

# Universidad Internacional de La Rioja Faculty of Education

# Master's Degree in Bilingual Education High school teachers' perception on CLIL in an e-learning environment

MD presented by:	Diana Rocío Mateus Gacha
Type of work:	Experimental study
Director:	Dr. María Gemma S <b>á</b> nchez Gonz <b>á</b> lez
Date:	16/03/2023

# **Abstract**

The aim of this experimental research is to convey the perceptions of high school teachers of Content and Language Integrated Learning (CLIL) in an e-learning environment. Be that as it may, we begin with a brief overview of the bilingual curricula for learning a foreign language (FL) or a second language (L2) in high school programs using India and Colombia as examples.

Followed by a definition of virtuality in education while describing types of digital learning and focusing on the impact of e-learning in CLIL, the nuances between the online spaces will be detailed and explained to set the context and move towards the core of the study.

Using a small but significant sample of forty-six (46) surveys conducted online with CLIL teachers from more than six (6) different countries, and a combination of multiple choice and Likert-scale questions in a questionnaire, a quantitative study of teachers' perspectives and perceptions of their CLIL teaching experiences was carried out.

The findings of the data obtained to measure and analyse the views of CLIL teachers in a non-physical and remote context will be addressed. This evidence is used to support some techniques and educational processes that will be presented to satisfy the demands of students in online and remote environments.

Along with an excerpt of comments from a limited group of teachers and facilitators, who shared their views in an open-ended interview, some qualitative findings were obtained to gain a deeper understanding of the impact of delivering online classes to high school learners based on the CLIL approach.

**Keywords**: Content and Language Integrated Learning (CLIL), e-learning, digital learning, high school, teachers' perspectives.

# Table of contents

1	. Intr	oduc	ction	7
	1.1.	Just	tification	7
	1.2.	Brie	ef analysis of the state of the art	9
	1.3.	Obj	ectives of the study	10
2	Lite	ratu	re review	11
	2.1.	Bilir	ngualism In high school	11
	2.1.	1.	Multilingualism in India	13
	2.1.	2.	CLIL in Indian high school's curricula	15
	2.1.	3.	The case of Colombia	17
	2.2.	Dist	tance education in digital spaces	18
	2.2.	1.	Online education	19
	2.2.	2.	Virtual Education	20
	2.2.	3.	Distance education	20
	2.2.	4.	Remote emergency education	21
	2.2.	5.	Electronic learning	22
	2.3.	Tea	chers' perspectives and beliefs of CLIL in distance learning	23
	2.3.	1.	Emotional intelligence	24
	2.3.	2.	Metacognitive strategies and scaffolding	26
3	. Ехр	erim	ental framework	28
	3.1.	Con	ntext and research participants	29
	3.2.	Me	thodology	29
	3.3.	Ana	alysis tool/s (analysis and validation)	30

3.4.	Data collection	.30
4. Res	sults and Discussion	.42
4.1.	Quantitative results and findings - Questionnaire	.42
4.2.	Qualitative results and findings - interview	.46
5. Coi	nclusions	.49
6. Lim	nitations and further research	.52
Referen	nces	.54
Annexe	S	.61
Annexe	A. Questionnaire link in Google Forms	.61

# List of figures

Figure 1. Emotional intelligence in teaching	25
Figure 2. Participants' age	32
Figure 3. Participants' teaching experience in years	32
Figure 4. CLIL Teachers	33
Figure 5. Teachers' training in CLIL	34
Figure 6. Teachers' perceptions on CLIL in e-learning	36
Figure 7. Teachers' grade of teaching	36
Figure 8. Challenges faced during the pandemic.	37
Figure 9. Students' perception of taking a FL/L2 online	37
Figure 10. Teachers' satisfaction level on teaching CLIL online	38
Figure 11. Teachers' digital literacy	38
Figure 12. Teaching strategies online	39
Figure 13. Teachers' perceptions on CLIL-oriented statements	40
Figure 14. Teachers' comments and reflections	40
Figure 15. Teachers' interview questions	41

# List of tables

Table 1. Participants nationality	30
Table 2. Participants teaching country	31
Table 3. CLIL Language teaching A.	34
Table 4. CLIL Subject-Content teaching B.	34

# 1. Introduction

Even before the recent global events, that confined us all to an almost exclusively virtual world in the face of the pandemic constraints of the COVID-19 outbreak, the main mean of communication, along with the emergence of new technologies, has made distant learning a highly sought-after alternative to foreign language (FL) and second language (L2) learning (Cao et al., 2020 as cited in Francisco, 2021).

Starting from an analysis of what is currently happening in bilingualism and presenting the context in secondary schools in India and Colombia, followed by a definition of the varieties in distance education distinguished on the digital spaces, alongside its advantages and disadvantages, this paper will provide an overview of the context in which this study is conducted.

In order to design effective online instruction, teachers must employ various strategies and pedagogical mechanisms to meet learners' needs in an online and distant environment. Therefore, this paper investigates teachers' perceptions of these changes and how they affect students' FL and L2 acquisition, as well as explores some of the teachers' strategies to promote autonomous learning in a face-to-face distant environment.

The purpose of this experimental research is to measure high school teachers' perceptions of the e-learning environment and build on this information to obtain an outline of its benefits that contribute to extending and promoting FL and L2 acquisition throughout Content and Language Integrated Learning (CLIL), looking forward to encouraging future studies of this topic.

#### 1.1. Justification

Considering the results of earlier research and investigations on online-based learning, it is necessary to involve CLIL teachers to learn from their perspectives and reflections on the effectiveness of online FL and L2 teaching and learning. Given that virtual spaces have the potential to level the playing field for learners around the world, providing access to information and educational opportunities that were previously out of reach (Friedman,

2005), new forms of content delivery came into focus, and with them the use of new technologies in bilingualism.

CLIL did not fall by the wayside; this approach based on Content and Language Integrated Learning, and currently prevalent in several schools around the world, has experienced its role in virtuality, and it is here that this study purports to convey teachers' perceptions of distance learning when teaching an FL and L2 through CLIL.

Drawing on one's experience of over three years as a classroom teacher and a Spanish as a second language teacher in an offline bilingual environment in India, combined with the last two years of teaching entirely online, a reflection on the impact of the digital wave and the increased use of technologies in bilingual education, as stated by De' (et al., 2020), influences the concerns of what this paper reads about.

As part of the purpose of this dissertation, it is intended to have proximity to the group of interviewees without harming the results or affecting the data, but to gain a deeper understanding preferably with familiar use cases, in order to explore the potential implications of one's professional and personal development as an online teacher.

Hence, most of the interventions brought to this study are experiences told by the author's Indian and Colombian colleagues, among others, about their immersion in digital education and the changes they have perceived as well as their observations in secondary education while most of them were leading CLIL classes.

Differences in the curricula of these countries, but more importantly the similarities, are highlighted to provide an overview of teachers' beliefs and understanding of their role in digital literacy, regardless of the subject or language they currently teach; English and Spanish are examined as FL and L2 sample languages.

This paper will be focused then on the impact of e-learning in the acquisition of an FL and L2 from a teachers' perspective while applying the CLIL approach, which many of us have already experienced in practice. However, some reflections and insights will be made to allow a discussion on the strategies to improve the efficient acquisition of a second or foreign language based on metacognition and e-learning environments (Webster, 2003).

## 1.2. Brief analysis of the state of the art

As we have stated before, bilingual education is the call of the hour in several curricula around the world, with a slight increase in the global south in recent years (Sánchez & Manzano-Agugliaro, 2021). This is the case in India, a country known for its cultural diversity even in education. Given its plurilingualism and multilingualism, English has become the lingua franca that encourages schools to adjust their language programs to promote bilingualism from the fifth grade onwards (Xperiential, 2022).

Being the country with the highest number of responses in the survey addressed in this study, Colombian bilingualism is not yet fully developed in the national curriculum despite initiatives promoted since 1991 (Rodriguez-Bonces, 2011). However, in recent decades there have been some advances to strengthen the implementation of international curricula, such as the International Baccalaureate (IB), International General Certificate of Secondary Education (IGCSE) and national adaptations of American programs (Rodriguez-Bonces, 2011).

As far as distance education is concerned, remote learning in the form of e-learning, together with the information and communications technology (ICT) tools, has become the perfect tool and ally to overcome the limitations of face-to-face activities, as was the case with pandemic constraints. However, there are also some challenges that might complicate the use of the new technologies.

The next layer brings CLIL into play and shows how it has been applied – or might be applied in the near future – in secondary education. Given the nature of this approach, which combines content and language to make the most of both (Coyle & Marsh, 2010), some difficulties may arise due to the general lack of knowledge on the part of institutions and the minimal preparation and training of teachers to conduct CLIL lessons via e-learning tools.

At this point, it would be necessary to determine the mental and emotional impact of the remote learning of distance education not only on students' behaviour but on teachers as well. All those involved in the process of advocating bilingualism – teachers, students, parents, institutions and government – must work together to contribute to the development of these programs.

Henceforth, educational strategies based on promoting students' independence and ownership in their own learning will be discussed and suggested. Based on the theories adopted to explore the use of CLIL in e-learning, it will lead us to understand teachers' perspectives and beliefs when imparting their lessons.

# 1.3. Objectives of the study

This study aims to address teachers' perceptions of CLIL in the e-learning environment and its impact on FL and L2 acquisition. It identifies teachers' beliefs, learning, personal experiences and opinions about this teaching approach.

To achieve this objective, the following specific objectives were proposed:

- To analyse bilingualism in the high school context of India and Colombia.
- To state the use cases of e-learning in distance education.
- To identify effective strategies in CLIL in e-learning teaching practices.
- To reflect on the areas in which emotional intelligence can be improved, in both teachers and students.
- To present and discuss high school teachers' perceptions of CLIL in distance learning.

# 2. Literature review

To facilitate the understanding of the upcoming work, it is important to start with the definition of the term *foreign language* – or FL- that was initially employed in the World War II with military purposes to ease the communication based on the need of exchange in different languages between bands, and not so later on, English was considered the first foreign language in European schools (Larsen-Freeman & Freeman, 2008).

Hence, the word *foreign* became a concept associated with geographical strategy to homogenize the social interaction in those days that remains till today (Larsen-Freeman & Freeman, 2008), granting it the meaning of the use of a second language that differs from the mother tongue or first language.

An example of it is represented in this literature review through the lens of two different countries, such as India and Colombia, where bilingualism is taking form in each of their contexts and oriented to its role in education with all the nuances associated with CLIL in an online environment.

## 2.1. Bilingualism In high school

Although the acquisition of an FL and L2 has been generally handled flexibly in high school curricula and offered as an elective (Stewart-Strobelt & Chen, 2003), in recent years we have witnessed how school policies adjusted in light of the importance of bilingual education as a requirement for entry into any college program.

Bilingualism can be highly valuable in high school and beyond, as it offers a number of benefits both academically and professionally. From an academic perspective, being bilingual can help students develop a deeper understanding of their own language and culture, as well as those of others. It can also lead to improved problem-solving and critical thinking skills, as well as improved cognitive flexibility and creativity varnishing students with a range of academic and professional opportunities, as mentioned by Stewart-Strobelt & Chen (2003).

Working towards integration of the target language into the curriculum, with equal emphasis on content and language, it is becoming school's target. Language should be used as the

medium of instruction for content subjects, and students should be encouraged to communicate in the target language as much as possible, as per CLIL approaching suggests (Coyle & Marsh, 2010).

CLIL environments can provide an opportunity for students to learn about different cultures and to develop intercultural competence. This can be achieved by including cultural elements in the curriculum and providing opportunities for students to interact with people from different cultures, emphasizing intercultural competence.

In a CLIL setting, language skills should be developed in context, with an emphasis on using language for meaningful communication. This means that students should be encouraged to use the target language in real-life situations, such as role-playing, debates, and projects for the purpose of developing language skills in context.

Same as incite autonomy, which under CLIL conditions should encourage students to take responsibility for their own learning, and to develop their language skills independently. This can be achieved by providing opportunities for self-directed learning, such as reading materials in the target language or using language learning apps, as an alternative.

For bilingualism to be effective, it becomes fundamental to assessing language and content skills. This can be done through a combination of formative and summative assessments, such as writing assignments, oral presentations, and exams.

On that account, bilingualism through CLIL is becoming increasingly important in high schools, as it provides students with a number of benefits both in their academic and personal lives (Merino & Lasagabaster, 2015). Cognitive skills such as memory, problem-solving, and multitasking improve in students who speak more than one language, as well as how learning another language can increase students' understanding and appreciation of other cultures. This can foster greater empathy and respect for people from diverse backgrounds (Webster, 2003).

A distinct benefit from bilingualism is well shown as improvement of academic performance. Bilingual students often perform better academically, as they are able to understand and

process information in multiple languages (García, 2016). Not leaving behind how being bilingual can delay the onset of age-related cognitive decline and dementia.

In conclusion, bilingualism is becoming increasingly important in high schools, as it provides students with a number of benefits that will serve them well both in their academic and professional lives. Treating bilingualism in CLIL environments requires a holistic approach, where equal emphasis is placed on content and language, and where students are encouraged to develop their language skills in context and to take responsibility for their own learning.

Therefore, the two countries selected in this study, India and Colombia, may seem completely different from each other, since the former is well-known for its multilingualism and diversity, while in the latter a single language rules all over the country. Given that, this literature review is framed portraying the main characteristics of each country in terms of language, highlighting the importance of English and Spanish, being those the main languages and sources of communication in each country.

#### 2.1.1. Multilingualism in India

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) in its Global Citizenship Education program (GCED), multilingual education means "the use of at least three languages: the mother tongue(s), a regional or national language and an international language" (UNESCO, 2022).

Hindi is the fourth most spoken language in the world, the third one in South Asia (Beitya et al., 2022) and is the bastion of all languages in India. Although India's multilingualism under the "three-language formula" (UNESCO, 2022) makes the country linguistically diverse, English leads the way as a medium of instruction to fill communication gaps (Tavarez & Almanzar, 2020). They both are official languages in the country, being English used for official purposes, which works in both ways, as an administrative resource and when it comes to multilingual Indians, is the one language that they both can understand (Dwivedi, 2015).

Around 400 languages are spoken in India, including native languages and dialects. However, this multilingualism is – academically speaking- only superficial, as students merely become fluent in a second or third language (Kumari & Saroo, 2022). In addition to it, the national

government policy has imposed restrictions in some public schools to counter English imperialism and promote Hindi as the majority language (Dalton-Puffer, 2011).

The British left behind a heavy load in the form of an English-language educational system and institutions that were supported by the government both directly –through grants– and indirectly –through other means in terms of recognition– (Kumar Sharma, 2017). As it happens in other scenarios where English is taking place, the reinforcement of an FL and L2 causes the development of the L1 to decline (Merino & Lasagabaster, 2015).

English plays a significant role in Indian high school education, serving as the medium of instruction, language subject, examination language, and a link to global education. English is widely used as the medium of instruction in many high schools in India, especially in private schools and international schools. This is because English is considered the language of opportunity in India and is seen as essential for academic and professional success.

The language is also taught as a subject in Indian high schools. Students are taught the basics of English grammar, vocabulary, and literature, as well as the skills required for effective communication, such as writing, speaking, and listening. It is often used as the language of examination in many subjects, including science, mathematics, and social sciences. This means that students must be able to understand and respond to exam questions in English.

What centuries ago was considered as a colonial language, is now seen as a link to global education and considered important for students who want to pursue higher education abroad. Many high schools in India prepare students for international English language proficiency exams, such as the TOEFL and IELTS.

At the same time, not long ago, Spanish was considered a non-prestigious minority language due to the status given to the immigrants in the United States of America (Southworth, 1980). However, in a globalized world that is rapidly moving towards acceptance and inclusion, the subject of Spanish as a second language has reached a high demand in South Asian countries, most notably in India.

Spanish is not widely involved in Indian education. Although Spanish is the second most widely spoken language in the world, and is widely used in many countries, it is not a widely taught

language in India. English is the primary foreign language taught in Indian schools, and most students focus on developing their English language skills.

In 2015, Spanish as a FL and L2 was learned by 14.5 million people around the world (Noack & Gamio, 2015) and its popularity is such that the language is taught in India mainly in three categories: International Baccalaureate (IB) or International General Certificate of Secondary Education (IGCSE) in prestigious international schools, Central Board of Secondary Education (CBSE) and Indian Certificate of Secondary Education (ICSE) offered by schools across India and Kendriya Vidyalayas a central school system in India and other countries (Yadav, 2018).

However, there are no firm figures on the number of Spanish language learners all over India, but estimates go around 25.000 in schools, universities and institutions (Booe, 2021). Some schools and universities in India that offer Spanish language courses and Spanish language institutes and cultural centers offer language classes for interested students.

Additionally, some universities in India offer programs in Spanish language and culture, which can be useful for students who want to study in Spanish-speaking countries or work in Spanish-speaking contexts. As part of this study, the majority of teachers interviewed are from Colombia teaching Spanish or a CLIL subject in India; hence the importance of highlighting these results.

#### 2.1.2. CLIL in Indian high school's curricula

CLIL is not widely spread in the Indian curriculum in high school education. Although CLIL is a popular approach in many countries around the world, it has not yet gained widespread recognition in India. This is because most schools in India still use a traditional, subject-based approach to education, where language and content are taught as separate subjects (Bowers & Kumar, 2015).

The implementation of CLIL in Indian curricula was consolidated in 2016 through the collaborative project named CLIL@India, funded by Erasmus+ and Manipal Centre for European Studies in collaboration with Indian local partner universities and some others in Spain, Italy and Latvia (Kumari & Sahoo, 2022).

Given the support of the "three-language formula" by the New Education Policy from 2020 some efforts have been directed towards school programs to promote multilingualism, but as Kumari & Sahoo (2022) mentioned, learners fail to acquire adequate language skills in the second or third target language. The authors explain that the problem lies in the language taught as a subject and the flexibility of teachers to allow students to learn language skills, as well as lack of interactive resources.

Apart from being co-official, English is considered a second language in India because a significant portion of the population lacks basic communication skills in Hindi, the other country's official language; indeed, there are still certain obstacles to the proper use of the language. As a result, English is used in some official communications and very often in social interactions. Dalton-Puffer (2011) states that the predominance of English as a CLIL medium results in Content-and-English Integrated Learning (CEIL) indicating that English is the main language used in CLIL.

There is a growing interest in CLIL in India, especially among private schools and international schools. These schools are beginning to adopt a more integrated approach to education, where language and content are taught together, and where students are encouraged to use the language for meaningful communication.

Thanks to the CLIL@India initiative, high schools in Manipal, Pune, Chandigarh and Pondicherry cities, have adopted CLIL approach as a new literacy framework with the support of NGOs (Graziano et al., 2021), while subject and second language teachers in international schools in major cities such as New Delhi, Mumbai and Bengaluru have integrated CLIL learnings and experiences from workshops and online training they received during the pandemic, as a form of enhancement to the already ongoing curricula as IB and IGCSE.

Therefore, it is believed that incorporating CLIL into the teaching and learning process is particularly beneficial. Incorporating CLIL into language teaching, especially when teaching English in the Indian context, is considered one of the most effective methods, because of the essential role languages play in shaping individual and societal culture and identity, they must

be protected, preserved, and promoted. Hence, CLIL is seen as the right way to create a balance between English and the regional languages, as proposed by the CLIL@India project.

#### 2.1.3. The case of Colombia

The Colombian government's efforts towards bilingualism in a country where the vast majority of the population speaks only Spanish, began in 1991 with the amendment of the national constitution and restructuring of the national Ministry of Education. Over time and with the changes in government, other strategies were developed based on the Common European Framework of Reference for Languages (CEFR) (Rodriguez, 2011).

In roughly 175 legally recognized bilingual schools in Colombia where more than 50% of primary or secondary topics are taught in English or in Spanish, French, Italian, or German, CLIL implementations have been documented (Rodriguez, 2011), especially in private or prestigious high schools and institutions.

The implementation of CLIL in Colombian and Latin American high schools varies depending on the country and the school. However, in general, CLIL is still not extensively widespread. In some countries, such as Colombia and Mexico, there has been an increase in the number of schools that use a more integrated approach to education, where language and content are taught together. However, these schools are often private or bilingual schools, and the majority of high schools in the region still use a traditional, subject-based approach to education.

Although, there is no certainty that CLIL tools and resources are being used in depth. Instead, schools are teaching their curriculums in English using classic methods, but under the name CLIL, as this is the trend in Latin America countries (McDougald, 2016). In virtual spaces, CLIL is taking form in EFL (English as a Foreign Language) online courses conducted in some regions of the country, particularly in the urban areas and principal cities, and one of the reasons mentioned by McDougald (2009) is that there is no clear and appropriate methodology.

Despite this, there is a growing interest in CLIL in the region, and many teachers and educators are beginning to recognize the benefits of integrating language and content in teaching and learning. Some universities and teacher training institutions in the region offer CLIL teacher

training programs, and there are also organizations and networks that promote CLIL in the region (Yaguara et al., 2022).

In addition, teachers are facing issues to adapt and delivering their lessons due to the lack of training or skills in ICT (Information and communication technologies) resources, although there is a large number of resources available online. This tendency has led Colombian teachers to seek opportunities to teach CLIL abroad, as they have the opportunity to receive training and gain a better understanding of the international curriculum and CLIL intentions (Torres & Cuesta, 2019), which they unfortunately cannot do in their own country, as they have expressed in the present study and survey, as well.

## 2.2. Distance education in digital spaces

The general uncertainty the world faced due to the pandemic forced us to make fundamental changes in the way we communicate and learn. One was in education, which was revamped overnight during the global emergency. Hence, various methods have been used in education, such as online, virtual, distance and emergency distance learning, just to name a few (Siemens et al., 2015).

The COVID-19 pandemic has had a profound impact on education systems around the world and has accelerated the adoption of remote teaching and learning. The pandemic forced schools to close and switch to remote learning almost overnight, which has created new challenges and opportunities for teachers, students, and parents (Gollom, 2020).

The pandemic has increased access to technology, as students and teachers have been forced to use computers, laptops, and smartphones to continue learning and teaching from home, says Gollom (2020). This has helped to close the digital divide, as many schools have provided students with the necessary technology to participate in remote learning.

The development of new pedagogical approaches, such as online classes, virtual labs, and elearning platforms, have helped to continue the education process in a remote setting allowing for greater flexibility, as students can learn from anywhere, at any time, and at their own pace (Kumar Basak et al., 2018).

Facilitating to accommodate students who have previously faced barriers to education, such as those with disabilities, those who live in rural areas, or those who are working, remote learning has also led to increased collaboration and communication, as students and teachers have been forced to use new tools and platforms to stay connected and share information, states Kumar Basak (2018).

Between virtual and online education, it is easy to think of them as synonymous when they are actually considered to be two different types of education. Those, alongside the other various forms, fall into distance education in digital spaces, from where we are starting this research. However, they all share the common characteristic of being delivered remotely, using technology, to students who are physically separated from the instructor.

#### 2.2.1. Online education

It is defined as education in which teachers and students participate and interact in a digital environment through technological resources, synchronously or asynchronously using the facilities provided by the Internet and computer networks, coinciding with session schedules and being delivered via computers, laptops, or smartphones (Bowers & Kumar, 2015).

This method usually has a social dimension as an opportunity. This is because teachers may have to work harder to achieve group integration. Because to achieve the educational goals, it is necessary to create an environment of freedom and trust among our students. As an example of online teaching, take a class taught through a Zoom session and then upload the activity to a platform in the cloud server for review.

Before the pandemic, Agudo-Peregrina (et al., 2014) stated that online learning was limited to computers and the Internet. What came next was an important transition to wireless systems and satellites, where the learning medium is primarily cell phones. Educational websites platforms have enhanced and simplified their tools shifting to mobile applications and making their resources user friendly with adaptable experiences.

Meanwhile, some of the goals to be achieved through online education are to promote students' autonomous learning (Román-Mendoza, 2018), collaborative tasks, and providing

variety and meaningful interactions (Siemens et al., 2015) that correspond to pupils' real-life contexts.

#### 2.2.2. Virtual Education

It is called virtual worlds to an "asynchronous, persistent network of people, represented as avatars, facilitated by network computers" by Bell (2008), which brought to the education field, it is commonly reduced to only essential technical resources such as computers or tablets, Internet connectivity and the use of multimedia platforms, hence the similarity to distance learning.

Due to its asynchronous nature, this method does not require teachers to time their students' sessions, given that as with real life spaces, virtual worlds also allow a sense of space and distance, together with coexistence with other participants (Bell, 2008).

Henceforth, virtual education as a branch of the virtual world offers an attractive bundle of benefits to the students in the form of interactive experiences while learning and playing are in place (Duncan et al., 2012). With classes being delivered in a virtual environment, the use of simulations, virtual reality, or other digital technologies is at first hand. Virtual education provides students with an immersive experience that is designed to simulate real-world scenarios.

Regarding the materials and course documents, all are uploaded to the platform of their choice and are available for students to review, while questions are generally discussed in public forums throughout the group.

#### 2.2.3. Distance education

One of the main nuances on digital spaces comes from the proximity of distance learning and distance education definition, which in King (et al., 2001) words, the former is "improved capabilities in knowledge and/or behaviours as a result of mediated experiences that are constrained by time and/or distance such that the learner does not share the same situation with what is being learned" while the latter is formalized instructional learning where the time/geographic situation constraints learning by not affording in-person contact between student and instructor.

Unlike virtual education, distance education can involve both face-to-face and virtual participation in different proportions; distance education can include both online and virtual education, but it typically involves more structured course materials and synchronous interactions with instructors. It is specifically designed for students who are unable to attend traditional classes due to geography, time constraints, or other reasons. This type of education does not require Internet connection or computer resources like other methods, allowing students to manage their time, space and pace of learning.

In distance education, students typically receive their course materials, such as textbooks, videos, and lectures, through the mail or online. They then complete their coursework on their own schedule and at their own pace, and communicate with their instructors and classmates through email, forums, or other online methods as it involves asynchronous communication.

Examples of this modality are distance education through television channels, social media such as YouTube, podcasts and even the radio. Authors like Yang and Yang (2022) talk about its benefits as it promotes inclusion. Although, the adequate lesson design must be appropriate to guarantee the right delivery applicable to different learning styles (James & Gardner, 1995).

#### 2.2.4. Remote emergency education

Even when the concept of remote learning was acquired in 2012 by the British Council and its English program in Uruguay (Stanley, 2019), it was reinstated two years ago thanks to COVID-19 as a consequence of the global crisis. The education system faced a very difficult situation as it had to adapt its methods in a very short time to be able to continue teaching all students. The main objective of training is to transfer courses previously taught in-person to distance, virtual, distance or online classrooms.

It refers to education that is delivered in an emergency situation, where students are unable to attend traditional in-person classes due to factors such as natural disasters, pandemics, or other circumstances that disrupt normal educational operations. In this type of education, students continue to receive instructional support and materials through remote means, such as online learning platforms, distance education programs, or other forms of technology.

The goal of remote emergency education is to minimize disruption to the educational process and to ensure that students continue to receive an education, even in the face of a crisis. This type of education often involves a shift in instructional delivery methods, as well as an adjustment of the educational curriculum and assessment processes.

Remote emergency education has become increasingly important in the wake of the COVID-19 pandemic, which has forced many schools to close and switch to remote learning. In this situation, remote emergency education has provided a critical safety net for students, enabling them to continue learning and to remain on track to meet their educational goals.

A report entitled "Emergency Remote Teaching" published by The Learning Factor in Peru (Cabrales et al., 2020) describes how countries and institutions respond differently to changes in education and defines roles and tools. It explains that this term emergency distance education is completely new because there was no such thing before the pandemic.

For example, in the United States, some institutions work face-to-face with restrictions, while others use the online method described above. How we define types of emergency distance learning therefore depends on how countries or institutions deal with crises.

#### 2.2.5. Electronic learning

Better known as e-learning, it is the use of digital electronic tools and media, defined as part of digital learning (D-learning) and associated with mobile learning (M-learning) as a tool for delivering learning content (Kumar Basak et al., 2018). E-learning is a broader term, as it encompasses not only distance learning, but also hybrid or blended learning that combines online elements with face-to-face sessions (Siemens et al., 2015).

Authors reach the conclusion that e-learning has emerged as the new educational dynamic of the 21st century and is characterized by incorporating elements of computer science, communication technologies and pedagogy, so the definition emphasizes these different elements (Sangrà et al., 2012, p. 153).

The last decade has seen a rapid increase in the use of e-learning in education, and the COVID-19 pandemic has only accelerated this trend. As some of the hallmarks of e-learning in the last decade, including the post-pandemic days, is the increment of accessibility, as technology has

become more widely available and affordable. This has increased the reach of e-learning and has allowed students in remote and underserved areas to have access to educational resources.

E-learning has also allowed for more personalized learning experiences, as students can learn at their own pace, and can receive tailored support and resources. This has helped to increase student engagement and motivation and has improved student outcomes.

Another advantage is how e-learning has opened the gate for greater flexibility, as students can learn from anywhere, at any time, and on any device. This has helped to accommodate students who have previously faced barriers to education.

## 2.3. Teachers' perspectives and beliefs of CLIL in distance learning

The importance of teachers' beliefs and their influence on student's cognitive achievements should not be confused with knowledge but taken into account as an important variable in children's learning development. As affective abilities progress, students' Emotional Quotient (EQ) will increase whilst it is linked to the sense of politeness and empathy towards others, particularly their peers (Wijoyo, 2020).

Teachers' perspectives and beliefs about CLIL can vary, depending on their level of experience and expertise in both teaching and technology, as well as how they are capable of dealing with distance settings.

Some of the common perspectives and beliefs of teachers regarding CLIL in distance learning include the challenges with technology. A few teachers may express concerns about their ability to effectively integrate technology into their CLIL lessons, especially if they are new to distance learning. They may be worried about ensuring that all students have access to the necessary technology and are able to use it effectively (Morton, 2022).

Coyle & Marshal (2010) mention that a recurrent constraint is the difficulty in delivering language instruction. CLIL involves teaching content through a foreign language, which can be a challenge for some teachers who are not fluent in the target language. They may be

concerned about their ability to provide adequate language support to students, and to assess their language development.

In her article "Online Learning in COVID-19 Detrimental to Teen Mental Health," Nikos-Rose (2022) discusses how in terms of emotional and mental health, distance learning can be isolating for both students and teachers, and teachers may be concerned about the lack of interaction and engagement in their CLIL lessons; they may worry that students are not receiving adequate feedback or are not able to collaborate with their peers.

Despite the challenges, many teachers believe that CLIL is an effective approach to teaching and learning, as it helps to integrate language and content in a meaningful way. They may feel that CLIL can provide students with a more comprehensive and engaging learning experience and can help them to develop both their language and content skills (Mehisto, Marsh & Frigols, 2008).

Professional development and teachers' satisfaction to deliver and integrate the content and language in their lessons needs to be discussed with the purpose of broadening their perspectives. Teachers may also recognize the importance of ongoing professional development to support their teaching in a distance learning environment. They may seek out opportunities to receive training and support in areas such as technology integration, language instruction, and assessment.

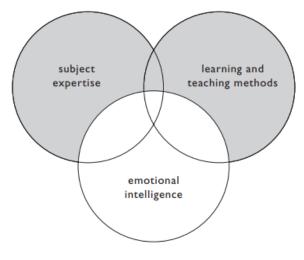
#### 2.3.1. Emotional intelligence

Emotional intelligence (EI) is a crucial factor for second language or CLIL teachers to consider when delivering online classes in remote settings. Besides aptitude, motivation is the most important reason to learn an FL or L2. Therefore, the role of emotional intelligence in all areas of education is undisputed. Mortiboys (2011) studies have shown how motivational and emotional factors frame the journey of bilingualism in higher education.

Defined and dimensioned by few authors (Goleman, 1998; Mayer & Salovey, 1997) as the importance and the capacity of recognizing, regulate and understand our own feelings – and others – to motivate and influence our actions, emotional intelligence has been a parapet of

teaching to complement expertise and pedagogical skills, as Mortiboys (2011) interprets through this diagram:

Figure 1. Emotional intelligence in teaching



Source: Mortiboys, 2011

Single the main features out of the emotional intelligence in students it is essential to determine areas where e-learning can be improved. Either if the learners prefer group or individual classes when taking an FL and L2, where they are feeling more comfortable and discussing the teachers' insights on how virtual education provides a proper environment to develop individual learning.

El can play a role in this context while building relationships with students. In a remote learning environment, it can be difficult for teachers to build relationships with their students and to foster a sense of community. However, teachers with high levels of El are able to use their emotional awareness, empathy, and interpersonal skills to connect with their students, build trust, and create a supportive learning environment.

Digital spaces can be stressful and anxiety-inducing for both students and teachers. Teachers with high EI are able to recognize and manage their own emotions, and to support their students in managing their emotions as well. They may also use their emotional regulation skills to remain calm and composed, even in challenging situations.

Most of the time, teachers are required to adapt to new teaching and technology environments, which can be challenging. Teachers with high EI are able to handle change and uncertainty with resilience and optimism and are able to use their creativity and resourcefulness to find solutions to problems.

Providing individualized support in a remote learning environment can be difficult, however, teachers proficient in EI can use their empathy and interpersonal skills to understand their students' needs, and to provide support that is tailored to each individual student.

Basically, by demonstrating empathy, understanding, and emotional awareness, teachers can create a more positive and supportive learning environment, which can improve student motivation, engagement, and overall learning experience.

#### 2.3.2. Metacognitive strategies and scaffolding

With teachers dealing to make students more independent and take agency over their own learning, it is necessary to acknowledge the importance of accompaniment in the virtual spaces, especially when a variety of scattered resources could be easily found with no structure or guidance (Morton, 2022).

One of the most useful strategies comes from metacognition, which can be simply defined by the action of learning how to learn and awareness of one's own cognitive processes and the control one exercises over them, as stated for the first time by Flavell (1976). In CLIL we see metacognition as one of the four dimensions of knowledge alongside factual, conceptual and procedural states.

Now, when a student interacts with digital environments, deficits in metacognitive skills are associated with low learning success because these situations require the setting of specific learning goals (Valencia-Vallejo et al., 2019).

Under the metacognition theories of authors such as McGuiness (1999), Muñoz (2002) and Webster (2003), just to mention some, perhaps classic strategies should be rethought as an exercise of reflection adapted for the contemporary times in the education of the 21st century. It is thought that the importance of self-directed learning (SDL) is expressed in the

literature on how teaching and learning have been approached during this time of the pandemic (Tlili et al., 2022).

Based on this, we will aim to identify some of the most popular strategies and elaborate on the Open Educational Resources (OER) and materials' adaptation to grant an adequate environment to create self-awareness and study independently.

Online teaching of a foreign or second language might present some particular difficulties, but there are a number of efficient teaching approaches and strategies that can be used to improve student learning.

At first, we can talk of Communicative Language Teaching (CLT) as the approach that emphasizes communication and interaction as the primary means for language learning (Abdisalimovich, 2023). In CLT, students are encouraged to practice speaking and listening in a natural, meaningful way, and the focus is on real-life situations and the language needed to function in those situations.

On the other hand, Task-Based Language Teaching (TBLT) points out learning through tasks or activities that have a real-life purpose. TBLT promotes learner autonomy, as students work collaboratively to complete tasks that require the use of the target language ("Task based language teaching (TBLT) ¿En qué consiste?", 2020).

Another strategy commonly used by online CLIL teachers is the flipped classroom, in which students are provided with pre-recorded video lectures or other instructional materials before class, and class time is then spent engaging in interactive activities and discussions. This approach can be particularly effective in online FL or L2 classes, where students may be more isolated and in need of opportunities to interact with peers and teachers (Flipped Classroom, 2022).

Moving to Gamification; it involves incorporating game elements into the learning experience to increase motivation and engagement. This could include games, quizzes, challenges, and other interactive activities that make learning more enjoyable and rewarding (Smiderle, et al., 2020).

In project-based learning, students work collaboratively on a project that requires the use of the target language. This approach promotes real-life problem-solving skills and can help students develop confidence in their ability to use the language in meaningful ways. (Becerra-Posada, 2022). It centres around students completing projects that focus on solving complex problems or answering challenging questions. The goal of PBL is to help students develop deeper knowledge, critical thinking, problem-solving, and collaboration skills while working on meaningful projects that have real-world applications.

Blended learning, also known as hybrid learning, is an approach to education that combines traditional face-to-face instruction with online or digital learning. This model seeks to leverage the benefits of both in-person and online instruction to create a more flexible and personalized learning experience for students, who engage in some portion of their learning through digital or online platforms, such as pre-recorded lectures, interactive multimedia activities, or online discussion forums (Siemens et al., 2015). This is then combined with inperson instruction, which could include classroom lectures, small group discussions, or handson learning activities.

Considering that in online FL or L2 classes, it is important to offer both synchronous (real-time) and asynchronous (self-paced) learning opportunities. This allows students to interact with teachers and peers in real-time while also providing flexibility for students who may have other commitments. Ultimately, the most commendable teaching strategies and methodologies will depend on the specific needs of your students and the goals of your course. By incorporating a range of approaches and techniques, you can create a dynamic and engaging online learning environment that promotes language acquisition and student success.

# 3. Experimental framework

As mentioned in the course of this paper, the aim of this study is to collect the teachers' perspectives on teaching CLIL in an e-learning environment. Given the theoretical framework previously presented to contextualize the research, a further detailed explanation is

showcased throughout the information gathered in the survey and interview conducted as follows.

# 3.1.Context and research participants

The purpose aforementioned of this research survey is to gather information and insights on teachers' experiences and perceptions of teaching CLIL in an online environment while understanding the challenges and opportunities that online CLIL teachers face, as well as their attitudes and beliefs towards this mode of teaching and learning. The findings from this survey can provide valuable information for educators, researchers, and policymakers to better support the development and implementation of effective online CLIL programs. Additionally, the results may inform future directions for research in this field and contribute to the ongoing discourse on the benefits and limitations of online CLIL.

# 3.2. Methodology

The methodology used in this study began with a quantitative approach through a survey. High school teachers who teach CLIL lessons mostly online were invited to participate by completing an online questionnaire. Following the results and feedback gathered from the survey, a qualitative approach was taken by conducting interviews. These interviews aimed to gain a deeper understanding of the teachers' preferences and to further explore their elaborated responses from the earlier questionnaire.

Using both qualitative and quantitative methods in a research paper complements each other by providing a more comprehensive and nuanced understanding of a research topic, rather than relying on just one method alone. For example, qualitative data can help identify patterns or themes that can be further investigated through quantitative methods (Creswell, J. W., 2014).

The sample approached is a small group of 46 CLIL teachers from different parts of the world, mainly from India, Colombia and Spain. Thanks to the records obtained from this batch, the next stage in the study guides us through the actual experiences and teachers' mindsets while implementing CLIL in a non-physical space.

The plan of the survey incorporates generally closed questions based on Likert scales, where members give their perception or supposition by selecting as much options as they considered as per their level of understanding, closing with a final open address that leads to a brief interview for the volunteered teachers who explained in their thoughts and share more about their encounters and appreciations on CLIL.

## 3.3. Analysis tool/s (analysis and validation)

A handful of the original study participants were given the link to the survey Google forms via WhatsApp and Facebook forums for CLIL teachers, and the chain-referral method was used to spread the information to others.

Initially, responses were scattered and then slowly increased with a positive contribution from participants who even disclosed their name and email address, although these were not required fields, which speaks to the trust and eagerness of participants to be heard.

The questionnaire consisted of 20 questions, apart from the optional name and email information, which were aimed at answering the individual objectives. The data collected via the Google form, comes in a diverse type of questions, from multiple selection, open-ended and one last question in the form of a Likert scale.

Since the questions were a variety of types, and the sample size was limited to 46 participants, a detailed description and summary of each item would be the best method of analysis given that the research question and main objective of this study are to understand what characteristics or behaviours teachers possess when teaching CLIL through e-learning. As evidenced by pie charts, bar charts, and the Google form app's list of answers, this statement is supported by graphs.

#### 3.4. Data collection

For starters, the CLIL teachers consulted for this survey are from different geographic locations, as per Table 1 showcases. The majority of participants belong to Colombia, India and Spain, in that order.

#### Table 1.

#### Participants nationality

Nationality	Participants		
Colombia (19)	19		
India (12)	12		
Spain (8)	8		
USA (2)	2		
Peru (2)	2		
Mexico (2)	2		
Ecuador (1)	1		
Total	46		

Own source

Just as mentioned in the justification section, one of the reasons for this research is the author's personal experience as a teacher in India, where one's has had the opportunity to work closely with FL and L2 teachers who are already implementing CLIL. Therefore, it is no surprise that most of the participants are currently based in India, followed by some teachers based in Colombia and the United States (Table 2).

It is important to highlight the fact that the nationalities of those participants influence this work for the proximity to this revision, but also for the study per se, as its significance permeates in the use of virtual scenarios with completely different contexts but with low repercussions on the study results.

**Table 2.**Participants teaching country

Teaching country	Participants	
India	25	
Colombia	8	
USA	5	
Thailand	4	
Barbados	1	
Peru	1	
Spain	1	

Mexico	1
Total	46
Own	source

In terms of teachers' age and number of years teaching, for demographic reasons, it is important to highlight that CLIL is implemented by older teachers who have already gone through academic phases and are continuing their education with this new approach, as can be seen in Figures 1 and 2.

Figure 2. Participants' age

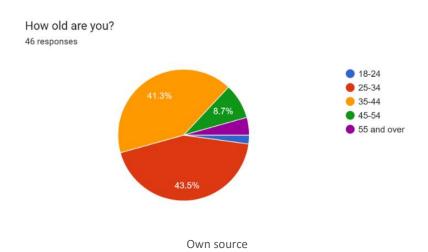
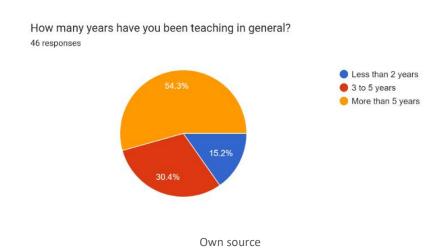
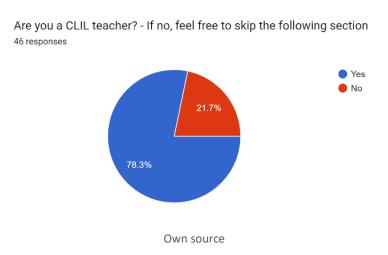


Figure 3. Participants' teaching experience in years



However, not all of the participants are CLIL teachers yet, but they are aiming to start their journey in the short term, as it shown in the Figure 4.

Figure 4. CLIL Teachers

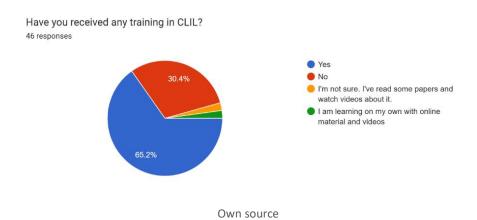


The training and implementation of CLIL for teachers varies greatly across the world. In some countries, CLIL is well established and widely implemented in both primary and secondary education, while in others, it is still in its early stages of development. In Europe, CLIL has been growing in popularity in recent years and is now a common approach in many countries, particularly in the Netherlands, Spain, and the United Kingdom. In other parts of the world, such as Asia and South America, the implementation of CLIL is still limited, although interest in the approach is growing, as reflected in Figure 5.

There is also variability in the level of teacher training and support provided in different countries. In some places, there are well-developed teacher training programs and ongoing support for CLIL teachers, while in others, teachers are expected to implement the approach with little to no training or support.

In general, the spread of CLIL training for teachers is influenced by a number of factors, including government policies, language education needs, and the availability of resources and funding. As the demand for bilingual and multilingual education continues to grow, it is likely that the training and implementation of CLIL will become more widespread in the coming years.

Figure 5. Teachers' training in CLIL.



In Tables 3 and 4 we can identify the language of instruction and the target subject-content as English and Spanish. Once we delve into the details provided by teachers, and as previously explained in the literature review, these two languages are being imparted as second or foreign languages bringing the bilingual component to the study.

**Table 3.**Language of instruction

Language of instruction	Participants	
English	34	
Spanish	11	
Hindi	1	
Total	46	

Own source

Regarding the content staged by the teachers, it is notably how English as a subject in language class as well as a foreign language, preceded by Mathematics, Social Studies and Biology. Spanish as a second language teachers lead the list with higher scores in the group.

**Table 4.**Subject-Content

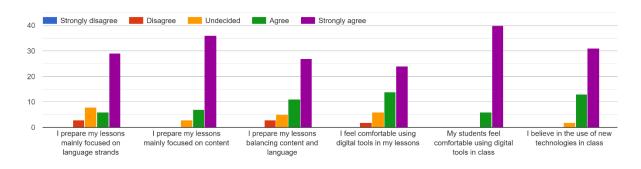
English	Participants	Spanish	Participants	Hindi	Participants
Art	1	Classroom	1	Language	1
Biology	3	Spanish (ELE)	7		
Business Admin.	1	History	2		
Chemistry	1	Math	1		
Classroom	1				
Economics	1				
EFL	4				
History	2				
Language - ENG	5				
Literature	2				
Math	5				
Physics	1				
Social Studies	4				
Special Needs					
(SNE)	1				
UOI	2				
Total	34		11		1

Own source

In the following summary via Figure 6 is visible how the vast majority of teachers feel committed towards their planning and preparation in digital competences while conducting online classes. In the process, they are aware of how to set clear goals, while keeping up with the technologies and trends, collaborating with other teachers and regularly reflecting on their practice, which includes prioritizing professional development.

Figure 6. Teachers' perceptions on CLIL in e-learning

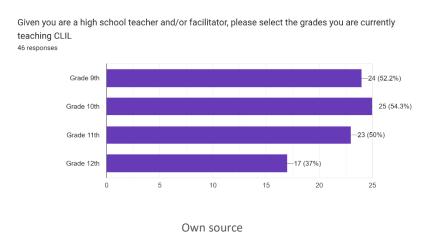
According to your experience teaching CLIL online, how would you rate the following statements?



Own source

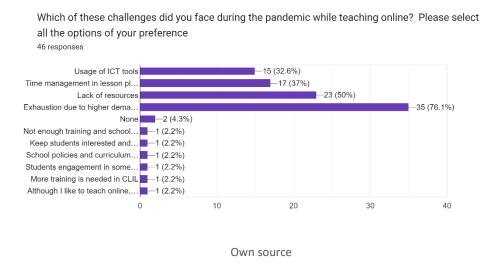
High school teachers (Figure 7) have faced several challenges since the pandemic. For starters workload has been increased affecting the time management in lesson planning, initially triggered by the lack of digital resources they were forced to create from the ground up with their elementary knowledge of many of the ICT tools.

Figure 7. Teachers' grade of teaching



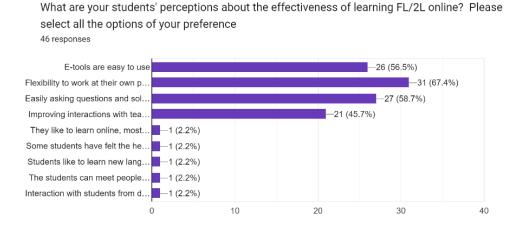
Students' disengagement was another constraint teachers highlighted. Children, who are used to active in-person lessons, are not prepared to stare at a screen for longer periods of time, triggering new demands which teachers are not prepared to handle. Therefore, the need to work around measurements to ensure teachers and students' mental health, focused on the burnout (Figure 8).

Figure 8. Challenges faced during the pandemic.



The perception of high school students regarding taking a foreign language (FL) or a second language (L2) course online and in virtual environments can vary depending on individual experiences and circumstances. However, some common perceptions and experiences reported by high school students regarding online FL or L2 courses include the flexibility that online courses offer so they can learn at their own pace, the wide range of multimedia resources, high level of interaction with their teachers and peers, as well as some constraints related to keep up the motivation and discipline to accomplish their tasks and commitments (Figure 9).

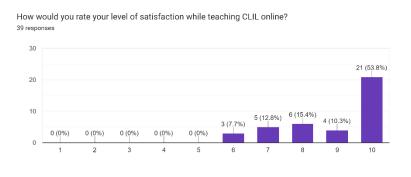
Figure 9. Students' perception of taking a FL/L2 online



#### Own source

On a scale from 1 to 10 (Figure 10.), teachers were asked about their level of satisfaction with teaching CLIL online; it appears that it falls in the range of 8-10 on a scale of 1 to 10. Overall, while there are both advantages and disadvantages to teaching CLIL online, it appears that most teachers have a moderate to high level of satisfaction with teaching this approach online.

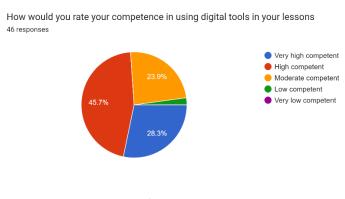
Figure 10. Teachers' satisfaction level on teaching CLIL online



Own source

On the one hand, teachers who are experienced with online teaching and comfortable with technology may find that teaching CLIL online provides them with more flexibility and access to a wider range of resources than traditional classroom teaching. As Figure 11 shows, the teachers' digital literacy is highly competent with a 45% of positive response, but overall, it is in progress. They may appreciate the ability to share materials and collaborate with other teachers across geographical locations.

Figure 11. Teachers' digital literacy



Own source

Teaching a foreign or second language online can present some unique challenges, but there are several effective teaching strategies and methodologies that can be applied to enhance the learning experience for students, as the ones presented by teachers in Figure 12.

The approaches and tactics for creating a dynamic and interesting online learning environment that supports language learning and student achievement received the greatest comments from teachers. Some of them described in the literature review section are Flipped Classroom, Gamification and Project Based Learning (PBL), among others.

Figure 12. Teaching strategies online



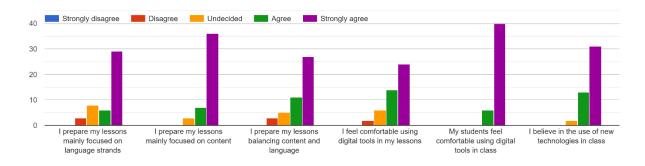
Own source

Overall, teachers' perceptions of CLIL-oriented statements can vary depending on their experience, training, and beliefs about language learning and teaching. While many teachers report positive perceptions of CLIL, others may have concerns or reservations about using the approach, (Figure 13).

Some of the affirmative perceptions entail improving language proficiency, increasing student engagement and enhancing subject knowledge. Although, some considerations have been highlighted, such as difficulty in balancing content and language, limitation in language proficiency and lack of training.

Figure 13. Teachers' perceptions on CLIL-oriented statements

According to your experience teaching CLIL online, how would you rate the following statements?



Own source

Four teachers expressed their comments with an open-ended question from where it is visible, they request some extra support from the school stakeholders to get trained in CLIL and technological aspects, as well as reflecting on the importance of CLIL as a medium of closing the gaps in educational fields (Figure 14).

#### Figure 14. Teachers' comments and reflections

Kindly express your comments and reflections on the e-learning in CLIL in your context, if any: 4 responses

I wish the stakeholders of my school support more training for us teachers to learn and apply more CLIL strategies in our classes.

The dual focused approach in CLIL based in content and language learning, motivates students and enhance their skills in both. I highly recommend the implementation in all schools.

CLIL is beneficial for students since it involves language and content skills, especially in the latest years of high school when pupils are getting ready to start heir college life.

Learning CLIL online is closing the gap for students who are not able to attend offline lessons. I recommend to spread the word about this magnificent methodology.

#### Own source

Finally, five CLIL participated in an interview (Figure 15), all of them are currently active and working in international schools in India for over 2 and 3 years. They also have incorporated

and conducted CLIL sessions in an online setting. Two of them are foreign language specialists teaching Spanish as a second language, two teach English as a foreign language and one is a literature English and homeroom teacher.

Certain recurring themes during the interview showed that everyone has clearance on the approach to language teaching that aims to integrate language learning with subject matter instruction. They all addressed that goal is to help students develop both their language skills and their knowledge of a particular subject at the same time. As well, they have experienced similar problems and seeing the same needs, explained in detailed on the results section of this document.

#### Figure 15. Teachers' interview questions

- Are you familiar with CLIL methodology? If so, how would you describe it in your own words?
- 2. Have you ever incorporated CLIL into your online teaching practices? If yes, can you describe how you did it?
- 3. In your opinion, what are the benefits of using CLIL in online teaching?
- 4. What are the challenges that you have encountered when incorporating CLIL into your online teaching practices? How did you overcome these challenges?
- 5. Have you noticed any differences in student engagement and learning outcomes when using CLIL in online teaching as opposed to traditional teaching methods? If so, can you describe these differences?
- 6. How do you design your CLIL lesson plans for e-learning? What resources do you use?
- 7. Do you feel that you have received enough training and support to effectively implement CLIL in your online teaching practices?
- 8. What advice would you give to teachers who are interested in incorporating CLIL into their online teaching practices?
- 9. How important do you think it is to have a language proficiency level to implement CLIL in e-learning?
- 10. How do you assess the effectiveness of CLIL in your online teaching practices? What evaluation methods do you use?

Own source

## 4. Results and Discussion

The study's quantitative and qualitative data was gathered from a questionnaire, as well as from an interview given to high school teachers in response to the study's objectives and research questions, detailed in the methodology section.

#### 4.1. QUANTITATIVE RESULTS AND FINDINGS - QUESTIONNAIRE

The data collected in the questionnaire allowed the interpretation from different fronts, starting with the context of the teachers who have just recently adopted the virtuality as a mean of instruction – which reproach and contrast with the generalities of virtuality, where the homogeneity and background of the instructors should not represent an actual obstacle and it is reinstated in place of the traditional on-site classrooms (Yang & Yang, 2022).

Some of the educators express that the new teaching and learning approaches under the umbrella of options in the virtual scenarios may cause anxiety, a lack of confidence, and even the feeling of incompetence. Teachers who lack the appropriate knowledge may be reluctant to try out new teaching strategies or understand them. This might have an impact on pedagogical interventions.

Since preparing for a vibrant and diverse teaching and linguistic landscape always requires spending additional time and effort, change is always apprehensive and high-risk. Some teachers may find it challenging to strike a balance between teaching subject content and teaching language. It can be difficult to find the right level of language complexity and subject complexity to ensure that students are able to learn both effectively. The combination of professional and personal life is seriously affecting teachers' performance while it is leading them to considering opting out from the education field (Al-Mawee et al., 2021).

Teachers are encouraging self-direction and autonomy as a way of releasing distension and making students participate in their own learning. Although they are aware that it might be a challenge, several strategies were proposed, such as establishing clear guidelines and expectations for student responsibility and self-direction at the beginning of the course. This will help students understand their role and responsibilities while setting clear expectations.

Encouraging students to take control of their own learning and make decisions about how they will approach coursework. This could involve having them set their own goals, create their own schedules, choose their own methods of learning and foster independence.

Providing opportunities for students to interact with each other and work together on projects. This can help build a sense of community and support and provide students with a sounding board for ideas and feedback. Then it becomes necessary to adopt the use of technology wisely to engage students and support their learning. For example, using discussion boards, virtual meetings, and online collaboration tools to help students connect with each other and their teachers.

Regular check-ins and feedback can also help students to stay on track and feel supported. Consider setting up regular virtual meetings or email check-ins to discuss their progress and offer guidance. Same as acknowledging and celebrating students' successes along the way, to reinforce their sense of autonomy and independence by celebrating their successes. Hence, implementing these strategies can help foster autonomy in students and create a more engaging and empowering learning experience for everyone involved.

In terms of planning and preparation for the challenges and experiences brought by a CLIL online approach, the results show that teachers are aware of how they should have a clear understanding of what they hope to achieve with their online classes and what digital competences they want their students to develop. Having well-defined goals and objectives can help to focus their planning and preparation efforts.

Teachers should stay informed about the latest technology and trends in online education and be open to learning new skills and techniques to improve their online teaching. This can help to keep them engaged and motivated. As well as sharing experiences and ideas with other online teachers can help to build a sense of community and support. Collaborating with other teachers can also help to identify best practices and overcome common challenges.

Although self-reflection practice should be applied in every aspect of personal and professional matters, the online teaching field works as a stimulus to keep instigating

bilingualism, hence is commendable to seek feedback from students and colleagues since it can help teachers to continuously improve in their praxis.

Part of it comes from investing in professional development opportunities, such as workshops, courses, and conferences to develop their digital competences and stay up to date with the latest trends and best practices in online education.

Notwithstanding, teachers have come across several challenges and constraints proper from the sudden shifting to classes online, starting from the initial days of the pandemic and some still remain around. Many teachers were not equipped with the technology or internet connectivity necessary to teach effectively online. This made it difficult for them to effectively engage with students and maintain classroom discipline. It can be challenging to keep students engaged and motivated in an online learning environment, particularly for students who struggle with technology or have distractions at home.

Online learning may not work for all students, especially those who are hands-on learners or need more individualized attention. It can be difficult to assess student learning and provide meaningful feedback in an online environment, which can have an impact on student motivation and progress, impacting assessment and grading.

As a result, teachers' workload has increased considerably, with the consequences affecting their performance. The transition to online teaching can be time-consuming and challenging, requiring teachers to develop new lesson plans and teaching strategies, as well as manage new technology.

On the other hand, some teachers may find that teaching CLIL online presents challenges such as a lack of face-to-face interaction with students, technical difficulties, and difficulties in providing differentiated instruction to students with varying levels of language proficiency. Additionally, some teachers may feel that the online environment limits their ability to engage students in hands-on, experiential learning activities that are integral to CLIL instruction.

Since teachers often report that CLIL helps students develop language skills faster and more effectively than traditional language instruction. Students learn the language in a meaningful context and are motivated to use it to access subject content. However, some may also be

concerned about students' limited language proficiency. Students may struggle to understand subject content if their language proficiency is not sufficient, which can be frustrating for both students and teachers.

On the same line, the pandemic has taken a toll on the mental health of teachers, who may be feeling stressed, isolated, and overwhelmed. With remote teaching, many teachers have reported feeling isolated and disconnected from their colleagues and students, which can impact their mental well-being. The ongoing pandemic and related public health measures have created a sense of uncertainty and stress for many individuals, and teachers are no exception.

With remote teaching, the line between work and personal life can become blurred, leading to feelings of being overworked and burnt out, due to a lack of boundaries.

Regarding inequity, the shift to online learning has highlighted disparities in access to technology and internet connectivity, making it more difficult for some students to participate in remote learning. However, some common perceptions and experiences reported by high school students about taking online FL or L2 classes carry their appreciation in the flexibility that these lessons offer. They can learn at their own pace and schedule, which can be helpful for students who have other obligations, such as extracurricular activities or family responsibilities.

Students have reported that virtual spaces provide them with access to a wide range of resources, such as online textbooks, interactive multimedia, and online language communities. These resources can enhance learning and help students to improve their language skills.

Some students may feel socially isolated when taking online lessons because they do not have the opportunity to interact face-to-face with their teacher or classmates. They may miss the classroom atmosphere and the chance to practice speaking the language with others.

High school students may encounter technical difficulties such as internet connectivity issues or software glitches. These issues can be frustrating and may hinder learning, but they show resilience and find ways to boost their creativity when they have to work offline.

In relation to the motivation and discipline required in these scenarios, some students may struggle with managing their time effectively without the structure and accountability provided by a traditional classroom setting. Although, teachers work hard towards keeping up the class spirit as if they were in a traditional physical setting classroom.

#### 4.2. QUALITATIVE RESULTS AND FINDINGS - INTERVIEW

The interview was conducted to 5 of the teachers that answered the questionnaire as well. As mentioned in the data collection section, all of them are currently working as CLIL teachers at international schools in India and have experience teaching online, as well.

In response to the question number 1., "Are you familiar with CLIL methodology? If so, how would you describe it in your own words?", they show clearness on the definition which is a teaching approach that combines the teaching of subject matter and language learning. It involves teaching content in a foreign language, usually in a way that contextualizes the language learning, as per stated by Coyle and Marsh (2010).

Once we asked if they have ever incorporated CLIL into your online teaching practices, given their positive answer, they describe how they design lesson plans that integrate language learning with subject matter instruction, integrating some other subjects in the curriculum. "For example, I have designed science lessons in which students learn about the water cycle in English", one said. "Using authentic materials in the foreign language that I am teaching. For instance, I have used news articles or videos in Spanish to teach my students about current events.", another teacher mentioned.

Regarding to the *benefits of using CLIL in online teaching*, as in the question 3., they all agree that some gains in the matter run on the account on how *CLIL can help students develop their language proficiency and subject matter knowledge simultaneously*, while *making language learning more meaningful and engaging by providing context and relevance to the language being learned*. One of them also stated that CLIL *can promote cross-curricular learning and help students develop critical thinking skills*, which was addressed by authors like Larsen-Freeman & Freeman (2008).

In relation to the challenges, they have encountered when conducting CLIL via e-learning and how they have overcome them, one of the teachers affirmed "one challenge I have faced is finding appropriate and authentic materials in the foreign language. To overcome this, I have used online resources and materials recommended by other language teachers.", which initially sounded contradictory given in the second answer, another teacher mentioned she has been using those authentic materials on regular basis, although at the end of her answer we could notice the importance of partnership and sharing in the CLIL teaching community.

Then, her colleague complemented the response including that "another challenge is making sure that students understand the subject matter content while also developing their language skills. To address this, I have designed activities that scaffold both the content and the language learning."

We should remember that scaffolding is a teaching strategy proposed by Mehisto, Marsh & Frigols (2008) as a CLIL workaround in lesson planning. In the question 6., "How do you design your CLIL lesson plans for e-learning? What resources do you use?" all five teachers agree on the sequence to design their CLIL lesson plans by first identifying the learning objectives for both content and language learning. Then select appropriate materials and activities that scaffold both aspects of learning, using a variety of resources, including textbooks, online materials, and authentic materials involving real life students' experiences in the foreign language.

Coming back to the question 5., "Have you noticed any differences in student engagement and learning outcomes when using CLIL in online teaching as opposed to traditional teaching methods? If so, can you describe these differences?" a general answer is that they actually have noticed that students are more engaged in CLIL activities because they are more meaningful and relevant to their lives. This is supported by authors like Larssen-Freeman (2008) and García (2016) who have argued that students have developed language skills more quickly and effectively when they are learning in context.

When teachers were asked if they feel that have received enough training and support to implement CLIL appropriately in online classes, as per question 7., the answers were split into

"Yes, I have received adequate training and support in CLIL methodology and feel confident in my ability to implement it adequately in my online teaching practices." on one side, versus a "No, I feel that I could benefit from additional training and backing up from school stakeholders to further enhance my teaching practices in CLIL, but mostly in ICT (Information and communication technologies) tools, that's what we teachers lack the most when taking online classes".

Some advice and tips came out in question number 8., for newly teachers who are interested in incorporate CLIL approach in virtual scenarios, "start with small, manageable activities that integrate both content and language learning", "Use authentic materials in the foreign language whenever possible to make the language learning more meaningful and engaging." and the response replicate the insights from before, such as, "collaborate with other teachers to share resources and ideas for incorporating CLIL in online teaching practices".

Getting close to the end of the interview, teachers were asked "How important do you think it is to have a language proficiency level to implement CLIL in e-learning?" where a unanimous answer pop up stating that "It is essential to have a high level of proficiency in the foreign language." "Even if you are not completely fluent in the foreign language, it is important to carefully select materials and activities that are appropriate for your students' level of proficiency."

With the last question number 10., "How do you assess the effectiveness of CLIL in your online teaching practices? What evaluation methods do you use?" we look for opening further discussions and insights on how to carry out the effectiveness of assessing content and language at the same time with CLIL. Given that some of the international schools in India work under IB or IGCSE programs, answers like "I use a variety of evaluation methods, including formative and summative assessments, feedback from students, and self-reflection on my teaching practices. I also collaborate with other teachers to discuss the effectiveness of CLIL in our online teaching routines" make sense.

## 5. Conclusions

As stated throughout this journey, the main objective of this paper is to gather teachers' perceptions over online teaching of CLIL in a high-school environment. Although there is still much work to be done in the areas of language learning methodologies, teacher preparation, curriculum creation and cultural and cross-cultural skills, language learning and bilingualism can be mastered in the long run, particularly in virtual scenarios.

As students approach the completion of their schooling and prepare to enter challenging degree programs, teachers' digital literacy and other skills should be improved through adequate and professional training.

This process generated new dynamics in the classroom, accelerated the inclusion of technology and widened the margin of coverage and use of tools other than the blackboard, on the one hand, but on the other, it overloaded the teachers' operativity, without being prepared or updated.

With the information gathered throughout the literature review, it is clear that CLIL approach is gaining adepts all over the world and pictures an interesting panorama to exercise a methodology to acquire an FL and L2 under its umbrella of capabilities.

Hence, it becomes mandatory to keep promoting professional training in CLIL and spreading the word to make it work alongside the new technologies and the advantages of inclusion and effectiveness that provides.

The issue of bilingualism in high school is still a work in progress for many, starting with our governments in the global south countries, which recognize it as an important tool for promoting an educated workforce that can lift economies, but lack the infrastructure to implement a comprehensive bilingual education plan that is long-lasting and effective.

In countries like India and Colombia, digital infrastructure is widely recognized and utilized in private international schools, being those the biggest advocates of inclusion of a second or third language and sponsoring teachers training and professional development. However, the

matter of contention will come from public schools and informal institutions that are way behind the expected results in terms of digital literacy.

On the students' side, mentioned by the teachers, an interesting point is that closing the gap in communication by acquiring a second or foreign language is becoming an important reason for learners in their studies. An inner sense of curiosity is being awakened influenced by the social media and general culture that learners aim to approach.

In the times we are currently living, e-learning is the most approachable and spread tool for education. If there is something that brings us all together in the education field, it is the yearning to promote and procure spaces to spread knowledge and virtuality has brought us all the benefits to work around it.

In virtual reality, no boundaries or stigmas come when we all are online. Although, it should be important to track how safe the results of the use of technologies are for high school students who are prone to be influenced by social media and not always reliable information.

Regarding the significant impact that e-learning has had on CLIL approaching by providing new ways of delivering content and facilitating language development, teachers highlight the accessibility that has made it easier for students to access educational materials and resources from anywhere, at any time. This is especially important for students who live in rural areas or who have limited access to educational resources.

In terms of personalization, e-learning platforms often allow for individualized instruction and assessment, which can be particularly beneficial for CLIL students who are working at different language proficiency levels.

In parallel, the multimedia resources available online provide access to a wide range of material, such as videos, audio recordings, interactive simulations, and virtual reality experiences, which can make content more engaging and memorable for students.

As mentioned by Yaguara (et al., 2022), virtual platforms often include tools for collaboration and communication, such as discussion boards, chat rooms, and virtual study groups, which can help students build their language skills through interaction with their peers.

Finally, teachers comment on how digital spaces allow flexibility in scheduling, so students can learn at their own pace and choose when and where they participate in the lessons.

Regarding mental health, it is important for teachers, schools, and communities to prioritize the mental health of educators during this challenging time. This can include offering support services, providing opportunities for self-care and stress management, and promoting a culture of well-being.

In the long run, e-learning has the potential to greatly enhance CLIL approach by making content and language learning more accessible, personalized, engaging, and flexible for students.

## 6. Limitations and further research

In the preliminary steps, since before the actual study starts, the idea was to collate the high school student's perceptions in CLIL in e-learning environments; and here it was the first limitation when interviewing one's own students became a conflict of interests. Once the dynamic of interviews was set, it was clear that there could be a bias in the pupils' answers led by the relationship between teacher and students.

It could have been taken forwards and carried out with the parent's permissions, the institution – UNIR – approval and perhaps amplifying the scope of interviewees to avoid the aforementioned boundaries. However, the intention of this writing is to have the proximity to the group without harming the results and affecting the data, but to get a closer understanding, preferable with familiar use cases, as part of the purpose for this dissertation is to explore the potential implications on one's personal and professional development as an online teacher.

On that account, this study has been shifted attempting to have an overview about teachers' perceptions on CLIL in e-learning, for which the literature is getting robust and gives the proper context to go deep into more research, rather than with high school students for the time being, with the idea and expectation to incentive similar productions like this one in the near future.

One of the limitations found while conducting the survey was the use of Google forms as a tool to collect the data, given this format only allows the use of *Gmail* accounts and no other email provider worked or provided a deficient visualization of the questions. Hence some of the teachers had to turn into their personal accounts to complete the info, and some others just preferred to let it be.

In those cases, a short interview, with only a few questions and created manually, was presented instead to the sample of teachers who agreed to take it as a complement for their set-up answers by the Google platform.

Furthermore, some questions may remain unanswered, given that not all fields were marked as mandatory to allow teachers flexibility in their responses. In the end, all answers were satisfactorily answered, and this did not happen.

Certainly, the small sample of 46 participants that respond on time and date to the survey disposed and spread online, represent a minor constraint to the analysis and validation of the data, that could be statistically measured using tools as SPSS, analysis of variance (ANOVA) or Pearson's correlation, which usually are used to comprehensive number of inputs.

As a result, there is an ample scope for further research in online CLIL in virtual scenarios from the perspective of teachers and students.

## References

- Abdisalimovich, K.J. (2023). Communicative Language Teaching and The System of Exercises. *Journal of Pharmaceutical Negative Results*, 1017–1022. https://doi.org/10.47750/pnr.2023.14.S02.122
- Agudo-Peregrina, A., Iglesias-Pradas, S., Conde-González, M. & Hernández-García, A. (2014). Can we predict success from log data in VLEs? Classification of interactions for learning analytics and their relation with performance in VLE-supported F2F and online learning. *Computers in Human Behavior. 31.* 542-550. https://doi.org/10.1016/j.chb.2013.05.031
- Al-Mawee W., Kwayu K.M. & Gharaibeh T. (2021) Student's perspective on distance learning during COVID-19 pandemic: A case study of Western Michigan University, United States. *Int J Educ Res Open. 2021; 2:100080.* doi: 10.1016/j.ijedro.2021.100080.
- Becerra-Posada, T., García-Montes, P., Sagre-Barbosa, A., Carcamo-Espitia, M. I., & Herazo-Rivera, J. D. (2022). Project-based Learning: The Promotion of Communicative Competence and Self-confidence at a State High School in Colombia. *HOW Journal*, 29(2), 13-31. https://doi.org/10.19183/how.29.2.560
- Kumar Basak, S., Wotto, M., & Bélanger, P. (2018). E-learning, M-learning and D-learning: Conceptual definition and comparative analysis. *E-Learning and Digital Media*. 15(4). 191-216. https://doi.org/10.1177/2042753018785180
- Bell, M. W. (2008). Towards a definition of "virtual worlds". *Journal of Virtual Worlds Research*, 1(1). https://doi.org/10.4101/jvwr.v1i1.283
- Beytía, P., Agarwal, P., Redi, M., & Singh, V. K. (2022). Visual Gender Biases in Wikipedia: A Systematic Evaluation across the Ten Most Spoken Languages. *Proceedings of the International AAAI Conference on Web and social media*, 16(1), 43-54. Retrieved from https://doi.org/10.1609/icwsm.v16i1.19271
- Bhandari, P. & Nikolopoulou, K. (2022, November 30). What Is a Likert Scale? | Guide & Examples. Scribbr. Retrieved January 13, 2023, from https://www.scribbr.com/methodology/likert-scale/.

- Booe, J. (2022, October 1). *How common is spoken Spanish in India (revealed)*. Doublespeak Dojo. Retrieved from https://doublespeakdojo.com/how-common-is-spoken-spanish-in-india-revealed/.
- Bowers, J., & Kumar, P. (2015). Students' Perceptions of Teaching and Social Presence: A Comparative Analysis of Face-to-Face and Online Learning Environments. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT), 10*(1), 27-44. http://doi.org/10.4018/ijwltt.2015010103
- Cabrales, A., Graham, A., Sahlberg, P., Hodges, C., Moore, S., Lockee, B., Trust, T., Bond, A., Lederman, D., Greene, J., Maggioncalda, J., Soares, L., Veletsianos, G. & Zimmerman, J. (2020). Enseñanza Remota de Emergencia Textos para la discusión. *The learning factor. Proyecto: Reflexión educativa. 1*, 2-31. http://www.educaccionperu.org/wp-content/uploads/2020/04/Ensen%CC%83anza-Remota-de-Emergencia-Textos-para-la-discusio%CC%81n.pdf
- CLIL@INDIA- CLIL India (2022) Language Learning Redefined | Indian Education | Indian Languages CLIL stands for Content and Language Integrated Learning. It is an educational approach that encourages multilingualism in schools by teaching subjects in more than one language. (n.d.). Retrieved from https://www.clilatindia.in/
- Codina Fernández, Judit. (2019). CLIL teachers' materials: Science-textbook's evaluative template (Master's Dissertation UNIR). Re-UNIR. https://reunir.unir.net/handle/123456789/8237
- Coyle, D., Hood, P. & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning* (CLIL). Cambridge; Cambridge University Press. http://doi.org/10.1017/9781009024549
- Creswell, J. W. (2014). Research design: qualitative, quantitative, and mixed methods approaches. Sage publications. Retrieved from https://www.ucg.ac.me/skladiste/blog 609332/objava 105202/fajlovi/Creswell.pdf
- Dalton-Puffer, C. (2011). Content and language integrated learning: From practice to principles? *Annual Review of Applied Linguistics, 31,* 182–204. http://doi.org/10.1017/S0267190511000092

- De', R., Pandey, N. & Pal, A. (2020) Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice, International Journal of Information Management, Volume 55, 2020, 102171, ISSN 0268-4012, https://doi.org/10.1016/j.ijinfomgt.2020.102171
- Dwivedi, A. V. (2015). Official Status of English in India. *The Journal of English Language Teaching*.
- Duncan, I., Miller, A., & Jiang, S. (2012). A taxonomy of virtual worlds usage in education. *British Journal of Educational Technology*, *43*(6), 949–964. https://doi.org/10.1111/j.1467-8535.2011.01263.x
- Fox, J. (2005) Rethinking Second Language Admission Requirements: Problems with Language-Residency Criteria and the Need for Language Assessment and Support, Language Assessment Quarterly. 2:2, 85-115. http://doi.org/10.1207/s15434311laq0202 1
- Francisco, R. (2021). Virtual Learning: Challenges and Coping Mechanisms of Language Learners in Rural Areas. *Journal of Learning and Development Studies*, 1(1), 40–52. https://doi.org/10.32996/jlds.2021.1.1.59
- Friedman, T. L. (2005). The world is flat: A brief history of the twenty-first century. Farrar, Straus and Giroux.
- García, O. (2016, February). Ofelia García föreläsning Symposium 2015 [Video file]. Retrieved from https://www.youtube.com/watch?v=JaVcaYhFzVY.
- Gollom, M. (2020, March 13). 'We can't flip a switch': E-learning unlikely solution for all Canadian students if COVID-19 closes schools. *CBC News*. Retrieved from https://www.cbc.ca/news/coronavirus-school-closures-canada-1.5495075
- Graziano, A., Turchetta, B., Benedetti, F. & Cinganotto, L. (2021). *Pedagogical and Technological Innovations in (and through) Content and Language Integrated Learning.*Cambridge Scholars Publishing.

- James, W.B. & Gardner, D.L. (1995). Learning Styles: Implications for Distance Learning. *New Directions for Adult and Continuing Education*, *67*, 19-31. Retrieved January 19, 2023 from https://www.learntechlib.org/p/79514/
- Kumar Sharma, S. (2017). The Tower of Babble: Mother Tongue and Multilingualism in India. East European Journal of Psycholinguistics, 4(1), 188–204. https://doi.org/10.29038/eejpl.2017.4.1.sha
- Kumari, M. & Sahoo, M. (2022). Implementation of Content and Language Integrated Learning in the Indian classroom for promoting multilingualism among learners. *International Journal of Advanced Research*, *10*(4):85-93. https://doi.org/10.21474/IJAR01/14521
- King, F. B., Young, M., Drivere-Richmond, P.G. & Schrader, P.G. (2001). Defining Distance Learning and Distance Education. *Educational Technology Review. The University of Connecticut.* Neag School of Education. Retrieved from https://www.academia.edu/30996301/Defining\_distance\_learning\_and\_distance\_education.
- Larsen-Freeman, D., & Freeman, D. (2008). Language Moves: The Place of "Foreign" Languages in Classroom Teaching and Learning. *Review of Research in Education*, *32*(1), 147–186. https://doi.org/10.3102/0091732X07309426
- McDougald, J.S. (2009). The State of Language and Content Instruction in Colombia. *Latin American Journal of Content and Language Integrated Learning*. 2. 44-48. http://doi.org/10.5294/laclil.2009.2.2
- McDougald, J. S. (2016). CLIL approaches in education: Opportunities, challenges, or threats? *Latin American Journal of Content & Language Integrated Learning*, *9*, 253-266.
- Mehisto, P., Marsh, D., & Frigols, M. J. (2008). Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education. *Oxford: Macmillan Education*.
- Merino, J. & Lasagabaster, D. (2015). CLIL as a way to multilingualism. *International Journal of Bilingual Education and Bilingualism*. 21:1, 79-92. https://doi.org/10.1080/13670050.2015.1128386

- Mortiboys, A. (2011). Teaching with Emotional Intelligence: A step-by-step guide for Higher and Further Education professionals (2nd ed.). *Routledge*. https://doi.org/10.4324/9780203806463
- Morton, T. (2013). Critically Evaluating Materials for CLIL: Practitioners' Practices and Perspectives. *In: Gray, J. (eds) Critical Perspectives on Language Teaching Materials.*Palgrave Macmillan, London. https://doi.org/10.1057/9781137384263 6
- Nikos-Rose, K (2022, November 30). Online Learning in COVID-19 Detrimental to Teen Mental Health, School Satisfaction, Performance. Social Media Failed to Compensate for Live Interaction. *The University of California, Davis. Retrieved from* https://www.ucdavis.edu/news/online-learning-covid-19-detrimental-adolescent-mental-health-school-satisfaction-performance
- Noack, R. & Gamio, L. (2015, April 23). The world's languages in 7 maps and charts. *The Washington Post. Retrieved from* https://www.washingtonpost.com/news/worldviews/wp/2015/04/23/the-worlds-languages-in-7-maps-and-charts/
- Román-Mendoza, E. (2018). Aprender a aprender en la era digital: Tecnopedagogía crítica para la enseñanza del español LE/L2. *Routledge (pp. 1-9)*. https://www.academia.edu/36616921/Aprender\_a\_aprender\_en\_la\_era\_digital.\_Routledge 2018
- Rodríguez B., M. (2011). CLILL: Colombia leading into Content Language Learning. *Íkala, Revista de Lenguaje y Cultura. 16* (2). 79-89. https://doi.org/10.17533/udea.ikala.9912
- Sánchez-Pérez, MdM. & Manzano-Agugliaro, F., (2021) Worldwide Trends in Bilingual Education Research: A Half-Century Overview. *Education Sciences*. *11*(11):730. https://doi.org/10.3390/educsci11110730
- Sangrà, A., Vlachopoulos, D., & Cabrera, N. (2012). Building an Inclusive Definition of E-Learning: An Approach to the Conceptual Framework. *International Review of Research in Open and Distance Learning*. *13* (2). 145-159. https://doi.org/10.19173/irrodl.v13i2.1161

- Siemens, G., Gašević, D., & Dawson, S. (2015). Preparing for the digital university: a review of the history and current state of distance, blended and online learning. *Athabasca University Press. MOOC Research Initiative. 234.* https://doi.org/ 10.13140/RG.2.1.3515.8483
- Smiderle, R., Rigo, S.J., Marques, L.B., Peçanha de Miranda Coelho, J.A. & Jaques, P.A. (2020). The impact of gamification on students' learning, engagement and behavior based on their personality traits. *Smart Learn. Environ.* 7, 3. https://doi.org/10.1186/s40561-019-0098-x
- Southworth, F. C. (1980). Indian bilingualism: some educational and linguistic implications. *Annals of the New York Academy of Sciences, 345*(1 Studies in Ch), 121–146. https://doi.org/10.1111/J.1749-6632.1980.TB51120.X
- Stewart-Strobelt, J., & Chen, H. (2003). Motivations and attitudes affecting high school students' choice of foreign language. *Adolescence*, *38*(149), 161–170. https://pubmed.ncbi.nlm.nih.gov/12803460/
- Tavarez DaCosta, P. & Almanzar Alvarado, V. (2020). Spanish Language Interference in the English Learning Process for Students of the English Immersion Program. *MESCYT*. https://files.eric.ed.gov/fulltext/ED602493.pdf
- The Flipped Classroom, (2022, April 26). https://www.theflippedclassroom.es/
- Tlili, A., Burgos, D., Olivier, J. & Huang, R. (2022). Self-directed learning and assessment in a crisis context: the COVID-19 pandemic as a case study. *Journal of E-Learning and Knowledge Society*, *18*(2), 1-10. https://doi.org/10.20368/1971-8829/1135475
- Task based language teaching (TBLT) ¿en Que consiste? (2020, September 28).

  UNIR. https://www.unir.net/educacion/revista/task-based-language-teaching/
- Torres-Rincon, J. C., & Cuesta-Medina, L. M. (2019). Situated Practice in CLIL: Voices from Colombian Teachers. *GIST Education and Learning Research Journal*, (18), 109–141. https://doi.org/10.26817/16925777.456
- UNESCO. (2022, May 5). What you need to know about languages in education. [Status update] https://www.unesco.org/en/education/languages/need-know

- Valencia-Vallejo, N., Lopez-Vargas, O., & Sanabria-Rodriguez, L. (2019, March 19). Effect of a metacognitive scaffolding on self-efficacy, metacognition, and achievement in e-learning.
  Knowledge Management & E-Learning: An International Journal.
  https://doi.org/10.34105/j.kmel.2019.11.001
- Webster, R., Edith Cowan University, Australia. (2003). *Cognitive Styles, Metacognition and the Design of E-learning Environments.* In F. Albalooshi (Ed.), Virtual education: cases in learning & teaching technologies (pp. 225- 241). IRM Press.
- Wijoyo, H., Santamoko, R., Muliansyah, D., Yonata, H. & Handoko, A. L. (2020, October 2) The Development of Affective Learning Model to Improve Student's Emotional Quotient. 

  Journal of Critical Reviews, Vol 7, Issue 19, 2020. Available at SSRN: https://ssrn.com/abstract=3873701
- Xperiential, H. (2022). *Language Policy in Indian Schools: A Point of View*. The Heritage School Gurgaon. Retrieved from https://www.heritagexperiential.org/language-policy-in-indian-schools-a-point-of-view/
- Yadav, S. (2018, September 21). *Spanish In Indian Schools: Present and Future.* The Progressive Teacher. Retrieved from http://www.progressiveteacher.in/spanish-in-indian-schools-present-and-future/
- Yaguara, J. A., Villalobos Salinas, N. P., & Otálora Caviche, J. C. (2022). Exploring the Implementation of CLIL in an EFL Virtual Learning Environment. *Latin American Journal of Content & Amp; Language Integrated Learning*, 14(2), 187–214. https://doi.org/10.5294/laclil.2021.14.2.1
- Yang, Wh. & Yang, Lz. (2022). Evaluating Learners' Satisfaction with a Distance Online CLIL Lesson During the Pandemic. *English Teaching & Learning 46*, 179–201. https://doi.org/10.1007/s42321-021-00091-5

## Annexes

# Annexe A. Questionnaire link in Google Forms

https://forms.gle/cSWVxuqGz99PTe69A