TEACHING SYNTAX AND PUNCTUATION IN FRENCH L1

How the notion of sentence was operationalized
in innovative didactic devices

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Abstract

The notion of sentence may seem clear to many, but in French L1 writing, students at the end of elementary school or at the beginning of secondary school experience some difficulties in punctuation, and their sentences often lack syntactic complexity. These areas of writing production are particularly important for students to gain control over sentence construction. During the first phase of a research project, we developed new teaching devices to address this problem through collaborative work with teachers and teacher consultants, which led to the creation of a sequence for students aged 10 to 14. In this paper, we will first explain why the notions of *phrase syntaxique* (literally 'syntactic sentence') and *phrase graphique* (literally 'graphic sentence') were chosen as key grammar concepts to talk about and justify syntactic and punctuation phenomena in French L1 writing. We will then demonstrate how these two notions were introduced to students in the sequence, through a first teaching device, and how they were mobilised to support whole-group metalinguistic discussions within two other teaching devices, which focused on punctuation and syntax.

Keywords: grammar, sentence, French L1 writing, teaching device, metalinguistic discussion, syntax, punctuation

1.   INTRODUCTION

Many French-speaking students struggle with syntax and punctuation when writing in French, as revealed by a report from Quebec's Education Department (MELS, 2012): out of five criteria evaluating writing production as part of official assessment[1], "syntax and punctuation" is the second most failed criterion at all grade levels. Moreover, a concern is raised regarding the important number of students who barely reach the passing score in writing examinations at the end of elementary school (Grade 6, age 11-12), since this might be indicative of insufficient competency to ensure success in secondary school. Moreover, socioeconomic environment remains a factor that strongly influences the results: at the end of elementary school, only 66 % of students from the lowest socioeconomic quintile are above the passing score compared to 95 % to 88 % of students from the four other quintiles (Desrosiers & Tétreault; 2012; $n = 1040$). Furthermore, another study from Boivin & Pinsonneault (2018; $n = 969$) analyses errors in syntax, punctuation and spelling (lexical and grammatical) found in official writing exams using a single evaluation grid at every grade level. Authors found that the total number of errors in syntax and punctuation is higher than the total of grammatical spelling errors at every school level. This result is surprising to anyone knowing how opaque and difficult French spelling is, due to its silent inflectional morphology (Jaffré & Fayol, 2006).

In order to improve students' writing skills in terms of syntax and punctuation, we thought it relevant to design and experiment, in collaboration with teachers and teacher consultants, new didactic devices in these areas for the last cycle of elementary school (Grades 5 and 6) and the first cycle of secondary school (Grades 7 and 8). Following a year-long pre-experimentation of activities focusing on syntax and punctuation using metalanguage and integrating key features of grammar teaching to support writing in French L1 classes, it became clear that some core grammatical concepts needed to be brought up earlier in the sequence. These notions, *phrase syntaxique* (PSynt) and *phrase graphique* (PGraph), literally "Syntactic Sentence" and "Graphic Sentence", did not necessarily correspond to the curriculum in primary school nor to the teachers' habitus in secondary schools. However, they came to be quite useful during the whole-class grammatical discussions which constitute the core of the activities experimented in 17 intact classes of French L1 students, from Grade 5 to 8, in Quebec, Canada.

The purpose of this paper is to present three innovative didactic devices that were used in a coherent sequence of activities, showing why the notions of PSynt and PGraph were chosen as grammar concepts to justify syntactic and punctuation

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[1]*Writing examinations from the education department are taken in Grade 4 (age 9-10) and Grade 6 (age 11-12) of elementary school, Grade 8 (age 13-14) and Grade 11 (age 16-17) of secondary school.*

phenomena, and how these two notions were used to support whole-group metalinguistic discussions within the didactic devices that were developed.

We will first introduce the context of the study, then sketch an overview of the theoretical groundings underpinning the creation of activities on syntax and punctuation. We will then present the three innovative didactic devices and show how the concept of "sentence" was used to support teacher-students metalinguistic talk.

2.   CONTEXT OF THE PRESENT RESEARCH

In the following sections, we will see that the notion of sentence in Quebec French pedagogical grammars can be puzzling and we will question the way grammar is usually taught before looking at promising teaching devices to teach syntax and punctuation that were experimented in the past few years.

2.1 The polysemic notion of sentence in French pedagogical grammar

As the grammar taught in schools may come from various theoretical backgrounds depending on the country and the language under study, we will briefly expose the notions of sentence and clause as they are explained in English pedagogical grammars, then we will explain how the notion of sentence can be puzzling in French pedagogical grammars, and specifically in the context of the Quebec school system[2]. Note that despite our efforts to explain in this paper the grammar concepts in use in Quebec schools, some concepts may have a slightly different meaning from the one in use in another language of schooling although they are referred to using a very similar terminology. This can also happen within different francophone countries.

In the English pedagogical grammars we consulted (Crystal, 2004a; 2004b; Ortiz, 2018; Terry, 2014), the notion of clause is used to make a distinction between a simple sentence and a complex sentence or compound sentence, as we can see in Ortiz (2018), a grammar book for secondary students:

> "A clause is an organised group of words, including a subject and a verb, that may or may not express a complete thought. An independent clause is complete; a dependent clause is incomplete." (p.116)

> "A simple sentence contains only one clause. It therefore consists, minimally, of a subject and a verb but may also contain objects (direct, indirect) and phrases (prepositional phrases, participle phrases)." (id. p.116)

> "A compound sentence contains two or more independent clauses joined by a semicolon or a coordinating conjunction (and, but, for, nor, or, so, yet)." (id. p.117)

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[2]*Quebec is a French-speaking province of Canada, a country where school systems fall under provincial jurisdiction.*

> "A complex sentence contains an independent clause and one or more dependent clauses. [...] The clauses are joined by a subordinate conjunction, such as after, although, because, since, and when." (id. p.118)

Before looking at the definition of "sentence" or "clause" in a French Canadian school grammar, we must first state that in French, the word for 'sentence' is '*phrase*', not to be confused with the English word 'phrase' as in 'noun phrase', which means a group of words headed by a noun (which is called '*groupe nominal*' or '*groupe du nom*' in French pedagogical grammars).

In Quebec French-speaking schools, there is no specific word used for 'clause'. Although the word '*proposition*' was used with the meaning of clause in traditional grammar, in the modernised grammar adopted around 1995 in official programs (for details, see Chartrand [2011a] or Nadeau [2017]), the notion of '*phrase de base*' was adopted, with the following definition:

> "A *phrase de base* is a P that has a structure identical to the BASIC MODEL because it contains the two mandatory constituents [subject of P and predicate of P], with eventually one or more optional and mobile constituents [complement of P, corresponding to an adverbial element], and because it has undergone no transformation of type or form" (Chartrand *et al.*, 1999, p. 76, free translation).

Let us bring to the reader's attention that the word "constituents", in this definition, does not refer to its linguistic meaning. Indeed, as a result of a necessary didactic transposition from linguistic descriptions as well as teacher expertise knowledge and social values for the teaching of grammatical concepts (Beacco, 2010), the term "constituents" is widely used in Quebec pedagogical grammars of French to designate the three groups of words in sentence-dependent grammatical functions, i.e. subject, predicate and sentence complement. This didactic choice was made after a period of hesitation and variation in order to designate in a steady and reliable way these three syntactic groups of a *Psynt* which can vary in nature, but not in their function. Indeed, although the Predicate of a *PSynt* is always a *groupe du verbe* (verb phrase) in French, the optional *complement de phrase* can be of many types of groups; the subject is most often a *Groupe du Nom* -or NP, but this function can also be occupied by other groups, like in English (*Going to the beach is fun*). For more discussion on these linguistic aspects, see Chartrand (2011b). We will therefore use "constituents" throughout this paper to refer to the three groups of words in the main functions of a syntactic sentence.

This clarification on labelling being made, let us come back to the definition of '*phrase de base*'. The examples given show how far this notion is from that of clause in English, for instance:

> "The new host on the TV show Morning Sports, who is a hockey fan, announced that she will interview the bests scorers of the National Hockey League in order that her audience know them better." (Chartrand *et al.*, 1999, p. 64, free translation)

The above sentence contains the three types of subordinate clauses in French, but it is given as an example of a '*phrase de base*' since it follows the "basic model": it contains a subject (in blue) followed by a predicate (in yellow) and an optional adverbial element (in pink), and it respects all its other characteristics (i.e. it is declarative, positive, active, neutral and personal). Under the linguistic principle of recursivity (Paret 1996), one '*phrase de base*', a P, can contain many subordinate clauses or many Ps.

If we now look at the definition of 'sentence' or '*phrase'* (in French), the following definition is given (id., p. 72), making a distinction between an "autonomous syntactic unit" called 'P' and a "graphic sentence":

> "A sentence is an autonomous syntactic unit, that is, it depends on nothing from a syntactic point of view. This unit is designated by the symbol P. A P does not necessarily begin with a capital letter and does not always end with a period [...]. Therefore, a P does not always coincide with what is commonly called a "sentence", that is, "a meaning unit that begins with a capital letter and ends with a period". In fact, what one usually calls a "sentence" is a *graphic sentence*. A graphic sentence can contain one or many Ps." (Id., p. 72, free translation)

Consequently, aside from the abstract model of '*phrase de base'*, used to study how to transform other structures from it, students will encounter the word '*phrase'* very often standing alone, as well as the expressions '*phrase graphique'* or '*phrase realisée',* which designates a real sentence and not the model of '*phrase de base'*, although a '*phrase graphique'* may contain a '*phrase de base'* with no modification. Moreover, the word '*phrase'* is also used for types and forms of sentences (*phrase interrogative, phrase impérative, phrase négative, phrase passive,* etc.), for subordinate clauses (*phrases subordonnées*), and for compound sentences (*phrases coordonnées*). Besides these expressions using the word '*phrase'*, expressions from traditional grammars are still in use in classrooms and exercise books, such as '*phrase simple'* and '*phrase complexe'*, not to mention '*phrase riche'*, '*phrase élaborée'* (respectively simple, complex, rich, and elaborate sentence).

This abundance of expressions with the word '*phrase'* results in somewhat ambiguous explanations from teachers, such as "*cette phrase contient une phrase subordonnée"* (literally: "this sentence contains a subordinate sentence") or "*cette phrase contient deux phrases coordonnées*" (literally: "this sentence contains two coordinated sentences")[3]. Moreover, to avoid ambiguity, the word '*phrase'* should never be used alone, but it is often the case. For example, a footnote mentions, in Chartrand *et al.* (1999, p. 72, free translation): "In this book, when we refer to a graphic unit, we use the term *phrase graphique*; when we refer to a syntactic unit,

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[3] *One must be aware that due to word order in French, such explanations create a logical contradiction in the mind of students before they hear the last word, leading to reactions such as: "How can there be two sentences in one sentence?"*

we use the P symbol; when a *phrase graphique* coincides with P, we use the term *phrase*[4] or the P symbol."

As it was noted, the notion of '*phrase*' remains unclear for students (Lefrançois *et al.*, 2014), and the criteria defining this notion come from different linguistic theories, so they can be contradictory (Béguelin, 2000; Paolacci & Rossi-Gensane, 2014). However, this notion is a key concept to understand many other grammatical phenomena, if not a metaconcept (Lipman, 2003; Van Rijt *et al.*, 2019).

This not-so-new pedagogical grammar was adopted officially in Quebec in the 1990s (and in Switzerland in the 1980s), and is embodied in the notion of *phrase de base* as well as other characteristics, such as multidimensional definitions of parts of speech and the use of syntactic manipulations (Genevay, 1993; Chartrand *et al.*, 1999; Nadeau & Fisher, 2006). Although this framework may bring many advantages compared to traditional grammar (Nadeau & Fisher, 2006), we will see that the notion of *phrase* is not clear for students in our study, even at the beginning of secondary school, despite the large amount of grammar lessons that characterises the learning of the French written language. We will see that making a clear distinction between *PSynt* and *PGraph*, and naming them as such, allows students to talk about syntax and punctuation before they even learn to analyse types of subordinate and coordinate clauses.

2.2 Grammar teaching practices in L1

L1 grammar teaching in most countries remains traditional, in terms of linguistic background, teaching approaches or both (Van Rijt *et al.* 2019). Despite the shift to a modernised grammar content in Quebec's schools, a vast study about grammar teaching practices of French L1 teachers in Quebec ($n = 801$) shows that traditional teaching methods prevail. Indeed, teachers declare that they proceed most often by a presentation of grammatical content (definition or rule for instance) followed by a set of decontextualised exercises, or "drills" (Chartrand & Lord, 2013). This decontextualised approach to teaching grammar has also been observed in a large-scale study in Switzerland based on in-class observation of teaching practices (30 classes; 150 lessons), where the grammatical structure under study (relative clause) was taught most often through grammatical activities isolated from writing contexts (Dolz & Schneuwly, 2009).

Regarding the teaching of punctuation, authors note that the oversimplification of the rules and examples used in grammar books and exercises does not prepare students for using signs properly in writing contexts (Jarno El Hilali, 2009; Riverin & Dufour, 2018).

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[4] *Word underlined by us.*

In addition, grammatical activities in L1 classrooms rarely engage students in metalinguistic reflection, even though it is crucial for making conscious choices during the writing process (Gombert, 1991; Nadeau & Fisher, 2011; Myhill & Jones, 2015; Fontich, 2016). For instance, students are hardly ever asked to justify their answer (using metalanguage), or to verbalise and test their hypotheses on sentence structures; they are rather placed in a role of passive "receptor" (Chartrand & Lord, 2013) of a given content, to be applied on given sentences. Some teachers turn to extensive writing activities to develop students' writing competency regarding the sentence construction and the use of punctuation signs. However, the practice of writing itself without metalinguistic reflection is not sufficient to ensure progress in the segmentation of sentences in writing (Rossi-Gensane & Paolacci 2016), nor is the scaffolding from the teacher during text revision (Colognesi & Deschepper, 2014). Unsure about efficient ways to teach syntax and punctuation, many teachers will end up suggesting students to use "short sentences" as a strategy to avoid making too many mistakes during writing exams.

2.3 Recent studies about efficient grammar teaching devices for syntax or punctuation

Even though it might represent a "challenge" for French L1 teachers (Bulea-Bronckart, 2015), the integration of grammar and writing into learning activities is an efficient way to ensure that students perceive the relevance of grammatical structures for text production (and comprehension). These activities, which draw students' attention to how grammatical structures contribute to meaning making, are especially efficient when students engage in "metatalk" (Naughton, 2006; Myhill & Newman, 2016), i.e. guided metalinguistic reflection.

For instance, in Lefrançois *et al.*'s (2014) study (*n* = 494 students), the observation of sentence constructions in youth literature supported by metalinguistic discussions significantly improved students' texts in terms of the norm. Other empirical studies conducted in French L1 classrooms have shown significant positive effects of instructional interventions fostering syntactic manipulations of sentences, verbalisations and justifications of grammatical reasoning with the use of metalanguage. These interventions showed positive effects on writing, in terms of punctuation (Jarno El Hilali, 2012; *n* = 121), syntax (Boivin & Pinsonneault, 2012, n= one class; Arseneau *et al.*, 2018, *n* = 52), as well as grammatical spelling (Nadeau & Fisher, 2014, *n*= 931 students; Jarno *et al.*, 2019, n = 482). Nadeau & Fisher's large-scale research, in which metacognitive interactive dictations were experimented, led to the present project, which is concerned with the effects of activities on syntax and punctuation inspired by this type of dictations on students' writing competency.

2.4 The project

In order to improve students' writing skills in terms of syntax and punctuation, we found it relevant to design and experiment new teaching devices in these areas for the last cycle of elementary school (Grades 5 and 6, age 10-12) and the first cycle of secondary school (Grades 7 and 8, age 12-14). Hence, the research project had two objectives, corresponding to two phases of the project:

1) The first objective aimed at designing, experimenting, and adjusting various innovative didactic devices to teach syntax and punctuation in order to support French L1 writing. This first phase of the project lasted a full school year and was conducted within a collaborative research framework involving teacher consultants and teachers from 17 intact classes from four grade levels in low socioeconomic environments. This pre-experimental phase 1 allowed for the fine tuning of three didactic devices, on which this paper focuses.

2) The second objective aimed at measuring the impact of the teaching sequence on punctuation control and syntactic complexity in students' texts. This second phase took place during the following school year, within a quasi-experimental design. The results, still under analysis, will be the focus of upcoming papers.

Therefore, in this paper, we will present the three didactic devices resulting from the first phase of the project by showing how the distinction between *Psynt* and *Pgraph* was operationalised in a first device and how these concepts were then mobilised to enable students to talk about syntax and punctuation in the two other didactic devices developed for the experimental sequence. Throughout the process of designing the didactic devices for the experimental sequence of activities, the same key principles underlying metacognitive interactive dictations (Cogis *et al.*, 2015) acted as our guideline, as explained in the following section.

3.   THEORETICAL BACKGROUND GUIDING THE CONCEPTION OF INNOVATIVE DEVICES IN SYNTAX AND PUNCTUATION

3.1 A socioconstructivist vision of learning

The socioconstructivist vision of learning, inspired by Vygotsky (1934/1998), puts forward the social nature of learning. Learning occurs in what is called the "*zone of proximal development*", where a learner can complete a task or solve a problem involving an abstract concept only with the external guidance of more expert persons (i.e. the teacher or peers). In this external phase of learning, social interaction, through language, is crucial. It is only after this external phase of learning that the learner can gradually internalise the understanding of the concept to complete the task or solve the problem by himself, without help.

Many didactic propositions for the teaching of grammar fall under this vision of learning where interactions in the classroom, through dialogue between teacher and students or between students, play an important role (Barth, 2002; Swain, 2010; Brissaud & Cogis, 2011, Mercer, 2016). Indeed, learning being viewed as a collaborative work to make meaning of knowledge, it is essential that students' talk be encouraged, and their real conceptions and procedures taken into account when solving learning-related problems (Jaffré, 1995; Haas, 2002; Cogis, 2005; Camps 2014). In this context, the teacher contributes to the students' learning by providing support during these interactions, and by modeling the use of cognitive tools that help in analysing language phenomena and in talking about them (Nadeau & Fisher, 2014; Ammar & Hassan, 2017).

3.2 The need for grammar and metalinguistic activity

It has been argued that explicit grammar instruction can support the development of writing skills when it encourages students "to engage in metalinguistic activity, in which verbalisation and data manipulation should play a key role" (Ribas *et al*., 2014, p.11). Writing being "a metalinguistic activity in itself" (Myhill & Jones, 2015) and a complex, multidimensional competence, the teacher's support is necessary.

Authors from different backgrounds hold that reaching a high level of competence in writing is conditional to the development of explicit knowledge about grammar (Ribas *et al.*, 2014; Camps, 2014; Myhill & Jones, 2015), and thus give much importance to metalinguistic activities. By distancing oneself from the language, metalinguistic activity makes language-related phenomena conscious, and "allows for their study or their control in production" (Reuter *et al.*, 2013, p. 123). Activities that include the observation, the analysis and the manipulation of linguistic elements help the student view a language as a system comprising different levels of organisation (semantical, lexical, syntactic, morphological, etc.).

Furthermore, these processes, which are mobilised during a problem to be solved through discussion (e.g. plural marking or the use of a punctuation mark), are supported by the appropriate use of syntactic manipulations, which in turn allow for testing and analysing hypotheses while making use of student's intuition about language. Through the use of precise metalinguistic terms to identify parts of speech, their syntactic function and the procedure used for analysis, students learn to conduct full grammatical thinking, first collectively with the support of the teacher, and progressively in a more autonomous way in their own writing (Boivin, 2009; Fisher & Nadeau, 2014).

3.3 The construction of grammatical knowledge by students

Even before formal learning starts upon their entry at school, students elaborate conceptions about writing and the way it works. The same goes for grammar notions,

but these conceptions may be approximate, fragile or straight up wrong, thus acting as obstacles to their learning. Grammar notions, like scientific or mathematical notions, are elaborated through a slow process, as shown by metagraphical verbal reports by young and older students (Jaffré, 1995; Haas, 2002; Cogis, 2005). It is then essential that grammar teaching devices allow students to verbalise their understanding of grammar phenomena and, in doing so, to become aware of them and eventually see their limitations. Within activities integrating grammatical discussions, the teacher can access the students' thoughts and understanding, a necessary condition to adapt their teaching to the students' zone of proximal development (Vygotsky, 1934/1998).

3.4 The importance of transferability/acceptability of new teaching devices by teachers

Because of a gap between promoted practices in official curriculum and effective practices often observed in many countries (Watson, 2015; Nadeau, 2017; Bulea Bronckart *et al.,* 2017; Van Rijt *et al.,* 2019) we find important to consider the transferability of new teaching devices from the start, i.e. from the beginning of the conception. In order to introduce successfully new teaching devices in classrooms, we relied on professional development studies. Cèbe & Goigoux (2007) and Goigoux & Cèbe (2009) have demonstrated that teaching is mediated by instruments that act as intermediaries in learning. For them, "instruments" mean both the "artefact", i.e. the concrete exercises or activities, and the "scheme of use", i.e. the way teachers use them. Such instruments (or devices) need to be collectively developed to be transferable in teachers' practices. Indeed, teachers adopt new devices not because they are scientifically coherent or because of an institutional prescription, but because they are close to their teaching vision, their usual practices, and their knowledge (Cèbe & Goigoux, 2007). Guskey & Yoon (2009), in the same line of thought, say that vision influences practices, but that for teachers to change their vision, they must start with changing their practices, see an effect on their own students' learning and on their daily work.

The meta-analysis by Darling-Hammond *et al.* (2009) led us to build a professional development plan corresponding to conditions of efficacy: it must be long-lasting (around at least 50 hours in a school year), embedded in teachers' practice, and directly linked to a specific content (in our case, syntax and punctuation). Moreover, it must be connected to an identified learning need and enable strong working relationships amongst teachers.

In our study, we organised a professional development plan including three modalities (Giguère *et al*., 2019): we provided teachers with material support (workbook, guide, videos); we had monthly meetings with them for discussion about the devices under experimentation; we also visited classrooms regularly to observe and

discuss the practice with each teacher. This plan allowed teachers to adopt new pedagogical gestures and develop their grammatical knowledge while allowing us to adapt and modify the didactic devices.

4. USING THE CONCEPTS OF *PSYNT* AND *PGRAPH* WHEN DISCUSSING SYNTAX AND PUNCTUATION WITHIN THREE TYPES OF INNOVATIVE ACTIVITIES

The sequence experimented in this research is the result of a year of designing various devices, pre-experimenting them and modifying/adjusting them through a collaborative work with the teachers and teacher consultants (Giguère *et al.*, 2019). A sequence of 20 activities (lasting around 30 minutes each) could then be experimented the following school year. The sequence included many activities of two types of devices, namely punctuation justification and sentence-combining, beginning by a first device designed to distinguish the two main concepts that would be useful to students for discussing syntax and punctuation in the following activities, namely the concepts of *phrase syntaxique* (*PSynt*) and *phrase graphique* (*PGraph*). Table 1 presents the sequence experimented in this second phase of the project.

Table 1. The sequence experimented

Sequence of 20 activities in syntax and punctuation
1- Distinguishing *phrase syntaxique (PSynt)* and *phrase graphique (PGraph)* by manipulating constituents (3 to 4 periods of 30 min each)

2- Punctuation activities followed by whole-group metalinguistic discussions similar to metacognitive and interactive dictation (6 or 7 activities of 30 min each)	3- Sentence-combining activities followed by metalinguistic discussions (10 activities of 30 min each)

In the following sections, we will first describe how the two notions of *PSynt* and *PGraph* were introduced. Then the two main devices will be exposed, showing how the two notions served to discuss syntax and punctuation phenomena respecting as much as possible the limits imposed by official programs regarding the notions and metalanguage to be used. Indeed, for a question of acceptance of such devices in schools, it is important for new devices to be close to official programs because teachers often struggle to cover all their content.

4.1 Device no 1: Distinguishing PSynt and PGraph by manipulating constituents

This first didactic device spreads over a short sequence of 3 to 4 periods of 30 minutes. Students are first asked: What is a sentence? In every class, the answers collected showed various types of definitions: graphic definitions (e.g. "it starts with a capital letter and ends with a period"), syntactic ones (e.g. "it contains a verb"; "it has to contain a subject"), and semantic ones (e.g. "a bunch of words that makes sense"; "a sentence must be logical"), but also aspects like types of sentences (e.g. "interrogative sentence"; "negative sentence"), mixed with less relevant elements (e.g. "word classes", "must have determiners"; "may feature a proper noun"). This introductory discussion leads to the conclusion that no clear definition of a sentence is shared amongst the students, and so it is relevant to work towards a more consistent conception of this key notion.

Students are then given an envelope with various groups of words printed on cardboard strips of different colours (according to their syntactic function), and they are asked to build a sentence using only two strips, as shown in figure 1a). Students can then observe that they all used the same two colours to make a sentence; some identify the functions of Subject and Predicate at this point, grammar notions which they are supposed to know already. This moment gives the teacher the opportunity to go over the syntactic manipulations used to prove these two functions, and to conclude that they are both mandatory to build a *PSynt*.

The syntactic manipulations that serve as proofs for the analysis of the mandatory constituents in the *PSynt* in French pedagogical grammar are the following: to identify the Subject, the syntactic group occupying this grammatical function can be "framed" by *c'est* and *qui* to create a sentence with emphasis on the Subject (*C'est le chef du village qui parle aux membres de sa tribu.*). As for the Predicate, the tensed verb being the head of the verb phrase in predicate function, syntactic manipulations to locate tensed verbs are the first to apply at this point of the activity. The tensed verb of the predicate can be "framed" by negation words (*Le chef du village viking ne parle pas aux membres de sa tribu.*), and the tense can be changed (*Le chef du village viking parlait aux membres de sa tribu.*). Note that the boundaries of the predicate, at this level of schooling, will later be identified by default after the identification of the Subject and the *Complement de phrase* (Sentence Adverbial) of a *Psynt*. This procedure allows to save time in labelling the constituents, which is not the goal, to spend more time discussing punctuation or sentence construction.

Students are then asked to add another strip from the envelope to add context to their initial sentence, as in figure 1 b). Again, they will identify the syntactic function of the added constituent, namely "*Complément de Phrase (CP)*" (Sentence Adverbial) and review the appropriate syntactic manipulations to prove it. For example, a key syntactic manipulation to decide if a syntactic group occupies the function of *CP* consists in moving it to different positions in the *PSynt* (*Le chef du village viking parle aux membres de sa tribu* **chaque soir**. *Le chef du village viking,* **chaque soir,**

parle aux membres de sa tribu. **Chaque soir,** *le chef du village viking parle aux membres de sa tribu.*).

It is only at this point that the teacher brings the precise metalanguage to refer to the construction of a *PSynt*: a *PSynt* is formed of a Subject + a Predicate (+ a mobile and optional *CP*).
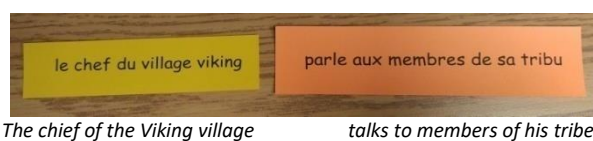
Figure 1 a). A sentence with two "strips"

The chief of the Viking village   talks to members of his tribe.

Figure 1b). A third "strip" was added to the previous sentence

*Every night,   the chief of the Viking village   talks to members of his tribe.*

In another period, students are again given the envelopes with the task of combining two *PSynt* by adding a pink "strip" on which conjunctions and commas are printed (see figure 2).

Figure 2. Examples of two PSynt *combined into one* PGraph

Every night, the chief of the Viking village talks to the members of his tribe,
but *these fighters do not listen to him carefully.*
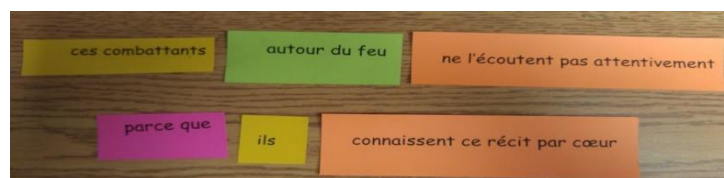
These fighters, around the campfire, do not listen to him carefully
because *they know this story by heart.*

Punctuation is then discussed around two of these sentences, selected by the teacher and projected on the interactive board, adding a capital letter at the beginning and a period at the end. The precise metalanguage can then be introduced: the *PGraph* is delimited by punctuation marks.

After the whole-class discussion, students can make the following observations: A *PGraph* can contain only one *PSynt*, or it can contain two or more *PSynt*. When this is the case, there must be something to link the *PSynt* together: a conjunction (without distinguishing coordination and subordination at this point) or a comma (for juxtaposition). The relative pronoun as a mean to link two *PSynt* is a notion that will be addressed later, when the structure (relative clause) appears in the other devices.

In short, students are now prepared to start discussing punctuation and syntax in the two next devices. They know that when identifying constituents (Subject, Predicate, *CP*), the notion of *PSynt* applies, and that when marking final punctuation, the notion of *PGraph* applies. Students keep track of these observations in a personal notebook dedicated to syntax and punctuation to institutionalise this knowledge.

It is important to note that the grammar notions that are addressed here are not new to students, even for our fifth graders (aged 10-11). They already know the syntactic functions of Subject and *CP*, they were taught syntactic manipulations, they know the word categories (parts of speech), and they know the main rules of punctuation.

What is new to the students through this activity is the distinction between *PSynt* and *PGraph* without having to analyse the different types of subordinate clauses or distinguishing coordination from subordination, notions that appear later in the curriculum.

What is also new is to ask students to use the notions to talk about punctuation and complex syntactic constructions in various sentences created by the students themselves, and to give proofs of their analysis. Manipulations may seem trivial in prototypical sentences like the ones a student encounters in a grammar book or in an exercise book. However, they reveal all their subtleties and potential when used in many contexts, in sentences written by students or from authentic texts, as it will be the case in the two other devices as well as in students' writing.

4.2 Device no 2: Punctuation device inspired by metacognitive and interactive dictation ("Phrase dictée du jour")

"*Phrase dictée du jour*" (literally, sentence-of-the-day dictation) is a teaching device in which spelling is discussed collectively, especially the silent morphology of French that marks concordances (Cogis *et al.*, 2015). Therefore, this kind of dictation is clearly a learning activity, not an assessment like traditional dictation in French class usually is. Basically, a sentence is dictated, then all the spellings found in the classroom are listed on the board to be discussed in order to find which one is correct,

which ones are wrong and why, relying on grammatical justifications, including syntactic manipulations (Nadeau & Fisher, 2014).

In our project, this device was adapted for punctuation. Firstly, students punctuate a sentence or a short paragraph with no punctuation marks or capital letters. Secondly, the text is projected on the board and students share their signs, one after another, until every sign appears (see figure 3). Each sign is then discussed. Valid ones must be justified, using syntactic manipulations, and invalid ones must be rejected also with a grammatical justification.

Figure 3. The board with all the signs to be discussed

Punctuation marks proposed by students from a Grade 7 class (12-13 years old)
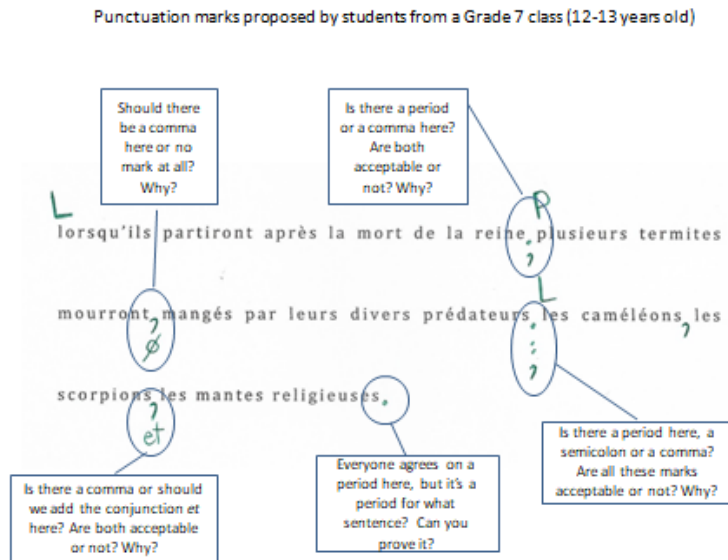
Literal word to word translation of the original sentence from a student's text:

> "When they will leave after the death of the queen, many termites will die, eaten by their various predators: the chameleons, the scorpions, the praying mantis."

Figure 3 shows the potential and the richness of grammatical discussions around the punctuation marks proposed by students. Sometimes, the justifications are semantical (for example around the list of predators), but they are mainly syntactic, as we will see in the next section.

Because the choices discussed come directly from students in the class, they are interested in such activities, but this can be a challenge for teachers. From one class to another, students suggest various sets of punctuation marks, so whole-class discussions do not necessarily focus on the same problems, making it impossible to supply a full answer sheet to the participant teachers. However, referring to key notions, such as *PSynt* and *PGraph*, when discussing punctuation options in class, teachers came to realise that any of these grammar problems may be solved.

As figure 3 showed, the notion of sentence is not clear for every student, even at this age. Up to three *periods* (for three *Pgraph*) were suggested for the whole-class discussion: after '*reine*' (end of a subordinate clause), after '*prédateurs*' (before the terms of the list of predators) and after '*religieuses*' (end of the text extract). The notions of *PSynt* and *PGraph* will help to explain why there can be only one *PGraph*

in this short text. Let us see how these two notions are reinvested in the whole-group grammatical discussion to justify or reject punctuation marks.

The first step is to identify Subject-Predicate pairs as mandatory constituents of each *PSynt*. This is done by first identifying tensed verbs, being head of verb phrases with Predicate function, then the Subject of each one. Syntactic manipulations will serve as proofs in this analysis and traces are drawn on the board, as shown in figure 4.

Figure 4. The board with traces of syntactic manipulations for the identification of tensed Verbs and Subjects

1st level of analysis : Subject and Verb identification (whole-class discussion)
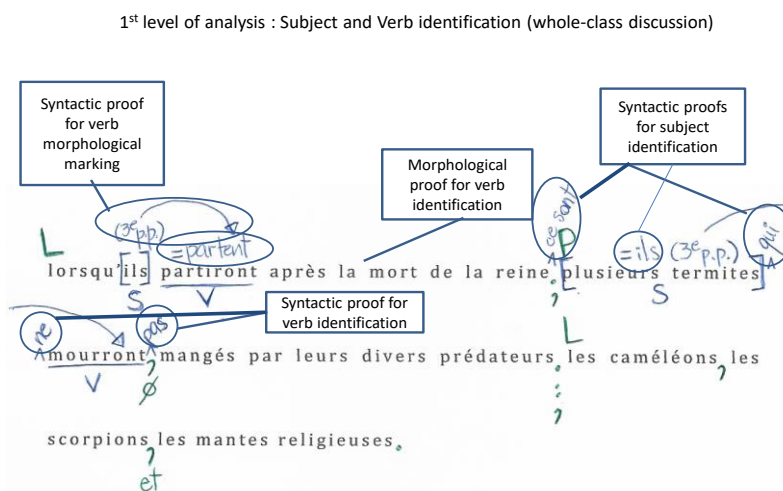
As there are two tensed verbs, each in relationship with a different Subject, it can be extrapolated that there are two Subject-Predicate pairs, indicating that there are two *PSynt*. Consequently, are there two *PGraph* or only one? If there is only one *PGraph*, how are the two *PSynt* joined? These questions leading to identify and justify the punctuation of graphic sentences will be discussed before the signs within a *PSynt*, mainly commas.

The comma suggested by some students between *reine* and *plusieurs termites* can be a sign that accounts for joining two *PSynt* into one *PGraph*, but the hypothesis of two *PGraph* must be rejected because the first PSynt is not an independent clause since it begins with a conjunction, namely *lorsque*. The analysis goes on to find *Compléments de phrases (CP)* using manipulations (mainly mobility and deletion).

Students easily identify the *CP 'après la mort de la reine'* by moving it at the very beginning (before '*lorsque*'), but that group is the CP of which sentence exactly? The answer is not so clear for students. A metalinguistic discussion is needed with many syntactic manipulations and links made with subtle differences in meaning to reach the conclusion that it is in fact the *CP* of the first *PSynt*, which itself is a *CP* of the other *PSynt*, as shown in figure 5.

Figure 5 The board at the 2nd level of analysis

2nd level of analysis: Links between Syntactic Sentences and justification of punctuation marks
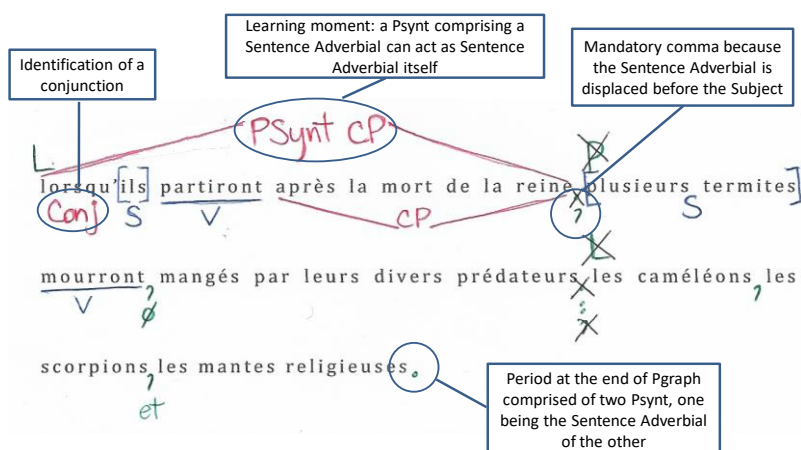
The meaning supports this analysis: it is because the termites left (the termitary) that they died eaten by predators, and they left because the queen died. They did not die eaten by predators because the queen died and because they left (such a meaning would be carried out by a structure with two *CP* of the same *PSynt*, namely *termites died eaten by predators*, but this is less acceptable).

Such a discussion on sentence segmentation links grammar to meaning, one being supported by the other. When the discussion on *PGraphs* is finished, the class will go on discussing the other signs left (commas, semicolons, etc.). When two punctuation signs are acceptable, both are left on the board, as shown in Figure 6.

Figure 6. The board at the end of the activity

Final whole-class decisions on punctuation marks

In the experimented sequence, after a few activities discussing only punctuation signs, students will start sentence-combining activities.

4.3 Device no 3: Sentence-combining activities followed by metalinguistic discussion

Sentence combining is an activity that consists in combining various short sentences into one longer sentence, as shown in figure 7. Such activities are known to improve syntactic maturity in students' texts and have been experimented since the 1970s in the U.S. (e.g. O'Hare, 1973), but they have recently regained interest in research showing their positive effect at different school levels (Graham & Perrin, 2007; Saddler *et al.*, 2008; Limpo & Alves, 2013). To our knowledge, sentence-combining has not yet been experimented in a French-speaking context.

Figure 7. Example of a sentence-combining activity

Instructions (in French): Reformule en une seule phrase graphique tous les éléments d'information des phrases 1 à 4. Tu peux changer l'ordre des idées!	Free translation: Reformulate into one graphic sentence all elements of information contained in sentences 1 to 4. You can change the order of ideas!
1: Il portait une veste de coton brune. 2: Il portait une chemise aux manches retroussées. 3: Un mouchoir rouge était noué autour de son cou. 4: Ses vêtements lui donnaient une apparence de poète.	1: He was wearing a brown cotton vest. 2: He was wearing a shirt with rolled-up sleeves. 3: A red handkerchief was knotted around his neck. 4: His clothes made him look like a poet.

Contrary to the initial idea of sentence-combining activities, where they were seen as grammar exercises in which students were asked to apply a given syntactic mechanism to join kernel sentences (e.g. "Use *and* or *but* to combine the following short sentences."), what Savage (1980) refers to as "signalled combining", in our research project, we chose to create only "open combining" activities, where the students combine short sentences freely using whatever syntactic mechanisms they see fit to express the meaning suggested in the different short sentences.

We also added to the device metalinguistic discussions (Myhill *et al.*, 2013; Nadeau & Fisher, 2014). This is how the activity unfolds: first, students do the activity individually, and if they can, they are asked to make a second *PGraph* changing the order of the elements of information. Then, the teacher collects the sentences from students and chooses two sentences for the whole-class discussion that will lead to the identification of various combining mechanisms (figure 8). At the end, students collectively choose a syntactic mechanism that was striking for them and write it down in their notebook (see details in Quevillon Lacasse *et al.,* 2018).

Figure 8. Example of sentences chosen for whole-group discussion

Combined sentences produced by students (in French)	Free translation
Quand l'homme portait une veste de toile brune, une chemise aux manches retroussées et un mouchoir rouge noué autour de son cou, il ressemblait à un poète.	When the man was wearing a brown cotton vest, a shirt with rolled-up sleeves and a red handkerchief knotted around his neck, he looked like a poet.
La veste de toile brune, la chemise aux manches retroussées et le mouchoir rouge noué autour de son cou donnaient une apparence de poète à cet homme.	The brown cotton vest, the shirt with rolled-up sleeves and the red handkerchief knotted around his neck gave an appearance of poet to this man.

During the whole-class discussion, students will again use syntactic manipulations and metalanguage to identify mechanisms of combination that were used implicitly and creatively when composing their sentences in order to become more aware of the syntactic structures underlying them, thus making this knowledge explicit and eventually consciously mobilised in writing production. For example, for the second *PGraph* of figure 8, the manipulation of adding *c'est ... qui* to frame the Subject will lead students to observe that this Subject contains three noun phrases (each with complements) that are juxtaposed and coordinated:

> *C'est* La veste de toile brune, la chemise aux manches retroussées et le mouchoir rouge noué autour de son cou *qui* donnaient une apparence de poète à cet homme.

In our sequence, sentence-combining activities were created from various *genres* of authentic texts (literary, descriptive, explanatory, etc.) to vary syntactic resources students could use. Finally, in order to close the gap between these activities and text revision, a few activities presented a student's paragraph in need of reformulation, usually from younger students, for example a text from a Grade 3 student (age 8-9) in an activity intended for Grade 5-6 students (age 10-12), as in Figure 9.

Figure 9. Sentence-combining activity asking for the reformulation of an extract from an authentic younger student's text

Literal translation of the text to be reformulated:
"And there is a game, it's questions, they ask questions then you have to say true or false."

Many mechanisms of sentence combining can be collected and discussed, sometimes by comparison to the initial sentences (e.g. a more precise word, a change of

category from verb to noun), sometimes within the combined sentence as seen above with the manipulation for Subject.

The analysis of the graphic sentence chosen for discussion into syntactic sentences and its construction is supported by open-ended questions such as: Do we really have one graphic sentence here? How many syntactic sentences does it contain? How are they linked?

Particular attention was drawn to coordination. It is easy for the students to identify a coordinating conjunction in the combined sentence because they know the most frequent ones by heart (and, but, ...), but it was absolutely not obvious for them to identify what was coordinated with these conjunctions. In order to deepen their understanding of this syntactic mechanism, they were systematically asked to identify the elements that were coordinated or juxtaposed, as shown in figure 10.

Figure 10 Traces of discussion on two combined sentences with different coordinated elements in a Grade 5 class.
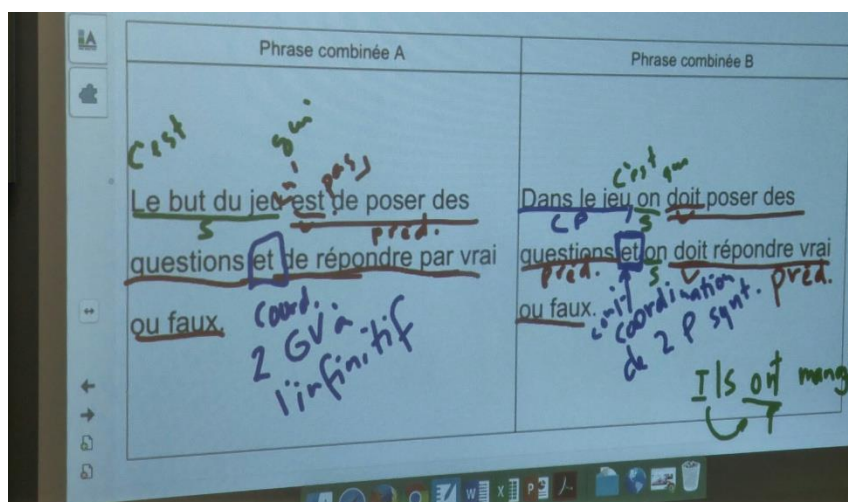
Free translation:

Combined sentence A	Combined sentence B
The aim of the game is to ask questions and answer by true or false.	*In this game, we have to ask questions and we have to answer true or false.*
Coordination of two infinitive verb phrases	Coordination of two *PSynt*

Finally, the notion of *PSynt* was sufficient to analyse subordinate clauses (mostly relative and circumstantial clauses) used implicitly by students without distinguishing the different types of subordinate clauses: the relative pronoun has a function, like any pronoun (ex.: *qui* (who) can be analysed as a Subject in the *PSynt*); a *Psynt* used

as *Complément de phrase (CP)* (Sentence Adverbial) can be moved or deleted altogether. This allowed for discussing about the autonomy of a *PSynt* or its dependency with a minimal use of metalanguage, even with students as young as age 10.

5.   DISCUSSION

This research was mostly exploratory, as these activities for syntax and punctuation with emphasis on metalinguistic discussions were never experimented before, at least to our knowledge, in L1 French-speaking school settings. Besides measuring the impact of this sequence on writing, something already planned in this project, further research is needed on such devices, and many questions remain, such as: At what age can students start using key concepts such as *PSynt* and *PGraph* to solve problems related to syntax and punctuation? What is the best metalanguage to use? How do students actually use these resources throughout the writing process?

Nevertheless, following the collaborative pre-experimentation of innovative devices to teach syntax and punctuation in Grade 5 to 8 French L1 classrooms in Quebec, it seems that the systematic use of the notions of *phrase syntaxique* (*PSynt*) and *phrase graphique* (*PGraph*) during whole-class discussions aiming at justifying the use of punctuation marks and the construction of sentences submitted by students has been fruitful both for teachers and students. Indeed, these two concepts represent an efficient metalinguistic foundation to start discussing syntactic and punctuation phenomena because these terms are clear, minimal and reliable to address linguistic data which is generally more complex than the sentences students work on in grammar books, but at the same time closer to the complexity of the sentences they read and write in school settings.

Especially the notion of *phrase syntaxique* appears to be more operational than the *phrase de base* in this context, because it gives importance to the main sentence-dependent functions of a syntactic sentence (Subject, Predicate and Sentence Adverbial), whether or not the sentence respects all the other characteristics of the abstract model. This allows for discussion on syntax with students at an early stage, even around subordinate clauses, helping them to develop a clearer vision of language as a system (Nadeau & Fisher, 2006; Ribas *et al.*, 2014; Bulea-Bronckart & Elalouf, 2016).

Since this notion is also closer to the teachers' grammatical knowledge, it is much easier for them to adopt it and use it with students compared to other definitions proposed by researchers such as Béguelin (2000), Combettes (2009) or Berrendonner (2017) which, despite their interest from a linguistic point of view, refer to a completely different linguistic theory to define the concept of sentence.

Another important aspect at the core of the teaching devices that were created within this research project was the systematic use of metalinguistic discussion (Fisher & Nadeau, 2014; Myhill & Newman, 2016) led by the teacher to scaffold grammar conceptualisation within a socioconstructivist view of grammar learning.

The novelty of our devices thus mainly resides in the whole-class discussion, which implies consistent changes in teachers' practices. Not relying on an answer key to address grammatical concepts, systematically probing students to justify their use and identification of syntactic mechanisms and punctuation marks, neutrally welcoming all the suggestions from students, selecting students' sentences as raw material for teaching syntax and punctuation, not being able to anticipate all the possibilities for grammar discussions in advance called for an important shift in the participating teachers' grammar teaching habits. However, the professional development plan that was set up, based on Cèbe & Goigoux (2007), Guskey & Yoon (2009) and Darling-Hammond *et al.* (2009), was worth the effort. As Giguère *et al.* (2019) observed, the teachers came to realise how their grammatical knowledge had expanded and deepened through these devices. They also realised how their students' implicit knowledge of syntax and punctuation was helpful in leading interesting discussions, even on grammatical concepts which they did not conceive as understandable for their students. Finally, these devices also allowed teachers to see how different grammatical concepts are interrelated within authentic sentences, and that working from context makes grammar more meaningful.

REFERENCES

Ammar, A. & Hassan, R. M. (2018). Talking It Through: Collaborative Dialogue and Second Language *Learning.Language Learning, 68*(1), 46-82.

Arseneau, R., Foucambert, D. & Lefrançois, P. (2018). Improving the mastery of relative clause in French L1 secondary classes: the effects of an intervention based on verbal interactions on written syntactic structures. *L1 - Educational Studies in Language and Literature, 18*, 1-29.

Beacco, J.-C. (2010). *La didactique de la grammaire dans l'enseignement du français et des langues*. Paris: Didier.

Béguelin, M.-J. (2000). Le passage à l'écrit : problèmes d'acquisition. In M.-J. Béguelin (Ed.), *De la phrase aux énoncés : grammaire scolaire et description linguistique* (pp. 260-273). Bruxelles: De Boeck Duculot.

Berrendonner, A. (dir.) (2017). *Grammaire de la période*. Bern: Peter Lang.

Boivin, M.-C. (2009). Jugements de grammaticalité et manipulations syntaxiques dans le travail en classe d'élèves du secondaire. In J. Dolz, & C. Simard (Eds.), *Pratiques d'enseignement grammatical. Points de vue de l'enseignant et de l'élève* (pp. 179-208). Québec: Presses de l'Université Laval.

Boivin, M.-C. & Pinsonneault, R. (2012). L'orthographe des homophones : une approche syntaxique. *La lettre de l'AIRDF, 52*, 36-40.

Boivin, M.-C. & Pinsonneault, R. (2018). Les erreurs de syntaxe, d'orthographe grammaticale et d'orthographe lexicale des élèves québécois en contexte de production écrite. *Revue canadienne de linguistique appliquée, 21*(1), 43-70.

Brissaud, C. & Cogis, D. (2011). *Comment enseigner l'orthographe aujourd'hui*. Paris: Hatier.

Bulea Bronckart, E. (2015). Interaction entre grammaire et texte : les défis d'une prescription innovante. *Scripta (Minas), 19*(36), 57-74.

Bulea-Bronckart, E. & Elalouf, M-L. (2016). Contenus et démarches de la grammaire rénovée. In S.-G. Chartrand (Ed.), *Mieux enseigner la grammaire* (pp. 45-61). Montréal: Pearson.

Bulea Bronckart, E., Marmy Cusin, V. & Panchout-Dubois, M. (2017). Les exercices grammaticaux dans le cadre de l'enseignement rénové du français : usages, problèmes, perspectives. *Repères, 56*, 131-149.

Camps, A. (2014). Metalinguistic activity in language learning. In T. Ribas, X. Fontich & O. Guasch (Eds.), *Grammar at school: Research on metalinguistic activity in language education* (pp. 25-42). Brussels: Peter Lang.

Cèbe, S. & Goigoux, R. (2007). Concevoir un instrument didactique pour améliorer l'enseignement de la compréhension des textes. *Repères, 35*, 185-208.

Chartrand, S.-G. (2011a) Prescriptions pour l'enseignement de la grammaire au Québec : Quels effets sur les pratiques? *Le français aujourd'hui*, (173), 45-54.

Chartrand, S.-G. (2011b). Utiliser un modèle rigoureux et opératoire pour analyser des phrases et les corriger. *Correspondance, 17*(1). [on line]: https://correspo.ccdmd.qc.ca/index.php/document/outils-et-modes-demploi/utiliser-un-modele-rigoureux-et-operatoire-pour-analyser-des-phrases-et-les-corriger/.

Chartrand, S.-G. & Lord, M.-A. (2013). L'enseignement de l'écriture et de la grammaire au secondaire québécois : principaux résultats d'une recherche descriptive. *Revue Suisse des Sciences de l'éducation, 35*(3), 515-539.

Chartrand, S.-G., Aubin, D., Blain, R. & Simard, C. (1999). *Grammaire pédagogique du français d'aujourd'hui*. Boucherville: Graficor.

Cogis, D. (2005). *Pour enseigner et apprendre l'orthographe*. Paris: Delagrave.

Cogis, D., Fisher, C. & Nadeau, M. (2015). Quand la dictée devient un dispositif d'apprentissage. *Glottopol, 26*, 69-91.

Colognesi, S. & Deschepper, C. (2014). Le savoir des élèves en ponctuation. Analyse des interactions et propositions didactiques. *Le français aujourd'hui, 187*, 43-55.

Combettes, B. (2009). Quelle(s) description(s) grammaticale(s) pour l'enseignement ? *Repères, 39*, 41-56.

Crystal, D. (2004a). *Rediscover Grammar*, Third edition. Harlow, UK: Pearson Education.

Crystal, D. (2004b). *Making Sense of Grammar*. Harlow, UK: Pearson Education.

Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N. & Orphanos, S. (2009). *Professional learning in the learning profession. A Status Report on Teacher Development in the United States and Abroad*. Washington, DC: National Staff Development Council.

Desrosiers, H. & Tétreault, K. (2012). Les facteurs liés à la réussite aux épreuves obligatoires de français en sixième année du primaire : un tour d'horizon. Institut de la statistique du Québec, Volume 7, Fascicule 1, Décembre 2012. [on line] http://www.stat.gouv.qc.ca/statistiques/education/presco-laire-primaire/reussite-epreuve-francais.pdf.

Dolz, J. & Schneuwly, B. (Ed.) (2009). *Des objets enseignés en classe de français : le travail de l'enseignant sur la rédaction de textes argumentatifs et sur la subordonnée relative*. Rennes: Presses universitaires de Rennes.

Fisher, C. & Nadeau, M. (2014) Usage du métalangage et des manipulations syntaxiques au cours de dictées innovantes dans des classes du primaire*. Repères*, 49, 169-191

Fontich, X. (2016). L1 Grammar Instruction and Writing: Metalinguistic Activity as a Teaching and Research Focus. *Language and Linguistics Compass, 10*(5), 238–254.

Fontich, X. & Camps, A. (2014). Towards a rationale for research into grammar teaching in schools. *Research Papers in Education, 29*(5), 598-625.

Genevay, E. (1994). *Ouvrir la grammaire : interlocuteur, énoncé, communication, phrase*. Lausanne: LEP /Montréal: La Chenelière.

Quevillon Lacasse, C., Nadeau, M. & Giguère, M.-H., (2018) La combinaison de phrases : un dispositif stimulant et efficace pour développer la créativité syntaxique. *Correspondance, 23*(5). [on line] https://correspo.ccdmd.qc.ca/index.php/document/la-combinaison-de-phrases-un-dispositif-stimu-lant-et-efficace-pour-developper-la-creativite-syntaxique/.

Giguère M.-H., Nadeau, M., Fisher, C., Arseneau, R. & Quevillon Lacasse, C. (2019) Teacher-researcher Dialogue in Differentiated Support to Develop Students' Skills in Syntax and Punctuation. In S. Briquet-Duhazé & C. Turcotte (Eds.), *From Reading-Writing Research to Practice* (pp. 33-60). Wiley.

Goigoux, R. & Cèbe, S. (2009). Un autre rapport entre recherche, pratique et formation. Les instruments didactiques comme vecteur de transformation des pratiques des enseignants confrontés aux difficultés d'apprentissage des élèves. Conférence de clôture du 9ème colloque international de Recherche en éducation et formation (REF). Université de Nantes, Nantes, France. [on line] https://halshs.archives-ouvertes.fr/halshs-00936348/document.

Gombert, J. E. (1991). Le rôle des capacités métalinguistiques dans l'acquisition de la langue écrite. *Repères, 3*, 143-156.

Graham, S. & Perrin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of educational psychology, 99*(3), 445-476.

Guskey, T. R. & Yoon, K. S. (2009). What Works in Professional Development? *Phi Delta Kappan*, (90), 495-500.

Haas, G. (2002). Apprendre, comprendre l'orthographe autrement : de la maternelle au lycée. Dijon: CRDP de Bourgogne.

Jaffré, J.-P. (1995). Compétence orthographique et acquisition. In D. Ducard, R. Honvault & J.-P. Jaffré (Eds.), *L'orthographe en trois dimensions* (pp. 93-158). Paris: Nathan.

Jaffré, J.-P. & Fayol, M. (2006). Orthography and Literacy in French. In R. M. Joshi, & P. G. Aaron (Eds.), *Handbook of Orthography and literacy* (pp. 81-104). New Jersey, USA: Erlbaum.

Jarno El Hilali, G. (2012). Expérimentation d'un dispositif pour l'enseignement de la ponctuation et ses effets sur les performances en écriture des élèves de 2ème année de l'école primaire. *Bellaterra Journal of Teaching & Learning Language & Literature, 5*(4), 42-55.

Jarno El Hilali, G. (2009). La ponctuation dans les manuels de lecture du CP. *Spirale. Revue de recherches en éducation, 44*, 113-127.

Jarno El Hilali, G., Nadeau, M. & Fisher, C. (2019). L'effet des dictées métacognitives interactives sur la compétence à orthographier les homophones grammaticaux en rédaction*. Repères, 60*, 45-63.

Lefrançois, P., Anctil, D. & Montésinos-Gelet, I. (2014). *Enseigner et apprendre la notion de phrase pour améliorer la compétence à écrire des élèves du primaire à l'aide de la littérature jeunesse*. Rapport de

recherché   FRQSC.   [on   line]   http://www.frqsc.gouv.qc.ca/documents/11326/518700/PT_Le-fran%C3%A7oisP_rapport+2014_enseigner+notion+phrase/d2156978-96fc-41dc-a261-65d81d17d8ed .

Limpo, T. & Alves, R. A. (2013). Teaching planning or sentence-combining strategies: Effective SRSD inter-ventions at different levels of written composition. *Contemporary Educational Psychology, 38*, 328-341.

Lipman, M. (2003). *Thinking in education* (2ⁿᵈ ed.). Cambridge: Cambridge University Press.

Mercer, N. (2016). Education and the social brain: linking language, thinking, teaching and learning, *Édu-cation et didactique, 10*(2), 9-23.

Ministère de l'éducation, des loisirs et des Sports (MELS). (2012). Évaluation du plan d'action pour l'amé-lioration du français, résultats aux épreuves ministérielles d'écriture de juin 2009 et 2010. [On line] http://numerique.banq.qc.ca/patrimoine/details/52327/2101353.

Myhill, D., Jones, S., Watson, A. & Lines, H. (2013). Playful Explicitness with Grammar: a Pedagogy for Writing. *Literacy*, *47*(2), 103–111.

Myhill, D. & Jones, S. (2015). Conceptualising metalinguistic understanding in writing. *Cultura & Edu-cación: Culture and Education, 27*(4), 839–867.

Myhill, D. & Newman, R. (2016). Metatalk: Enabling metalinguistic discussion about writing. *International Journal of Educational Research*, (80), 177-187.

Nadeau, M. (2017) La implementacion d'una nova gramatica pedagogica: obstacles I oportunitats a par-tir de l'experiencie al Quebec francofon. *Caplletra*, no 63. [on line] https://doi.org/10.7203/caplle-tra.63.10399

Nadeau, M. & Fisher, C. (2006). *La grammaire nouvelle : la comprendre et l'enseigner.* Montréal: Gaëtan Morin éditeur.

Nadeau, M. & Fisher, C. (2011). Les connaissances implicites et explicites en grammaire : quelle impor-tance pour l'enseignement? Quelles conséquences? *Bellaterra Journal of Teaching & Learning Lan-guage & Literature, 4*(4), 1-31.

Nadeau, M. & Fisher, C. (2014). *Expérimentation de pratiques innovantes, la dictée 0 faute et la phrase dictée du jour, et étude de leur impact sur la compétence orthographique des élèves en production de texte*. Rapport de recherche FRQSC. [On line] http://www.frqsc.gouv.qc.ca/docu-ments/11326/449040/PT_NadeauM_rapport+2014_Dict%C3%A9e+impact+orthogra-phique.pdf/f2307696-6f26-4ea0-965f-433a9fbe0a54.

Naughton, D. (2006). Cooperative strategy training and oral interaction: enhancing small group commu-nication in the language classroom. *The Modern Language Journal, 90*, 169-184.

O'Hare, F. (1973). *Sentence-combining*. NCTE Research Report, No. 15. Champaign: NCTE.

Ortiz, M. (2018). *Indispensable English Grammar for Secondary I to V*. Québec: SOFAD.

Paolacci, V. & Rossi-Gensane, N. (2014). Ponctuation et écrits d'élèves : une conception différente de la phrase pour enseigner la ponctuation autrement. *Le Français aujourd'hui, 187*, 115-125.

Paret, M.-C. (1996). Une autre conception de la phrase et de la langue pour faire de la grammaire à l'école. In S.-G. Chartrand (Ed.), *Pour un nouvel enseignement de la grammaire: propositions didactiques* (275-310). Montréal: Éditions Logiques.

Reuter, Y., Cohen-Axria, C., Daunay, B., Delcambre, I. & Lahanier-Reuter, D. (2013). *Dictionnaire des con-cepts fondamentaux des didactiques*. Louvain-la-Neuve, Belgique: De Boeck Supérieur.

Ribas, T., Fontich, X. & Guasch, O. (2014). *Grammar at school: Research on metalinguistic activity in lan-guage education*. Brussels: Peter Lang.

Riverin, P. & Dufour, M.-P. (2018). Enseigner la ponctuation au collégial : quels contenus, quels principes? *Correspondance, 23*(6), 1-9.

Rossi-Gensane, N. & Paolacci, V. (2016). La segmentation des écrits d'élèves à l'école et au collège : quel rôle pour la phrase? LIDIL, *Revue de linguistique et de didactique des langues, 54*, 35-53.

Saddler, B., Behforooz, B. & Asaro, K. (2008). The Effects of Sentence-Combining Instruction on the Writing of Fourth-Grade Students with Writing Difficulties. *The Journal of Special Education, 42*(2), 79-90.

Savage, J. (1980). *Sentence Combining: A Positive Practice*. Chicago: Science Research Associates.

Terry, M. (2014). *Teaching Grammar & Punctuation in the Twenty-First Century*. Don Mills, Canada: Oxford University Press Canada.

Van Rijt, J. H. M., de Swart, P. J. F., Wijnands, A. & Coppen, P.-A. J. M. (2019). When students tackle grammatical problems: Exploring linguistic reasoning with linguistic metaconcepts in L1 grammar education. *Linguistics and Education*, *52*, 78-88. [on line] https://doi.org/10.1016/j.linged.2019.06.004

Vygotsky, L. S. (1997). *Pensée et langage* (first ed. 1934). Paris: La Dispute.

Watson, A. (2015). Conceptualisations of Grammar Teaching: L1 English Teachers' Beliefs about Teaching Grammar for Writing. *Language Awareness, 24*(1), 1–14.