MENDIVE
REVISTA DE EDUCACIÓN

Original article

Flipped Classroom model for learning vocabulary in English

Modelo de Aula Invertida para el aprendizaje del vocabulario en Inglés

Modelo de sala de aula invertida para aprender vocabulário em inglês

Myriam Johana Chicaiza Chango [1]

http://orcid.org/0000-0002-5932-4910

[1] Pontifical Catholic University of Ecuador, Ibarra Headquarters. Ecuador

jchicaiza192@gmail.com

ABSTRACT
The Inverted or Flipped Classroom model Classroom has extended its application in recent years as an alternative to motivate and engage students in their meaningful learning process. In the case of teaching English as a foreign language, it is also recognized as a useful tool. The objective of this work is to evaluate its usefulness in improving vocabulary learning in English and the feasibility of implementing it at the eighth grade level of basic education in a fiscal educational unit in Quito, Ecuador. A qualitative research was developed, based on documentary sources, and consultation with teachers who teach English at that school level, through a designed and validated interview. The analysis of the collected information allowed us to identify that the Flipped Classroom is a model to improve the learning of vocabulary in English. In the school studied, there are positive factors for its implementation such as: the knowledge that teachers generally have, the frequent use of activities that promote autonomous and cooperative work, and technological tools and applications. However, unfavorable economic conditions, the level of training and training in innovative strategies by teachers were identified as limiting factors.

Keywords: Flipped Classroom; significant learning; Ecuador; basic education; model; vocabulary.

RESUMEN
El modelo de Aula Invertida o Flipped Classroom ha extendido su aplicación en los últimos años como una alternativa para motivar y comprometer a los estudiantes en su proceso de aprendizaje significativo. En el caso de la enseñanza del inglés como lengua extranjera es reconocida también como una útil herramienta. El objetivo del presente trabajo es evaluar su utilidad en el mejoramiento del aprendizaje del vocabulario en inglés y la viabilidad de implementarla en el nivel de octavo de educación básica en una unidad educativa fiscal de Quito, Ecuador. Se desarrolló una investigación de tipo cualitativa, con base en fuentes documentales, y la consulta a los docentes que imparten la materia de inglés en dicho nivel escolar, a través de una entrevista diseñada y validada. El análisis de la información recopilada permitió identificar que el Aula Invertida es un modelo para mejorar el aprendizaje del vocabulario en inglés. En la escuela estudiada tiene factores positivos para su implementación como: el

conocimiento que a modo general tienen los docentes, el uso frecuente de actividades que promueven el trabajo autónomo y cooperativo, y de herramientas y aplicaciones tecnológicas. Sin embargo, se identificaron como limitantes las condiciones económicas desfavorables, el nivel de capacitación y la formación en estrategias innovadoras por parte de los docentes.

Palabras clave: Aula Invertida; aprendizaje significativo; Ecuador; educación básica; modelo; vocabulario.

RESUMO

O modelo de Sala de Aula Invertida ou Sala de Aula Invertida ampliou sua aplicação nos últimos anos como uma alternativa para motivar e engajar os alunos em seu processo de aprendizagem significativa. No caso do ensino de inglês como língua estrangeira, também é reconhecido como uma ferramenta útil. O objetivo deste trabalho é avaliar sua utilidade para melhorar o aprendizado do vocabulário em inglês e a viabilidade de implementá-lo na oitava série da educação básica em uma unidade educacional pública em Quito, Equador. Foi desenvolvida uma pesquisa qualitativa, com base em fontes documentais, e na consulta de professores que ensinam inglês nesse nível escolar, através de uma entrevista concebida e validada. A análise das informações coletadas permitiu identificar que a Flipped Classroom é um modelo para melhorar o aprendizado do vocabulário em inglês. Na escola estudada, possui fatores positivos para sua implementação como: o conhecimento que os professores geralmente possuem, o uso frequente de atividades que promovam o trabalho autônomo e cooperativo, ferramentas e aplicativos tecnológicos. No entanto, as condições econômicas desfavoráveis, o nível de formação e formação em estratégias inovadoras por parte dos professores foram identificados como fatores limitantes.

Palavras-chave: Sala de Aula Invertida; aprendizagem significativa; Equador; Educação básica; modelo; vocabulário.

INTRODUCTION

Currently, there are numerous work strategies in the classroom and outside it, which promote meaningful learning and student motivation towards the acquisition of new knowledge and skills. The case of the Flipped Classroom model is based on the role of the student in their learning process, based on the teacher's guide, who must develop digital learning materials taking advantage of the benefits of Information and Communication Technologies, along that educational institutions must contribute by generating the adequate infrastructure and means (Alarcón & Alarcón, 2021).

In the work of Rivarola, Domínguez & Aguirre (2020), the Flipped Classroom is recognized as the technique, approach or pedagogical model through which the activities that have usually been carried out in the classroom are carried out outside of it through technological means, recognizing it as a "*light hybrid inductive model as it* combines the advantages of inductive models with some deductive aspects" (p. 58). A deeper analysis allows to identify in the model, the classic principles of constructivism and collaborative and cooperative learning, which tend to achieve significant learning.

Most of the studies show that this model has a positive effect on student academic performance, increased motivation, self-regulation and teamwork, compared to traditional models (Hinojo, Aznar, Romero & Marín, 2019), based on on the principle that the student becomes the center of the teaching-learning process and a new interaction is generated with teachers, technological means, the educational

institution and other environments and new learning actors, such as the school and the family.

At the primary or basic school level, this model has generated great interest, because the student, in addition to acquiring knowledge and skills in specific subjects, acquires other technological and scientific skills (Campillo, Miralles & Sánchez, 2019), as well as others of an attitudinal nature that allow him to forge an independent personality and committed to his training. These authors indicate that the success of this type of methodologies is related to the "(...) interaction between the different forms of content acquisition (skills and knowledge), the execution and control of the different learning strategies (activities and techniques) and skills linked to the management of ICT (*online tools*, digital platforms)" (p. 358-359). Added to this is the attitudinal component that accompanies the teaching-learning process and that in relation to the acquisition of communication skills in a foreign language must cover both knowledge, skills, values and attitudes.

The teaching of English becomes increasingly necessary in the current context, and it is recognized that its start from the initial and primary levels of education is key to achieving a significant long-term learning process (Rodríguez & Cedeño, 2020). In this sense, it is very important to use innovative models that facilitate the process and integrate different actors (students, teachers, family) and media (especially technological ones). Within these models, the Flipped Classroom allows students to visualize themselves "(...) as protagonists of their learning and the teacher as a guide and facilitator in the English class, (...) diversifies the moments to learn, improves prior knowledge and optimizes a student-centered training process" (Aguayo, Bravo, Nocetti & Aburto, 2019, p. 2).

In the reviewed bibliographical review, some studies related to the application of the Flipped Classroom in English classes at the primary level are documented, for the development of basic skills (written expression, oral expression, written comprehension and oral comprehension), where grammatical aspects, vocabulary and pronunciation are fundamental (Rivarola, Domínguez & Aguirre, 2020). However, specific studies on the influence of the model on the learning of English vocabulary are not abundant, especially considering that the model has been used worldwide for approximately 10 years, so it continues to be a novel approach in the pedagogical field; all this, despite the fact that vocabulary is elementary in the process of learning a foreign language, and that in Ecuador its teaching is generally still based on traditional and rote methods (Mogobrejo, Mamani & Tipo, 2019).

The investigation will focus on a fiscal educational unit, that is, a public entity attached to the Ministry of Education in the city of Quito, Pichincha province. The school has a sierra school regime, it is located in the southern zone of the city of Quito and its school activity is carried out in the range of upper basic education and high school. The institution has 2,265 students and 120 teaching and administrative staff. Specifically, at the eighth-grade level of basic education, a total of 150 students are enrolled in the 2021-2022 school year, attended by four English teachers.

In the exploratory study carried out, it was identified that students in this grade have limited participation in classes, due to a precarious vocabulary that hinders the development of their communicative skills in English.

In this sense, the objective of this research is to evaluate its usefulness in improving vocabulary learning in English and the feasibility of implementing it at the eighth-

grade level of basic education in a fiscal educational unit in Quito, Ecuador.

MATERIALS AND METHODS

The research developed was of a qualitative type, addressing the phenomenon of learning English in the eighth grade of a fiscal educational unit in Quito. The analysis of bibliographic sources, work documents in the fiscal educational unit under study and data collection from an interview questionnaire applied to the four English teachers who work in the eighth grade in said institution were carried out.

Theoretical scientific methods such as systemic, historical and hypothetical-deductive were applied, with the support of analysis-synthesis and abstraction-integration procedures. The bibliographic sources were selected under current and scientific relevance criteria, consulting documents from regionally and globally recognized databases.

The interview was prepared by the author, incorporating contributions from the approach proposed by Núñez (2016) and validated by two specialists in the field of English teaching, pedagogy and educational management, determining that it is clear, precise and consistent with the objective. Of the investigation.

Four English teachers from the fiscal educational unit under study were interviewed, of which three hold a master's degree in different areas related to pedagogy; they have an average of 25 years of teaching experience and 12 years of work in the school, for which it is considered that they have an adequate level to give an opinion on the topic analyzed.

The results of the interview were determined using the content analysis technique and word cloud processing with the Atlas ti v.22 program, which allowed "identifying the words with the highest incidence and knowing the focus of the answers provided" (Villanueva, Velázquez & Rosales, 2021, p. 691).

RESULTS

The bibliographic analysis carried out determined the following results in relation to the origin and development of the Flipped Classroom model:

- The model is applied based on the use of videos, digital platforms, didactic resources prepared with the support of technologies and others that are oriented in classes, in addition to being used in the students' free time (at home, with the support of classmates and families), with subsequent feedback in class.

- For its implementation in the English class, the teacher is required to be trained in the use of Information and Communication Technologies; as well as access to the Internet and other technological means at school and at home.

- The application of the model in the context of primary or basic education is complex, especially due to the incorporation of information and communication technologies.

- Scientific evidence indicates that the application of this model allows improving the acquisition of vocabulary and, therefore, influencing the improvement of linguistic skills, based on greater motivation, cooperation and independence of the students, which in turn influences communicative competence.

On the other hand, in relation to the analysis of the viability of the application of the

Flipped Classroom for the learning of vocabulary in English, at the eighth-grade level of basic education in the fiscal educational unit studied in Quito, Ecuador, an interview was applied to the four teachers who teach the subject of English, which yielded the following results.

In relation to the knowledge of the methodology and its usefulness in the subject of English, especially for the acquisition of vocabulary, all the interviewees expressed themselves positively. Figure 1 shows the concept cloud built in relation to these first interview questions:

Fig. 1- Cloud of words about the usefulness of the methodology
Source: Processing in Atlas ti software

In relation to the conditions that the school has for the application of the methodology, a consensus was also evidenced among the interviewees on the impossibility due to the circumstances of the physical and technological infrastructure of the institution, as well as the low economic level of the students. students and their families, as shown in figure 2. However, in relation to the level of preparation and training of teachers, 50% stated that they are prepared and the other 50% the opposite. This indicates that this is one of the aspects in which the Educational Unit must work more if it aspires to implement the methodology in a general way in the eighth grade.

Fig. 2- Cloud of words about conditions for implementation and teacher training
Source: Processing in Atlas ti software

One of the pillars for the success of the Flipped Classroom is the motivation of the students and the support of the families, as indicated above. In the case analyzed, all the interviewees agreed on the key concepts shown in the following figure.

Fig. 3- Word cloud about student motivation and family support
Source: Atlas ti software processing

Regarding the use of autonomous work, individual and cooperative work, as well as the resolution of doubts considering the differences between students, the four teachers interviewed expressed themselves positively, highlighting the following aspects:

Fig. 4- Cloud of words about the work promoted by the teacher
Source: Processing in Atlas ti software

In relation to the significant learning that should be achieved in the English class, all the teachers expressed their agreement, highlighting what is shown in figure 5.

Fig. 5- Word cloud about meaningful learning
Source: Processing in Atlas ti software

Finally, the teachers were questioned about the educational platforms or applications most used by them to teach vocabulary, and the answers can be seen in figure 6.

Fig. 6- Cloud of words about the most used platforms for vocabulary learning
Source: processing in Atlas ti software

The application of the Atlas ti facilitated the qualitative analysis in relation to the development of the teaching-learning process of English as a foreign language in the Educational Unit, according to the vision of the teachers, which is discussed further below.

DISCUSSION

Hinojo, Aznar, Romero & Marín (2019) state that the Flipped Classroom model has an emergent character and, therefore, little development in the scientific literature; however, the teachers interviewed stated that they knew it and had some experience in its application, despite the fact that the conditions in the Educational Unit are not propitious enough for it. The recognition of the usefulness of combining this with other methodological strategies for teaching and reinforcing vocabulary in English is highlighted, through interdisciplinary projects, the use of technological means and others chosen by the teacher, as a result of the training and elaboration processes. research you do.

Aguayo, Bravo, Nocetti & Aburto (2019) state that this model surpasses other didactic innovations and support resources that have been applied to learning English in recent years; while Salazar, Pérez, González &

Romero (2019, p. 169) define it as a "new extra-class strategy to improve a common deficiency among second language learners, such as the lack of knowledge of vocabulary".

One of the aspects that was mentioned the most by teachers, as can be seen in several clouds generated with Atlas ti, was the low economic capacity, both of the students and their families, and of the educational institution itself, since it is public. and tax. The economic crisis of recent years in Ecuador and the contraction of state budgets for the education sector (Alvarado & Arévalo, 2020) imply that the provision of new technological resources and adequate infrastructure is increasingly limited. This was recognized as a serious limitation for the development of this methodology in the Educational Unit.

Regarding the training of teachers, there was no consensus, only half of them stated that they were prepared to assume this and other innovative methodologies. This, together with the unfavorable physical and economic conditions, can jeopardize the widespread implementation of the methodology in the eighth grade of the Educational Unit; Therefore, at least one should tend to generate continuous training actions for teaching staff in the didactic innovations that are most used today.

In relation to the prominence of students, in the work of Aguayo, Bravo, Nocetti & Aburto (2019) a higher level of commitment to tasks outside the classroom was evidenced, which implied better learning results. On this topic, Campillo, Miralles & Sánchez (2019) recognize that it is one of the ones that should be worked on the most in the future, due to how important it is for the implementation and improvement of the Flipped Classroom model that students increasingly exchange their way of thinking. thinking and effects of participation inside and outside the classroom.

The use of Information and Communication Technologies is so necessary for the implementation of this model, that according to Alarcón & Alarcón (2021), learning time is optimized from the conception that the student prepares at home, with family support and access to classes basically to clarify doubts and exercise what they have learned. This, at the basic or primary level of education, requires a key role for the family. In the case study, the teachers interviewed considered that the family environment is key to the successful development of the Flipped Classroom. However, there are limiting factors related to the role of the family, such as the level of awareness of the parents, the availability of economic and technological means and the time for its application, which are fundamental. On this topic, Vaccotti (2019) highlights how complex family-educational institution relationships are in the process of training adolescents.

Rivarola, Domínguez & Aguirre (2020) indicate that, for the success of the Flipped Classroom in the acquisition of basic skills in English, the planning of the class must contain the activities inside and outside the class. During the class, it is key to encourage autonomous work, individual and group activities, as well as feedback with student leadership. In relation to this, there would be no difficulties for the implementation of the Flipped Classroom in the eighth grade of the Educational Unit, since all the teachers stated that they frequently use these models, usually adapted to the context and specific contents. Another of the aspects evaluated was the usefulness of the model to achieve meaningful learning in English; In this regard, the teachers stated that it is key to promote learning for life, especially in the teaching of a language that is so important for the personal and professional growth of adolescents. This coincides with what was stated by Rodríguez & Cedeño (2020, p. 565) that it allows "constructing knowledge with greater interest in the practice of students, through the elaboration of the contents

autonomously from their homes and in the same way do homework in the classroom.

The Flipped Classroom uses digital technology to manage learning outside the school cloisters in the search for optimal use of time, aimed at classes under the face-to-face modality, taking into account that the student does so in advance in his/her home and access the classroom to clarify doubts and exercise what they have learned.

Mogobrejo, Mamani & Tipo (2019) highlight that the use of innovative technologies and approaches manage to improve the acquisition of vocabulary in English, based on high motivation, autonomy, communication and entertainment. In the work of Salazar, Pérez, González & Romero (2019), the usefulness of the Flipped Classroom model was evidenced, through the use of web resources such as Quizlet and YouTube for the improvement of vocabulary in English, which in the students approached presented serious difficulties. Meanwhile, the teachers who teach English in the eighth grade of the Tax Education Unit studied, stated that they use a range of applications such as Witheboard, Notebook cast, Youcaste, Liveworksheet, Wordwall, Cambridge platform, among others, as can be seen in the built cloud, and that denotes that despite the technological difficulties, an effort is made to use it in the context of the English class, for specific vocabulary learning.

After carrying out the work, it is concluded that the Flipped Classroom is a very useful model in current conditions, since it combines certain principles and methods that tend to a significant learning. In the study, from the bibliographical analysis carried out, its usefulness for teaching vocabulary in English was evidenced, as well as some key aspects for its success, especially the will of students and families, the preparation of teachers and the technological conditions required. for its execution.

The evaluation carried out with four teachers who teach the subject of English in a Fiscal Educational Unit in Quito, Ecuador, allowed us to recognize favorable factors for its implementation, such as: knowledge of the Flipped Classroom and its advantages, the frequent use of activities that promote autonomous and cooperative work and technological applications that facilitate tasks inside and outside the class. However, it was evidenced that the level of teacher training is not sufficient, especially that the economic conditions of the students, families and the educational institution itself, would not guarantee its widespread use, especially due to the inequitable access to technological means.

BIBLIOGRAPHIC REFERENCES

Aguayo, M., Bravo, M., Nocetti, A. & Aburto, R. (2019). Student perspective of the flipped pedagogical model classroom or flipped classroom in learning English as a foreign language. *Education, 43* (1), 1-16. doi:10.15517/ revedu.v 43i1.31529

Alarcón, D. & Alarcón, O. (2021). The flipped classroom as a learning strategy. *Conrad, 17* (80), 152-157. Retrieved from http://scielo.sld.cu/pdf/rc/v17n80/ 1990-8644-rc-17-80-152.pdf

Alvarado, M. & Arevalo, M. (2020). Possible economic policy measures in the current and post-Covid-19 context: Ecuador case. *Sur Academia Magazine, 7* (14), 59-73. Retrieved from https://revistas.unl.edu.ec/index.p hp/suracademia/article/view/727

Campillo, J. Miralles, P. & Sánchez, R. (2019). The teaching of social sciences in primary education

through the flipped classroom model. *Interuniversity Journal of Teacher Training, 33* (3), 347-362. doi: https://www.redalyc.org/jatsRepo/274/27466132020/27466132020.pdf

Fennel, F., Aznar, I., Romero, J. & Marín, J. (2019). Influence of the flipped classroom on academic performance. A systematic review. *Virtual Campus, 8* (1), 9-18. Retrieved from https://redined.educacion.gob.es/xmlui/bitstream/handle/11162/184523/Art.%201.pdf?sequence=1&isAllowed=y

Mogobrejo , A., Mamani, G. & Tipo, M. (2019). Game and Simulation of Television Contest Programs as a Didactic Technique to Improve the Learning of English Vocabulary in Spanish-Speaking Students. *Technological Information, 30* (1), 225-236. doi:10.4067/S0718-07642019000100225

Núñez, A. (2016). flipped learning for learning English. *EDUTEC. Electronic Journal of Educational Technology* (56), 89-102. Retrieved from http://www.edutec.es/revista

Rivarola, M., Dominguez, M. & Aguirre, C. (2020). Teaching English through the flipped classroom. *Connected Teachers, 3* (5), 54-63. Retrieved from https://www.evirtual.unsl.edu.ar/revistas/index.php/dc/article/view/93/67

Rodríguez, T. & Cedeño, L. (2020). flipped Classroom as a strategy for meaningful learning of the English language. *Knowledge Pole, 5* (1), 565-584. doi:10.23857/ pc.v 5i1.1958

Salazar, M., Pérez, G., González, D. & Romero, G. (2019). Analysis of closed Facebook communities to improve vocabulary development in English as a foreign language through the flipped class method. *REDIPE Bulletin Magazine, 8* (8), 168-179. doi:10.36260/rbr.v 8i8.809

Vaccotti , R. (2019). The family-educational institution relationship in secondary education: perspectives of secondary school teachers. *Education Pages, 12* (1), 164-178. doi: 10.22235/ pe.v 12i1.1787

Villanueva, R., Velázquez, J. & Rosales, G. (2021). Atlas.ti : tool to measure the participation of local strategic actors in the management of rural tourism for Tomatlán, Jalisco. *Rosa Dos Ventos. Tourism and Hospitality, 13* (3), 681-700. doi: 10.18226/21789061.v13i3p681

Conflict of interests:

The author declares that she has no conflicts of interest.

Contribution of the authors:

The author participated in the design and writing of the work, and analysis of the documents.