# The Impact of Computer-Based Activities and Non-Computer-Based Activities on College Students' Learning Engagement in English Lessons

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#### **ABSTRACT**

The impacts of computer-based activities (CBAs) and noncomputer-based activities (NCBAs) on the learning engagement of college students in English as a Foreign Language (EFL) courses at FPT Polytechnic College are investigated in this paper. The study involved eighty second-year students, followed a mixed-methods approach with a within-subject design spanning six weeks. Participants in courses include just CBAs during the first three weeks, followed by NCBAs in the next three weeks. To evaluate students' cognitive, emotional, and behavioral involvement in different learning environments, data were gathered by means of surveys and interviews. With 55% of participants choosing NCBAs for concept sharing and 58.75% expressing enthusiasm for class involvement, the results show that NCBAs significantly raised students' cognitive and emotional engagement. On the other hand, CBAs linked with lower participation levels on several other criteria. The paper underlines the need to include NCBAs to improve the learning environment and advises teachers to use a balanced approach in the evolution of EFL curricula. In language-learning environments, this paradigm increases student involvement and raises educational results.

Keywords: Computer-Based Activities, Non-Computer-Based Activities, College students, Learning Engagement, EFL

#### Introduction

Academic performance depends critically on student participation in language acquisition, particularly in English as a foreign language (EFL) settings. The integration of digital technology in learning environments has made the investigation of computer-based activities (CBAs) for enhancing engagement a top research focus that is absolutely important. Research on how technology might improve student motivation, involvement, and active learning in English language education has shown positive results (Chapelle, 1997; Warschauer, 2011). On the other hand, classic non-computer-based activities (NCBAs), like group discussions, role-playing, and paper-based exercises, are indispensable in many schools. Their chances for experiential learning and personal interaction help to increase involvement by direct communication (Brown, 2008).

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Though both approaches have special advantages, the argument on how well CBAs compare to NCBAs in raising learning engagement keeps on. By offering customized feedback, interesting experiences, and access to thorough materials, CBAs help to increase student autonomy (Reinders & Benson, 2017). Some academics contend that overuse of technology could cause distractions and less deep cognitive involvement (Carr, 2020). On the other hand, NCBAs have been commended for encouraging cooperation, critical thinking, and social interaction; however, they might not always fit particular learning environments and speeds (Dörnyei, 1998).

As can be seen, much research has been conducted to show NCBAs and CBAs' efficiency. However, there are rather few studies comparing the effects of these two kinds of activities on the learning engagement of college students. Therefore, the purpose of this study is to investigate how CBAs and NCBAs affect college students' learning engagement in English classes. It looks at how students view and participate in different kinds of activities to find the one or combo of approaches that best improves active involvement, drive, and learning results in an EFL classroom. The findings can help teachers and curriculum designers enhance English language instruction by means of engagement techniques.

#### Literature review

## Students' learning engagement

Typically, three linked dimensions define engagement: behavioral, emotional, and cognitive involvement.

Behavioral engagement refers to students' participation in academic activities like class attendance, homework completion, and classroom discussion participation (Fredricks et al., 2004). Students who show behavioral engagement are reportedly more inclined to participate in school events, therefore improving their academic performance. For English language learners, participation in interactive activities, including debates, role-plays, and language games, helps to enhance practical language use and skill development, thereby raising engagement (Dörnyei, 1998).

Students' affective reactions to the learning environment, that is, their sense of belonging, interest, and enjoyment in school, define their emotional engagement in that regard (Skinner, 1965). In EFL classes, emotional involvement is very important since it helps build good relationships between teachers and students, reducing fear and increasing students' readiness to participate in language exercises. According to Klem and Connell (2004), kids with emotional ties to their professors and school often exhibit higher academic drive and endurance.

Cognitive engagement is the degree of students' mental efforts toward understanding and mastery of the course of instruction (Pintrich & De Groot, 1990). Cognitively involved students reach mastery by using critical thinking and self-regulated learning techniques. In particular, this is extremely relevant in language acquisition since cognitive involvement could include considering language rules, developing vocabulary learning plans, or using metacognitive techniques to improve reading comprehension. Long-term memory and the application of knowledge in novel environments are predicted by cognitive involvement (Mayer, 2005).

## Computer-based activities (CBAs)

Students now have an easier time than ever to benefit from technology developments that enable them to access and examine an almost limitless range of human-made resources(Vu, 2022). Developed by Sweller (1988), cognitive load theory clarifies how CBAs might improve

learning by reducing extraneous cognitive tasks. Through multimedia resources combining text, images, and audio, effectively designed CBAs can help minimize cognitive overload and enhance understanding, thus facilitating learning (Mayer, 2005). Using several learning channels, language-learning programs that combine vocabulary exercises with audio pronunciation guides improve students' information processing. Many students from Phenikaa University believed that digital games helped them learn vocabulary more effectively and usefully(Trinh et al., 2022).

Studies show repeatedly that CBAs greatly increase student involvement. CBAs offer one major benefit in their ability to offer interactive and customized learning opportunities. According to Warschauer and Healey (Warschauer & Healey, 1998), computer-based assessments give students immediate feedback, so encouraging constant engagement by allowing them to instantly correct mistakes. Since it can greatly speed up the learning process, instant feedback on grammar, vocabulary, and pronunciation is especially important in language acquisition (Reinders & Benson, 2017). Online quizzes, virtual simulations, and language-learning apps among other CBAs improve involvement by providing interactive and tailored learning opportunities (Reinders & Benson, 2017).

Moreover, CBAs allow different learning environments and preferences, so offering a level of personalizing is difficult to reach in traditional classrooms. According to Keller (Keller, 2010), adaptive learning technologies, which change task difficulty based on individual student performance, have great value. Adaptive computer-based tests in English language instruction provide activities tailored to students' degrees of proficiency, maintaining motivation and reducing boredom or frustration.

Computer-based activities present different difficulties even if they have many benefits. In the classroom, excessive technology use could cause cognitive overload or distraction. Carr (2020) suggests that the constant flood of digital data could reduce students' capacity for deep, concentrated learning, so fostering a taste for surface-level processing. In language learning, where precision is crucial, students might give quick task completion top priority over a thorough grasp of language ideas.

The digital divide stands for the differences in technology access among students from different socioeconomic levels. While CBAs can raise learning results, if particular students lack access to dependable internet or digital devices, they could also aggravate educational inequalities (Selwyn, 2004). Teachers trying to include CBAs in their courses find this difficult since they have to ensure fair access to the necessary technological tools for every student.

Moreover, some academics argue that CBAs might lack the degree of emotional involvement and human interaction typical of conventional face-to-face education. Though CBAs offer interactive experiences, Dörnyei (1998) notes that they might not have the emotional depth and social connection found in direct teacher-student contacts. This is especially relevant in language acquisition since developing strong personal relationships can boost inspiration and help reduce language anxiety (Horwitz, 2010). Therefore, CBAs should be used in combination with non-digital solutions, encouraging emotional involvement and personal interaction.

## *Non-computer-based activities (NCBAs)*

Vygotsky's "Zone of Proximal Development" highlights the importance of social interaction in the learning process, implying that learners do better when working with more knowledgeable peers or instructors (Vygotsky, 1978). Non-computer-based activities make use of this by encouraging cooperative learning settings whereby students improve one another's knowledge utilizing communication and group projects.

As Kolb (1983) defines, experiential learning is a basic component of NCBAs. Experiential learning helps the application of knowledge in pertinent contexts, improving cognitive engagement and enabling the transfer of knowledge to new circumstances. Kolb's model emphasizes the need for learning via direct experience, reflection, and application, which NCBAs promote through activities like role-playing, debates, and real-world problem-solving tasks (Kolb, 1983).

Non-computer-based activities have various advantages in increasing student involvement and supporting major learning opportunities. The main advantages are improvement of interpersonal communication and teamwork abilities. Unlike computer-based activities that could limit in-person engagement, NCBAs need direct student communication enabled by group discussions, debates, or cooperative projects. According to Johnson and Johnson (1987), cooperative learning programs entail students working in small groups toward common goals, improving academic achievement, and developing social and communication skills. These exercises help students in English as a foreign language (EFL) contexts to practice language in real, communicative settings, therefore enhancing both linguistic competency and speaking confidence (Brown, 2008).

NCBAs improve teamwork and also foster critical thinking and problem-solving skills. According to Prince (2004), active learning techniques including NCBAs outperform conventional lectures in developing critical thinking and improving memory of knowledge.

Moreover, NCBAs create engaging and individually meaningful learning environments that help to foster emotional involvement. Motivation and persistence depend on emotional engagement, that is, pupils' emotive reactions to learning activities. Through role-playing and storytelling, among other activities, NCBAs help students participate fully in the learning process, often leading to increased curiosity and enjoyment. Role-playing exercises help EFL students to utilize language in imaginative and contextually relevant ways, therefore reducing language anxiety and perhaps encouraging a sense of achievement (Horwitz, 2010).

NCBAs offer certain challenges even if they have many advantages. One important restriction is the possible fluctuation in student involvement. While some students thrive in interactive group environments, others may find it difficult to participate successfully for reasons including shyness, lack of confidence, or poor subject-matter knowledge (Cohen & Lotan, 2014). Less confident students in language classes may show resistance to participating in debates or role-plays, which would cause differences in involvement rates. Teachers should consider these dynamics and create encouraging surroundings that let every student contribute (Dörnyei, 1998).

The time-consuming character of NCBAs presents still another difficulty. Generally speaking, debates, group projects, and hands-on experiments demand more time for planning and execution than conventional lectures or online assignments. Teachers may find it difficult to balance the time needed for thorough, hands-on activities with the demands of curriculum coverage (Prince, 2004). Moreover, NCBAs could call for more classroom supplies, physical objects, or space for group projects, which would provide difficulties in environments with limited resources.

NCBAs may also sometimes be lacking in the timely feedback that computer-based activities provide. CBAs provide immediate feedback via quizzes or automated assessments, whereas NCBAs depend on evaluations from teachers or peers, resulting in a longer feedback delivery time. The delay in feedback may impede students' capacity to recognize and rectify errors promptly (Kulik & Kulik, 1988). Peer feedback and reflective discussions during NCBAs

provide deeper, formative insights that enhance long-term learning.

## Research Questions

To fulfill the purpose of the study, the survey was seeking to answer the following research questions:

- 1. In which aspects do computer-based activities outweigh or fall behind non-computer-based activities in engaging college students in English lessons?
- 2. What are college students' opinions about using computers in English lessons?

## **Methods**

# Pedagogical Setting & Participants

This research was carried out at FPT Polytechnic College, examining the effects of CBAs and NCBAs on student engagement in English lessons. The study involved 80 second-year students enrolled in English Level 2.1, corresponding to the A2 level of the Common European Framework of Reference for Languages (CEFR). The coursebook utilized by the students was American Language Hub Level 1.

The instructional approach utilized a blended learning method. Students engaged with the Language Hub platform in both classroom and home settings to access interactive exercises, quizzes, videos, and supplementary materials. This digital platform facilitated flexible and continuous interaction with course content, allowing students to enhance their learning beyond the classroom.

The selection of participants was based on their high frequency of using computers in both English and other subjects at FPT Polytechnic College. This offers a benefit since students rapidly adjust to activities using technology tools; however, it also presents a difficulty when students try to work alone without computer support.

This study investigates the impact of each activity type on learning engagement in the framework of language acquisition at the A2 level using a group of students evaluating the efficacy of combining digital learning tools with conventional approaches.

## Design of the Study

Using a mixed-methods approach, the study included interview methods for data collecting and analysis together with a within-subject design. This method helped the researcher to fully grasp how CBAs and NCBAs affect student involvement in English classes.

A key component of the study was the within-subject design, in which the same group of students participated in courses focused on two different kinds of activities - CBAs and NCBAs - over several periods. With each student serving as their control, this design lets researchers consider personal variances. This approach enabled a direct comparison of the effects on student involvement in various forms of activity. The researcher used questionnaires to gather quantitative data on student experiences, addressing issues of student preferences for different activities and involvement.

Following the intervention, twenty randomly selected participants underwent interviews to provide qualitative data and improve knowledge of the viewpoints and feelings of the students about the activities. The mixed-methods approach lets the researchers triangulate their results, providing a complete picture of how well CBAs and NCBAs increase student participation in

# English lessons.

## Data collection & analysis

This study employed a structured and systematic sampling procedure over six weeks, during which participants participated in lessons incorporating two types of activities: CBAs and NCBAs.

In the first three weeks, students engaged in lessons utilizing exclusively CBAs to enhance their listening, writing, reading, vocabulary, and grammar skills within the English language. The activities were conducted through digital platforms including Kahoot, Quizziz, Blooket, Language Hub, Padlet, Bamboozle, and Wordwall. Speaking activities were conducted without computer assistance to ensure a balanced approach to language practice.

In the next three weeks, the emphasis has transitioned to 100% NCBAs, enabling students to participate in hands-on and interactive activities that address all facets of language learning. The activities included charades, word galleries, sentence-building partner exercises, mind-map drawings, presentations, debates, and narratives. This phase aimed to improve cooperation and innovation, so countering the previously used technologically driven approaches.

Following the six-week courses, student impressions of their experiences with both kinds of events were gathered using Google Forms. This aimed to compile quantitative information about students' involvement, preferences, and opinions of the efficacy of CBAs and NCBAs. The survey questions were developed in line with Yunik's Student Engagement Criteria table (Yunik, 2020). Her development of this table drew on the three divisions of student participation suggested by Trowler (2010) and Fredricks, Blumenfeld, and Paris (2004).

Table 1 Student engagement criteria

	STUDENT ENGAGEMENT CRITERIA	
	Indicators	<b>Sub-Indicators</b>
Cognitive	Comprehension	response to the teachers' questions
		do the teacher's task
	Share ideas	communicate ideas to the classroom
		help each other to do the tasks.
	Preview	answer the teachers' questions related to the last
	knowledge	materials
Emotional	Interest	eager to join the class
		do the classroom activities
	Worried	be afraid to make mistake
		keep silent
Behavioral	Attention	follow and do the teachers' instruction
	Effort	do the tasks in or out of the classroom
		submit the task on time
	Classroom	participate actively
	Participation	
	Responsibility	be responsible
		follow the lesson on time

The quantitative information collected from the surveys came from descriptive statistics. This involved computing statistical measures, including means, medians, frequencies, and standard

deviations, to aggregate student responses on their involvement and choices for CBAs and NCBAs. Descriptive statistics helped to clearly show general trends and patterns in the data, so clarifying the effects of different activities on student involvement.

Interviews were done to gather qualitative information about students' opinions of these events. The interviews helped better understand how students view and feel about their educational experiences, so clarifying the influence of different activities on their involvement and learning results.

Content analysis was applied to the qualitative information gathered from the interviews. This approach involved methodical classification and coding of responses to find recurrent themes, patterns, and attitudes voiced by students on their experiences with the activities. Employing the examination of interview material, researchers were able to acquire a more thorough understanding of the viewpoints, emotions, and recommendations of students about CBAs and NCBAs.

The sampling technique enabled a comprehensive investigation of the effects of different activities on student participation in English lessons, providing significant new perspectives on the effectiveness of technology integration in language learning and underlining the benefits of classic interactive approaches. The study was set up to help produce significant findings about the respective effects of CBAs and NCBAs on student learning.

# Findings and discussion

Students' view on the impacts of NCBAs compared to CBAs on their engagement in English class

## Students' cognitive engagement

In terms of comprehension, 41.25% of students said NCBAs helped more effectively answer teachers' questions than CBAs, which were judged more beneficial by 27.5% of students. A significant 31.25% of students were undecided, showing no clear preference for either method. Concerning task performance, over half (52.5%) of the students believed they performed better in NCBAs, while 28.75% expressed greater confidence in completing tasks during CBAs, and 18.75% remained neutral regarding their preferences between the two formats.

Besides, regarding the communication of ideas, 55% of students indicated that NCBAs more effectively facilitated idea exchange during lessons. Conversely, 22.5% of students perceived CBAs as more effective in this context. Additionally, 22.5% expressed neutrality, suggesting an absence of a definitive preference between the two communication methods. NCBA classes significantly enhanced levels of student collaboration in mutual assistance. A significant majority of 47.5% of students indicated that they assisted their peers more effectively in lessons through the use of NCBAs. In comparison, 37.5% of students indicated that CBAs promoted increased collaborative interactions. Only 15% of participants exhibited neutrality.

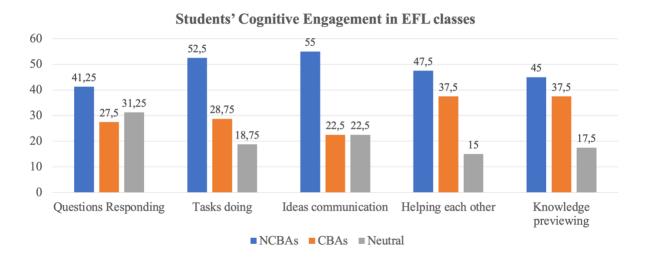
A high percentage of students, 45%, reported that they engaged more effectively in reviewing and consolidating knowledge during NCBA lessons. In the meantime, 37.5% expressed a preference for CBAs when previewing content. A minority, 17.5%, did not express a definitive inclination towards either type of activity in this specific dimension of engagement.

The findings indicate that students typically exhibit greater cognitive engagement in NCBAs in various dimensions of learning. For example, 41.25% of students indicated that NCBAs enhanced their ability to respond to questions, while 52.5% reported that they were more

effective for task completion. This suggests that traditional, hands-on activities like mind-mapping and storytelling may create more engaging environments for understanding and task execution. Furthermore, 55% of students indicated that NCBAs enhanced peer collaboration, probably attributable to the face-to-face and interactive characteristics of these activities, which promote group work and direct communication.

Conversely, 37.5% of students preferred CBAs for knowledge previewing knowledge, underscoring the advantages of digital tools such as quizzes and language applications in offering organized and engaging methods for material review. Nonetheless, a smaller proportion of students regarded CBAs as effective in facilitating interaction and idea communication, with merely 22.5% expressing a preference for these methods. This indicates that although CBAs can improve specific elements of learning, they may not entirely replicate the collaborative and communicative dynamics present in traditional classroom environments.

Fig. 1
Students' cognitive engagement in EFL classes



## Students' Emotional Engagement

In terms of student interest in the classroom, 58.75% of students demonstrated a higher willingness to engage in classes employing NCBAs, whereas only 23.75% preferred CBA-based lessons. 17.5% indicated neutrality on this matter. A majority of 55% of students reported increased involvement in classroom activities during NCBA sessions. Conversely, only 28.75% of students reported increased engagement during CBA classes, whereas 16.25% of participants expressed neutrality.

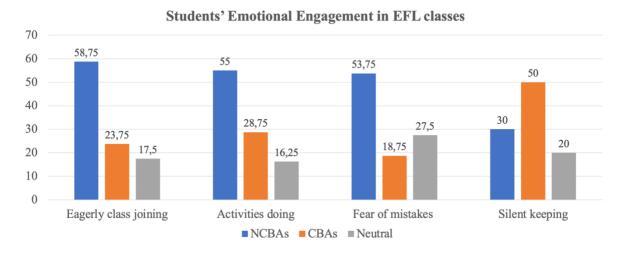
Regarding student anxiety, 53.75% reported a reduction in concerns about making mistakes in NCBA classes, whereas only 18.75% noted a decrease in fear during CBA-based lessons. Approximately 27.5% of students indicated a neutral stance on this issue, implying a diverse reaction concerning the influence of both methods on their confidence. Half of the students indicated that they typically remained silent during CBA lessons. In contrast, 30% of students in NCBA classes did not voice their opinions, whereas 20% maintained a neutral stance on this matter.

The findings demonstrate that NCBAs enhance emotional engagement across various domains, notably in motivating students to enthusiastically attend classes and engage in activities. 58.75% of students demonstrate increased enthusiasm for NCBA lessons, indicating that

interactive, face-to-face, or group-based activities foster a more stimulating and engaging classroom environment. The 55% preference for NCBAs in activities indicates that these tasks likely provide a more engaging and interactive learning experience, fostering greater involvement.

The elevated percentage of silent keeping in CBA sessions (50%) indicates the capacity of CBAs to facilitate passive learning. The personal nature of digital platforms may lead to reduced communication and collaboration among students. The increased apprehension regarding errors in CBA classes reinforces this notion, as students report greater comfort and reduced anxiety in NCBA sessions (53.75%).

Fig. 2
Students' emotional engagement in EFL classes



# Students' Behavioral Engagement

Regarding student attention in the classroom, 67.5% of students indicated a higher likelihood of following instructions during NCBAs. Only 16.25% of students indicated improved compliance with instructions in CBAs, while another 16.25% remained neutral.

A majority of students (60%) reported greater consistency in task completion during NCBA classes compared to outside the classroom. On the contrary, 22.5% indicated increased diligence during CBA sessions, while 17.5% were undecided. When it comes to task submission punctuality, 48.75% of students indicated that NCBAs served as a motivating factor for adhering to deadlines. In the context of CBAs, 28.75% of participants expressed a similar viewpoint, while 22.5% maintained a neutral stance regarding timely submission.

In terms of active participation, 57.5% of students reported greater involvement during NCBA lessons, whereas 26.25% indicated increased engagement in CBA lessons, and 16.25% remained neutral.

67.5% of students reported an increased sense of responsibility when participating in NCBAs. Only 20% of students expressed a preference for CBAs in fostering a sense of responsibility, whereas 12.5% remained neutral. For punctuality in lesson attendance, 57.5% of students indicated that NCBAs were beneficial in maintaining their schedule, whereas 28.75% considered CBAs to be more effective for this objective. 13.75% of the students expressed neutrality regarding this aspect.

The findings express that NCBAs significantly enhance behavioral engagement in EFL classes.

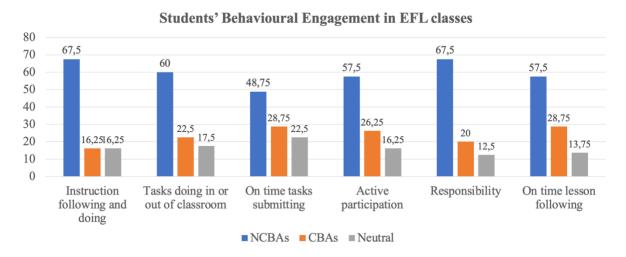
The elevated percentages for adherence to teacher instructions (67.5%) and responsibility (67.5%) suggest that students exhibit greater accountability and responsiveness during non-computer-based activities. The results likely indicate the structured, face-to-face format of NCBAs, wherein immediate feedback and personal interaction with the instructor foster a heightened sense of obligation and concentration.

The elevated rates of task completion (60%) and on-time submission (48.75%) during NCBA sessions substantiate the notion that these activities promote a more disciplined learning environment. This may result from the concrete, practical nature of these tasks, which can appear more manageable and less abstract compared to digital assignments in CBAs.

Active participation was significantly higher in NCBA lessons (57.5%), indicating that traditional or interactive methods, such as group work, presentations, or role-playing, may foster a more engaging classroom environment. CBAs, despite being interactive, may not foster the same degree of personal engagement due to their frequently isolated or individualistic nature.

Nonetheless, CBAs retain certain advantages, especially in assisting students with timely lesson adherence (28.75%). This can be ascribed to the structure and adaptability of digital tools that facilitate self-paced learning. However, the lower degrees of responsibility and involvement noted during CBAs point to the possibility of disengagement in the lack of sufficient scaffolding from these instruments.

Fig. 3
Students' behavioural engagement in EFL classes



Students' other opinions about using computers in English class Students' reflection on CBAs class

Student preferences in CBAs classes revealed some important new information about the components they thought most useful and interesting. The comments revealed different points of view on the advantages of CBAs as well as open acceptance of students using computers in class.

Many of the students expressed thanks for the availability of online materials during CBA sessions. Many people have said that improving vocabulary comprehension and task completion efficiency requires the use of tools such as Google Translate and online dictionaries. The availability of these tools allowed quick clarification of unknown words or phrases,

enhancing understanding and performance right away. The students saw this autonomy as beneficial since it would help them to grow at their own speed and lessen reliance on direct teacher intervention.

Several students said that using computers enabled a more effective interaction with the course of instruction. The clear reading of questions and directions on screens made possible by the digital format helped to access and review materials. Students who preferred interacting with visual and written materials especially benefited from this accessibility tool. The ability to negotiate several computer-mediated lesson sections helped to maintain lesson flow.

Some students admitted that occasionally they used the computers for activities unrelated to the English class. They revealed that throughout the class they were working on projects for other disciplines. Although this not is the intended use of class time, this scenario emphasizes a possible disadvantage of computer-based assessments since students may be distracted by the several features and tasks offered on computers.

During interviews, students provided several suggestions for how CBAs might be more engaging and effective in English classrooms. The comments underlined the need for a more systematic application of technology to lower distractions and for more variety in tools.

Most of the students said they preferred more diversity and participation in CBAs. The teachers assigned to provide these CBA experiences to their students were directed to improve the CBA's enjoyment and interactivity. Teachers should, the students suggested, include more varied tools and platforms in the CBA. The CBA's specific recommendations for digital tools cover games, tests, and several collaborative digital platforms. The students thought that different digital tools would help them to better understand the content and enable a more interesting CBA.

Many students suggested that using one computer per group would improve the output of group projects. Their justification was that using one tool would help the group to become more cohesive. Some students suggested that several groups working on different projects close together could create a type of "studious noise" fit for improving general concentration in the library. The group members expected that, in a condensed form of a CBA, their arrangement would improve communication and cooperation.

Some students suggested that teachers should keep an eye on and control how students use screens during CBA classes. Issues about the possible influence of the internet and different initiatives on students' attention during classwork surfaced. The students thought they would be more sensitive to the expectations placed in the classroom if their professors used internet control. Students thought this policy would help them stay on target and lower the temptation to use computers for non-class-related purposes, thus preserving a better degree of concentration and output.

## Students' reflection on NCBAs class

The interviews revealed several points of view on students' choices for NCBAs in English courses. The comments stressed better communication, more concentration, and different personal tastes. Many students said NCBAs helped them to engage more directly with peers and teachers. Independent of digital tools, the participants valued the opportunity for direct communication, idea sharing, and teamwork. This direct involvement improved students' speaking abilities, helped them understand the lesson materials, and inspired more honest questions. Most students thought that improved communication helped to create a more dynamic and supportive classroom.

Many students said their focus during NCBAs was better than that during CBAs. The lack of

computers or digital screens allowed more participation and a better understanding of the course instruction. The lack of technology, the students observed, lessened distractions and helped them to concentrate more on the teacher and the given assignments. The participants thought that NCBAs helped them to focus on language acquisition.

While most students appreciated NCBAs for their communication and focus, one student expressed dissatisfaction, suggesting a lack of fun in the NCBAs classes. From this student's point of view, students have different preferences and learning styles; some feel NCBAs to be less interesting or motivating than CBAs. Throughout the interviews, students shared their ideas on possible classroom improvements to NCBAs. The answers were mostly positive; most of the students wanted the continuation of these events.

Many students showed a strong desire to attend extra NCBA-based courses. These interactive and communicative elements improved peer interaction and increased involvement with the course of instruction. An increased frequency of NCBA sessions would, according to students, enhance their learning experience by giving them more chances to participate actively, work well with the team, and develop their real-life communication abilities. Many participants underlined how the interactive, in-person character of NCBA events improved the efficacy and enjoyment of the educational process. A small percentage of students did not provide particular recommendations for enhancing NCBA offerings. They either chose not to comment on possible improvements or found the NCBA sessions' present arrangement to be good while they were undergoing the interview process.

## **Conclusion**

This study sought to investigate how students' cognitive, emotional, and behavioral participation in English as a Foreign Language (EFL) classes responded to CBAs and NCBAs. With courses split into three weeks of CBAs and three weeks of NCBAs, a mixed-methods approach was used combining surveys and interviews.

The results showed that NCBAs were usually better at raising students' learning engagement. More students claimed that NCBAs improved their capacity for answering questions, clearly expressing ideas, and participating actively in class. Students said NCBAs encouraged emotional involvement by inspiring them to actively participate in classes, finish assignments with confidence, and reduce their anxiety about making mistakes. Students reported better task completion, more responsibility, and timely lesson follow-up, so NCBAs showed a good influence on behavioral engagement. Although CBAs made it easier for students to access online tools like Google Translate and dictionaries, many of them claimed to use computers for other courses, which reduced engagement. Therefore, the combined approach might improve student involvement by including interactive communication with the strategic use of digital resources.

A limitation of this research is that the sequence of the lessons may have influenced the outcomes. Given that CBAs were conducted prior to NCBAs, it is possible that students exhibited greater engagement in the latter, potentially due to novelty or adaptation to a more interactive approach. The order effect may have introduced bias in the comparison of the two methods.

Future studies should incorporate teachers' perspectives to obtain more objective and comprehensive insights. Gathering educators' perspectives on both CBAs and NCBAs would enhance the analysis, elucidating instructional strengths and challenges. Furthermore, varying

the sequence of CBAs and NCBAs among different groups may mitigate potential biases in the findings and enhance the comprehension of their effects on student engagement.

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## References

- Barron, B., & Darling-Hammond, L. (2015). How can we teach for meaningful learning? In *Powerful learning: What we know about teaching for understanding.* John Wiley & Sons.
- Bear, G. G., & Minke, K. M. (2006). Student-teacher relationships. In *Children's needs III: Development, prevention, and intervention.* (pp. 59–71). National Association of School Psychologists.
- Brown, H. Douglas. (2008). *Principles of language learning and teaching*. Recording for the Blind & Dyslexic.
- Carr, N. (2020). *The Shallows: What the Internet is Doing to Our Brains* (2nd ed.). Independent Publisher.
- Chapelle, C. A. (1997). *Call In The Year 2000: Still In Search Of Research Paradigms? 1*(1), online. http://llt.msu.edu/vol1num1/chapelle/default.html
- Cohen, G. E., & Lotan, A. R. (2014). *Designing Groupwork: Strategies for the Heterogeneous Classroom* (3rd ed.). Teachers College Press.
- Deci, L. E., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer Science & Business Media.
- Dörnyei, Z. (1998). Motivation in second and foreign language teaching. *Language Teaching*, 31(03), 117–135.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the Concept, State of the Evidence. In *Source: Review of Educational Research* (Vol. 74, Issue 1). http://www.jstor.org/URL:http://www.jstor.org/stable/3516061
- Gee, J. P. (2003). What video games have to teach us about learning and literacy. *Computers in Entertainment*, 1(1), 20–20. https://doi.org/10.1145/950566.950595
- Horwitz, E. K. (2010). Foreign and second language anxiety. *Language Teaching*, 43(2), 154–167. https://doi.org/10.1017/S026144480999036X
- Johnson, D. W., & Johnson, R. T. (1987). Learning together and alone: Cooperative, competitive, and individualistic learning. Prentice-Hall.
- Jonassen, H. D. (1994). Thinking Technology: Toward a Constructivist Design Model. *Educational Technology*, 34(4), 34–37.
- Keller, J. M. (2010). *Motivational Design for Learning and Performance*. Springer US. https://doi.org/10.1007/978-1-4419-1250-3

- Kessler, G. (2018). Technology and the future of language teaching. *Foreign Language Annals*, 51(1), 205–218. https://doi.org/10.1111/flan.12318
- Klem, M. A., & Connell, P. J. (2004). Relationships Matter: Linking Teacher Support to Student Engagement and Achievement. *Journal of School Health*, 74(7), 262–273.
- Kolb, A. D. (1983). Experiential Learning: Experience As The Source Of Learning And Development. Prentice-Hall.
- Kulik, J. A., & Kulik, C.-L. C. (1988). Timing of Feedback and Verbal Learning. *Review of Educational Research*, 58(1), 79–97. https://doi.org/10.3102/00346543058001079
- Mayer, E. R. (2005). *The Cambridge Handbook of Multimedia Learning*. Cambridge university press.
- Piaget, J. (1971). The theory of stages in cognitive development.
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33–40. https://doi.org/10.1037/0022-0663.82.1.33
- Prince, M. (2004). Does Active Learning Work? A Review of the Research. *Journal of Engineering Education*, 93(3), 223–231. https://doi.org/10.1002/j.2168-9830.2004.tb00809.x
- Reeve, J. (2002). Self-determination theory applied to educational settings. In *Handbook of self-determination research* (pp. 183–203). University of Rochester Press.
- Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. Language Teaching, 50(4), 561–578. https://doi.org/10.1017/S0261444817000192
- Reinders, H., & White, C. (2009). The theory and practice of technology in materials development and task design. In *English Language Teaching Materials: Theory and Practice*. Cambridge University Press.
- Selwyn, N. (2004). Reconsidering Political and Popular Understandings of the Digital Divide. *New Media & Society*, *6*(3), 341–362. https://doi.org/10.1177/1461444804042519
- Skinner, B. F. (1965). Science and human behavior. Simon and Schuster.
- Son, J.-B. (2018). *Teacher Development in Technology-Enhanced Language Teaching*. Springer.
- Trinh, T. H., Nguyen, M. N., & Tran, T. T. H. (2022). Teachers and Students' Perceptions of Using Digital Games in Improving Vocabulary at Non-English-majored Class. *AsiaCALL Online Journal*, 13(5), 112–131. https://doi.org/10.54855/acoj.221358
- Trowler, V. (2010). Student engagement literature review.
- Vu, T. B. N. (2022). Application of technology in teaching and learning at the University Opportunities and challenges for lecturers and students in Vietnam today. *AsiaCALL Online Journal*, 13(5), 100–111. https://doi.org/10.54855/acoj.221357
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
- Warschauer, M. (2011). Learning in the Cloud: How (and Why) to Transform Schools with Digital Media. Teachers College Press.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: an overview.

Language Teaching, 31(2), 57–71. https://doi.org/10.1017/S0261444800012970

Yunik, S. (2020). The Students' Engagement in EFL Online Class. *Lingual: Journal of Language and Culture*, 10(2), 8. https://doi.org/10.24843/LJLC.2020.v10.i02.p02

## **Biodata**

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