

INTERCULTURAL COMMUNICATIVE COMPETENCE THROUGH CLIL AND PBL HYBRID APPROACH: A COSTA RICAN PERSPECTIVE

COMPETENCIA COMUNICATIVA INTERCULTURAL MEDIANTE UN MÉTODO HIBRIDO DE AICLE Y ABP: UNA PERSPECTIVA COSTARRICENSE

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Received: 19/01/2022

Accepted: 31/03/2022

Published: 16/01/2023

ABSTRACT

This study explores the enhancement of intercultural communicative competence through content and language integrated learning and project-based learning hybrid approach of principles in English as a foreign language classroom at tertiary education in the Costa Rican context. The study conducted two pedagogical interventions for two semesters where learning principles from these approaches were combined to plan English language lessons while infusing intercultural matters of both foreign and local/home cultures. A quasi-experimental design was implemented in the Integrated English I and II courses offered at the National University of Costa Rica, Liberia campus. Participants were divided into control and experimental groups. Two Likert questionnaire scales were used to gather data. Quantitative data analysis was processed through descriptive and inferential statistics using SPSS. After the interventions, results supported the hypothesis that exposing participants to systematic intercultural hybrid methodology of principles promotes learners' intercultural communicative competence.

Keywords:

CLIL; intercultural competence; language; learning; PBL

Cubero Vásquez, Karol Viviana (2023). Intercultural Communicative Competence through CLIL and PBL hybrid approach: a Costa Rican perspective. DEDiCA. REVISTA DE EDUCAÇÃO E HUMANIDADES, N.º 21, 2023, 29-56. ISSN: 2182-018X. DOI: <http://doi.org/10.30827/dreh.vi21.23757>

RESUMEN

Este estudio explora el impacto de una metodología híbrida que implica principios de los modelos AICLE (Aprendizaje Integrado de Contenidos y Lengua) y ABP (Aprendizaje Basado en Proyectos) hacia la Competencia Comunicativa Intercultural en el aprendizaje del Inglés en la educación terciaria costarricense. En el estudio de tipo cuasi-experimental, fueron implementadas dos intervenciones pedagógicas a lo largo de dos semestres, en el año 2020, a través de las cuales se introdujo material intercultural en las clases de Inglés. Los participantes fueron los estudiantes matriculados en los cursos de *Inglés Integrado I* e *Inglés Integrado II*, ofertados en la Universidad Nacional de Costa Rica (Campus Liberia). Los participantes fueron divididos en grupo de control y experimental. La recolección de datos se realizó mediante dos cuestionarios estructurados en escalas de Likert. El análisis de los datos cuantitativos se procesó mediante estadística descriptiva e inferencial utilizando SPSS. Realizadas las intervenciones pedagógicas, los resultados apoyan la hipótesis de que exponer a los participantes a una mediación híbrida de principios de enseñanza favorece la competencia comunicativa intercultural.

Palabras clave:

ABP; AICLE; aprendizaje; competencia intercultural; lenguaje

Introduction

Intercultural encounters occur almost daily, as, indeed, the world seems to be shrinking its borders. This can be explained in relation to both, the impact of technology, migration all around the planet, and the numerous social, economic, health, and political challenges that modern societies face nowadays.

There is no city without a mix of cultural diversity, which is a positive trait that allows individuals to learn and grow if mutual understanding and perspectives are established. In this diversity, communication is fundamental to connect and learn from each other. In this context, the global tendency has been to use *English as a lingua franca* as a starting communicative ground among people from different cultural backgrounds.

Consequently, language educators in the 21st century must reconsider their teaching praxis to truly meet the task of empowering

students to acquire a foreign/ other languages and intercultural dimensions (i.e., knowledge, skills, attitude, and cultural awareness) and to engage themselves efficiently in today's multicultural and hyper-connected world.

In this sense, integrating intercultural communicative competence (ICC) is not only an effective path to facilitate foreign language learning but a rewarding learning experience that promotes lifelong learning and personal growth and development impacting students' perceptions of life and their worldviews. Thus, becoming intercultural mediators/speakers who can communicate in different contexts by putting into practice their linguistic and intercultural knowledge and skills, becomes a crucial task in the field of language teaching-learning.

Indeed, many scholars have long advocated for further research and pedagogical practices which can entitle learners to become interculturally aware and capable of communicating effectively across cultures (Byram et al., 2017; Byram, 2020; Borghetti, 2017; Deardorff, 2012; Houghton, 2016).

Literature Review

Learning views on foreign/second language instruction have been fluctuating, motivated by socioeconomic and political forces redefining directions to face present and future challenges. In that light, educational policies and institutions have adopted novel teaching practices towards reinforcing intercultural competence. The notion of ICC comprises cognitive, affective, and behavioral skills, knowledge, and culture awareness domains intended to serve as a platform to interrelate in multicultural scenarios effectively. According to Béréšová (2019), ICC relates to the context and speakers need to be competent in every specific situation, what entails communicating and behaving appropriately. To take this fundamental issue to the classroom, one influential model for developing ICC in educational settings is proposed by Byram (2020). Along underlying theoretical components, his model comprises practical goals which require a shift in the roles of both, learners, and teachers in EFL contexts.

Byram's model postulates an exploration of the factors linked to intercultural communication in the foreign/second language

classrooms and how these permeate one's knowledge, attitudes, skills, and awareness to mediate between cultures and languages. In that process, language learners deeply understand how foreign culture management and their own culture plays a role on the kind of communicative patterns they adopt (Byram, 2020). It is in language that human complexities (i.e., groups' worldviews, organization, practices, and behaviors) are found. Compelling to train individuals in such matters is highly positive and rewarding. According to Lazarevic (2020) "intercultural competent learners will empathize with people of different cultural affiliation, in addition to being curious and open to other cultures" (p. 322).

Byram's model has captured the attention of many language educators and researchers because the objectives proposed are well-justified and intend to guide learners to develop intercultural knowledge, attitudinal, cognitive, and behavioral changes. Several studies on ICC development in educational contexts focus on core notions in Byram's model (Lu & Corbett, 2012; Muller-Hartmann, 2006; Sercu, 2007; Woodin, 2001), such as guidance on mediating ICC, meeting linguistic and educational purposes. Bennett (2013) agrees that the authentic shift in language teaching-learning objectives goes from implementing traditional practices to fostering meaningful language use and personal engagement through ICC.

This study proposes that content and language integrated language (CLIL) and project-based learning (PBL) can be combined to promote ICC learning in the EFL context. Both rely on principles which may support ICC mediation in foreign, second or additional language lessons, favoring a comprehensive language learning experience infused with intercultural content, tasks, and projects. The rationale that underlines these teaching principles target linguistic objectives and functional dimensions which may be useful to develop critical skills and acquire valuable knowledge. CLIL and PBL overlap, targeting multimodal interactional principles such as foreign language development, culture connections, context nexus, real-life significance, practicality, creativity, and scaffolding (Plaza-Vidal, 2020; Sanchez-Palacios, 2017)

CLIL origins are documented in the 1990s as a European effort to innovate teaching and learning methodologies in a foreign or second language while embracing multilingualism and multicultural

citizenship (Hemmi & Banegas, 2021; Llinares & Morton, 2017). This methodology has been considered a pedagogical approach that incorporates the teaching and learning of content and second/foreign languages during a process that adjuces four components: content, communication, context, and culture. (Celce-Murcia, 2014; Coyle et al., 2010). Alternatively, PBL “is a curriculum instructional approach that prioritizes student-centered instruction by assigning projects” (Thomas, 2000, p. 1). It is a model that comprises multiskilled tasks that lead to creating a realistic product in a learning community (peers and the educator) activating cognitive skills, foreign language use and social skills in a participatory context.

In this light, language educators must carefully analyze their teaching philosophies and reassess the possibility of ascribing to new theoretical currents in eclectic ways. In foreign/second/additional language contexts, a comprehensive and explicit local and foreign cultural study through contextualized resources and material (e.g., literacy, task activities, projects) help students develop intercultural skills, awareness, and sensitivity (Cubero-Vásquez, 2019; García-Pérez & Rojas-Primus, 2017; González Rodríguez, & Borham Puyal, 2012; Martínez-Lirola, 2018; Tatyana Litvinova et al., 2021). Besides, culture as a learning goal through varied content themes can serve as a resource for scaffolding, meaning making, purposeful intercultural communication, sensitivity, and awareness while stimulating learners’ open attitudes, empathy, understanding, and tolerance towards diversity (Byram, 2020; Porto et al., 2018; Corino & Onesti, 2019; Cubero, 2021; Mahan, 2020). Overall, authentic material enriched by culture sources engage learners in authentic reflection and learning (Almulla, 2020; Beckett & Slater, 2005; Guo et al., 2020; Mikulec & Miller, 2011; Stoller, 2006).

Therefore, a hybrid approach suggests various possibilities in planning multivariant lessons linguistically and culturally richened. Undertaking this path is a challenging teaching responsibility that can be met by adopting a hybrid approach that addresses the emergent questions of why, what, and how of culture incorporation while learning a foreign/second language.

Method

Context and Participants

This study is framed as an exploratory longitudinal quasi-experimental design. It is sustained on a pedagogical intervention which lasted two academic semesters, and which was directed at students enrolled in the English courses Integrated English I and II at the National University of Costa Rica, campus Liberia. The study intended to determine the effect of a hybrid approach in fostering students' ICC in the context of foreign/second language learning. The total number of participants was ($n = 219$); all participants in the study were informed about the aims in this research and that the instruments were designed to collect data solely for research purposes. The questionnaires used served as an informed consent form. Participants were divided into two groups: the experimental group ($n = 124$) and the control group ($n = 95$). In this context, the researcher uses intact and equivalent groups, but only one group experiences the treatment while the other acts as a control group (Price et al., 2015).

Instruments and Data Procedures

Before implementing the pedagogical intervention, participants from both groups were administered a five-point Likert-scale questionnaire as a pretest, measuring respondents' level of agreement and disagreement on different ICC dimensions. This scale comprised 38 items regarding the ICC dimensions of knowledge, critical cultural awareness, attitudes, and skills contextualized to the Costa Rican cultural reality and linked to English learning. Learners were required to self-assess their ICC by selecting options that would resonate with their perceptions. Their responses were analyzed regarding changes before and after the interventions during the periods studied. Moreover, to understand the implications resulting from the interventions in both semesters (I-II), an after-intervention perception Likert-scale questionnaire was used to measure the effectiveness of the interventions comprising 20 items measuring 3 categories: impact, satisfaction, and benefits. This instrument was only applied to the experimental group. Data collected from these instruments were analyzed and interpreted according to the objectives and questions proposed.

Data Analysis

To analyze the data, results were compared among control and experimental groups for the two periods studied to determine if there were any statistically significant differences and if correlations are valuable in determining the impact of the hybrid approach implemented linked to ICC progression. Some of the research questions explored were:

- Are there any significant differences in participants' pretest and posttest scores measuring ICC for both experimental and control groups?
- Is the hybrid approach correlated with promoting students' ICC in the experimental group?

The procedures used in the study were conducted after consent was obtained by the university campus authorities and from the subjects involved.

The Cronbach α test was also performed to measure the internal consistency of the scales. The Shapiro-Wilk test was used to determine the normality of scores and determine the appropriate test to use. As the data were not normally distributed, the Mann-Whitney U test (Wilcoxon rank-sum test) was used to demonstrate the intervention's effectiveness, determining whether data distribution yielded significant differences in each of the intercultural dimensions studied before and after the pedagogical interventions during the two semesters in English courses I and II.

Pretest and posttest results were computed and compared to determine the efficacy of the method against the control group and establish participants' ICC development. Descriptive statistics were computed, and differences between groups were compared using SPSS. A significance level equal to 0.05 has been considered to reject or accept the null hypothesis. Therefore, a p -value of < 0.05 was considered to indicate statistical significance. The ICC progression of participants was evaluated in two ways through the 38-item assessment scale questionnaire, which served as a pretest and posttest data indicator to prove or dismiss the impact regarding the pedagogical hybrid method followed. The pretest data results helped understand participants' initial intercultural competence level among control and experimental groups. The experimental group was also

administered a 20-item survey questionnaire to measure their perceptions of the hybrid approach used in the lessons.

Pedagogical Intervention Description

For this study, data were gathered from pre- and posttest results from control and intervention groups and from conducting two pedagogical interventions as treatment for the experimental group. The interventions were applied for a 13-week period during each course (i.e., Integrated English I and Integrated English II). The control group did not receive any intercultural training and followed traditional instruction using a four-skill and textbook-oriented instruction (i.e., grammar forms, reading, listening comprehension, vocabulary, and writing) without methodically integrating the ICC component into the lessons. In contrast, the experimental group followed a syllabus complemented by thematic units with intercultural content following a CLIL and PBL hybrid approach of principles.

The intervention was designed to enhance students' learning experience, engagement, and interest towards cultures. The pedagogical interventions occurred primarily within a remote learning environment during both semesters due to the global health emergency caused by COVID-19. The official UNA (National University of Costa Rica) virtual platform was the primary technological tool to mediate the asynchronous sessions during interventions. Thus, other digital tools such as Google Classroom were used to record and keep students' online production and interaction. For synchronous sessions, digital platforms such as "Zoom" and teams were used to facilitate online live meeting lessons. The online classes were carried out every week, and each session was divided into synchronous and asynchronous teaching hours. The synchronous lessons, discussion, and mediation of the units were discussed, and mediated for two hours.

Results and Discussion

A description of the results is presented below for each instrument used during the study. The data collected from the two instruments provide insightful indicators of students' ICC development and evolution after participating in the pedagogical interventions I and

It compared to control group results. Furthermore, the after-intervention questionnaire applied only to the experimental group yielded positive and thought-provoking results. These results seek to measure the efficacy of the intervention lessons and determine whether internal validity is maintained throughout the experimental phase. Before implementing the ICC intervention (pre-experimental measurements), the pretest results were used to compare the control and experimental groups' results to determine if any equivalence was reflected initially. The subsequent comparisons among groups and periods were used to determine whether the method was effective.

ICC Scale Results: Intervention I

Table 1 shows control and experimental groups' pre- and posttest results obtained during the first semester 2020 I. A Cronbach's α greater than 0.89 was reported indicating a high internal consistency for the ICC scale components (i.e., knowledge, critical awareness, attitude, and skills). Table 1 reveals that no significant mean differences were yielded among the pretest scores between the control and experimental groups in terms of knowledge, critical awareness, attitude, and skills since the Mann-Whitney U test demonstrated that all the p -values were found to be > 0.05 , not statistically significant. These results may indicate that participants lack exposure and awareness regarding the intercultural component.

These pretest results show that groups hold similar tendencies around language and intercultural knowledge, skills and attitudes and critical awareness. Results showed that the highest score is on the critical cultural awareness, and the lowest is on knowledge and skills dimensions. As for the posttest results, no evidence of progression is found in the control group. However, there was a significant mean difference between control and experimental groups in the four categories.

The posttest means scores for the experimental group increased in all four ICC dimensions (i.e., knowledge, critical awareness, attitude, and skills). It can be interpreted that there is a positive impact on learners' ICC development after participating in the hybrid approach language activities. After examining the scores obtained in the ICC dimensions in the experimental group, it can be observed that the highest scores are in the knowledge ($n = 124$, $m =$

3.85) and critical culture awareness dimensions ($n = 124, m = 3.68$), whereas the attitude dimension had a lower score ($n = 124, m = 3.56$).

Table 1 ICC Scale results: Experimental Group vs. Control Group (Intervention I)

	Control ($n = 95$)	Pretest Intervention ($n = 124$)	<i>P</i> - value	Control ($n = 95$)	Posttest Intervention ($n = 124$)	<i>P</i> - value
Knowledge			0.898			< 0.001
Cronbach α	0.95	0.92		0.95	0.96	
<i>M</i>	2.82	2.84		2.83	3.85	
Median (IQR)	3 (2.2-3.5)	3 (2.2-3.7)		3 (2.2-3.5)	4 (3.3-4.2)	
<i>SD</i>	0.90	0.87		0.88	0.82	
Critical awareness			0.999			< 0.001
Cronbach α	0.95	0.94		0.95	0.94	
<i>M</i>	2.93	2.92		2.99	3.68	
Median (IQR)	3 (2.1-3.5)	3 (2-3.8)		3 (2.3-4)	4 (3-4)	
<i>SD</i>	0.93	0.91		0.95	0.98	
Attitude			0.278			< 0.001
Cronbach α	0.96	0.89		0.97	0.96	
<i>M</i>	2.83	2.91		2.92	3.56	
Median (IQR)	3 (2.1-3.3)	3 (2.3-3.4)		3 (2.3-3.3)	4 (3-4.5)	
<i>SD</i>	0.94	0.82		0.94	1.08	
Skills			0.510			< 0.001
Cronbach α	0.95	0.90		0.95	0.97	
<i>M</i>	2.65	2.61		2.66	3.58	
Median (IQR)	2.9 (2-3)	2.7 (2.2-3)		2.9 (2-3)	4 (3-4)	
<i>SD</i>	0.85	0.83		0.86	1.11	

Notes. *p*-values = Mann-Whitney *U* test (Wilcoxon rank-sum test).

Source: Own elaboration

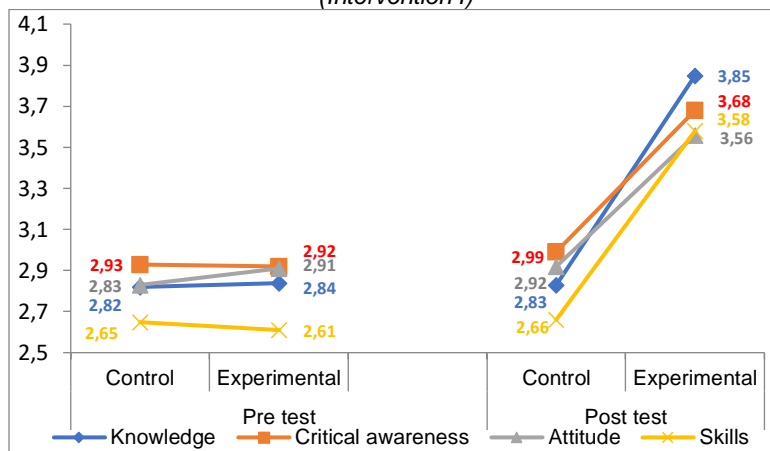
The Mann-Whitney U test was conducted to examine whether any measure was particularly affected. The change of scores in each dimension after the first intervention was compared against the control and intervention groups to establish any significant differences. *P*-values were found to be < 0.05 in all the four dimensions explored,

demonstrating a statistically significant development. Additionally, the Mann-Whitney U test results allowed exploring the dimensions that progressed the most in comparisons to pretests supporting that the systematic exposure to intercultural content, tasks, and projects in the EFL classroom affected learners' intercultural dimension of knowledge ($U = 2199.500, p < .001$), ($Z = -8.029, p < .001$). The second dimension that significantly progressed was skills ($U = 2833.000, p < .001$), ($Z = -6.656, p < .001$).

These results are aligned with what the field has identified as signs of early evidence for ICC progression, indicating that it is usually reflected on the knowledge dimension (Byram, 2020; Deardorff, 2006). It is also plausible to establish a relationship between the knowledge dimension and sufficient intercultural content and analysis as a platform to initiate the path towards developing critical cultural awareness. It can be interpreted that these results support evidence regarding the view of ICC as a cyclical-interdependent pedagogical process where knowledge and content provide the building blocks to incite the act of becoming aware and empathetic to other beings (Yang, 2021; Yoko, 2021) and their cultural views within a communicative act.

A graphical representation of the mean differences in Figure 1 provides a deeper insight into the data obtained.

Figure 1 ICC Scale Mean Difference: Control vs. experimental Group (Intervention I)



Source: Own elaboration

Figure 1 illustrates the comparison of pretest and posttest mean differences between control and experimental groups. As can be observed, it displays the progression that the experimental group experienced after the pedagogical proposal of hybrid activities and content under the umbrella of principles of the CLIL and PBL learning models.

Thought-provoking results are yielded when analyzing the experimental group data per ICC dimension. For example, the knowledge dimension (referring to intercultural knowledge about national memory and general information about the target and home cultures), mean results have risen from 2.84 in the pretest to 3.85 in the posttest. In the critical awareness dimension, learners' mean scores increased as well, going from 2.92 to 3.68. As for the attitude dimension, means scores improved from pretest to posttest 2.91 to 3.56 correspondingly. Regarding the intercultural skills, these considerably increased from 2.61 to 3.58.

These scores reveal that the hybrid approach effectively mediates ICC dimensions in the foreign language class. The experimental group improved and progressed in all the ICC components. However, the control group's scores did not change

significantly, proving the methodology's efficacy to foster intercultural competence.

ICC Scale Results: Intervention II

Table 2 shows the pretest and posttest results comparison between control and experimental groups for intervention II, which took place during the second semester of 2020 with participants enrolled in the Integrated English II course. A Cronbach's α test result greater than 0.90 was reported among the two groups, indicating a high internal consistency for the scale components (i.e., knowledge, critical awareness, attitude, and skills).

Table 2 ICC Scale Results: Experimental vs. Control Group (Intervention II)

	Control (n = 95)	Pretest Intervention (n = 124)	P- value	Control (n = 95)	Posttest Intervention (n = 124)	P-value
Knowledge			< 0.001			< 0.001
Cronbach α	0.95	0.96		0.95	0.96	
M	2.80	3.57		2.82	4.09	
Median (IQR)	3 (2.1-3.5)	3.5 (3-4)		3 (2.2-3.5)	4 (4-4.9)	
SD	0.86	0.88		0.88	0.73	
Critical awareness			< 0.001			< 0.001
Cronbach α	0.96	0.96		0.95	0.93	
M	2.92	3.78		2.90	4.19	
Median (IQR)	3 (2.1-3.3)	4 (3-4.5)		3 (2.3-3)	4 (4-5)	
SD	0.93	0.99		0.90	0.68	
Attitude			< 0.001			< 0.001
Cronbach α	0.97	0.94		0.97	0.95	
M	2.80	3.48		2.78	4.21	
Median (IQR)	3 (2-3)	3.6 (3-4)		3 (2-3)	4 (4-5)	
SD	0.92	0.94		0.89	0.75	
Skills			< 0.001			< 0.001
Cronbach α	0.95	0.97		0.95	0.96	
M	2.67	3.27		2.66	4.12	
Median (IQR)	2.9 (2-3)	3 (2.9-4)		3 (2-3)	4 (4-5)	
SD	0.85	1.04		0.86	0.70	

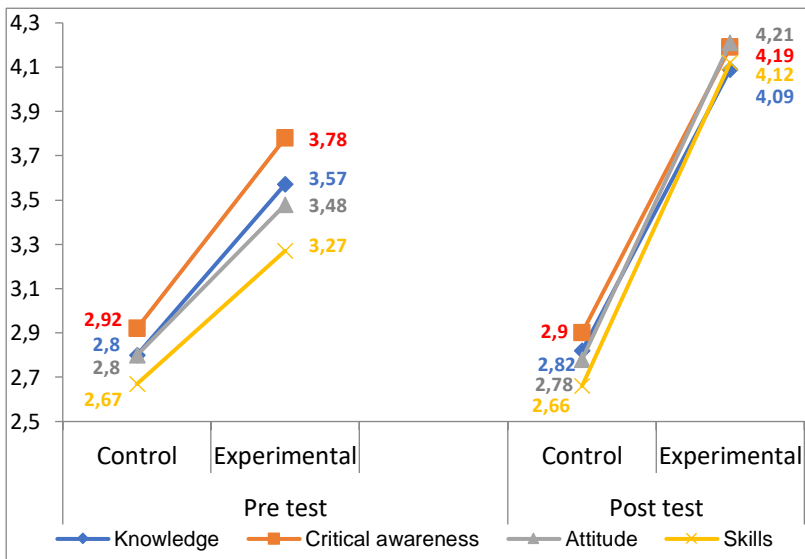
Notes. *p*-values = Mann-Whitney U test (Wilcoxon rank-sum test).

Source: Own elaboration

There are significant differences in all the scale dimensions compared to the control group for the pretest and posttest, which shed some light on the contribution the pedagogical intervention II had on experimental participants' perspectives around the cultural role in the process of learning English as a foreign language.

Regarding the control group, Table 2 illustrates no significant mean differences among the pretest and posttest scores in any ICC dimension. It is supported by the statistics that the control group did not undergo significant changes while the intervention group scores statistically increased considerably. After analyzing and comparing the Mann-Whitney U test results between the control and intervention group, p -values were found to be < 0.05 in all four dimensions studied, demonstrating a statistically significant development and progression of the experimental group. To further scrutinize results, a graphical representation of the mean differences is shown in Figure 2, which better illustrates the ICC dimensions progression among groups.

Figure 2 ICC Scale Mean Difference: Control vs. Experimental Group (Intervention II)



Source: Own elaboration

Figure 2 demonstrates mean differences between groups' pretest and posttest during the second time the pedagogical intervention of a hybrid approach was implemented. For instance, the posttest mean results between the experimental and control groups showed statistically significant differences, evidencing the positive impact of the hybrid mediation intervention carried out within the experimental group. In the knowledge dimension, the control group's mean score was 2.82, while the experimental group reported 4.09. In the critical awareness dimension, the control group's mean score was 2.90; meanwhile, the experimental group noted a higher mean score of 4.19. As for the attitude dimension, the control group accounted 2.78 and the experimental 4.21. Similarly, a difference was demonstrated regarding the skills dimension where the control mean was 2.66 while the experimental group scored 4.12.

It is worth indicating that the highest score for the experimental group after the second pedagogical intervention was on the ICC component of attitude ($n = 124$, $m = 4.21$). In contrast, the lowest mean score was noted on knowledge ($n = 124$, $m = 4.12$). It can be interpreted that experimental participants self-assessed their perspectives, favoring the attitude and critical awareness dimension supporting the idea that after a prolonged exposure to intercultural matters via a hybrid approach positively influences the learners' perception of the ICC phenomena, changing and adopting new intercultural stands in their English learning process. The Mann-Whitney U test results allowed determining the level of progression per dimension. It was observed that learners' intercultural skills significantly progressed the most during the second intervention ($U = 1057.000$, $p < .001$), ($Z = -10.574$, $p < .01$) while the second most affected was attitude ($U = 1223.000$, $p < .001$), ($Z = -10.200$, $p < .01$).

These results reinforce and support the previous descriptive analysis, indicating that a positive impact and influence are apparent after weeks of systematically implementing a hybrid intercultural language approach. Students' self-perceptions of their intercultural competence were positively affected in all the scale components.

Based on Deardorff's (2006) insights, it is fundamental to begin the long-life process of intercultural competence by allowing the individual to progress towards the interactional level where outcomes can be visible. She supported that the degree of intercultural competence depends on attitude as an ideal starting point from where the intercultural knowledge and skills can be sustained. These study results show that the higher mean score was on attitude, proving that a systematic and prolonged mediation of ICC is beneficial to learners' critical ICC dimension development. Attitude is a fundamental intercultural component supportive of a process linked to reshaping personal frames of reference, which later are believed to influence communicative behaviors (Deardorff, 2006).

Intervention I vs. Intervention II: Experimental Group

During each intervention, the data results support the positive impact of a planned learning experience under a hybrid approach of principles with intercultural language objectives on language learners. To this study, it is valuable to explore data results to determine how

learners advanced, reacted, and self-reported their ICC progression from intervention I to intervention II carried out during the Integrated English I and II courses. In that sense, Table 3 shows the comparison results between pre- and posttest scores from interventions I and II.

Table 3 ICC Assessment Scale Results: Descriptive Statistics

	Intervention I Integrated English I		P- value	Intervention II Integrated English II		P-value
	Pre (n = 124)	Post (n = 124)		Pre (n = 124)	Post (n = 124)	
Knowledge			< 0.001			< 0.001
Cronbach α	0.92	0.96		0.96	0.95	
Mean	2.84	3.85		3.57	4.09	
Median (IQR)	3 (2.2- 3.7)	4 (3.3- 4.2)		3.5 (3-4)	4 (4-4.9)	
SD	0.87	0.82		0.88	0.73	
Critical awareness			< 0.001			0.003
Cronbach α	0.94	0.93		0.95	0.93	
Mean	2.92	3.68		3.78	4.19	
Median (IQR)	3 (2-3.7)	4 (3-4)		4 (3-4.5)	4 (4-5)	
SD	0.91	0.98		0.99	0.68	
Attitude			< 0.001			< 0.001
Cronbach α	0.89	0.95		0.94	0.95	
Mean	2.91	3.56		3.48	4.21	
Median (IQR)	3 (2.3- 3.4)	4 (3-4.5)		3.6 (3-4)	4 (4-5)	
SD	0.82	1.1		0.94	0.75	
Skills			< 0.001			< 0.001
Cronbach α	0.90	0.97		0.97	0.96	
Mean	2.61	3.58		3.27	4.12	
Median (IQR)	2.7 (2.2- 3)	4 (3-4)		3 (2.9-4)	4 (4-5)	
SD	0.83	1.1		1.0	0.70	

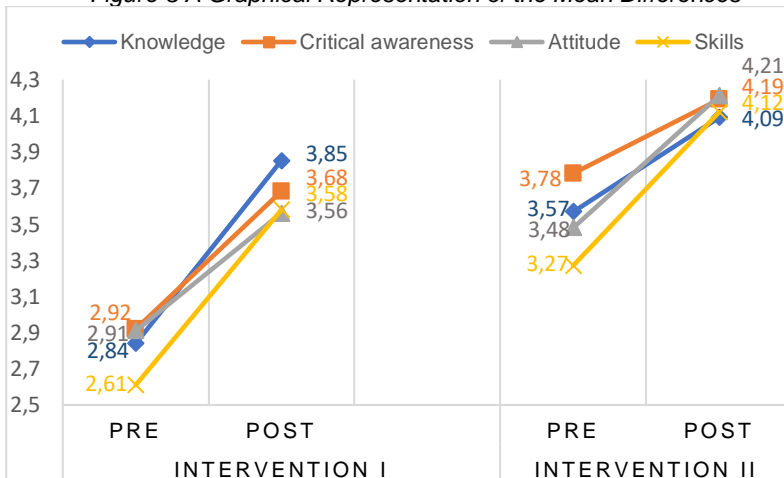
Note. p-values= Mann-Whitney U test (Wilcoxon rank-sum test).

Source: Own elaboration

Table 3 also displays p -values that were found to be statistically significant in all the four dimensions ($p < 0.001$), indicating that overall, among first and second interventions, a positive tendency of development towards the complex process of acquiring the ICC took place. It is demonstrated that after prolonged exposure to foreign language and intercultural learning mediated by a hybrid approach of

CLIL and PBL principles, students do not only learn useful content while practicing the foreign/second language, but they are also transformed into seekers by adding value to their lives while acknowledging the idea that language and culture are part of a lifelong learning process that enriches their personal and professional life from many diverse angles.

Figure 3 A Graphical Representation of the Mean Differences



Source: Own elaboration

Figure 3 shows that for interventions I and II, a significant mean difference within the experimental group between the pre- and posttest scores reported significant progression effects in all four ICC dimensions, unfolding a tendency of development. It is interesting to notice that higher mean scores varied and shifted from intervention I to intervention II.

For instance, during intervention I, the higher mean scores were found on knowledge and critical awareness, while the lower mean score was noted on the attitude dimension. These previous results are aligned with what the field has identified as signs of early

evidence for ICC progression, indicating that it is usually reflected on the knowledge dimension (Byram, 2020; Dearthoff, 2006).

As for intervention II, higher mean scores were noted on attitude and critical awareness. Interestingly, the shift on the attitude intercultural dimension from intervention I to intervention II went from one of the lowest mean scores to the highest mean score during intervention II. It is also observed that critical cultural awareness, one of the fundamental dimensions in the path to building the intercultural dimension, is noted to be affected as the second higher mean score during both interventions. The intercultural knowledge dimension affected during the first intervention helped shape learners' perception and understanding of different cultures (target and home). As a result, participants portrayed themselves as open-minded and willing to study, reflect, and acquire intercultural issues in the EFL classroom.

Therefore, it can be determined that the interventions significantly improved the intercultural communicative competence of the experimental group proving such ICC growth can be sustained throughout a longitudinal exposure/mediation of a hybrid approach of CLIL and PBL principles infused with intercultural language tasks, content, and projects in a class context of planned, purposeful, meaningful, practical, and engaging learning activities. Overall, this ICC improvement can be attributed to the systematic constant, progressive mediation of intercultural language lessons along the two-semester period demonstrating the efficacy of the interventions implemented.

Hybrid Approach Scale Results: Experimental Group

A scale was used to gather participants' perspectives about their ICC learning experience after implementing a hybrid approach of CLIL and PBL lessons. A total of 124 students from the experimental group completed the scale questionnaire. Tests results presented below seek to measure the effectiveness of the method implemented to verify the internal validity of this experiment. A Cronbach's coefficient α test was performed to measure the scale's internal consistency and reliability estimates. A Cronbach α higher than 0.90

was reported for all the scale categories proving the scale effectiveness. A Shapiro-Wilk statistical test was applied to check for normality that indicated the nonexistence of normality.

Therefore, a nonparametric test was used to compare the measurements of the two-period interventions studied. The Mann-Whitney U test (Wilcoxon rank-sum test) was chosen to demonstrate whether there were significant results once the parametric option was discarded. The instrument intended to measure the perceptions of the participants on ICC under the combined approach in three categories: impact of the CLIL and PBL combination on English language proficiency; benefits of the CLIL and the level of satisfaction with the tasks, projects, topics, and resources used during the implementation of the hybrid approach interventions.

Table 4 Hybrid Approach Questionnaire/Scale: Descriptive Statistics

	Intervention I	Intervention II	P-value
Impact			0.036
Cronbach α	0.990	0.991	
<i>M</i>	4.01	4.23	
Median (IQR)	4 (4-5)	4 (4-5)	
<i>SD</i>	0.92	0.86	
Benefits			0.004
Cronbach α	0.994	0.993	
<i>M</i>	4.01	4.31	
Median (IQR)	4 (4-5)	4 (4-5)	
<i>SD</i>	0.92	0.85	
Satisfaction			0.003
Cronbach α	0.993	0.994	
<i>M</i>	4.11	4.37	
Median (IQR)	4 (4-5)	5 (4-5)	
<i>SD</i>	0.87	0.85	
Overall			0.004
Cronbach α	0.997	0.997	
<i>M</i>	4.03	4.32	
Median (IQR)	4 (4-5)	4.75 (4-5)	
<i>SD</i>	0.91	0.85	

Notes. Intervention I ($n = 124$), Intervention II ($n = 124$), p -values = Mann-Whitney U test (Wilcoxon rank-sum test).

Source: Own elaboration

Table 4 displays the findings after conducting a descriptive analysis regarding the participants' perspectives on the combined principles applied to foster ICC within the English classroom during the two academic semesters. As mentioned before, the pedagogical interventions were implemented in the integrated English courses I and II of 2020.

Perspectives around the hybrid method of principles on the two times the interventions were carried out were perceived as favorable. Concerning intervention I the satisfaction category (perceptions around participants' level of satisfaction with the facilitated tasks, projects, topics, and resources used to mediate a foreign language) obtained the highest mean score ($m = 4.11$). This category also measured participants' perspectives on progression around collaborative and cognitive skills (critical thinking and creativity) activated through the intercultural and language units, projects, and tasks. Students highly agreed with those statements and slightly favored this category more than impact and benefits, which also yielded high scores ($m = 4.01$). These results reveal a significant degree of satisfaction within these category statements.

Table 4 also shows findings concerning participants' perspectives after applying intervention II during the Integrated English II, semester II, 2020. Results clearly show an increase in scores compared to intervention I (Integrated English I). It is interesting to highlight that the category with the highest mean score remained satisfaction $m = 4.37$, followed by the benefits category. The benefits category (perceived benefits of the CLIL and PBL hybrid approach in the ICC learning experience) was accounted with $m = 4.31$, while the impact category was scored $m = 4.23$.

These results align with what Sánchez-Palacios (2017) believes about the opportunities that the CLIL and PBL combination offer to learners in terms of an active learning environment where critical functional skills can develop. These advantages can be flourished if new teaching views are embraced. As Nemouchi and Byram (2019) state, "models and theories to intercultural competence need to be challenged and modified as need data become available" (p. 200). In that sense, this study proves the feasibility of working

under a hybrid approach to foster and advance ICC in the language classroom.

Lessons infused with intercultural content, reflective task activities, and project work seem to be accepted models of learning among participants since they perceived and valued their progress even though the on-campus learning was abruptly changed to remote learning due to the global health emergency. In general, students' level of satisfaction and perceived benefits of the projects and tasks reinforced and supported by intercultural content and authentic resources are highly positively viewed and assessed among participants. During both interventions the most significant affected category was satisfaction, while the least was the category of impact.

It can be inferred that the impact category referring to statements linked to the influence of the combined approach of CLIL and PBL on students' English proficiency, confidence when speaking, use of grammatical structures scored lower due to the novelty of the remote virtual learning. Overall, results are highly encouraging and motivating to keep integrating ICC into the foreign language classroom, where development is part of a process that requires time and systematic opportunities to develop ICC.

Conclusions

In general, this study is expected to infuse a constructive contribution and reflection on the need to address the fundamental role of culture in the context of a foreign language by accommodating hybrid teaching instruction (CLIL and PBL) to mediate ICC. Results yielded from the instruments used in this quasi-experiment were statistically significant, associating students' ICC development and progression during the two semesters the interventions were implemented. Research related to the development of intercultural competence, particularly foreign/second/additional language learning, has been noted to be favorably developed in the EFL classroom context (Byram, 2020; Larzén-Östermark, 2008; Sercu, 2007; Tran & Duong, 2018).

Posttest score results concerning intervention I indicated a significant mean difference between the control and experimental

groups in the four categories (i.e., knowledge, critical awareness, attitude, and skills) for both interventions. The experimental group noted higher mean scores in knowledge and critical cultural awareness. For intervention II, examination of the results revealed that the control group did not significantly change while the experimental group experienced a statistically significant difference. After intervention proposal II, the highest score for the experimental group was on attitude, whereas the lowest was noted on knowledge ($n = 124$, $m = 4.12$). It can be inferred that participants self-assessed their perspectives, favoring a shift from knowledge (first intervention) towards attitude (second intervention), indicating that the prolonged exposure to intercultural matters (e.g., tasks, content, resources) influenced their ICC self-assessment perception and growth.

The systematic exposure of intercultural content, tasks, and projects in the English classroom is effective in helping learners to advance in intercultural skills which was noted to have significantly progressed the most during the second intervention ($U = 1057.000$, $p < .001$), ($Z = -10.574$, $p < .001$), while the second most affected was the attitude dimension ($U = 1223.000$, $p < .001$), ($Z = -10.200$, $p < .001$). During each intervention, the experimental group's test results were statistically significant p -values < 0.001 , while the control group did not yield any difference. These promising results are associated with Deardorff's (2006) statement relating attitude as critical in developing intercultural competence since it supports reshaping personal frames of reference, which eventually influence proper intercultural behaviors. She believes that intercultural competence depends on attitude as a stimulus to the involvement and awareness in ICC components and the ability to communicate effectively. Similarly, Byram (2020) believes that attitude is fundamental in fostering ICC.

This research reinforced the view that ICC takes a developmental process that can be successfully integrated into educational settings through a hybrid approach to build learners' awareness and sensitivity towards the self and others. During that process, learners can transform perceptions, cultural views, behaviors, and communication patterns resulting in careful, mindful, empathetic individuals during intercultural communicative engagements. Addressing the ICC construct into the teaching praxis

is, in fact, challenging but combining two learning models proves to be suitable in meeting the task. The combination works well because it addresses content, culture, context, language, and communication, critical factors in any language learning experience. The CLIL approach holistically intends to “make teachers aware of their responsibility to educate the ‘whole’ child” (Ellison, 2019, p. 262), preparing learners for the 21st-century society in context of collaborative and interdisciplinary educational purposes (Cruz, 2019; Marsh, 2012; Ohler, 2013). These claims may be applied to university students as well. In fact, these ideas are supported by the outcomes linked to the perspectives regarding the hybrid approach applied to mediate the intercultural language experience. After Interventions I and II, the results showed that the experimental group participants believed the method was favorable. The highest mean score was obtained in the satisfaction category, indicating a higher degree of satisfaction with the tasks, projects, topics, and resources used.

In general, the benefits are perceived in different vertices; the process of progression in ICC and language skills was especially noticed by learners in terms of communicating, managing, learning, and producing new content and vocabulary, as well as serving to rediscover home cultures’ key aspects. Students’ attitude and openness to new views towards content, information, and practices towards the language learning process and the relevance of culture in the English class shifted and became visibly important to participants. The role of language learners shifted to autonomous learning, willing to embark on a conscious lifelong learning process of the target language and ICC allowing them to become aware of the implications in a language learning process.

Funding: None

Acknowledgement: I thank all the participants who contributed to this study. Their learning spirit in times of COVID-19 was inspirational.

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How to cite this article...

Cubero Vázquez, Karol Viviana (2023). Intercultural Communicative Competence through CLIL and PBL hybrid approach: a Costa Rican perspective. *DEDiCA. REVISTA DE EDUCAÇÃO E HUMANIDADES*, 21, 29-56.

DOI: <http://doi.org/10.30827/dreh.vi21.23757>

Cubero Vázquez, Karol Viviana (2023). Intercultural Communicative Competence through CLIL and PBL hybrid approach: a Costa Rican perspective. DEDiCA. REVISTA DE EDUCAÇÃO E HUMANIDADES, N.º 21, 2023, 29-56. ISSN: 2182-018X. DOI: <http://doi.org/10.30827/dreh.vi21.23757>