REMEDYING FOREIGN LANGUAGE ANXIETY THROUGH CLIL? A MIXED-METHODS STUDY WITH PUPILS, TEACHERS AND PARENTS

Mathea Simons
Claudio Vanhees
Tom Smits
Karen Van De Putte
University of Antwerp, Belgium

Abstract: Foreign Language Anxiety (FLA) is an important challenge for language learning. In Content and Language Integrated Learning (CLIL), subjects are taught in a language that is not the learners' mother tongue; a context that could reduce FLA. This study analyzes whether CLIL can positively influence FLA and which characteristics determine its presence in a CLIL context. Data were collected from 225 pupils, their parents and teachers in Flemish-speaking Belgium. Quantitative and qualitative methods were applied, with pre- and post-measurement. Results indicate that CLIL can indeed positively influence FLA. Pupils experienced growth in their self-confidence to use the foreign language. Their teachers observed more active participation, especially from more silent and less proficient pupils. The parents also noticed an increase in communicative attitudes. We found eight variables to have an influence. The foreign language used in CLIL appeared to have the most important influence besides the pupils' interest in language learning and their personality traits, extraversion and agreeableness.

Keywords: CLIL, foreign language anxiety (FLA), mixed-methods, pupils, teachers, parents.

1. INTRODUCTION

Research has shown that success (or failure) in foreign language learning in an educational context is largely related to affective factors. Foreign language anxiety (FLA) is such an affective factor and can be held responsible for its debilitating effect on language learning. Researchers and stakeholders are seeking approaches that can help reduce FLA in the classroom. Content Language Integrated Learning (CLIL) is an educational approach in which subjects are taught in a foreign language, and that could help reduce FLA. Therefore, the aim of the present study is to analyze the potential influence of CLIL on FLA and to provide more insights into characteristics that influence the presence of FLA in the CLIL classroom.

2. THEORETICAL FRAMEWORK

A large and growing body of literature has demonstrated that affective factors significantly influence the processes involved in foreign language learning. Both negative and positive learner emotions can be considered "the fuel for foreign language learning" (Dewaele *et al.,* 2017). The domain of language learning and emotions is marked by several key concepts such as motivation, willingness to communicate, self-efficacy and (foreign) language anxiety (Simons & Smits, 2018). In the last decade we have witnessed a growing interest in the influence of positive emotions on language learning (Dewaele, 2005, 2015; Gregersen *et al.,* 2014; 2016; MacIntyre & Gregersen, 2016; Oxford, 2015; Ross & Starcke, 2016; Seligman & Csikszentmihalyi, 2000), At the same time, we observe a renewed and global interest in the emotion and psychological construct of Foreign Language

Anxiety (FLA) (Young, 2018). FLA is "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (Horwitz *et al.,* 1986:128). The construct emerged in the mid-1980s when it first sparked the interest of teachers and researchers, continued to do so in the 90s, and provoked a growing interest in the XXI Century (Young, 2018). The influence of FLA on language learning has been extensively studied. For reviews we refer to Dewaele and MacIntyre (2014); Gardner and MacIntyre (1993) and Horwitz (2001, 2010).

FLA has been shown to have a weakening effect on language learning (Aida, 1994; Dewaele & Al-Saraj, 2015; Horwitz, 2010, Pérez-Paredes & Martínez-Sánchez, 2000; Thomas & Sylvén, 2015), for both proficient and less proficient pupils (Gregersen & Horwitz, 2002). In some cases a negative influence on acquisition and retention (Horwitz, 2000, 2001; MacIntyre, 1995) or on motivation (MacIntyre, 2002; Yamashiro & McLaughlin, 2001) has been demonstrated as well. As, depending on the language, most studies mention occurences of 1 to 3 or 1 to 4 pupils (Simons & Decoo, 2009; Pihko, 2007), teachers and stakeholders are seeking approaches or specific contexts that reduce anxiety (Lasagabaster, 2009).

Content and Language Integrated Learning (CLIL) is an educational approach in which a subject (content) is taught and learned in a language distinct from the learners' mother tongue, with a dual focus on content and language. Both aspects are equally important and are to be integrated in each other (Coyle, Hood, & Marsh, 2010; Strobbe *et al.,* 2012). The concept originated in the 1990s and spread rapidly. Dalton-Puffer and Smit (2007:8) list arguments that support CLIL education: CLIL "creates conditions for naturalistic language learning, (…) it revolves around the purpose and the meaning of language use in the classroom; (…) attending CLIL classes means a substantial increase in the amount of target language exposure". They also point to the potential positive influence on affection: reducing target language anxiety and increasing learners' motivation. This positive impact of CLIL on affective variables is also mentioned by other researchers. Muñoz characterizes CLIL as "a relatively anxiety-free environment" (2002:36). Lasagabaster (2009) adds that besides enhancing motivation, improving language attitudes and fostering multicultural openness, CLIL may reduce anxiety. Thompson and Sylvén (2015) explain that the theoretical underpinning for lower anxiety in CLIL lies in the focus on communicating content rather than on language form.

Research into the link between CLIL and FLA is recent and scarce. Macintyre, Baker, Clement and Donovan (2003) applied a survey with a qualitative section to study the effects of language, sex and grade on FLA, willingness to communicate (WTC), and perceived communicative competence in CLIL and traditional classes in a Canadian junior high French late immersion programme.They found that students' L2 WTC, perceived competence, and frequency of communication in French increased from grades 7 to 8 and was maintained between grades 8 and 9, despite a drop in motivation between grades 7 and 8 and a steady level of FLA across the three grades. Boys' overall WTC and FLA levels remained constant across the three grade levels, whereas girls showed an increase in WTC and a decrease in FLA from grade 8 to 9.

Pihko (2007) investigated English Language Anxiety in CLIL and traditional classes in Finnish comprehensive schools through a survey. She found that a considerable number of pupils in both settings experienced FLA, yet CLIL pupils to a lesser extent. She doubts if effects are due to CLIL or pupils' higher personal motivation.

Doiz, Lasagabaster and Sierra (2014) compared pupils of grades 7 and 9 in CLIL and non-CLIL in the Basque Autonomous Community in Spain. In grade 7, CLIL pupils showed a higher motivation than non-CLIL pupils, but also experienced significantly more anxiety, which might be explained by the more demanding CLIL approach. However, no significant differences in anxiety were found in grade 9, so they hypothesize that CLIL pupils became gradually accustomed to English as the subject language. Lasagabaster and Doiz (2017) subsequently studied both age groups during a longer period. Results for non-CLIL pupils did not reveal important changes despite higher anxiety levels in grade 9 compared to grade 7. CLIL pupils reported more anxiety in higher grades, leading the authors to consider age as a possible influencing variable.

Thompson and Sylvén (2015) studied Swedish CLIL and non-CLIL pupils in grade 10. CLIL pupils exhibited significantly less anxiety, increased self-confidence, more affinity with English classes, a more relaxed attitude towards English, increased confidence with native speakers and less fear of ambiguity in English. Strikingly, these significant differences were found at the start of high school, when pupils initiated CLIL, which made the authors hypothesize that the differences cannot be attributed to CLIL, but rather to pupil profiles of CLIL learners, whose lower anxiety may be innate. Möller (2016) compared different types of anxiety in CLIL and non-CLIL in German secondary education, bearing in mind the approach used in primary education. No significant differences were detected between pupils as regards exam anxiety. As for fear of success (i.e. the belief that success will lead to negative consequences such as jealousy or bullying), however, CLIL pupils exhibited significantly more anxiety, which the author assigned to the selectivity of German CLIL education. In one of the most recent studies Somers and Llinares (2018) compared motivation and feelings of anxiety in students enrolled in two bilingual tracks of differing intensity (Bilingual Education programme of the Community of Madrid). They observed significantly more anxiety in high-intensity students and considered it a wake-up call for CLIL educators who should counterbalance this with greater immersive language support.

3. RESEARCH QUESTIONS

Results from the above studies demonstrate the relevance of exploring the phenomenon of FLA in a CLIL context more profoundly. In previous studies, FLA was generally measured at a specific moment without considering the evolution or checking the specific influence of CLIL (e.g. through pre- and post-measurement). Moreover, only pupils were investigated, while other stakeholders, namely (language and subject) teachers and parents, could also provide crucial information on its effects. Research on the subject has been mainly quantitative in nature whereas qualitative data could provide deeper insights into the phenomenon. Furthermore, no prior study has investigated the underlying factors that teachers might have an influence on. Therefore, this study set out to answer the two following research questions:

RQ1: How do pupils, their parents and teachers (CLIL teachers and language teachers), perceive the (potential) influence of CLIL on FLA?

RQ2: Which underlying characteristics (e.g. gender, home language, personality, CLIL language, motivation for CLIL) influence the presence of FLA in the CLIL classroom?

4. METHODOLOGY

4.1. Research context

This study is carried out in Flanders, the Dutch-speaking part of Belgium. Flemish pupils generally start to learn French in primary education by the age of 10. At 14 they initiate English classes and subsequently add German or Spanish by the age of 15. Although French is the first foreign language in the curriculum and one of Belgium's official languages, contact with English is much more frequent and attitudes towards it much more positive (Housen, Janssens, & Pierrard, 2002).

CLIL is relatively new in Flanders (Strobbe *et al.,* 2012): French, English or German can be used as CLIL languages, but are also still taught as foreign languages. CLIL education encompasses a maximum of 20% of the teaching time, and is generally organized for one subject per grade, which results in 1 or 2 CLIL periods a week. Flemish pupils participate voluntarily in CLIL and a parallel programme in Dutch is always offered. If pupils – even during the school year – are unwilling to continue CLIL, they switch to the parallel programme. CLIL teachers sign up voluntarily, but have to master the CLIL language at C1 level. In order to answer the research questions, a study was conducted on two campuses of a large scale secondary school (1247 students). The study was carried out across three grades of secondary education, with three subjects and two foreign languages (see Table 1):

Table 1. Context of the study

Grade	Age span	CLIL subject	CLIL language
10th	14-17	Geography	English
11th	15-17	Art History	English
12th	17-18	Economics	French

4.2. Respondents and Research Instruments

Three respondent groups participated in the study: pupils, their parents and their (CLIL and language) teachers. The mixed-method approach consisted of a quantitative (survey) as well as a qualitative (semi-structured interviews) strand involving pre- and post-measurements. All research questions were answered by the three respondent groups. The following table shows the number of respondents per group and the instruments for data collection:

Table 2. Research design.

Respondent group(s)	Method
Pupils (N= 225)	Quantitative (Survey)
	Pre measurement: September
	Post measurement: May
(N= 14)	Qualitative (Interview): February
Teachers (N= 8)	
• CLIL-teachers	Qualitative (Interview): February
• Language teachers	Qualitative (Interview): February
Parents (N= 130)	Quantitative (Survey)
	Pre measurement: September
	Post measurement: May

We decided to collect both quantitative and qualitative data from the pupils. Given the small number of teachers (N=8), they were interviewed. The parents answered a survey (twice) due to their large number (N=130) and time constraints.

4.2.1. Respondent group 1 – Pupils

The participating pupils first completed a web survey and then a selection of them took part in semi-structured interviews with the researchers.

a. Web survey. The web survey was administered with the *EvaSys*-tool at the beginning (September, pre-measurement) and the end of the school year (May, post-measurement). Thanks to teacher support, a 100% response rate was realized in both measurements and all items were completed by all pupils. However, the number of participants differs between pre- and post-measurement due to illness, pupils changing subjects or schools and other reasons. 187 pupils completed both surveys. Table 3 provides an overview in which gender, but also home languages, nationalities and academic age are taken into account.

Table 3. Profile of the pupils - Survey

Context	Total N	Gender Female %	Gender Male %	Language spoken at home 1 %	Language spoken at home 2 or more %	Nationality 1 %	Nationality 2 %	Age Required age %	Age Younger %	Age Older %
10th Geography - English	133	71.4	28.6	90.2	9.8	95.5	4.5	88.7	6.0	5.3
11th Art History - English	43	72.1	27.9	88.4	11.6	95.3	4.7	88.4	7.0	4.7
12th Economics - French	11	45.5	54.5	81.8	18.2	100	0.0	72.7	0	27.3
Total	187	70.1	29.9	89.3	10.7	95.7	4.3	83.3	4.3	12,4

As Table 3 shows, more girls than boys participated in the survey, 1 pupil out of 10 has more than one home language, and 4.3% more than one nationality. The overlap between nationality and other home languages is complete: pupils with another nationality also speak another home language. Most have the stipulated academic age: 4.3% are ahead of their age, 12.4% lag behind.

The web survey (see Appendix 1) consisted of (1) items to measure FLA, in order to compose the dependent variable FLA (RQ1), and (2) items to identify independent variables that possibly influence FLA (RQ2).

Foreign language anxiety as a dependent variable

To measure the dependent variable FLA, we used a translated version (Dutch) of the *Foreign Language Classroom Anxiety Scale (FLCAS)*, which has been frequently used in empirical research (33 items, scored on a 5-point Likert scale) (Horwitz, 1986). Despite its extensive use, some researchers have criticised the validity of the scale. Sparks and Ganschow (2007) and Sparks and Patton (2013) state that FLCAS does not measure an anxiety distinct to FL learning, but rather individual differences in students' skills and/or self-perceptions of their language learning skills. Other researchers (e.g. Skehan, 1989; Trang, 2012) observe the possibility that some FLCAS concepts (e.g. test anxiety) refer to a common type of fear, not exclusive to foreign language learning. Despite the development of other scales (e.g. MacIntyre & Gardner, 1994; Woodrow, 2006) we opted for the FLCAS because we are convinced that the items best reflect the concept we want to measure, because it is still the most widely used instrument, because it provides a relatively clear theoretical framework (Trang, 2012), and because some authors attribute differences between factor analysis results to the role of culture and ethnicity in shaping students' beliefs (Yang, 2012). To avoid using an instrument with insufficiently proven validity, we decided to apply EFA ourselves and to retain only those items referring univoquely to the concept of FLA as defined in the first section.

Independent variables

In addition to (traditional) personal characteristics (**gender, age, nationality, home language**), the **CLIL language, personality, motivation for CLIL, interest in the subject, interest in language learning** and **extracurricular language learning** were used as independent variables. Personality, motivation and extracurricular language learning were measured with (validated) instruments or items.

The pupils' **personality** was determined with the *Big Five*, "a hierarchical model of personality traits (…) which suggests most individual differences in human personality can be classified into five broad, empirically derived domains" (Gosling *et al.*, 2003:507): (1) Emotional stability, (2) Agreeableness, (3) Conscientiousness, (4) Extraversion and (5) Openness to experience. Each bipolar factor (e.g. Extraversion *vs.* Introversion) summarizes several specific facets (e.g. sociability), which subsume even more specific traits (e.g. talkative, outgoing). For reviews, see John and Srivastava (1999), and McCrae and Costa (1999). We used the short, free version of the test (20 items).

We assumed that also **motivation** for CLIL influences (possible) feelings of anxiety a pupil develops. The construct of motivation in foreign language learning has been extensively studied both within the SLA field and the broader educational field, with several key publications (e.g. ardner, 2001; Dörnyei & Schmidt, 2001). In this study, we decided to use a modified version of Vansteenkiste and Soenens' (2015) scale. Four motivational types are measured, subdivided in two categories: (a) external motivation, linked to obligation, pressure and stress, labelled as external regulation (punishment, reward expectation) and introjected regulation (ego-involvement, shame, guilt), and (b) internal motivation, with a lot of psychological freedom for the individual, called autonomous motivation (personal relevance) and willingness (pleasure, passion, interest).

Besides motivation for CLIL, **interest and motivation for the subject and for language learning** may also play a role. Nine items measured these underlying characteristics.

b. Semi-structured interviews. In-depth midterm interviews were conducted on 14 pupils (February, 6 months of CLIL experience) to deepen the quantitative results from the web survey. Their grade, gender and CLIL language were taken into account for the selection (see Table 4): 9 girls and 5 boys were interviewed; 7 had languages as their major subject; 11 exclusively spoke Dutch, while 3 spoke an additional language. Based on the pre-measurement results, 6 pupils were affected by FLA. The interviews (Appendix 2) comprised four main questions. The first three aimed at answering and deepening answers to RQ1. The last question focused on RQ2.

Table 4. Profile of the Learners – Interview (Results section uses learners' code names).

Code Name	Gender	Age	Languages spoken at home	Grade	Language Major	FLA profile	CLIL language
L1	Male	18	1	12th	Yes		French
L2	Female	17	1	12th	No	FLA	French
L3	Female	17	2	12th	No		French
L4	Male	17	1	12th	No	FLA	French
L5	Male	18	2	12th	Yes		French
L6	Female	18	1	12th	Yes	FLA	French
L7	Male	18	1	12th	No		French
L8	Male	18	1	12th	No		French
L9	Female	15	1	10th	Yes		English
L10	Female	16	1	10th	No	FLA	English
L11	Female	15	1	10th	Yes		English
L12	Female	16	1	10th	Yes		English
L13	Female	15	2	10th	No	FLA	English
L14	Female	16	1	10th	Yes		English

4.2.2. Respondent group 2 – Teachers

For the full picture to emerge, the pupils' teachers (N = 8) were equally involved in the study: five 'regular' language and three CLIL teachers. Table 5 gives more details on their profile. We organized the interviews (again at midterm) with all teachers from both groups, each built around four questions (Appendix 3). The first three questions focused on RQ1: how do teachers perceive FLA in regular language and CLIL classes for CLIL, but also non-CLIL pupils. Moreover, the questions focused on the evolution of anxiety after six months of CLIL education. The last question enquired about causes of language anxiety (RQ2).

Table 5. Profile of the Teachers (Results section uses subject and language teachers' code names).

Code Name	Gender	Type	Mother tongue	Teaching Experience	CLIL Experience
Ts1	Male	Subject Teacher (Geography)	Dutch	5-10 years	1 year
Ts2	Male	Subject Teacher (Art History)	Dutch	5-10 years	2 years
Ts3	Female	Subject Teacher (Economics)	French	5-10 years	1 year
Tl4	Female	Language teacher (English)	Dutch	> 20 years	1 year
Tl5	Female	Language teacher (English)	Dutch	> 20 years	2 years
Tl6	Female	Language teacher (English)	Dutch	5-10 years	1 year
Tl7	Female	Language Teacher (English)	Dutch	5-10 years	2 years
Tl8	Male	Language teacher (French)	French	1 year	1 year

4.2.3. Respondent group 3 – Parents.

All of the participating pupils' parents completed a survey on paper at the beginning and the end of the school year (Appendix 4). 130 parents returned both questionnaires (69.5% response rate), displaying strong parental involvement (see Table 6).

We decided to use a limited set of open questions so as to receive as much data as possible. The first questions dealt with pupils' attitudes towards CLIL and their parents' perceptions. The third focused on language anxiety (RQ1) and tried to map possible causes (RQ2). The last questions enquired about comprehension during CLIL lessons, the self-confidence to participate and the difficulty of the subject matter.

Table 6. Profile of the Parents.

Parents' Response Rate (N= 130)	Parents' Response Rate (%)	Child's CLIL subject	Child's CLIL language
94 (out of 133)	70,7%	Geography	English
29 (out of 43)	67,4%	Art History	English
7 (out of 11)	63,6%	Economics	French

4.3. Data Analysis

4.3.1. Web survey analysis (pupils)

A first group of variables was measured with one or a very limited set of items (e.g. CLIL language, interest in the subject). In this case, data reduction was unnecessary and these characteristics were included in the analysis as separate variables. A second set was measured through a series of items, making it necessary to reduce the data through exploratory factor analysis (EFA). As recommended in the literature, we used *Principal Components Analysis* with Varimax-rotation (Nunnally, 1978; Kline, 1994) and only included items with loadings higher than 0.30. For a factor to be retained, its eigenvalue had to be > 1 (Kaiser, 1960) and the reliability of the new scale (Cronbach's alpha) > 0.70. Based on the new scales, new (composed) variables were calculated.

a. Dependent variable: FLA

EFA (KMO: 0.950; Bartlett 0.000) resulted in a three factor solution, which explained 51.8% of the variance (see Table 7). All item loadings were higher than 0.30, but several items showed cross loadings on more than one component. If the difference in loadings was inferior to 0.20, the item was removed.

Table 7. Solution EFA FLCAS.

Factor	Explained variance	Cronbach's alpha	Number of items	Items
FLA1 – Foreign language anxiety	25.0%	α = 0.923	10	R1, 3, 7, 9, R11, 13, R14, R18, 23, R24
FLA2 – Didactic process anxiety (evaluation, error correction)	15.7%	α = 0.788	6	10, 12, 15, 16, 19, 29
FLA3 – Negative feelings towards CLIL context	11.0%	α = 0.703	3	5, 6, 17

Note: R=Reversed item

By means of sum scores, new variables were created from the items. In order to analyze the influence of independent variables (RQ2), we tried to compose one single dependent variable. Therefore, we analysed the correlations between the three newly created variables and performed an additional EFA:

N = 187	Variable 'FLA global'
FLA1	0.810
FLA2	0.864
FLA3	0.701

As the Cronbach's alpha of the three variables shows a global score of 0.706, we decided to create a new variable 'FLA global' to be used as the central dependent variable in the explanatory analysis (RQ2).

b. Independent variables

Several (independent) variables were targeted with multiple items. To verify whether the underlying constructs were measured, we conducted exploratory factor analyses (EFA).

1. Personality. The respondents' personality was measured through 20 items. EFA (KMO: 0.716; Bartlett 0.000) indicated a solution of 5 components (see Table 8), together explaining 54.9% of the variance.

Table 8. Solution EFA Personality – Big Five.

Factor	Cronbach's alpha	Number of items	Items
Personality 1 – Extraversion	α = 0.735	3	5, 11, 19
Personality 2 – Conscientiousness	α = 0.708	4	R3, 7, 12, R18
Personality 3 – Agreeableness	α = 0.702	3	6, 15, 17
Personality 4 – Emotional stability	α = 0.560	3	1, R2, 8
Personality 5 – Openness to experience	α = 0.573	2	4, R10

Note: R = Reversed item

In view of the low validity of Personality 4 and 5 (α < 0.600), these variables were discarded from further analyses.

2. Motivation for CLIL. EFA of the motivation-related items (KMO = 0.708; Bartlett's test 0.000) led to a two-factor solution, together explaining 60.1% of the variance (see Table 9).

Table 9. Solution EFA Motivation.

Factor	Cronbach's alpha	Number of items	Items
Internal motivation	α = 0.761	5	a, c, e, g, h
External motivation	α = 0.720	3	b, d, f

3. Extracurricular language learning. This variable was measured through 7 items. EFA (KMO: 0.697; Bartlett's test: 0.000) resulted in a two-factor solution, with 49.8% of the variance explained (see Table 10).

Table 10. Solution EFA Extracurricular language learning.

Factor	Cronbach's alpha	Number of items	Items
Seizing opportunities for language learning autonomously	α = 0.569	3	5, 6, 7
External motivation	α = 0.488	2	4, 8

Given the low reliability of the new scales (α < 0.700), we decided to leave these variables out of the subsequent analysis.

The following table gives an overview of the dependent and 11 independent variables that were taken into account in the analysis.

Table 11. Overview of dependent and independent variables.

Variable	Name	Number of items	Cronbach's alpha	Categories
Dependent variable				
FLA global	Language Anxiety	10	0.788	
Independent variable				
1. Gender		1		0 = male
				1 = female
2. Age		1		
3. Home language		1		0 = language of the region
				1 = other
4. CLIL language		1		0 = English
				1 = French
5. Interest in the subject		1		0 = no interest or neutral
				1 = interest
6. Interest in language learning		1		0 = no interest or neutral
				1 = interest
7. Personality 1	Extraversion	3	0.735	
8. Personality 2	Conscientiousness	4	0.708	
9. Personality 3	Agreebleness	3	0.702	
10. Motivation 1	Internal	5	0.761	
11. Motivation 2	External	3	0.720	

4.3.2. Interviews (pupils and teachers) and parents' survey analysis

The pupil and teacher interviews were audio-taped and transcribed verbatim, and the open questions of the parents' interview were categorized. The first coding phase consisted of an explorative analysis of the transcripts by one researcher. Both research questions were used as a framework for the initial coding scheme, which was refined and extended based on the data. Then, the data were re-coded based on the extended framework and analyzed using NVivo10 software. Several strategies assured the validity structure (Johnson, 1997) of the qualitative data analysis. *Investigator triangulation* and *peer review:* two researchers monitored the data collection, after which one researcher performed an independent coding of the data in two steps (intra-rater reliability). Inconsistencies in coding between both phases were discussed with the other researchers. The use of *low inference descriptors*: the respondents' actual language and personal meanings were described verbatim and reported with direct quotations (see Results).

The following table gives an overview of the qualitative data coding scheme, containing four main categories: the FLA currently experienced (pupils) or perceived (teachers, parents), the development of FLA, causes of FLA and causes of (language) confidence. Text fragments were coded: generally to one; to two or more when appropriate. The table shows the number of pupils and teachers (N) mentioning the subcategory as well as the number of times it was mentioned during the interviews (N of refs).

Table 12. Coding scheme and results of qualitative data analysis.

Main category	Subcategory	N Pupils (N= 14)	N of refs Pupils	N Teachers (N= 8)	N of refs Teachers
		Pupils		**Teachers**	
Current FLA	- Speaking	6	8	2	6
	- Listening	5	6	1	1
	- Reading	3	4		
	- Writing	1	1		
FLA evolution	- Speaking	6	12	8	22
	- Listening	4	5		
	- Reading	2	2		
	- Writing	3	4		
	- Evolution of results	1	1		
	- Evolution of subject and language course	11	19		
FLA causes	- To feel judged	1	2		
	- Classmates, atmosphere			2	6
	- Teacher			2	8
	- Fear of errors	1	1	6	14
	- Individual language skills	1	1	4	4
	- LSP in the CLIL language				
	- Personality	4	6	8	16
	- Nature of the foreign language	5	8	2	2
	- Type of activity, exercise, task	2	2	3	6
	- Lack of preparation, time	2	2	2	2
	- Main subject			2	2

5. RESULTS

This section will successively answer the research questions underlying the study. First it describes FLA in the CLIL context and how pupils, their teachers and parents perceive the (potential) influence of CLIL on FLA. Then the second research question will be addressed, in search of subjacent causes explaining differences in perceived FLA. The data from the (web) survey with the pupils (pre- and post- measurement) are used as a starting point. Subsequenty, we deepen our findings on the basis of the data from the pupil and teacher interviews and the parents' survey. For the interpretation of the descriptive statistics we consider mean scores ≥ 3.5 (on 5) high, mean scores below 2.5 low. In case the standard deviation (SD) is ≥ 1, the group is regarded as heterogeneous.

5.1. The impact of CLIL on FLA (RQ1)

At the start of the CLIL programme, the global FLA of the pupils (N = 225) is low to neutral, although standard deviations show important in-group differences: M = 2.68 (on a scale of 5), SD = 1.04. 24.6% of the pupils have a score of more than 3.5 (to 5) on the factor Foreign Language Anxiety. This percentage confirms earlier research. At the end of the school year, global FLA stays at the same level, although internal group differences remain important (M = 2.62; SD = 1.00).

Table 13 shows mean scores and standard deviations on the three factors distinguished in the FLA scale, based on the pre- and post-measurement, complemented with the global FLA variable. Paired samples tests were used to estimate differences between pre- and post-measurements.

Table 13. Descriptive analysis and analyses of variance.

N= 187	Mpre	SDpre	Mpost	SDpost	t	df	Sig
1 FL anxiety	2.67	1.03	2.62	1.00	1,15	186	0.253
2 Didactic process anxiety	2.16	0.85	2.02	0.81	2.72	186	0.007**
3 Negative feelings towards CLIL context	2.03	0.84	2.19	1.02	-2.56	186	0.011*
4 FLA global	2.41	0.84	2.32	0.81	2.45	186	0.015*

* = p < 0.05; ** = p < 0.01; *** = p < 0.001

Pre- and post measurement results indicate that pupils experience low anxiety feelings, neither for the foreign language, neither for the FLT/CLIL pedagogical approach nor for the specific CLIL context (M < 2.67 of 5). The first variable 'Foreign language anxiety' obtains the highest score and SDs are also important here. Paired sample

t-tests show that one year of CLIL education does not significantly decrease this variable. Nevertheless, we see (small yet) significant differences for the two other variables and for the general FLA global variable. Despite low initial anxiety feelings, from the statistically significant results we infer that CLIL education can help to reduce these feelings even more.

The variable 'Didactic process anxiety' shows the most significant decrease. After one year of CLIL, pupils are less anxious about pedagogical aspects of language learning: e.g. not always understanding the teacher, the teacher who corrects every error, making mistakes. Consequently, the anxiety to learn a subject in a foreign language diminishes.

We also see a low but significant increase over time for the third variable 'Negative feelings towards CLIL context', which stands for not feeling like going to class, doing other things, not willing to take more CLIL education (see Table 7). Hence, it shows that after one year of CLIL education, the novelty element has disappeared, the focus is (again) more on learning success and the enthusiasm to engage in CLIL has slightly decreased.

As described before, the FLCAS is subject to criticism. Therefore, we included a control item: "After one year of CLIL education, I experience less fear when I speak or write [the CLIL language]". The pupils confirmed this (M = 3.21), which indicates an increase in self-confidence in the FL. 44% of them even obtain a score of > 4 on a total of 5, but there are important in-group differences (SD = 1.15).

46 pupils (= 24.5%) show a high score on initial language anxiety (> 3.5), 25 of them even higher than 4 on a total of 5. For this group, we separately analyzed the influence of CLIL education on feelings of anxiety (see Table 14).

Table 14. Descriptive analysis and analysis of variance of pupils with high levels of anxiety.

N= 46	Mpre	SDpre	Mpost	SDpost	t	df	Sig	
1 FL Anxiety	4.06	0.43	3.90	0.54	1.80	45	0.078	
2 Didactic process anxiety	2.80	0.92	2.67	0.74	1.21	45	0.234	
3 Negative feeling towards CLIL context	2.28	1.03	2.57	1.16	-2.42	45	0.020*	
4. FLA global		3.43	0.55	3.28	0.50	1.78	45	0.082

* = p < 0.05; ** = p <0.01; *** = p < 0.001

The anxiety these pupils develop towards the FL appears to have diminished after one year of CLIL education. The decrease is not significant (p = 0.078), but may indicate a tendency. However, the difference with the overall pupil group is clear: for the entire group, a decrease of only 0.05 (to 5) could be found, whereas within the group of anxious pupils, the decrease of FLA amounts to 0.16 (to 5).

For the latter group, one year of CLIL did not have an impact on their anxiety related to didactic aspects. Their negative feelings towards CLIL in general also increase slightly but significantly. Consequently, a year of CLIL education did not positively impact their motivation to enroll in (even) more CLIL classes.

When **pupils** reflect on language anxiety in a CLIL context, they mainly focus on speaking and listening (see Table 12). Three pupils also describe their anxiety when reading and one when writing in the FL: "*I sometimes feel scared of writing in French. It's so difficult…*" (L6). Despite low anxiety feelings among most, many undergo a positive evolution: "*Those two extra hours in the FL boost my confidence.*" (L1). Most pupils (N= 11, out of 14) notice an improvement for the CLIL subject and language classes: "*I think it's thanks to CLIL, my friends that don't take CLIL have more difficulties with understanding and speaking*" (L3). Almost half of them mention progress for speaking. Most do not notice substantial differences, but three explicitly mention less stress. Their writing skills also evolve, especially the use of specific FL jargon: "*I'm more confident to write specific words as I've seen them written on the blackboard during CLIL, even without knowing their meaning…*" (L14).

When (language and CLIL) **teachers** mention anxiety in a CLIL context, they mainly refer to oral skills (see Table 12) – to no surprise. The occurrence of FLA has mainly been described for productive skills, especially for speaking (e.g. Aida, 1994). Both CLIL and language teachers observe a rise in self-confidence: "*I notice most pupils are less afraid to express themselves*" (TI7). One also refers to FLA in listening: at the beginning of CLIL the pupils were keyed up when listening to a text, but now he observes more self-confidence. Teachers perceive a positive evolution in pupils' oral skills, especially in quiet or weaker pupils: "*Some pupils, particularly those initially afraid to speak, show less fear and more fluency when given a turn*" (TI7), or as Ts1 states: "*One boy with particular difficulties in English still doesn't talk much, but says he now enjoys discussions because he understands more thanks to CLIL*".

A vast majority of the **parents** (N = 94; 72.3%) state their child is enthusiastic about CLIL, whereas 10% (N = 13) say they regret the choice. One out of ten (n = 15) notices their child experiences stress. No other attitudes or feelings are mentioned.

Almost half of the parents never hear about CLIL (46.9%), which is possibly connected with the pupils' age (puberty). If so, pupils often comment positively (33.8%): they learn a lot, it goes 'amazingly' well, and it is fun to learn a language in another way. Some mention quieter lessons and more concentration. Negative feedback (13%) is often about feelings of frustration: "*She doesn't understand enough, which makes her feel bad*", or refers to additional efforts and pressure due to CLIL.

Almost half of them (48 %) think their children feel more at ease in the CLIL language, and show more self-confidence and understanding. Most parents (84%) perceive a positive influence of CLIL on asking questions in class, specifically due to more exemplary questions and the lack of negative comments. 9 out of 10 positively evaluate the comprehension of the subject matter.

Yet not all are convinced. An important group (40.1%) does not see a noticeable improvement on (self-) confidence, largely because their child already felt self-confident in the FL: "*She already dared to express herself quite well*". Others think one or two CLIL periods a week are insufficient for an effect. Almost half of those who do not see any improvement, still mention a considerable fear to communicate: "*She still doesn't speak spontaneously because she thinks her English is not good enough*".

5.2. Elements influencing FLA in a CLIL context (RQ2)

Based on exploratory factor analysis (EFA) we could discern one dependent variable, 'FLA global', and eleven independent variables (see Table 11). These independent variables were incorporated in the analysis and their influence on the dependent variable was examined by multiple linear regression analyses. We ascertained its significance (significant limit $p < 0.05$) and examined the effect size using the Beta coefficient, that indicates which share of the total variance within the dependent variable can be attributed to the independent variable (i.e. contribution on a total of 5). It also marks the direction of the effect on language anxiety (positive or negative).

A model composed of all independent variables explains FLA significantly ($F(11,186) = 7.08$, $p < 0.001$, $R^2 = 0.27$). It accounts for 27% of the variance within the dependent variable. The collinearity between independent variables is correct (VIF < 1.93; Tolerance > 0.56). Table 15 shows the influence of the independent variables on FLA in CLIL.

Table 15. The influence of independent variables on the dependent variable FLA.

Independent variables	FLA – Foreign Language Anxiety (dependent variable)		
	β	T	p
1. Gender (1 = female)	0.242	1.97	0.050*
2. Age	-0.272	-2.77	0.006**
3. Home language (1= other)	-0.061	-0.370	0.712
4. CLIL language (1= French)	**0.895**	2.99	0.003**
5. Interest in the subject (1= is interested)	0.058	0.493	0.623
6. Interest in language learning (1= is interested)	**-0.373**	-3.22	0.002**
7. Personality 1 – Extraversion	0.276	4.99	0.000***
8. Personality 2 – Conscientiousness	0.045	0.499	0.618
9. Personality 3 – Agreeableness	0.177	2.03	0.044*
10. Motivation 1 – Internal	-0.149	-2.25	0.025*
11. Motivation 2 – External	0.163	3.13	0.002**

* = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$

FLA in CLIL is significantly influenced by eight variables, namely: Gender, Age, CLIL language, Interest in language learning, Extraversion, Agreeableness, Internal and External Motivation. The variable *CLIL language* has the largest Beta coefficient (β =0.895). Thus, the anxiety feelings a pupil develops, depend mostly on the CLIL instructional language, which in our analysis constitutes CLIL education in French.

Interest in language learning has a β-value of -0.373. Pupils that find the language course interesting, will experience less FLA in the CLIL context. Furthermore, we observe three variables with similar β-values.

Personality-Extraversion has a Beta coefficient of β = 0.276 and displays the highest significance (p < 0.001). Its direction may, however, surprise: the more pupils believe to be extravert, the more FLA they experience. *Age* (β = -0.272) and *Gender* (girl) (β = 0.242) also exert a significant influence. Female pupils experience more FLA, as Donovan and MacIntyre (2004) also observed, whereas FLA is inversely proportional to pupils' age (15-18 years). Finally, three variables have a smaller, yet significant impact, the first of which is *Personality - Agreeableness* (β = 0.177). The more a pupil's susceptibility to interests of others, the higher anxiety may be. This constitutes the drive experienced to live up to the expectations of others (teacher, peers). If pupils are motivated by *external factors* (parents' expectations, obligation), FLA increases (β = 0.164), while it decreases when they choose CLIL based on internal motivation (β = -0.149).

The qualitative data on the **pupils** confirm this analysis. The participants mention seven causes for FLA (see Table 12). In CLIL, the language itself is the main cause for FLA: "*I'm not afraid, but if geography were taught in another language I wouldn't feel at ease*" (L11). Pupils also believe personality traits influence FLA: "*Well, X never talks. But that's his character*" (L14). They also mention 15 elements that could reduce FLA in CLIL (see Table 12) and teachers are clearly key. They should encourage the use of FL (L13: "*Don't be afraid to speak English in class. When you need help, I'll be there*"), allow mistakes and correct errors discreetly (L4: "*He corrects our mistakes without subtracting points*"), be available for questions and offer supporting materials, use the mother tongue adequately and translate if needed, but also separate subject and language contents in evaluation (L8: "*We have to study vocabulary and course units, but she separates them well*"), and give clear instructions and feedback. Besides teachers, 11 out of 14 pupils signal the importance of motivation for CLIL. In interesting lessons the will to communicate increases: "*When it's interesting, you naturally participate more*" (L1). The influence of peers and class atmosphere on well-being and self-confidence is mentioned by the same number of pupils. Speaking in a tolerant group, helps to reduce FLA in CLIL considerably: "*There's an open atmosphere in class. Mistakes are not an issue*" (L12). Pupils seem to be concerned about their classmates' opinion: "*If they laughed, I wouldn't dare to raise my hand again*" (L11).

Teachers indicate nine possible FLA causes. All (N = 8) consider pupil personality the main cause: "*A few perfectionist pupils don't express themselves easily*" (Tl6). Another important cause is the fear to make mistakes: "*Some pupils are just afraid to commit errors*" (Tl8). All teachers point to group atmosphere and peers as key elements. FLA diminishes in a safe environment: "*When pupils feel comfortable, they express themselves more easily*" (Ts2). Six also emphasize the importance of adequate feedback and evaluation: "*Feedback should focus on what they've just learned and they shouldn't be interrupted. Otherwise they won't dare to speak anymore*" (Tl7). They also notice their own impact on FLA: "*We must encourage them and give everyone a turn as often as possible. We create the learning environment*" (Ts1).

Most **parents** are positive about the influence of CLIL on self-confidence and (possible) feelings of anxiety. Parents notice a greater WTC at home as well as abroad (e.g. during holidays). Only a small group of parents (14%) answer the open question and provide possible causes for their child's increased self-confidence. Most of them (n = 12) refer to the teacher's proficiency and pronunciation in the CLIL language as key elements for success. At the same time, they are convinced that the teacher's attitude and pedagogical approach play a role in the emotions pupils develop towards the FL: "*He corrects mistakes, but doesn't include them in the evaluation*". Some parents (n = 9) attribute increased self-confidence simply to more frequent contact with the FL: "*The more you engage with the language, the more you dare to use it*", or to larger vocabulary: "*He's more willing to express himself because he knows more words*". When their child experiences anxiety, parents mention the fear of making mistakes (n = 4) and peer pressure in class (n = 3): "*My daughter experiences stress while answering, and is always a bit afraid to make mistakes*"; "*She feels as if other pupils might laugh at her when she makes a mistake*".

6. CONCLUSION AND DISCUSSION

As in CLIL education more attention is paid to content (subject) than to language, researchers suspect that this approach might positively influence FLA. In the present study we used a mixed-methods approach to operationalize this hypothesis in a sample of 225 pupils, their parents (N = 130) and their teachers (N = 8; CLIL and regular teachers) to ascertain if CLIL affects FLA and what aspects impact on its occurrence.

Most pupils exhibited little anxiety at the onset of their CLIL programme. In spite of this low initial FLA, it diminished even further – thanks to the CLIL experience –, particularly the fear of pedagogical-didactic aspects of the approach (e.g. fear of mistakes and study failure). Yet a quarter of the pupils suffered from high initial FLA. This number corroborates earlier research on FLA incidence (Simons & Decoo, 2009; Pihko, 2007), also in CLIL settings (Thompson & Lee, 2013). Among the latter feelings of anxiety equally decreased, albeit not significantly. Hence, FLA appears to be relatively stable. CLIL education can reduce FLA, but from this study its potential only appears as a tendency without statistical significance. Qualitative data revealed that pupils experienced growing confidence to use the FL, both in CLIL and language classes, which was confirmed by teachers of both courses.

Despite its low perceptibility, they noticed that (especially weaker and quieter) pupils more often dared to speak in class. Parents equally commented (relatively) positively on the decrease in communicative timidity. Nearly half of them reported that their child felt more comfortable in the CLIL language and dared to use it more.

An explanatory model composed of 11 variables allowed us to pinpoint eight variables that significantly account for FLA in a CLIL context. The language CLIL is taught in seems to have the biggest impact. English and French were the instruction languages in this study. Pupils taking French CLIL classes risk seeing FLA rise with 0.9 to 5 compared to pupils taking English CLIL classes. The qualitative data underpin this observation. The morphological complexity of a language and its linguistic familiarity might be contributing factors to FLA. This result confirms previous research by Dewaele (2010), who found that in a FL from a familiar linguistic family anxiety tends to be significantly lower. In this study the pupils' mother tongue was Dutch, a Germanic language such as English, which made English CLIL classes less anxiety provoking. Given this fact, stakeholders might consider initially organizing CLIL classes in an instruction language linguistically closer to the pupils' mother tongue and gradually moving towards less familiar languages.

A second variable with a considerable effect is pupil interest in the CLIL language. If present, it causes FLA to subside. It constitutes a more global attitude of pupils towards the FL: if they are interested in the CLIL language (i.e. read in the FL at home, try to use it when the opportunity arises, watch series in the FL etc.), anxiety feelings decrease.

Furthermore, pupil personality (i.e. extraversion and agreeableness) turned out to be of influence. Rather surprisingly, more extraverted pupils displayed higher FLA levels, which might be explained by Baker and MacIntyre's (2003) findings that immersion pupils' communication anxiety correlated most strongly with WTC. FLA reduces with age or combined with internal motivation, whereas external motivation (obligation, expectations) causes it to increase. Female CLIL pupils are more susceptible to FLA than males. The qualitative data on pupils and teachers confirm the effects of CLIL language and personal traits. As regards FLA and developing language confidence, all pupils mention the teacher, whose deliberate choice of a didactic-pedagogical approach and sympathetic attitude benefit pupils' assuredness. Peer group and class atmosphere also affect communicative courage, which is confirmed by teachers. Parents perceive teachers as key figures but also underline the importance of habituation: the more contact with L2 (in language and CLIL classes), the faster language confidence can grow. These findings, on the basis of the qualitative data, offer an interesting option for further research.

A few limitations of the present study, however, are noteworthy. First, pupils' L2 proficiency was not measured. A decrease in anxiety should lead to an improvement in L2 proficiency. Moreover, it could be interesting to administer measures of L1 skill and/or FL aptitude (eg. The MLAT) to participants prior to the study, especially to investigate the role of confounding variables in FLA. Data could be collected from the pupil files on their performance on previously-administered measures of language-related skills.

Furthermore, elements such as teacher characteristics, pedagogical approach, pupil group characteristics, pupil's relative standing in the group of learners, class atmosphere and the scope of the CLIL programme have not (yet) been included in the study. Besides such a cross-sectional study, a longitudinal study of CLIL pupils from grades 7 to 12 on the evolution of FLA over time, would be particularly interesting as this age group knows "a bump in anxiety during the teens and twenties that drops off in older groups" (Dewaele & MacIntyre, 2014). It would be equally of interest to include larger respondent groups for each CLIL language, as it constitutes the variable of most important consequence for FLA in the present study. Models that equally include those aspects, will manage to shed more light on the decisive factors for the prevention of FLA in CLIL.

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APPENDICES

APPENDIX 1 – SURVEY PUPILS

A. Items to measure the dependent variable Foreign language anxiety

The following items refer to the subject courses [i.e. geography, art history, economics] taught and learnt in a foreign language [i.e. English, French]. Please indicate what applies: 1 (strongly disagree)–2 (disagree)–3 (neutral)–4 (agree)–5 (strongly agree).

1. I always feel quite sure of myself when I am speaking in my foreign language class

2. I don't worry about making mistakes in language lessons.

3. I tremble when I know that I'm going to be called on in language lessons.

4. It frightens me when I don't understand what the teacher is saying in the foreign language.

5. It would bother me to take more classes in a foreign language.

6. During class, I find myself thinking about things that have nothing to do with the course.

7. I keep thinking that the other students are better at languages than I am.

8. I am usually at ease during tests in [FL] for the [subject] class.

9. I start to panic when I have to speak [FL] in [subject] classes.

10. I worry about the consequences of missing my class of [subject].

11. I don't understand why some people get so upset about speaking [FL] in [subject] classes.

12. Sometimes I can get so nervous that I forget things I know.

13. It embarrasses me to volunteer answers in [FL].

14. I would not be nervous speaking [FL] with native speakers.

15. I get upset when I don't understand what the teacher is correcting.

16. Even if I am well prepared for language class, I feel anxious about it.

17. I often feel like not going to my [subject] class as it is taught in [FL].

18. I feel confident when I speak [FL] in [subject] classes.

19. I am afraid that my teacher is ready to correct every mistake I make.

20. I can feel my heart pounding when I'm going to be called on.

21. The more I study for a language test, the more confused I get.

22. I don't feel any pressure to prepare very well for [subject] in [FL].

23. I always feel that the other students speak [FL] better than I do.

24. I feel very self-conscious about speaking [FL] in front of other students.

25. [Subject] classes move so quickly I worry about getting left behind.

26. I feel more tense and nervous in my [subject] class than in my other classes.

27. I get nervous and confused when I am speaking in my [subject] class.

28. When I'm on my way to the [subject] class, I feel very sure and relaxed.

29. I get nervous when I don't understand every word the language teacher says.

30. I feel overwhelmed by the number of rules one has to learn to speak [FL].

31. I am afraid that the other students will laugh at me when I speak [FL].

32. I would probably feel more comfortable around native speakers than with students when I have to speak [FL].

33. I get nervous when the [subject] teacher asks questions that I haven't prepared in advance.

Control item in post-measurement:

34. After one year of CLIL education I am less anxious when speaking or writing [FL].

B. Items to identify independent variables:

1. Personal data

Name; Gender; Nationality; Home language

2. Items measuring personality traits

Please rate each statement according to how well it describes you: 1 (strongly disagree) –5 (strongly agree).

1. I am relaxed most of the time.
2. I worry about things.
3. My bedroom is often a mess.
4. I have a vivid imagination.
5. I don't mind being the center of attention.
6. I take time for others.
7. I follow a schedule.
8. I rarely get irritated.
9. I put the others first.
10. I have difficulty understanding abstract ideas.
11. I keep in the background.
12. I am always prepared.
13. I lift a conversation to another level.
14. I talk to a lot of different people at parties.
15. I make people feel at ease.
16. I complain easily.
17. I feel other people's emotions.
18. I shirk my duties.
19. I don't like to draw attention to myself.
20. I am quick at understanding things.

3. Items related to motivation for CLIL

Please indicate to which extent the following propositions apply: 1 (strongly disagree)–5 (strongly agree).

I opted for CLIL because

A.   I like it.
B.   Others (parents, teachers etc.) expect it of me.
C.   I can learn a lot from it.
D.   I would feel guilty if I didn't.
E.   I realize why it is useful
F.   Others forced me to do this.
G.   I want to prove myself
H.   I find it interesting.

4. Motivation for the subject and the language

Please indicate what applies: 1 (strongly disagree)–5 (strongly agree).

1. I find the subject interesting.

2. I find the language class interesting.

3. I read [FL] books, magazines, newspapers etc. in my spare time.

4. I go on holiday to an [FL]-speaking country.

5. I try to speak [FL] when the opportunity presents itself (e.g. on holiday abroad)).

6. I watch [FL] series or programmes (e.g. on television or on my computer).

7. I try to understand the lyrics of [FL] songs.

8. I correspond in [FL] with friends abroad, acquaintances etc. (e.g. Facebook, Twitter etc.).

9. I have participated in an [FL] summer course.

APPENDIX 2 - GUIDELINES FOR THE INTERVIEW, PUPILS

Main questions	Subquestions
(RQ1) You are taking (subject) in (CLIL language). Do you feel confident/comfortable:	- when speaking (CLIL language)? (Afraid of making mistakes?) - when writing? - when hearing? - when reading?
(RQ1) Do you feel more self-confident than last year, when you didn't take (subject) in (CLIL language) yet?	- Do you feel that you can easily express yourself in (CLIL language)? (E.g. in a class conversation; Are you more at ease asking questions?) - Do you feel that you understand better? (E.g., when the teacher explains something or when reading something) - Do you feel that you can write more fluently? (E.g., when writing an essay or writing down answers.)
(RQ1) Do you enjoy taking (subject) more now that it is being taught in (CLIL language), or less?	- Would you opt for it again? - Would you like to take more courses in another language? Which subjects? Which languages?
(RQ2) From the previous questions we can infer that you feel secure/insecure during (subject) classes in (CLIL language)… What influences this feeling of (in)security?	- Your own personality? (Are you someone who doubts sometimes or comes across unsure of him/herself? Or are you rather self-assured and don't you care so much what other people think of you?) - The language itself? (Is (CLIL language) your forte, do you consider it an enjoyable/interesting/difficult language?) - Your interest in (CLIL language) or in (subject)? - Your classmates? (Do you help each other if you don't understand something?) - The teacher/support? (Does (s)he encourage you? Do you feel at ease addressing him/her? - Your motivation? Why did you opt for the CLIL programme? (personal interest, friends, parents, teachers)

APPENDIX 3 - GUIDELINES FOR THE INTERVIEW, TEACHERS

Main questions	Subquestions
(RQ1) Would you say that the students are at ease in your classes?	- How can you tell? E.g. asking and answering questions, expressing their (dis)likes, disclosures, formulating reasons, a point of view or opinion, actively taking part in a conversation,. - Do you notice a difference between the skills?
(RQ1) Do you notice a difference with the beginning of the school year?	- On which point do you perceive an evolution? - Do you notice a difference between the skills?
(RQ1) Do you notice a difference with students not receiving CLIL education?	- Do you notice a difference between the skills?
(RQ2) What might influence students' language confidence?	- What causes of feelings of anxiety or insecurity do you discern? - What causes of language confidence do you discern?

APPENDIX 4 – SURVEY, PARENTS

1. What is your daughter/son's attitude towards the CLIL classes? My daughter/son* *(several answers possible)*

   - is enthusiastic about the CLIL classes.
   - regrets his/her decision to take up CLIL.
   - experiences more stress because of the CLIL classes.
   - other:

2. When my daughter/son talks about the CLIL classes at home, this feedback is

   - positive, because (explain briefly):
   - negative, because (explain briefly):
   - my son/daughter never talks about the CLIL classes at home.

3. Do you feel that your daughter/son feels more at ease with (CLIL language)? (e.g. dares to express themselves more, understands better)   YES/NO

   If yes: does that hold true for all skills? (speaking, writing, listening, reading)
   If not: what causes this and how can it be improved?

4. My daughter/son indicates understanding the teacher WELL/NOT WELL and being able to follow the teaching content WELL/NOT WELL.

   If well: has this improved compared to the beginning of the school year and why do you think?
   If not well: what causes this and how can it be improved?

5. My daughter/son indicates (s)he DOES/DOES NOT manage to ask questions during CLIL lessons.

   If so: has this improved compared to the beginning of the school year and why do you think?
   If not: what causes this and how can it be improved?

6. My daughter/son indicates that studying the learning content is EASIER/MORE DIFFICULT.

   If easier: has this improved compared to the beginning of the school year and why do you think?
   If more difficult: what causes this and how can it be improved?