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Pedagogical Paradigms in teaching EFL classroom: evaluating approaches of cognitivism, constructivism, pragmatism, and connectivism

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ABSTRACT

The aim of the teaching-learning process is to transmit knowledge, skills, and values to the student, who is the recipient. This process must be holistic: in its structure and methodology, it must contain various types of training. Separately, any one of these types of training can improve the quality and effectiveness of the others. At the same time, each type has its own distinctive features, which are determined by the psychological peculiarities of the teacher, the general educational goals, and the particular tasks. This study analyzes the teaching-learning process in the English area based on modern approaches in education, which are important theoretical movements that are currently being used: cognitivism, constructivism, pragmatism, and connectivism.

We used a convenience sample of for groups with a total number of 120 university students at the A2 English level. This case study was developed at the Technical University of Babahoyo. We used the English skills of listening, writing, speaking and writing and ICT platforms to put those approaches into practice. As result, the students get greater grades with the inclusion of each approach, getting average grades between 8.17 and 9.23 in the reading and cognitive approach, between 7.38 and 8.91 in the writing and constructivism approach, between 8.25 and 9.52 in the listening and connectivism approach.

The speaking activity related to the pragmatism approach was measured in the number of errors where there were between 10 and 16 pronunciation or coherence errors in a one-minute speech. In all the approaches they have a significant evolution since their first activity and also, we have satisfaction levels in all the dynamics above 91%. In conclusion, with adequate strategies, and effective technological and digital resources, multiple changes can be achieved by introducing these pedagogical approaches that allow students to develop their skills through collaborative learning tasks, promoting student autonomy, and fostering their ability to work together to develop their critical thinking and create a community-oriented environment for the students.

Keywords: pedagogical approaches, cognitivism, constructivism, pragmatism, connectivism, English skills.

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Paradigmas pedagógicos en la enseñanza de EFL en el aula: evaluación de enfoques de cognitivismo, constructivismo, pragmatismo y conectivismo

RESUMEN

El objetivo principal del proceso de enseñanza-aprendizaje es transmitir conocimientos, habilidades y valores al alumno, que es su destinatario. Este proceso debe ser holístico: en su estructura y metodología, debe contener varios tipos de formación. Por separado, cualquiera de estos tipos de formación puede mejorar la calidad y la eficacia de los demás. Al mismo tiempo, cada tipo tiene sus propias características distintivas, que vienen determinadas por las peculiaridades psicológicas del profesor, los objetivos educativos generales y las tareas particulares.

Este estudio analiza el proceso de enseñanza-aprendizaje en el área de inglés a partir de los enfoques modernos en educación, que son movimientos teóricos importantes que se están utilizando en la actualidad: el cognitivismo, el constructivismo, el pragmatismo y el conectivismo. Utilizamos una muestra de conveniencia para grupos con un número total de 120 estudiantes universitarios en el nivel de inglés A2. Este estudio de caso se desarrolló en la Universidad Técnica de Babahoyo. Utilizamos las habilidades en inglés de escuchar, escribir, hablar y leer y plataformas TIC para poner en práctica esos enfoques. Como resultado, los estudiantes obtienen mayores calificaciones con la inclusión de cada enfoque, obteniendo calificaciones promedio entre 8.17 y 9.23 en el enfoque de lectura y cognitivo, entre 7.38 y 8.91 en el enfoque de escritura y constructivismo, entre 8.25 y 9.52 en el enfoque de escucha y conectivismo.

La actividad oral relacionada con el enfoque del pragmatismo se midió en el número de errores donde había entre 10 y 16 errores de pronunciación o de coherencia en un discurso de un minuto. En todos los enfoques tienen una evolución importante desde su primera actividad, además que, tienen niveles de satisfacción en todas las dinámicas superior al 91%. En conclusión, con estrategias adecuadas y recursos tecnológicos y digitales efectivos, se pueden lograr múltiples cambios al introducir estos enfoques pedagógicos que permitan a los estudiantes desarrollar sus habilidades a través de tareas de aprendizaje colaborativo, fomentando la autonomía de los estudiantes y fomentando su capacidad de trabajar juntos para desarrollar sus habilidades. pensamiento crítico y crear un ambiente orientado a la comunidad para los estudiantes.

Palabras clave: *enfoques pedagógicos, cognitivismo, constructivismo, pragmatismo, conectivismo, habilidades en inglés.*

INTRODUCTION

The teaching-learning process in the classroom is the main educational activity carried out by teachers with students, this process has its own peculiarities, which allow teachers and students to learn better (Mirzaev, 2022). Although teaching English is a complex task, it requires always high professional competence to comply with its academic goals (Alnujaidi, 2019). For this reason, there are many types of teaching methods, from the simplest to the most complex.

As EFL (English as a Foreign Language) teachers, we are always guided by an organized process into the classroom (Lubis et al., 2010), which has classified our daily teaching activities into four main activities: i. planning, where the teacher plans what he is going to teach and how he is going to do it; ii. teaching, in which the teacher explains what he has planned and how he intends to teach it, using efficient materials and resources to practice them in class, iii. learning, in which the teacher allows his students to learn by interacting with them, listening to them, observing them, and in turn motivating them to generate ideas and knowledge, and finally iv. evaluation, in which the teacher evaluates the learning of his students by asking them questions, carrying out tests, and making observations (Chen et al., 2021).

This study analyzes the teaching-learning process in the English area based on modern paradigms in education, which are important theoretical movements that are currently being used: cognitivism, constructivism, pragmatism and connectivism, highlighting mainly their philosophy and core characteristics. Then, its aim is to demonstrate how those approaches have given new and qualitative answers to pedagogical questions in English processes, looking forward also their strengths and weaknesses.

Literature Review

The study of cognition is one of the most important and challenging topics in the field of education (Descombes, 2010). The process of learning is not a simple one, and it requires a thorough understanding of the cognitive process. The cognitivist theory focuses on the learner's ability to reason logically and make decisions based on their own personal knowledge and experiences (Carroll, 1978). The learner's cognitive processes are developed through interaction with other people. Through this interaction, learners are able to develop their abilities in several areas including: language development, social

interaction skills, problem solving abilities and cultural awareness (Anastasi & Cyprien, 2021).

The main advantage to using cognitivism as a basis for teaching English in the classroom is that it provides an explanation for why some students are more successful at learning than others (Yana et al., 2019). This theory also offers an explanation for why some students have difficulty when they encounter certain concepts in their courses. The disadvantage to using cognitivism is that it does not provide a clear solution for language learners who are struggling with specific concepts or vocabulary words (Descombes, 2010).

On the other hand, constructivism, which is a theory of learning, affirms that learning occurs through the construction of knowledge and that it was initially introduced by Piaget in 1964 and complemented by Berger and Luckmann in 2001 according to (Córdoba, 2020). Under this approach, the teacher plays an active role in this process by providing information to students and helping them to build their knowledge. In this way, constructivism provides a way for students to develop their own ideas and beliefs about how they should behave, as well as what they can achieve in life (Tigse-Carreño, 2019).

Starting from the constructivist approach in teaching English, constructivism, as a mentality and perspective of educational practice, marked a radical change in education and in the way of understanding learning. The conception that supports the teaching-learning process is to combine it with the possibilities offered by computer networks, known as "technology", which today presents us with an effective interaction tool (Liu et al., 2020). Before its implementation, this did not seem credible, but through the new possibilities that computation brings "in the world", constructivism can be fully implemented and is being used for a modern educational model, and allows us as teachers to include media and gamification into our daily practice (Yang et al., 2021).

In a class, applying the constructivist approach, the teacher will always be the main guide in the students' learning, giving them examples of how to solve a problem and putting it into practice in the classroom. Likewise, the teacher can also use various tools, such as models, diagrams, and graphs, to illustrate a point or concept.

Thus, students are expected to use their own experiences, knowledge, and skills to learn new concepts. They are also encouraged to ask questions and discuss their views on topics that are difficult for them. Teachers can help students understand why certain

things happen in science or mathematics (Bolaño Muñoz, 2020) using examples from nature or other interesting situations or events. On the other hand, studies such as the one proposed by (Macías Ibarra & Barzaga Sablón, 2019) show that constructivism can be applied in any area of learning, including physical education, where pedagogical models of learning are also used.

The main disadvantage of constructivism is that it tends to be overly simplistic. In essence, constructivism assumes that everything we know about the world comes from our experiences and knowledge. It does not attempt to look at other ways in which our experiences and knowledge can be constructed (Liang & Li, 2018). In addition, constructivism does not provide a clear way of defining what is important for students to learn. For example, some students may find that they do not have much interest in English when they first begin studying it because they find it boring or abstract (J. Zhang & Lin, 2018). This can lead teachers who use constructivism to give up on teaching English altogether or try and make sure that their lessons are fun enough so that students will want to keep going despite their lack of interest in the subject matter itself.

The pragmatist approach to teaching English is based on the idea that students learn best by using what they already know in order to achieve certain goals. Thus, pragmatist approach focuses on students' abilities and needs rather than their background or education level (Zhang, 2012). It believes that there are no innate differences between people's abilities or learning styles; instead, it sees all people as being born with varying degrees of knowledge and skills, which they acquire through life experiences, e.g., reading, listening, speaking (Tarnopolsky, 2018).

This approach emphasizes the importance of authentic situations in which learners can apply what they have learned through experience and interaction with others. In such an environment, teachers must focus on helping students learn how to use what they already know, e.g., language acquisition strategies) rather than focusing on teaching techniques that may not be relevant for their individual needs at this stage in their development, e.g., grammar rules (Tarnopolsky et al., 2021). The goal is for students' own interests and abilities to guide them toward mastery over their learning tasks and for teachers to encourage.

However, there are some disadvantages associated with this approach, such as i. the teacher's role changes from being the one who provides information to being one who

helps students understand it themselves and, ii. teachers may not be able to completely control what happens in class since students may follow their own interests and ideas rather than those suggested by teachers (Tarnopolsky, 2018).

The fourth paradigm reviewed is connectivism, it goes beyond simply stating that students construct knowledge, it also recognizes that students are active participants in their own learning. (Santander, 2018) indicated instead, that connectivism is proposed as the evolution of constructivism, given the technological evolution of recent years. Connectivism suggests that learners should be given the opportunity to make decisions about what to learn next based on their prior knowledge and understanding, as well as their personal beliefs and opinions. This approach encourages students to think critically about issues rather than just accept what others say without question or debate (Cao, 2018).

Connectivism was built on constructivism, which focuses on the social nature of knowledge creation. Although it recognizes that people do not create knowledge individually, but work together in groups or communities, it also recognizes that these groups form around shared interests (for example, language) (Cao, 2018). Connectivism then explores how these groups interact with each other through digital networks. The focus is on how students relate to each other as well as their experiences within these networks (López De La Cruz, 2021).

According to al Maawali (2022) the central idea of connectivism is that information can only be understood when it is seen as part of a network, or from multiple perspectives (that is, from multiple lenses). Therefore, connectivism emphasizes multiperspective teaching and learning strategies that encourage students to think about content from multiple perspectives so that they can better understand what they are learning, or "connecting" (Bernal-Garzón, 2020). Connectivism then is the evolution of constructivism where we could use all the platforms, apps and media to generate knowledge, and create the right motivation for students to learn English, and to facilitate practice and repetition of certain topics (Mantuano et al., 2021).

The main disadvantage of connectivism goes when it does not give much attention to the individual person's differences and needs (Guerrero Salazar, 2022). The teacher must adapt their teaching methods according to the student's abilities and interests in order to achieve a good learning process (Mata-García & Zepeda-Moreno, 2022). Connectivism

requires teachers to have high expectations of their students and they have no choice but to make them act as agents who can take action on their own behalf. However, this approach might cause students to become passive learners who do not want to engage in any form of learning activity (Torres et al., 2022).

METHODS

For this study, we used an exploratory and descriptive methodology, with a longitudinal dataset, based mostly on a qualitative focus, using online platforms as the main tool to gather data. It was developed as a Case Study at Babahoyo Technical University.

We used a convenience sample of 120 students, divided into 4 groups from Level 4 for their university curriculum, which is equivalent to A2 English, the second level of English in the Common European Framework of Reference (CEFR). In the platforms, we created activities for the 14-week period course focusing on English skills. Table I present the main activities developed to enhance each of the approaches:

Table I: Activities per approach

Activity	Approach	Online Platform
Jigsaw Reading - Activity in groups, National Geographic article: Past decade was the hottest on record	Cognitivism	Zoom and Nearpod
Writing – Activity in Groups: Create a story	Constructivism	Zoom and Canva
Speaking: The most important experience in my life	Pragmatism	Flip
Listening: Climate change is real	Connectivism	Tik Tok and Nearpod

The data were collected according to the effort and effectiveness to deliver the activities, and also by obtained grades. It is presented using descriptive statistics in tables.

RESULTS AND DISCUSSION

First, we are going to analyze the data obtained from the cognitive approach. Jigsaw reading is an effective strategy to improve cognitive activities through reading. The jigsaw strategy consists in divide the text and making group discussions in different stages to create expertise in the topic. In Table II, we gathered the information on average grades obtained by the students using this strategy.

Table II: Grades using the cognitive approach

Group	Average grade	St Dev
Group 1	8,32	2,22
Group 2	8,17	2,37
Group 3	8,30	2,7
Group 4	9,23	2,06

In the class, the cognitivism approach has increased the overall grades of the groups to good levels. The average grade for reading skills in the first activity in the course was 6.82, the cognitivism strategy could help the improvement and also the understanding of the reading activities. We also asked for the students' perception, and Table III, present the relevant information:

Table III: Students' perception of Jigsaw activity

Student's Perception	Percentage
Confidence in expressing ideas	88,05%
Time spent improved reading comprehension	92,04%
Vocabulary has increased	90,27%
Ability to argument about the topic	89,78%
Satisfaction about the Dynamic	93,83%

Students' perceptions are really favorable. Mostly all the parameters are above 90%, but 88% of students now feel comfortable expressing their ideas using this dynamic, and 94% of students are satisfied with this activity.

Then, there is the constructivism strategy, for this activity, the students had to create a story in groups using the canva platform. They had to work in real-time, during the class. Table IV presents the average grade for each group in this activity.

Table IV: Average grade for the constructivism activity

Group	Average grade	St Dev
Group 1	7,38	2,25
Group 2	7,97	1,72
Group 3	7,75	1,64
Group 4	8,91	1,27

In this activity, the students use all their creativity to create their stories and also to create visuals to improve their narrative. However, the grades here are lower than in reading, this is because writing skill is one of the hardest in EFL learning. Although they have good grades, they haven't improved as much as it happens with their reading competence, that's because the average writing for all the groups was 7.21. In Table V we analyzed the student perception of this activity.

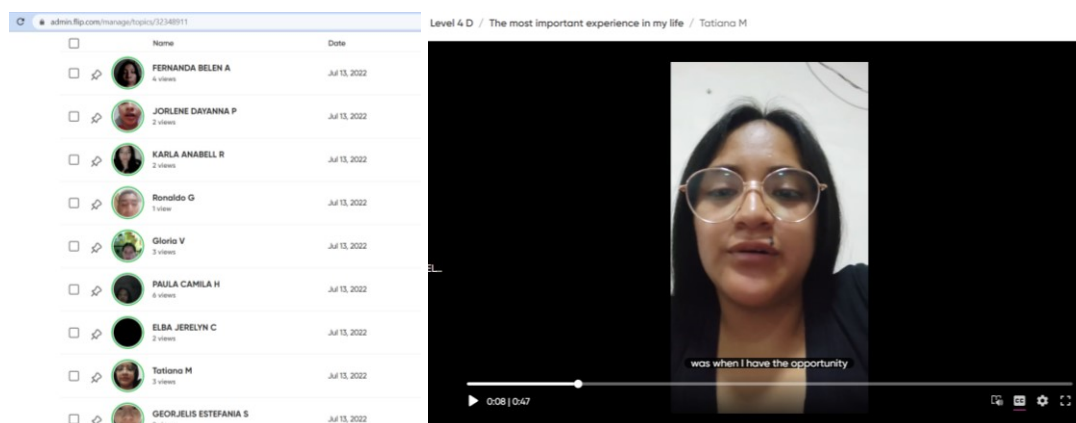
Table V: Students' perception of writing activity

Student's Perception	Percentage
Confidence in expressing ideas	81,22%
Time spent improved writing ability	82,32%
Vocabulary has increased	91,11%
Creativity to create the story	85,88%
Satisfaction with the Dynamic	95,83%

Indeed, the constructivism approach is a great tool to improve writing, it can enhance creativity among students and they use this creativity to build knowledge based on the past experiences they have already had. This activity was more complex for the students, and that's the reason the perception obtained has a lower percentage, however, the satisfaction level was higher, giving 95.83% of students a positive impact.

The third approach was pragmatism, we decided to use it through speaking skills. For this activity, we evaluate their speech to know if there is coherence and practical knowledge that allow them to create phrases and a complete discourse. For this activity, they need to answer a simple question, having studied vocabulary and grammar before, they have to create a one-minute speech about "The most important experience in their lives", on Figure I we present some speeches on Flip.

Figure 1: Students' participation in Flip



Flip support students practice speaking skills, while they can record their speeches over there, then watch other students' speeches and also review with the automatic close caption generated. In this activity, we evaluated the number of errors presented in pronunciation and coherence. The Table VI we presented these results.

Table V: Presented error in speaking production

Group	Average error	St Dev
Group 1	16,75	1,34
Group 2	13,58	1,36
Group 3	16,67	1,32
Group 4	10,33	1,37

In this activity, the comparison is more complex due to the different levels of speaking for the students of each group. Group 4 has fewer errors with 10.33 on average, followed by group 2 with 13.52, and groups 1 and 3 have 16 errors approximately. However, they all have an evolution through the course, when the first activity of listening has a total error average of 32 in a one-minute speech also.

The last approach to evaluate was connectivism. We use connectivism to analyze listening, using social media and Nearpod platform. For this activity, we present a Tik Tok video with activities of pre, while, and post-listening, that includes different types of activities such as prediction, guessing, matching, gaming, inferring, and posting comments. Table VI presents the average grades obtained in each group:

Table VI: Average grade for the connectivism activity

Group	Average grade	St Dev
Group 1	8.25	1.88
Group 2	9.52	1,62
Group 3	8.97	1,71
Group 4	9.36	1,55

This approach received the greatest average grades of all four. Groups are around 8.25 to 9.52 in the overall grade, considering that they had to overcome several activities related to listening skills. This information is useful due in this digital area, we as teachers could take good advantage of the connectivism approach to make several activities based on different strategies, and we are pretty sure they would work. Let's always remember that our students now were born in the digital age. Finally, we review in Table VII the students' perception of the listening activity.

Table V: Students' perception of listening activity

Student's Perception	Percentage
Ability to understand ideas	89,33%
Time spent improved listening ability	91,05%
Vocabulary has increased	92,25%
Ability to express ideas related to the topic	86,44%
Satisfaction with the Dynamic	91,08%

The student's perception is great as it was in the last approach. For the listening activity related to the connectivism approach gathered 91.08% of students satisfied. Then, it is just important to highlight that those approaches that are mostly viewed as paradigms are a good way to improve abilities in EFL classes. Students are comfortable with the activities as long as they are interactive and motivating to perform them into class.

Discussion

Constructivist theory emphasizes the importance of knowing how to learn as an essential part of learning. Children must be taught how to learn and how they can make sense of their own experiences. They must be able to use their prior knowledge and experience to make sense of new information.

However, the main disadvantage of constructivism is that it tends to be overly simplistic. In essence, constructivism assumes that everything we know about the world comes from our experiences and knowledge. It does not attempt to look at other ways in which our

experiences and knowledge can be constructed. Furthermore, constructivism does not provide a clear way of defining what is important for students to learn.

On the other hand, connectivism views learning as a dynamic process that can be influenced by multiple factors. It recognizes in each student a learning potential, which depends on the conditions of her life. Connectivism does not view learning as something that occurs in isolation from others; believes that students are always present in their environment and immersed in an environment made up of people, tools, and information (López De La Cruz, 2021). In this sense, connectivism can be considered a theory of situated cognition that emphasizes context and community as important aspects of learning (Santander, 2018).

Unfortunately, it has disadvantages, connectivism does not pay much attention to the differences and needs of each person. The teacher must adapt his teaching methods according to the abilities and interests of the student to achieve a good learning process. Connectivism requires that teachers have high expectations of their students and have no choice but to make them act as agents who can act on their own behalf.

Nevertheless, in order for the approaches to work effectively, they need to be properly implemented by first understanding what it means from a teacher's perspective and then choosing an appropriate strategy or method to implement it in your classroom environment. In this sense, the teaching-learning process has been transformed into a more collaborative, participatory, interactive, and student-centered process, in which the development of collaborative learning skills is necessary for students to become active participants in learning. various classroom activities.

CONCLUSIONS

In the end, it becomes important to emphasize that in recent decades education has been increasingly complemented by technology and as a consequence, the teaching-learning process has been transformed into a digital vision. In this context, cognitivism, constructivism pragmatism and connectivism are good theoretical approaches that have given rise to new teaching and learning paradigms in teaching English.

Cognitivism is based on the idea that learners learn through understanding, which means the process of learning is viewed as a series of steps that learners must follow in order to understand the concepts and skills taught in an English course. Constructivism is based on the idea that people learn by creating knowledge and shaping their own

understanding of concepts. This approach focuses on students' active involvement in their own learning process by making decisions about what they want to know and how they want to learn it, and we could create effective environments in the classroom to achieve our academic goals.

Pragmatism, in its own way, emphasizes students' practical concerns and how these become an important part of their motivation for learning English. It also stresses the importance of developing an awareness of culture and other aspects of language use so that learners can apply what they learn in real-world contexts. And at last, connectivism is based on learner-centered principles in which learners are seen as active agents who are capable of making decisions about their own learning activities.

Therefore, with adequate strategies and effective technological and digital resources, multiple changes can be achieved by introducing these pedagogical approaches that allow students to develop their skills through collaborative learning tasks, thus promoting student autonomy, fostering their ability to work together, developing their critical thinking skills, and create a community-oriented environment in which students have equal opportunities in access to resources and participation in our EFL classes.

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