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Effects of a Blended-Flipped English program on the learning of Academic and Administrative Staff in a Higher Education Institution

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ABSTRACT

This article presents the results of an exploratory study about the contributions of a blended English as a Foreign Language (EFL) learning program, with a flipped classroom instructional model, to the development of the listening and reading skills of academic and administrative staff of a higher education institution. The research followed a mixed method approach framed on variables such as the development of oral (listening) and written (reading) comprehension activities. The results present some contributions of the blended-flipped instructional model to the EFL teaching and learning processes, as well as to development of professors' and administrative staff's communicative competences in English. This study highlights how the combination of blended learning with a flipped classroom approach to proficiency program design opens new possibilities in the language learning instructional design field, and demonstrates the blended-flipped model's positive effects on language learning. It is also novel in its proof of the effectiveness of creating a program based on the professional development needs of the University's community of professors and administrative staff from various disciplines.

Key words: Instructional Design, Flipped Classroom, Blended Learning, Foreign Language Learning, Listening, Reading

INTRODUCTION

The dynamics of the education sector have led teachers and researchers to focus their efforts towards getting to know needs of the main actors in language learning: students. This allows for the creation or adjustment of pedagogical models in order to better respond to the learners' needs and learning styles and thus ensure learning. Consequently, personalized education is gaining importance in different learning scenarios for various educational levels. Student-centered foreign language teaching-learning has multiple benefits, since it contributes to the development of communicative competences through the development of language production skills (writing and speaking) and comprehension skills (reading and writing).

The learning environments for the adjustment of teaching practices to different contexts and populations also favor the personalization processes. Such is the case of the flipped classroom approach which has been shown to have positive impacts on student learning and autonomy fosterage (Blau & Shamir-Inbal, 2017; El-Banna et al., 2017; Gilboy, et al., 2015; Sohrabi & Iraj, 2016; Yilmaz, 2017). This approach has also proved to be versatile and adaptable to different learning environments, including personalized environments (Gilboy et al., 2015). The flipped learning approach enhances the student's active role by promoting self-direction, self-discipline, and motivation, which provide significant benefits for populations of adult students who are learning a foreign language.

This study examined a blended-flipped instructional model for the English learning of academic and administrative staff at a higher education institution. This instructional model combines an asynchronous virtual learning environment with a classroom environment that takes place on the university campus. The first environment is developed in the Learning Management System Moodle and corresponds to 78% of students' study time; the second environment is developed through face-to-face sessions in classrooms which correspond to 22% of students' study time.

The flipped classroom begins in the virtual environment, through a learning path that provides multimodal content and proposes activities to be prepared before each weekly classroom session. The methodology of the model was structured based on the nine instructional events proposed by Robert Gagne and Walter Dick (1983), which are: to present the learning objective, to guide learning, to provoke performances, to provide feedback, (p.265) among others. The path of learning in the virtual environment is developed in four stages that guide students' autonomous work: 1) exploration and practice, 2) self-evaluation, 3) feedback, and 4) production.

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The flexibility of the blended-flipped model allows students to approach content and perform the virtual activities autonomously, at their own learning pace, in their time and space of preference. It also provides them with moments of verification in which they can make decisions to redirect their learning path, review content, repeat exercises and look for support or for clarifying resources. These moments are not commonly present in a learning process that takes place only in a classroom.

The implementation of the program in blended mode began in 2006. Using this program, 2,145 students completed the seven English levels required by the institution. In 2014 the flipped classroom approach was integrated into this blended instructional model. After implementing this program for quite a long time, the academic team decided to conduct research in order to analyze the effect of a 'flipped classroom' instructional design on the students' language learning. Consequently, data was collected on seven consecutive semesters of the program's implementation, with the learning processes of university's administrative and academic staff enrolled in the program from the academic semester 2015-1 until the semester 2018-1 forming the base of data. The research inquiry to be solved through this study is: what is the effect of a 'flipped classroom' instructional design on the reception language activities (listening and reading), of academic and administrative staff from a private university learning English as foreign language in a Blended language program?

LITERATURE REVIEW

Comprehension Activities in Learning English as a Foreign Language

Comprehension is a capacity developed through different cognitive processes: attentional, perceptive, lexical, syntactic and semantic (Miramontes-Zapata & García Rodicio, 2017), that a person performs when interacting with information presented in different modes. According to the Common European Framework of Reference for Languages: Learning, Teaching, Evaluation (Council of Europe, 2002), communicative-linguistic competence involves language activities such as comprehending, expressing, interacting and mediating. The comprehension process (oral and written) refers to listening and reading skills, while the process of expression involves speaking and writing skills. Listening (oral comprehension) involves the reception of information (input), with different purposes by the listener or user of the language-- in this case, the student. Reading comprehension refers to reception of information that is processed through written texts. For expression activities the student produces both oral and written texts, taking into consideration an audience or a reader who will receive the information communicated.

The Common European Framework of Reference (Council of Europe, 2002), CEFR hereafter, provides a categorization of foreign language users' proficiency levels as indicators for the organization and planning of learning experiences. The categorization starts with a division of three broad levels: A- basic user, B- independent user and C- proficient user. From each of these levels branch two sub-levels: A1-Breakthrough, A2-Way stage, B1-Threshold, B2-Vantage, C1-Effective Operational Proficiency, and C2-Mastery. This framework can be considered instructionally for the development of syllabus, content, and learning activities, regardless of the learning environment in which those take place. The CEFR provides global descriptors on both expression and comprehension activities for each of the sub-levels. For the purpose of this research, only the descriptors of the comprehension activity will be taken into consideration.

In this study the computer is considered the main mediation tool, since the English as a foreign language teaching and learning processes take place in a blended learning environment, with a flipped classroom approach. The instructional model of this program was designed based on a structure focused on nine learning events (Gagne & Dick, 1983), to promote linguistic-communicative competence, specifically in oral and written comprehension.

Comprehension Activities Development with Technological Scaffolding: Blended Learning Environment and Flipped Classroom Approach

Nowadays technological tools and interaction platforms offer diverse options to rethink pedagogical practices. In this process of reflection on those practices the hybrid or blended learning emerges to benefit because of the attributes of the two, virtual and face-to-face learning environments (Graham, 2004). Studies such as the ones build by Regalón and Leyva (2014), Osorio (2010) and Yalçınkaya (2015) report the impact of English teaching-learning blended programs in institutions of higher education. These authors agree that in this digital, electronic and internet-mediated the world, blended learning becomes the future of foreign language learning, as it tends to promote the development of communication skills (Janthon, Songkram, & Koraneekij, 2015).

In the implementation of two blended academic courses, Regalón and Leyva (2014) found that students were not ready to face a blended English program. Consequently, they developed a model of assisted self-access in which the teacher guided students during their self-preparation. Results report a positive pedagogical impact evidenced by the improvement of the class quality and higher results in students' grades. These authors also emphasize that there was a radical change in the role of the teacher during the implementation of this blended program, as he had to teach his students how to learn in this environment and promote the socialization and demonstration of what students learned through individual study (Regalón & Leyva, 2014).

Other recent studies have pointed out that blended learning could have a positive effect on students' autonomy, as well as on promoting lifelong learning (Jokinen & Mikkonen, 2013). Barnard, et al., (2009) in accordance with Parra and Riveros (2014) mention that autonomy characterizes the blended learning environment, in which self-regulation becomes a critical factor for students to succeed in this kind of learning experience.

Studies comparing learning outcomes in blended environments with those in fully virtual environments have found that the conditions of blended learning environments providing greater benefits for higher education students' performances (Matukhin and Zhitkova, 2015; Thai, et al., 2017; Vo, et al., 2017). This blended method provides teachers or instructors with more opportunities to offer student-centered learning experiences through which cognitive skills can be developed (Khlaisang & Likhitdamrongkiat, 2015). In addition, Matukhin and Zhitkova (2015) stated in their research study, that blended learning technologies contribute to the humanization, personalization and differentiation of educational processes.

Most of the existing research in the area of English learning through blended-flipped environments report students and teachers' positive perceptions or high satisfaction levels (Basal, 2015; Bishop & Verleger, 2013; Huang and Hong, 2016; Li, 2016; Wanner & Palmer, 2015). Tucker (2012) reports that there is not a single model for the flipped classroom (p.82). In agreement with Tucker, Basal (2015) points out that flipped learning or flipped classroom represents a redesign of the teaching method, in which students access instructional resources in advance and outside the classroom, thus the classroom time is devoted to developing problem solving activities, clarifying concepts, and/or learning collaboratively (p.28). Among the advantages of this approach are better use of time, a greater one-on-one interaction between the teacher and his students, and the personalization of the learning pace according to each student's needs (Barnard et al., 2009; Cabero-Almenara et al., 2016; Holden et al., 2009; Schlairet et al., 2014). To sum up, flipped learning implies a flexible environment in which students can choose, when, where, what and how to study and learn (Oppenheimer, 2014; Wanner & Palmer, 2015).

Among the strengths of the flipped classroom are the increased motivation, interest and autonomy of students (Gilboy et al., 2015; Sun et al., 2018; Yang et al., 2018), and the communicative, sociocultural and interactional development of competences in the learning of foreign languages (Jeong, 2017). As Blau and Shamir-Inbal (2017) demonstrate, the flipped classroom promotes varied opportunities to develop high order thinking skills through active participation, knowledge construction and interaction. It also provides possibilities for feedback, as well as for the co-creation and sharing of learning products.

English learning through the comprehension activities: reading and listening in settings mediated by technology have been the focus of study and exploration of several researchers (Liu et al., 2010, Ponce et al., 2012). Among some of the findings, it has been stated that blended learning environments favor the development of reading comprehension, since they promote the development of learning strategies (Liu et al., 2010; Lysenko & Abrami, 2014; Zoghi et al., 2010). These environments are composed of hypermedia resources that increase attention and complement and support the effectiveness of the learning exercise (Bataineh & Mayyas, 2017). Some of the resources used in the virtual environment are: glossaries, diagrams, videos or annotations (Hamdan et al., 2017).

In regard to the use of technologies it has been found that blended learning environments have become a prominent setting for the development of oral comprehension skills (Erdem & Erdem, 2015; Yang et al., 2013). From the pedagogical perspective, the positive effect is attributed to the fact that the blended environment provides possibilities for content integration, allows communication and collaboration, allows exploration at the individual pace of learning and promotes student's autonomy (Guangying, 2014). From the perspective of instructional design, researchers Yang et al., (2013) affirm that blended learning favors not only the development of oral comprehension capacity, (as long as the design privileges student-centered learning and needs), but also includes learning experiences that involve the use of authentic language.These researchers report that the aforementioned can be achieved through individualized instruction and feedback processes, and the design of activities and resources for each level.

Dimensions of the blended-flipped model based on the nine instructional events of Robert Gagne

The teaching-learning process in the model proposed for this study is pedagogically constructed based on the nine instructional design events proposed by Gagne and Dick (1983): 1) gain attention, 2) inform of the goal, 3) activate previous learning, 4) present content, 5) guide learning, 6) provoke performance, 7) provide feedback, 8) evaluate performance, and 9) improve retention and transfer. (p.265)

The above Figure 1 shows each one of the mentioned events within the didactic learning path proposed for this blended-flipped instructional model.

The learning path that students autonomously go through in the virtual environment is developed in four stages: 1) exploration and practice: content is presented in a virtual learning object in SCORM (Sharable Content Object Reference Model) format, which includes comprehension activities with automatic feedback to develop reading, listening, writing, grammar and vocabulary; 2) self-assessment: it contains a learning checkpoint activity in which students take an open test to verify their learning and make decisions about whether to go forward with the production stage or go back to a specific exploration activity for learning consolidation purposes; 3) Feedback: includes a workshop that demonstrates the student's performance and on which the instructor provides feedback; and 4) production: composed first by a forum aimed at the socialization, interaction and personalization of learning in the virtual environment, through which critical thinking and collaboration are promoted. The second production activity is a speaking task, focused on the development of functional language aspects.

This Figure 2 shows the blended-flipped learning path students find in the LMS Moodle platform

Following the nine events proposed by Gagne and Dick (1983), and framed in a flipped classroom approach, each English course invites students each week to go through the aforementioned learning path for each of the 12 modules that compose a course. Those modules are permanently enabled in the Moodle virtual platform in which all the virtual components take place.

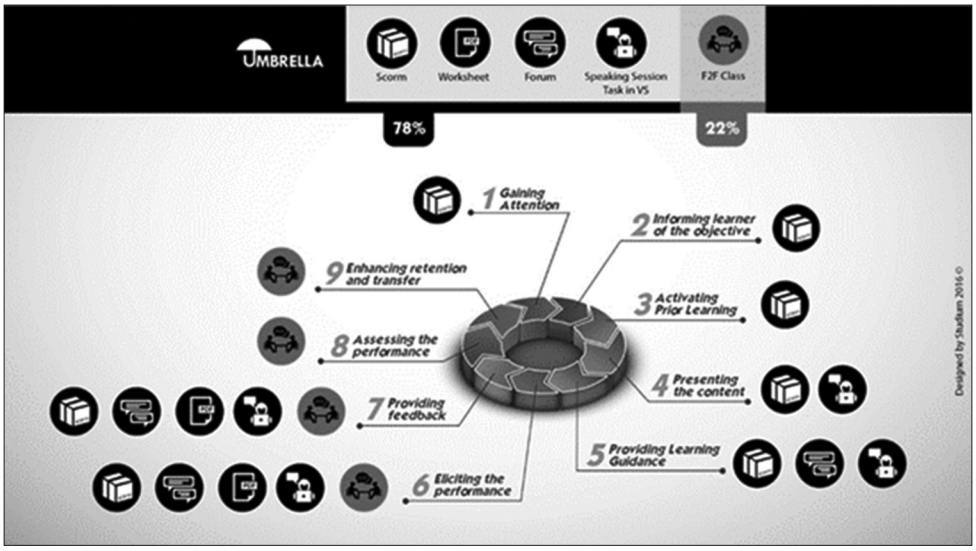

Figure 1. Pedagogical dimensions in the blended-flipped English learning model. Studium (2016)

Figure 2. Visualization of the blended-flipped learning path in the LMS Moodle platform

METHODOLOGY OF THE PROGRAM

The flipped classroom has been defined as a pedagogical approach in which direct instruction takes place outside the classroom and classroom time is used to develop meaningful and personalized learning activities (Bishop & Verleger, 2013). For the purpose of this blended English program, this approach is integrated with the goal of optimizing the learning experience in the virtual environment; such that students explore the content and work at their own pace before meeting their teacher and classmates in the two face to face hours.

Resources

The Language Resource Center and Research (Studium), located in the institution, has an academic team composed of the resource center director, a coordinator of the language learning area, and a coordinator of the English program and teachers. In addition, Studium has a technological development team composed of the coordinator of digital resources development, the manager of digital resources and a team of student-monitors. The digital educational resources that students find in the virtual learning environment have been

mostly developed (90%) in-house by the academic and technological teams. The remaining resources (10%) have been curated using free material that can be found on the web for educational use and that have an open Creative Commons license. These teams work continuously to keep the contents updated on the platform. Among the resources that are deployed in the platform are learning objects in SCORM format with a variety of interactive learning activities supported by multimodal resources such as: videos, audios, images, links to web 2.0 learning tools, slide presentations, and texts.

Instructional Model Scope for Learning

The level of personalization of the blended-flipped instructional model presented in the framework of this study is a differentiating factor that benefits the foreign languages teaching-learning processes. This model proposes a face-to-face learning event with only small groups of students, who benefit from the specificity and frequency with which teachers provide feedback on their learning products. In the same line, the implementation of learning support mechanisms, and opportunities for reflection and self-assessment, have proved to have positive effects on students' awareness of their levels of progress in different language activities and areas for improvement, as well as their development of self-management strategies (Blau & Shamir-Inbal, 2017; El-Banna et al., 2017; Gilboy et al., 2015; Sohrabi & Iraj, 2016; Soliman, 2016; Yilmaz, 2017). Some studies have demonstrated that students increase their reflective competence by experiencing different opportunities to receive feedback and to implement self-regulation strategies, which promotes competences and learning processes development (Rosário et al., 2016).

Course Type

This section presents the blended-flipped course structure, the categorization of course levels and the target population (Table 1).

This Table 1 describes the structure of the blended-flipped English courses.

Table 1. Course type

Blended-flipped English courses	
Course type	**(LMS) MOODLE**
Target audience	Academic and administrative staff in a higher education institution
Mode	Blended 78% virtual and 22% face-to-face
English courses and Common European Framework levels	Level 1 (A1.1), Level 2 (A1.2), Level 3 (A2.1), Level 4 (A2.2), Level 5 (B1.1), Level 6 (B1.2), Level 7 (B2.1)
Number of hours	Each course takes 16 weeks (one academic semester): Virtual work 112 hours Face to face work 32 hours

Learning Objectives and Competences to be Developed

Each level of the program is articulated under a constructivist pedagogical model through which the learners have an active role in the learning process. There, students build knowledge from learning experiences in which they interact with the environment and with other participants. Constructivism is considered a social methodology that promotes collaborative, cooperative and project-based learning. To illustrate, the teacher has the role of guiding learners towards the achievement of learning objectives and following up their learning process by constantly monitoring the work done. Table 2 describes the elements of the English courses and specifies the competences to be measured in comprehension skills.

This Table 2 provides the description of the English courses' methodology.

Assessment

In the blended-flipped program, the assessment focuses on processes that make evident the participants' progress in their communicative competences in English and in the domain of self-direction and metacognition strategies. We work with formative and summative assessment processes.

Formative assessment

Firstly, this assessment takes place through the development of virtual learning activities (input) that are deployed in SCORM format in the institutional LMS: Learning Management System (Virtual Sabana Platform). This platform provides automatic feedback, indicating to each student whether or not he has achieved the objectives of each exercise. At the end of each module of activities, the platform provides progress bars and percentages indicating the student's level of performance. Secondly, the students are assessed formatively each face-to-face session, based on the outcomes (output) they produced weekly during the 78% of virtual-autonomous work.

Table 2. English courses methodology

Objective	**Generate learning processes through which communicative competence in the second language (English) develops:.**
Pedagogical approach	Constructivist: social learning
Methodology	Blended – flipped learning
Articulating work axis	The learning experiences developed through situation prompts. This strategy allows the inclusion of different interaction scenarios through which the learners acquire linguistic knowledge, develop language skills and achieve the expected communication objectives.
Competences to be developed	Oral and written comprehension from level A1.1 to B2.1 of the Common European Framework of Reference for Languages: Learning, Teaching, Evaluation (2002).

Self-assessment

At the end of each of the two terms, students complete a self-assessment activity, which includes questions on: (1) virtual independent work, (2) preparation of tasks, (3) taking advantage of the feedback received from the tutor, and (4) attendance at the face-to-face sessions. There, each student grades each criterion on a scale and makes self-assessment comments. The quantitative result of each self-assessment is included in the grades of each assessed term.

Summative assessment

This assessment is presented at the closing moments of the two academic terms. Students take a formal test for each of the language activities, including both oral and written sections to test comprehension and production.

The tests are taken during a face-to-face session through the virtual platform which provides results automatically. The written tests of oral and written comprehension (listening and reading) are structured with alternative answer, multiple choice questions or ordering questions.

METHOD

This study focused on identifying the contribution of a 'flipped classroom' instructional design, on the receptive language abilities (listening and reading), of a group of students learning English as foreign language in a blended language program. A diagnostic test was administered before and after the course implementation to assess the participants' listening and reading competence levels in English, according to the six common reference levels stated in the CEFR (2002). The results obtained by the participants on the listening and reading exams administered in the course were compared to students' own perceptions of their progress. The study also inquired about students' perceptions of the course learning environment and the extent to which the available resources in the course contributed to the development of their listening and reading competence level in English.

We followed a mixed method approach with an explanatory exploratory design framework (Creswell & Plano, 2011) based on variables such as, reception activities (listening and reading) of English as a foreign language, and a 'flipped classroom' instructional design and its effects on English as a Foreign language learning. We followed these phases:

- Exploratory phase: we analyzed the records to identify the number of participants who studied their English courses in the Blended program and their entrance proficiency level, assessed by an English placement test. Data were extracted from a selected period of three and a half years, from 2015 to 2018, in which 13 courses were taught: seven four-months courses and 6 three-weeks intensive courses (four courses in each year from 2015 to 2017, and one course in 2018).
- Implementation phase: in this phase we collected the information from the course gradebooks and analyzed the average grade obtained by participants in the listening and reading course exams.
- Assessment phase: we compared the placement test results with the students' exit proficiency level from the program, according to their equivalence to the CEFR levels (Council of Europe, 2002). Later, we analyzed the grades obtained by each student in the listening and reading exams administered throughout the program.
- Perception phase: we analyzed data collected from the final course evaluation survey to identify students' perceptions regarding the Blended learning environment, the flipped classroom approach, and the available learning resources. Results from this survey also allowed the researchers to identify students' perceived progress on their listening and reading levels in English. Students' consent to participate in the study was also collected in this survey.

The sample of participants for the study were of non-probabilistic type determined by a discretionary sampling technique. The total number of participants admitted to the program and who were identified as administrative or academic staff from the university were from 13 cohorts from 2015 to 2018. We received consent to participate in the study from 202 students. Table 3 summarizes the study focus, the research design, the data collection instruments and their distribution throughout the different activities evaluated in the program.

RESULTS

The initial exploratory phase (Creswell and Plano, 2011) of this study aimed at characterizing the population of professors and academic staff of the institution in order to identify their English competence or level before taking the courses in the blended-flipped program. The enrollment registers of the English Blended program from 2015 to 2019 showed that 256 students belonged to the categories 'administrative staff' or 'academic staff'. From that group, 54 students who cancelled their course registration were not considered for the study. After that, we identified the placement test results and we then used this data to measure students' improvement in listening and reading, while taking into consideration the number of blended program courses taken by each student. Later, we classified students' placement test results into the six common reference levels from the CEFR (Council of Europe, 2002). This procedure allowed the researchers to identify students' English level for the reception activities (listening and reading) before the 'blended-flipped' instructional design courses had been implemented. Data analysis showed that more than half of the students (59%) started their English course as basic users (A1 and A2 level) according to the CEFR (Council of Europe, 2002). The researchers tracked and analyzed the participants' academic results using the listening and reading evaluative activities and the participants' perceptions of their progress on listening and reading. These data were extracted from the course gradebooks and students' self-assessment journal entries.

Table 3. Study focus, research design, data collection techniques and instruments, and activities evaluation

Study focus	**'Flipped classroom': a strategy for university professors and administrative staff studying English as a foreign language in a Blended program**			
Problem	What is the effect of a 'flipped classroom' instructional design, on the reception language activities (listening and reading) of academic and administrative staff from a private university learning English as foreign language in a Blended language program?			
General Objective	To analyze the effect of a 'flipped classroom' instructional design on the reception language activities (listening and reading) of academic and administrative staff from a private university learning English as a foreign language in a Blended language program.			
Research method	Mixed method approach			
Participants	202 academic and administrative staff from a private university, studying English as a foreign language.			
Design	Exploratory design			
Design phase	**Exploration**	**Implementation**	**Evaluation**	**Perception**
	Data collection of the number of students in the program and their placement test results.	'Flipped classroom' instructional design in action	Students' entry and exit competence level in listening and reading. Students' average scores in listening and reading exams.	Closed survey
Data collection techniques	Documents and records	Documents and records	Documents and records	Survey
Data collection instruments	Course inscription records Placement tests results	Students' self-assessment Course gradebooks	Students' follow-up records Course gradebooks	End of course survey
Variables	Independent variable: a Blended English as a foreign language program with an instructional 'flipped classroom' design.Dependent variable: the reception language activities (listening and reading) in English as a foreign language Extraneous variables: students' absences, students' non-use of the language learning platform.			
Variables control	The 'flipped classroom' instructional design prompts the development of students' reception language activities (listening and reading) in English as a foreign language.The 'flipped classroom' instructional design doesn't prompt the development of students' reception language activities (listening and reading) in English as a foreign language.The 'flipped classroom' instructional design partially prompt the development of students' reception language activities (listening and reading) in English as a foreign language.			
Hypothesis	Research hypothesis: the implementation of a 'flipped classroom' instructional design prompts the development of students' reception language activities (listening and reading) in English as a foreign language.Alternative Hypothesis (H1): the implementation of a 'flipped classroom' instructional design has a significant impact on the learning processes of reception language activities (listening and reading) in English as a foreign language, as evidenced by students' performances in the listening and reading exams administered thought the course.Null Hypothesis (HO): the implementation of a 'flipped classroom' instructional design does not prompt the development of students' reception language activities (listening and reading) in English as a foreign language.			

Impact on Students' Oral and Written Comprehension Performance

Students' documents for enrollment in the program were again addressed, this time to determine the exit level of the population and to compare it with the entry level. The independent user B2 corresponds to the final course, level 7, offered in the blended-flipped classroom program. Figure 3 indicates that a significant number of the enrolled students (34%), finished the complete English program offered by the institution. On the other hand, the graph reports that 67% of the students finished the program having an independent user level of B1 and B2 (Council of Europe, 2002). The impact of the program on the development of the participants' English competence is evidenced by the contrast between the initial and final proficiency levels, which passed from basic users (A1 and A2) to independent user for more than half of the population (59%).

Figure 3 describes the entrance and output proficiency levels of students enrolled in the hybrid-flipped program.

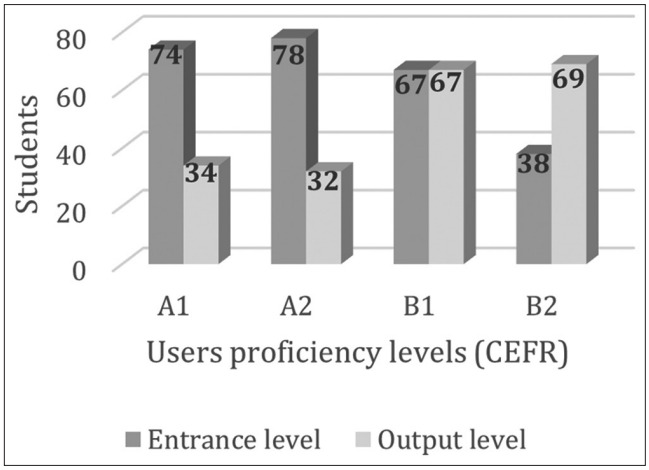

Figure 3. Entrance and output proficiency levels

The data collected above shows that most of the population (67%), progressed in their comprehension skills,

passing from basic A1 users able to "understand and use everyday expressions, as well as, simple phrases intended to satisfy needs of immediate type", or of basic A2 users able to" understand phrases and expressions related to areas of experience that are especially relevant" to independent B1 users, able to "understand the main points of clear texts and in standard language if they deal with issues that are known to them, whether in work, study or leisure situations" and to independent users of B2 level, able to "understand the main ideas of complex texts that deal with both concrete and abstract issues, even if they are of a technical nature, within their field of expertise "(Council of Europe, 2002).

As part of the implementation phase and in order to corroborate in detail the progress of students' oral and written comprehension skills, the gradebooks were addressed and students' grades on those language skills were averaged during each of the academic periods studied. The final averages per student were placed on the performance scale: high (3.4 to 5.0), medium (1.7 to 3.3) and low (0.1 to 1.6), whose result indicated that the overall grade average of all students in reading was 4.2, and in listening 3.9, over 5.0 which is the maximum grade. Both results suggest high grade averages of performance.

When analyzing the averages of each one of the language activities, the results show that in the written comprehension activity, 90% of the students were in the high-performance scale, and 10% in the medium performance scale. None of the students ranked on the low performance scale. Regarding the performance of students in the listening activity, the results indicate that 75% of the students were placed on the high-performance scale, 24% on the medium performance scale, and 1% on the low performance scale.

These results demonstrated that this hybrid-flipped program offers students an alternative to learning English that allows for enhanced progress in the development of their communication skills in a foreign language. The continuity of most of the students in the program suggests that this program is not only well received by students, but also that it fits both their personal and work life circumstances.

Self-awareness on English Learning: Difficulties and Action Plans

One of the key instruments for these findings on students' self-awareness of their English learning was the self-assessment form, in which participants were invited to analyze their performance during the course quantitatively and qualitatively. In the qualitative section students enter comments about their performance. Results demonstrated that students mentioned either aspects that they wanted to improve or they specified an action plan with strategies or resources they wanted to work with in order to improve. The analysis of quantitative data collected with the self-assessment instruments evidenced that from 625 self-assessments carried out, 49 (7.8%) of them referred to the listening activity and 19 (3.0%) of them to the reading activity. In 13 (26%) of the self-assessment forms participants identified the listening activity as an aspect to be improved in their learning process, while 9 (18%) of the participants said they had progressed in listening during the English course taken. Likewise, 25 of the participants (49%) proposed specific actions to improve in listening, for instance: to watch news programs, videos, movies; to listen to music or audios; to work on exercises like formal exams; and/or to spend more time studying or to better manage time.

Regarding the written comprehension activity, it was found that from 19 self-assessment forms, in 4 (21%) of them participants commented about difficulties when reading English and 8 of the students (42%) specified their actions for improvement, for example, reading about their area of work or interest in English, increasing the time of practicing reading comprehension and reading aloud. Finally, in 7 (37%) of the self-assessment forms, participants commented that they had improved in this comprehension activity. That students not only reflected upon the skills they found particularly difficult, but further proposed possible action plans to overcome these difficulties, suggests that the blended-flipped program enhances processes of developing metacognitive skills and has a significant effect on students' self-awareness during the English learning process.

Students' Perception of Progress in English Oral and Written Comprehension

Students' perception regarding their level of progress in each of the language activities were revealed. The results show that the activity in which the most progress was perceived was reading; 94% of the students perceived a "very good" and "good" level of progress in their written comprehension, while only 6% considered that progress was "regular" or that they "needed to improve" on it. Regarding oral comprehension, it was found that 67% of the students considered their progress as to be "very good" or "good", while 33% considered their progress as to be "regular" or "needs improvement". These results suggest that almost all the students perceived a very significant advance in their reading level and more than half of them identified a significant advance in their listening level during the English learning process. Consequently, from the students' perspective, it can be interpreted that this hybrid-flipped program favors the development of comprehension skills, and favors the development of written comprehension to a greater extent than oral comprehension.

The Virtual Environment's Contribution to English Learning

In the same survey, students were asked to assess the blended learning environment and its learning resources. Regarding the SCORM learning objects, participants assessed aspects such as: coherence between activities and learning objectives, instruction clarity, variety and difficulty of activities, quality of automated responses, visualization and ease of use, and usefulness for the learning process. The data collected indicated that 90% of the students assessed the learning objects in the previously mentioned aspects as "very good" and "good". In regards to the workshop resources of each of the modules, 52% of the students assessed them as

"very good" and 44% as "good". The third resource assessed was the forum activity; 52% of the students rated it as "very good" and 38% as "good". Finally, 66% of students assessed the speaking task a "very good" and 29% of students assessed it as "good".

In the qualitative results also obtained from students' perceptions in the English program survey, it was corroborated that students characterized the virtual learning environment and its resources as an interesting, organized, structured and well-designed learning opportunity, in which they were offered personalized support tools. Suggestions were also collected regarding elements that would favor students' learning; the answers reported that students would like to have more accent-varied listening exercises on the platform and more variance in levels of difficulty in order to strengthen their oral comprehension. There were no suggestions regarding written comprehension, so it can be assumed that it is a frequently worked skill and that no further adjustment is required.

The instructional design of virtual learning resources was clear enough, both in its instructions and in its scaffolding process, thus allowing students to autonomously approach them without requiring the immediate presence of the tutor. These results indicate that most of the population had a positive perception regarding the resources of the virtual platform. Virtual resources have been coherently structured in the content development, and they offer a variety of topics, which together make them useful for students' learning processes.

The previous results conclude that the virtual environment had a positive effect on English learning, especially because of the benefits of its instructional design in terms of its opportunities for oral and written comprehension development, personalized learning, self-pace learning and access to a variety of resources.

DISCUSSION

This research focused on observing the contribution that the hybrid- flipped instructional design made for students' oral and written comprehension. The results analysis drawn from the design phases of the present study evidenced the contribution of the program, specifically in the post-implementation phase. There, when measuring students' grades in both oral and written comprehension skills it was evidenced that most of the students (90%) were placed on the highest performance scale. In addition, the results of the students' self-assessment showed that only 10% of the comments were related to the comprehension skills, which shows that for most of the students these activities did not represent great difficulty, which in turn can translate into a satisfactory perception of their performance. In addition, the analysis of results obtained in the program assessment survey shows that students perceive a significant improvement in both comprehension skills, mostly in oral comprehension than in written comprehension.

These results are consistent with recent studies about students' perceptions of the flipped classroom model in which similar findings are exposed (Wanner & Palmer, 2015, Yang et al., 2013). The results described above, elucidated that the hybrid-flipped instructional design significantly contributed to the development of English comprehension skills. The aforementioned was achieved through the student's completion of virtual exercises focused on the development of cognitive processes: attentional, perceptive, lexical, syntactic and semantic. A possible explanation for this result may be that the virtual learning environment allows students to experience such cognitive processes through oral and written comprehension exercises according to their individual abilities. Students can take the time to attend to their individual cognitive processes, for example, in the case of written comprehension exercises by looking up unfamiliar vocabulary, or for oral comprehension exercises, by listening to an audio many times as they require. This experience also triggers the parallel development of learning awareness, through which the student can identify the cognitive processes in which he has good performance and with which he has difficulty.

Other evidence is based on the characteristics of the instructional design based on the nine events of Gagne (1983), which allowed the participants to explore and practice oral and written comprehension in English following a didactic sequence that promoted their autonomy and the exploration of educational content at an individual pace and at an individual pace flexible to each participant's time availability. This responds to the essential principles of a flipped classroom instructional design model, which seeks to personalize learning and make teaching and learning moments and environments more flexible (Blau & Shamir-Inbal, 2017). This instructional design promotes an environment in which students play an active role in the development of their communication skills and become aware of their cognitive processes and strategies for improvement in language learning, all while receiving continuous support via the instructor's feedback.

The results also show the correlation between the independent variable and the dependent variable: a course composed of an instructional model in flipped classroom mode affects English as a foreign language learning in oral and written comprehension. The above is supported by students' high participation in the platform and their high performances in the comprehension activities. In fact, the model and its characteristics allowed successful learning based on a flipped classroom instructional design, which generated learning opportunities based on autonomy, flexibility and the personalization of learning. Regarding the results in relation to students' entrance and ending proficiency levels, it was found that 34% of the participating students completed the entire program, 67% entered to the basic user level and progressed to the independent user level, and the remaining 21% did not finish as they canceled the subject or dropped out of the process. These findings show that the proposed instructional model allows students to advance in their foreign language training plan and succeed in completing the program to obtain the maximum B2.1 level offered. The above results demonstrate that one of the key objectives of the program was successfully achieved-- namely, that students decided to dedicate their time to the study of a foreign language despite

the time constraints imposed by their workplace responsibilities. This program achieves these educational goal through the high level of personalization, flexibility and monitoring of individual learning processes.

The extraneous variables in this study centered on the students' possible non-attendance and permanent non-use of the learning platform. According to the reports generated by the LMS (Learning Management System) the participation in the platform was 95%, and the attendance at the face-to-face meetings was 6.2%. These results indicate that the level of commitment and participation of the population in the program was high and that these extraneous variables did not have any negative effects on the dependent variable about learning English as a foreign language in oral and written comprehension.

The level of personalization of this instructional model had positive effects on students' awareness of their progress and their capacity to identify their weaknesses and strengths and determine effective self-direction strategies. The personalization in the program is achieved not only by limiting the number of students per group (a maximum of 6), but also by providing detailed feedback on students' learning products, as well as offering mechanisms of support and reflection and self-assessment techniques continuously during the course. Students increase their reflective competence by experiencing different opportunities in which they receive feedback and put self-regulation strategies into practice, which in turn facilitates the learning processes and fosters the development of competences (Rosário et al., 2016). In this study, participants had positive perceptions of their progress in reading and listening in English, which shows that they were able to reflect on their own learning processes and account for their progress. Therefore, the research hypothesis is corroborated, and we can conclude that the implementation of a 'flipped classroom' instructional design favors the learning processes of reception language activities (listening and reading) in English as a foreign language.

CONCLUSION

With this study we identified the contributions of a blended-flipped classroom program to develop the English reception language activities (listening and reading) of the academic and administrative staff of a higher education institution. The results showed that this instructional model favored the development of listening and reading activities, allowing students to maintain high levels of performance as corroborated by learners' own self-assessment and average grades. The program had a positive effect on students' progress in oral and written comprehension, enhanced self-awareness when learning English and influenced student's perception of their own progress in language learning, especially because of the learning opportunities provided by the virtual learning environment.

The above is related to the levels of personalization and flexibility offered by the program, which, among other things, contributed to the development of metacognition and student autonomy. This instructional model proved to favor the learning processes of a population of employees who find it difficult to take courses structured primarily around face-to-face components (Yalçınkaya, 2015) and who benefit from having a blended program, as this course method allows participants to manage their study times and cope with course commitments (Chateau & Zumbihl, 2012, Pinto-Llorente et al., 2017).

The fact that the average performance of participants in listening was slightly lower than in reading suggests, firstly, the need for students' training on listening strategies. Studies show that the teaching of learning strategies has a positive effect on the development of language learning competences (Risueño Martínez et al., 2015). Secondly, the number of listening exercises to which the students are exposed, could be increased both in the virtual work and in the classroom. Finally, the divergence between the tests results and students' perceptions of their progress suggests the need for further research aiming at exploring whether the exams generate some type of anxiety in students, which negatively influences tests results.

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