



RECEPTIVE VOCABULARY KNOWLEDGE AND MOTIVATION IN CLIL AND EFL

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Abstract: Content and Language Integrated Learning (CLIL) is a widely researched approach to foreign language learning and teaching. One of the pillars of CLIL is the concept of motivation. Some studies have focused on exploring motivation within CLIL, however there has not been much discussion about the connection between motivation, or other affective factors, and each component of foreign language learning. Hence, given two groups of learners with the same hours of EFL instruction, the main objective of this research is to determine whether there exists any kind of interaction between the number of words learners know receptively and their motivation towards English as a Foreign Language (EFL). Most students in both groups were highly motivated. No relationship was identified between the receptive vocabulary knowledge and the general motivation for the secondary graders but a positive significant relationship was found for the primary CLIL graders. Several reasons will be adduced.

Keywords: Motivation, EFL receptive vocabulary, Content and Language Integrated Learning (CLIL), time of instruction.

1. INTRODUCTION

In the last two decades in the European context, Content and Language Integrated Learning (CLIL) has become a central issue in the field of foreign language teaching and learning. To provide an accurate definition of CLIL is an arduous task (Cenoz, Genesee and Gorter, 2013). In the mid 1990s the European Network of Administrators, Researchers and Practitioners (EUROCLIC) adopted CLIL as the umbrella term that could cover a variety of modes of content and language teaching implementation, from those more content-oriented to those more language-oriented. A large body of empirical research has explored foreign or second language outcomes within CLIL provision. For example, Dalton-Puffer (2007) and Dalton-Puffer and Smith (2007) approach CLIL discourse analysis, Llinares, Morton and Whittaker (2012) focus on classroom interaction, some publications tackle the issue from the perspective of the different educational levels in which CLIL takes place (e.g., Ruiz de Zarobe and Jiménez Catalán, 2009; Dalton-Puffer, Nikula and Smit, 2010; Fortanet-Gómez, 2013). On the pedagogical side, handbooks for good implementation are also found, such as Coyle, Hood and Marsh (2010) and Mehisto, Marsh and Frigols (2008).

The affective component has also received attention in the literature, though to a lesser extent than other aspects. The research conducted by Gabryś-Barker and Bielska (2013), Anglada and Banegas (2012), Lasagabaster (2011), or Heras and Lasagabaster (in press), for example, underscores the relevance of motivational and affective factors within a CLIL context as CLIL intends to provide foreign language learning with meaning and real life. The present study attempts to contribute to this growing literature on affective factors in CLIL. The main goal of the present paper is to compare the relationship of the outcomes in a receptive vocabulary test and a motivation questionnaire of two groups of Spanish EFL learners: a group of CLIL 5th primary education learners and a non-CLIL group of 2nd secondary education learners. At the time of data collection, both groups had received the same number of hours of instruction in English, what cancels out the effect of time of exposure. We will try to deal with these issues by means of reporting the preliminary results of an investigation in progress.

In the following section, we will present the state of the art of research conducted on the topics involved here: motivation in foreign language learning and, specifically in CLIL, and receptive vocabulary studies and their connection with affective factors.



2. STATE OF THE ART

2.1 Motivation towards foreign language

The relationship between motivation and foreign language learning has been extensively investigated. Different models in the literature have addressed this issue. Gardner and Lambert's (1972) Socio-Psychological Model pioneered the field. Recently other models have come onto the scene, such as the Self-Determination Theory (Deci and Ryan, 1985; Noels, Pelletier, Clément and Vallerand, 2000; Noels 2001), or the L2 Motivational Self System by Dórnyei (2005, 2009). According to Gardner and Lambert (1972), motivation towards language learning is the desire to achieve a language by means of effort, want or desire, and also affect or attitude. They refer to orientations, understood as the ultimate goals or reasons behind learning a foreign language. Two types of orientations are found: integrative orientation or learners' willingness to learn the language so as to become part of the target language community, and instrumental orientation, i.e. learners' desire to command the foreign language for external reasons. Later models of motivation have postulated other constructs. Deci and Ryan (1985) in the Self-Determination Theory referred to extrinsic motivation, a type of motivation based on the external factors that guide the learning of a foreign language, and intrinsic motivation, which relies on the interest that foreign language learning awakes in the learner. Caution must be applied when comparing these pairs of terms, since they are multifaceted notions with not so clear-cut boundaries (Carreira, 2005).

Many authors have found a positive correlation between motivation and foreign language attainment (e.g., Schmidt and Watanabe, 2001; Masgoret and Gardner, 2003; Csizér and Dörnyei, 2005; Bernaus and Gardner, 2008; Yu and Watkins, 2008). This type of studies have examined the relationship between types of motivation and foreign language learning by paying attention to variables such as age or gender. Contradictory results are obtained. As for age, it is found that intrinsic motivation decreases with schooling time whereas extrinsic motivation increases (Eccles, Wigfield and Schiefele, 1998; Doiz, Lasagabaster and Sierra, 2013). On the contrary, Lepper, Sethi, Dialdin and Drake, (1997) identified a decrease in intrinsic motivation but not in the extrinsic one, while Carreira (2006, 2010) found that both types decrease with age.

2.2 Motivation in CLIL

Motivation is considered one of the pillars of CLIL implementation and frequently it also serves to justify it. It is rare that primary or secondary education students feel attracted towards the language; yet it is much more likely that they feel attracted towards a content subject. In CLIL the content subject is the excuse to push students towards the foreign language without noticing it. As Banegas (2013:94) points out, "foreign language learning becomes an engaging activity when knowledge of the world is approached through it". Very often, learners' actual levels of motivation under CLIL are taken for granted in the literature on the topic. Very often, publications theorize about how CLIL and its associated methodologies could motivate students and offer guidelines to work motivational factors (e.g., Mehisto, Marsh and Frigols, 2008; Coyle, Hood and Marsh, 2010). Action or classroom research becomes a very useful pool for obtaining first-hand knowledge on the processes involved in the interaction of language learning and motivation (Anglada and Banegas, 2012; Banegas, 2013).

However, there is little systematic empirical evidence on how motivation and other affective factors actually interact with CLIL pedagogies. Cenoz, Genesee and Gorter (2013:15), for instance, note this fact and agree with Bruton (2011) on the idea that "student motivation might be reduced because of loss of self-esteem when students are required to use a language they do not know, and use of the language might actually diminish if the subject matter is novel and/or complex resulting in reduced language acquisition". A point that deserves attention is the fact that the typical CLIL student profile corresponds to one who, before enrolling in CLIL, is academically motivated towards the foreign language. There is no other way to find out these issues but by means of empirical research. The research in the Basque Country by (e.g., Lasagabaster, 2011) contributes to palliate the lack of empirical findings. Some studies have been conducted in Ireland (Murtagh, 2007) and in Finland (Seikkula-Leino, 2007). Overall, results confirm what assumptions suggest: language learning and motivation benefit from each other in a CLIL context. However, further research is in need to clarify this relationship.

2.3 Receptive vocabulary knowledge

Foreign language vocabulary knowledge is an increasingly important area in the field of Applied Linguistics (e.g. Schmitt, 2000; Qian, 2002, López Mezquita, 2005; Nation, 2006). Central to the investigation within foreign language vocabulary knowledge is the distinction between productive and receptive vocabulary knowledge types. Receptive vocabulary is understood as a passive skill which involves the perception of a word and the understanding of its meaning in listening and reading. Productive vocabulary refers to an active skill that covers word production so as to match the speakers' intention in writing and speaking (Nation 2001).

Receptive vocabulary studies show that the size or breadth of knowledge, i.e., the number of words that learners know, depends on proficiency as well as exposure to the foreign language and frequency of vocabulary input (Fan, 2000; Golberg, Paradis and Crago, 2008). The type of instruction is having some bearing on vocabulary



results, since CLIL seems to offer repeated exposure to new words as well as contextualisation by means of rich and meaningful content, as Xanthou (2010) explains.

A well-known instrument to measure receptive vocabulary knowledge is the Vocabulary Levels Test (VLT) by Nation (1983, 1990), largely validated in research (Schmitt and Meara, 1997; Laufer, 1998; Laufer and Paribakht, 1998; Cobb and Horst 1999; Jiménez and Terrazas 2005-2008; Agustín Llach and Terrazas Gallego, 2012). It is a word-definition matching format test that measures receptive vocabulary breath based on the subjects' recognition of words of graded frequency lists of 2,000, 3,000, 5,000, The Academic Word List and the 10,000 most frequent words in English. Knowing words in a frequency band implies knowing words in all lower bands. Overall, the results in VLT studies point to the fact that the L2 proficiency level or the number of hours of L2 exposure affects the number of words that learners know receptively.

2.4. Motivation and vocabulary learning

As motivation has an effect on language learning, a logical assumption could therefore be made that motivation is likely to facilitate vocabulary learning. So far, however, there has been little discussion about the connection of motivation and vocabulary learning (Elley, 1989; Gardner and MacIntyre, 1991; Laufer and Husltijn, 2001; Kim, 2008). For example, Laufer and Hulstijn (2001) theorise on the cognitive and motivational load of vocabulary tasks. As they call it, the Involvement Load Hypothesis, is further investigated by Kim (2008), who finds a connection between motivational factors and lexical performance. Other studies conclude that both integrative and instrumental motivation can help vocabulary learning (e.g. Gardner and MacIntyre, 1991). In a different line, Tseng and Schmitt (2008) propose a framework that explores vocabulary knowledge and motivation and suggest that motivated vocabulary learning follows a developmental mode and functions as a cyclic process as learners' motivation towards vocabulary learning ebbs and flows over a time period.

In understanding the effect of motivation on vocabulary acquisition we should also consider the productivereceptive distinction of vocabulary types explained above. As authors such as Laufer and Paribakht (1998) and Webb (2008) note, production is a more demanding task than reception, an aspect with implications for learners' motivation towards learning a foreign language. In this vein, Nation (2001:28) concludes that, differently from receptive vocabulary, in productive vocabulary, if we want to convey a message, we need to have a sense of wanting to do it. This feature is not required in receptive vocabulary. Then, each type seems to require a different level of motivation.

3. PURPOSE

Given a CLIL and a non-CLIL group of students with the same number of hours of instruction in English as a Foreign Language (839 hours) we attempt to explore (1) the levels of motivation of both groups of learners, (2) their EFL receptive vocabulary size, and (3) the connection between motivation and receptive vocabulary size in each group.

4. METHOD

4.1. Participants

A group of 183 Spanish-speaking learners of 2nd grade of secondary education (aged around 13-14 years old) and a group of 55 Spanish-speaking EFL learners of 5th grade of primary education (aged around 10-11 years old) participated in this study. They all belonged to school centers located in the north of Spain.

At the testing time, both groups had received approximately 839 hours of instruction in English as a Foreign Language. Each group had been exposed to EFL in the English Language Classroom, but the primary group had also received extra hours of EFL through a CLIL subject. A non-CLIL 5th primary group receives approximately 524 hours of English through traditional EFL classes. The difference of hours between a non-CLIL group and a CLIL group in 5th year corresponds to the hours in the foreign language that the CLIL group receives via the content subject class.

4.2. Data gathering instruments, procedures, and analysis

In the present study, the EFL vocabulary size is measured through version 2 of the 2,000-word frequencyband from the receptive version of the Vocabulary Levels Test (2K VLT) by Schmitt, Schmitt and Clapham (2001) (Appendix 1). The test consists of ten groups of six words and three definitions per group. The test-takers have to match each of the target word to its corresponding definition. Correct matching is given one point, so that the maximum score of the test is 30 points. In order to calculate students' word estimates, Nation's (1990:78) formula



"Vocabulary size = N correct answers multiplied by total N words in dictionary (the relevant word list) divided by N items in test" is applied. We gathered data in one regular school time session. Testees had 10 minutes to complete the test. Before they started, we gave them clear instructions in their mother tongue both orally and in written form.

On the other hand, we assess learners' motivation towards EFL by means of a semantic differential technique of 7-point bipolar rating scale using the following 7 pairs of bipolar adjectives: 'necessary/unnecessary', 'ugly'/'nice', 'attractive'/'unattractive', 'pleasant'/'unpleasant', 'important'/'unimportant', 'useful'/'useless', and 'interesting'/'boring'. The pair 'difficult' / 'easy' is also included as a distractor as it does not measure motivation. General motivation is tested through the 7 pairs of adjectives. These adjectives are introduced with the Spanish phrase "Considero que el inglés es..." ("I consider English to be..."). This scale (Appendix 2) is part of a questionnaire adapted from Gardner's (1985) Attitude/Motivation Test Battery (A/MTB). Intrinsic motivation is measured through the pairs 'ugly'/'nice', 'attractive'/'unattractive', 'pleasant'/'unpleasant', and 'interesting'/'boring'; the extrinsic motivation is measured through the pairs 'necessary'/'unnecessary'', important'/'unimportant', and 'useful'/'useless'. The complete questionnaire was completed in 10 minutes. Data from the VLT and the motivation scale were analyzed through SPSS program version 19.0.

5. RESULTS

RQ1. Levels of motivation of both groups of learners.

We arranged learners' motivation scores according to a three-level scale: level 1 (marks: 1.0 to 3.0), level 2 (marks: 3.01 to 5.0), and level 3 (marks: 5.01 to 7.0), where 1 is the lowest level of motivation and 7 the highest. Table 1 shows that most students in both groups were highly motivated: 66.48% of the 2nd secondary non-CLIL graders and 76.36% of the 5th primary CLIL graders.

Table 1. Motivation levels: frequency and percentage.

| | 2nd secondary ed | ducation (no-CLIL) | 5th primary education (CLIL) | | |
|---|------------------|--------------------|------------------------------|--------|--|
| Motivation levels | n | % | n | % | |
| Level 1 (marks 1.0-3.0) | 121 | 66.48% | 42 | 76.36% | |
| Level 2 (marks 3.01-5.0) | 58 | 31,87% | 13 | 23.64% | |
| Level 3 (marks 5.01-7.0) | 3 | 1.65% | 0 | 0 | |
| Missing (students who do not provide an answer) | 1 | | 0 | | |

With respect to the scores in general, intrinsic and extrinsic motivation, the primary education CLIL group overcomes the secondary education non-CLIL group in all measures, as Table 2 indicates.

Table 2. General, intrinsic and extrinsic motivation: descriptive statistics.

| | Grade | Mean | Min. | Max. | S.D. |
|----------------------|-----------------------------------|------|------|------|------|
| General motivation | 2nd secondary education (no-CLIL) | 5.41 | 1 | 7 | 1.01 |
| | 5th primary education (CLIL) | 5.70 | 3.75 | 7 | 0.87 |
| Intrinsic motivation | 2nd secondary education (no-CLIL) | 4.74 | 1 | 7 | 1.41 |
| | 5th primary education (CLIL) | 5.42 | 3.00 | 7 | 1.16 |
| Extrinsic motivation | 2nd secondary education (no-CLIL) | 6.41 | 1 | 7 | 0.97 |
| | 5th primary education (CLIL) | 6.60 | 3.67 | 7 | 0.70 |

RQ2. EFL receptive vocabulary size in both groups.

Table 3 presents the mean results of both groups in the Schmitt, Schmitt and Clapham's (2001) version 2 of the 2,000-word frequency-band from the receptive version of the Vocabulary Levels Test. The secondary group overcame the primary group (14.83 vs. 10.58). Furthermore, in the primary education group the minimum number of words the learners understood in the VLT was 1, whereas that for the secondary group the minimum was 4. In the latter, no learners produced fewer words than 4. As for the maximum number of words, this was 19 in the primary group and 26 in the secondary group. According to Nation's (1990:78) formula "Vocabulary size = N



correct answers multiplied by total N words in dictionary (the relevant word list) divided by N items in test", the mean vocabulary size or mean word estimates for the secondary group was 985 words, whereas that for the primary group was 705 words. Table 4 displays the results related to these word estimates. It is interesting to note that standard deviation (SD) is high in both groups, what proves the heterogeneity of the samples, as, for example, in the 2nd secondary group some learners know 1733 words and others just 266, or in the 5th primary group some learners reach up to 1267 words and some learners only 67.

Table 3. 2K VLT: descriptive statistics.

| | Mean | Min. | Max. | SD |
|-----------------------------------|-------|------|------|------|
| 2nd secondary education (no-CLIL) | 14.83 | 4 | 26 | 4.70 |
| 5th primary education (CLIL) | 10.58 | 1 | 19 | 4.04 |

Table 4. Word estimates: descriptive statistics.

| | Mean | Min. | Max. | SD |
|-----------------------------------|------|------|------|-----|
| 2nd secondary education (no-CLIL) | 985 | 266 | 1733 | 312 |
| 5th primary education (CLIL) | 705 | 67 | 1267 | 269 |

RQ3. Connection between motivation and receptive vocabulary size in each group.

In exploring the relationship between both variables, for the 5th primary education group, we performed a Shapiro-Wilk normality test to identify the normality of the data set in the VLT results (w = 0.97, p-value = 0.43). However, the normality cannot be accepted neither in the case of general motivation (w = 0.95, p-value = 0.03), intrinsic motivation (w = 0.94, p-value = 0.01), nor in extrinsic motivation (w = 0.63, p-value = 1.621202e-10).

The 2nd secondary education sample is bigger than the primary education sample, then, the Shapiro-Wilk normality test cannot be run. We performed a Lilliefors (Kolmogorov-Smirnov) normality test instead both in the VLT (d = 0.07, p-value = 0.00), in general motivation (d = 0.10, p-value = 0.00), in intrinsic motivation (d = 0.14, p-value = 1.382563e-09) and in extrinsic motivation (d = 0.39, p-value = 2.21979e-82). We can accept normality in no case.

Hence, we ran a Spearman correlation both in the VLT and motivation in both groups of students. As Table 5 shows, only a positive significant relationship was found between the receptive vocabulary knowledge and the general motivation of the primary CLIL group (p-value < 0.05). Spearman's rank correlation coefficient measures the strength of relationship between these two variables, and according to it, we should point to a positive relationship but a weak one (rho = 0.27). No correlation was identified for the rest of measures.

Table 5. Correlation motivation and 2K VLT (Spearman rank correlation).

| | | | Intrinsic motivation | | Extrinsion | motivation | |
|-----------------------------------|--------------------|---------|----------------------|------------|------------|------------|--|
| | General motivation | | and 2K VI | and 2K VLT | | and 2K VLT | |
| | rho | p-value | rho | p-value | rho | p-value | |
| 2nd secondary education (no-CLIL) | 0.03 | 0.67 | 0.00 | 0.91 | 0.06 | 0.40 | |
| 5th primary education (CLIL) | 0.27 | 0.04 | 0.19 | 0.16 | 0.22 | 0.10 | |

6. DISCUSSION

The first research question of the present study addresses the issue of the level of motivation (general, intrinsic and extrinsic) of the two samples of learners. High levels of motivation and guite similar distribution patterns across levels of motivation are identified in both groups. However, the 5th primary education group slightly surpasses the secondary education group in the three measures of motivation. Learners in both groups are more extrinsically than intrinsically motivated. The biggest difference is in intrinsic motivation in favour of the primary graders. These results are partially in line with the study by Doiz, Lasagabaster and Sierra (2013), who concluded that younger learners are more intrinsically motivated than older learners, although they find that older learners are more instrumentally motivated. Further longitudinal studies are required to explore the evolution of these motivation levels and to corroborate or refute results by these authors or others, such as Lepper, Sethi, Dialdin, and Drake (1997), who pointed to a decrease in intrinsic motivation but not in the extrinsic one along time, or Carreira (2010, 2006), who concluded that both types decrease with age. On the other hand, whether the type of instruction is



playing some role on motivation or not is an issue that could be approached again by means of a longitudinal study. Whatever the case, the present study shows that CLIL is not affecting negatively the learners' motivational level towards foreign language acquisition.

The second research question focuses on the learners' size of receptive vocabulary knowledge, in other words, the number of words they know receptively. We have found that, as could be expected, the 2nd secondary non-CLIL group overcomes the 5th primary CLIL group. However, the results of our 5th primary CLIL group are better than the results achieved by a 6th primary EFL group (word estimates: 663, EFL hours: 629) in a study conducted by Agustín Llach and Terrazas Gallego (2012) in a similar educational context in the north of Spain. In explaining this result, we should point to the effect of age (or cognitive level) or the type of instruction since the EFL hours of instruction are kept the same in both groups. It would be interesting to plan a research design to identify, on the one hand, the role played by the CLIL approach and, on the other, by the exposure time to EFL. We should also add that, overall, the scores by our groups fall short of the 1,000 most frequent words in English. An important number of studies that explore receptive vocabulary size of learners in contexts different from the context of the present study identify better scores in fewer hours of instruction (e.g., Milton and Meara 1998, Takala, 1984).

The third research question of this research addresses the relationship between motivation and VLT results in both groups of learners. In general, no conclusive evidence is found. There is no correlation between these variables in the group of secondary non-CLIL graders, what implies that the level of motivation does not necessarily affect the VLT score and vice versa. It is interesting to mention here, though, that a significant correlation was found between both variables in 180 students of our sample as they move up a grade (Fernández Fontecha and Terrazas Gallego, 2012). Also, Fernández Fontecha (2010) found a positive connection between motivation and productive vocabulary in a group of 250 2nd secondary graders, to which the sub-sample of the present study belongs. A possible interpretation of this result would be that productive tests there could be a sense of wanting to express a meaning. As Nation (2001: 28) points, students need to be highly motivated to produce words because this is a more demanding task than recognizing words. As regards the CLIL group, general motivation level correlates with VLT results: the higher the general motivation, the higher the receptive vocabulary size is or vice versa. However, although positive, the correlation is not big, which implies that other variables could be affecting this result. Then, again, we should consider the type of vocabulary learning (receptive) measured in this study as one probably less dependent on affective factors, such as motivation, and more dependent on other variables, such as intelligence or aptitude.

7. CONCLUSION

The study described here set out to mainly explore the connection between the motivation levels and receptive vocabulary size of two groups of learners of different ages but with the same EFL exposure time: a CLIL group of 5th grade primary learners and a non-CLIL group of 2nd grade secondary learners. The findings suggest that, in general, (1) both groups are highly motivated, (2) similar distribution patterns of motivation levels are found in both groups, (3) once the effect of the time of exposure to the foreign language is cancelled out, the age - or type of instruction - reveals itself as a determining factor for vocabulary size, and (4) some correlation is identified between the mean general motivation and receptive vocabulary size only in the case of CLIL students. In general, it seems that motivation is linked to a need of communication which is present in productive vocabulary tasks but is somehow missing in receptive vocabulary tasks or tests. Finally, a number of important limitations need to be considered. First, the current research was not designed to determine which of the two variables, age or type of instruction, is playing a bigger role in results on motivation and vocabulary learning. Also, longitudinal studies are required to identify the evolution of the relationship of motivation and vocabulary learning, as they are dynamic and fluctuating processes. As correlation between motivation and vocabulary learning depends on the task, the effect of different productive vocabulary tasks and different receptive vocabulary tasks in vocabulary learning results could be addressed. These studies could be complemented with qualitative research that offers a more complete picture of learners' performance. Despite its caveats and exploratory nature, this research has gone some way towards enhancing our understanding of the interrelation between a type of vocabulary learning (receptive), and motivation, and thus, contributes to the scarcity of research on vocabulary learning and affective factors.

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REFERENCES

- Agustín Llach, M.P. and Terrazas Gallego, M. (2012). "Vocabulary Knowledge Development and Gender Differences in a Second Language", ELIA, 12: 45-75.
- Anglada, L., and Banegas, D. (2012). Views on Motivation and Autonomy in ELT: Selected Papers from the XXXVII FAAPI Conference. San Martín de los Andes: APIZALS.
- Banegas, D. (2013). "The integration of content and language as a driving force in the EFL lesson", in E. Ushioda (ed.), International Perspectives on Motivation: Language Learning and Professional Challenges. Basingstoke: Palgrave Macmillan. pp. 82-97. doi:10.1057/9781137000873.0010
- Bernaus, M. and Gardner, R.C. (2008). "Teacher Motivation Strategies, Student Perceptions, Student Motivation, and English Achievement", The Modern Language Journal, 92/3: 387-401. doi:10.1111/j.1540-4781.2008.00753.x
- Bruton, A. (2011). "Is CLIL so beneficial or just selective? Re-evaluating some of the research", System, 39: 523-532. doi:10.1016/j.system.2011.08.002
- Carreira, J.M. (2005). "New framework of Intrinsic/Extrinsic and Integrative/Instrumental Motivation in Second Language Acquisition", The Keiai Journal of International Studies, 16: 39-64.
- Carreira, J.M. (2006). "Motivation for learning English as a foreign language in Japanese elementary schools", JALT Journal, 28: 135-157
- Carreira, J.M. (2010). "Relationship between motivation for learning EFL and intrinsic motivation for learning in general among Japanese elementary school students", System, 39: 90-102. doi:10.1016/j.system.2011.01.009
- Cenoz, J., Genesee, F. and D. Gorter (2013). "Critical analysis of CLIL: taking stock and looking forward", Applied Linguistics, 13: 1-21.
- Cobb, T. and Marlise E.H. (1999). "Vocabulary sizes of some city University students", Journal of the Division of Language Studies of City University of Hong Kong 1.1.
- Coyle, D., Hood, P., and Marsh, D. (2010). CLIL: Content and Language Integrated Learning. Cambridge: CUP.
- Csizér, K. and Dörnyei, Z. (2005). "The Internal Structure of Language Learning Motivation and its relationship with Language Choice and Learning Effort." Modern Language Journal, 89: 19-36. doi:10.1111/j.0026-7902.2005.00263.x
- Dalton-Puffer C., Nikula, T. and Smit, U. (eds.) (2010). Language Use and Language Learning in CLIL Classrooms. Amsterdam: Benjamins. doi:10.1075/aals.7
- Dalton-Puffer, C. (2007) Discourse in Content and Language Integrated Learning (CLIL) Classrooms. Amsterdam: John Benjamins. doi:10.1075/Illt.20
- Dalton-Puffer, C. and Smit, U. (eds.) (2007). Empirical Perspectives on CLIL Classroom Discourse. Frankfurt: Peter Lang.
- Deci, E.L. and Ryan, R.M. (1985). Intrinsic Motivation and Self-Determination in Human Behavior. New York: Plenum Publishing Co. doi:10.1007/978-1-4899-2271-7
- Doiz, A., Lasagabaster, D. and Sierra, J.M. (2013). The impact of individual and contextual variables on motivation. Paper presented at the Applied Linguistics Perspectives on Content and Language Integrated Learning (ALP-CLIL), Miraflores de la Sierra, Madrid, June 2013.
- Dörnyei, Z. (2005). The Psychology of the Language Learner: Individual Differences in Second Language Acquisition. Mahwah, NJ.: Lawrence Erlbaum.
- Dörnyei, Z. (2009). "The L2 motivational self system", in Z. Dörnyei and E. Ushioda (eds.). Motivation, Language Identity and the L2 Self. Bristol: Multilingual Matters. pp. 92-142.
- Eccles, J.S., Wigfield, A. and Schiefele, U. (1998). "Motivation to succeed". W. Damon and N. Eisenberg (eds.) Handbook of Child Psychology, Vol. 3. New York, NY: John Wiley and Sons. pp. 1017-1095.
- Elley, W.B. (1989). "Vocabulary Acquisition from Listening to Stories", Reading Research Quarterly, 24: 174-187. doi:10.2307/747863
- Fan, M. (2000). "How big is the gap and how to narrow it? An investigation into the active and passive vocabulary knowledge of L2 learners", RELC Journal, 31: 105-119. doi:10.1177/003368820003100205
- Fernández Fontecha, A. (2010). "Gender and motivation in EFL vocabulary production", in R.M. Jiménez Catalán (ed.) Gender Perspectives on Vocabulary in Foreign and Second Languages, London: Palgrave Macmillan. pp. 93-116.
- Fernández Fontecha, A. and Terrazas Gallego, M. (2012). The role of motivation and age in vocabulary knowledge. VIAL, 9: 39-62.
- Fortanet-Gómez, I. (2013). CLIL in Higher Education. Towards a Multilingual Language Policy. Bristol: Multilingual Matters.
- Gabryś-Barker, D. and Bielska, J. (2013). The Affective Dimension in Second Language Acquisition. Bristol: Multilingual Matters.



- Gardner, R.C. (1985). Social Psychology and Second Language Learning. London: Edward Arnold.
- Gardner, R.C. and Lambert, W.E. (1972). Attitudes and Motivation in Second Language Learning. Rowley, MA: Newbury.
- Gardner, R.C. and MacIntyre, P.D. (1991). "An instrumental motivation in language study: who says it isn't effective?", Studies in Second Language Acquisition, 13/1: 57-72. doi:10.1017/S0272263100009724
- Golberg, H., Paradis, J., and Crago, M. (2008). "Lexical acquisition over time in minority first language children learning English as a second language", Applied Psycholinguistics, 29: 41-65. doi:10.1017/S014271640808003X
- Heras, A. and Lasagabaster, D. (in press). "The impact of CLIL on affective factors and vocabulary learning", Language Teaching Research.
- Jiménez Catalán, R.M. and Terrazas, M. (2005-2008). "The receptive vocabulary of English foreign language young learners", Journal of English Studies, 5-6: 173-191.
- Kim, Y. (2008). "The role of task-induced involvement and learner proficiency in L2 vocabulary acquisition", Language Learning, 58/2: 285-325. doi:10.1111/j.1467-9922.2008.00442.x
- Lasagabaster, D. (2011). "English achievement and student motivation in CLIL and EFL settings", Innovation in Language Learning and Teaching, 5: 3-18. doi:10.1080/17501229.2010.519030
- Laufer, B. (1998). "The development of passive and active vocabulary in a second language: same or different?", Applied Linguistics 19/2, 255-271. doi:10.1093/applin/19.2.255
- Laufer, B. and Hulstijn, J. (2001). "Incidental vocabulary acquisition in a second language: the construct of taskinduced involvement", Applied Linguistics, 22: 1-26. doi:10.1093/applin/22.1.1
- Laufer, B. and Paribakht, T.S. (1998). "The relationship between passive and active vocabularies: Effects of language learning context", Language Learning, 48: 365-391. doi:10.1111/0023-8333.00046
- Lepper, M., Sethi, S., Dialdin, D. and Drake, M. (1997). "Intrinsic and extrinsic motivation: A developmental perspective", in S.S. Luthar, J.A. Burack, D. Cicchetti and J.R. Weisz (eds.). Developmental Psychology: Perspectives on Adjustment, Risk, and Disorder. New York: Cambridge University Press, pp. 23-50.
- Llinares, A., Whittaker, R. and Morton, T. (2012). The Roles of Language in CLIL. Cambridge: CUP.
- López-Mezquita, M.T. (2005). La Evaluación de la Competencia Léxica: Tests de Vocabulario. Su Fiabilidad y Validez. Universidad de Granada: Doctoral Dissertation.
- Masgoret, A-M. and Gardner R.C. (2003). "Attitudes, motivation, and second language learning: meta-analyses of studies by Gardner and associates", in Z. Dörnyei (ed.) Attitudes, Orientations and Motivations in Language Learning. Oxford: Blackwell. pp. 167-210.
- Mehisto, P., Marsh, D., Frigols, M.J. (2008). Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education. Oxford: Macmillan.
- Milton, J. and Meara, P. (1998). "Are the British really bad at learning foreign languages?", Language Learning Journal, 18: 68-76. doi:10.1080/09571739885200291
- Murtagh, L. (2007). "Out-of-school use of Irish, motivation to learn the language and proficiency in immersion and subject-only post-primary programmes", International Journal of Bilingualism and Bilingual Education, 10/4: 428-453. doi:10.2167/beb453.0
- Nation, P. (1983). "Teaching and testing vocabulary", Guidelines, 5: 12-25.
- Nation, P. (1990). Teaching and learning vocabulary. New York: Newbury.
- Nation, P. (2001). Learning Vocabulary in Another Language. Cambridge: Cambridge University Press. doi:10.1017/ CBO9781139524759
- Nation, P. (2006). "How large a vocabulary is needed for reading and listening?", The Canadian Modern Language Review/La revue canadienne des langues vivantes, 63/1: 59-81. doi:10.3138/cmlr.63.1.59
- Noels, K.A. (2001). "Learning Spanish as a Second Language: Learners' orientations and perceptions of their teachers' communication style", Language Learning, 51: 107-144. doi:10.1111/0023-8333.00149
- Noels, K.A., Pelletier, L.G., Clément, R., and Vallerand, R.J. (2000). "Why are you learning a second language? Motivational orientations and Self-Determination Theory", Language Learning, 50: 57-85. doi:10.1111/0023-8333.00111
- Qian, D. (2002). "Investigating the relationship between vocabulary knowledge and academic reading performance: An assessment perspective", Language Learning, 52/3: 513-36. doi:10.1111/1467-9922.00193
- Ruiz de Zarobe, Y. and Jiménez Catalán, R.M. (eds.) (2010). Content and Language Integrated Learning: Evidence from Research in Europe. Bristol: Multilingual Matters.
- Schmidt, R. and Watanabe, Y. (2001). "Motivation, strategy use, and pedagogical preferences in foreign language learning", in Z. Dörnyei and R. Schmidt (eds.) Motivation and Second Language Acquisition (Technical Report #23). Honolulu: University of Hawai'i, Second Language Teaching and Curriculum Center. pp. 313-359.



- Schmitt, N. (2000). "Vocabulary acquisition", in N. Schmitt (ed.) Vocabulary in Language Teaching. Cambridge: Cambridge Language Education. pp. 116-141.
- Schmitt, N. and Meara, P. (1997). "Researching vocabulary through a word knowledge framework: word associations and verbal suffixes", Studies in Second Language Acquisition, 19: 17-35. doi:10.1017/S0272263197001022
- Schmitt, N., Schmitt, D. and Clapham, C. (2001). "Developing and exploring the behaviour of two new versions of the Vocabulary Levels Test", Language Testing, 18: 55-88. doi:10.1177/026553220101800103
- Seikkula-Leino, J. (2007). "CLIL learning: achievement levels and affective factors", Language and Education, 21/4: 328-341. doi:10.2167/le635.0
- Tseng, W-T. and Schmitt, N. (2008). "Toward a Model of Motivated Vocabulary Learning: A Structural Equation Modeling Approach", Language Learning, 58/2: 357-400. doi:10.1111/j.1467-9922.2008.00444.x
- Webb, S. (2008). "Receptive and productive vocabulary sizes of L2 learners", Studies in Second Language Acquisition, 30/1: 79-95. doi:10.1017/S0272263108080042
- Xanthou, M. (2010). "Current trends in L2 vocabulary learning and instruction. Is CLIL the right approach?", Advances in Research on Language Acquisition and Teaching: Selected Papers, Thessaloniki, Greece: Greek Applied Linguistics Association (GALA). pp. 459-471.
- Yu. B. and Watkins, D.A. (2008), "Motivational and cultural correlates of second language acquisition; an investigation of international students in the universities of the people's Republic of China", Australian Review of Applied Linguistics, 31/2: 17.1-17.22.

APPENDIX 1.

2,000-word frequency-band from the receptive version of the Vocabulary Levels Test (2K VLT) (Schmitt, Schmitt and Clapham 2001).

| | EXAMPLE | | | ANSWER |
|--|---|-------------|---|---|
| 1 business | | | 1 business | |
| 2 clock | part of a house | | 2 clock | 6 part of a house |
| 3 horse | animal with 4 legs | → | 3 horse | _3_ animal with 4 legs |
| 5 shoe | something used for writing | | 5 shoe | 4 something used for writing |
| 6 wall | | | 6 wall | |
| 1 coffee 2 disease 3 justice 4 skirt 5 stage 6 wage | money for work a piece of clothing using the law in the right | way | 1 adopt 2 climb 3 examine 4 pour 5 satisfy 6 surround | go up look at closely be on every side |
| 1 choice 2 crop 3 flesh 4 salary 5 secret 6 temperature | heat meat money paid regularly for a | doing a job | 1 bake 2 connect 3 inquire 4 limit 5 recognize 6 wander | join together walk without purpose keep within a certain size |



| 1 cap | | 1 burst | |
|-------------|-------------------------|-------------|---------------------------|
| 2 education | teaching and learning | 2 concern | break open |
| 3 journey | numbers to measure with | 3 deliver | make better |
| 4 parent | going to a far place | 4 fold | take something to someone |
| 5 scale | | 5 improve | |
| 6 trick | | 6 urge | |
| 1 attack | | 1 original | |
| 2 charm | gold and silver | 2 private | first |
| 3 lack | pleasing quality | 3 royal | not public |
| 4 pen | not having something | 4 slow | all added together |
| 5 shadow | | 5 sorry | |
| 6 treasure | | 6 total | |
| 1 cream | | 1 ancient | |
| 2 factory | part of milk | 2 curious | not easy |
| 3 nail | a lot of money | 3 difficult | very old |
| 4 pupil | person who is studying | 4 entire | related to God |
| 5 sacrifice | | 5 holy | |
| 6 wealth | | 6 social | |

APPENDIX 2.

Likert scale adapted from the Attitude/Motivation Test Battery (A/MTB) Gardner's (1985).

| Necesario | | | | Innecesario |
|-----------------|--|--|--|--------------|
| Feo | | | | Bonito |
| Difícil | | | | Fácil |
| Atractivo | | | | No atractivo |
| Agradable | | | | Desagradable |
| Poco importante | | | | Importante |
| Inútil | | | | Útil |
| Interesante | | | | Aburrido |

