present study compares the academic performance of students of Spanish as a second language between a control group following a flipped learning methodology and another group receiving more traditional instruction. It also evaluates the impact of combining the two methodologies during the same semester on the students' linguistic performance. The results of the pre- and post-tests based on grammar activities indicate that, in the between-subjects design, there are no notable differences between the inverted and non-inverted groups. The findings of the within-group analysis show that students who have combined both methodologies perform better in the non-inverted instructional model.

Keywords: flipped-classroom approach; Spanish L2; student academic performance; grammar-focused tasks.

RESUMEN

El presente estudio compara el rendimiento académico de estudiantes de español como segunda lengua entre un grupo de control que sigue la metodología de aprendizaje invertido y otro que recibe una instrucción más tradicional. Además, evalúa el impacto que tiene la combinación de ambas metodologías durante el mismo semestre en el desempeño lingüístico de los estudiantes. Los resultados de los pre y post-tests basados en actividades de gramática indican que, en el diseño entre sujetos, no hay diferencias notables entre el grupo invertido y el no invertido. Los hallazgos del análisis realizado dentro del mismo grupo demuestran que los estudiantes que han combinado ambas metodologías tienen mejor rendimiento en el modelo de instrucción no invertido.

Palabras clave: aprendizaje invertido; español como segunda lengua; rendimiento académico; actividades de gramática.

1. INTRODUCTION

Education has traditionally been viewed as the transfer of information from teachers to learners within the context of the classroom. However, during the last decades, and increasingly in the aftermath of the COVID-19 pandemic that forced reorganizations in the teaching process, there has been a desire to move away from this paradigm (Vitta & Al-Hoorie, 2020). With innovative methods having adapted to the new technological advancements and to the changing global situation, some alternatives to teacher-dominated instruction have recently emerged across various educational domains.

One method that responds to new ways of teaching and studying is the flipped model (Bergmann & Sams, 2012). This pedagogical innovation moves the direct instruction into videos watched by learners outside the classroom setting, in an individual learning space, while class time is used to engage in higher cognitive levels of learning with peers and teacher present. Many educators applying the flipped model reimagine classroom time, replacing long lectures with scaffolded, learner-centered activities (Bergmann & Sams, 2012). Since highly interactive activities have long been an integral component of instruction in modern foreign languages (FL) (i.e., task-based instruction, two-way information tasks, etc.), instructors value the flipped classroom pedagogy particularly for its opportunity to dedicate less time to explicit content instruction and to allocate more time to use a second language (L2) meaningfully in class (Moranski & Kim, 2016).

As the popularity of the flipped model increases across different academic contexts, at all levels and fields, including second language teaching; its study has recently become a research interest for many scholars. Previous studies have argued that the flipped model seems to have positive results in student academic achievements when compared to more traditional learning formats (e.g., Ahmad, 2016; Aybirdi, Efe & Atasoy Sal, 2023; Bredow et al., 2021; Farah, 2014; Huang & Hong, 2016; Kang, 2015; Samadi et al., 2024; Shahnama, Ghonsooly & Shirvan, 2021; Shi et al., 2020; Webb & Doman, 2016; Wu, Hsieh & Yang, 2017; Zhang, 2015). However, some others have claimed that benefits of this teaching methodology in student performance is still debatable (e.g., Durfee et al., 2020; Jia et al., 2021; Oki, 2016). Additionally, positive opinions about this teaching methodology have been shared by learners (e.g., Basal, 2015; Belmonte, Guerrero & Cabrera, 2021; Kang, 2015) and teachers (e.g., Vaezi, Afghari & Lotfi, 2019; Wang & Chen, 2020) while it has also been found that some teachers recognize problems with its implementation (Fontecha, 2020; Hoshang, Hilal & Hilal, 2021) and some students manifest a clear resistance towards it (e.g., García-Allen, 2020; Moranski & Kim, 2016; Ozadowicz, 2020).

Today research on flipped learning in the FL classroom is abundant, especially in English courses. However, to the writer's knowledge, limited amount of research has been conducted in the Spanish L2 classroom at the university context (e.g., Moranski & Kim, 2016), and particularly at the novice level (e.g., Fontecha, 2020; García-Allen, 2020). In addition, the majority of studies within the Spanish L2 field seem to have explored differences between a flipped learning environment and a traditional teaching context

in different groups, but little is known about the impact of combining these two teaching methodologies in the same group of learners. The need of addressing these gaps has partially motivated the present investigation, which besides including a between-group analysis, also involved a within- group study.

This research aimed to contribute to this body of literature by implementing the flipped model in two beginner Spanish L2 courses at the tertiary level in United States. The objective of this study was to examine the impact that the flipped-classroom approach has on student academic performance on grammar-focused tasks compared to the non-flipped model.

2. THEORETICAL FRAMEWORK

2.1 Flipped-classroom approach: history and definition

The concept of flipped-classroom model is not new but has evolved to the present stage after the passage of an extended period. The seed of what today is known as the flipped-classroom approach was first proposed in 1984 by Militsa Nechkina, a member of the USSR Academy of Pedagogical Sciences. She advised teachers to "let pupils extract new things from autonomous reading of a textbook at home. Allow them to consider it, then discuss it with their teacher at school and come to a united conclusion" (Nechkina, 1984, p. 51). After this, in the 1980s and 1990s teachers in Russia began to try this instructional strategy, becoming the first nation that implemented this innovative practice.

In 1993, Alison King, as associate professor of education in the College of Education at California State University in San Marcos, focused on the importance of the use of class time for the construction of meaning rather than information transmission in her book "From Sage on the Stage to Guide on the Side". Despite not directly illustrating the concept of flipping the classroom, her work is often considered as an impetus for an inversion to allow the educational space for active learning.

In their publication "Inverting the Classroom: A Gateway to Creating and Inclusive Learning Environment" (2000) Lage, Platt and Treglia, associate professors of economics at Miami University (Ohio), asserted that class time that became available from the inversion of the classroom could be leveraged. By moving information presentation via lecture out of the classroom to media such as computers, students' needs with a wide variety of learning styles could be better met. Therefore, according to them, inverting a classroom meant that events that traditionally take place inside a classroom would take place outside and vice versa with the goal of aligning learning and teaching styles to improve student learning and engagement.

In practice, the flipped classroom approach was then started in 2006 in Colorado by the high school teachers Jonathan Bergmann and Aaron Sams. With their chemistry students reporting that classroom time was not enough to go over all new concepts and then, practice them in class, these teachers noticed that time spent in the classroom

explaining new content limited the amount of practice students could do in the classroom. However, without explicit instruction, students could not do the practice exercises.

After reflecting on these difficulties, Bergmann and Sams discovered that taking notes in class, doing the assignments, and catching up with lessons were the main problematic issues in their classes. As a consequence, they decided to invert the classroom lecture and bring homework to class. They recorded PowerPoint slides explaining the new content and distributed them online on YouTube, then; they assigned those videos as homework, using in-class time to help students with the concepts that they had not understood.

In this way, Bergmann and Sams divided the process of flipping the classroom into two steps. The first part consists of transferring lecture content into videos made by educators so that students can go at their own pace since they can stop or rewind the videos and take notes; this is done outside the classroom setting. The second part is developed in class where students complete homework, projects, guided and independent practice, and higher-order thinking activities where interaction and meaningful communication are the main focus. The resulting outcome was a total success, and in their book "Flip your classroom" (2012) the first definition of flipped learning was born as leaving "what was traditionally treated as homework to be done in the class time, and that which was previously done in class being done at home" (Bergmann & Sams, 2012, p.13).

The flipped classroom was later defined by The Flipped Learning Network (2014) as:

A pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter.

This inversion results in a different setting for the classroom compared to traditional methods. While in the traditional instruction time is mainly devoted to explaining new concepts and going over assigned homework, in the flipped model, most of the time is used for guided and independent practice, discussion, action-orientated and peer-learning activities, cooperative and collaborative learning, as well as assistance and feedback, and focusing on student learning needs, autonomy, agency, interaction and engagement. This time enhancement is achieved by the fact that lecture time and content delivery is not part of the lesson since the explicit instruction is moved by means of asynchronous video lectures, presentations or podcasts and assigned as homework prior to coming to class. In this way, the flipped classroom model allows learners to work at their own pace, with students receiving a personalized education tailored to their individual needs since they can view and pause the video lectures as many times as needed and at their own pace, which provides students with the opportunity to be well prepared and ready for class time (Bergmann and Sams, 2012).

In addition, the role of both learners and teachers changes in the flipped model compared to traditional teaching practices. The concept of the flipped classroom is based on a student-centered approach. In the flipped model students become more autonomous while the teacher becomes the guide and facilitator of content, activities, and models. As stated by Bergmann and Sams (2012) "flipping the classroom is redirecting attention away from the teacher and putting attention on the learner and the learning" (p. 27).

Since Bergman and Sam were chemistry teachers, soon after their experiment, the flipped classroom gained popularity particularly in pure sciences as they are mainly lecture-based classes. Given the positive results obtained in STEM (science, technology, engineering, and mathematics) subjects, the flipped model was recommended for all other subjects, including language teaching.

More specifically in recent years, this methodology has become a predominant form of teaching and learning in many fields as an alternative to traditional face-to-face instruction due to the COVID-19 pandemic.

2.2 Research on the flipped model

2.2.1 Flipped model research on STEM and science-related courses

With the increasing implementation of the flipped classroom in many different domains during the last decades, the study of this innovative teaching practice has recently become a research interest for many scholars. STEM and science-related courses have been targeting subjects for many pioneer experts on the topic. Research has assessed the impact of the flipped model on students' academic results on diverse subjects such as pharmacotherapy, programming, algebra, mathematics, and chemistry courses, just to mention some (e.g., Belmonte, Guerrero & Cabrera, 2021; Kugler et al., 2019; Love et al., 2014; Rehman et al., 2020; Umam et al., 2019; Yildiz, 2018). These studies have observed that the flipped model can enhance students' academic performance. Similar results regarding the effectiveness of this methodology on learners' achievements were also found in multiple meta-analysis studies in engineering courses (e.g., Mason, Shuman & Cook, 2013), health professions education (e.g., Hew & Lo, 2018), nursing education (e.g., Xu et al., 2019) and some other disciplines.

However, some studies have not found significant differences on students' grades when comparing those learning through traditional approaches and those receiving instruction under the flipped model. For instance, in Durfee's et al. study (2020), conducted in a radiology course at the university level in USA, learners' performance on the standardized final exam in the flipped group was similar to that of the in-person teaching group.

Considering the shift in the role of the learner in the flipped model where new content is "learned" by students on their own, research has also focused on examining learners' perceptions about the flipped classroom through individual and focus-group interviews, reflective journals and/or questionnaires (e.g., Belmonte, Guerrero & Cabrera, 2021;

Hoshang, Hilal & Hilal, 2021; Hussain et al., 2015; Kurtz, Tsimerman & Steiner-Lavi, 2014; Strayer, 2007; Zappe et al., 2009).

In an overview of recent studies in flipped learning (Bishop and Verlenger, 2013) it was found that general reports of students' perceptions in engineering courses were consistent and positive. For example, students preferred going to the classroom having previously worked on the material on their own since they came to class better prepared (DeGrazia et al., 2012). Students in other studies have pointed out the level of enjoyment and engagement in flipped learning (Zappe et al., 2009). Similar results were found in Belmonte, Guerrero & Cabrera (2021), where students in a mathematics course indicated that the flipped model had contributed to a better relationship with their teachers, to the improvement of their degree of autonomy, to the deepening of their learning and to the use of time in the classroom.

Results in some other studies show students' negative opinions towards this methodology or suggest a transition between the traditional and the flipped classroom. For instance, in Kurtz, Tsimerman and Steiner-Lavi's study (2014), business university students in Israel, although reporting some advantages of the flipped model (i.e., an increase in involvement, understanding, and confidence in their own learning), clearly preferred receiving in-person instruction in class. Besides, Strayer (2007) compared a traditional classroom with a flipped classroom at an introductory statistics class at the university level. His findings showed that initially students were less satisfied with the flipped classroom than with the regular class but gradually they became more open to cooperative learning and innovative teaching methods during the course. Thus, Strayer reasoned the need of a transition between methodologies. Supporting Strayer's (2007) conclusions, Hoshang, Hilal & Hilal (2021) observed students and teachers' opinions in engineering courses and based on the results, suggested that both students and teachers may need to take training about the process of flipped classrooms. In line with these implications, several studies described in a review article by Divjak et al. (2022) that offers findings and recommendations for flipped classrooms during the pandemic, showed that in study programs where students had experience learning through this approach since that they had already utilized this methodology before COVID-19, it was possible to give the course entirely online with minimal adjustments (i.e., Attarabeen et al., 2021; Collado-Valero et al., 2021; Jia et al., 2021; Liberman-Martin & Ogba, 2020).

2.2.2 Flipped model research on second language courses

Given the success of the flipped model in many different teaching contexts, researchers have recently started looking at flipped teaching in the second/foreign language classroom. Similarly to other studies, research in the L2 classroom have also included comparisons between traditional teaching contexts and flipped classrooms and their impact on language performance as well as students' perceptions. Interestingly enough, much of the research in L2 settings has taken place in EFL classrooms across many different countries. For instance, Farah (2014) examined the impact of using a flipped classroom instructional method on the EFL writing performance of twelfth grade Emirati female students with high level of English Proficiency at the Applied Technology High

School (ATHS) in Abu Dhabi, United Arab Emirates (UAE). The study also sought to identify female students' perceptions of the flipped instruction in an EFL writing setting. There were two groups, students who learnt through the flipped model (experimental group) and those who learnt traditionally (control group). Both groups completed a pre-test and post-test. Findings revealed statistically significant differences between the mean scores in favor of the students in the experimental group. The results showed that this improvement in the writing performance was largely attributable to the flipped instruction method of teaching. Students' attitudes towards the flipped instruction were analyzed through a questionnaire. Supporting those findings in student performance, the majority of learners showed positive attitudes towards this approach regarding involvement, confidence, and motivation. However, almost half of students showed preference to having the teacher explaining in class and favored the traditional instruction over the flipped model.

In Kang's (2015) study, 24 upper-intermediate EFL learners in Korea were taught using both regular and flipped approaches. In order to explore the efficiency of the flipped model pre-tests and post-tests were analyzed. These pre and post-tests illustrated that only the flipped classroom group produced statistically significant changes in both vocabulary and grammar knowledge. In addition, student's perceptions were also examined. Data from students' blogs and opinions suggested that well-blended flipped classroom maximized face time, retained more interaction, and achieved learning goals. Likewise, students in a post-questionnaire and interviews reported that the flipped model was highly positive in aspects such as satisfaction, helpfulness, in-class activities, and instructor's roles. However, the author also found that students not completing the pre-assigned tasks was the biggest disadvantage of the flipped classroom (Kang, 2015). Similarly, Webb and Doman (2016) investigated whether the flipped classroom led students to increased gains on learning outcomes in two high-intermediate EFL contexts, in Macau (China) and in the United States. The effectiveness of this model on students' achievement on grammar was evaluated with a pre-test and a post-test grammar test, along with students' perceptions of their increased comfort and confidence using English grammar through a survey. Despite the differences in instructional contexts, the findings suggested that although both control and experimental groups showed increased comfort in the self-report data, gains on actual achievement were significant only for the flipped learning groups (Webb & Doman, 2016).

Findings regarding gains on students' achievement in these studies are also consistent with more research that has also observed that flipping the classroom benefits intermediate and upper-intermediate students in other various aspects, including enhancing their creative thinking (e.g. Al-Zahrani, 2015), listening comprehension (e.g. Ahmad, 2016), grammar skills (e.g. Al-Harbi & Alshumaimeri, 2016), reading comprehension (e.g. Huang & Hong, 2016), writing skills (e.g. Ahmed, 2016), English pronunciation (e.g. Zhang et al., 2016), and overall English proficiency (e.g. Wu, Hsieh & Yang, 2017; Zhang, 2015). The flipped classroom has also been found to help students become more responsible for their learning (e.g., Homma, 2015; Han, 2015).

Some research regarding learners' opinions has also been conducted with teacher education students, an interesting population since these are students training to

become teachers. In Hussain's et al. study (2015), students (prospective teachers) recognized having enhanced their pedagogical skills in the flipped approach since it allowed them to plan regularly for the class, thus positively impacting their planning skills; and practice different presentation activities and discussions, which had a positive effect on their presentational skills. Similarly, Basal (2015) examined the perceptions of prospective EFL teachers at a state university in Turkey on flipped classrooms. According to their responses to the questionnaire, it was concluded that flipped classroom was beneficial in terms of learning at one's own pace, advancing student preparation; increasing participation; and overcoming the limitations of class time.

In the last years, some scholars have also examined the impact of the flipped approach during and after the COVID-19 pandemic since educational institutions worldwide have embraced online learning measures through this tough time. Shahnama, Ghonsooly, & Shirvan (2021) conducted a meta-analysis that consisted of 69 between-subject design studies in the field of EFL, in which they compared the flipped and lectured-based classrooms in improving students' achievements. They found that the influence of flipped learning on students' achievements was large and positive. Researchers concluded that flipped learning has the potential to improve students' achievements if appropriately designed and implemented. Aybirdi, Efe & Atasoy Sal (2023), examined the effects of flipped learning on EFL students' overall academic achievements through meta-analysis. Forty studies on flipped classroom and academic achievement were included in this study. Results revealed that flipped learning has statistically significant effect on EFL learners' academic achievements compared to traditional learning approaches. Likewise, in Samadi et al. (2024), results demonstrated the potential of the flipped classroom approach to positively shape EFL learners' self-regulated learning and higher-order thinking skills, advocating for its incorporation into language education practices.

Although most of these studies agree that the flipped classes obtain better results than the traditional classes in terms of performance, in Oki's study (2016) in an intermediate EFL course in Hawaii, it was found that students' academic performance was not impacted by the flipped classroom. In this action research study, course grades as well as students' perceptions of the flipped model were used to examine the impact of flipped learning. Like other studies, these EFL students seemed to enjoy their flipped classroom because they perceived that class-time was used more efficiently to review, discuss, and engage in critical thinking activities. They also stated that the teacher's role as a facilitator in class was very helpful. However, the academic performance did not reveal statistical difference; in fact, the author claimed that students performed similarly in either flipped or traditional contexts. Similar findings appear in Al-Harbi's study (2016), where it was suggested that although adopting the flipped classroom strategy appeared to play a role in enhancing students' grammar performances with the flipped group showing a mean score higher than that of the non-flipped class, the difference between both classrooms' mean scores was not statistically significant.

Considering teachers' attitudes is important since their perceptions are translated into classroom practices. Some researchers have recently focused on teachers' perceptions towards the use of a language flipped classroom. For instance, Vaezi, Afghari and Lotfi (2019) examined perceptions of experienced EFL teachers in Iran through a written

questionnaire and found that an overwhelming majority of these instructors agreed or strongly agreed that this approach had the capacity to improve students' knowledge of English. They also recognized flipped learning could open up many possibilities for language teachers including the ability to personalize instruction, manage time more efficiently, and connect more to the L2 learners (Vaezi, Afghari & Lotfi, 2019).

It has also been found that the flipped classroom allows teachers more individual interaction with every learner and helps them develop better relationships with all their students (e.g., Zhang & Wu, 2016). It has also been suggested that flipping the instruction significantly reduces negative behavior in the classroom (e.g., Cockrum, 2013).

Research on the flipped model in Spanish L2 contexts is very limited. Moranski and Kim (2016) compared the learning of complex Spanish grammatical structures in inverted classrooms and in-class presentational classes in an Intermediate Spanish I course in USA. To assess students' Spanish L2 knowledge, a grammaticality judgment test (explicit knowledge), a usage description task (metalinguistic knowledge), and a chapter test (production knowledge) were used. An attitudinal inventory scale rating was also included for students to rate their assignments in terms of comfort, enjoyment, and confidence with the material. The results showed that students in the inverted classroom scored higher in the grammatical judgment test, although no statistically considerable differences were found for both groups in the usage description task or in the chapter test. Results from the attitudinal questionnaire showed that learners in this study were aware and in favor of the ways in which the flipped model facilitated their processing of the material (i.e., pace of the videos, how these videos forced them to actively listen to answer the questions, how the assignment structure facilitated interaction with the lesson's content, how they were more prepared to participate in the classroom). A small number of learners objected to the practice of using videos, citing conflicts with existing study habits. For example, the preference to learn by reading or to listen to music when studying.

García-Allen (2020) compared student performance as well as learner' attitudes in flipped and traditional classrooms in a first-year introductory Spanish course (i.e., Spanish for Beginners) at the university level in Ontario, Canada. Participants in this study had no previous knowledge of Spanish. Student performance was examined through summative assessment (four tests throughout the year and one final exam). All tests contained sections that evaluated oral comprehension, grammar and vocabulary, and reading comprehension. All exercises required an open answer with right or wrong responses, as there were no fill-in-the-blank exercises. In addition, participants completed a written questionnaire at the end of the academic year where they were asked to indicate, using a 5-point Likert scale, their agreement with different statements regarding enjoyment and expectations. Results in this study indicated that students in the flipped classroom sections were found to perform significantly better than students in the traditional classroom sections on the tests throughout the year. However, participants performed similarly in the delayed final exam. In the questionnaire, no significant differences were found. The researcher highlighted that a possible reason could be that the flipped learning method was a new experience for the students and thus, they needed to have a better understanding of this approach.

In the same vein, although without analyzing student performance, Fontecha (2020) conducted an action research that aimed to evaluate teachers' perception and students' attitudes and practices over the impact of applying a flipped learning model for a basic Spanish course at a university in USA. The intervention consisted of four lessons that dealt with grammar topics transferred into tutorial videos and in-class activities to practice the content from the videos. To gain a broader spectrum of the teacher and students' perceptions, questionnaires and field journals designed to obtain both numerical and non-numerical data from the teacher and the students were used. The study highlighted the cyclical process (i.e., reflection phase, action phase and evaluation phase) of implementing a new teaching model. The author concluded that assignment completion was pivotal for the model to work and that if the flipped model was implemented properly, the role of the teacher was more of a facilitator. It was also suggested that the flipped model helped discuss and build grammar knowledge in a bidirectional way between students and teacher.

As seen above, there is abundant research on flipped learning, especially in STEM classes and in EFL contexts. However, there is a lack of research on some fields of language learning, principally in non-English classes, as is the case of Spanish L2 contexts. Moreover, the vast majority of the previously mentioned studies focus on intermediate and upper-intermediate EFL learners, and it seems that further research is needed on beginning courses. It is also important to point out that most researchers in these studies compared flipped and non-flipped models among different groups of learners. Little is known about the impact of shifting from one to the other within the same group.

In addition, to the writer's knowledge, the flipped model in language learning has not been thoroughly explored in educational contexts in the United States. With Spanish being the most studied language in schools and colleges in the USA (Looney & Lusin, 2018), there is a need to research how flipped learning impacts Spanish second language classrooms and learning in the United States.

Moreover, as a consequence of technology having significantly evolved during the last decades and as commented above, as a consequence of COVID-19, the incorporation of this methodology in academic settings has increased and therefore, its popularity has grown rapidly in recent years, including language learning and teaching contexts (Muldrow, 2013). The flipped approach to teaching has become particularly attractive because of the availability of internet resources including audio and video on virtually any subject; and the approach seems to have singular appeal for students in this electronic age (Herreid & Schiller, 2013). In this way, addressing these new contexts of Spanish L2 learning in the American educational framework is an important research interest nowadays.

2.3 Research question

This study aimed to learn more about flipped learning in Spanish L2 classrooms by examining beginning Spanish learners' language performance at a tertiary level in United States. The research question that the present study aimed to answer is:

Do Spanish L2 learners improve their target language performance on grammar-focused tasks more in the flipped learning approach than in the non-flipped learning format?

3. METHODOLOGY

3.1 Participants

Participants in this study were a cohort of 40 undergraduate students with ages ranging from 18 to 22 enrolled in two basic Spanish classes at Illinois State University in Bloomington-Normal, Illinois, United States. The language learning groups consisted of novice students who had never received instruction on the Spanish language or took a couple of years of high school Spanish some time ago but did not present a strong foundation in the language. It is also important to point out that participants enrolled in this course to fulfil academic language requirements for their majors since they needed two semesters of a foreign language. Therefore, it should be considered that perhaps for most of the students their motivation was purely instrumental, that is, to meet the language requirement.

3.2 Teaching context

The Basic Spanish Skills course (i.e., SPA 111) is the first of two introductory courses for beginning students of Spanish. It is a four-credit hour course designed for students with no prior Spanish study and imparted four days a week in fifty-minutes lessons during one semester; that is to say, a total of fifteen weeks, sixty hours per term. According to the course description, the learning outcome is to help students develop proficiency in the four language skills (i.e., reading, listening, writing, and speaking) essential to effective communicative language learning and to offer an introduction to the culture of the ample Hispanic world. Overall, students in this course are trained to be able to convey personal basic meaning and engage in very simple Spanish conversations about personal topics and/or daily occurrences. Emphasis in this course is in development of oral skills and Spanish is the language of instruction.

This course is taught through *Contraseña*, an interactive online platform with all the learning resources and materials needed for the course. It covers six units, each of them including different sections: *Texto* (reading or listening), *Vocabulario*, *Gramática I*, *Gramática II*, *Exploración cultural*, *Estrategia de producción* (writing or speaking) and *Proyecto*.

In this SPA 111 course students learn the material in the six units following the flipped-classroom approach. Students watch instructional and explanatory videos in *Contraseña* and complete some mainly input-based application activities (i.e., *Aplicar* and *Comprobar* activities) before coming to class. During class time, they engage in oral and communication-based tasks in order to review the content previously learned outside the classroom. All instructional videos are created by *Contraseña*. They usually last between 5 and 8 minutes and include animation and input enhancement.

The control group in this study followed the instructional model for the SPA 111 sequence, as described above. The experimental group combined different

methodologies during the semester. In the first eight weeks of the semester, students were taught the material of the first three units using a traditional face-to-face explicit teaching approach where new language concepts were explained by the teacher in the classroom and learners completed homework (i.e., *Aplicar* and *Comprobar* activities in *Contraseña*) at home to practice what was taught in class. Starting week eight and thus, the last three units in the course, the instructional model switched to a flipped learning approach. Students were asked to watch instructional videos on new content as well as comprehension-based exercises in the online platform and then, come to class to put into practice what they had learned through input- and output-based tasks.

Instructors for the two class sessions participating in this study agreed on the instructional material and lesson plans used on the lessons targeted for this study. All instructors in this Basic Spanish language courses are trained to teach following a communicative approach to language teaching, giving prominence to exposure to meaningful input and encouraging output through personal and meaningful exchanged between students. However, the fact that there were different instructors for the two courses in this study is also a variable.

3.3 Research design

The present study includes a between-group and a within-group design. The between-group design involves one group of learners being instructed via a flipped classroom approach during one semester (control group) and a comparison group learning the same material via a traditional and explicit face-to-face approach for approximately eight weeks (experimental group).

In addition, the within-group design involves a comparison within the experimental group, where the first eight weeks of teaching learners received traditional explicit teaching in the classroom and the remaining eight weeks of teaching, they learned the material under a flipped model. In order to facilitate the identification of the three educational scenarios mentioned, the following identifiers are proposed:

- FC: Flipped Control group
- NFE: Non-flipped Experimental group
- FE: Flipped Experimental group

3.4 Data collection instruments

The research question was assessed through six pre and post-tests, which were grammar-focused and mainly output-based tasks. The instructor designed the pre-tests in a way that they asked for the same language function that the post-tests. Therefore, the pre-tests were based on the content and format of the post-tests. The post-tests included:

- (i) Quiz #1 (Unidad 1, Gramática II): gender and number agreement with nouns and adjectives. In this output-based task, students are asked to select from a list of missing-ending adjectives the adjective that best describes a picture and to add the ending (-o; -a; -os; -as) so that they agree in gender and number with the subject;

(ii) Quiz #2 (Unidad 2, Gramática I): "ser" and "estar" singular and plural forms and uses. This grammar-focused task consists of two different steps. First, students are asked to match different conjugated forms of "ser" and "estar" to their correct use in an input-based activity. In step 2, learners have to complete a conversation with the correct form of "ser" and "estar";

(iii) Quiz #3 (Unidad 3, Gramática II): the present tense of "tener que" and "ir a". This is an output-based activity where students are asked to write a short paragraph describing what they have to do (i.e., tener que) and what they are going to do (i.e., ir a) during the week;

(iv) Quiz #4 (Unidad 4, Gramática I): the verb "haber" in contrast with "ser" and "estar". Students are asked to complete a paragraph with the correct form of the verbs "ser", "estar" and "haber" (hay);

(v) Quiz #5 (Unidad 5, Gramática II): "saber" and "conocer". Students are asked to first, decide whether they have to use "saber" or "conocer" in different sentences based on the context, and then complete an email with the correct form of the verbs;

(vi) Quiz #6 (Unidad 6, Gramática II): stem-changing present tense verbs. Learners need to complete one narration with the correct forms of the most appropriate verb in parenthesis based on the context.

These six grammar lessons were chosen for this study because they included relevant and meaningful grammar concepts that would help students develop their speaking competence and allow them to convey personal meaning in a substantial manner.

3.5 Data collection procedures

There were different stages to the data collection procedures. First, out of the seven sections of each unit (i.e., *Texto*, *Vocabulario*, *Gramática I*, *Gramática II*, *Exploración cultural*, *Estrategia de producción* and *Proyecto*), data for this study was collected only in the *Gramática I* or *Gramática II* sections from units 1-6. Students in both control and experimental groups completed one pre- and post- grammar-focused and mainly output-based test on each lesson targeted for this study. Pre- and post-tests were the same in both groups. Six written pen-and-pencil pre-tests were completed in both classrooms the day before the target grammar concept was introduced and/or practiced in the classroom. At the end of the second day of instruction, post-tests were completed by both groups in the classroom. In the experimental group, three of the six pre- and - post tests were done during the first eight weeks of instruction, that is, during the explicating-teaching period or non-flipped model. The last three pre- and post-tests were done during the flipped-model period.

3.6 Data analysis

Data in this study was analyzed using a quantitative method. In order to answer the research question and using a quantitative analysis, students' language performance in control and experimental groups was assessed by examining their scores in six pre- and six post- grammar-focused tests. These tests were completed by learners before (pre-tests) and after (post-tests) each targeted grammar section taught either through the

flipped (FC and FE groups) or the non-flipped model (NFE group) in units 1-6. Scores in both groups were analyzed using descriptive statistics.

4. RESULTS

A spectrum of the results of control and experimental groups in the grammar-focused pre and post quizzes is offered in Table 1 and 2, respectively. Numbers in brackets indicate the number of participants that completed each pre and post quiz. In addition, Figures 1 and 2 provide a more visual version of this information.

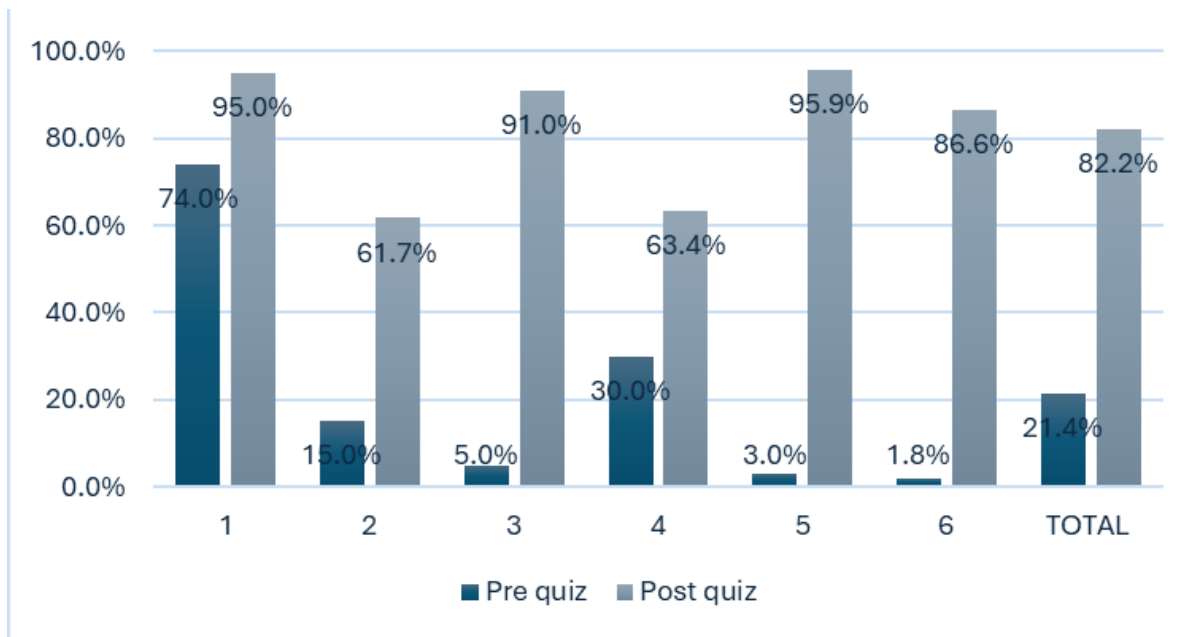


Figure 1. Control group's academic performance in grammar-focused pre and post-quizzes in units 1-6.

CONTROL GROUP	FLIPPED APPROACH (Units 1-6)						
	PRE QUIZ						
	1	2	3	4	5	6	TOTAL
	74% (20)	15% (18)	5% (15)	30% (13)	3% (8)	1.8% (6)	21.4%
	POST QUIZ						
	1	2	3	4	5	6	TOTAL
95% (17)	61.7% (16)	91% (15)	63.4% (16)	95.9% (11)	86.6% (15)	82.2%	

Table 1. Control group's academic performance in grammar-focused pre- and post-quizzes in units 1-6

Table 1 and Figure 1 show results in the FC group. As expected, students in this group seemed to barely have Spanish grammar knowledge before the instruction, with a total average of a 21.4% in pre-quizzes. As can be seen in their outcomes in post-quizzes, students in the FC group obtained a total average score of 82.2%. Thus, learners achieved an overall increase percentage of 60.8% after the instruction of grammar concepts.

Some interesting facts are revealed regarding learners' performance in pre-quiz 1 and pre-quiz 4. Students obtained 74% in pre quiz 1. This might happen because pre-quiz 1 focused on *gender* and *number agreement*. While the course description indicates the course is for students with no previous knowledge of Spanish, the truth is that this course also attracts students with one or two years of high school Spanish but who had Spanish classes several years earlier and thus, did not feel prepared to start their language learning experience in college in the second semester of Spanish. Considering gender and number agreement is one of the most noticeable characteristics of the Spanish language, it may be possible that the results obtained in the pre-quiz 1 are a reflection of the student population's prior knowledge in the language. Similarly, pre-quiz 4 was based on the conjugation of *ser*, *estar* and *haber*. Although the verb *haber* was first introduced to students in this lesson, *ser* and *estar* were grammar concepts that students had studied in previous units. Therefore, this could explain the fact that they achieved a 30% in this pre-quiz.

Table 2 and Figure 2 shows the academic performance of students in the experimental group in grammar-focused pre- and post quizzes in units 1-6.

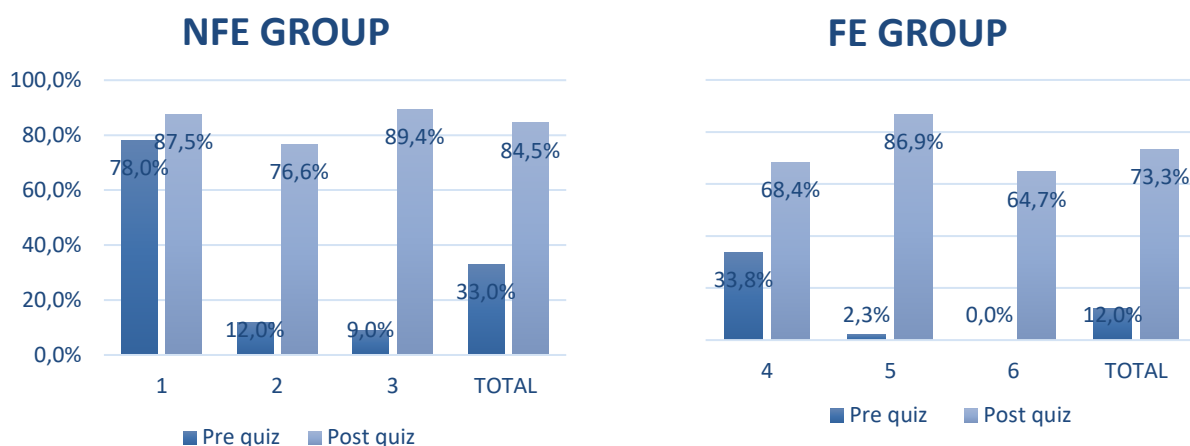


Table 2. Experimental group's academic performance in grammar-focused pre and post-quizzes in units 1-6.

EXPERIMENTAL GROUP	NON-FLIPPED APPROACH (Units 1-3)				FLIPPED APPROACH (Units 4-6)			
	PRE-QUIZ							
	1	2	3	TOTAL	4	5	6	TOTAL
	78% (20)	12% (19)	9% (15)	33%	33.8% (13)	2.3% (12)	0% (5)	12%
POST QUIZ								
	87.5% (20)	76.6% (19)	89.4% (16)	84.5%	68.4% (14)	86.9% (12)	64.7% (12)	73.3%

Figure 2. Experimental group's academic performance in grammar-focused pre and post-quizzes in units 1-6.

As shown in Table 2 and Figure 2, similar results are found in the experimental group. Students in both NFE (units 1-3) and FE (units 4-6) groups performed as expected in pre-quizzes, with a total average of 33% and 12%, respectively. As in the case with learners in the control group, students in the experimental group also showed little knowledge of Spanish grammar before the instruction. In addition, the same phenomenon as in the control group can be found in pre-quiz 1 and 4.

As can be seen in their outcomes in post-quizzes, students in the experimental group achieved a total average score of 84.5% when learning the material under the non-flipped model and a total average score of 73.3% when receiving the instruction through the flipped-classroom approach. Thus, learners achieved an overall increase percentage

of 51.5% (units 1-3) and 61.3% (units 4-6) respectively, after the instruction of grammar concepts.

As expected, learners in this study performed better in the grammar-focused tasks after treatment (either through teacher explicit grammar instruction in class or under video posts of grammar concepts in *Contraseña*) in the three educational scenarios (i.e., FC group; NFE group and FE group).

Given that the experimental group was exposed to both flipped and non-flipped learning and thus, results for this group may be confounded by other factors to be examined in the Discussion section, it is important to compare flipped vs. non-flipped in two different groups (i.e., between-group analysis). Therefore, Figure 3 shows the results from post-quizzes for the first three units for the control group (i.e., flipped) and the experimental group (i.e., non-flipped).

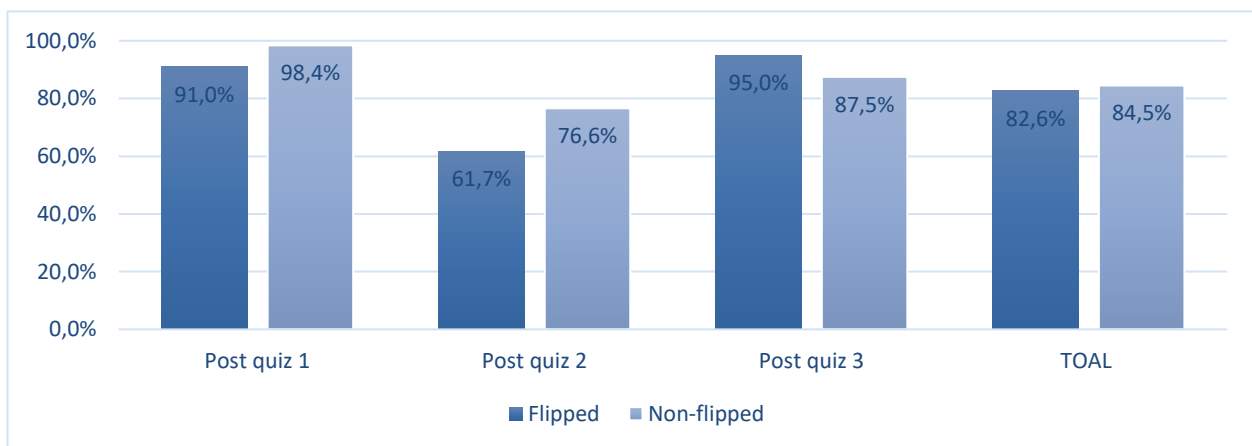


Figure 3. Scores of FC and NFE groups in units 1-3

The overall average score of the FC group in units 1-3 stood at 82.6% while students in the NFE group achieved an overall average score of 84.5% in the same units. More specifically, in post-quiz 1, the FC group achieved an average score of 95% while the NFE group's average score was 87.5%. In post quiz 2, students obtained an average score of 61.7% in the FC group and 76.6% in the NFE group. In post quiz 3 the FC group's average score stood at 91% while learners in the NFE group achieved 89.4%.

Some interesting facts are revealed from these results. First, as can be seen in Figure 3, there was hardly any difference between both groups' total averages in units 1-3. Likewise, student performance in two of the three targeted post quizzes (i.e., post-quiz 1 and post-quiz 3) did not show any important differences between FC and NFE groups (being slightly higher in the FC group). This may suggest that teaching methodology is not a factor impacting student performance in the form-focused tasks used in this study.

However, learners' academic achievement in post quiz 2 was higher in the NFE group (76.6%), than in the FC group (61.7%). One possible explanation for this fact could be

that post-quiz 2 consisted of two different steps and although the second step was similar to other activities in the rest of the quizzes, as Figure 4 shows, the first one was purely theoretical, with students being asked to match different sentences in Spanish with the correct use of the verbs *ser* or *estar*.

Paso 1: ¡A clasificar! Classify each statement according to the correct uses of *ser* and *estar*.

Características

Estado

Lugar

Origen

Son de América Central.

Están en Wisconsin.

Estamos ocupados con la tarea de matemáticas.

Somos tímidas.

Están relajados en la lección de biología.

Somos de Nueva York.

Figure 4. Post-quiz 2 ("*ser*" and "*estar*"): Paso 1

Since post quiz 2 was the only post quiz that has a theory-based activity, it may be suggested that the NFE group scored higher only in this post-quiz as a consequence of having received an explicit face-to face grammar instruction in the classroom.

In addition to the between-group analysis, a within-group analysis of the data was also conducted in the experimental group in order to compare student performance in the grammar-focused tasks when shifting from a non-flipped to a flipped context.

Figure 5 offers a comparison between NFE (units 1-3) and FE (units 4-6) groups regarding their overall academic performances in the targeted post-quizzes.

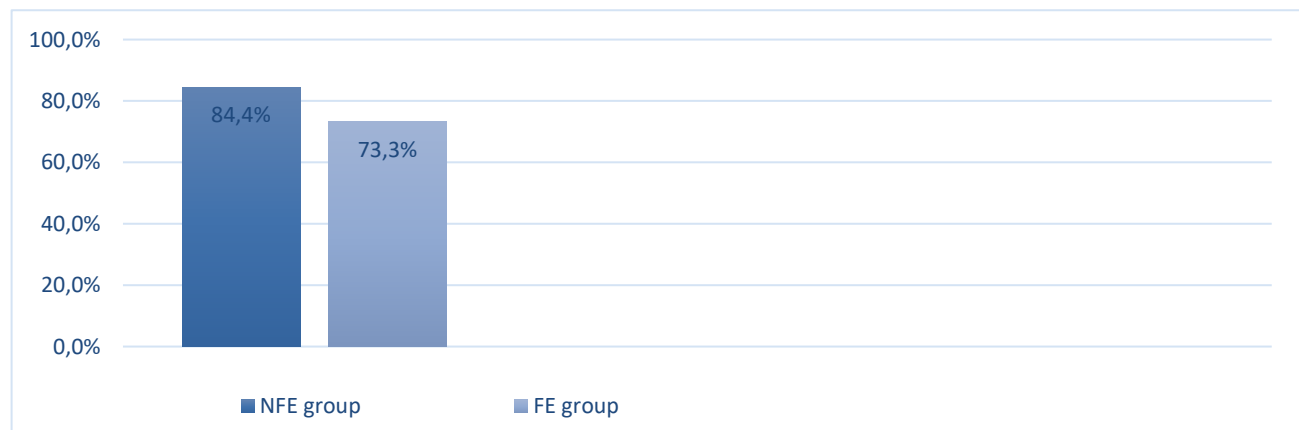


Figure 5. Scores of the NFE and the FE groups

As can be seen, students achieved an overall average score of 84.4% in units 1-3 when learning the material through a non-flipped approach (NFE group) and a 73.3% in units 4-6 when receiving grammar instruction under the flipped-classroom approach (FE group). These findings stand against those in the between-group analysis since contrary to what is observed when comparing control and experimental group's post-quiz scores (no noticeable differences are found), students in the experimental group performed better in the post quizzes in the first eight weeks when they learned the material in a more traditional way (i.e., non-flipped learning context) than in the last eight weeks where students were involved in flipped lessons. This seems to suggest that the flipped model did not positively impact students' academic performance in this group.

In summary, Spanish L2 learners did not notably improve their target language performance on grammar-focused tasks more in the flipped learning approach than in the non-flipped learning format. In fact, although results in the between-group showed that teaching methodology is not a factor impacting student performance in this study, findings in the within-group analysis indicated that students performed better in the non-flipped model of instruction than in the flipped-classroom approach.

5. DISCUSSION

Students' target language performance in the three educational scenarios (i.e., FC group; NFE group and FE group) was examined through six grammar-focused pre- and post-quizzes completed by students in each targeted grammar section in units 1-6.

In the between-group analysis, no differences were observed between the average scores in units 1-3 for the FC and NFE groups, which may suggest that teaching methodology is not a relevant factor impacting student performance in the form-focused tasks used in this educational context. One could question whether the starting language proficiency of participants was similar. However, since both groups performed similarly in pre-tests and the overall performance in units 1-6 was 82.2% and 78.9%, respectively, it seems clear that language proficiency is not a factor impacting results in this study.

While learners' academic achievement in post-quizzes 1 and 3 was slightly higher in the FC group, student performance was higher in the NFE group in post-quiz 2. This post-quiz was the only one presenting a theory-based activity that focused on metalinguistic knowledge (uses of *ser* and *estar*). In contrast to Moranski and Kim's (2016) study, where findings indicated that learners in both flipped and non-flipped groups were able to provide the correct metalinguistic information for uses of *se*, results in this study may suggest that receiving an explicit face-to face grammar instruction with the professor explaining the concepts in the classroom could benefit student performance in purely theoretical tests. However, it is important to consider that the present study assessed student language performance only through these post-quizzes while Moranski and Kim (2016) used three different assessments (i.e., grammaticality judgement test, description tasks and chapter test). That is to say, this study looked at explicit grammatical knowledge in simple production tasks that were not very communicative

while in-class activities were mainly meaningful and communicative and thus, the practice that learners had in class and the assessment used were quite different. Findings in the present investigation might be different if, as in Moranski and Kim's (2016), language learning would have been analyzed through several types of assessment, which was not feasible for this study since this course was designed by a supervisor and it was important to ensure that all sections followed the same procedure and expectations.

These findings agree with García-Allen's (2020), who compared student performance in flipped and traditional classrooms in a first-year introductory Spanish course (i.e., Spanish for Beginners) at the university level in Ontario, Canada. She found that although students in the flipped classroom sections performed better than students in the traditional classroom sections on the tests throughout the year, both groups performed similarly in the delayed final exam. Therefore, in terms of overall academic performance, no differences between these two teaching methodologies were observed.

Results in this study are also consistent with other studies on student performance in the EFL context. For instance, Oki (2016) found that student academic performance in an intermediate EFL course in Hawaii did not reveal statistical difference since learners performed similarly in either flipped or traditional contexts. In the same way, Al-Harbi (2016) did not find a statistical difference between flipped and non-flipped classrooms in language proficiency gains in an EFL secondary school classroom in Saudi Arabia.

While student language performance did not show important differences when learning the material under the flipped or the non-flipped models, these results prove that replacing the traditional face-to face approach by a flipped learning format may still be favorable for the academic achievement of Spanish learners in this context. By moving the explicit grammar instruction to the individual space outside the academic setting, students may be provided with more opportunities to practice and develop their second language communicative skills in the classroom without their performance in grammar-focused tasks being affected.

However, the present study also contributed to this body of literature by examining the effectiveness of the flipped learning approach in a within-group analysis, which sheds some light on this topic in a genuine manner since it allows to compare not only the target language performance of both control and experimental groups, but also to analyze the academic performance of students in the same group (experimental group), which combined two different methodologies during the semester.

Results in the within-group analysis stand against those in the between-group in this study. The experimental group was found to perform substantially better in units 1-3 when learning the material under the traditional approach (NFE group) than in units 4-6, where the material was learnt through the flipped model (FE group). One could think that topics learnt in the last three units might be more difficult than those in the first three units. However, considering the overall averages for the control group were virtually the same in both halves of the semester (82% in units 1-3 and 81% in units 4-6) this does not seem to be a factor impacting results in this study.

This discrepancy between results in the between-group and results in the within-group analysis may provide significant pedagogical implications since, while teaching methodology does not seem to be a factor impacting student performance in grammar-focused tasks if being the only one followed during the semester (between-group analysis), when combining methodologies in the same group and, more specifically, with the non-flipped model being the first approach implemented, learners' target language performance is negatively affected (within-group analysis). This fact could imply that it may be more difficult for learners to shift from one methodology to another in the same semester, which supports Strayer's (2007), Hoshang, Hilal & Hilal (2021) and Divjak et al. (2022) suggestion of a transition between these two methodologies.

In fact, students were performing substantially better in the *Aplicar* and *Comprobar* activities in the non-flipped period and it is possible that their level of frustration with the flipped period, seeing their scores for *Aplicar* and *Comprobar* were considerably lower, may have negatively impacted their overall performance and engagement in class activities and post-tests. More specifically, this may suggest that after having received grammar instruction through an explicit face-to face approach the first eight weeks of instruction, which requires less work-load and effort in the individual space, it may be harder for students in the experimental group to adapt to the flipped model afterwards, which requires a higher work-load on the part of students. Moving from non-flipped to flipped model may be part of the problem. It would be interesting to see what would have happened if the experimental group had started with the flipped-learning approach.

6. CONCLUSIONS

As applications of the flipped-learning approach continue to increase in prominence and implementation across various educational domains, including foreign language teaching and learning, and continue to challenge the traditional models as they try to adapt to new emerging teaching contexts, it is indispensable to evaluate the impact of flipped learning methods in the classroom. This study aimed to learn more about the impact of the flipped model on student language performance in Spanish for Beginners L2 classrooms at a tertiary level in the United States.

Findings in this study offered some important pedagogical implications. Student language performance on grammar-focused tasks was virtually the same in these Spanish L2 courses when learning the material under either the flipped or the non-flipped models. This result may imply that teaching under the flipped model is not detrimental to language learning and in fact, it is beneficial because it allows more time in the classroom for language practice, something students cannot do on their own since in order to learn to communicate in Spanish they need a partner. However, results also suggested that combining flipped and non-flipped models within the same group of learners in the same context may negatively affect their performance on grammar-focused tasks in favor of the non-flipped model. No clear findings can be shown in regards to this phenomenon since, although language proficiency did not seem to be a factor affecting results in this study, it is uncertain if it was due to this combination of different teaching

methodologies, due to the order (from non-flipped to flipped model) in which this shift took place or due to other factors such as individual differences (considering the limited number of participants in many of the pre and post-tests) that students performed better in the non-flipped classroom.

It would be interesting to compare the experimental group's language performance inverting the order, with students learning the material first through the flipped model (units 1-3) and then, via the non-flipped learning format (units 4-6). In addition, these results could also be informed and enriched by examining students' opinions towards the combination of these two teaching approaches to determine if there is a concordance between their academic results and their perceptions.

This study suffered from a number of limitations. First, not all 40 students showed up during the duration of all grammar lessons targeted in the study, thus not all participants completed every pre- and post-tests. The different number of learners participating in each test should be a factor to consider when interpreting results in this study.

Another limitation in this study is that, although agreeing on the instructional material and lesson plans used on the lessons targeted for this study, there were different instructors for control and experimental groups, which brings in another variable. Additionally, videorecorded data of the lessons being targeted was not collected. It would have been interesting to look at the amount of explicit instruction in class time in both control and experimental groups since students demand it regardless of the methodology followed. Thus, it is important that teachers should understand that adopting the flipped model does not mean eliminating explicit instruction in the classroom. What it means is that in class, as students engage in language practice, teachers should focus on form through student feedback or language related episodes where explicit attention to grammatical forms takes place based on students' performance in class tasks. As teachers evaluate students' understanding of the material as they perform language tasks, they should spontaneously and always within meaningful context, provide any form-focused attention to grammatical components in the input as well as making sure students are given the chance to ask for clarification of concepts not fully grasped.

Regarding the analysis, this study would be strengthened by employing inferential statistical tests since this approach would facilitate the derivation of more robust conclusions regarding the differences among groups.

Finally, further research on flipped learning should contrast different participants based on their interest to learn Spanish L2 as well as their level of Spanish proficiency since as seen in this study, in these mandatory introductory classes students lacked the discipline and motivation to learn the language. Comparing student language performance in the teaching context given in the present study with a non-mandatory intermediate or upper-intermediate Spanish L2 course, where students are strongly involved in the subject and present some previous knowledge of the Spanish language, would inform this body of literature with important insights.

In all, results in this study showed that implementing the flipped-learning approach in the instruction of this Spanish L2 course may be a valid teaching practice if following this methodology during the entire semester. However, when combining non-flipped and flipped models throughout the same term, learners perform substantially better in the non-flipped format.

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