IJRDO- Journal of Language, Gender and Literature Studies

Published by: **IJRDO JOURNAL**
ISSN (Online): **XXXX XXXX**
Doi: XXXXXXX
Volume 01 | Issue 01 | March 2026

IMPACT OF CLIL TEACHING ON PRIMARY STUDENTS' LEARNING OUTCOMES: A QUANTITATIVE STUDY

Reema Bathla[1*], Dr Sangeeta Pant[2], Dr Sukhjit Singh[3]

[1*,2,3]Ph. D from Chitkara University

Corresponding Author: Reema Bathla

ABSTRACT

This study investigated the effect of Content and Language Integrated Learning (CLIL) pedagogy on selected learning outcomes of primary grade students through a quantitative approach, utilizing a sample of primary school students This study was carried out within the educational environment of Punjab. For the purpose of this study, two private schools located in District Mohali were chosen. The current study employed an Explanatory Sequential Research Design, beginning with a quantitative approach (Experimental study) to evaluate the effectiveness of CLIL in comparison to non-CLIL group students. In the quantitative phase, a quasi-experimental setting was employed, utilizing a pretest-posttest control group design to gather data (CLIL GROUP = 200, NON CLIL GROUP = 170). The participants in the study, encompassing both the experimental and control groups, were chosen from students attending six sections of 4th and 5th grades at two private schools located in Banur, Punjab. The intervention group received instruction through CLIL methodology, while the control group was taught using a bilingual method by the investigator. For Quantitative analysis and hypotheses testing, t test and effect size calculation were performed along with descriptive analysis. Quantitative results indicated that the CLIL group achieved superior performance compared to the Non-CLIL group in language scores as well as in Content gain scores. The findings indicated that the implementation of CLIL as a pedagogical approach was effective for students, as evidenced by the gain scores in language. This suggests that the CLIL group outperformed the Non-CLIL group in language as well as Content gain scores. This study culminated in recommendations for future experimental research utilizing CLIL pedagogy across additional subjects such as science and mathematics.

Keywords: CLIL, Primary students, Quantitative analysis, language, content

Article History:
Article Type: **Research**
Received Date: **22/10/2025** | Revised: **18/01/2026** | Accepted Date: **04/03/2026** | Published Date: **26/03/2026**

1. Introduction

The National Education Policy (NEP) of 2020 acknowledges the significance of achieving proficiency in English and various Indian languages. This recognition seeks to provide students with essential skills for effective communication in a diverse and interconnected world.

The pedagogical changes outlined in the National Education Policy (NEP) 2020 align with contemporary educational theories that emphasize experiential learning, critical thinking, and skill development. The strategy promotes a multidisciplinary approach that involves breaking down traditional topic boundaries to enhance overall understanding of knowledge. The concept involves transitioning from rote memorization to active engagement, inquiry-based learning, and the practical application of knowledge in real-world contexts. The aim of these educational modifications is to foster creativity, improve problem-solving skills, and promote a deep understanding of the interconnectedness of disciplines. In educational contexts, a fundamental shift in instructional techniques is necessary, urging educators to adopt progressive, learner-centered methodologies that foster curiosity and a desire for knowledge acquisition.

The National Education Policy of 2020 emphasizes the integration of technology in education, acknowledging its potential to enhance learning outcomes and improve educational accessibility. In the educational context, this is evident in the use of digital tools and resources alongside traditional teaching methods. The policy seeks to create a supportive environment for digital learning by providing students with technological resources that enhance research, collaboration, and skill development. The integration of technology in education aligns with the changing demands of the labor market, equipping students with essential skills for a technology-driven society and facilitating personalized learning experiences that address individual preferences and learning styles.

Furthermore, Language, as a means of instruction and communication, assumes a pivotal role in the implementation of the pedagogical modifications delineated in the National Education Policy (NEP) of 2020. The policy acknowledges the importance of language proficiency as a fundamental skill and places emphasis on the cultivation of robust communication capabilities.

Coyle, Hood, and Marsh (2010) assert that the practice of teaching individuals in a non-native language has been present since the beginning of education. The term Content and Language Integrated Learning (CLIL) was formally established in 1994. Coyle et al. (2010) defined it as a pedagogical framework designed to enhance effective language acquisition in diverse educational contexts throughout Europe.In 1994, David Marsh introduced the concept of Content and Language Integrated Learning (CLIL). This pedagogical approach shares similarities with language immersion and content-based education methodologies; however, it remains distinct. The term "Content and Language Integrated Learning" (CLIL) denotes the use of a foreign language as the instructional medium for gaining knowledge in specific subjects, including physics or geography. CLIL involves acquiring proficiency in a foreign language by studying content-based

subjects. CLIL, formerly referred to as "Content-based instruction," "English across the curriculum," and "Bilingual education," has experienced multiple nomenclatural changes.

In the Indian context, marked by the presence of multiple languages, Content and Language Integrated Learning (CLIL) has the potential to mitigate language disparities and promote a more inclusive educational environment. Diverse linguistic backgrounds among students can be effectively utilized in the classroom setting. Content and Language Integrated Learning (CLIL) utilizes linguistic resources to facilitate the concurrent development of topic knowledge and language proficiency.

CLIL is relevant due to its alignment with broader educational reform and policy objectives. Many educational systems worldwide, particularly India's National Education Policy (NEP) 2020, emphasize a shift from rote learning to a focus on developing competencies such as critical thinking and creativity. Content and Language Integrated Learning (CLIL) is a pedagogical approach that supports the achievement of educational objectives through active participation, inquiry-driven instruction, and the practical application of acquired knowledge in the classroom. This approach promotes the application of knowledge in genuine, real-world contexts, thereby enhancing a deeper and more enduring understanding of the subject matter. As educational systems transform to meet 21st-century requirements, Content and Language Integrated Learning (CLIL) emerges as a pedagogical approach that supports Indian classrooms and enhances the objectives of these reforms from the primary level of education.

Review of literature on CLIL research (2016 onwards)

Banegas (2016) examined Argentinian educators' professional development CLIL materials. CLIL description and literature review. This study extensively examined workshop participants' lesson plans. This content analysis revealed useful teaching principles and suggestions from participants. Future research is informed by these findings.

Stapel (2016) examines medical school CLIL. This study suggests CLIL helps students learn language and subject-specific knowledge jointly. Motivated learning improves job language. The study promoted medical and scientific English. Combining language and academics prepared them.

Sisay (2017) found that language-driven content and CLIL reading education affect EFL students' critical thinking and reading comprehension. Control and pretest-posttest were employed. Two seventh-grade EFL classrooms had 85 students. Classes were randomly assigned experimental (43) and control (42) groups. Experimental readers got CLIL-driven language instruction. Pre- and post-tests measure critical thinking and reading. Reading comprehension and critical thinking were slightly positively correlated. Results confirmed predictions, supporting language-driven CLIL for EFL reading comprehension and critical thinking.

Audrey et al. (2018) evaluated second-language students' classroom anxiety and enjoyment. Dutch and English were compared at CLIL and non-CLIL primary and secondary schools. Much CLIL research focuses on English. The "other" language, Dutch, must be used to compare Belgian conditions. A self-reported questionnaire examined 896 French-speaking Belgian children's classroom fear, happiness, and background. Non-CLIL and CLIL students reported very different anxiety levels. The non-CLIL students were scarier. Dutch pupils experienced greater anxiety and depression than Brits. Secondary school CLIL and English language instruction function better, but elementary school kids are more emotionally sensitive.
Cañado (2018) studied the impact of CLIL programs on monolingual students' L1 performance and subject comprehension in primary and secondary school. The study recruited 2024 students from twelve monolingual Spanish provinces to ensure motivation, verbal IQ, and English proficiency homogeneity. Also assessed were school type, environment, and socioeconomic status. Discriminant analysis revealed differences. Long-term CLIL benefits did not hinder L1 competency or subject learning. Moderators affect school type and socioeconomic status, not rural-urban.
Lasagabaster. (2018) studied CLIL sessions and intensity on EFL acquisition. Two testing stages comprise a year-long longitudinal study. The study involved 393 Spanish-bilingual and monolingual high schoolers. The study found that CLIL session quantity significantly affected students' English competence.
Graham et al. (2018) examined CBI/CLIL language and content outcomes. This study assessed 25 qualified papers. Most research demonstrate CBI increases student achievement. The study has many methodological flaws that prevented strong CBI conclusions. Spain has researched CLIL more than others. This study recommended methodologically sound international CBI outcome research.
A CLIL curriculum was tested at a rural Galician bilingual school by San Isidro and Lasagabaster (2019). This two-year study homogenized 44 CLIL and non-CLIL samples before using the CLIL technique to fix CLIL research faults. Both groups improved their English over two years, but CLIL more. CLIL Spanish and Galician students outscored non-CLIL students over two years. Significantly, CLIL did not hinder subject learning. The study deemed CLIL pedagogy and instruction crucial.
According to Chumbay and Ochoa (2020) study concluded that Language-driven CLIL increased senior students' Syntax, Content, Communicative Achievement, Organization, and Language writing at Manuel J. Calle High School in Cuenca, Ecuador. An exploratory, mixed-method, quasi-experimental study with a subjective open-ended questionnaire collected CLIL students' topics. Language-driven CLIL classroom differences were found on Independent and Paired T-Tests. Student CLIL perceptions were questioned and statistically examined. Students liked History, Biology, and Spanish Language and Literature, researchers discovered. Every experimental group parameter beat control. Only Organisation and Syntax outperformed both statistically.

Maria and Juan's (2020) comprehensive study found CLIL teacher training gaps, recommendations, and best practices. Reviewing and synthesizing academic repository findings. The review aimed to improve CLIL teacher training by stressing practical solutions. ERIC, ScienceDirect, Scopus, and partially Google Scholar supplied 39 European studies and practices and papers. Papers were found using MSH phrases and careful reading. Based on systematic methods, the researchers' qualitative data revealed thoroughness.

Beaudin (2021) evaluated CLIL in a Southern Taiwanese elementary school using classroom-based evaluation. Coyle's 4Cs appeared in the five-week bug course. They took a pretest, posttest, and delayed posttest on course material and completed post-study questionnaires. Many students improved and passed delayed posttests. The student survey showed they loved CLIL, thought it improved English, and wanted more courses. Progress assessment was difficult due to students' English language barriers. CLIL enthused elementary students.

Vietnamese higher education lecturers' CLIL professional development was investigated by Phan (2021). Without assistance or training, university management instructed professors to switch to CLIL from textbook-based English. This study examines how Vietnamese lecturers responded to substantial role changes, did professional development, taught in new CLIL programs, and considered cultural, linguistic, and social aspects. This case study examined Vietnamese university CLIL instructors. This group provided interview, classroom observation, and curriculum document analysis data. This study examined CLIL university instructors' pedagogies and professional development, including local language, culture, and social activities, using Vygotsky's sociocultural theory of learning and instruction. Studies show CLIL educators need CLIL-specific pedagogy, methodology, and professional development. A bilingual education goes beyond foreign language instruction.

Martínez Agudo (2021) studied the impact of CLIL on content acquisition. The survey included 318 students from Extremadura's autonomous community's 10 primary and secondary schools and public bilingual and non-bilingual charter schools. Factor and discriminant analyses using school and educational level factors determine if CLIL or other variables explain observed differences. According to statistical study, CLIL improves content subject acquisition and bilingual students outperform monolingual students at both levels, notably in secondary education. CLIL's long-term impact on subject matter acquisition was shown when public bilingual schools outperformed charter non-bilingual schools after Compulsory Secondary Education.

Rong and Nair (2021) examined whether CLIL improves English writing student language and content. CLIL's impact on Chinese college students' Business English Writing instruction was examined. A quasi-experimental design was used. Eight weeks were spent on the experiment. The Control Group learned Business English Writing traditionally, while the Experimental Group used CLIL. Hunan's Shaoyang University's 80 third-year Business English students participated. Two 40-student classes were sampled.

Tests before and after. Data analysis used independent samples t-test. A pilot test assessed the writing test's reliability and validity before the study. The Experimental Group employing CLIL teaching methods wrote business English reports, memos, and letters better than the Control Group using traditional methods. Next writing classes should use CLIL. CLIL improved Business English writing, affecting education.

In a newly installed Italian CLIL program, Virdia (2022) examined content-subject and cognitive achievement differences between CLIL and non-CLIL classes. 988 fourth-graders took TIMSS, a proven science test. English, German, and the students' native Italian were used for science. Early studies disregarded causal links, but counterfactual research did not. Both treatment groups had slightly slower scientific learning than the control group due to CLIL. Both CLIL groups hurt content-specific knowledge acquisition but not reasoning or application. CLIL effects were only significant for low-language scorers and students from disadvantaged backgrounds.

Hidalgo and Ortega-Sanchez (2023) examined scientific literature to evaluate how CLIL affects Pre-school, Primary, and Secondary English language learning. Language acquisition, not content learning, has dominated studies over the past decade, according to this comprehensive analysis. Statistics show that year and country do not affect research designs in selected publications. No association detected between schooling and language teaching. Research shows that Spanish bilingual education improves curriculum topic knowledge. Thus, multidisciplinary longitudinal research on quality bilingual education is essential to investigate schooling phases.

Segura (2023) analyzed pre-primary teachers' CLIL knowledge and underlined CLIL implementation's projected benefits, challenges, and teacher and student needs. For this, 129 pre-primary teachers (76 in-service and 53 pre-service) completed an online survey. Atlas.ti displayed R-coded responses. According to the report, most employed teachers know CLIL but not trainees. Teachers hope CLIL helps them and pupils. Pre-primary foreign language teachers need methodology, training, guidelines, materials, and stakeholder support.

Most CLIL and non-CLIL learners' motivation studies were quantitative or neglected socioeconomic status, according to Buchingham and Iwaniec (2023). Many academics agreed that CLIL students were more motivated than non-CLIL students, but no student studies explained why. This mixed-methods study assessed CLIL and non-CLIL learners' current and future self-visions using the L2 motivated self-system and self-concept. 348 15-year-olds in Madrid were examined for SES, English, academic, and teacher expectations. Researchers held motivated student focus groups. Despite no significant SES difference, CLIL students had stronger self-concept and ideal L2 self-visions, which may explain their English study motivation. The L2 ought-to self provided secondary but valuable motivation. Fltoum (2023) explored how CLIL affects pupils' arithmetic and language skills. The 12-week mixed-method strategy examined data in

three parts. This study involved 28 Introductory Algebra students. The study suggested a CLIL curriculum to address student issues.

Content and Language Integrated Learning helped heterogeneous Swiss primary school students learn English, according to Schmid (2023). Two task-based CLIL modules integrating English and art were implemented in diverse primary classes using lesson study, focusing on three high-, average-, and low-achieving English learners. The Communication Orientation of Language Teaching (COLT) observation system was used to analyze their spoken language performance. Learning options were examined with teachers and students. Strong and ordinary students developed their English speaking skills similarly. Low-achieving students used CLIL activities differently but met English art speaking goals.

Poveda-Garcia-Noblejas and Antropova (2024) used WoS and Scopus for PRISMA-compliant systematic review. Extrinsic to scientific, methodological, and content-based aspects were studied in 142 2018–2022 publications. Comparing methodological and content-based factors to CLIL evaluation measures and employing 4Cs. CLIL investigations occurred across many continents. Secondary schools valued science. Quality and quantity research were balanced, favoring questionnaires. Cognition was overlooked in science: communication ruled. Science intrigued CLIL. Language improvements were prioritized, while other sectors grew. The findings improved CLIL research.

Farouk (2024) examined how CLIL improved second graders' reading at Abu-Bakr El-Siddeeq Primary School in Beni-Suef. A pre-test taught CLIL these skills. An experimental group of 32 students was created. Experimental group pre-tested. Data came from 2022-2023's first semester. One group received a post-test following software training. The results showed group improvement. Program improved these skills. Data analysis yielded research findings, recommendations, and future research.

Sari et al. (2024) found that English as a lingua franca boosted CLIL research. Most studies featured secondary to upper school pupils who learnt L1. The topic was primary education and teachers' viewpoints. This study examined how CLIL affects primary school students' English skills to prove its viability. The English ability and skills of 64 third and 62 fourth graders in a Surabaya, Indonesia, primary school were studied using descriptive quantitative methods. Students learned English through CLIL. Students showed basic to advanced English. Overall, writing, hearing, and English were good. All skills were above average. For CLIL students, strong English exposure and input from content-subject resources created this. Content-based skills helped them learn the language. Students needed to increase reading detail scores.

Lo (2024) examined CLIL students' language obstacle self-regulation and learning results. The hardest CLIL model was listening for 167 junior secondary students from three Hong Kong schools, who had moderate self-regulation and

different linguistic difficulties. A fairly positive correlation exists between self-regulation and perceived linguistic obstacles. Motivation predicted L2 proficiency and topic subject accomplishment in multiple regression analysis, but not self-preparation, monitoring, or reflection. CLIL students of all abilities needed self-regulation and linguistic skills to learn.

Mettewie et al. (2024) longitudinally examined CLIL's socio-affective benefits. The 18-month study examined classroom anxiety, satisfaction, and language acquisition motivation (task value, success expectancy, and cost) in 756 French-speaking primary and secondary school students taking CLIL or mainstream foreign language programs and studying English or Dutch as a 'language other than English.' Personal history and target language vocabulary were assessed. Like earlier cross-sectional socio-affective studies, CLIL improved pleasant feelings and language learning motivation. Longitudinal CLIL effects were low, notably on baseline vocabulary. Data often disprove the idea that CLIL boosts language emotions and learning motivation.

Media exposure, CLIL, and other factors affected English acquisition among Grade 1 students in Catalonia, Spain, according to Soto-Corominas et al. (2024). At the start and conclusion of Grade 1, 176 students from 14 schools took a receptive and productive English test. CLIL did not help pupils, and Grade 1 ability was the best predictor of year-end ability. Students with more English extracurriculars and educated mothers scored higher by Grade 1.

Wunberg et al. (2024) found that two years of CLIL may increase Grade 8 pupils' English self-concepts but lower their math self-concepts. As overlooking pre-existing disparities between CLIL and non-CLIL students has previously inflated CLIL benefits, the study examined selection and preparation implications from selective access and better English education before CLIL. We had 5,963 academic-track pupils. Selection biases were reduced by matching propensity scores. The impact of CLIL on English and math self-concepts was examined using structural equation modeling. Students' math self-concepts were unaffected by CLIL. This study examined how CLIL affects students' subject-wide self-concepts. Future CLIL research must consider selection and preparation effects for unbiased estimates.

Yacoub (2024) said CLIL-based curriculum hindered ESP incorporation. The researcher used a quasi-experimental quantitative approach to test thirty first-year secondary students' ESP-integrated reading and writing skills after teaching a comprehensive CLIL-based EFL curriculum. Integration was assessed by pre-posttests and rubrics. THE CLIL-based program significantly improved students' ESP integrated reading and writing subskills at 0.01. Most impact was 1.57 for combined reading and writing, followed by ESP reading (1.53) and writing (1.33). These findings recommend teaching secondary students subject-specific information, language-related cultural awareness, cognitive aspects, and communication skills using CLIL principles.

Studies conducted on CLIL in Indian Context

Vency and Ramganesh (2013) examined if CLIL might teach language in India. The study found that CLIL employing science and technology to teach language works. The findings imply India should consider CLIL. Sudden changes might endanger and demotivate students. The CLIL framework has substantially enhanced students. The authors found that India's CLIL model has improved learning outcomes.

Lal and George (2017) define CLIL as a synthesis of communication and content. These two components must work together for language acquisition proficiency. Proponents believed this technique fit the Indian school system. This technique motivates Indian students by giving them autonomy in the learning process. The research gaps have been identified by the investigators through the above review of the literatureconducted is that Content and Language Integrated Learning (CLIL) represents a pedagogical approach that remains underutilized in educational institutions in India. The researchers aimed to examine the potential effects of Content and Language Integrated Learning (CLIL) on English proficiency in students in grades 4 and 5. The objective of this present study was to assess whether the implementation of CLIL methodology, which integrates language and subject instruction, results in enhanced English language skills. This intervention aimed to improve understanding of the English language. There is a scarcity of studies on CLIL in primary education, particularly within the Indian context.

Hypotheses of the study

There is no significant difference between CLIL pedagogy and Non-CLIL pedagogy on language scores of primary grade students.

There is no significant difference between CLIL pedagogy and Non- CLIL pedagogy on content scores of primary grade students.

Methodology

The present study was conducted in Quasi Experimental setting with Pretest Post-test Control Group design to collect data. The study participants (both for experimental and control group) were selected from the students enrolled in six sections of Classes 4th and 5th of two private schools in Banur, Punjab. Both schools had CLIL as Experimental groupand Non- CLIL as Control group. The intervention group was taught using CLIL methodology whereas control group was taught through bilingual method by the Investigator.

Achievement test was developed by the researcher to assess the achievement in social science as a result of teaching strategies. The test was based on the syllabus of CBSE four classes IV, V

Results Analysis

Quantitative Analysis was done at two levels i.e. Descriptive Analysis and Inferential Analysis (Hypotheses testing). Out of 370 students, 191 (51.60%) were Boys and 179 (48.40%) were girls. Out of 200 students

in CLIL group, 104 (52%) were Boys and 96 (48%) were girls. Similarly, out of 170 students in Non-CLIL group, 87 (51.18%) were boys and 83 (48.82%) were girls.

Table 1: Descriptive analysis of Pre test and Post test scores of Language and Content

								Skewness		Kurtosis	
	Group	N	Mean	Median	SD	Minimu	Maximu	Skewness	SE	Kurtosis	SE
Pre language scores	CLIL	200	9.64	10	2.34	4	15	0.0492	0.172	0.241	0.342
	NON-CLIL	170	9.69	10	2.89	4	15	0.0512	0.186	-0.315	0.37
Pre Content scores	CLIL	200	9.38	9	3.52	2	17	0.3824	0.172	-0.527	0.342
	NON-CLIL	170	9.48	10	3.72	1	18	0.136	0.186	-0.754	0.37
Post Language Scores	CLIL	200	12.4	12	2.65	7	19	0.167	0.172	-0.528	0.342
	NON-CLIL	170	11.6	11	3.03	5	19	0.266	0.186	-0.411	0.37
Post Content Scores	CLIL	200	12.6	12	3.64	4	21	0.233	0.172	-0.493	0.342
	NON-CLIL	170	11.4	11	3.68	3	20	0.105	0.186	-0.638	0.37

The table 1 presents descriptive statistics for language and content scores in both CLIL (Content and Language Integrated Learning) and NON-CLIL groups, measured before and after the intervention. The pre-language scores exhibit similar means for CLIL (M = 9.64, SD = 2.34) and NON-CLIL (M = 9.69, SD = 2.89), with negligible skewness and kurtosis values. Pre-content scores show slightly lower means for CLIL (M = 9.38, SD = 3.52) compared to NON-CLIL (M = 9.48, SD = 3.72), with minor skewness and negative kurtosis. Post-intervention, the CLIL group demonstrates higher mean scores in both language (M = 12.4) and content (M = 12.6) compared to NON-CLIL (M = 11.6 and M = 11.4, respectively). Variability remains comparable across groups, with skewness and kurtosis values suggesting near-normal distributions.

Table 2: Group wise Gain Score analysis for Language scores

Variable	Group	N	Mean	SD	SE	df	t test	p-value	Cohen's d
GAIN SCORES IN	CLIL	200	2.76	1.69	0.119	368	4.89	<0.001	0.51
LANGUAGE	NON-CLIL	170	1.9	1.68	0.129				

From above table 2, it can be deduced that t value came out to be 4.89 with p value <0.001 which means that CLIL group performed better than non-CLIL group in Language scores. Effect size for this comparison was calculated which came out to be 0.51 (Cohen's d) which considered to be medium effect size. The above result showed that CLIL as a pedagogy worked for students in terms of gain scores in language.

Table 3: Group wise Gain Score analysis for Content scores

Variable	Group	N	Mean	SD	SE	df	Welch t test	p-value	Cohen's d
GAIN SCORES IN CONTENT	CLIL	200	2.73	1.88	0.133	368	6.91	<0.001	0.71
	NON-CLIL	170	1.8	1.61	0.124				

From above table 3,it can be deduced that Welch's t value (as Levene's test of Homogeneity was not fulfilled) came out to be 6.81 with p value <0.001 which means that CLIL group performed better than Non-CLIL group in Language scores. Effect size for this comparison was calculated which came out to be 0.71 (Cohen's d) which considered to be large effect size. The above result showed that CLIL as a pedagogy worked for students in terms of gain scores in Content.

Discussion

According to the findings of the current study, which was carried out in, elementary school students who were exposed to CLIL pedagogy demonstrated significant improvements in their English language proficiency as well as an enhanced comprehension of the subject matter. These findings were in strong agreement with the findings reported by Zarobe and Lasagabaster (2010) and Cañado and Luisa (2018), who discovered that CLIL pedagogy significantly improves language skills, particularly speaking and listening, without compromising the learning of content. As a result of the integrative nature of CLIL, students were able to acquire linguistic competence while simultaneously learning complex academic concepts in the current study. This is a result that is also evidenced in the longitudinal research conducted in Spain by Merino and Lasagabaster (2018). This bilingual aspect of CLIL is very important in Indian context specifically in Punjab context where English is not a first language of students and in primary education, it is the best opportunity for teachers to make students familiar to second language by attaching it to subject matter.The fact that these findings are consistent with those found in earlier research lends credence to the notion that CLIL, as a method of instruction, offers benefits that are dual in nature: cognitive and linguistic development. The findings of the research conducted by Merino and Lasagabaster in Spanish-speaking regions have relevance in the context of India, particularly in the state of Punjab, where a significant number of students navigate environments that accommodate multiple languages.Limitations of the present study were that only Social Studies as a subject was integrated with Language.Only Private Schools were taken for this study.

Educational Implications of the present study are that this research can guide elementary education curriculum designers to better integrate CLIL pedagogy, ensuring equal weight for language competency and content acquisition. To increase student motivation and engagement, teachers can use CLIL success insights to integrate language learning with relevant information from other topics.To accurately assess

language competence and topic knowledge in primary grades, researchers can explore CLIL-aligned pedagogical techniques. Policymakers can promote CLIL pedagogy integration in elementary schools to meet educational standards by considering research findings. These findings support NEP 2020 pedagogical concerns, emphasizing multidisciplinary approaches in primary, secondary, and senior secondary classrooms. Skillful CLIL implementation can enhance teaching methods in bilingual or multilingual classrooms. Suggestions for future researchers of CLIL based on this study includes longitudinal studies can track the academic performance and language proficiency of children who have participated in CLIL programs from primary to secondary education. This would show CLIL's long-term effects on learning.Comparative Analysis can evaluate the impact of CLIL on learning outcomes including academic achievement, language competency, and cognitive development compared to other language instruction methods like immersion programs and traditional classrooms. This may reveal CLIL's distinctive contributions to primary education. Research can examine how contextual elements like school resources, student demographics, and community support impact the effectiveness of CLIL instruction. Qualitative insights can be applied to research students' and teachers' CLIL perspectives. Study motivation, engagement, linguistic attitudes, and cultural awareness to understand CLIL's non-cognitive effects on primary grade children. Research on teacher training and professional development programs for CLIL instructors can be done.

References

1. Adijaya, M A. (2023). Implementation of Content and Language Integrated Learning (CLIL) in Teaching English for Guiding. Journal for Lesson and Learning Studies, 6(1), 1-8. https://doi.org/10.23887/jlls.v6i1.59570
2. Adipat, S. (2021) Developing Technological Pedagogical Content Knowledge (TPACK) through Technology-Enhanced Content and Language-Integrated Learning (T-CLIL) Instruction. EducInfTechnol 26, 6461–6477 .https://doi.org/10.1007/s10639-021-10648-3
3. Aksnes, D.W., Langfeldt, L. and Wouters, P. (2019), “Citations, citation indicators, and research quality: an overview of basic concepts and theories”, SAGE Open,Vol.9 No.1,pp.1-17.
4. Al Hajri, M., Al Mekhlafi, A., & Al Barwani, T. (2021). Connecting the Dots: Impact of CLIL on Vocabulary Size and Content Mastery in Higher Education. Multicultural Education, 7(9).
5. Ana Llinares & Anne McCabe (2023) Systemic functional linguistics: the perfect match for content and language integrated learning, International Journal of Bilingual Education and Bilingualism, 26:3, 245-250, DOI:10.1080/13670050.2019.1635985

6. Anderson, L. W., &Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives: complete edition. Addison Wesley Longman, Inc..
7. Awan, M A., &Sipra, M A. (2018). CLIL: Content based Instructional Approach to Second Language Pedagogy. Arab World English Journal, 9(1), 121-133. https://doi.org/10.24093/awej/vol9no1.9
8. Ball, P., Kelly, K A., & Clegg, J R. (2016). Putting CLIL Into Practice. http://ci.nii.ac.jp/ncid/BB2032838X
9. Bauer-Marschallinger, S. (2022). CLIL with a capital I: Using cognitive discourse functions to integrate content and language learning in CLIL history education (Publication No. 62480)[Doctoral dissertation, University of Vienna]. U: theses.
10. Beaudin, C. (2021). A classroom-based evaluation on the implementation of CLIL for primary school education in Taiwan. English Teaching & Learning,46(2), 133-156. https://doi.org/10.1007/s42321-021-00093-3
11. Buyamin, B., Rahayu, B., Suradi, S., Herawaty, I., Suryadi, S., Syaifullah, D. H., Kurniawati, A., &Syahr, Z. H. (2023). The influence of war and global economy on article publication (Bibliometric analysis using Biblioshiny-R). https://doi.org/10.21203/rs.3.rs-2680363/v1
12. Cañado, M L P. (2018). Innovations and Challenges in CLIL Teacher Training. Theory Into Practice, 57(3), 1-10. https://doi.org/10.1080/00405841.2018.1492238
13. Cañado, M. L. P. (2018). The effects of CLIL on L1 and content learning: Updated empirical evidence from monolingual contexts. Learning and Instruction, 57, 18-33.
14. Chostelidou, D., &Griva, E. (2014). Measuring the effect of implementing CLIL in higher education: An experimental research project. Procedia-Social and Behavioral Sciences, 116, 2169-2174.
15. Chumbay, J., & Ochoa, J. F. Q. (2020). Language-Driven CLIL: Developing Written Production at the Secondary School Level. English Language Teaching, 13(8), 74-90.
16. Coyle, D., Hood, P., & Marsh, D. (2010). CLIL: Content and language integrated learning (Vol. 9, pp. 1-10). Cambridge: Cambridge university press.
17. Coyle, D. (2007). Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies. International Journal of Bilingual Education and Bilingualism, 10(5), 543-562. https://doi.org/10.2167/beb459.0
18. Cresswell, J. W. (2016). Advances in mixed methods research. Mixed Methods International Research Association.

19. Dalton-Puffer, C. (2011). Content-and-Language Integrated Learning: From Practice to Principles?. Annual Review of Applied Linguistics, 31, 182-204. https://doi.org/10.1017/s0267190511000092
20. Effendi, D. N., Irwandani, Anggraini, W., Jatmiko, A., Rahmayanti, H., Ichsan, I. Z., &MehadiRahman, M. (2021). Bibliometric analysis of scientific literacy using VOS viewer: Analysis of science education. Journal of Physics: Conference Series, 1796(1), 012096.https://doi.org/10.1088/1742-6596/1796/1/012096
21. Farouk Aly, O. (2024). The Effectiveness of CLIL Teaching Strategy in Enhancing Reading Skills among primary 48-66. 261(261), ,مجلةدراساتفيالمناهجوطرقالتدريس Pupils. School
22. Farouk Aly, O. (2024). The effectiveness of CLIL teaching strategy in enhancing reading skills among primary https://doi.org/10.21608/mjat.2024.337832 48-66.,261(261),مجلةدراساتفيالمناهجوطرقالتدريسpupils. school
23. Gabillon, Z. (2020). Revisiting CLIL: Background, pedagogy, and theoretical underpinnings. Contextes et didactiques. Revue semestrielleen sciences de l'éducation, (15).
24. Gajo, L. (2007). Linguistic knowledge and subject knowledge: How does bilingualism contribute to subject development? International Journal of Bilingual Education and Bilingualism, 10(5), 563-581.https://doi.org/10.2167/beb460.0
25. Galán-Rodríguez, N. M., Fraga-Viñas, L., Bobadilla-Pérez, M., Gómez-Sánchez, T. F., &Arcas, B. R. (2024). Methodological training in plurilingual Education in the Spanish Higher Education training programmes: are pre-service teachers ready for CLIL? Formaciónmetodológicaeneducaciónplurilingüeenlosprogramas de Educación Superior enEspaña:¿Estáelprofesoradoenformaciónpreparadoen AICLE?. Revista de Educación,403, 31-58.
26. Georgiou, S I. (2012). Reviewing the puzzle of CLIL. ELT Journal, 66(4), 495-504. https://doi.org/10.1093/elt/ccs047
27. Graham, K. M., Choi, Y., Davoodi, A., Razmeh, S., & Dixon, L. Q. (2018). Language and Content Outcomes of CLIL and EMI: A Systematic Review.Latin American Journal
28. Lo, A. W. (2024). Unlocking CLIL success: exploring the interplay between students' self-regulation levels, linguistic challenges and learning outcomes in Hong Kong secondary education. Language and Education, 1-19.
29. MartínezAgudo, J. D. D. (2021). The effects of CLIL on Subject Matter Learning: The case of Science in primary and Secondary Education. Content and Language Integrated Learning in Monolingual Settings: New Insights from the Spanish Context, 167-184.
30. Mettewie, L., Van Mensel, L., De Smet, A., &Galand, B. (2024). A longitudinal test of the impact of CLIL on language emotions and learning motivation. System, 103355.

31. Phan, T. T. (2021). Content and Language Integrated Learning (CLIL): A case study of lecturers' experiences of professional learning for Engineering and English Integrated Learning Program within Vietnamese Higher Education.
32. Poveda-Garcia-Noblejas, B., &Antropova, S. (2024). Analysis of CLIL-related research in school settings: A systematic review. Journal of Language and Education, 10(1 (37)), 146-159.
33. Rong, H., & Nair, S. M. (2021). Analyzing the effects of CLIL method in teaching business English writing in China. Research in Social Sciences, 4(1), 8-15.
34. Sisay, Y. (2017). Effect of language-driven CLIL on upper primary school students' critical thinking proficiency and reading comprehension achievement. Ethiopia. The Internet Journal Language, Culture and Society. URL: http://aaref. com. au/en/publications/journal.
35. Soto-Corominas, A., Roquet, H., & Segura, M. (2024). The effects of CLIL and sources of individual differences on receptive and productive EFL skills at the onset of primary school. Applied linguistics, 45(2), 364-382.
36. Virdia, S. (2022). The (heterogeneous) effect of CLIL on content-subject and cognitive acquisition in primary education: evidence from a counterfactual analysis in Italy. International Journal of Bilingual Education and Bilingualism, 25(5), 1877-1893.
37. Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Massachusetts: Harvard University Press.
38. Vygotsky, L. S. (1986). Thought and language. Cambridge, MA: MIT Press.
39. Wunberg, M., Baumert, J., Feddermann, M., Lohmann, J. F., &Möller, J. (2024). CLIL effects on academic self-concepts: Positive effects in English but detrimental effects in math?.Learning and Instruction, 92, 101923.
40. XiaochenRui, XiaochuLi, YuxiaLi&Yuen YiLo(2024)Examining the effects of teacher collaboration on student learning in a CLIL classroom,International Journal of Bilingual Education and Bilingualism,27:1,66-82,DOI: 10.1080/13670050.2022.2152276
41. Yacoub, E. S. A. (2024). The Effectiveness of CLIL based curriculum in Developing ESP Reading and writing Skills for Secondary Students. المجلةالدوليةللمناهجوالتربيةالتكنولوجية , 15(26),17-45

This article is licensed under a **Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY NC ND4.0)** License; copyright remains with the author(s).