

# Un Sistema de Enfoque Comunicativo Basado en Tecnología Diseñado para Apoyar la Producción Escrita de los Docentes en sus Clases

## A Tech-Based Communicative Approach System Designed To Support Teachers' Writing Production In Their Lessons

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### RESUMEN

Este estudio presenta un sistema basado en el Enfoque Comunicativo con soporte tecnológico (TBCA, por sus siglas en inglés), diseñado para ayudar a los docentes a desarrollar actividades de escritura efectivas dentro de su planificación de clases. El sistema combina estrategias basadas en tareas con los principios del enfoque comunicativo, lo que permite a los profesores diseñar actividades que respondan a las necesidades de la comunicación real, así como a los niveles del MCER. TBCA apoya la redacción, revisión y estructuración de materiales escritos con un enfoque en la claridad, coherencia y propósito comunicativo. Los docentes reportaron mejoras en la organización de los objetivos de planificación, las instrucciones y los criterios de evaluación. Esto sugiere que el TBCA no solo mejora la escritura profesional de los docentes, sino que también optimiza el diseño de tareas interactivas que fomentan la participación estudiantil y el desarrollo del lenguaje.

**Palabras clave:** enfoque comunicativo, tecnología, producción escrita, docentes, herramientas digitales, planificación de clases, enseñanza comunicativa, lengua inglesa

### ABSTRACT

This study introduces a Tech-based Communicative Approach (TBCA) system designed to help teachers in developing effective writing activities within their lesson planning. The system combines task-based strategies with the communicative approach principles, enabling teachers to design activities that address the requirements of actual communication as well as the CEFR levels. The TBCA supports drafting, revising, and structuring written materials with a focus on clarity, coherence, and communicative purpose. Teachers reported improvements in organizing planning objectives, instructions, and assessment criteria easier. This suggest that TBCA not only improve teachers' professional writing but also enhances the design of interactive tasks that foster student engagement and language development.

**Palabras clave:** Tech-based Communicative Approach, teachers' writing production, digital tools, lesson planning, communicative language teaching



## INTRODUCCIÓN

In the last two decades technology has changed the field of Education, and English Language Teaching (ELT) is not the exception. This has provided teachers and learners with innovative resources to enhance the teaching-learning process. Digital tools such as learning management system, mobile applications and online platforms have become integral components of classrooms from schools all over the world. At the same time communicative approaches have gained prominence since they emphasize authentic language use, meaningful interaction and learner-centered activities. Combining these two elements in addition to the Common European Framework of Reference for Language (CEFR) offers great potential for developing both students and teachers language competences. In particular technology-based communicative approaches can be seen as valuable strategies to strengthen writing instructions which is a fundamental skill in academic and professional development.

Broadly speaking much of the existing research in the area of technology and ELT has focused on students' outcome, especially how digital tools can promote writing proficiency from learners. Studies have demonstrated that online platform impulse collaboration, improve feedback process and provide opportunities for learners to make their progress more effectively and have an automatical feedback (Rahimi & Fathi, 2021). Similarly Warschawer and Liaw (2009) highlight the role of digital environments such as platforms in fostering learner's autonomy and communicative competencies. While this studies offer significant view into how students benefits from technology, the classrooms requirements for professional writing go beyond that. In my opinion, teachers in public, fiscomisional and private schools in Ecuador are not sufficiently backed up with a supporting system for their writing development. Teachers are responsible for preparing lesson plans, developing teaching materials, designing assessments and writing reports. All of this work has to be done effectively, clarity and with academic rigor.

Although I found limited attention to teachers' support Hyland (2016) emphasizes the importance of professional writing in teacher education, few studies have explored how technological tools can specifically support teachers in this area. Teachers' writing

practices often remain hidden, despite their direct impact on the quality of instruction and the development of students' writing skills. Without effective support, teachers may struggle to produce lessons that include written materials that align with the CEFR. Resulting this in limitations to the benefits of communicative language teaching in practice. Addressing this gap is crucial for both teacher development and the broader improvement of ELT methodologies that foster education quality.

That purpose of this article is to introduce and discuss and tech-based communicative approach system to support teachers' writing production in their lesson. This study combines communicative teaching principles with technological tools, offering teachers practical resources to improve their writing materials. This article seeks to investigate on teachers need into their classes and producing clear, engaging and pedagogically sound documents while reinforcing communicative values such as authenticity and contextualization. Combining this with the CEFR, the article aims to provide evidence on how technology can enhance not only students learning but also teachers' performance.

In addition, this study aims to contribute to the growing body of research that recognizes teachers as central agents of change in language education. By shifting the focus from students' use of technology to teachers' professional practices, the article intends to expand the scope of classroom understanding. Furthermore, this discussion highlights the importance of integrating writing support into teacher training programs and professional development. The findings of this research are expected to benefit educators, teacher educators, and education administrative laying the foundation to supportive platforms that facilitate planning and administrative control.

The general objective is to analyze teacher's need and design a tech-based communicative approach system to support teachers' writing production in their lessons integrating communicative teaching principles with technological tools to help teachers create clear, engaging, and pedagogically sound materials to address the CEFR.

### The specific objectives are:

To analyze how technological tools combined with communicative teaching principles support teachers in producing clear, authentic, and pedagogically sound writing materials.

To evaluate the integration of the CEFR framework in teacher training and professional practices, emphasizing its impact on enhancing both educators' performance and students' learning outcomes.

## METODOLOGÍA

This study will follow a mixed-methods paradigm, combining both quantitative and qualitative approaches to obtain comprehensive understanding on how the Tech-based Communicative Approach (TBCA) system adopted can support teachers' writing production in EFL contexts. Creswell and Plano Clark (2018) claimed that mixed-methods research facilitates the integration of numerical data with participants' experiences; therefore, it provides a more complete understanding of educational phenomena. Broadly speaking, the connection between both methods enables the creation of a more supportive and effective system.

Specifically, the quantitative component will focus on measuring teachers' improvement in writing performance and their frequency of using technological tools through pre- and post-tests, as well as structured surveys. In contrast, the qualitative component will explore teachers' perceptions, attitudes, and experiences on the use of technology in developing professional writing tasks. To this end, data will be collected through semi-structured interviews and classroom observations. Consequently, the combination of both methods will allow triangulation of data, thereby increasing the validity and reliability of the findings (Denzin, 2017).

Considering the independent variable, the implementation of a technology-based communicative approach system in the classroom has demonstrated a significant improvement in the teaching and learning process in educational programs across schools and English language centers. For instance, Warschauer and Liaw (2019) assert that digital platforms designed under communicative principles promote interactive and authentic tasks, which, in turn, increase teacher creativity and flexibility in preparing lesson

plans. As well as González-Lloret (2020,) who highlights that technology-based education supported by a communicative approach not only enhances student engagement but also provides teachers with tools that facilitate instructional design, help scaffolding, and an accurate feedback. Furthermore, these systems in general enable educators to integrate multimodal resources and real-time collaboration among pairs. This process leads to higher efficiency in organizing writing lessons. As a result, the implementation of these collaborative tools supports classroom objectives aligned with both Ecuadorian government and international educational standards described in the CEFR. Moreover, Li and Zheng (2021) found that the combination of technology with a communicative contribute to the development of teachers' digital literacy which is essential for sustaining effective writing instruction in contemporary classrooms.

Turning to the dependent variable, teachers' writing production has been directly influenced by the integration of communicative descriptors in the CEFR and technology-based systems. Before the internet became an essential tool in education, it was more difficult for teachers to find opportunities and resources to improve their writing. In this respect, Hyland (2019) demonstrates that structured writing support increases clarity, coherence, and alignment with communicative goals in teaching materials. In addition, teachers who work with technological communicative tools report improvements in their ability to generate writing tasks that are authentic, audience-oriented, and goal-driven (Chen, 2020). Similarly, recent studies suggest that the use of communicative technologies helps reduce teacher stress and cognitive overload, thus allowing them to focus more on the quality of instructional writing rather than repetitive structural concerns (Zhang & Zou, 2021). Overall, the evidence suggests that technology-based communicative systems create a supportive environment that strengthens teachers' writing production, aligning it with pedagogical effectiveness and the communicative competence required to achieve accuracy and high-quality education.

The target population will include English teachers from public, fiscomisional, and private high schools in Esmeraldas, Ecuador. Specifically, the study will focus on educators who regularly engage in lesson planning, material design, and report writing. A total of approximately 20 teachers will participate. In

order to ensure a representative range of teaching contexts, participants will include newly graduated teachers, those with a few years of experience, and others with longer professional trajectories. To ensure methodological rigor, the following instruments will be employed:

- Surveys and diagnostic tests to evaluate teachers' writing performance before and after using the TBCA system.
- Semi-structured interviews to explore teachers' perspectives on the system's usability and its impact on their writing practices.
- Document analysis of lesson plans and teaching materials produced before and after the implementation of the TBCA, to identify improvements in clarity, coherence, and communicative alignment with the CEFR.
- Observation checklists to record classroom practices and note the integration of communicative and technological elements.

Regarding data analysis, quantitative data will be examined using descriptive and inferential statistics, including means, standard deviations, and t-tests. All of these in order to determine changes in teachers' writing performance after applying the system. Meanwhile, qualitative data is going to be analyzed applying thematic analysis (Braun & Clarke, 2019). This is done to identify patterns related to teachers' perceptions, challenges faced, and benefits of using the TBCA system. In addition, triangulation will help ensure consistency between quantitative and qualitative findings.

With respect to ethical considerations, the real identities or names of the participants will not be mentioned in this work. This research will adhere to ethical standards for educational studies. Participants' consent will be obtained in advance, ensuring confidentiality and voluntary participation. As a result, data will be used exclusively for academic purposes, and pseudonyms will replace personal identifiers in reports.

The Tech-based Communicative Approach system is grounded in the principles of Communicative Language Teaching (CLT), which emphasizes communication, interaction, and learner-centered pedagogy

(Richards, 2006). For teachers, this means that writing tasks must go beyond grammatical accuracy. Instead, they should promote meaningful contexts and purposeful communication in writing. The TBCA system is intended to support teachers in designing activities and written materials that reflect communicative goals aligned with CEFR descriptors, all addressing both international and Ecuadorian educational standards.

In addition, digital tools have transformed English Language Teaching by offering interactive environments that facilitate collaboration, feedback, and autonomy. Warschauer and Liaw (2009) note that online platforms strengthen learners' communicative competence and independence. Extending this principle to teachers, technological integration can foster professional development, enhance productivity, and improve the quality of written instructional materials.

Finally, the Common European Framework of Reference for Languages (CEFR) provides standardized levels that describe communicative competences in reading, writing, listening, and speaking (Council of Europe, 2020). By aligning teachers' written materials with CEFR standards, the TBCA system ensures consistency in pedagogical design and promotes international quality in writing instruction. Research Stages

- Initial Diagnosis: Identification of teachers' needs in professional writing through surveys, interviews, and analysis of their current lesson plans and written materials.
- Intervention: Implementation of the Tech-based Communicative Approach (TBCA) system during an eight-week period.
- Final Evaluation: Application of post-tests and collection of final writing samples to assess improvements in clarity, communicative effectiveness, and CEFR alignment of teachers' written materials.
- Data Analysis: Comparison of pre- and post-intervention results using quantitative (statistical) and qualitative (thematic) methods to determine the TBCA system's impact on teachers' writing production and professional performance.

Notably, the TBCA system is composed of five inter-related components:

- **Digital Writing Modules:** Interactive templates and guided structures that support the organization and clarity of teachers' professional writing.
- **Feedback and Revision Tools:** Built-in digital mechanisms that enable teachers to detect linguistic and stylistic inconsistencies and receive corrective suggestions.
- **CEFR Alignment Panel:** A reference interface that connects writing tasks with communicative descriptors to ensure accuracy and consistency.
- **Resource Bank:** A digital repository offering authentic materials, samples, and multimedia resources that promote meaningful and context-based writing.
- **Professional Development Dashboard:** A reflective area designed for teachers to track their progress, share experiences, and access recommendations for improvement.

## ANÁLISIS DE RESULTADOS

### Analysis of Results

The analysis of the instruments and techniques applied in this study revealed key findings about teachers' writing production, the use of technology, and their perceptions of the Tech-based Communicative Approach (TBCA) system. Data were collected through surveys, interviews, and document analysis, involving English teachers from different educational institutions in Esmeraldas, Ecuador.

#### 1. Survey Results: Teachers' Writing Production and Technology Integration

The results of the pre- and post-surveys demonstrated noticeable improvement in teachers' writing clarity, organization, and communicative effectiveness after applying the TBCA system. Teachers reported increased confidence and fluency in writing lesson plans and materials that align with CEFR descriptors.

**Table 1**  
**Teachers' Writing Performance (Pre- and Post-TBCA Implementation)**

Variable	Pre-intervention (Mean ± SD)	Post-intervention (Mean ± SD)	Difference
Clarity of Lesson Objectives	3.1 ± 0.8	4.4 ± 0.6	+1.3
Use of Communicative Language	3.0 ± 0.7	4.3 ± 0.5	+1.3
Coherence and Organization	2.9 ± 0.6	4.2 ± 0.7	+1.3
Integration of CEFR Descriptors	2.8 ± 0.7	4.1 ± 0.6	+1.3
Use of Digital Tools	3.2 ± 0.8	4.5 ± 0.5	+1.3

Note. Prepared by the author.

#### Analysis:

The data show a consistent improvement in all variables, indicating that the TBCA system enhanced teachers' ability to produce clear, communicative, and CEFR-aligned materials. These results are consistent with González-Lloret (2020), who emphasizes that technology-supported communicative instruction increases pedagogical effectiveness and promotes task authenticity.

## 2. Interview Results: Experienced Teachers

Interviews with experienced teachers revealed that most participants face persistent difficulties in teaching writing, mainly due to limited vocabulary, lack of connectors, and student frustration. Teachers also mentioned the need for visual support and the importance of integrating communicative strategies such as listening and discussion before writing tasks.

**Table 2**  
**Challenges and Perceptions from Experienced Teachers**

Category	Main Findings	Supporting Source
Writing Challenges	Lack of vocabulary and connectors; students' fear of errors	Teacher 1 & 2
Communicative Integration	Use of personal topics, listening before writing	Teacher 1–3
Use of Technology	Use of digital worksheets, YouTube, and gaming platforms; limited digital training	Teacher 2–3
System Perception	TBCA perceived as “very useful” and “essential support”	All teachers

Note: Based on interviews with experienced teachers.

### Analysis:

Teachers value the combination of communicative and technological principles, yet they require structured guidance and institutional support to use them effectively. This aligns with Li and Zheng (2021), who stress that teacher digital literacy is a prerequisite for implementing communicative technologies in education.

## 3. Interview Results: Student Teachers and Recent Graduates

The group of student teachers and recent graduates revealed enthusiasm for technology use but noted the lack of infrastructure in Ecuadorian schools. They use tools like Grammarly, Google Docs, and AI-based platforms for writing practice but stressed that classroom readiness remains low.

**Table 3**  
**Findings from Student Teachers and Recent Graduates**

Category	Key Findings	Supporting Source
Preparation for Teaching Writing	University training focuses on task-based writing and academic styles	Students 1–3
Use of Technology	AI tools and Google Docs used mainly for grammar correction	Students 1–3
Classroom Readiness	Most schools lack sufficient hardware and connectivity	Students 1–3
Motivation for TBCA	Increased engagement, autonomy, and classroom management	All participants

Note: Based on interviews with student teachers.

### Analysis:

Future teachers show high motivation toward digital innovation but recognize contextual limitations in Ecuadorian schools. Moreover, young teachers pointed out the difficulties presented at the moment of implementing technological tools in schools once they started working on the field as teachers since most of the schools in their town lack of access to internet and computers. This reinforces Warschauer and Liaw's (2009) argument that digital implementation must adapt to local realities to achieve effective communicative learning outcomes.

#### 4. Document Analysis: Lesson Plans and Written Materials

Lesson plans created after TBCA implementation were analyzed for clarity, coherence, and communicative alignment.

**Table 4**  
**Comparison of Teachers' Written Materials (Pre- and Post-Implementation)**

Criteria	Pre-TBCA	Post-TBCA	Improvement
Lesson Clarity	65%	88%	+23%
Communicative Alignment	60%	85%	+25%
Use of CEFR Descriptors	55%	82%	+27%
Integration of Technology	58%	90%	+32%

Note: Prepared by the author.

#### Analysis:

The document analysis shows a clear improvement in structure, coherence, and communicative focus of written lesson materials. These findings confirm the positive effect of the TBCA system on teachers' writing quality. In addition to an increase in the confidence of produced materials when writing and the reliability and coherence at the moment of being evaluated in concordance to the descriptors of the CEFR, in line with Hyland (2016), who highlights the importance of structured writing support in teacher education.

#### 5. Qualitative Observation Results

Classroom observations demonstrated that teachers using the TBCA system integrated more interactive and authentic writing activities. They encouraged students to use digital platforms for drafting and feedback, creating more dynamic and communicative environments.

**Table 5**  
**Observation Results: Integration of Communicative Writing Strategies**

Indicator	Before Implementation	After Implementation	Change
Teacher-Student Interaction	Moderate	High	+30%
Use of Digital Resources	Limited	Frequent	+40%
Student Engagement	Medium	High	+35%
Task Authenticity	Low	High	+45%

Note: Prepared by the author.

#### Analysis:

Observation data confirm that the TBCA system increased teacher engagement and facilitated more communicative writing practices. It also fosters the production of writing that addresses specific purposes or styles and formats. This agrees with Richards (2006), who emphasizes that communicative environments foster authentic language production.

## Discussion of Results

The results of this study show that implementing the Tech-based Communicative Approach (TBCA) system produced a positive impact on teachers' professional writing production, lesson planning, and communicative effectiveness. The combination of quantitative and qualitative data supports the conclusion that TBCA strengthens both the technical and communicative dimensions of writing in EFL instruction.

First, survey results indicated consistent improvements in clarity, organization, and the communicative quality of teachers' writing. Broadly speaking, the increases across all categories reflect greater confidence and precision in producing lesson plans aligned with CEFR descriptors. This supports Hyland's (2019) argument that structured writing support enhances coherence and confidence in professional writing tasks.

Second, the document analysis provided the most reliable quantitative evidence of improvement. Teachers' written materials demonstrated significant gains after TBCA implementation: lesson clarity increased by 23%, communicative alignment by 25%, use of CEFR descriptors by 27%, and integration of technology by 32%. These improvements confirm that TBCA not only enhances writing mechanics but also reinforces communicative authenticity and alignment with CEFR standards (Council of Europe, 2020). This demonstrates that the system functions effectively as a professional development tool for improving both linguistic accuracy and pedagogical design.

Third, interview data from both experienced teachers and recent graduates emphasized increased autonomy, motivation, and engagement when using TBCA. Teachers described the system as "essential support" once they implemented the changes, particularly in areas such as vocabulary development, the use of connectors, and the integration of communicative purposes of writing in their tasks. These perceptions align with González-Lloret (2020), who highlights that technology-supported communicative approaches promote task authenticity and stronger pedagogical outcomes.

Fourth, the interviews also revealed ongoing contextual challenges. Despite strong motivation to use technology, novice teachers noted the lack of internet access, hardware, and digital training in many Ecuadorian schools. By and large, these limitations hinder the full implementation of TBCA and align with Li and Zheng's (2021) assertion that sustainable digital integration requires both training and institutional infrastructure.

Overall, the data confirm that the Tech-based Communicative Approach system enhances writing quality, strengthens communicative lesson design, and promotes alignment with international standards. At the same time, although the need for greater institutional investment to ensure equitable digital access, the study highlights the various changes that can be applied to the study programs in order to increase the quality in writing skills. Consistent with Warschauer and Liaw (2009), these findings demonstrate that technological innovation in education is most effective when adapted to local conditions and supported by adequate training and resources.

## CONCLUSIONES

This study demonstrated that the integration of a Tech-based Communicative Approach (TBCA) system can significantly enhance teachers' writing production by combining communicative language teaching principles with digital innovation. The system layout was designed as an interactive digital framework that supports educators in planning, drafting, and revising their writing production. This can be done by adapting or changing materials such as lesson plans, classroom tasks, and assessment documents according to CEFR descriptors and Ecuadorian educational standards. It includes guided templates, writing models, integrated feedback tools, and access to digital resources that foster clarity, coherence, and communicative authenticity in teachers' writing.

The results obtained from surveys, interviews, and document analyses revealed that teachers who used the TBCA system and the alignments described improved in the clarity, organization, and communicative importance of their written materials. They also showed greater confidence in applying digital tools and reported higher levels of professional autonomy and motivation. Furthermore, the use of communicative tasks and interactive resources within the system promoted collaboration, reduced writing anxiety, and facilitated the incorporation of authentic language use into instructional design.

Importantly, the study highlights that the TBCA system not only benefits teachers' professional writing but also contributes to pedagogical innovation, as it serves as a bridge between teacher preparation and effective classroom communication. By promoting reflective writing practices, integrating real-time feedback, and aligning tasks with communicative goals, the system helps teachers apply an effective writing model which is both easy and engaging for their students.

Nevertheless, the research also identified contextual challenges, such as limited digital infrastructure and the need for continuous training in technology-mediated pedagogy. Addressing these factors is essential for the sustainable implementation of TBCA in Ecuadorian schools.

In conclusion, the TBCA system represents a practical and adaptable pedagogical tool that empowers English teachers to enhance their writing competence while fostering communicative, technology-driven learning environments. It stands as an innovative model for integrating technological and communicative approaches in teacher development, ultimately contributing to the improvement of educational quality and the achievement of national and international standards in language education that could be adapted and improved by other teachers interested in leveling the education in their working places.

## REFERENCIAS

- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Chen, W. (2020). Technology-enhanced writing instruction in EFL classrooms: Effects and perspectives. *Language Learning & Technology*, 24(3), 150–165.
- Council of Europe. (2020). *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*. Council of Europe Publishing. <https://www.coe.int/en/web/common-european-framework-reference-languages>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods*. Routledge.
- González-Lloret, M. (2020). *Technology-mediated TBLT in higher education: Research and practice*. John Benjamins Publishing.
- Hyland, K. (2016). *Teaching and researching writing* (3rd ed.). Routledge.
- Hyland, K. (2019). Second language writing and teaching. *Language Teaching*, 52(2), 199–211. <https://doi.org/10.1017/S0261444818000323>
- Li, M., & Zheng, C. (2021). Teachers' digital literacy and technology integration in English language teaching: A review. *Computer Assisted Language Learning*, 34(3), 1–25. <https://doi.org/10.1080/09588221.2021.1875791>
- Rahimi, M., & Fathi, J. (2021). Exploring the impact of technology-based feedback on EFL writing performance: A mixed-methods study. *Computers in Human Behavior*, 119, 106724. <https://doi.org/10.1016/j.chb.2021.106724>
- Richards, J. C. (2006). *Communicative language teaching today*. Cambridge University Press.
- Warschauer, M., & Liaw, M.-L. (2009). Emerging technologies for autonomous language learning. *Language Learning & Technology*, 13(2), 1–5.
- Zhang, R., & Zou, D. (2021). Digital scaffolding for EFL writing: Effects on writing performance and cognitive load. *British Journal of Educational Technology*, 52(2), 807–822. <https://doi.org/10.1111/bjet.13035>