# L1 in the L2 Classroom at the Secondary and College Levels: A Comparison of Functions and Use by Teachers 

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#### Abstract

The debate on the role of the L1 in L2 classes has not reached a conclusive outcome and teachers use the L1 often without any rationale. This study examines the L1 practices of 11 French high school (HS) and college teachers through 15 hours of data to identify the functions for L1 use in teachers' L2 speech and recognize differences that exist between HS teachers' and college instructors' L1 practices. As in previous research, teachers employed the L1 for metalinguistic explanation, class management/discipline, empathy/solidarity, and task instruction. Additional roles are immediate and delayed translation. Furthermore, in this study, HS and college teachers' L1 usages are compared in order to enlighten linguistic practices at different levels of instruction. From the overall findings, suggestions for L2 teachers' training are given: additional pre-service and in-service mentoring and self-refection based on self-videotaping, reflection on the role of the L1 and L2 through previous research and observation of experienced teachers, development of strategies in order to maximize time efficiency, pre-service teaching opportunities (e.g. service-learning, micro-teaching, assisting teachers) to decrease teaching anxiety.


## 1 Introduction

Foreign language teachers have to make important decisions regarding their teaching methods and styles, including the use of the first language (L1), whose role remains a topic of discussion among many teachers and researchers (Bateman, 2008; Castellotti, 2001; Cook, 2001, 2005; Kraemer, 2006; Levine, 2003; Macaro, 2001; Moore, 2002; Piker, 2006; Rell, 2005; Thompson, 2006; Turnbull, 2001; Turnbull \& Arnett, 2002; Wilkerson, 2008). While some allege that exclusive use of the second language (L2) (i.e. full immersion) is the best answer to achieve learning (Department of Education and Science, 1996, cited in Cook, 2001; Krashen, 1981, 1989; MacDonald, 1993), others support a maximal use of the L2, without excluding the L1, which becomes part of learners' and teachers' repertoire of comprehension strategies (Atkinson, 1993; Castellotti, 2001; Cook, 1999, 2001; Duff \& Polio, 1990; Franklin, 1990; Levine, 2003; Moore, 1996, 2002; Polio \& Duff, 1994; Rolin-Ianziti \& Brownlie, 2002; Swain \& Lapkin, 2000; Turnbull, 2001; Turnbull \& Arnett, 2002; Wilkerson, 2008). In practice, this last technique appears to be the most preferred by teachers in the United States, Canada, and possibly around the world; however, the adjective "maximal" is ambiguous as it does not clearly define the amount of L2 to use (Macaro, 2005; Turnbull, 2001). This lack of agreement on the role and amount of teachers' L1 contributes to variability in teachers' practices. They are not often aware of what research suggests and base their decisions on deduction instead of evidence. The objective of the present research is not to judge the efficiency or hindrance that the L1 can have in L2 learning and teaching, but rather to bring new empirical evidence to the functions of L1 use in foreign language classes, as well as a
comparison of L1 usage between high school (HS) teachers and college instructors of French. The data will consequently provide implications for teacher training, as they offer a deeper understanding of teacher L1 practices in two different teaching contexts, HS and college. The implications will specifically offer suggestions to increase L2 use while developing strategies to optimize L1 functions. A review of previous research will precede the analysis, in turn followed by discussion and conclusion sections.

## 2 Literature review

In a foreign language classroom, input is considered to be the most valuable element in language learning. The amount of input determines how much learners are exposed to the L2. For this reason, it seems reasonable to say that a foreign language class should be only taught in the L2. The presence of the L1 could prevent L2 acquisition since learners become less exposed to the L2 (Krashen, 1981, 1989; Long, 1991). As long as the input is comprehensible, the more input a learner receives, the more he or she should acquire the L2. However, it is evident that many teachers, if not most, occasionally use the L1 in order to facilitate the teaching of the L2. A disagreement lies between those who believe that a foreign language curriculum should only be based on the L2, as the L1 is detrimental to learning, and others who see the L1 as a practical tool to facilitate L2 acquisition. The theoretical framework justifying a potential positive role for the L1 is explained by the multilingual competence and sociolinguistic models. Through an overview of those models and empirical evidences, the following review of past research will present how the L1 has been used for L2 learning.

### 2.1 Theoretical approaches for L1 use in L2 classrooms

The multilingual competence model has been used to rationalize L1 use while learning or speaking the L2 since being a multilingual speaker entails that two or more languages are part of one's cognitive system. Based on the actual practice of most language teachers and learners, previous studies (Castellotti, 2001; Cook, 2001, 2005; Py, 1991) have transferred this theoretical framework into the L2 classroom, as it supports the idea that two languages coexist in the mind of a bilingual individual. Consequently, the question is to know if and how the languages separate (Cook, 2005). The fact that both languages could be tightly interwoven could justify the idea of mixing two languages within instruction (i.e. code-switching). Cook (2005) further suggests that if the L1 is always present in the learners' mind, its role in the classroom might have positive effects on learning and teaching as "a way of conveying L2 meaning," "a short-cut for explaining tasks, tests, etc.," "a way of explaining grammar," and "practicing L2 uses such as code-switching" (2005, p. 59). The L1 could have a role of metalinguistic scaffolding for a better understanding of the L2.

Besides the cognitive aspect, the use of students' L1 by teachers in the classroom environment can also be viewed from a sociolinguistic perspective. In society, language is a major part of interaction, and code-switching, an alternation of languages within the same discourse or speech act (Auer, 1998; Genesee, Paradis \& Cargo, 2004; Grosjean, 1982), is frequently used among bilingual speakers, often to convey messages with intended effects. In her Markedness Model, Myers-Scotton (1993) claims that bilinguals might make use of code-switching into the marked language to integrate and belong to a specific group. In a classroom context, the marked language could be interpreted as learners' L1, which the teacher adopts to obtain learners' acceptance.

Despite the different views on the use of the L1 and L2, one cannot disregard the fact that in a foreign language class, most students and teachers switch between the L1 and L2 when interacting with each other. It is therefore of particular importance to examine what previous studies have found regarding the functions for L1 use in the foreign language classroom.

### 2.2 Functions of L1 use in the classroom

Although many researchers see benefits of the presence of the L1 (Cook, 2001; Folse, 2004; Macaro, 2005; Moore, 1996; Turnbull, 2001; Turnbull \& Arnett, 2002; VanLier, 1995), most will agree that an optimal use of the L2 is crucial for reaching higher proficiency. Since teachers and learners still commonly use the L1 in their classes, several empirical studies have investigated the reasons for this practice. Duff and Polio (1990) and Polio and Duff, (1994) studied instructors' linguistic practice at the college level. Duff and Polio (1990) found that, for 13 instructors of different language families, the factors determining the different amounts of L1 and L2 were the language origin, lesson content, departmental policy, guidelines and a lack of pedagogical training. Teachers' proficiency level in learners' L1 was not a variable in the amount of L1 and L2 use (e.g. one non-native L 2 teacher used $95.6 \%$ of the L2, while a native L2 teacher only used $9.5 \%$ of the L2). Additionally, the number of years of experience did not appear to make a difference in the amount of L1 used by teachers. In their 1994 study, Polio and Duff determined other possible variables: classroom administrative vocabulary (e.g. tests, review session), grammar instruction, classroom management, empathy/solidarity, practicing English (as an L2 for them), and lack of vocabulary and comprehension.

Nzwanga (2000) analyzed three teachers and their students' L1 use in an intermediate College French course. Code-switching in English (L1) was found "to (1) translate, (2) practice discovery and rote learning, (3) explain/expand a teaching point, (4) bridge communication gaps, and (5) enhance students' reflection" (p. 85). Nzwanga noticed that in the case of his study, the L1 seemed to be unavoidable and therefore suggested that teaching methods should incorporate the L1 in order to provide pedagogical accommodation for teachers who regularly employ the L1.

Macaro (2001) observed L1 use of six student teachers during their student teaching experience. These student teachers received, in a methods course, instruction on issues regarding code-switching. Macaro discovered that, despite little experience, the L1 was used minimally (an average of $4.8 \%$ ) and was primarily motivated by vocabulary clarification, translation, grammar explanations, discipline, relationship building, and procedural instructions.

In her study, Castellotti (2001) reported that teachers appeared to have practical motivations for L1 use, based on the degree of learners' competence, the nature of the activities and the context of learning. The L1 holds three important roles: it can be used for 1) communicative and pedagogical organization and management; 2) guidance, facilitation of exchanges, comprehension check and assessment; 3) metalinguistic explanations and reflections with learners.

Moore (2002) noticed that teachers of French, in Italy and Spain, followed students' switches into the L1 in order to focus on form, ease the communication flow and raise students' metalinguistic awareness. Moore stated that the presence of the L1 did not automatically indicate a lack of competence, but rather that it might have enhanced language awareness and encouraged "revision of prior knowledge" (p. 290).

Liebscher and Dailey-O'Cain (2004) studied a teacher and her learners' code-switching in an advanced Applied Linguistics German class. Learners were told early in the semester that English (L1) was acceptable in necessary situations. They observed that learners' code-switching practices were similar to the code-switching found in settings such as bilingual communities. This study suggests that learners who see the classroom as a language community copy the linguistic behaviors found in natural bilingual communities. This supports the idea of multilingual competence since allowing the presence of the L1 might facilitate bilingual communications, without being harmful to learning; however, since in this study, learners were explicitly told that English was acceptable, the learners might have used it more liberally than in other regulated, more formal situations, or natural bilingual communities. Dailey-O'Cain and Liebscher (2006) found similar findings, and concluded that the L2 classroom was another type of a natural bilingual setting.

Thompson (2006) observed the contexts for L1 use of 16 instructors of Spanish. His data were very extensive, as he not only asked for teachers' opinions of their own linguistic use, but also analyzed their speech. He found that the level of instruction might have influenced the amount and
type of L1 use. At beginning levels, the L1 was mostly used for grammar instruction, while, at intermediate levels, translation of new vocabulary was the primary reason for the L1. Overall, Thompson's findings closely matched Polio and Duff (1994)'s.

In a recent study, Wilkerson (2008) looked at five Spanish college instructors. She found that for teachers used English "to save time, demonstrate authority, and reduce ambiguity" (p. 315). Her conclusions were that teachers' beliefs for learning often reflect their teaching.

Research has noticed that the L1 is used for a number of specific functions. However, a gap is still found in two specific areas. First of all, the functions are not exhaustive, especially when looking at the data of the present study that could not be categorized by all of the suggested functions. Secondly, no studies comparing HS and college teachers have been found. This is a valuable question though, as the articulation between high school and college is not often studied and a lack of research is felt in this particular area of foreign language education. The present study provides a large sample of teachers' observations ( 15 hours from 13 teachers), thus, allowing for a thorough analysis in light of the existing functions for L1 use, as well as the identification of new functions. Additionally, these data provide an unprecedented comparison: the one of L1 use between HS and college teachers' speech. No previous research on this topic has been found.

## 3 Research questions

The overview of the previous literature shows two specific lacks that this article aims to fulfill: the search for a more complete taxonomy of factors for L1 use and a comparison between HS and college teachers' L1 use. The following questions therefore emerge:

1) What are the functions of L1 use in teachers' L2 speech?
2) What differences exist between HS teachers' and college instructors' L1 practices?

## 4 Methodology

This study presents data based upon a set of observations of the French-language instructors at the High School and college levels. All the instructors previously participated in two other research projects (college instructors: Grim, 2008; HS teachers: in progress ${ }^{1}$ ), and the data collected for these studies gave an opportunity for a qualitative examination of teachers' linguistic behavior.

### 4.1 Procedure and data collection

Eight college instructors of French, from a large university in Illinois (the United States), were video-recorded, and 3 HS teachers, from a large northern Colorado town, were audio-recorded. Fifteen hours of data were provided ( 7.5 hours on videotapes for the college instructors and 7.5 hours on audiotapes for the HS teachers). From these data, every L1 episode spoken by a teacher was transcribed with the surrounding context in order to analyze possible functions for L1 use. To answer the second research question, it was necessary to tally all English and French words to compare the amount of L1 use between both groups of teachers.

### 4.2 Participants

Of the 8 college instructors, all were graduate teaching assistants and native or near-native speakers of French ${ }^{2}$. The classes they taught were ${ }^{3} 3$ rd-semester French. They were pursuing or had pursued graduate studies in fields such as French Studies, French Linguistics, Second Language Acquisition and Teaching, Advertising, and English Literature. While they had all attended foreign language training courses offered and required by the French department, their teaching experience varied due to their level of study (Master's vs. Ph.D.). The 3 HS teachers, who were native speakers of English, were teaching in different schools of a large town in northern Colorado. Their 3rd-year French classes were chosen in order to provide a relatively close comparison re-
garding students' proficiency between their classes and the college instructors' (3rd semester). Similar to the college instructors, their teaching experience varied significantly. Katie was a certified French teacher with 9 years of teaching experience. Sarah and Laura were student teachers, during their last semester of training. At the university and high schools, no specific language choice policy was mandated to the teachers. All instructors had previously taken a foreign language teaching methods course for their appropriate level of instruction. It explicitly emphasized that the L2 should be maximized as much as possible since the teaching goals and textbooks used in all classes were based on communicative language teaching practices. However, the L1 was not banned.

## 5 Data analysis

### 5.1 Research question 1: What are the functions of $L 1$ use in teachers' $L 2$ speech?

Every L1 episode was transcribed and sorted, following a specific coding system, mostly based on previous studies' categories (e.g. Duff \& Polio, 1990; Polio \& Duff, 1994; Rolin-Ianziti \& Brownlie, 2002; Levine, 2003). The categories of 'metalinguistic explanation, 'class management/discipline', 'empathy/solidarity', and 'task instruction' were borrowed, as they matched some of the L1 functions of this study. However, to attribute all L1 episodes to a function, it was necessary to create two additional categories identified as immediate translation and delayed translation. All categories are operationalized as follows:

- Metalinguistic explanation: teacher uses the L1 to focus on grammatical forms through explicit or metalinguistic explanations, mostly motivated by a belief that students would not understand or motivated by a student's question.
- Task instruction: teacher uses the L1 to give instructions for an activity or a task.
- Class management/Discipline: teacher uses the L1 to deal with lack of concentration, noise, talk, misconduct, etc.
- Empathy/Solidarity: teacher uses the L1 in a sense of closeness with students either to show understanding or to create a friendly rapport.
- Immediate translation: teacher uses the L1 to give the translation of a word or expression, without asking students for the meaning or taking time to check students' comprehension.
- Delayed translation: teacher uses the L1 to give the translation of a word or expression, using a prompt to ask students for the meaning.
These categories will guide the organization of the study illustrated by examples from the data. For all examples mentioned in this paper, transcription procedures follow Liebscher and Dai-ley-O'Cain's study (2004). Utterances in English are bolded, the ones in French are in normal font (not bolded), and the translations of the French (by the author) are in italics and between brackets. Each instructor is also referred to by a pseudonym, while students are referred to by the letter " S ". In the following section, examples for each function will be displayed, while the discussion section will attempt to understand the reasons behind these practices.


### 5.1.1 Metalinguistic explanation

Previous studies (Duff \& Polio, 1990; Franklin, 1990; Levine, 2003; Polio \& Duff, 1994; Ro-lin-Ianziti \& Brownlie, 2002) have shown that metalinguistic explanation (on error, grammar or other complex items) could trigger L1 use. Indeed, by using the L1, teachers might feel that their explanations will be interpreted faster and with more clarity. In the present study, metalinguistic features are also found when teachers use their L1 in order to focus on grammatical forms, the forms targeted for the initial experiment in Grim (2008). This is done through relatively explicit descriptions. The following four examples illustrate college instructors' use of the L1 in order to expand on their grammatical explanations.

## Example 1: Explanation on relative pronoun use

1 Emilie: Aujourd'hui, c'est une république dans laquelle il y a un [Today, it is a republic in which there is

2 président élu démocratiquement, alors ici, vous voyez democratically elected president, so here, you also see

3 aussi 'une république dans laquelle' parce que 'a republic in which'because

4 'république' est un nom féminin et puis singulier alors, 'republic' is a feminine noun, and singular at that,

5 donc on utilise 'dans laquelle' or 'in which' or 'at so we use 'in which'or 'in which'or 'at

6 which'.
which'.]
Example 2: Explanation on relative pronoun use
During a group activity, a student asks a question in English (inaudible) on using a relative pronoun.
Aurélie responds.
1 Aurélie: Nous avons loué un bateau avec lequel nous avons [We rented a boat with which we fished,]

2 pêché, with which, from which.
Example 3: Explanation on preposition use
While teaching about Senegal,
1 Emilie: La capitale dans laquelle se trouve le centre est [The capital in which the center is found is Dakar.

2 Dakar. Ici par exemple, vous voyez pronom relatif Here, for example, you see the relative pronoun

3 'dans laquelle',c'est parce que la capitale, c 'est un 'in which' it is because the capital is a]

4 nom féminin, it's aplace so on utilise dans, dans [feminine noun we use 'in, in

5 laquelle. Alors on va voir plus d'exemples. which'. So we will see more examples.]

Example 4: Explanation on relative pronoun use
While teaching about Senegal,
1 Nicole: Cette structure, on va voir plusieurs fois. Nous avons [This structure, we will see it several times. We have

2 «lequel, laquelle, lesquels » comme pronom "which (masculine singular), which (feminine singular), which'(masculine plural)" as

3 interrogatif pour demander which one. Ici on l'utilise an interrogative pronoun to ask] which one. [Here, we use it as a relative pronoun

4 comme pronom relatif comme «que, qui, dont», avec as "that, who, of which", with

5 une préposition. Donc "dans laquelle", qu'est-ce que a preposition. So "in which"

| 6 | ça veut dire? <br> what does it mean?] |
| :--- | :--- |
| 7 | S2: In which. |

In the examples above, the teachers used the L1 to emphasize the grammatical constructions. Some teachers used French to make metalinguistic references and English to translate the grammatical forms (examples 3 and 4) in order to keep metalinguistic information comprehensible. In the data, none of the HS teachers gave metalinguistic explanation. The two HS teachers who were told to explain the grammatical forms just read over the forms two or three times, without additional explanations in the L1 or L2.

### 5.1.2 Task instructions

Another frequent use of the L1, although only found among HS teachers, was task instructions. Teachers would switch to English to either give instructions to carry out the tasks or to translate the instructions they had just given in the L2. All three HS teachers used English to give or translate directions. Examples 5 through 7 are a sample:

## Example 5: Instructions on card activity

The students finish playing a memory game and they need to put it away.
1 Katie: Voici les cartes de Tabou. When you have guessed [Here are the Taboo cards.]

2 the right word, then take the next one.
Example 6: Instructions on how to carry out an activity
The students will play a game similar to Taboo and Laura gives out the instructions.
1 Laura: Il faut que vous fassiez cette activité en français. [You need to do this activity in French.]

2 There is no English. You cannot use the words
3 underneath. If you get to a card you are stuck,
4 that's okay. Just go to the next one. Okay, I'll
5 bring the cards to you. Si vous
[If you
6 avez des questions, demandez-moi. have questions, ask me.]

Example 7: Instructions on action
Sarah shows some pictures and instructs the students to pay close attention.
1 Sarah: Regardez, look here.
[Look,]
HS Teachers were the only ones to give instructions with the help of the L1. Research supports this finding, although the college instructors in this study alleviated this issue through the use of the L2 and simple language directions.

### 5.1.3 Class management/discipline

The next category of L1 use concerned class management and/or discipline. In the recorded
data, no instance of class management or discipline was found among the college instructors' discourse. However, the need for classroom management was plentiful for two of the HS teachers. Examples 8 through 11 are illustrations of teachers' L1 to manage and keep control over their class.

## Example 8: Managing a noisy group of students

Laura is giving out instructions for an activity. However, the students are not listening. She uses a strict and loud voice in order to be heard by her students.

1 Laura: Don't leave your group, people!
Example 9: Managing students who are talking
Laura is still organizing the group activity, while students are talking.
1 Laura: Would you stop talking when I am talking, please?
Example 10: Disciplining an off-task behavior
While Sarah is walking around in the class, a group of students are off-task and chatting about personal matters. She reprimands them.

1 Sarah: Hey guys, you need to seriously work!
Example 11: Disciplining an off-task behavior
Using a sarcastic tone, Sarah reprimands her students for not asking questions appropriate for the moment.

1 Sarah: Guys, I can't hear intelligent questions. Merci [Thank you

2 beaucoup! very much!]

The teachers in those examples did not always use a loud voice, but through the use of sarcastic or reprimanding tones, students paid more attention.

### 5.1.4 Empathy/solidarity

In this study, as in previous research (Duff \& Polio, 1990; Polio \& Duff, 1994), instances of the L1 with the function of empathy/solidarity are found in all teachers' discourse. Empathy/solidarity is here defined as L1 use in order to raise a sense of closeness with students, to show understanding or to create a friendly rapport. All teachers appeared to have used their L1 in that context. Some examples (12-14) from the HS teachers demonstrate this feature.

Example 12: Empathy through apology
After a student, who had been reprimanded, tells Laura that he did not do anything wrong, she recognizes her mistake.

1 Laura: J'ai tort. I was totally wrong. [I am wrong.]

Example 13: Solidarity through the use of vocabulary from students' register
Laura is attempting to stop an off-task discussion.
1 Laura: Alright guys...

Example 14: Solidarity through the use of vocabulary from students' register
This example is practically identical to the example above, coming from a different teacher. This expression was used several times by Sarah.

1 Sarah: Hey guys...
College instructors used the L1 in a similar context (examples 15-16).
Example 15: Empathy through apology and solidarity through the use of vocabulary from students' register

A student asked a question (unintelligible)
1 Julie: No, I am sorry... cool.
Example 16: Solidarity though the use of vocabulary from students' register
Blanche reacts to a student sharing his experience in France.
1 Blanche: C'est très fun!
[It is very] ["fun" with an American accent]
These instances exemplify teachers' choice of words to possibly feel closer to their students. Solidarity and empathy are very common stimuli for teachers' L1 use, as the previous literature has shown.

### 5.1.5 Immediate translation

Immediate translation was used abundantly by all teachers and instructors. As Moore (1996) stated, teachers commonly use the L1 with the intent to avoid comprehension breakdowns or to facilitate communication. Immediate translation differs from delayed translation in that the former is done immediately following the L2 words or expressions, without taking time to ask learners for meaning or to check comprehension. In the present data, the focus of this type of strategy was lexical and was employed by both HS and college instructors Examples 17 through 19 present a few occurrences from the college instructors.

## Example 17: Immediate translation

Reading through a poem by Leopold Sédar Sanghor, Aurélie helps with a word.
1 Aurélie: Mon interprétation, c'est qu'il parle de l'aube, dawn.
[My interpretation, it is that he talks of dawn, dawn.]

## Example 18: Immediate translation

Emilie is showing a few pictures of the countryside of Senegal
1 Emilie: Quelques images de la campagne, country.
[A few pictures of the country, country.]
Example 19: Immediate translation
Julie is describing a painting.
1 Julie: Très abstrait, very, very abstract.
[Very abstract,]
The following examples (20-22) are by HS teachers.

Example 20: Immediate translation
Laura is showing a picture of boat.
1 Laura: Ça, c'est la planche à voile, ça, c'est de la voile.
[This, it is the wind board; this, it is the sail.]
2 Sailing.

## Example 21: Immediate translation

Sarah is starting the 2nd day of the lesson on Guadeloupe with a warm-up.
1 Sarah: Est-ce que vous vous souvenez de quelque chose sur [Do you remember anything about

2 la Guadeloupe? Est-ce que vous vous souvenez de Guadeloupe? Do you remember

3 quelque chose sur la Guadeloupe? Do you remember anything on Guadeloupe?]
4 anything interesting on Guadeloupe?
Example 22: Immediate translation
Sarah is still trying to stimulate students' knowledge through questions.
$\begin{array}{ll}1 \text { Sarah: } \quad \text { Qui a *découvré }{ }^{4} \text { la Guadeloupe? Who discovered } \\ & \text { [Who discovered Guadeloupe?] }\end{array}$

## 2 Guadeloupe?

As the examples demonstrate, some of the immediate translation L1 episodes were produced as if the L1 belonged to the L2 discourse, without any interruption in the speech. This type of L1 was the most commonly found among all the instances of L1 use in the study.

### 5.1.6 Delayed translation

Not discussed in previous research, delayed translation is the final category analyzed from the data in this study. This function represents the episodes where the translation was delayed by the use of prompts, such as "qu'est-ce que ça veut dire...?" (what does ... mean?"), "qu'est-ce que c'est ...?" (what is ...?), "ça veut dire" (it means...), "vous comprenez...?" (do you understand...?). The focus was lexical. Examples 23 through 26 present instances of delayed translation from the college instructors, with the prompts underlined.

## Example 23: Delayed translation

Julie is using a similar technique to the previous teacher with the Senegal lesson.
1 Julie: Qu'est-ce que c'est une pirogue?
[What is a pirogue ?]
2 S4: Boat.
3 Julie: Oui, a *bark ${ }^{5}$, a boat.
[Yes,]
Example 24: Delayed translation
Aurélie is also using a similar technique to the previous teachers.
1 Aurélie: Vous comprenez 'amer'? (.) bitter, ça veut dire que
[Do you understand 'bitter' ? (.) bitter, it means that

2 le thé est amer. tea is bitter.]

## Example 25: Delayed translation

In an answer to a student, Emilie also translates the work 'bitter'.
1S5: Qu'est-ce que ça veut dire 'amer'? [What does 'bitter'mean ?]

2 Emilie: Amer? Bitter.
Example 26: Delayed translation
Emilie is showing pictures of the countryside and fields in Senegal.
1 Emilie: 'Champs', qu'est-ce que c'est en anglais? Like fields. ['Fields, what is it in English ?]

The following examples (27 and 28) are from the HS teachers:

## Example 27: Delayed translation

Laura is checking for comprehension when presenting lesson on Guadeloupe.
1 Laura: Qu'est-ce que c'est qu'un loisir? [What is a leisure?]

2 Student: ... \{Not intelligible\}
3 Laura: Oui, it's an activity, things you can do in your free [Yes,]

4 time.
Example 28: Delayed translation
Sarah checks for comprehension.
1 Sarah: There is four departments. Il y a 4 départements qui
[There are 4 departments
2 ne touchent pas la France. What does it mean? that don't touch France.]

In the examples above, noticeable prompts introduce the use of the L1. The teachers wanted the students to notice the lexical forms. It is important to point out that in all cases, the focus was either on lexical or cultural information, and not on grammatical forms.

### 5.2 Research question 2: What differences exist between HS teachers' and college instructors' L1 practices?

Often neglected in research is the articulation that may or may not exist between secondary and higher education. The purpose of this 2 nd research question is to observe if L1 practices differ from an education level to another, in order to better understand students' transition from HS to college foreign language classes. As it was observed in the previous section, HS teachers and college instructors share some common L1 usages: empathy/solidarity, immediate translation and delayed translation. However, they also appeared to differ in metalinguistic explanations, task instructions and class management/discipline. HS teachers felt compelled to use the L1 for class management/discipline, while college instructors did not encounter any needs for class manage-
ment or discipline. HS teachers also used the L1 to give instructions for specific tasks, while college teachers did not encounter any need. Likewise, HS teachers did not give any metalinguistic explanations, while some of the college instructors used the L1 to bring some forms to attention.

To compare the quantity of L1 use at both instructional levels, a word count of all teachers' L1 and L2 episodes was conducted. Table 1 summarizes the results.

|  | Instructors' Names | $\begin{gathered} \hline \text { Length of } \\ \text { class } \\ \text { Time } \\ \text { (minutes) } \\ \hline \end{gathered}$ | Word count French | Word count English | Word count Total | \% of English words |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| high school teacher | Sarah - class 1 | 90 | 848 | 2087 | 2935 | 71.11 |
|  | Sarah - class 2 | 90 | 915 | 2403 | 3318 | 72.42 |
|  | Laura | 90 | 2705 | 409 | 3114 | 13.13 |
|  | Katie - class 1 | 90 | 4825 | 19 | 4844 | 0.39 |
|  | Katie - class 2 | 90 | 4998 | 13 | 5011 | 0.26 |
| HS Mean\% |  |  |  |  |  | 31.46 |
| $\begin{gathered} \hline \text { TOTAL class } \\ \text { time } \\ \text { (minutes) } \\ \hline \end{gathered}$ |  | 450 |  |  |  |  |
| college instructors | Marie | 50 | 2391 | 63 | 2454 | 2.57 |
|  | Nicole | 50 | 1904 | 55 | 1959 | 2.81 |
|  | Blanche | 50 | 2805 | 138 | 2943 | 4.69 |
|  | Alice | 50 | 2086 | 694 | 2780 | 24.96 |
|  | Emilie | 50 | 1794 | 149 | 1943 | 7.67 |
|  | Julie | 50 | 2079 | 227 | 2306 | 9.84 |
|  | Eddy | 50 | 2329 | 3 | 3232 | 0.1 |
|  | Aurélie - class 1 | 50 | 1943 | 32 | 1975 | 1.62 |
|  | Aurélie - class 2 | 50 | 1887 | 44 | 1931 | 2.28 |
| College Mean \% |  |  |  |  |  | 6.28 |
| $\begin{gathered} \hline \text { TOTAL class } \\ \text { time } \\ \text { (minutes) } \\ \hline \end{gathered}$ |  | 450 |  |  |  |  |
| Median |  |  |  |  |  | 3.57 |
| Mean of \% English word count |  |  |  |  |  | 15.28 |

Table 1: Word count and percentages of L1 and L2 use in teachers' discourse
These results show that except for one HS teacher, who used English 71.11\% and 72.42\% of the time, all other HS and college teachers used English between $0.1 \%$ and $24.96 \%$ of the time, with a median at 3.75 and a mean at 15.28 . The median shows that teachers, regardless of academic levels, will naturally lean towards the L2, switching to the L1 for occasional instances.

## 6 Discussion

### 6.1 Research question 1: What are the functions for $L 1$ use in teachers' $L 2$ speech?

This analysis documented and supported most of the functions for L1 use by foreign language teachers that were also found in previous research studies (as seen in the literature review section). However, a new distinction was made in the area of translation, which suggests important implications for teaching.

As seen in the previous literature, metalinguistic explanations can trigger the L1 as a tool to bring more constructive, explicit and efficient attention to forms. The use of the L1 is concise and to the point. As the examples from this study show, the teachers did not elaborate in the L1; they used a few words to explain the rule, and moved on to the content in the L2. One important point to notice is that only the college teachers made use of this function. The HS teachers did not elaborate on the grammatical forms. One possible cause could be that even though some of them knew there was a grammatical component integrated into the lesson, they were distracted with the cultural content and solely focused on it. Based on this observation, it is important to train teachers to stay focused on their objectives, without losing track of what they want to teach. They need to develop strategies that help them teach all the components (culture, grammar, lexis etc.) initially planned, through clearly organized lesson plans and specific activities that integrate the intended objectives.

In this study, the L1 was triggered by task instructions, albeit only among the HS teachers. This behavior seems common across many foreign language practices (Chambers, 1991; Duff \& Polio, 1990; Franklin, 1990; Levine, 2003; Polio \& Duff, 1994); teachers often feel the frustrations expressed by students if they are not able to clearly comprehend the goals of an activity. The L1 ensures comprehension in a situation that teachers and students deem very valuable and accomplishes this in a short period of time. However, in this study, the college instructors did not make use of this strategy, which might possibly be explained by the fact that their instructions were simple (e.g. "read the 1st paragraph," "look at this photograph") and that they believed their students understood them well. With teacher training in mind, it is important to help inexperienced teachers develop strategies to present instructions in the L2, by showing how to simplify activities and instructions and by teaching useful vocabulary early on.

For many teachers, the L1 ensures effective and rapid class or discipline management (Chambers, 1991; Duff \& Polio, 1990; Franklin, 1990; Macaro, 2001; Polio \& Duff, 1994). In the present case, the college instructors did not encounter any such situations. This could be explained by the fact that the students were generally more mature and motivated. However, two of the HS teachers had serious difficulties with class management. With the L1, they frequently reprimanded students and asked them to focus on the tasks. Both were pre-service teachers, implying that their lack of teaching and class management experience might have influenced a relatively excessive use of the L1 to manage students' behavior. Discipline and class management are important concerns that K-12 teachers typically deal with to a much greater extent than college instructors. This definitely became a problem for the pre-service teachers as: 1) some situations affected the goals of the lesson; 2) the teachers did not know how to handle some behaviors; and 3) some students seemed to take advantage of the teachers' lack of experience in order to "rule" the class. Foreign language methods courses for pre-service teachers should definitely cover this matter, in order to share techniques for managing a multitude of behaviors. Without good classroom management, teaching and learning cannot be efficient, and therefore it is a crucial element to master.

The function of empathy/solidarity was a motivation for all teachers to use the L1. Positive relationships with students are essential for teachers (Duff \& Polio, 1990; Polio \& Duff, 1994). Besides being kind and respectful, some teachers might integrate students' lexical register into their own discourse. Some teachers from this study appeared to have felt naturally compelled to be involved with the student group, choosing humor and words pertinent to students (e.g. "cool", "guys", etc.). Myers-Scotton's Markedness Model (1993) could explain why there is a need to use
the marked language. Indeed, by using students' L1 and lexical register, teachers might feel more accepted by students. This can become an ethical discussion, but it is essential to remind young teachers to keep some professional relationship with their students, which in turn might help with class management.

Translation was utilized to fill in the gap of vocabulary and comprehension (also found in Duff \& Polio, 1990; Macaro, 2001; Nzwanga, 2000; Polio \& Duff, 1994; Thompson, 2006). However, two particular distinctions of translation emerged in this data, which have not previously been analyzed: immediate and delayed translations. In this study, immediate translations were used frequently, in order to provide instant L1 equivalences. Because of these spontaneous decisions, students did not have a chance to give any indications of their comprehension before or after the translation. Examples of this immediate reaction show that in many cases, the translation was unnecessary, since the translated words were either cognates of English (e.g. "laitue", "erreur") or at a very beginning proficiency level (e.g. "regardez"). One explanation for using immediate translation is that teachers do not plan on translating these words beforehand, and their reaction is impulsive by fear of comprehension breakdown. The second kind of translation found in the data was delayed translation, which seemed to be stimulated by anticipation of a misunderstanding; teachers perceived a difficulty and ensured students' comprehension by preparing them through the use of questions and prompts. By delaying the translation, teachers provide students the time to process for the meaning, which is more pedagogically sound: it induces learners to notice new words, before moving on in the comprehension negotiation. Even though delayed and immediate translations have similar mechanisms, the motive with delayed translation could be interpreted differently. L1 use could be justified because it eases comprehension, while still instilling translation strategies to learners by leading them to think of the L1 equivalence. When led by prompts (e.g. "what does ... mean?", "what is ...?", "do you understand ...?") or other strategies (e.g. pause, gestures), delaying the translation encourages learners to take time to think of a word and its meaning before it is translated, giving them a chance to pause, ponder for a brief moment and notice the focused forms. Even though the aim of this study is not to prove the efficiency of either translation, delayed translation could hold more efficient learning strategies for comprehension processing. Previous research (Ellis, 2001; Grim, 2008; Long, 1991) has shown that the techniques of planned focus-on-form (in this case, identified as delayed translation) give more significant results than incidental focus-on-form (or immediate translation).

### 6.2 Research question 2: What differences exist between HS teachers' and college instructors' L1 practices?

The data in Table 1 showed that the level of instruction (i.e. HS vs. college) was not a factor in the L1 use of most teachers. Indeed, at the HS level, only Sarah abundantly used English (71.11\% and $72.42 \%$ ). Laura used $13.13 \%$, and Katie used $0.39 \%$ and $0.26 \%$. At the college level, the percentages of L1 use ranged from $0.1 \%$ to $24.96 \%$. The overall median was $3.75 \%$. This confirms that most teachers did not overuse the L1. One college instructor (Alice) had relatively high usage of L1 ( $24.96 \%$ ); however, most of her L1 was heard during one-on-one interactions with students. According to Polio and Duff (2004), instructors whose L2 was students' L1 (English) had a tendency to practice their English in class. In this particular study, this phenomenon does not seem to be reflected, as the teachers who used the most English (the L1) were actually native speakers of English. Additional research is necessary to further explore this hypothesis. In the case of Sarah, the HS teacher who abundantly used the L1, she made use of the immediate translation strategy during practically her entire class periods, as if she anticipated a complete comprehension breakdown from her students. To a much lesser extent (13.13\%), Laura, the other student teacher, also used the L1, mostly for discipline issues. Raising the issue of level differences, Thompson (2006) notices that teachers will typically use the L1 more recurrently with lower levels of instruction and will more likely focus on grammatical discourse. At higher levels of instruction, vocabulary negotiation seems to be the main cause for L1 use. In the present study, the major difference was ob-
served mostly with the student teachers. Their language choices might have been based on presuppositions of what learners can cognitively handle. Indeed, their L1 was generally used to give instructions or manage their classroom. The consequence is that students could get accustomed to hearing instructions in English and might not make any effort to understand them in the L2. Research on student teachers in the foreign language contexts is minimal (Macaro, 2001), which accentuates the need for additional studies on pre-service teachers and mentoring, particularly when teaching practices such as Sarah's are observed. It is critical that pre-service teachers and inexperienced instructors receive adequate on-going training and mentorship, through theoretical reflections and most of all through practice (e.g. mock practices, service-learning, student teaching, complemented by observations of experienced teachers). The mentoring, by superiors' or peers' observations and feedback during their teacher training and early years, is then crucial (Wilkerson, 2008). If their L1 and L2 practices are never addressed, they might not become aware of the impacts of their linguistic choices.

## 7 Conclusions

Through the monitoring of language use, this study has shown that teachers utilize the L1 primarily for practical functions, such as facilitating comprehension, overcoming grammatical obstacles and saving time in lengthy L2 task explanations. However, it was also found that the L1 was used with deliberate intents, such as in delayed translation. Delayed translation could be considered to provide focus on form by giving time for students to process the information. In this particular case, the L1 could have strategic impacts and be actually considered as a profitable communicative and teaching strategy. Through planning for comprehension breakdown, teachers can present forms by giving learners the opportunity to process, notice, and perhaps acquire the new input. Because most L2 teachers do not practice an all-L2 teaching principle, accepting the L1 as a potential successful instrument could therefore help produce successful teaching strategies through, for instance, the use of delayed translation which presents form in a planned manner (i.e. planned focus-on-form). It is clear that further investigation is needed on the effects that delayed translation could have on students' learning. One dilemma with supporting the presence of the L1 in particular cases is that teachers might choose to use it in unnecessary cases and therefore limit L2 input.

The present data also showed that teachers at both instructional levels (high school vs. college) were faced with different situations and consequently responded differently. These findings emphasize the importance of further research on the articulation between levels of instruction, as well as on the development of mentorship and training for new teachers. Research studies often make suggestions without differentiating learners' cognitive, social and academic levels as well as teachers' background, making the pedagogical suggestions often unsuitable and difficult to apply. Furthermore, accentuating discussions and reflections during teacher training might help with the development of practical tactics to increase L2 use, while considering the L1 strategically, regardless of teaching circumstances and levels of instruction. In this study, it was evident that a few teachers did not adequately reflect on the consequences of their linguistic behaviors. Regardless, L2 teachers, from all instructional background, should be developing positive habits through the implementation of strategies. For instance, they should:

- Learn about teaching methodologies and articles on teachers' L1 and L2 use and discuss their benefits (e.g. delayed translation to help focus on form) and disadvantages;
- Reflect and make decisions critically on the role of the L1 in their current or future classroom;
- Observe numerous experienced teachers and critique L1 use practices;
- Be given ample opportunities for teaching and for being in direct contact with students, prior to the student teaching practicum (e.g. service-learning, micro-teaching, assisting teachers);
- Be given a list of strategies (e.g. paraphrasing, miming, drawing) for using the L2 optimally, particularly for classroom management situations at secondary schools;
- Retrospect on their teaching and linguistic behaviors, with the support of mentors. Self-observation (video-tape) is a key tool (Polio \& Duff, 1994).
These strategies, among others, if made aware to teachers through teaching methodology courses and training, could become resourceful tools in learning to appropriately manage the L1 in the classroom. However, all teachers, inexperienced and experienced alike, should constantly be exposed to professional development, self- and peer-evaluations, and improvements, in order to keep their strategies as up-to-date and effective as possible.

The main limitation of this study concerns the unbalanced number of HS teachers (3) and college instructors (8). It would have been ideal to have an equal number of teachers, as well student teachers. However, the amount of time recorded for each group was identical. To make conclusive and generalizable observations, further investigation is needed on the effects of delayed translation and other L1 functions on learning.

On a final note, the motivation for this study is not to take part in the debate of L1 vs. L2 use. However, since we cannot deny that the majority of L2 teachers occasionally or even frequently use the L1, attempting to understand the reasons and the effects of the L1 is important when training teachers and developing teaching materials. Equipping L2 teachers with strategies to avoid or optimize the L 1 will encourage linguistic success in the classroom.

## Notes

${ }^{1}$ All IRB approvals were received for the project.
${ }^{2}$ All non-native speakers of English Teaching Assistant were all required to obtain a minimum score of 550 (paper) on the TOEFL, and of 50 on the Test of Spoken English for all Teaching Assistant at this university.
${ }^{3}$ All names throughout this article are pseudonyms.
${ }^{4}$ The teacher used the wrong past participle of the verb "découvrir".
${ }^{5}$ The word «bark » was pronounced with an American-English intonation. It seems that the teacher, raised by a French mother and an American father, borrowed the French word "barque" (meaning "small boat").

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