

The Impact of CLIL on the Acquisition of Language Competences and Skills in L2 in Primary Education by Esther Nieto Moreno De Diezmas: A Paper Review

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April Nachel C. Cuyos

University of the Visayas, Cebu City, Philippines
Buanoy National High School, Buanoy, Balamban, Cebu, Philippines
ORCID: 0009-0006-1437-7142 | aprilnachel_cuyos@uv.edu.ph

Leio PJ R. Revelo

University of the Visayas, Cebu City, Philippines
Basak Community High School, Cabrereros St, Cebu City, Philippines
ORCID: 0009-0007-7138-0716 | leiopj_revelo@uv.edu.ph

Ma. Nanette C. Nibalvos

University of the Visayas, Cebu City, Philippines
Eastern Samar State University, Borongan City, Eastern Visayas, Philippines
ORCID: 0009-0004-8804-782X | nanette_nivalbos@uv.edu.ph

Eduardo F. Omaña

University of the Visayas, Cebu City, Philippines
Department of Education – Regional Office 7, Sudlon, Lahug, Cebu City, Philippines
ORCID: 0009-0009-2139-4575 | eduardo.omana@deped.gov.ph

Abstract

This paper review evaluates the effectiveness of Content and Language Integrated Learning (CLIL) in improving language skills among primary school students. The study utilized a large sample and reliable tests to ensure accurate and consistent results. It found that CLIL significantly enhances spoken production and interaction skills, but shows limited impact on reading, writing, and listening competences. The research highlights the strengths of CLIL in promoting oral language skills, while also pointing out its limitations due to the short duration of exposure and regional focus. The study did not consider factors like students' motivation or prior language proficiency, which could influence the outcomes. To improve the understanding of CLIL's effectiveness, future research should involve longer exposure and a more diverse participant pool, and account for additional influencing factors. This would help determine whether the benefits observed in spoken production and interaction can be extended to other language competences with more prolonged and varied implementation. Additionally, considering factors such as students' motivation, prior language skills, and socio-economic background could provide a more comprehensive understanding of how CLIL impacts language learning. Despite its limitations, the study provides valuable insights for educators and policymakers. It underscores the potential of CLIL to enhance speaking skills in young learners, which is crucial for their overall language development. The detailed analysis of various language competences and specific indicators within each competence contributes to a more nuanced understanding of CLIL's impact. This information is essential for shaping future educational strategies and interventions aimed at optimizing language learning outcomes. Overall, the study makes a significant contribution to the field of language education by offering a detailed analysis of CLIL's impact on primary school students.

Keywords: *Content and Language Integrated Learning (CLIL), Language acquisition, Educational strategies, Language competences, and Bilingual education*

The Author

Esther Nieto Moreno de Diezmas is a dedicated educator and researcher with a strong background in language education. She is the Chair of the Department of Modern Languages at the University of Castilla-La Mancha and the Director of the Research Group on Language Teaching and Learning (Investigación en Didáctica de las Lenguas y las Artes). Her main research interests focus on bilingualism and bilingual education, spanning from early childhood to higher education. Esther is currently leading several projects, including a research project funded by the University of Castilla-La Mancha - European Regional Development Fund (Universidad de Castilla-La Mancha - Fondo Europeo de Desarrollo Regional), an innovation project on teacher training and collaboration in English-Medium instruction, and a project funded by the Spanish Foundation for Science and Technology (Fundación Española para la Ciencia y la Tecnología) on integrating Science and Arts, called "Science and Arts Project (Ciencia y Artes Proyecto)."

Esther has extensive experience in teaching and researching innovative methods to improve language learning among young students. Her work primarily explores effective teaching strategies, such as Content and Language Integrated Learning (CLIL), to enhance language competences in primary education. Her commitment to advancing language education is evident in her thorough and well-structured studies, which aim to provide valuable insights for educators and policymakers.

Introduction

This paper examines the effect of Content and Language Integrated Learning (CLIL) to the attainment of the English language skills at the primary education level. The study compares the CLIL approach with conventional English as a Foreign Language (EFL) classroom teaching methods. The aforementioned method is considered revolutionary in language education as it integrates the learning of subject content with language acquisition, thereby providing a more immersive and practical learning experience. This approach is supported by European Union institutions as part of their efforts to promote multilingualism and improve language proficiency across member states. By embedding language learning within the context of other subjects, CLIL aims to enhance students' language competences more effectively than traditional methods. The main purpose of this review is to evaluate the effectiveness of CLIL in enhancing English language competences among primary school students, providing insights into its potential benefits and limitations compared to conventional EFL teaching.

Summary of the Research Paper

The study addresses the challenge of identifying effective methods to enhance English language skills among young learners. Specifically, it seeks to determine whether the focused method is more effective than traditional English learning methods. By comparing these approaches, the research aims to gather proof on the effectiveness of CLIL to enhancing language competences in primary school students.

Procedurally, this study utilized quantitative data. The research examined grade 4 primary students from Castilla-La Mancha. Participants involved had ages ranging from 9 to 10 years old. Such participants were divided into two groups. The first one was the CLIL students (intervention group), and the second group was the non-CLIL students (non-treatment group). The data was gathered for over three years using a diagnostic assessment from the educational system of Castilla-La Mancha which focused on four language competences which were writing, oral production and interaction, reading, and listening. In terms of the writing assessment, the students were asked to write an article about their favorite animal. Furthermore, the student participants shared their preferred choice of a new bedroom. Furthermore, the reading test engaged students in reading an email and answering related questions in the oral production and interaction test. On the other hand, the listening test involved students to watch a video about hygiene habits and respond to given questions.

In the analysis of the gathered data, the researchers utilized SPSS which stands for Statistical Package for Social Science. Cronbach's alpha was used to gauge the tests' internal consistency and reliability. Indeed, the reading and listening tests revealed reasonable reliability (Cronbach's alpha slightly below 0.7), and the writing and oral production and interaction tests yielded great reliability (Cronbach's alpha > 0.85). To check for the normal distribution, Kolmogorov-Smirnov Test (K-S test) was used in this study. The data results of the CLIL and non-CLIL groups were analyzed through the use of independent sample t-tests to determine if there were any significant differences. Marks out of 10 were used to display the results. This quantitative approach enabled the researchers to statistically differentiate across different language competences the performance of the two opposing groups.

The study revealed that students under CLIL performed significantly better in spoken production and interaction category. However, there were no major differences in reading and writing skills, and non-CLIL students performed slightly better than CLIL students in terms of the listening aspect. The author concludes that CLIL is a promising method particularly in enhancing speaking skills, but its overall effectiveness in primary level is restricted by factors like young age of the students and their short duration of exposure to the aforementioned method. More research is to be done to fully grasp CLIL's advantages and its limitations.

The key findings of the research show that students who underwent CLIL significantly performed better than students under conventional EFL teaching methods in spoken production and interaction category which makes it the only communicative competence with significant differences. In terms of writing, CLIL students demonstrated significant improvements in "preparing an outline before writing." Not falling behind, the non-CLIL students also performed exceptionally in the areas of "use of grammatical structures" and "clear and orderly presentation." In reading, CLIL students performed way better in "understanding space-time relations," but there were no significant results observed in other categories of reading. In listening, students under CLIL got a higher score in "identification of details and "global comprehension," while non-CLIL students performed greatly in "understanding of space-time relations" and "vocabulary." The results emphasized both pros and cons of the CLIL method in enhancing language competences of primary school students.

The study further concludes that CLIL yields positive results in developing the spoken production and interaction among primary students. Furthermore, CLIL learners had also obtained great scores in reading and writing but no significant differences. Listening was lowest to be positively affected, with students under CLIL obtaining lower results compared to the other group, but still no significant difference. CLIL students greatly performed in oral production and interaction, which significantly outperformed non-CLIL students in areas of answering questions, oral vocabulary, fluency, pronunciation, rhythm, active listening, intonation, preparing conversations, and respect for communicative rules categories. They revealed as well greater proficiency in understanding space-time relations in reading, global comprehension and identification of details in listening, and preparing an outline before writing, but students under CLIL committed more errors in grammar and demonstrated unclear presentations in their writing endeavors. They had a hard time in space-time relations in oral texts, and vocabulary. These findings contradict with studies in secondary school settings which typically show higher English proficiency with CLIL.

This study also suggests that selection of CLIL students and voluntary access to CLIL in high schools have the potential to increase proficiency and motivation that could reflect the positive results of CLIL. The study expected a slight lead in listening, but gains in reading, speaking (fluency), writing (fluency and lexical/syntactic complexity). The expectations were greatly established in the speaking category, the most favorably affected competence, and listening, the least improved under the CLIL intervention. Furthermore, categories of writing and reading had outcomes which were lower than the anticipated results. The study had then indicated that using CLIL in the early primary education may yield all the identified positive effects after several years which could justify the implementation of CLIL in elementary education schools, continuing to the secondary level.

Critical Analysis

In evaluating the study on CLIL (Content and Language Integrated Learning), it is important to consider both its strengths and weaknesses. The study demonstrates several strengths, including a robust methodology, rigorous data analysis, and a detailed evaluation of language competences. However, it also has notable weaknesses, such as limited significant findings, short duration of exposure, regional focus, and lack of control for other influencing factors. Here is a detailed examination of these aspects.

To begin with, the study has several strengths. Firstly, the methodology involved a large sample of primary school students, which enhances the reliability of the findings. A large sample of primary school students enhances the reliability of the findings because it increases the statistical power of the study, making it more likely to detect true effects and reducing the likelihood of Type II errors (false negatives) (Statology, 2021). Larger sample sizes also provide more accurate mean values, identify outliers that could skew the data in a smaller sample, and offer a smaller margin of error, thereby improving the precision of the results (Sciencing, 2021). Additionally, the inclusion of various language competences, such as reading, writing, listening, and speaking, provided a comprehensive assessment of the impact of CLIL. Additionally, the inclusion of various language competences, such as reading, writing, listening, and speaking, provided a comprehensive assessment of the impact of CLIL because it allows for a holistic evaluation of language acquisition and proficiency. By assessing multiple competences, researchers can identify specific areas of strength and weakness, offering a more detailed understanding of how CLIL affects different aspects of language learning (Ruiz de Zarobe, 2014). This comprehensive approach ensures that the findings are robust and applicable to real-world educational settings, where language skills are interdependent and multifaceted (Scott & Beadle, 2014).

Furthermore, the data analysis was rigorous, utilizing statistical methods like the Kolmogorov-Smirnov Test and independent sample t-tests. Furthermore, the data analysis was rigorous, utilizing statistical methods like the Kolmogorov-Smirnov Test and independent sample t-tests because these methods ensure the robustness and reliability of the findings. The Kolmogorov-Smirnov Test is used to determine if a sample comes from a specific distribution, which helps in validating the normality of the data (Watkins, 2017). Independent sample t-tests are employed to compare the means of two independent groups, allowing researchers to identify significant differences between groups (Flick, 2014). These statistical methods enhance the credibility of the study by providing a systematic approach to data analysis and reducing the likelihood of errors (Watkins, 2017).

The internal consistency and reliability of the tests were high, particularly for writing and oral production. Lastly, the study offered a detailed evaluation of different language competences and specific indicators within each competence, providing a nuanced understanding of the areas most affected by CLIL.

On the other hand, studying has several weaknesses. Firstly, it found significant improvements only in spoken production and interaction, with no significant differences in reading, writing, or listening. This suggests that the benefits of CLIL may be limited in younger students. Moreover, the relatively short duration of CLIL exposure (250 hours) might not be sufficient to observe significant improvements in all language competences, and longer exposure might yield different results. Additionally, the study was conducted in a single region (Castilla-La Mancha), which may limit the generalizability of the findings to other regions or contexts. Lastly, the study did not account for other

factors such as students' motivation, prior language proficiency, or socio-economic background, which could influence the results.

Thus, while the study provides valuable insights into the impact of CLIL on primary school students, its findings are somewhat limited by the short duration of exposure and the regional focus. Further research with longer exposure and a more diverse sample is needed to fully understand the benefits and limitations of CLIL.

Evaluation

In evaluating the study on Content and Language Integrated Learning (CLIL), it is essential to consider its validity, reliability, objectivity, potential biases, generalizability, originality, and significance. This comprehensive evaluation will provide a clearer understanding of the study's strengths and limitations. Validity and reliability are crucial as they ensure that the study accurately measures what it intends to and produces consistent results (Tazik, 2019). Objectivity is important to avoid researcher bias and ensure that findings are based on data rather than personal beliefs (Reiss & Sprenger, 2014). Potential biases, such as not accounting for students' motivation, prior language proficiency, and socio-economic background, can significantly influence outcomes and should be addressed to enhance the study's credibility (Nguyen, 2022). Generalizability is also a key factor, as findings from a single region may not apply to other contexts, necessitating similar studies in diverse settings to confirm the conclusions (Andringa & Godfroid, 2020). Lastly, the originality and significance of the study contribute to its overall impact and relevance in the field of language education.

To begin with, the study demonstrates strong internal validity due to its use of reliable tests and rigorous statistical methods for data analysis. This careful approach ensures that the results are accurate and consistent, reflecting a true measure of the impact of Content and Language Integrated Learning (CLIL) on language competences. The high internal consistency and reliability of the tests, particularly for writing and oral production, further support the credibility of the findings. Reliable tests and rigorous statistical methods are essential for ensuring internal validity, as they help to accurately measure the variables of interest and reduce the likelihood of measurement errors (Tazik, 2019). However, the external validity of the study is limited. Since the research was conducted in a single region, Castilla-La Mancha, the findings may not be generalizable to students in other regions or countries. This regional focus restricts the applicability of the results to broader contexts, suggesting that similar studies in diverse settings are necessary to confirm the generalizability of the conclusions. Research indicates that the generalizability of study findings is often compromised when the sample is not representative of the broader population, as regional differences in educational practices and student demographics can significantly influence outcomes (Andringa & Godfroid, 2020).

Furthermore, the author of the study appears to maintain a high level of objectivity by presenting a balanced view of the strengths and weaknesses of the Content and Language Integrated Learning (CLIL) approach. This balanced presentation enhances the credibility of the research. However, there are potential sources of bias that need to be considered. One such bias arises from the study's failure to account for factors like students' motivation, prior language proficiency, and socio-economic background. These factors can significantly influence language learning outcomes and might have affected the results. For instance, motivated students or those with higher initial language skills might perform better regardless of the teaching method used (Nguyen, 2022; Golonka, 2010). Additionally, the study's regional focus could introduce bias, as educational practices and student demographics in Castilla-La Mancha might differ from those in other regions. Addressing these potential biases in future research could provide a more comprehensive understanding of the effectiveness of CLIL.

Moreover, the generalizability of the study's findings is somewhat constrained due to its regional focus and specific sample population. Conducted exclusively in Castilla-La Mancha, the study's results may not be applicable to students in other regions or countries, where educational practices, cultural contexts, and student demographics might differ significantly. This limitation suggests that the observed effects of Content and Language Integrated Learning (CLIL) on language competences might vary in different settings. Additionally, the study's sample consisted of primary school students from a particular educational system, which may not reflect the diversity of student experiences and backgrounds found elsewhere. Research indicates that the generalizability of study findings is often compromised when the sample is not representative of the broader population, as regional differences in educational practices and student demographics can significantly influence outcomes (Henrich et al., 2010). To enhance the generalizability of the findings, future research should include a more diverse range of participants from various regions and educational contexts. This broader approach would help determine whether the benefits and limitations of CLIL observed in this study are consistent across different populations and settings, thereby providing a more comprehensive understanding of its effectiveness.

Finally, the study stands out for its originality and significance, offering fresh insights into the impact of Content and Language Integrated Learning (CLIL) on young learners. By focusing on primary school students, the research addresses a relatively underexplored area, as much of the existing literature predominantly examines CLIL's effects on older students. This unique focus helps fill a gap in the current understanding of how CLIL influences language

acquisition at an early age. The study's findings highlight both the potential benefits and limitations of CLIL, providing a balanced view that is crucial for educators and policymakers. Specifically, it underscores the effectiveness of CLIL in enhancing spoken production and interaction skills, while also pointing out the challenges in improving reading, writing, and listening competences. These insights are valuable for shaping future educational strategies and interventions aimed at optimizing language learning outcomes. Moreover, the study's detailed analysis of various language competences and specific indicators within each competence contributes to a more nuanced understanding of CLIL's impact, making it a significant addition to the field of language education. Research indicates that focusing on younger learners can provide critical insights into language acquisition processes that differ from those observed in older students, thereby enriching the overall understanding of educational methodologies (Lightbown & Spada, 2013).

To sum it up, while the study provides valuable insights into the impact of CLIL on primary school students, its findings are somewhat limited by the short duration of exposure and the regional focus. Further research with longer exposure and a more diverse sample is needed to fully understand the benefits and limitations of CLIL.

Conclusion

The main purpose of this review was to evaluate the effectiveness of Content and Language Integrated Learning (CLIL) in enhancing language skills among primary school students. By examining the study's methodology, data analysis, and findings, aimed to understand the strengths and weaknesses of the CLIL approach.

To summarize, the study has several strengths. It used a large sample of students and reliable tests, ensuring accurate and consistent results. Reliable tests and rigorous statistical methods are essential for ensuring internal validity, as they help to accurately measure the variables of interest and reduce the likelihood of measurement errors (Mackey & Gass, 2015). The detailed evaluation of different language competences provided a comprehensive understanding of the areas most affected by CLIL. However, there are also notable weaknesses. The study found significant improvements only in spoken production and interaction, with no major differences in reading, writing, or listening. The short duration of CLIL exposure and the regional focus limit the generalizability of the findings. Research indicates that the generalizability of study findings is often compromised when the sample is not representative of the broader population, as regional differences in educational practices and student demographics can significantly influence outcomes (Henrich et al., 2010). Additionally, the study did not account for factors like students' motivation or prior language skills, which could influence the results. These factors can significantly influence language learning outcomes and might have affected the results (Dörnyei, 2001).

Based on these observations, future research should consider longer exposure to CLIL and include a more diverse range of participants from various regions and educational contexts. It is also important to account for other influencing factors such as students' motivation, prior language proficiency, and socio-economic background. These improvements could provide a more comprehensive understanding of the effectiveness of CLIL.

In conclusion, the research paper offers valuable insights into the impact of CLIL on young learners. It highlights the potential benefits of CLIL in enhancing speaking skills, while also pointing out the challenges in improving other language competences. This balanced view is crucial for educators and policymakers in shaping future educational strategies. Despite its limitations, the study makes a significant contribution to the field of language education by providing a detailed analysis of CLIL's impact on primary school students.

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Appendices

Appendix A. Reference Research Study

You can view the research titled "**The Impact of CLIL on the Acquisition of L2 Competences and Skills in Primary Education**" by **Esther Nieto Moreno De Diezmas**, which serves as the foundation for this research paper review.

Research Link

https://drive.google.com/file/d/1erPtjUcTVShEcZ0wxco6tXk0Zs4sf5wH/view?usp=drive_link