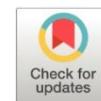# Action research implementing ICTs and E-learning to improve communicative performance of A2 students

Investigación de acción implementando TIC y E-learning para mejorar el rendimiento comunicativo de los estudiantes A2

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Palabras claves:	Resumen
TIC y E-learning, rendimiento comunicativo, investigación-acción, ESL.	**Introducción:** La investigación en curso en el campo de la enseñanza del inglés mediante la implementación de tecnologías de la información y la comunicación (TIC) y el aprendizaje electrónico ha mejorado significativamente el rendimiento comunicativo de los estudiantes A2, pasando del aprendizaje presencial al aprendizaje totalmente en línea. **Objetivo:** El objetivo de esta investigación fue determinar en qué medida la implementación de estrategias didácticas mejoró el nivel de desempeño comunicativo en estudiantes que migraron de la enseñanza presencial a la educación totalmente en línea, en estudiantes de pregrado A2 a través de la evaluación de materiales, metodología de enseñanza y recursos informáticos disponibles. **Metodología:** La metodología utilizada fue descriptiva y exploratoria basada en la investigación observacional, así como en una encuesta. El enfoque de investigación fue cualitativo, basado en la descripción, observación y encuestas para la recolección de datos de los estudiantes; tanto al principio como al final del curso, con el fin de comprender los cambios en el rendimiento comunicativo de los estudiantes. **Resultados:** Las estrategias comunicativas implementadas durante el curso tuvieron un impacto positivo en los resultados del desempeño de los estudiantes, reflejándose en el desempeño general de los estudiantes, quienes mantuvieron sus calificaciones o las aumentaron significativamente a lo largo del desarrollo del curso a pesar de las limitaciones. Cerca del 70% de los estudiantes mantuvieron su rendimiento y calificaciones durante la transición de cara a cara a un entorno totalmente en línea. Además, alrededor del 20% mejoró su rendimiento y calificaciones, mientras que el 12% informó haber experimentado una caída en su rendimiento. **Conclusiones**: La investigación ha demostrado que la implementación de estrategias didácticas ha mejorado el rendimiento comunicativo en estudiantes que migraron de cara a cara a un modelo de educación totalmente online. Los estudiantes cursaban el nivel A2 y era una combinación del análisis de recursos tecnológicos, estrategias metodológicas y la introducción de nuevas prácticas a través de la investigación-acción. **Área de estudio**: Educación
Keywords: ICTs and E-learning,	Abstract

Introduction: Ongoing research into the field of Teaching English by implementing information and communication technologies |

communicative performance, action research, ESL.

(ICTs) and E-learning has significantly improved the communicative performance of A2 students, going from face to face to fully online learning. **Objective:** The aim of this research was to determine the extent to which the implementation of didactic strategies improved the level of communicative performance in students migrating from face to face teaching to fully online education, in A2 undergraduate students through the evaluation of materials, teaching methodology and IT resources available. **Methodology:** The methodology used was descriptive and exploratory based on observational research as well as a survey. The research approach was qualitative, based on description, observation, and surveys for data collection from learners; both at the beginning and at the end of the course, in order to understand changes in communicative performance of students. **Results:** Communicative strategies put in place during the course had a positive impact on the results of students' performance, reflected on the overall performance of students, who either maintained their grades or increased them significantly throughout the development of the course despite limitations. Close to 70% of students maintained their performance and grades during the transition from face to face to a fully online setting. Additionally, around 20% improved their performance and grades, while 12% reported to have experienced a drop in their performance. **Conclusions**: The research has shown that the implementation of didactic strategies has improved the communicative performance in students who migrated from face to face to a fully online model of education. The students were attending the A2 level and was a combination of the analysis of technological resources, methodological strategies, and the introduction of new practices through action research. **Study area**: Education

Introduction

Online learning has been increasingly gaining popularity amongst busy adults who have had to combine work and studies to further their knowledge and continue with their careers' advancement at the same time (Ahmet, 2015). According to Johnson (2013), there are various reasons why online learning can be advantageous, amongst those are time management because you can access online platforms at any given time during the day; cost saving benefits as students will not have to move out to other cities or even

countries to access the degree subject they are looking for, so the costs of accommodation, transport and others can be saved when studying from home.

However, there are also some limitations to online learning related to the lack of teachers and students face to face interaction that enables to understand each other in a more personal way; the dynamics of having your peers next to you, to be able to learn from each other.

Besides, computer literacy is also a very important factor to consider because the lack of it can be a real obstacle in learning a second language or indeed any other subject (Anderson, 2019). Fortunately, the deliberate use of technology has been a crucial ally in this process, helping with the development of fully virtual learning and teaching environments where students can interact within themselves, with teachers, other colleagues, and be provided with the right resources such as online libraries, the latest papers and videos that enrich their learning experience; this because such resources are available worldwide and can be accessed in real time or just within hours of delay (Sánchez & Rojas 2017).

In that regard, resources' availability has experienced a revolution as anybody who has a decent internet connection can gain access to the latest resources from the remotest parts of the world. The challenge here is therefore to be able to take advantage of the best online methodologies, tools and strategies that have proved to work in online education to the point of minimizing all the weaknesses and enhancing the strengths of a more inclusive and open system where learners take responsibility of their own language acquisition by means of exploring the available resources and interacting with many online sources in a collaborative way.

This research has been designed with the purpose of finding out from experience whether teaching online didactic strategies, implemented over a period of three months have resulted in the improvement of students' communicative performance through the use of information and communication technologies (ICT) or not, in order to take corrective measures. This will be achieved by first of all, identifying the main variables that affect students' performance online and face to face settings in order to recognize if they differ from each other and how greatly they do if so.

Then, the aim becomes to monitor those variables in the new system which is the virtual setting throughout the duration of the course in order to determine whether there has been an improvement or not in helping to improve communicative performance in students. Finally, the main contribution of the study would be the proposal of new strategies and pedagogical implementations in future courses in order to achieve better practices of E-learning.

Methodology

This action research was based on the need for improvement of students' communicative performance by the introduction of didactic strategies. The question here was whether these strategies will result in better performance and if so to what extent. These factors will guide the research and help identify the means for proposing, implementing, measuring, analyzing and evaluating new information which will contribute to the understanding of the research topic.

The methodology used was descriptive and exploratory based on observational research as well as a survey. According to Chenlu (2015), "the object of descriptive research was to portray an accurate profile of persons, events or situations", and exploratory studies that "look for what is happening to seek for new insights and look for questions to assess phenomena in a new light".

The research approach used for the purpose of this project was qualitative, based on description, observation and surveys for data collection from learners; both at the beginning and at the end of the course, in order to understand changes in communicative performance of A2 level students of the Institute of Technology Manuel Galecio in Ecuador.

The Higher Institute of Technology Manuel Galecio is a state school located in the town of Alausí, in the Chimborazo province of the country of Ecuador. It offers degrees in Business Administration and Tourism to students from and around Alausí. English courses have been offered traditionally in a face to face setting, however since the start of the pandemic covid19 it has changed to fully online, taking e-learning on board in record time, thus students and teachers had to adapt to this new environment very fast.

The research type was action research. This research is aimed to understand the issues related to the topic of research in detail, to find a solution to such issues. In this context, the classroom is the laboratory where observation and implementation of change take place. This type of research involves teachers and learners equally in the study, in an open, democratic and collaborative way, because it is important that all participants understand the value and contribution that this type of research could have for the improvement of the teaching-learning practice as the matter of everybody's concern (Villafuerte & Macías, 2020).

Additionally, this action research started with a clear purpose of diagnosing the reality that students are facing in terms of their communicative performance, the issues that are affecting the most and preventing students from achieving the right level of competence. This stage is also known as fact finding analysis in undertaking action planning and

decision making about what should be the path of action taken in order to address the problems encountered early on in the diagnostic phase (Saunders et al., 2009).

Subsequently, planning further actions or in this case designing those didactic strategies that would be the most effective is needed to make sure the problems are addressed properly by looking at existing literature and adapting theory to the reality of the Institute of Technology Manuel Galecio, taking into account its ICT facilities as well as the e-learning context in which learners interact.

Hence, according to the action research methodology there have been proposed five stages to follow.

Stage 1. Starts with the diagnosis of the main problems related to communicative performance within the A2 group, using observation research as well as exploratory analysis of data collection in the online classroom. The purpose of the diagnosis is the identification of the main issues preventing students to develop the right level of communicative competence for what is expected to be at A2 level according to the European Framework of Reference for Languages (CEFR), so this rubric will be adapted in order to diagnose students' communicative performance at this stage.

Stage 2. Analysis of the mains issues with communicative performance within learners as well as determining possible causes of such problems in ICTs and E-learning. This is because students at the Institute are from very different backgrounds, therefore it is important to identify potential issues related to accessibility to resources, time management, location, computer literacy, amongst others that could result in detriment of students' communicative performance. A list of the main issues facing and a number of students facing those issues should be written down and analysed at this stage.

Stage 3. Didactic strategies and techniques design using ICTs and E-learning. This is perhaps one of the most crucial parts of the research as it is the key to finding out the solution for the problems that have been identified at stage 1 and 2. It is crucial to design and adopt the right strategies with the support of the ICT´s tools that are appropriate for the context of the online learning environment. Thanks to an in-depth review of the available strategies designed to boost students' communicative competence, at these stages it will be relatively easy to choose and adapt those didactic strategies that will hopefully result in the improvement of students' performance.

Amongst the chosen strategies are promoting students' independent learning through the use of TBL which will include tasks that encourage learners' communicative exchanges in order to understand, negotiate meaning and perform the given tasks. Moreover, these tasks will not only focus on communication but also will have some type of extended activities that will also focus on form. Finally, tasks will be relevant to their subject of

studies and content, ensuring students maintain interest throughout the course of the module.

Furthermore, other communicative strategies will also be adopted for this study such as the use of role plays, oral presentations, gap filling activities, video and audio playing, amongst others. All of them with the purpose of making the class interactive and involving communication at all times, switching the traditional role of the teacher in the Ecuadorian classroom to a student center in ETL.

Stage 4. Implementation of didactic strategies and techniques using ICTs and E-learning. Once defined the strategies will be implemented during the period of nine weeks which is the duration of the course. During this time classroom observation will be carried out to understand patterns and behaviors during the implementation of the strategies. All these aspects will be closely monitored in order to make corrections when needed.

Stage 5. Evaluation of classroom intervention with didactic strategies and techniques using ICTs and E-learning. This is the contribution of the research that enables decision makers at the center to make decisions on future course design, taking into consideration the strengths and limitations found during the different stages of this research. It is important to clarify that the target group for this research are A2 level students, who according to The Common European Framework of Reference (CEFR) are expected to develop their communicative skills, oral and written, as well as, comprehension in order to improve their communicative performance. During the diagnostic phase students will be assessed according to the rubric provided by the CEFR for A2 level in order to determine the main issues related to their performance. Moreover, after identifying the main issues that are facing students and looking at its causes new didactic strategies will be designed, taking into account that such strategies should be designed in response to the problems and based on scientific evidence reviewed in the literature.

Furthermore, during the development of the course the strategies will be implemented to twenty-five A2 level students who are enrolled on a full time course of Business Administration of the 2020 academic year and have just migrated from a face to face setting to a fully online course (Oxford, 2000). The entire population will be sampled for the research purpose. The duration of the course is nine weeks from start to end.

In addition, this investigation has looked at the relationship of didactic strategies and its incidence on the communicative performance of the learners, while it analyses the improvements of such competence during the teaching-learning process with the support of ICTs and e-learning.

In order to collect information for this research different tools were used:

a)   Online questionnaires given to the students, before and after the actual course takes place in order to determine their perception of the face to face and online teaching, computer literacy, online resources.

b)   Note-taking during the development of the course in order to identify those strategies that have better results in students' improvements of language competence as well as those that are not having any positive impact on learning.

c)   Evaluation rubric in order to assess students' communicative performance at the beginning and at the end of the course, this will help with the comparison of the performance at different moments of the course.

Observation: is key in action research. The teacher is the person who knows the environment and the students better than anybody else because of the closeness and daily interaction in the classroom, being this online or face to face. This closeness allows teachers to constantly question his/her teaching methods and look for improvement in areas that students are not meeting the learning objectives.

To structure observation and look at teacher´s strategies a guide was designed containing the main aspects to be observed during the class. Moreover, for the purpose of assessing students' level of communicative performance a rubric was adopted, so it allowed to have a clear starting point of students' levels. Moreover, this rubric was the tool that helps identify the weaker parts of students' performance in the English Language that was addressed during the development of the course and future decision making.

At the end of the 6-week period a new evaluation of students' communicative performance was carried out, by means of a progress test to draw on conclusions about the improvements in performance if any, with the implementation of the proposed strategies.

Survey: This strategy is associated with questions to answer who, what, where, how much. So, if we want to look at issues and understand them in detail a survey is a good way to search for events happening in the classroom. Open ended questions were directed to students in order to have a broader appreciation of issues preventing language acquisition in the classroom.

More structured surveys answer specific information we are trying to gather through the questioning of the target group. In this context, there is a need for detailed information so both open-ended as well as semi-structured questions were part of the survey to the students.

Alongside observation, data was collected with help of a questionnaire at the beginning of the course and at the end of the course in order to find out about students' point of view

of the strategies presented to them and the contribution they have made to their learning objectives in relation to communicative competence.

The survey contained 10 open-ended questions that was reflected on students' perceptions of the proposed strategies as well as the impact they have had on their learning. Moreover, they also be able to make further proposals on how to improve the teaching-learning process with help of ICTs and e-learning.

Results

The Diagnostic phase of the research provided with tools needed to understand students´ reality in relation to the access to resources, their computer skills as well as their level of communicative competence. The first stage was to determine students' access to resources and computer literacy through the survey sent to the students via Google Forms.

The survey was sent to the students attending the course on the first day of class and the question was related to having access to a suitable device of some type to attend class during the given timetable. The answers were registered as follows:

Figure 1

Students' access to a device/device (Student´s own work, 2020)
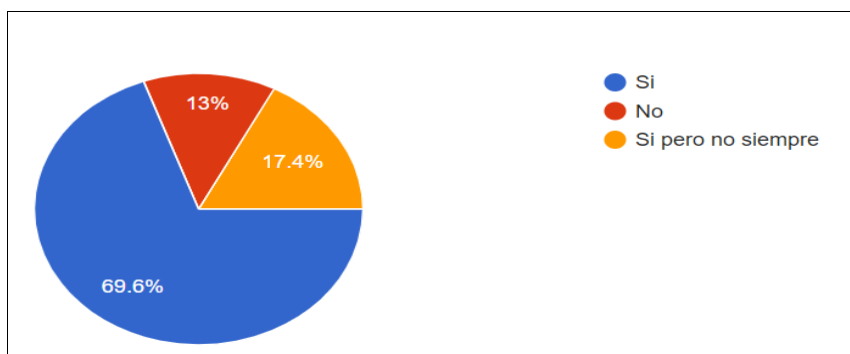
For the majority of students (70%) there were not problems accessing a device in order to join the online classroom, however there was a small percentage (13%) that had no access to any type of electronic device and had to look for other means of solving this issue. A 17% of the group reported having access however not continuous. In addition, students were asked whether they had a good supply of internet access during the course so they could either work synchronously or asynchronously using the given resources available on the platform. The answers were registered as follows:

Figure 2

*Students' access to internet (Student´s own work, 2020)*
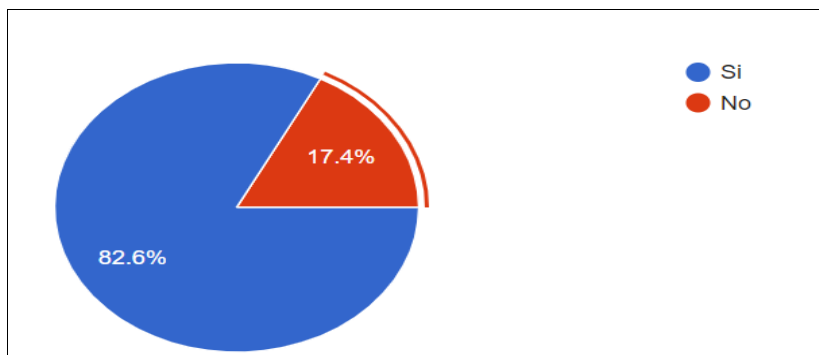
The majority of students had a reasonable connection to internet as the graph shows, however, a 17% of students declared having not access to internet and again this was an issue to be looked at by the teacher in order to help students get the resources they needed via alternative ways according to each personal situation the students had. Some of the ways to support students included sending the materials through email, WhatsApp and printing the worksheets in order for them to work on this task in their own time.

Finally, all these issues were slowly being sorted out by the students themselves to ensure they had the resources needed to be able to attend classes as planned and benefited from the course equally with the rest of the students.

Another question was related to whether students have had any experience attending an online course previously. The answers were registered as follows:

Figure 3

*Students' experience with online courses (Student´s own work, 2020)*
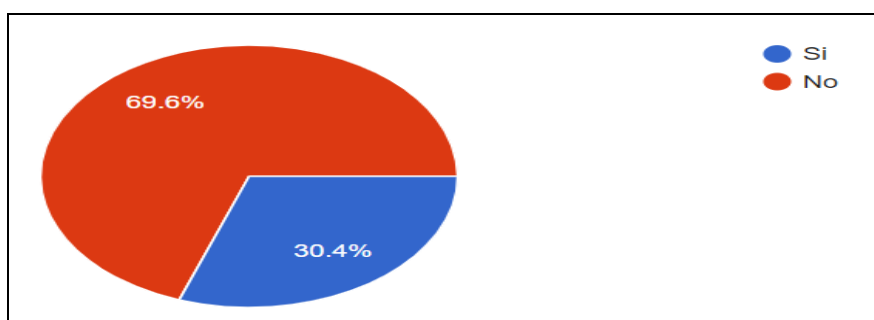
As a result of the health crisis caused by covid19 students were moved from the face to face setting to a totally online course setting, for the majority of them it was a new experience while 30% of them informed having had some kind of experience with these type of learning environments. Students were asked about their opinion on the most

important benefits of attending an online course and the answers were varied and registered as follows:

Figure 4

Students' perceptions of the advantages of online courses (Student´s own work, 2020)
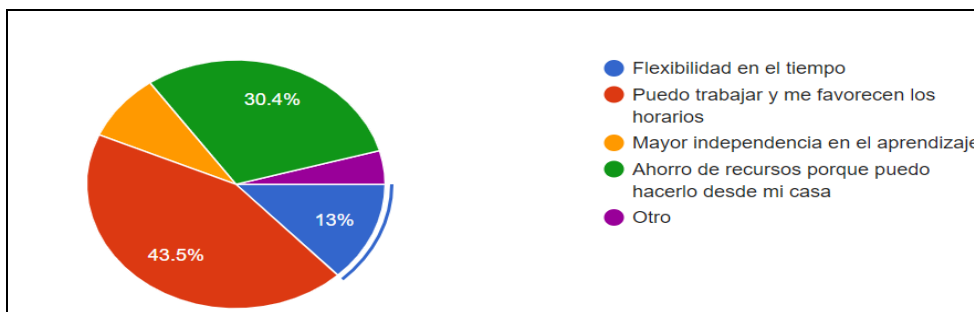
An important number of students 43% seemed that online education provided with the opportunity to combine work and studies, while another 30% seemed it as a way of saving resources when entering online courses. Moreover, 13% of students believed there were advantages related to time management as there was flexibility in relation to timetables. In contrast, students were also asked about the main challenges perceived or they thought they could potentially face when attending an online course. The answers were listed as follows:

Figure 5

Students' perceptions of the disadvantages of online courses (Student´s own work, 2020)
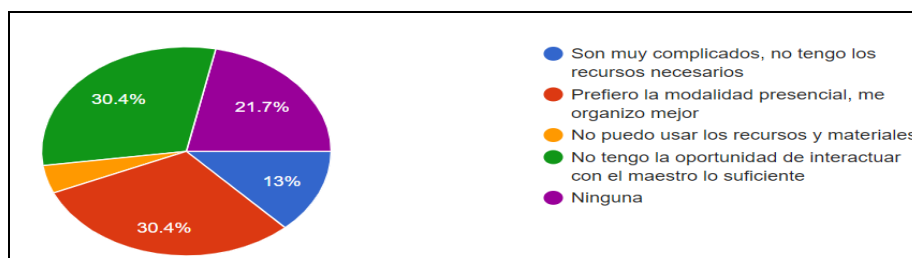
Amongst the disadvantages related to online education 30% of students mentioned the difficulties in interacting with the teacher as in a face-to-face setting. Another group of students 30% mentioned that they believed could organized themselves better when attending a traditional face to face class, and a 21% did not see any disadvantage in online learning at all. 13% of students were worried about being able to accomplish with was needed because of their lack of access to suitable devices and the internet. In relation to learning itself, students were asked whether they thought there were significant

differences when it comes to online and face to face settings and the acquisition of the language. The answers were registered as follows:

Figure 6

*Students' perceptions of online vs face to face learning acquisition (Student´s own work, 2020)*
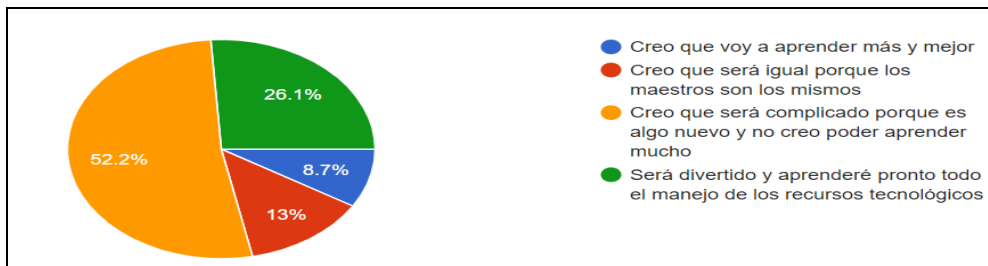
The graph shows that more than 50% of students had their reservations about the effectiveness of online learning for themselves, especially because it was completely new to most of the group, so they thought it was in detriment of the learning of the L2. In contrast, 26% of students had an open mind about the new setting, they believed the process of moving into another modality was fun and felt confident about learning fast about the new tools required for the course development. A 13% of students believe the results were going to be the same as the teachers were the same teachers they had before. The perception of the group about the type of tools used for teaching English online was registered as follows:

Figure 7

Students' perceptions of online tools and resources (Student´s own work, 2020)
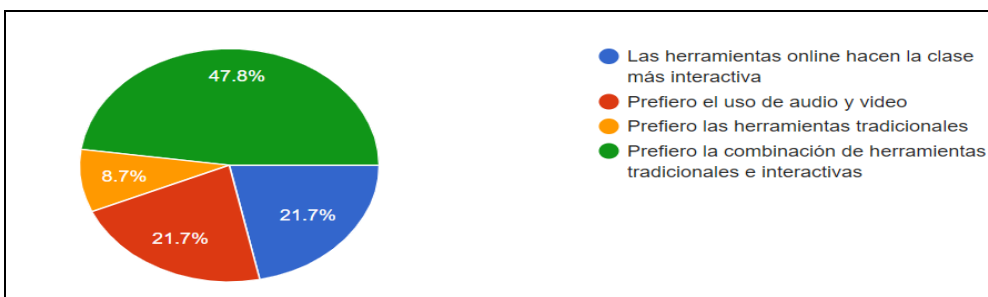
Technological tools are seen as an important aspect of learning the language by students, however 47% of the students mentioned they prefer the combination of traditional and interactive tools in the classroom; while 21% of students preferred only traditional tools, compared with 21% who were inclined to the use of interactive tools used in online learning. And 8% of the students reported preferring the use of audio and video in the

classroom. About two specific tools used in the TEFL course are Zoom and Moodle and students were asked about their familiarity with them. The answers were recorded as follows:

Figure 8

Students' knowledge of the use of the platforms and resources (Student´s own work, 2020)
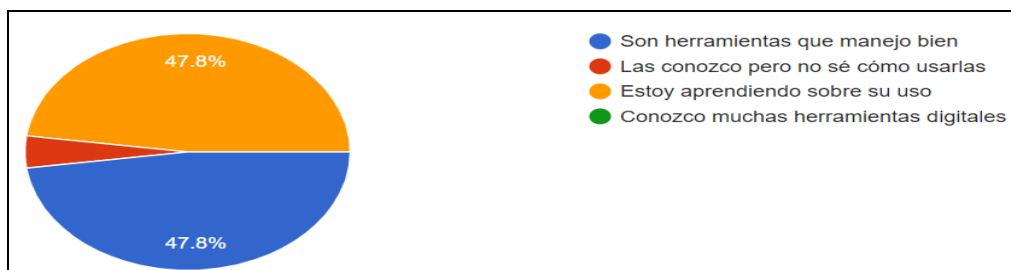
47% of the students mentioned that have mastered the use of Moodle and Zoom. Equally, students in the same amount mentioned that they were learning about the two platforms, while there were no students who had not heard of the mentioned tools. This shows that close to 100% of the students knew beforehand about the two platforms and were getting familiar with all the elements they have.

Finally, students were asked to mane the main aspects to be considered by teachers in online teaching and learning. The answers were listed as follows: Amongst the main aspects students mention about an online course were related to feedback, they wanted to know what the mistakes are and how to solve them, so a regular system for receiving feedback was suggested. Another aspect that students mentioned were the type of resources and the channels used to make them available as an important number of them perceived online courses difficult as they are new to them.

Besides, students also mentioned the importance of the clarity in the learning objectives and their relation with the material and provided resources in order to take advantage of the contents and the course as a whole. Finally, aspects such as patience and personalized teaching were mention amongst the aspects to be taken into consideration when designing an online course.

Survey analysi**s:** From what has been said by students in the survey, it is understood that at the beginning of the course at least 70% had the facilities and the internet to access the platforms and the resources on them. However, an important number of them 17,5% were not able to attend classes regularly at because of their lack of technological resources, in those cases the Institute opened its doors so only students who really had no possibilities of solving this issue could attend the course at the labs.

Another way of helping students was that of recording the classes and uploading them to Moodle, so they could access them on their own time. For the majority of students online courses were new, only 30% of students were familiar with this type of education, this meant that the methodology, resources, and the use of technological tools were aspects to be taught and practiced before the taking off the course so all students had equal knowledge of the basics in relation to course materials and the use of technological tools.

However, the perceived difficulties of an online course, students recognized two major advantages related to firstly, time management as they could combine work and study; and secondly, saving resources as they could access the course from the comfort of their home, meaning the costs had significantly been reduced in the new settings. While the downside was not being able to interact enough with the teacher and lack of self-organizational skills as students do need to be able to work independently in an organized manner.

Generally, for at least half of the students the new online setting was perceived as difficult and they though it was in detriment of their learning objectives just because they saw it as something completely new. With only 26% of them seeing the process as something fun and the opportunity to learn the use of new technological tools. In this respect, the role of the teacher became quintessential to ensure motivation levels were higher amongst learners. Equally, for at least 47% of the students it was important to combine the use of traditional with new ways of teaching. With 20% being open the emerging technologies and more audio and video in the class. So, a transition from presentation to more independent work was the strategy during the course in order to give students time to adapt to new teaching strategies.

Finally, the recommendations made by students were carefully considered such as the provision of regular feedback and the communication of the learning objectives on each individual class was something clearly stated by the teacher. Additionally, individual students' needs were considered and taken on board as to increase students' satisfaction and promote motivation.

Diagnostic Test results: The test results in the diagnostic phase at the beginning of the course were varied, showing students had mixed abilities and the group was heterogeneous. Particularly with the listening section students scored as follows:

Figure 9

A2 Listening Diagnostic Test Results (Student´s own work, 2020)
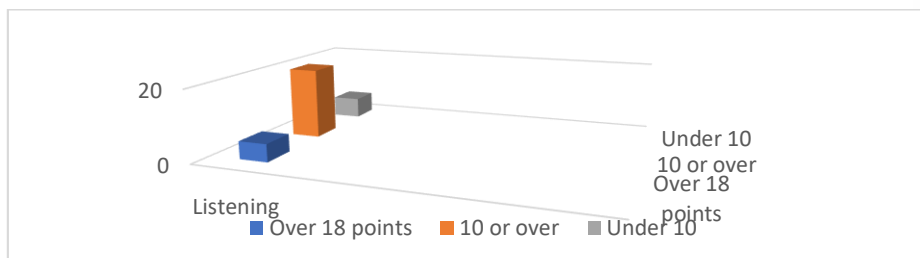

Considering that every skill was assessed over 25 points. Some students (17%) had stronger listening skills than others with familiar topics such as family, work, leisure and other topics. However, there were students (20, 7%) who needed extra work on basic vocabulary as they struggled to understand simple words. These group of students scored just under 10/25 and had difficulties with listening for specific information. Students from this group in particular saw the language as very difficult and recalled having issues with grammar and sentence construction as well. Most students 62% were placed over 10 points.

Reading was one of the skills students had positive results on at the beginning of the course. And the results were registered as follows:

Figure 10

A2 Reading Diagnostic Test Results (Student´s own work, 2020)
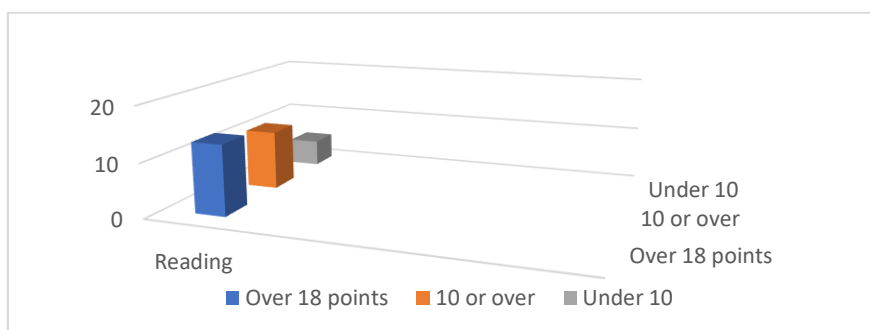

Reading was the strongest skill performed by students at the Institute. Over 44% of students scored over 18/25 points; 38% of students scored over 10/25 points and a 17% of students scored under 10 points and was the group that needed more support with reading.

Results on writing were also quite poor and were registered as follows:

Figure 11

A2 Writing Diagnostic Test Results (Student´s own work, 2020)
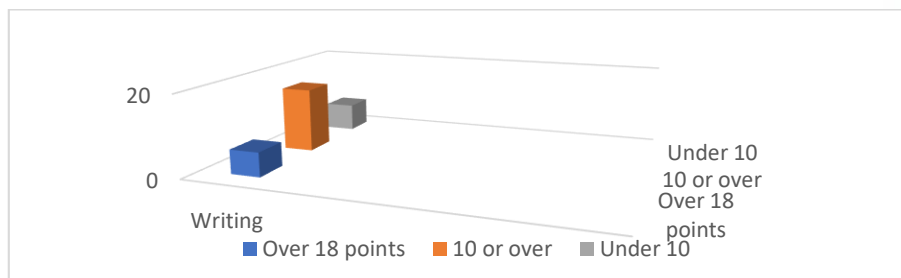

With more than 50% of students not being able to answer the questions properly and failed to score 18 points or more, students were found that they did not follow the instructions as described on the test. Students also failed to count on the number of words and sentence construction, this was communicated to them, so they became aware of the importance of answering the questions as well as following the instructions. This issue could be seen as the inexperience of students with tasks of the type presented to them, therefore training on test solving is an important part to be considered within the course, this is particularly important because of many students are planning to undertake the international examinations offered in the country.

Speaking was assessed following the format of working in pairs, the exam had three components; the first component had a number of questions related to family, work and social life, spelling and that type. The second was about a conversation between the two students and the final one about a description of a photo or a given situation where students needed to interact with each other as in a natural setting. The answers were registered as follows:

Figure 12

A2 Speaking Diagnostic Test Results. (Student´s own work, 2020)
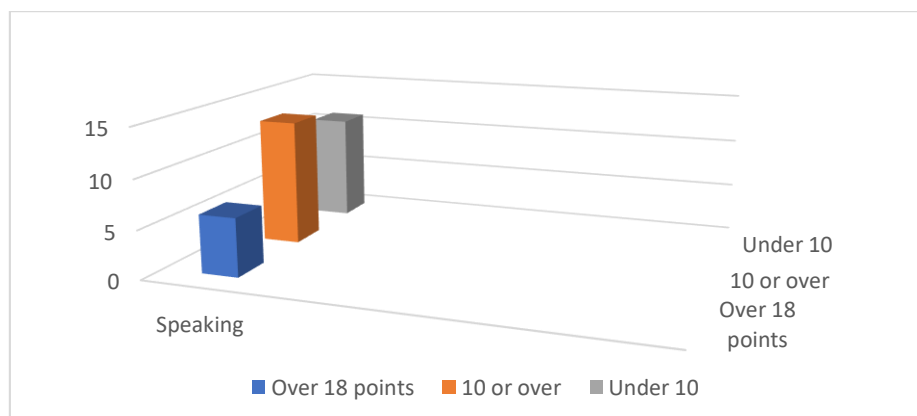
As the graph shows 21% of the students showed they were competent speakers and managed to have some degree of fluency. The communication was clear despite some errors in the use of the language and grammar. Most students 45% had problems with understanding the questions, so students asked up to three or more times to repeat the questions and as the questions were repeated many of them were not able to answer back as there were still misunderstandings. They also found difficulties in achieving communication solely in the L2 and often used and recalled words from L1 in order to make themselves understood.

Finally, 34% of the group showed having problems with understanding the questions, replying to them and sentence formation even with familiar topics. This group combined quite often Spanish words with English as fillers in order to make themselves understood

Progress Test Results:

Listening: The progress test was given to students during the sixth week of the course with the purpose of assessing progress in their' communicative performance. The test was carried out within two hours and was designed to evaluate the four skills of the language.

Figure 13

A2 Listening Progress Test Results (Student´s own work, 2020)
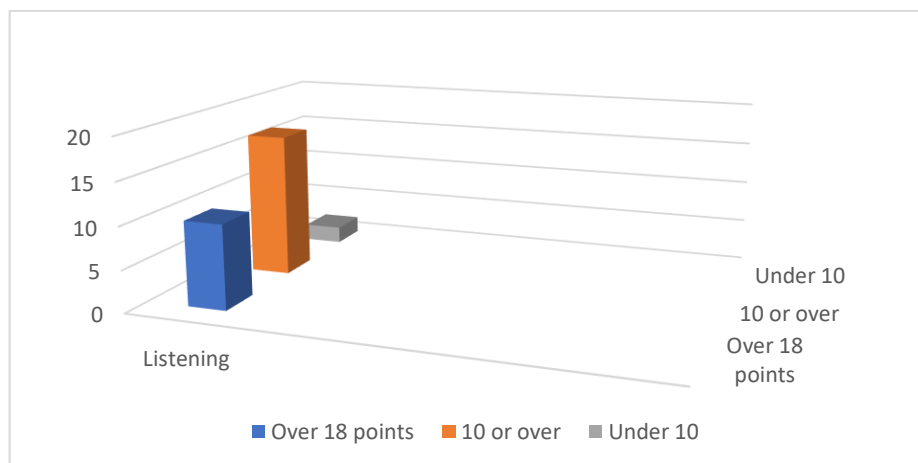
The results showed that generally students made a significant improvement in achieving communication. The test started with the listening section and the questions were a combination of photos, dates, and specific words such as addresses and numbers. Although about 7% of the students still showed some kind of difficulties with listening, the majority 70% made significant improvements scoring 15 points or over, out of 25 points.

This result, show that students accomplished to develop better listening skills and benefited from practices such as looking at the exam a few minutes in advance so to have an idea of the type of information they were listening for. Additionally, another very important point is that they became familiar with the listening test, managed well the time given and practiced similar exercises during the lessons.

On the other hand, students who were still facing difficulties with listening were asked to go back to the audios do the exercises once again until they become more familiar with the pronunciation and the information provided in the materials and resources available.

Reading: More than 83% of the students showed better reading practices as they successfully managed to complete the reading activities in the progress test, such as filling in the gaps, selecting the correct answers and re-writing sentences so they have the same meaning as the original one.

Figure 14

A2 Reading Progress Test Results (Student´s own work, 2020)
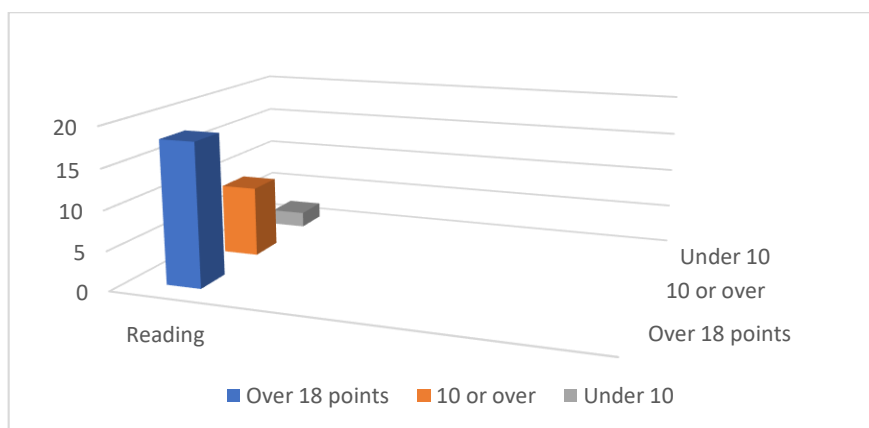
This skill was the strongest developed during the course according to the progress test and shows that students took independent learning seriously as reading activities were provided during asynchronous work in combination with audio and video. Additionally, reading activities provided during the class had a positive impact on students' performance as they learnt reading strategies related to skimming, avoiding translation whenever possible and reading for specific purposes.

Finally, reading was a suggested activity for students struggling with vocabulary and sentence construction as it enhances the use of new words and phrases. This is what is called the comprehensible input by Chomsky; therefore it was highly present in the course.

Writing: This production skill along with speaking is perhaps the weakest and an important number of students still need to work on it, according to the progress test results. This because, although students have the idea of sentence structure, punctuation, and organization in writing, they still need to be able to reduce one-by-one word translation because it makes very difficult to understand the message as a whole. Over 40% of students have difficulties in producing a good piece of writing and have been advised to continue building up vocabulary and avoiding one-by-one word translation; instead, they have been encouraged to see phrases and sentences as a unit in order to escape those common mistakes.

Figure 15

A2 Writing Progress Test Results (Student´s own work, 2020)
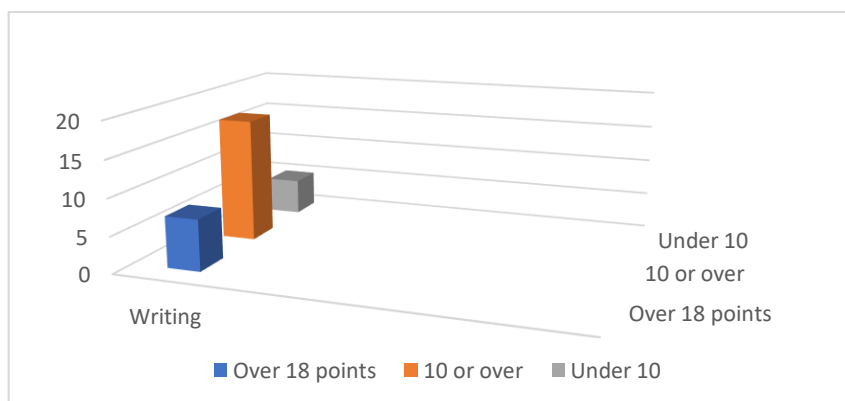
In the light of these results, writing is a skill that needs to be practiced with the group. English writing becomes particularly difficult for this group of students as the practice is not widely encouraged is schools and other institutions throughout the country. However, recent changes to the education system countrywide suggest that students should produce more instead of remaining passive as teachers do all the talking and dominates the classroom. This student center approach is in itself a very difficult model to undertake for students who have been used to a completely different system where students do not take initiative and wait to be presented with every single content and perhaps this reality has been the biggest challenge to students at the beginning of this course.

Having said that, important progress has been made while the course progress and students learnt to take responsibility for their own learning by listening to music, watching films, chatting with people over the internet and other extra classroom activities in the L2.

Speaking: Likewise, with writing, speaking was one of the hardest skills to become competent in. The results were registered as follows:

Figure 16

A2 Speaking Progress Test Results (Student´s own work, 2020)
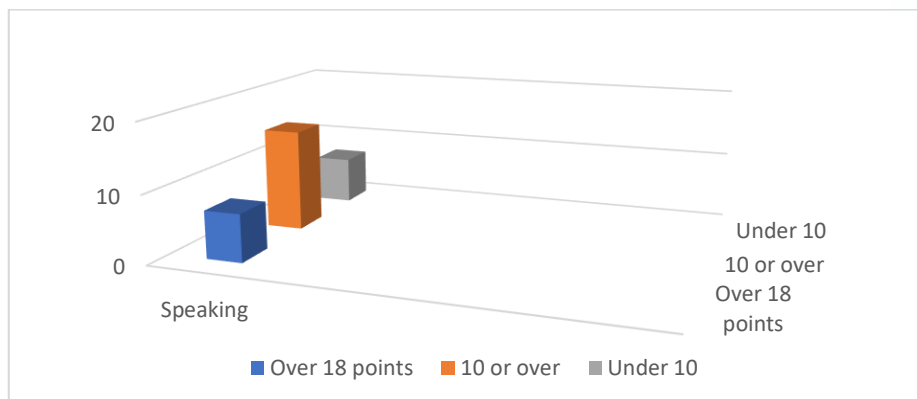
Although students have improved vocabulary and sentence formation there is clearly in a high number of students' lack of fluency. At least 24% of students are still struggling with getting the message across, however they manage to make themselves understand by means of trying to replace a word, there is constant hesitation within this group and sometimes words in Spanish are introduced. Stronger performers, however, have taken full advantage of the resources and manage to increase their knowledge significantly by improving pronunciation, widen their vocabulary and achieving some fluency comparing to the diagnostic phase.

Generally, students have improved their abilities with the language during the initial six weeks of the course, however there were still aspects to be corrected so carrying out observation and assessing students' communicative performance provided with a list of issues that needed to be considered for the second part of the course as well as strategy change. Amongst the strategies monitored and modified through because of observation were the following:

Survey questionnaire at the end of the course: At the end of the course students were asked about the general development of it with the purpose of comparing if their actual perception of online education had changed due to experiencing the new model. The survey was sent via Google Forms to the 29 students who attended the A2 course during the second semester of the year of 2020, so the same group of students who were surveyed at the beginning of the course. The answers are presented here:

The first question had to do with the experience student had in relation to access to resources and the internet supply during the course and they answer as follows:

Figure 17

*Students who accessed the resources and the course regularly (Student´s own work,2020)*
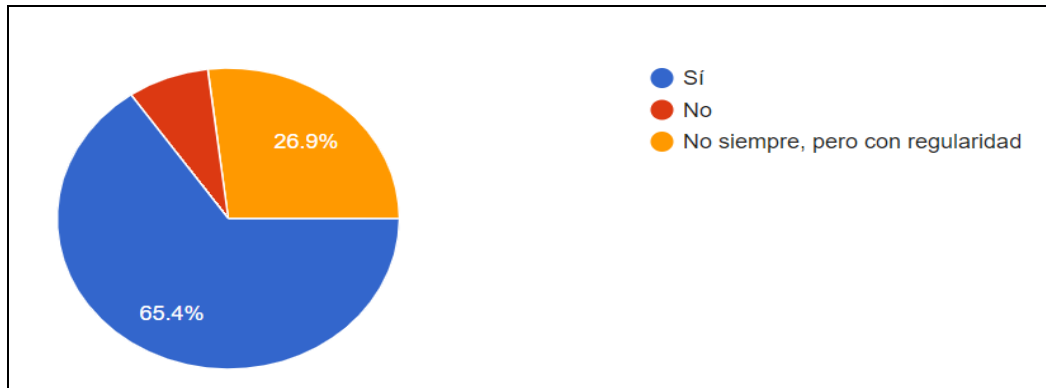
The actual access to resources in a regular basis by students was 65%, while 27% of the students always had access to the platforms but not. 8% of students reported not having had access to the resources and the internet on time. Comparing to the original perception of students which in reality was lower than what was reported at the beginning when 17% of the students said had problems with the internet and devices.

Moreover, Students reported experiences several advantages with the online course as time management and the flexibility to work and study at the same time, they also mentioned having a comfortable environment while they were studying from home, the benefits of independent learning, taking advantage of new technological tools, to revisit materials and classes that were unclear at first because the classes were recorded and available on the platform. So, the advantages were perceived as greater at the end of the course as per students got to experience the new model.

On the other hand, the disadvantages were minimized and the original fear of using new tools disappeared, one of the disadvantages mentioned was the poor-quality internet connection experienced by at least 17% of the students through the online classes. Less than 7% of the students reported not being able to manage times adequately due to work and other obligations at home. In relation to learning itself students had the following experience:

Figure 18

Students experience with the online course (Student´s own work, 2020)
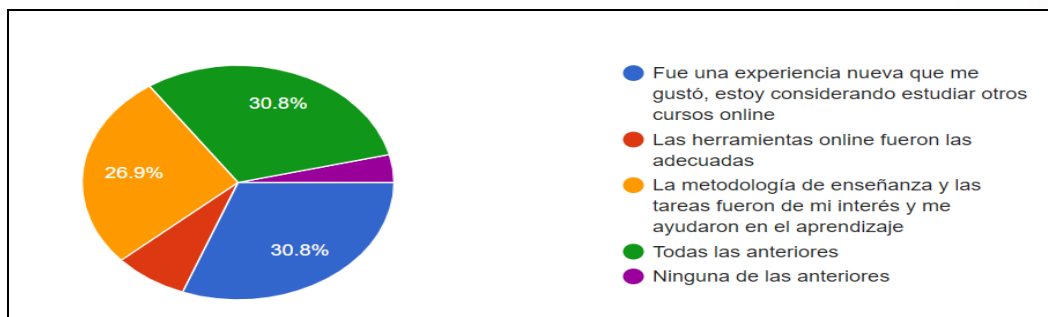
As opposed to the original idea of having difficulties with the general management of the course, students have changed their perception drastically; with 31% of the students reporting they enjoyed the experience and are willing to enroll in future online courses, 27% mentioning that the methodology and tasks carried out during the course help achieve the learning objectives, 31% agreed with all the management of the course.

Finally, students were asked about their performance and compare it when the face to face setting, the answers were as follows:

Figure 19

Students' comparison of performance and grades (Student´s own work, 2020)
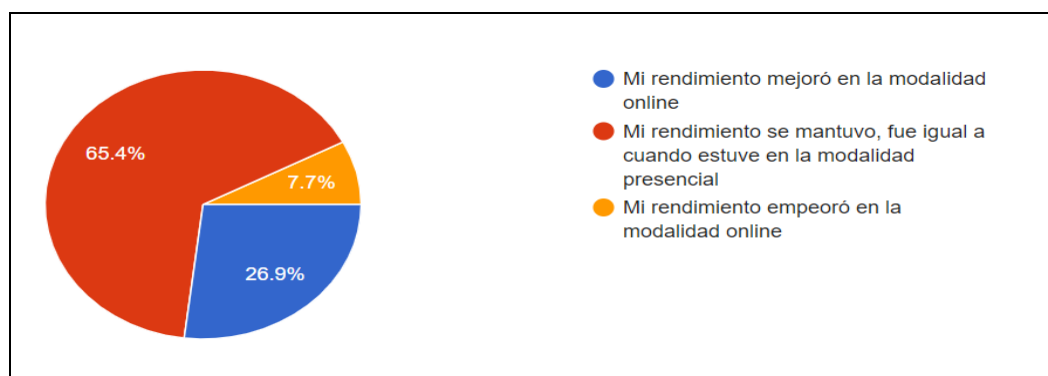
The majority if the students reported that their performance and grades remained the same in the transition period from face to face to a fully online setting and were not affected in any significant way. Meanwhile, 27% of the students informed that their performance and grades had improved during the online setting. However, 8% of students corresponding to 2 students reported having dropped their performance and grades during the online course comparing to the previous term. According to Lukyanovaa et al. (2015), this is a

crucial finding that allows teachers to make decisions based on the perceptions of the students as well as the actual facts that were reported in this study.

Discussions

The survey conducted with the students attending the A2 course at The Highest Institute of Technology Manuel Galecio has shown that there is an important difference in the perception of students between online courses and face to face classrooms. The main concern was on the accessibility and use of the resources as it was a completely new model of education for the surveyed group. As the course progressed, however, students showed great adaptability as the majority of them learned quickly about the use of the tools and the resources within them. Only a small percentage who had not had continuous access to internet supply experienced issues with meeting the time in relation to task completion and exams.

At the end of the course, the majority of students said they were satisfied with the way it was run, also they agreed about the materials, tools and strategies, they were inclined to continue studying online. These outcomes have an important repercussion on the planning of future online and face to face courses as both of them should include the use of technological tools and adjust the resources so students can look at them in their own time as it promotes independent learning.

The communicative strategies used during the course had a positive impact on the results of students' performance which were reflected on the overall performance of students who either maintained their grades or increased them significantly throughout the development of the course despite some limitations. Students developed specific abilities within each language skill such as listening and reading for specific information, understanding in context rather than word for word translation, paragraph structure, linking and organizing ideas, contrasting, and comparing, amongst others.

Additionally, students learned to work independently as part of the tasks they needed to work on at times making use of the resources provided on the platform in the form of videos, podcasts and reading articles. As well as collaborating with their partners for the completion of the given projects and task.

Moreover, according to students' performance on each and every skill, we can perhaps say that, productive skills were the most challenging amongst the group which is expected as they are the ultimate objective of learning a language. However, overall it is clear that the performance of the students was not affected negatively in any way. Close to 70% of students reported that they maintained their performance and grades during the transition from face to face to a fully online setting.

Additionally, around 20% of the students reported they have improved their performance and grades while attending the online course; only 12% reported to have had a drop in their performance and unfortunately the reasons are the lack of access to technological resources, this is especially true in rural areas.

Another issue encounter during the course was the quality of the internet supply of some students, some of them were not able to maintain connection and were dropped from the sessions constantly, this was because the service providers are still developing their product and have experienced difficulties in maintaining a good service throughout the duration of the course. This issue needed to be considered and addressed by the teacher and the Institute in order to provide with alternatives such as opening the computer laboratory and finding other mechanisms to send the materials.

Besides, students also had difficulties with working independently as it is not one general characteristic of the Ecuadorian education system. Students needed to be induced on independent work and pushed to take responsibility in their own learning, this was seen as somehow problematic at the start of the course, with some students complaining about the methodology. This situation was seen as a natural reaction to change and needed to be addressed with information and encouragement by the teacher/researcher in order to maintain motivation levels high.

Moreover, during the progress of the course there were issues with the application of the strategies due to aspects such as strong students dominating the groups and weak students hiding behind so there was a change in strategy while working in groups and work in pairs was adopted early on in the course.

This is an experienced that has been shared with other teachers at the Institute and it is going to be considered for future course planning in which students can work both is pairs and for bigger task as part of a bigger groups.

The introduction of communicative tasks improved the communicative performance of the group overall as shown in the results. Students above all, were encouraged to communicate with their peers as much as possible with the use of ICTs in the forums for example, on Zoom, chats over WhatsApp, and through e-learning. This practice had a positive effect on their language acquisition (Reinders & Stockwell, 2017). Moreover, it has been found that students interacted freely on informal settings such as WhatsApp and were able to share content that was both fun and engaging. This last practice made learning English a natural process and could be promoted amongst the different levels.

Conclusions

The research has shown that the implementation of didactic strategies has improved the communicative performance in students who migrated from face to face to a fully online

model of education. The students were attending the A2 level at the Higher Institute of Technology Manuel Galecio, the study was a combination of the analysis of technological resources, methodological strategies and the introduction of new practices through action research.

The study included a survey at the beginning and at the end of the course to 29 students enrolled during the second semester July-December of 2020. The surveyed students were attending the Business Administration course and adopted the online setting as a result of the health crisis of covid19. In this context the main issues found by this research were the lack of resources, difficulties accessing the internet due to both economic reasons and location wise, as some students come from disadvantageous backgrounds or live in rural areas where there is limited internet access. However, with the commitment of students and teachers these issues were minimized, and learners managed to complete the course by putting into practice independent learning as well as online classes with help of ITCs such as Zoom, Moodle, WhatsApp, e-mail and the Cloud.

Additionally, the study included assessing students both at the beginning and at the end of the sixth week in order to measure progress in communicative performance. Consequently, to develop the research a plan was drawn and followed step by step.

First was the identification of the main issues affecting students' communicative performance, this was carried out by means of classroom observation and listing the aspects preventing learning to take place. First of all, it was identified that the class was highly heterogeneous and had mixed abilities which was an important aspect to be taken into account so strategies could develop in order to meet individual students' needs. Another significant issue was that students had not been used to the exposure to video and audio on a regular basis, so listening for specific information was a weakness for the majority of them. Furthermore, although reading was the strongest skill with students, they needed to develop reading skills such as skimming and reading comprehension. Finally, writing and speaking as production skills were both challenging to students and were the areas of more concern during the course.

Moreover, based on the issues reported in the diagnostic phase by students and the diagnostic test, there was the need for re-structuring the pedagogical strategies taking into account the variables affecting the performance of the students in order to meet the learning needs of the group.

Then, the strategies were applied and monitor by means of observation in order to see if they are working for the students benefit. Each and every strategy was revised and for those that were working there were not changed but those that represented a slowdown on learning were changed. For instance, group work was revised and changed to pair work when possible due to having some students dominating the group and others being left

behind or not taking part at all. An additional strategy changed was that writing activities which were originally sent as an asynchronous activity exclusively, this fact affected students writing abilities as many of these tasks were not done according to the requirements and the formats provided for that purpose. Therefore, regular short writing pieces were introduced to the class with the intention to practice the skill and compare to those of the peers.

Additionally, role plays were also a regular practice in the online classroom, using ITCs to form groups and small presentations by students. This strategy was adopted as a support to boots students' communication skills in real life situations. Finally, other strategies were used during the class amongst them games, songs, short videos, etc.

In addition, results from the diagnostic test and the progress test were compared registering an important improvement on communicative performance by students who had better results in all four skills assessed during the course. A important number of students (70%) informed that they had maintained their performance and grades during the transition from face to face to a fully online setting despite the limitations. Additionally, around 20% of the students reported they had improved their performance and grades while attending the online course and only a 12% experienced a drop on their performance on the online setting, this mostly to not being able to access the platforms and attending classes. This is an encouraging result for online learning and could be considered as the basis for future course planning within the Institute or other institutions that are looking to adopt this model of education permanently. However, it is also suggested to compare and contrast these findings with others of this type in order to have a broader perspective of the reality of online education in Ecuador and particularly in Chimborazo and in the field of SLA.

Likewise, it is also advisable to look at the issues presented along the course in detail, so to prevent students from facing difficulties with accessibility and the lack of technological devices thus they take fully part of the different activities, tasks, projects and tests in order to complete the course successfully.

Finally, the following plan has been designed in order to provide teachers and other people in charge with important elements found in this study which could help in future decision making related to online course planning.

Action Plan for improving students' Communicative Performance at A2 level using ICTs and E-learning

Educational Institution: The Higher Institute of Technology Manuel Galecio

Teacher´s name: Diana Casandra Paredes Peralta

Area of work: University

Teaching level: A2 according to the CEFR

Objectives:

- To improve the communicative performance of A2 students through didactic strategies using ICTs and e-learning at the Higher Institute of Technology Manuel Galecio.
- To promote independent learning in students by communicating the model and providing them with relevant resources
- To improve the online classroom management through the use of communicative strategies that work best for students.

This plan is the result of students´ point of view on the course as a whole and the aspects of major impact on learning determined by the research. So the plan is detailed below and include the processes that are involved on the achievement of the short term, medium and long term objectives.

Table 1

Action Plan for improving students' Communicative Performance at A2 level

Processes	Short Term	Medium Term	Long Term
Leadership and vision	Adapt online course planning to the individual needs of learners considering the concepts of independent learning as well as collaborative learning.	Achieve quality results on online courses by the use of innovative tools in line with the concepts of independent learning and collaborative learning	Achieve better students' communication performance overall
Teaching and Learning	Ensure teachers are aware of the dynamics of e-learning and plan lessons accordingly. Promote both independent learning as well as collaborative learning within the institution on online settings.	Train teachers in E-learning and the use of ITCs with the help of experienced institutions in the country, to ensure that teachers have the tools needed to do their job properly Improve classroom management by using the strategies suggested in these study and validated by students	Capitalize on teacher quality in order to strengthen the process of teaching and learning with help of local and international institutions and adopt best practices

Table 1

Action Plan for improving students' Communicative Performance at A2 level (continuation)

Processes	Short Term	Medium Term	Long Term
Productivity and Professional Practice	Encourage observation in the classroom and the production of materials, tasks and plans by teachers according to students' needs.	Share the results with other teachers and coordinators in order to compare and contrast the results to make informed decision on future planning	Teachers empowerment resulting on their own production of materials, resources based on proved didactic strategies
Evaluation	Evaluating the class by means of better practices with adaptations of rubrics and other techniques to assess communicative performance	Promote self-evaluation amongst students as well as finding the means to improve performance by themselves	Design evaluative tests and tasks taking into account the communicative approach to teaching and learning
Social and Ethical responsibility	Sharing results and more importantly the implications of the findings for future application in online course design	Creating a database with the available research so other teachers and coordinators have a reliable source of information available	Creating a network with partner institutions to share information based on mutual consent and collaboration to achieve better practices in research and education

Bibliography

Ahmet, M. (2015). Evaluation of listening skill of ELT textbook at secondary school level. *Advances in language and literary studies*. 6(3), pp.225-229. https://www.journals.aiac.org.au/index.php/alls/article/view/1537/1482

Anderson, J. (2019) Cooperative learning: principles and practice. UNICEF. The British Council.

Chenlu, L. (2015). Application of the communicative method in EFL listening and speaking class. *Studies in Literature and Language*. 10(5), pp.1-4. https://app.luminpdf.com/viewer/5f8e59781d21a10012106d28

Johnson, L. (2013). NMC Horizon Report: 2013 Higher Education Edition, Austin: New Media Consortium.

Lukyanovaa, N, Daneykina, Y. & Daneikinaa, N. (2015). Communicative Competence Management Approaches in Higher Education. 214(2015), pp.565-570. https://core.ac.uk/download/pdf/287436437.pdf

Oxford, R. (2000). Integrated skills in the ESL/EFL classroom. *The journal of TESOL France.* Pp.5-12. https://www.tesol-france.org/uploaded_files/files/TESOL%20Vol%208%202001%20C1.pdf

Reinders, H. & Stockwell, G. (2017). Computer-assisted second language acquisition. In: Loewen, S. & Sato, M. The Routledge Handbook of Instructed Second Language Acquisition, pp.361-365. New York: Routledge.

Sánchez & Rojas. (2017). A comparative analysis between the Higher education systems of Ecuador and Bolivia. *Innova Research Journal,* 2(10), pp.70-83. file:///C:/Users/USER/Downloads/Dialnet-ComparativeAnalysisBetweenTheHigherEducationSystem-6183853.pdf

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. Fifth Edition. England: Pearson Education Limited.

Villafuerte, J., & Macías, K. (2020). Teaching English Language in Ecuador. *Journal of Arts and Humanities*, 9(2), pp.1-16. https://www.theartsjournal.org/index.php/site/article/view/1854/838

Conflicto de intereses

La autora declara que no existe conflicto de intereses en relación con el artículo presentado.

Indexaciones