CONTENT AND LANGUAGE INTEGRATED LEARNING IN BILINGUAL EDUCATION: WHAT CAN WE LEARN FROM THE PREVIOUS STUDIES?

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A B S T R A C T

CLIL is widely implemented in English as a foreign language class, but there has been no specific research conducted to identify the advantages and challenges of implementing it in the context of bilingual education. This study aims to examine the implementation of Content and Language Integrated Learning (CLIL) in bilingual education. Specifically, this study focuses on the benefits of CLIL in bilingual education and the challenges of implementing CLIL in bilingual education. Then, a recommendation to implement CLIL effectively was drawn using the benefits and the challenges of CLIL. This research was conducted by following the steps of a literature review. Data was collected from articles from accredited international journals published online from 2012 to 2022. The collected data were analyzed qualitatively using an interactive data analysis model, carried out in three stages of analysis: data reduction, data display, and conclusion drawing/verification. The data collected showed that CLIL improved mastery of a second language. It is because CLIL provides a lot of exposure for the students. Besides, CLIL enables students to acquire English by practicing it actively. The challenge in implementing CLIL lies in teachers', students', and teaching media readiness. To run CLIL effectively, it should be done by considering the quality, quantity, and consistency of the English exposure.

Introduction

Bilingual education is believed to have various benefits for students. One of the benefits of providing bilingual education to students is making them fast task-switching, i.e., being able to do one job and then switch to another immediately (Marian & Shook, 2012). This is because students are accustomed to switching codes or languages quickly while using two languages. They will also become multi-tasking people, which develops the ability to understand two languages simultaneously (Poarch & Bialystok, 2015). This ability usually forms other abilities that make it faster and more responsive to various situations. Therefore, students who can communicate bilingually tend to be good at doing other things requiring multi-tasking skills (Janic et al., 2020; Ware et al., 2020). For example, making decisions and solving problems (Hommel et al., 2011; Y. Yang et al., 2021).

When students understand two or more languages, information disclosure is even more comprehensive. This means that students' access to various information needed to increase knowledge and knowledge is wide open (Bright & Filippi, 2019). This can allow students to continue their education to a higher level with a broader choice. For example, with good English or foreign language skills, options for higher education for students are not limited to the national scale but also internationally.

In learning a language, students will also learn the culture of that language (Budasi et al., 2021). This is because language and culture are closely related. Understanding

culture helps students understand the context of using the target language. When students understand different cultures, they will better understand differences and will be able to adapt more quickly to changes (Wesołowska et al., 2018; Wulandari et al., 2022). Seeing the world that is constantly changing, students' bilingual abilities make it easier to deal with various changes that are constantly happening.

Students usually become more sensitive to changes or changes when using two or more languages in daily communication. That is a sign that students have great attention. In addition, students who understand two or more languages will be used to determine when to use a language, under what conditions, and to whom. In addition, many other students' abilities also develop or increase in communicating bilingually. For example, students can communicate with many people, be more confident, and more readily accept the variety or differences around them (Chen & Padilla, 2019).

In order to achieve maximum results, the implementation of bilingual education needs to be supported by an appropriate learning approach. One learning approach often implemented in bilingual education is Content and Language Integrated Learning (CLIL). CLIL is a learning approach that combines language and content approaches, where a second language (L2) or a foreign language is not only used as the language in learning instructions but also as an essential tool for building knowledge (Bekirogulları et al., 2022; Jiang et al., 2022). CLIL's goal is to increase students' knowledge and skills in a subject and their proficiency in the language being taught. There are 4C components in CLIL, namely: (1) content (subject matter), (2) communication (learning language and using), (3) cognition (learning and thinking processes), and (4) culture (developing intercultural understanding and global citizenship) (Graham et al., 2021).

Various studies have been conducted to determine the effect of CLIL implementation on the successful implementation of bilingual education. However, each study that has been carried out still examines CLIL implementation from a specific point of view separately. Thus, to gain a comprehensive understanding of the implementation of CLIL in bilingual education, a more thorough study is necessary that combines the results of previous studies. For this reason, this study aims to provide a complete picture of how CLIL is implemented in bilingual education, including its benefits and challenges. So the novelty of this study is that this research complements previous research studies which only explained the effect of CLIL on students' English language skills. This research provides the underlying reasons why CLIL can be an effective approach.

Research Method

This research was conducted by following the steps of the literature review research. According to Snyder (2019), there are four stages in a literature review: designing, conducting, analyzing, and writing the review. From the purpose of this study, it can be said that the literature review carried out in this study is an integrative review, namely a review carried out by synthesizing the results of previous studies to answer specific questions or prove something (Lubbe et al., 2020).

The data in this study were collected from articles published online in international indexed journals Scopus, DOAJ, and Thomson Reuters. The researcher selected the articles purposively. The articles that the researcher reviewed were articles published from 2012 to 2022. To find these articles, the researcher searched using several keywords related to the benefits of CLIL in bilingual education and the challenges of implementing CLIL in bilingual education. To ensure that the articles that researchers collect are indexed international articles, researchers search for these articles through indexed international journal portals such as ScienceDirect, MDPI, NCBI, and Sagepub.

The data successfully collected was then analyzed qualitatively using an interactive data analysis model. Following the analytical method, there are three primary stages that the researcher carried out in the process of analysis, data reduction, data display, and conclusion drawing/verification (Miles et al., 2014). At the data reduction stage, the researcher sorts the data to collect the data that the researcher needs according to the research objectives. In the data display stage, the researcher groups the data according to the research questions. Finally, at the conclusion drawing stage, the researcher draws conclusions based on the data that has been grouped at the data display stage.

Result and Discussion

Based on the purposes of the study, this section describes and discusses three main topics. First, it tells about the benefits of CLIL. The researchers explain why CLIL should be implemented to increase the students' English mastery. Second, it tells about the common challenges in implementing CLIL. The discussion of the challenges focuses on the problems normally found in CLIL implementation. Third, this section also provides recommendations to implement CLIL effectively, especially to promote students' English mastery.

Benefits of CLIL

In its application, CLIL is intended to build students' L2 understanding by using L2 in the learning process of several subjects. From the results of various studies, CLIL has been proven to improve students' language skills, especially L2, so that students have balanced first and second language skills (García-Centeno et al., 2020; Graham & Yeh, 2022; Mearns, 2012). The most essential benefit of applying CLIL is enriching students' vocabulary (Bekirogulları et al., 2022; Jafarigohar et al., 2022; Salvador-García et al., 2020). This is because, through CLIL, students will be accustomed to reading teaching materials in L2 (de Zarobe & Zenotz, 2015; Salvador-García et al., 2020). Through reading, students will acquire new vocabulary and understand the use of these words from the example sentences provided in the text they read (van den Broek et al., 2022).

CLIL has also proven to help improve students' language skills. In implementing CLIL, students must communicate orally and in writing in L2 (Goris et al., 2019; Lasagabaster & Doiz, 2016). When students get used to and often get exposure to the use of L2 from the learning process that is carried out automatically, the ability to communicate with students in writing and orally in L2 also increases (Kozhevnikova, 2014; Lee & Lo, 2017). The same goes for listening and reading skills. Getting the students used to reading and listening to L2 during the learning process also improves students' reading and listening skills in L2 (Fan et al., 2015; Feddermann et al., 2022; Llinares & Dalton-Puffer, 2015; Pladevall-Ballester & Vallbona, 2016).

In addition, providing opportunities for students to use L2 also has a vital role in mastering L2. CLIL provides many opportunities for students to communicate in L2 because students must use L2 in the learning process (Dallinger et al., 2016; Piesche et al., 2016; Séror & Weinberg, 2021). The more often students used L2 both orally and in writing and coupled with the acquisition process from examples of using L2 according to context helps accelerate L2 mastery (Hüttner & Smit, 2014; Piesche et al., 2016). The process of learning from examples and direct practice using L2 is effective in improving students' speaking skills. Furthermore, in the long-term implementation process, CLIL is also proven to increase student motivation to master L2 (Pladevall-Ballester, 2018).

Another benefit of CLIL is that it helps students to do both intensive and extensive reading in L2 (BinSaran, 2021; Çelik & Yangın Ersanlı, 2022; Li & Zhang, 2020).

Students accustomed to reading in L2 will have no problems reading additional material from other sources. In addition to increasing students' L2 abilities, this can also increase students' knowledge from various sources. Furthermore, another positive impact of having better knowledge is that students can solve problems better (Campillo-Ferrer et al., 2020; Jiang et al., 2022; Riley et al., 2015).

From the explanation above, it can be understood that CLIL helps students improve their English mastery by providing enough exposure and opportunity to practice English. For some students whose English are not good, CLIL can be a complex process in the beginning because CLIL forces them to use English. However, when they have enough exposure, vocabulary, and practice, their English will improve, and CLIL will no longer be a problem. The explanation above also shows that CLIL has a similar process to the first language acquisition process. People acquire their first language because they have abundant exposure, and they have to use that language to communicate with other people, starting from their family members (Leona et al., 2021; Zauche et al., 2016). Once the students have enough vocabulary, they may use the language. The more exposure and practice they have make them master the language better. It is like a spiral line that gets bigger over time (see Figure 1). In other words, CLIL benefits potentially positively affect students' English mastery.
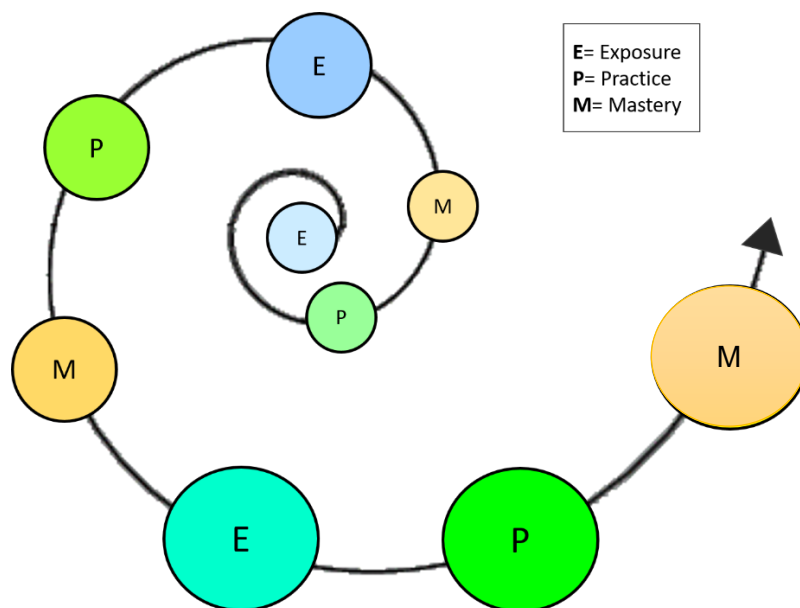

Figure 1. CLIL Effect on Students' English Mastery

Challenges in Implementing CLIL

CLIL has its challenges in the implementation process (Moreno, 2021). This challenge concerns school readiness, especially the readiness of teachers and students (Aizawa et al., 2020; Goris et al., 2019; McDougald, 2015). The greatest challenge faced by teachers is teaching subjects in L2. In schools implementing CLIL, teachers must be bilingual and master the first language and L2 well (Banegas & del Pozo Beamud, 2020; Olsson, 2021). They must master the first and second languages for oral and written communication (Fazio et al., 2015). Thus, teachers who are not native speakers of L2 often face problems. This problem is related to the teacher's difficulties in explaining the

material taught to students in L2, especially those still constrained in L2 (Goris et al., 2019; Jafarigohar et al., 2022).

The same thing happened to students. If students are not ready to take part in learning with the CLIL approach, they will often experience problems (Bruton, 2013; W. Yang & Yang, 2022). Students who have low L2 learning motivation tend to experience problems in the learning process with the CLIL approach (Harrop, 2012; Marsh & Marsh, 2012). Those who experience these problems will have difficulty in learning. Thus, they tend to have low learning achievement due to low L2 understanding (De Diezmas, 2016).

Another problem that often arises in the CLIL implementation process is the availability of CLIL learning tools that teaching materials and special learning media must support in L2 (Klimova, 2012). However, not all schools are ready with these specific learning materials and media, which impacts CLIL implementation in these schools. Sometimes, the subject matter available on the market cannot be directly used to learn with the CLIL approach. Students' L2 abilities may not match the language level used in the available material (De Diezmas, 2016). The problem will become bigger when the language level used in the material is much higher than the students' language skills (Pellegrino et al., 2013). Thus, students experience difficulties understanding the language and content of the studied material. The same thing also happens in learning media. Learning media with languages that are not following the student's language level also causes the same problem. Thus, the availability of suitable learning media is also a challenge in CLIL implementation. Therefore, the implementation of CLIL requires good preparation, which takes a lot of time, especially for determining learning materials and strategies (Арцишевська et al., 2021).

From the explanation above, it can be understood that the main challenges faced in implementing CLIL come from the language skills of teachers and students and learning support facilities such as teaching materials and learning media. So, from these challenges, the implementation of CLIL must be carried out with good preparation to minimize problems that teachers and students might face. The summary of the challenges in implementing CLIL can be seen in Figure 2.
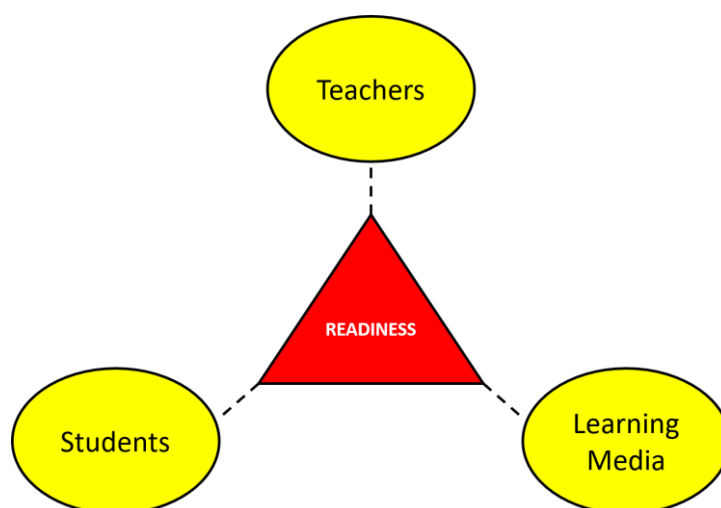

Figure 2. Challenges in Implementing CLIL

Recommendation for Effective CLIL Implementation

Considering the benefits and the challenges in implementing CLIL, some recommendations can be drawn for effective CLIL implementation. However, the effectiveness here is limited to improving students' English mastery. The researchers tried to summarize the recommendation into three words quality, quantity, and consistency. Those three words are considered the keys to CLIL effectiveness and are interrelated (see Figure 3).

The first key is quality. Quality here concerns teachers', learning media, and students' readiness. From the teachers' readiness, quality means the level of teachers' English mastery. To apply CLIL, the first thing that needs to be ensured is the quality of the teachers' English (Deswila et al., 2020; Novitasari et al., 2022). It is crucial because the teachers' English mastery will influence the quality of the English exposure. Besides, it also will affect the quantity of exposure. If the teachers can speak English fluently and correctly, they will not have any problems fully doing the teaching and learning process in English. It means that the teachers can provide quality and sufficient amount of English exposure when the teachers' English mastery is higher. The quality of the teaching media also has the same role as teachers' English mastery. When the teaching media provides quality English, it will be a good resource for English learning for the students. While students' quality here means that the students have a quality that they are ready to be forced to use English during the teaching and learning process (Qurays et al., 2023; Yufrizal, 2021).

The second key is quantity. Quality exposure with a limited amount will not significantly affect students' English mastery. Thus, in implementing CLIL, the teachers should ensure the students have sufficient English exposure (Sari, 2023). Besides, quantity also has something to do with the quantity of the opportunity to practice the English language. Teachers also must ensure that the students have sufficient opportunities to practice their English during the teaching and learning process. English learners can improve their English mastery significantly when they always practice English. Thus, in CLIL implementation, the teaching and learning process should be students centered that require students to be actively involved during the teaching and learning process. The more the students have exposure and practice their English, the better their English mastery will be.

The third key is consistency. CLIL program will be successful in making the students have good English mastery when it is done consistently. Consistent means continuously. Students need some time to improve their English mastery. Thus, doing CLIL consistently gives students more time to improve their English mastery. Consistency will also help the students change their perception from being forced to use English to becoming accustomed to using it in the classroom.
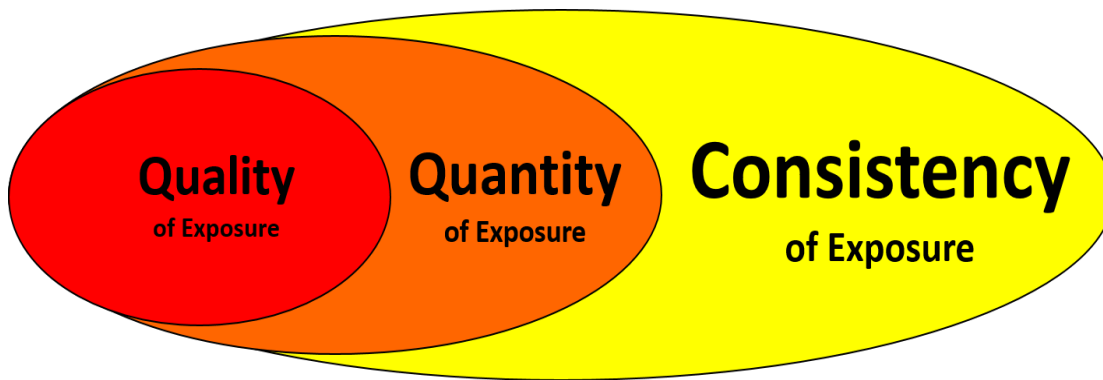
Figure 3. The Three Keys of CLIL Effectiveness

Conclusion

CLIL is considered effective to make students become a bilingual. However, there is no study that explains comprehensively about the benefits, challenges, and the recommendations to conduct CLIL effectively. Based on the results of the studies conducted, it can be concluded that CLIL provides many benefits to students' L2 abilities. CLIL improves students' L2 listening, speaking, reading, and writing skills. However, to get optimal benefits from CLIL, schools must prepare teachers, students, and learning tools that support them, considering that the most common problem that arises from implementing CLIL is the readiness of teachers, students, and learning tools. CLIL will have a positive impact in helping students become bilinguals if these three things are ready. However, on the contrary, when these three things are not ready, CLIL can also have a negative impact. Besides, CLIL will be successful if it is conducted by considering the quality of the English exposure, quantity, and consistency of the process. Considering the results of this study, it is necessary to carry out further research regarding the development of instruments for measuring school readiness in implementing CLIL. These instruments' availability will help schools planning or implementing CLIL to evaluate their readiness to determine policies and obtain maximum results from CLIL implementation.

References

Aizawa, I., Rose, H., Thompson, G., & Curle, S. (2020). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research*, 1–25. https://doi.org/10.1177/1362168820965510

Banegas, D. L., & del Pozo Beamud, M. (2020). Content and Language Integrated Learning: A Duoethnographic Study about CLIL Pre-Service Teacher Education in Argentina and Spain. *RELC Journal*, *53*(1), 151–164. https://doi.org/10.1177/0033688220930442

Bekirogulları, H., Burgul, N., & Yagcı, E. (2022). Promoting language development in physically disabled adults through sports: The content and language integrated learning method. *Frontiers in Psychology*, *13*, 969877. https://doi.org/10.3389/fpsyg.2022.969877

BinSaran, A. A. A. (2021). Use of Content and Language Integrated Learning (CLIL) for Teaching Reading Skills in Saudi Universities. *English Language Teaching*, *14*(8), 1. https://doi.org/10.5539/elt.v14n8p1

Bright, P., & Filippi, R. (2019). Editorial: Perspectives on the "Bilingual Advantage": Challenges and Opportunities. In *Frontiers in psychology* (Vol. 10, p. 1346).

https://doi.org/10.3389/fpsyg.2019.01346

Bruton, A. (2013). CLIL: Some of the reasons why … and why not. *System*, *41*(3), 587–597. https://doi.org/https://doi.org/10.1016/j.system.2013.07.001

Budasi, I. G., Satyawati, M. S., & Anggayana, W. A. (2021). The status of lexicon used in Tabuh Rah ritual in Menyali Village North Bali: An Ethnolinguistic study. *Kasetsart Journal of Social Sciences*, *42*(1), 3151. https://doi.org/10.34044/j.kjss.2021.42.4.2542-

Campillo-Ferrer, J.-M., Miralles-Martínez, P., & Sánchez-Ibáñez, R. (2020). CLIL teachers' views on cognitive development in primary education. *Palgrave Communications*, *6*(1), 97. https://doi.org/10.1057/s41599-020-0480-x

Çelik, F., & Yangın Ersanlı, C. (2022). The use of augmented reality in a gamified CLIL lesson and students' achievements and attitudes: a quasi-experimental study. *Smart Learning Environments*, *9*(1), 30. https://doi.org/10.1186/s40561-022-00211-z

Chen, X., & Padilla, A. M. (2019). Role of Bilingualism and Biculturalism as Assets in Positive Psychology: Conceptual Dynamic GEAR Model. *Frontiers in Psychology*, *10*, 2122. https://doi.org/10.3389/fpsyg.2019.02122

Dallinger, S., Jonkmann, K., Hollm, J., & Fiege, C. (2016). The effect of content and language integrated learning on students' English and history competences – Killing two birds with one stone? *Learning and Instruction*, *41*, 23–31. https://doi.org/https://doi.org/10.1016/j.learninstruc.2015.09.003

De Diezmas, E. N. M. (2016). The impact of CLIL on the acquisition of L2 competences and skills in primary education. *International Journal of English Studies*, *16*(2), 81–101. https://doi.org/10.6018/ijes/2016/2/239611

de Zarobe, Y. R., & Zenotz, V. (2015). Reading strategies and CLIL: the effect of training in formal instruction. *The Language Learning Journal*, *43*(3), 319–333. https://doi.org/10.1080/09571736.2015.1053284

Deswila, N., Kustati, M., Besral, B., & Sukandi, S. S. (2020). Content and Language Integrated Learning (CLIL) Approach across Curriculum in Science Classrooms: Are the English Language Use and Learning Reveal? *Journal of Innovation in Educational and Cultural Research*, *1*(1), 15–21. https://doi.org/10.46843/jiecr.v1i1.4

Fan, S. P., Liberman, Z., Keysar, B., & Kinzler, K. D. (2015). The Exposure Advantage: Early Exposure to a Multilingual Environment Promotes Effective Communication. *Psychological Science*, *26*(7), 1090–1097. https://doi.org/10.1177/0956797615574699

Fazio, A., Isidori, E., & Bartoll, Ó. C. (2015). Teaching Physical Education in English using CLIL Methodology: A Critical Perspective. *Procedia - Social and Behavioral Sciences*, *186*, 918–926. https://doi.org/10.1016/j.sbspro.2015.04.041

Feddermann, M., Baumert, J., & Möller, J. (2022). Just selection and preparation? CLIL effects on second language learning. *Learning and Instruction*, *80*, 101578. https://doi.org/https://doi.org/10.1016/j.learninstruc.2021.101578

García-Centeno, M.-C., de Pablos Escobar, L., Rueda-López, N., & Calderón Patier, C. (2020). The impact of the introduction of bilingual learning on sixth grade educational achievement levels. *PloS One*, *15*(6), e0234699. https://doi.org/10.1371/journal.pone.0234699

Goris, J., Denessen, E., & Verhoeven, L. (2019). Effects of content and language integrated learning in Europe A systematic review of longitudinal experimental studies. *European Educational Research Journal*, *18*(6), 675–698. https://doi.org/10.1177/1474904119872426

Graham, K. M., Matthews, S. D., & Eslami, Z. R. (2021). Using Children's Literature to Teach the 4Cs of CLIL: A Systematic Review of EFL Studies. *Latin American Journal of Content & Language Integrated Learning*, *13*(2), 163–189. https://doi.org/10.5294/laclil.2020.13.2.2

Graham, K. M., & Yeh, Y.-F. (2022). Teachers' implementation of bilingual education in Taiwan: challenges and arrangements. In *Asia Pacific Education Review* (pp. 1–12). https://doi.org/10.1007/s12564-022-09791-4

Harrop, E. (2012). Content and language integrated learning (CLIL): Limitations and possibilities. *Encuentro*, *Clil*, 57–70. https://eric.ed.gov/?id=ED539731

Hommel, B., Colzato, L. S., Fischer, R., & Christoffels, I. K. (2011). Bilingualism and creativity: benefits in convergent thinking come with losses in divergent thinking. *Frontiers in Psychology*, *2*, 273. https://doi.org/10.3389/fpsyg.2011.00273

Hüttner, J., & Smit, U. (2014). CLIL (Content and Language Integrated Learning): The bigger picture. A response to: A. Bruton. 2013. CLIL: Some of the reasons why … and why not. System 41 (2013): 587–597. *System*, *44*, 160–167. https://doi.org/https://doi.org/10.1016/j.system.2014.03.001

Jafarigohar, M., Divsar, H., & Etemad, P. (2022). The effect of CLIL context on the primary education EFL receptive and productive lexical growth. *Language Teaching Research*, 13621688221078996. https://doi.org/10.1177/13621688221078997

Janic, A., Cavanagh, P., & Rivest, J. (2020). Effect of bilingualism on visual tracking attention and resistance to distraction. *Scientific Reports*, *10*(1), 14263. https://doi.org/10.1038/s41598-020-71185-6

Jiang, P., Akhter, S., Azizi, Z., Gheisari, A., & Kumar, T. (2022). Exploring the role of content and language integrated learning approach in developing transversal skills in university students with respect to the mediating role of emotional intelligence. *Frontiers in Psychology*, *13*, 988494. https://doi.org/10.3389/fpsyg.2022.988494

Klimova, B. F. (2012). CLIL and the Teaching of Foreign Languages. *Procedia - Social and Behavioral Sciences*, *47*, 572–576. https://doi.org/https://doi.org/10.1016/j.sbspro.2012.06.698

Kozhevnikova, E. (2014). Exposing Students to Authentic Materials as a Way to Increase Students' Language Proficiency and Cultural Awareness. *Procedia - Social and Behavioral Sciences*, *116*, 4462–4466. https://doi.org/https://doi.org/10.1016/j.sbspro.2014.01.967

Lasagabaster, D., & Doiz, A. (2016). CLIL students' perceptions of their language learning process: delving into self-perceived improvement and instructional preferences. *Language Awareness*, *25*(1–2), 110–126. https://doi.org/10.1080/09658416.2015.1122019

Lee, J. H., & Lo, Y. Y. (2017). An exploratory study on the relationships between attitudes toward classroom language choice, motivation, and proficiency of EFL learners. *System*, *67*, 121–131. https://doi.org/https://doi.org/10.1016/j.system.2017.04.017

Leona, N. L., van Koert, M. J. H., van der Molen, M. W., Rispens, J. E., Tijms, J., & Snellings, P. (2021). Explaining individual differences in young English language learners' vocabulary knowledge: The role of Extramural English Exposure and motivation. *System*, *96*, 102402. https://doi.org/https://doi.org/10.1016/j.system.2020.102402

Li, D., & Zhang, L. (2020). Exploring teacher scaffolding in a CLIL-framed EFL intensive reading class: A classroom discourse analysis approach. *Language Teaching Research*, *26*(3), 333–360. https://doi.org/10.1177/1362168820903340

Llinares, A., & Dalton-Puffer, C. (2015). The role of different tasks in CLIL students' use of evaluative language. *System*, *54*, 69–79. https://doi.org/https://doi.org/10.1016/j.system.2015.05.001

Lubbe, W., Ham-Baloyi, W. ten, & Smit, K. (2020). The integrative literature review as a research method: A demonstration review of research on neurodevelopmental supportive care in preterm infants. *Journal of Neonatal Nursing*, *26*(6), 308–315. https://doi.org/https://doi.org/10.1016/j.jnn.2020.04.006

Marian, V., & Shook, A. (2012). The cognitive benefits of being bilingual. *Cerebrum : The Dana Forum on Brain Science*, *2012*, 13.

Marsh, D., & Marsh, A. D. (2012). *Content and Language Integrated Learning (CLIL) A Development Trajectory*.

McDougald, J. S. (2015). Teachers' attitudes, perceptions and experiences in CLIL: A look at content and language. *Colombian Applied Linguistics Journal*, *17*(1), 25. https://doi.org/10.14483/udistrital.jour.calj.2015.1.a02

Mearns, T. L. (2012). Using CLIL to enhance pupils' experience of learning and raise attainment in German and health education: a teacher research project. *The Language Learning Journal*, *40*(2), 175–192. https://doi.org/10.1080/09571736.2011.621212

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis* (3rd ed.). SAGE Publication.

Moreno, D. R. (2021). Student perspectives on dual immersion in California: A comparison with the perceptions of CLIL learners in Madrid. *Linguistics and Education*, *61*(1), 100887. https://doi.org/https://doi.org/10.1016/j.linged.2020.100887

Novitasari, N., Wahyuningsih, N., & Agustina, H. N. (2022). Improving Students' Speaking Skills through CLIL in Tourist Guiding Online Class. *Celtic : A Journal of Culture, English Language Teaching, Literature and Linguistics*, *9*(1 SE-Articles), 53–68. https://doi.org/10.22219/celtic.v9i1.20903

Olsson, E. (2021). A comparative study of CLIL implementation in upper secondary school in Sweden and students' development of L2 English academic vocabulary. *Language Teaching Research*, 13621688211045000. https://doi.org/10.1177/13621688211045000

Pellegrino, E., De Santo, M., & Vitale, G. (2013). Integrating Learning Technologies and Autonomy: A CLIL Course in Linguistics. *Procedia - Social and Behavioral Sciences*, *106*, 1514–1522. https://doi.org/10.1016/j.sbspro.2013.12.171

Piesche, N., Jonkmann, K., Fiege, C., & Keßler, J.-U. (2016). CLIL for all? A randomised controlled field experiment with sixth-grade students on the effects of content and language integrated science learning. *Learning and Instruction*, *44*, 108–116. https://doi.org/https://doi.org/10.1016/j.learninstruc.2016.04.001

Pladevall-Ballester, E. (2018). A longitudinal study of primary school EFL learning motivation in CLIL and non-CLIL settings. *Language Teaching Research*, *23*(6), 765–786. https://doi.org/10.1177/1362168818765877

Pladevall-Ballester, E., & Vallbona, A. (2016). CLIL in minimal input contexts: A longitudinal study of primary school learners' receptive skills. *System*, *58*, 37–48. https://doi.org/https://doi.org/10.1016/j.system.2016.02.009

Poarch, G. J., & Bialystok, E. (2015). Bilingualism as a Model for Multitasking. *Developmental Review : DR*, *35*, 113–124. https://doi.org/10.1016/j.dr.2014.12.003

Qurays, M., Wello, M. B., & Korompot, C. A. (2023). Applying Content and Language Integrated Learning (CLIL) to Improve Students ' English -Speaking Skill. *Pinisi:*

Journal of ARt, Humanity & Social Studies, *3*(3), 77–93.

Riley, B. L., Robinson, K. L., Gamble, J., Finegood, D. T., Sheppard, D., Penney, T. L., & Best, A. (2015). Knowledge to action for solving complex problems: insights from a review of nine international cases. *Health Promotion and Chronic Disease Prevention in Canada : Research, Policy and Practice*, *35*(3), 47–53. https://doi.org/10.24095/hpcdp.35.3.01

Salvador-García, C., Capella-Peris, C., Chiva-Bartoll, O., & Ruiz-Montero, P. J. (2020). A Mixed Methods Study to Examine the Influence of CLIL on Physical Education Lessons: Analysis of Social Interactions and Physical Activity Levels. *Frontiers in Psychology*, *11*, 578. https://doi.org/10.3389/fpsyg.2020.00578

Sari, S. Y. (2023). Content Language Integrated Learning (CLIL) and Non Native English Speaking (NNES) Learners English Language Acquisition. *Journal of English Language Teaching*, *12*(1), 372–379. https://doi.org/10.24036/jelt.v12i1.122827

Séror, J., & Weinberg, A. (2021). Exploring the longitudinal impact of university immersion: Bilingual spaces, multilingual values. *System*, *99*, 102523. https://doi.org/https://doi.org/10.1016/j.system.2021.102523

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*(July), 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

van den Broek, G. S. E., Wesseling, E., Huijssen, L., Lettink, M., & van Gog, T. (2022). Vocabulary Learning During Reading: Benefits of Contextual Inferences Versus Retrieval Opportunities. *Cognitive Science*, *46*(4), e13135. https://doi.org/10.1111/cogs.13135

Ware, A. T., Kirkovski, M., & Lum, J. A. G. (2020). Meta-Analysis Reveals a Bilingual Advantage That Is Dependent on Task and Age. In *Frontiers in psychology* (Vol. 11, p. 1458). https://doi.org/10.3389/fpsyg.2020.01458

Wesołowska, K., Hietapakka, L., Elovainio, M., Aalto, A.-M., Kaihlanen, A.-M., & Heponiemi, T. (2018). The association between cross-cultural competence and well-being among registered native and foreign-born nurses in Finland. *PloS One*, *13*(12), e0208761. https://doi.org/10.1371/journal.pone.0208761

Wulandari, P. D. M., Marsakawati, N. P. E., Dewi, N. L. P. E. S., & Santosa, M. H. (2022). Challenges Encountered by an Active Bilingual Child in Productive Skills. *Journey: Journal of English Language and Pedagogy*, *5*(2), 249–255. https://doi.org/10.33503/journey.v5i2.2086

Yang, W., & Yang, L. (2022). Evaluating Learners' Satisfaction with a Distance Online CLIL Lesson During the Pandemic. *English Teaching & Learning*, *46*(2), 179–201. https://doi.org/10.1007/s42321-021-00091-5

Yang, Y., Wu, S., Duñabeitia, J. A., Jiang, K., & Li, Y. (2021). The Influence of L2 Proficiency on Bilinguals' Creativity: The Key Role of Adaptive Emotion Regulation Strategies During the COVID-19 Pandemic. *Frontiers in Psychology*, *12*, 695014. https://doi.org/10.3389/fpsyg.2021.695014

Yufrizal, H. (2021). The impact of project based-CLIL on students' English proficiency. *Journal of Education and Learning (EduLearn)*, *15*(1), 11–18. https://doi.org/10.11591/edulearn.v15i1.15692

Zauche, L. H., Thul, T. A., Mahoney, A. E. D., & Stapel-Wax, J. L. (2016). Influence of language nutrition on children's language and cognitive development: An integrated review. *Early Childhood Research Quarterly*, *36*, 318–333. https://doi.org/https://doi.org/10.1016/j.ecresq.2016.01.015

Арцишевська, А., Гриня, Н., & Кузнецова, Л. Н. (2021). CLIL APPROACH IN

BILINGUAL EDUCATION. *Молодий Вчений.*