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Teachers' Support and Pupils' Writing Strategies in a Networked Elementary-School Learning Environment Integrating a Blog
Le soutien d'enseignants et les stratégies d'écriture d'élèves du primaire dans un environnement d'apprentissage en réseau intégrant un blogue

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Résumé de l'article

Bien que la dimension affective de l'écriture soit importante et bien documentée, peu d'écrits ont étudié comment les enseignants et les élèves font usage d'un blogue pour travailler les aspects cognitifs de l'écriture. C'est avec cette préoccupation en tête que nous avons documenté l'incidence d'un blogue sur le développement de l'écriture d'élèves de 6e année du primaire. Les objectifs de l'étude ont été les suivants: a) décrire le type de soutien à l'écriture fourni par les enseignants et b) décrire comment les processus et les stratégies d'écriture ont été utilisés par les élèves pendant leur usage du blogue. Deux enseignants et leurs élèves ont participé à l'étude. Les données ont été collectées à partir d'entrevues et d'observations en classe. Nous avons utilisé les processus d'écriture de Hayes et Flower, déclinés en 27 stratégies, pour analyser les données. Les résultats indiquent que les enseignants ont mis surtout l'accent sur les processus de planification et de révision.

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TEACHERS' SUPPORT AND PUPILS' WRITING STRATEGIES IN A NETWORKED ELEMENTARY-SCHOOL LEARNING ENVIRONMENT INTEGRATING A BLOG

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ABSTRACT. Although the affective dimension of writing is important and well documented, we know less about how teachers and students are making use of the blog in classrooms to advance specifically cognitive goals connected to writing. It is with this in mind that a case study was carried out to closely document the effect of classroom blogs on the development of writing in 6th grade pupils. The study intended to a) describe the kind of support about writing provided by teachers and b) describe how writing strategies and processes were used by the pupils while they were using the blog. Two teachers and the students in their classrooms participated in our study. Data were collected from classroom observations and interviews. We used Hayes and Flower's writing processes, elaborated in 27 writing strategies, to analyze the classroom data. The results reveal that teachers focused the most on planning and revising processes.

LE SOUTIEN D'ENSEIGNANTS ET LES STRATÉGIES D'ÉCRITURE D'ÉLÈVES DU PRIMAIRE DANS UN ENVIRONNEMENT D'APPRENTISSAGE EN RÉSEAU INTÉGRANT UN BLOGUE

RÉSUMÉ. Bien que la dimension affective de l'écriture soit importante et bien documentée, peu d'écrits ont étudié comment les enseignants et les élèves font usage d'un blogue pour travailler les aspects cognitifs de l'écriture. C'est avec cette préoccupation en tête que nous avons documenté l'incidence d'un blogue sur le développement de l'écriture d'élèves de 6e année du primaire. Les objectifs de l'étude ont été les suivants: a) décrire le type de soutien à l'écriture fourni par les enseignants et b) décrire comment les processus et les stratégies d'écriture ont été utilisés par les élèves pendant leur usage du blogue. Deux enseignants et leurs élèves ont participé à l'étude. Les données ont été collectées à partir d'entrevues et d'observations en classe. Nous avons utilisé les processus d'écriture de Hayes et Flower, déclinés en 27 stratégies, pour analyser les données. Les résultats indiquent que les enseignants ont mis surtout l'accent sur les processus de planification et de révision.

Reading and writing are essential competencies for the development of any individual. Much in the same way as reading, writing is at the root of numerous learning experiences (Cutler & Graham, 2008; Smets, 2010). Just as reading is demanding on linguistic and cognitive levels, this is also the case with writing.

For young writers, producing a text is a complex task, which requires teachers to consider factors that can contribute to the development and maintenance of student motivation (Bruning & Horn, 2000; De La Paz & Graham, 2002). Among the most salient factors to take into account are: the authenticity of the task, the receiver of the message (the addressee), constructive comments made on precise components of the message, information and communication technologies (ICTs), and teacher support of students (Bruning & Horn, 2000; Graham, 2008; Rief, 2006; Rijlaarsdam et al., 2008).

Bruning and Horn (2000) identified the school environment as the main place where young people write. This situation may be changing because of the extent of social media use on a personal level (Roy, 2009). Routman (2010) has noted that a large number of pupils do not like writing as it is practiced in schools, even though they are eager to learn to write before entering school. One explanation for this would be that teachers tend to attach great importance to writing well, emphasizing adherence to linguistic conventions, and less the pleasure of writing itself. For this reason, it is all the more important to offer pupils varied and authentic tasks that encourage them to write about subjects that they know about and that interest them because this will influence their commitment in a positive way. It is also important that attempts at writing are seen in a positive and constructive light. Students should also be encouraged to write by teachers who enjoy the subject themselves. Indeed, it seems that youth put more effort in writing activities when their communication has intent, they can write on subjects that concern them, and the tasks are challenging, without being exaggeratedly so (Bruning & Horn, 2000; Cutler & Graham, 2008; Rief, 2006; Rijlaarsdam et al., 2008). Albaugh (2013) has stated the use of blogs can prepare students to function and communicate properly in the larger society.

It is from this perspective that the *Quebec Education Programme* (Quebec Ministry of Education [MEQ], 2001)[1] suggested that pupils should access a wide variety of sources of information and communicate with addressees using authentic intent so as to inform, convince, share ideas, etc. Pascopella and Richardson (2009) and Howard (2011) note that the advent of social media offers interesting affordances for young people to write to real people, including worldwide (Meinecke, Smith & Lehmann-Willenbrock, 2013), and that it is desirable to adapt pedagogical writing practices to this new context. Writing practices centered on communication require that the writer coordinate writing intent to the text being produced, as well as manage writing processes and strategies (Rijlaarsdam et al., 2008). To this end, novice writers need to be supported, which requires scaffolding provided by the teacher to model proper use of recognized writing strategies (Dunsmuir & Clifford, 2003; Wood, Bruner & Ross, 1976).

Not only does the expansion of information and communication technologies (ICTs) contribute to greater access to information (Canadian Council on Learning, 2010), it also plays a central part in renewing learning environments, be it in affording authentic learning contexts or offering personalized and embedded support. For instance, networked learning environments bring ICTs into the heart of the classroom to expand on face-to-face interactions (Laferrière, Breuleux & Lamon, 2006). That means students will have the possibility to use what they learned with their teacher in different contexts. Learning environments integrating blogs would seem to encourage student motivation. A literature review conducted on this topic has highlighted the fact that few studies have paid specific attention to the writing process and the content and quality of texts disseminated through such a tool (Allaire, Thériault & Lalancette, 2011). Acknowledging this opens up new possibilities for exploring more precise aspects of developing writing competency, and where the blog holds promising pedagogical potential in the eyes of many (Downes, 2006; Ward, 2004).

It is with this intent that we document teacher scaffolding practices in learning environments integrating the use of a blog, this through a case study with elementary students and their teachers. Although some affective aspects were considered, emphasis fell on the cognitive aspects, namely, those related to writing processes and strategies. This article: a) explains the forms of support provided by teachers in order to scaffold the development of student writing competency and b) describes how the writing processes and strategies were applied by the pupils. The main contribution of this article is to provide results from data that illustrate what is going on, from a cognitive writing perspective, when we use a blog in an elementary classroom.

FRAMEWORK OF THE STUDY

Students' writing strategies are developed and mobilized by offering students a variety of tasks. Deschênes (1995) reminds us that traditional cognitive models of text production consider the following three factors: the writer's knowledge structure (general, linguistic, and relating to the task at the hand), the writing process set in motion, and the writing situation itself (intent, person receiving the text, type of text). Hayes and Flower's (1980) is the most well-known and remains the most widely-used writing process model (Garcia-Debanc & Fayol, 2002). According to this model, text production relies upon three main processes: planning, writing (putting ideas into words), and revising. It is an iterative model, which means that these processes are not linear. For instance, more advanced writers use them as needed throughout the writing task. The *Quebec Education Programme* (MEQ, 2001) has tallied 27 strategies involved in the planning, writing and revising (text revision, text correction, and self-evaluation categories). Table 1 enumerates these strategies.

TABLE 1. *Quebec Education Programme's (MEQ, 2001) writing processes and strategies*

Writing processes	#*	Writing strategies
Planning	1	Remembering real-life writing experiences.
	2	Using a trigger to stimulate the imagination (e.g., works of art, illustrations, and objects).
	3	Specifying writing intent and keeping it constantly in mind.
	4	Thinking about the reader of the text about to be produced.
	5	Recalling possible content (examination and choosing of ideas).
	6	Anticipating the text's sequence or structure.
	7	Drawing up an exploratory map, a sketch, a diagram, a summary or any other form of pedagogical support.
Writing (putting ideas into words)	8	Adding ideas as they emerge during writing
	9	Writing a preliminary version from ideas conjured up in one's mind.
	10	Going back to the writing project's data or some other external aid.
	11	Rereading what is already written in order to continue writing.
Revising (text revision, correction, and self-evaluation)	12	Asking oneself if what has been written corresponds to what one wants to say.
	13	Finding passages that need to be rewritten.
	14	Reflecting upon potential modifications that need to be made.
	15	Reading one's text out loud to one person or many people or asking them to read it, so as to obtain suggestions for improvement (structure, content, and language).
	16	Choosing, among suggestions received, those that seem the most appropriate.
	17	Modifying the text by resorting to syntactic processes (adding, removing, moving, replacing groups of words or sentences).
	18	Rereading one's text more than once.
	19	Writing down marks or symbols that may be used as a reminder or mnemonic device.
	20	Resorting to a corrective or self-corrective procedure.
	21	Consulting available works of reference.
	22	Resorting to another pupil or adult.
	23	Using word processing resources or automatic spellchecking.
	24	Describing or explaining the approach used.
	25	Checking to see if one has attained their writing intent.
	26	Coming to a decision on the effectiveness of the strategies chosen.
	27	Evaluating oneself as a writer.

NOTE. *Strategy numbers are used to present results in order to streamline the chart layout.

In the current paper, we use the Hayes and Flower (1980) writing process framework to investigate whether and how teachers supported writing in the classroom and pupils' writing strategies on the blog, invoking the 27 strategies recommended in the QEP when analyzing classroom practices.

METHODS OF THE STUDY

The multiple case study

Our research team privileged the case study, which "consists in studying a person, a community, an organization, or an individual society"[2] (Roy, 2003, p. 160). Researchers may undertake this methodological approach according to varied perspectives, ranging from Yin's (1994) positivist pole to Merriam and Associates' (1998) interpretative pole. The latter matches the objectives sought after by this research, which distinguishes itself by its particularistic, descriptive, heuristic, and inductive nature. According to Merriam and Associates, case studies are concerned with situations, events, programmes, or specific phenomenon. The final product constitutes a rich description of the studied phenomenon. The case study may lead to a new comprehension of a phenomenon or confirm what is already known. In the end, its goal is to explore new phenomenon rather than to verify hypotheses.

We chose the two cases according to particular characteristics essential to the case study (Gagnon, 2005). The case study method allowed us to pay particular attention to an issue little studied to date, namely, cognitive goals while using a blog to enhance the development of writing in a primary classroom. Use of a limited number of cases favoured detailed study by recourse to a wide range of tools (Roy, 2003) that contribute to get in-depth understanding of a phenomenon and to the validity and reliability of results in such context of investigation. Finally, the case study made it possible to consider the specificity of the participants' contexts, while highlighting similarities and differences brought about by comparative analysis leading to general conclusions (although limited to these cases).

Choice of participating classes

A pedagogical counselor working on the integration of ICTs in the language arts recommended participants in this case study. Two main criteria guided the selection of cases (Allaire, Thériault & Lalancette, 2011). On one hand, teachers had to explicitly intend to use a blog in order to develop students' writing competency (affective and/or cognitive aspects). On the other, this integration had to take place over the whole academic year. Researchers received confirmation that participants had respected these criteria and had interest in participating in this research project, speaking with teachers directly on the phone. Thus, two teachers (Class 1 [C1] and Class 2 [C2]) of the third cycle of primary school (6th grade) and their pupils took part in the study; both teachers and their classes belonged to the same school board.[3]

Data gathering

The authors collected data from teachers and their pupils during the 2010-2011 academic year.

All hand-written observation notes concerning data entry were transcribed in electronic format. Audio recordings were generally transcribed in *Word* documents. A team member extracted the main ideas from some of them, especially informal interviews conducted after observation in class.

Data gathering from teachers. Researchers collected data relative to teachers' support of students by means of observation in class and informal interviews after these periods. Each observation period lasted between 60 to 120 minutes and happened once a month. Their goal was to document pedagogical support carried out by teachers in order to scaffold the students' development of writing competency. These observations concerned affective as well as cognitive aspects of writing (writing components and strategies, MEQ, 2001; Spandel, 2003). However, the present article reports findings only on the cognitive aspect.

Teachers were observed to direct their support toward one pupil, a group, or the whole class. After each observation, a meeting took place with the teacher to better understand their pedagogical intentions, and to compile a summary concerning writing and use of the blog over the previous weeks. This was a time to understand how teachers had linked activities one to the other and the writing tasks assigned to the pupils. These meetings, which lasted about an hour each, were retrospective.

Data gathering from pupils. Researchers entered written qualitative notes in situ from an observation chart conceived according to the three main stages of the writing process (planning, writing, and revising, Hayes, 1995; Hayes & Flower, 1980). We included examples of questions relative to each stage as a reminder to the observer.

Researchers observed blog use in class over periods of 60 to 120 minutes once a month.[4] Their goal was to document the diversity of writing processes that pupils had recourse to during blog use. To be able to do this, they utilized a spoken verbalization procedure inspired by the *Think-Aloud Protocol* (Ericsson & Simon, 1980). Each time they came to observe the class, between five and ten pupils were questioned. These pupils participating in the interviews were not always the same ones because the activity in the workshop meant scheduled rotations in blog use.

Each conversation with the pupils lasted about five minutes so as to limit interruptions during tasks. The researchers took down written qualitative notes, using the same observation grid inspired by Hayes (1995) and Hayes and Flower (1980).

Data analysis

Researchers analyzed the qualitative data using predetermined grids elaborated according to the 27 strategies identified by the MEQ (2001) and put together according to the three processes of writing (Hayes, 1995; Hayes & Flower, 1980). More precisely, we coded each strategy every time we noticed its occurrence, be it during observations or interviews.

Considering our multiple case study context, it is important to mention that, for most of the data, researchers conducted the analyses first by class and then, in an aggregated manner.

PRESENTATION OF RESULTS

From the outset, let it be known that the presentation of results in a multiple case study usually occurs in two phases. The first of these gives an overview of each case, while the second presents results of the comparative analysis by highlighting their resemblances and differences in such a way as to draw certain conclusions (Merriam, 1998).

Considering the fact that only two cases were studied, the research team favoured a variation of this presentation of results. The first part instead describes the class context of each of the cases, while the second reports the results of the comparative analysis concerning writing strategies. We explain this choice by the intent to connect results from the two classes to highlight their richness, all while avoiding the redundancies of a presentation made according to the traditional two-step model explained previously.

Presentation of the cases studied

This section presents the learning environment of each of the cases. A brief portrayal of the context precedes this. Then, certain common characteristics will be discussed and distinctions made between the teachers and their classrooms.

First case: Class 1 (Michael). Michael[5] has seven years of experience as a primary-school teacher. He teaches in a school located in an urban environment that belongs to a school board in the Montérégie region, located in the Province of Quebec, Canada. His group's level is of the second year of the third cycle of primary school (sixth grade), and his class contains 26 pupils of which there are 10 girls and 16 boys. Three pupils are dyslexic. Michael adopted an approach based on differentiated instruction. He admits that the teacher who supervised him during his final pupil practicum had great influence on the pursuing of his teaching career. This mentor taught him that it is possible to do things differently and not be enslaved by the traditional models that he had been exposed to during his training.

Second case: Class 2 (Andrew). Andrew has taught primary school for 30 years. His retirement occurred at the end of the 2010-2011 academic year. Over the

past 10 years, he has taught at the same school board (but a different school from Michael's), in what he calls "a slightly underprivileged environment." His class's level is also that of the second level of the third cycle of primary school (sixth grade), and his classroom is made up of 28 pupils; of these, there are 17 girls and 11 boys. Among this group, there is a dyslexic pupil, a pupil with Attention Deficit Hyperactivity Disorder (ADHD), one with dysorthographia, and three pupils who have failed a grade. Andrew explained that the pupils' needs, interests, and development towards autonomy are fundamental to his pedagogical practices.

Common characteristics and differences between the cases. The teachers from participating classes share an innovative teaching profile. They want to experiment with new practices and think that school needs to be "modernized" to adapt itself to the reality of young people today. The physical organization of their classrooms shows that they are concerned with the pupils' well-being in the learning environment. For instance, a couch is available to provide a more comfortable space for reading. Furthermore, each one operates his class as a workshop, which gives a certain amount of latitude to the pupils for engaging in tasks and activities. This also encourages students to become responsible. Both classes have easy access to computers and use the same blogging tool. The tool used was an adaptation of the open-source software called SPIP (http://www.spip.net/rubrique91.html). This access is particularly facilitated in Class 2 because of the number of computers that remain there permanently. Pedagogically speaking, the teachers mainly use the blog to spark student interest in the act of writing. This is the emotional or affective aspect of writing. That said, they were also interested to uncover the blog potential for cognitive purpose.

Teaching experience is the first distinctive characteristic of the participating teachers. The teacher in the first class is at the end of the initial phase of his professional career, while the teacher in Class 2 has completed his career. Blog use is different in both classes in the sense that it is mandatory in Class 1, but optional in Class 2. Pupils in the latter class may chose between writing a blog or a writing journal inspired by a reader response journal (Montreuil, 2001). Moreover, even though the way blog posts are put online is identical for both teachers (they have to give their approval before a post is placed in cyberspace), the teacher in Class 1 takes more time to put the posts online (sometimes many days), while Class 2's teacher posts them online practically the same day they are completed. The way the teacher goes about pedagogical support in Class 1 concerning blog use differs from that of Class 2 in the sense that the first class proceeds in big groups, while the second offers mainly individualized scaffolding to pupils. Finally, the last distinctive trait between the groups is the teachers' individual functioning as writers. The teacher in Class 2 writes a weekly journal that he sends out to parents by email at the end of the week. Researchers did not note any regular writing practice by the teacher in Class 1.

Pedagogical support and writing strategies

This section concerns how teachers pedagogically supported and scaffolded the pupils in the development of writing competency, as well as the strategies that the pupils deployed in a writing situation.

The presentation form of some of the results depended on the three periods of the academic year, which are September to November, December to February, and March to May. Although some results were presented according to this type of organization, the researchers' goal in observing teacher support was not to document change over time, but rather to understand the range of support and the degree of its presence.

Teachers' support. Monthly observations on the part of the research group were the main source for documenting teacher support / scaffolding. We initially considered explanations given to pupils about the writing process approach, before concentrating on the support that the teachers carried out concerning the writing strategies linked to each one of these processes.

Figure 1 shows the results of all of the support that researchers observed concerning the writing processes.
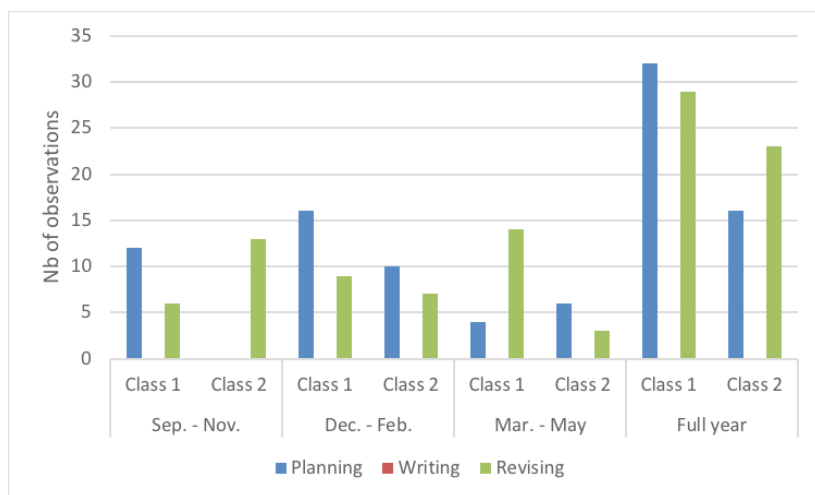

FIGURE 1. *Pedagogical support observed in class (all writing strategies merged together)*

The first general observation that we can make pertains to the relatively limited number of observations concerning scaffolding in the pupils' writing processes. More specifically, the absence of observations of support relative to the process of putting ideas into words, which accompanies the writing of texts, is striking. Notwithstanding this small amount of teacher support, the fact remains that the scaffold was of quality and it showed development of writing in accordance with strategies that are known to be effective. It also

demonstrated a skillful touch in nourishing the pupils' desire to write. We will present some detailed examples of this situation below.

Furthermore, the greater quantity of support conducted by the teacher in Class 1 may be explained by the periodical clarification that went on in this learning environment. The teacher in Class 2 also clarified things in this manner; this happened, however, almost always spontaneously, that is, in an unplanned manner and for a short amount of time. Moreover, the teacher in Class 2 intervened more frequently in an individual way with pupils who came to ask him for help.

The next charts detail support observed according to each writing process strategy, beginning with planning (Figure 2). We invite the reader to refer to Chart 1 in order to obtain the breakdown of the (27) strategies from the QEP.

FIGURE 2. *Teaching support relating to planning strategies observed in class*

The teacher in Class 1 was a bit more active than the one in Class 2 in scaffolding pupils at the planning strategy level. This support mainly took the form of: *using a trigger* (Strategy 2), *specifying the writing intent* (Strategy 3), and *identifying the text addressee* (Strategy 4). Here are a few examples of that teacher support.

Strategy 2. Using a trigger to stimulate imagination

The teacher talks about what encourages originality, whereas pupils question themselves about what they are going to write in the "Personal Profile" section of their blog.

While pupils speak to him informally about last night's hockey game, the teacher seizes the occasion to make them notice that they could write a blog post on this subject.

The teacher inquires to find out if the pupils read posts written by students in another class. He mentions that this could give them some ideas about which subjects they could write.

Strategy 3. Specifying writing intent and keeping it constantly in mind

From a same writing theme chosen by pupils, the teacher gives examples about ways they could write according to the three categories suggested in the blog (Passion, Emotion, Reason).

The teacher points out that the author of a post doesn't take a position on a question, contrary to what the text introduction announces.

Strategy 4. Thinking about a post's reader

The teacher heightens the pupils' awareness about the fact that the blog is accessible to anyone in the world, to many different individuals and that what they write and the way they write about the subject may make these people react.

The teacher mentions the importance of working on meaning, coherence, and learning to organize ideas so as to be understood by others.

The second teacher mainly leads the pupils to *recall possible content for the writing of their posts* (Strategy 5) and to *anticipate the course of the text* (Strategy 6). Here are some examples.

Strategy 5. Recalling possible content (exploring and choosing ideas)

The teacher leads a pupil to question himself about what his post says: Does it have any real original content or is it just agreeing with someone else's post?

The teacher indicates that it is preferable to enrich one's viewpoint when commenting on another pupil's post.

Researchers did not observe the teachers using any kind of support material (plan, diagram, outline, exploration map) that would have helped students to organize ideas in a logical way. Figure 3 presents teachers' support relative to revising strategies (text revision, correction, and self-evaluation of the process).
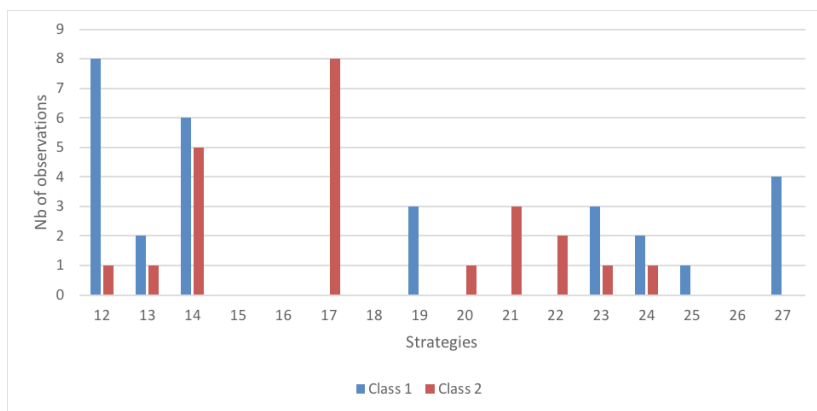

FIGURE 3. *Pedagogical support observed in class relating to revising (text revision, correction, and self-evaluation of the process)*

Among the 15 strategies of this kind, there are mainly three recurrent ones. One notes here that both teachers led their pupils to *reflect on changes that they could bring about in their writing* (Strategy 14). Here are some examples.

> Strategy 14. Reflecting on possible changes
>
> Teacher 2 has a pupil come to his desk to ask him if the pupil thinks it would be appropriate to justify part of the content of the post before publishing it on the Internet.
>
> Teacher 1 recalls the visit of a children's books author during which the author explained that the publishing house had asked for revision work on three chapters of a books. By reminding the pupils of this, he mentions that one doesn't rewrite a post many times by erasing everything, but rather by keeping in mind precisely what one wants to change.
>
> Teacher 1 encourages pupils to take risks and to use synonyms of words with which they are familiar, explaining that it is this way that they will increase their vocabulary.
>
> Teacher 2 suggests to a pupil that they explain why they like a signer who they have discussed about in a post. He encourages the pupil to give reasons for this.

Furthermore, the teacher in Class 1 emphasizes getting pupils to *ask themselves if what they have written corresponds to what they want to say* (Strategy 12), whereas the teacher in Class 2 concentrates on scaffolding pupils in the process of *modifying their texts by having recourse to syntactic processes* (strategy 17). Here are examples of the way that the teachers have intervened in this matter.

> Strategy 12. Ask oneself if the written text corresponds to the writing intent
>
> Since noticing the widespread presence of emoticons on the blog, the teacher remarked to the pupils that the presence of these symbols is often revealing of a certain fear of being misunderstood by the reader. He asks them to review the expression of ideas so that they correctly reflect what the pupils want to communicate.
>
> The teacher asks the pupils to concentrate on the text's meaning and the linking of ideas one to the other before dwelling on linguistic conventions.
>
> Strategy 17. Modifying the text by having recourse to syntactic processes
>
> The teacher remarks that certain sentences in a pupil's post are too long. He suggests that it be rewritten in two distinct sentences.

Furthermore, in awareness that class observations only lasted a few hours per month and that they were not long enough to show all of the support provided by the teachers, we have documented other strategies mentioned during interviews. These talks went on, notably, in order to understand what was going on concerning the development of writing competency during the researchers' absence. The results that follow reflect what teachers reported doing (see Figure 4).

FIGURE 4. *Pedagogical support self-reported by teachers (all writing strategies merged together)*

Notably, the teachers' reports make little mention of support in the use of writing strategies, in the same way that researchers had noted during direct class observation.

Both teachers spoke at least once of each strategy in the planning category, except strategies 1 and 7 concerning respectively the *recall of past writing experiences* and *use of a support tool to aid the logical organization of ideas in a text*. Teacher 1 spoke little of support that he had conducted concerning this type of strategy, while they were frequently present in class observation data. Conversely, the second teacher's discourse brought a new light that class observation alone could not have rendered. In particular, he specified that he intervened to bring about pupils to *specify their writing intent* (Strategy 3) and *reflect on the post's addressee* (Strategy 4).

The teachers' discourse does not account very well for scaffolding supporting revision, correction, and self-evaluation strategies comparatively to the diversity of support conducted during class observations. Nevertheless, the teachers' discourse allows us to confirm that no support went on relating to strategies 15, 16, 18, and 26, all of which are connected with reading one's text out loud, choosing among suggestions received, rereading one's text more than once and coming to a decision on the effectiveness of the strategies chosen. However, we have learned through the interview process that the teacher in the first class has intervened more often than what we had observed concerning the *correction and self-evaluation processes* (Strategy 20).

Pupils' writing strategies. Researchers documented the writing strategies mobilized by pupils in the context of blog use during monthly observations in class. Figure 5 shows data pertaining to the 50 to 80 total observations and/or pupil interviews per class which went on throughout the academic year in the two classes.
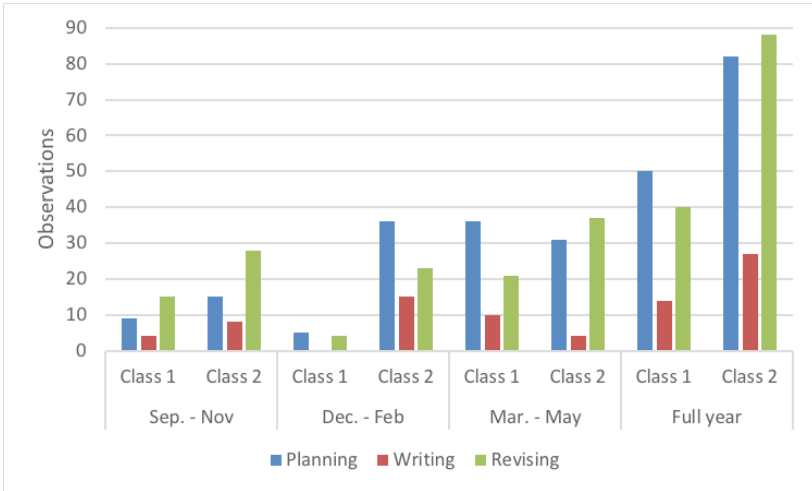

Figure 5. Pupils' writing strategies (all strategies merged together)

On the whole, when we consider the scope of the data collection (some eight months' worth) as well as the number of observations or interviews that we have conducted, the number of strategies used by students appears modest to us. The types of strategies mobilized by the pupils appear in similar proportion in the teachers' support aiming to scaffold their mobilization. Concerning Class 1, we might explain the weakest presence of strategies in part by the fact that the teacher provided support mostly in a large group setting when pupils were not working on their blogs. Thus, we could not observe or question pupils as much as we did in the case of Class 2. Furthermore, specifically relating to the December to February period, we must recall that researchers made no observation in class in the month of February because of a mishap.

Despite the apparently limited number of writing strategies that the pupils mobilized, some came to life in a significant manner, as the following examples clearly illustrate. Figure 6 details the pupils' planning strategies.
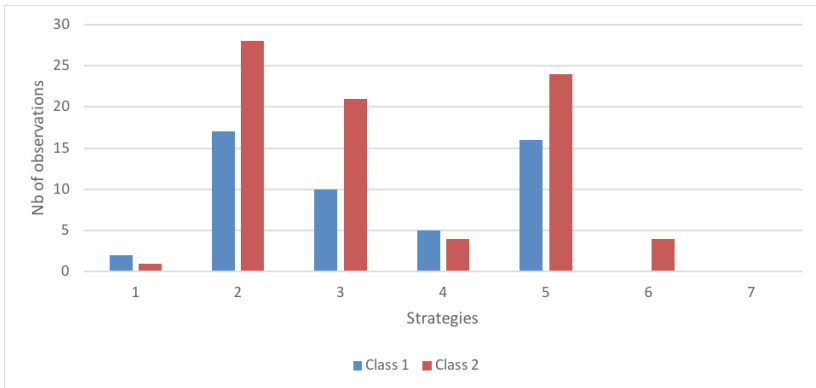
FIGURE 6. *Pupils' planning strategies*

Pupils employed three main planning strategies, which were: *using a trigger to stimulate imagination* (Strategy 2), *identifying writing intent* (Strategy 3), and *recalling possible content* (Strategy 5). Here are some examples of these.

Strategy 2. Using a trigger to stimulate one's imagination

Researchers noted four main sources acting as writing triggers for blog posts among the pupils. Some pupils got inspiration from a true story. This was the case of one pupil who used a soccer match in which they had participated, another pupil wrote a post because they didn't feel like doing their homework, or one student wanted to speak more on the subject in question because of a class debate. Other pupils wrote a post after listening to an audiovisual document. This was the case of a pupil who wrote about poaching after watching a consciousness-raising video on YouTube, or other pupils who chose to compose text about watching television, in this case a news report about animals. Book reading, documents distributed in class, or Web sites were the third source of writing triggers. For example, we saw a pupil consulting the sports news on the RDS (a television sports channel) website before they began writing on their blog. Another one decided to write a post after an unsuccessful Google search about a subject that interested them. Finally, other pupils were inspired by their classmates' posts.

Strategy 3. Specify your writing intent and keep it in mind at all times

We drew two very evident conclusions about this strategy. The first concerns writing situations in which the pupils clearly knew from the beginning in which genre (Passion, Emotion, Reason) their writing would be categorized. They were able to distinctly explain the nature and purpose of this intent; this seemed evident to them from the start. The second conclusion is somewhat opposed to the first. Researchers observed a number of situations in which pupils did not seem to have a specific intent in mind. They wrote in a freestyle manner and then they determined, so to speak, their intention once they had completed the text.

Strategy 5. Recalling possible content (exploring and choosing ideas)

When we questioned them about content that they had decided to include in their posts, pupils generally had difficulty going into detail about the subject. When they did do so, it was to express their opinions on an event. An example of this is a situation in which there was unruly contact during a hockey game. The pupils seemed, more often than not, to begin their writing from a sole idea.

Otherwise, we did not see *use of a planning aid* (Strategy 7), which is not very surprising because no teaching support was observed or made mentioned of by teachers either about this.

Some strategies were less frequently used, but were nonetheless interesting. This was the case of the strategy *anticipating the text's sequence or structure* (Strategy 6), seen in Class 2 for example, in which a pupil explained dividing a post in three sections because of a theory that they had read in a book. This theory apparently enumerated three existing types of pollution. According to what the pupil said, this would make the reading easier. Moreover, the pupil's teacher used this way of proceeding in a weekly log that he would send to the parents. Figure 7 describes pupils' writing strategies (putting ideas into words) in detail.
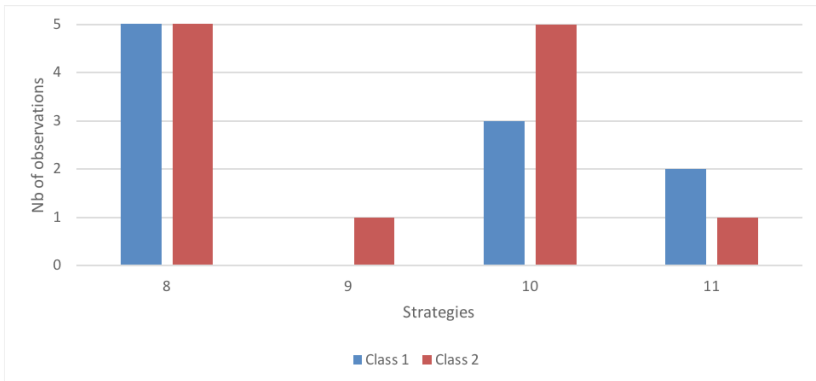

FIGURE 7. *Pupils' writing strategies (putting ideas into words)*

We note that pupils used two main strategies in both classes. Inasmuch as we have analyzed strategy 8, that is, *adding ideas as they emerge while writing*, many of the pupils' comments lead us to believe that they had "poured" what came to mind in their post until every idea was used up. This coincides in a certain way with the conclusion that has been made concerning the *recall of possible content* (Strategy 5). Here are a few quotations which show pupils' thinking on this subject.

"I just thought up this idea for the post; I am writing spontaneously."

"I am writing about ideas as they come into mind."

"I am writing in one go."

"I find ideas in my mind; they just come to me that way."

"I write until I have no ideas left."

"I have finished because I have nothing else to say."

Our research team noted that the 10th writing strategy (*Going back to the writing project's data or some other external aid*), came second in rank as the most observed strategy. When they could not come up with ideas, the pupils referred to external sources to inspire them and then pursue their writing. Some consulted Wikipedia, while others stopped writing temporarily to go read some of their classmates' posts on the same subject. Another pupil asked for help from his peer while researching the subject of interest.

Finally, on a strictly methodological level, writing strategies mobilized by pupils were more difficult to document than those of the two other types of process, which could partially explain the fewer number that the research team compiled.

Figure 8 details revising strategies (text revision, correction, and self-evaluation strategies of the process).
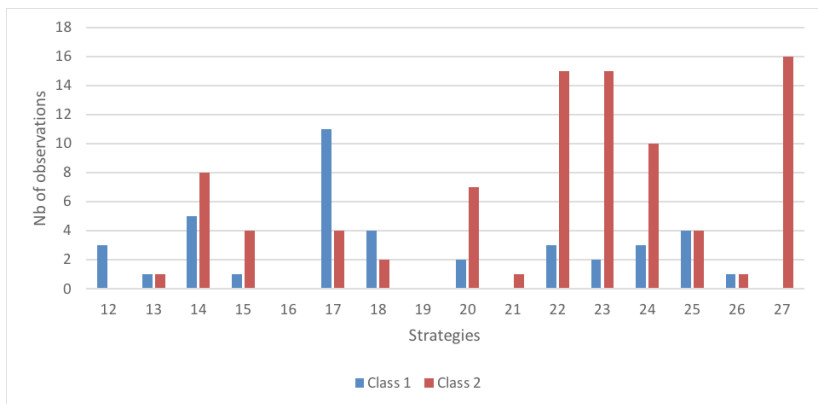

FIGURE 8. *Pupils' revising strategies (text revision, correction, and self-evaluation of the process)*

The first conclusion that we have drawn here concerns increased use of strategies of this type by pupils in Class 2. We believe this can be explained by the fact that the class's teacher presented a self-evaluation procedure at the very beginning of the academic year, whereas this tendency did not seem so apparent in Class 1.

Three main strategies were used by pupils in Class 2, which are *self-evaluation* (Strategy 27), *asking for another pupil or an adult's help* (Strategy 22), and *using the help of a word processor* (Strategy 23). Here are some examples.

Strategy 27. Evaluating oneself as a writer

A pupil showed conviction to the effect that the help given by his friend contributed to making them more self-reliant. A few others mentioned that their writing style had changed, while another pupil judged that writing about a subject important to society should attract many comments. Moreover, a certain number of pupils expressed satisfaction about themselves because they had written a longer than usual text or had taken less time writing it. Finally, others identified problems necessitating solutions, such as expressing more of what they really think or improving subject-verb agreement.

Strategy 22. Turning to another pupil or an adult

Many pupils in Class 2 consulted their teacher or asked for a peer's opinion when they were concentrating on correcting their posts. This could mean checking the spelling of a word or a verb conjugation, finding a more representative synonym for an idea.

Strategy 23. Using a word-processing programme or a spellchecker

The main resource that the pupils used was the on-line spellchecker named "Bon Patron" ("Good Boss"). It detects mistakes and suggests possible modifications to the users. The criteria that the pupils used to make their choices could not be documented however, because attempts at questioning them about this gave little result.

Inasmuch as use of revision, correction, and self-evaluation strategies are concerned in Class 1 pupils, the main observation we made was that of *modifying the text by having recourse to syntactic operations* (Strategy 17). Yet other, less frequently-used strategies still deserve to be highlighted. This is the case with *thinking about possible modifications* (Strategy 14), about which a few pupils mentioned that they occasionally took some time to stop and think about supplementary content.

DISCUSSION OF RESULTS

This case-study explored the support provided by teachers to scaffold elementary school students' development of writing competency. The study aimed to describe how teachers put these processes and writing strategies forward in the context of blog writing. Researchers observed a limited support by the teachers concerning writing strategies and processes, as the results show. However, even though there was few in number, the support was mostly in tune with what is known to be effective; its subjects were planning and reviewing strategies, correction and self-evaluation of the approach. Results show that the few writing strategies deployed by pupils essentially concerned planning and revising processes. Writing strategies concerned with putting ideas into words in a certain sequence are thus almost totally absent from the teachers' support; pupils equally developed these very little. It is encouraging to note that of the strategies scaffolded by their teachers, students used them. This draws attention to the importance of teachers' targeting strategies from the process involving "putting ideas into words."

Pupils seemed to mainly use two strategies when putting ideas into words; these were *adding ideas as they emerge while writing* and *going back to the writing project's data or some other external aid*. The utilization of these strategies seemed to be intuitive to them, which means that explicit instruction from the teacher did not seem to be necessary in order for the pupils to use these. The fact that the research team saw or discussed no support linked to the putting of ideas into words could explain the recourse to such strategies on the part of the pupils. In this regard, Garcia-Debanc and Fayol (2002) remarked that there exists a certain vagueness about the meaning of the putting of ideas into words, which may have contributed to research concerning planning and revising strategies. Interested in better understanding primary-school pupils' knowledge about writing development, Lin, Monroe, and Troia (2007) questioned 28 pupils from the second to the eighth grade of the same school about different aspects of writing. They limited their questions to planning and revising strategies regarding the writing processes. One idea to further investigate would be to explore more explicit scaffolding of the putting of ideas into words: strategies that could be adapted to the iterative dimension of writing developed with an electronic forum, as by Allaire, Thériault, Laferrière, Hamel, & Debeurme (2015).

The care that the teachers gave to planning and revising strategies coincides with writing practices identified by 294 primary school teachers (first and second cycles) in a survey conducted by Cutler and Graham (2008). Even though teachers in our study taught writing in the *third* cycle of primary school, this congruence is curious given that the putting of ideas into words process seems so rarely to be the object of a lesson in the teaching of writing. Garcia-Debanc and Fayol (2002) tried to explain this by suggesting that these strategies are less accessible, considering their level of abstraction. The problem that sometimes afflicts experienced teachers in putting their practice into words may constitute another explanation. Future research also needs to consider that teachers may not know all of the writing strategies mobilized by an expert writer, even if these are in the teaching programme. It seems that we have taken for granted that teachers know their required lessons well and that they are able to articulate their practices in the same manner as many other professionals (Cutler & Graham, 2008). And yet, the complexity of the act of writing and the diversity of mental processes which are involved in doing so may make it challenging for certain teachers to explain their own writing strategies.

In order for them to become more competent writers, Graham (2008) has noticed that pupils need to be in the presence of a model writer who thinks out loud, reviews the planning of his or her text, asks himself or herself questions, and hesitates and rephrases his or her ideas for example. In this sense, De La Paz and Graham (2002) noted that pupils mobilized more complex strategies and produced better quality texts when they had the opportunity to learn explicit writing strategies. However, Pressley and Afflerbach (1995) observed that teachers felt ill at ease with such pedagogical practices while teaching reading

skills. This discomfort with explaining strategies might be equally present in the teaching of writing. This could shed new light on the fact that this type of support was not observed or even reported by the participants.

Finally, the teachers participating in this study wanted to develop a taste for writing in their pupils through the use of a blog. This intention is clearly related with previous literature about affective dimension of writing with social media, especially the blog (Clark & Dugdale, 2009; De Craene, 2005; Luckin et al., 2009; MacBride & Luehmann, 2008). Such an intention could explain why support specifically pertaining to the cultivation of writing strategies and processes rarely occurred. Teachers had a clear understanding of what a blog is, i.e. a public digital tool that opens students to the community (Bélanger, 2008) and the world (Luehmann & MacBride, 2008; MacBride & Luehmann, 2008), provides freedom and control to students over their learning process (De Craene, 2005; Luehmann & MacBride, 2008), and transforms them into content producers (De Craene, 2005). Moreover, teachers understood the blog's potential to fit their need of pedagogical differentiation and innovation. In this regard, they knew the blog was flexible enough to take into account personal goals of learning and multitasked activities occurring at the same time in the classroom (Luehmann & MacBride, 2008). Teachers' understanding of how the blog can support writing was clear concerning the affective dimension of writing. Moreover, they had ideas of how the blog could support cognitive dimensions too, especially the importance of authentic writing situation (Bélanger, 2008; De Craene, 2005) and the affordance of multiple writing contexts (Allaire, Thériault & Lalancette, 2011). That said, the potential for a more detailed and precise cognitive dimension of writing appeared as a work in progress all along the research. This calls into importance the need for professional development about how ICTs can leverage students' learning such as writing. Even though there was some support specific to writing strategies and linguistic knowledge, more frequent use of text examples on these subjects could have been made. Why not use posts written by pupils to question their methods and enhance the value of certain strategies? Why not develop a writing model and some kind of organization for opinion pieces, since this type of post was frequently written by pupils on their blog? As Santangelo and Olinghouse (2009) have explained, these are actual teaching practices of writing strategy because they highlight the authentic nature of the task.

LIMITATIONS OF THIS STUDY

Even though we conducted this research rigorously, this case study nonetheless has certain limitations. The methodological choices that we made did not permit us to describe how the situation evolved over the academic year, however this was not our objective. This could, however, be a potentially interesting subject to research in the future.

Furthermore, in an indirect way, the *Think-Aloud Protocol* that we used may have created a habitual reflexive response in some pupils in describing their strategies. This may have led them to integrate a greater number of writing strategies and express their recourse to the writing process more easily.

Despite the fact that we are aware that the results of a case study lead to conclusions that may be linked only to the cases studied, we nonetheless believe that these conclusions shed a certain light on the teaching and learning of writing, while offering new avenues for continued research.

CONCLUSION

In conclusion, the learning environments set up by the teachers offered an appealing writing context for the pupils, in which students' interests ingrained themselves. The environments also allowed students to draw on their previous knowledge, whether it was about writing strategies or other subjects. The pupils found that writing through social media was a pleasant activity, and yet they did so with seriousness. From the results of this case study emerges the possibility for greater use of task authenticity to encourage the development of writing strategies. Considering the greater importance that social media now have in young people's lives, blog writing allows a tie-in of the development of writing competency to their activities thus giving meaning to this complex learning task.

NOTES

1.   Known in French as the *Programme de formation de l'école québécoise*.

2.   This is our free translation from French.

3.   The research project received ethics approval (no 602.131.04) from the Université de Québec à Chicoutimi ethics committee on July 8, 2010.

4.   The February observation could not be held in class number 1 because of a mishap.

5.   The given names indicated are pseudonyms to preserve participants' identity.

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