The Employment of Cognitive and Metacognitive Strategies in Bilingual Pupils' Creative Writing

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Abstract

The present research investigates the employment of cognitive and metacognitive strategies by bilingual pupils and the processes followed when they compose a short story in Greek (L2). The sample was comprised by 43 pupils enrolling in the 5th and 6th grade of Primary School. Data was collected through think-aloud protocols and individual retrospective interviews. The findings revealed variations between the two levels of language proficiency (good-weak writers) and types of bilingualism (simultaneous-successive) in terms of employing effective strategies and flexibility in strategy choice. Pupils' difficulties were focused in the selection of appropriate vocabulary and organization of ideas.

1. Introduction

Writing is a complex, recursive cognitive process involving mental processes and strategy use. As highlighted in the theoretical frameworks of L2 writing, a host of factors affect writing performance, such as syntax, lexicon, task objectives and "socio-cultural" factors (Lantolf 2004). Various writing processes are propounded in the best known models of L1 or L2 composing (Silva & Brice 2004). These models assume that various processes are responsible for text-construction activity. The mental processes of writing encompasses a series of stages (basically pre-writing, writing, reviewing, and rewriting) involving multiple drafts.

It has been underlined that among the factors that affect the process and product of L2 writing (a learner's language proficiency, metacognitive knowledge about the writing task, employment of writing strategies, writers' personal characteristics), writing strategies are particularly remarkable since it is their use

that primarily separates successful from less successful writers (Baroudy 2008; Victori 1999).

Strategies can pave the way toward greater proficiency, learner autonomy, and self-regulation (Hsiao & Oxford, 2002). There are various classifications of writing strategies and processes which were termed with different labels and have been used to interpret bilinguals writing processes and actions (Wenden 1991; Riazi 1997; Sasaki 2000). According to the classification of O'Malley and Chamot (1990), metacognitive strategies are those actions that aim at monitoring the writing process consciously without the direct involvement of the target language. Cognitive strategies are those writers use to implement actual writing actions and require a straightforward involvement with the target language (Carson & Longhini 2002). Cognitive strategies help students comprehend and produce language and include summarizing, translating, and taking notes while metacognitive strategies direct the acquisition of knowledge through self-monitoring, evaluating, or identifying the purpose of a language task (Olivares-Cuhat 2002).

Studies investigating part of or the entire process of L2 writing commonly have reached to the conclusions that unskilled L2 writers tend to plan less and revise more at the word and phrase level (De Larios et al. 2006; Baroudy 2008), are less concerned about surface level revisions and more committed to the given assignment (Sasaki 2002). Diversly, skilled L2 writers plan more, revise at the discourse level, and elaborate in order to do the task most effectively (De Larios et al. 2006; Sasaki 2002). Strategy use is also influenced by the language proficiency, gender, school year or learning styles (Chamot 2004; Green & Oxford 1995; Lee 2003; Ehrman et al. 2003).

Studies indicate that the unsuccessful writers tend to use rote memorization, repetition of spelling words, but seldom apply cognitive strategies in lesson review (Olivares-Cuhat 2002; Sasaki 2002). Skilled writers have a complete repertoire of strategies for planning, generating, organizing, and revising text (Griva et al. 2009). As for the relationship of strategy use and proficiency level, many studies had similar results that high-proficiency students used strategy use more frequently than those in the lower proficiency levels (Green & Oxford 1995; Khali 2005; Lan & Oxford 2003; Lee 2003; Oxford 1990).

Much less is the literature focusing on differences between the strategies employed by simultaneous and successive bilinguals. Although, some recent studies provide evidence that simultaneous bilinguals, who have learned both languages at the same time, show different strategies and speeds in the development of writing skills (Akita et al. 2007), engage in planning, spell more correctly in both languages in spite of different orthographies (Berman 1994). Successive bilinguals, who usually learn the second language in a different age and different context, after the

establishment of their first language, are less flexible in lexical choice and spelling (Sousa et al. 2011).

Thus, the study takes into account of the writers' cognitive and metacognitive strategies by efficient and less efficient bilingual pupils and different types of bilingualism, simultaneous and successive. Knowing what skilled writers do as they compose, what specific strategies they use when they write, will help students to become better writers (Nyikos & Oxford 1993). Planning, revising, and managing the writing process are the "*know-how*" they need to become strategic writers (Harris & Graham 1994). There have been lots of studies investigating the strategy use (Green & Oxford 1995) suggesting that strategies are culture-related and culture-specific (Olivares-Cuhat 2002; Bazerman 2008) and if they are used appropriately, they can be the crucial factors related to success in language learning especially for the inexperienced students (Ehrman et al. 2003).

2. The study

The present research can be considered as an attempt to provide a source of insight into the strategies employed by bilingual children while writing in Greek.

The reason of the study stemmed from the observed constant immigration influxes in Greece and the increasing immigrant pupils who are enrolling Greek primary school classes. Their differentiated linguistic and cultural backgrounds comprise of a teaching and educational challenge. The study aims at identifying the writing strategies and recording the difficulties observed during creative writing as well as tracing possible correlations between the language proficiency level and type of bilingualism.

More specifically, the study investigates the following questions:

- a) What are the strategies that bilingual pupils use in the pre-, while- and post- writing stage of their creative writing?
- b) Are the employed cognitive and metacognitive strategies used efficiently?
- c) What are the difficulties confronted by the pupils?
- d) Do pupils of the two language proficiency levels and types of bilingualism differ in their strategy employment and confronted difficulties?

2.1. Sample

43 Albanian pupils (23 boys and 20 girls) who attended the 5th and 6th grade ($M = 11.27 \pm 0.31$ years old) took part in the study. They were selected from a larger number of bilingual pupils, according to their language proficiency and type of bilingualism.

2.2. Procedure

All bilingual pupils were distributed the screening standardized test for the detection and investigation of their deficiencies and difficulties in the process of writing (Porpodas, et al., 2007). The pupils were grouped into two writing competence levels, according to their scores at the aforementioned test: the weak writers and the good writers.

Think-aloud protocols, semi-structured interviews and key-observations were chosen for the identification of the cognitive and metacognitive strategies that were employed during the writing process key-observations.

Each participant was asked to write a short narrative story based on five key words they were given. At the same time, they were asked to express their thoughts while planning, organizing ideas, writing and reviewing, focusing on the difficulties encountered. The individual semi-structured retrospective interviews followed next to allow flexible data collection so that emergent issues could be explored in depth, along with the discussion of the key themes regarding the writing strategies used and the overlapping of the difficulties that occurred in writing. Pupils' behaviors were recorded, using a key-observation created by the researchers for the reasons of this research and had been piloted on previous stage.

2.3. Data Analysis

The Statistical Package for the Social Sciences (SPSS) was used for the quantitative data analysis. The techniques of Chi-square test (χ^2), Monte Carlo test and Cramer's V test were performed in order to identify differences in strategy use between more and less competent readers as well as the types of bilingualism. The Cramer's V correlation is mentioned as the most statistically-sound method for determining relationships.

The consistency of the ratings assigned by the two raters (the researchers) and the inter-rater reliability of the classification of data was examined. Inter-rater reliability in classifying the data in variables should be both substantive and statistically significant. In this light, we employed sequentially four reliability indexes: Scott's Pi (p), Cohen's kappa (Ck), Krippendorff's alpha (a), and Fleiss' kappa (Fk), each of which provided a high score of reliability and significance (.82).

The verbal data, after being analyzed qualitatively, resulted in groups of categories/sub-categories, (Miles & Humberman, 1994), which were classified into basic thematic strands. The analysis of qualitative data resulted in thirty-seven (37) codes that were subsumed in eight (8) categories: cognitive pre-writing strategies, metacognitive pre-writing strategies, cognitive while-writing strategies, metacognitive while-writing strategies, cognitive post-writing strategies, metacognitive post-writing strategies, word level writing difficulties

and text level writing difficulties. The categories were grouped into four basic thematic strands: a) pre-writing strategies, b) while-writing strategies, c) post-writing strategies, and d) writing difficulties. Afterwards, contrastive tables were formed for each pupil, that were next commented. In order to evaluate writers' strategy efficiency, each strategy was rated from 0 to 2, depending on their inefficient (0), relatively efficient (1) or efficient use (2). Similarly, the referred and detected difficulties were also assessed from 0 to 2: 0 for low difficulty, 1 for fair difficulties 2 for high difficulty.

3. Results

3.1. Cognitive and Metacognitive Writing Strategies

The qualitative analysis of verbal data (think aloud protocols and semi-structured interviews) resulted in 37 codes considering bilingual pupils' employment of cognitive and metacognitive strategies while writing creatively. 16 of the codes correspond to the use of cognitive strategies (see Table 1) while the rest 14 are connected with the adoption of metacognitive strategies by the pupils (see Table 2).

The strategies of resourcing ideas (47 reports), retrieving from background knowledge (35 reports), local (33 reports) and global rereading (31 reports), retrieving (25 reports) and generating ideas (24 reports) were the most employed cognitive strategies in all three stages of the writing process.

Evaluating local production (32 reports), global planning (31 reports), error correction on the post-writing stage (29 reports) as well as on while-writing stage (26 reports), monitoring local production (27 reports) and planning (26 reports) were the strategies most preferred in all stages.

3.1.1. Pre-writing Stage

A large number of pupils employed certain cognitive and metacognitive writing strategies on the pre-writing phase, in order to plan and make drafts. The most employed strategies were: resourcing ideas (47 reports), generating ideas (24 reports), retrieving background knowledge (35 reports) and hypothesizing (14 reports). Pupils comment on their actions before writing: *"when I realized what I had to do I started thinking how I will be relevant with it. I would like it to be like a fairy tale and I think I did it right"* (pupil 6).

The metacognitive strategies of this stage were connected to global planning (31 reports), evaluating of ideas (23 reports) and rehearsing (18 reports). A pupil mentioned: *"I was thinking too long to decide what I could write. I wanted to pick*

Table 1.
Codes related to cognitive writing strategies

Codes	Interpretation	Stage	Occurrences
RESIDE	Resourcing ideas	Pre-writing	47
RETRIP	Retrieving	Pre-writing	35
LORDERD	Local rereading	Writing	33
REREAD	Rereading	Post-writing	31
RETRIW	Retrieving	While-writing	25
GENIDE	Generating ideas	Pre-writing	24
AVOIDA	Avoidance	While-writing	23
ELABOR	Elaborating	While-writing	21
TRANSL	Translating	While-writing	19
MAKCON	Making connections	While-writing	18
TRANSC	Transcribing	Post-writing	17
LOCREV	Local revising	While-writing	16
REVISIN	Revising	Post-writing	16
HYPOTH	Hypothesizing	Pre-writing	14
RESIDS	Researching ideas	While-writing	12
RECALL	Recalling	While-writing	9

Table 2.
Codes related to metacognitive writing strategies

Codes	Interpretation	Stage	Occurrences
EVALPR	Evaluating local production	While-writing	32
GLOPLA	Global planning	Pre-writing	31
ERRCOR	Error correction	Post-writing	29
MONLPR	Monitoring local production	While-writing	27
PLANN	Planning	While-writing	26
ERCORW	Error correction	While-writing	26
EVALID	Evaluate ideas	Pre-writing	23
MONPRO	Monitoring Production	Post-writing	23
REHIDE	Rehearsing ideas	Pre-writing	18
EVAPRO	Evaluating Production	Post-writing	16
REHSTR	Rehearsing structure	While-writing	15
EVAABI	Evaluating ability	Post-writing	12
EVPATA	Evaluating paragraph task	While-writing	8
FEEDBA	Feedback	While-writing	7

interesting ideas. If an idea wasn't appealing enough, I would think of something better. When I had planned every part of the story, I tried to organize the ideas and then I started writing" (pupil 32).

The quantitative analysis of the pre-writing strategies (see Table 3) indicates that almost all cognitive and metacognitive strategies are used relatively efficiently.

Table 3.

Descriptive indices for pre-writing strategies employment.

Categories	Codes	Inefficient use	Relatively efficient use	Efficient use
Cognitive Strategies	RESIDE	20,9%	41,9%	37,2%
	RETRIP	23,3%	44,2%	32,6%
	GENIDE	30,2%	25,6%	44,2%
	HYPOTH	37,2%	27,9%	34,9%
Metacognitive strategies	GLOPLA	34,9%	39,5%	25,6%
	EVALID	34,9%	39,5%	25,6%
	REHIDE	37,2%	37,2%	25,6%

However, some differentiations were observed regarding the levels of writers. The good writers used all cognitive and metacognitive pre-writing strategies more effectively than the weak, who were less engaged to the pre-writing processes. The χ^2 and the Monte Carlo independence tests indicated some statistically significant differentiations between the two levels of writing competence. Similarly, the Cramer's V test strengths the relationship between the writing level and the effective use of pre-writing cognitive and metacognitive strategies (see Table 4).

Table 4.

Differences between good and weak writers in cognitive and metacognitive strategies use

Categories	Codes	Weak-Good Writers
Cognitive Strategies	RESIDE	$\chi^2=15,457$, $df=2$, $p=0,000$ Cramer's $V=0,600$
	RETRIP	$\chi^2=25,306$, $df=2$, $p=0,000$ Cramer's $V=0,767$
	GENIDE	$\chi^2=21,974$, $df=2$, $p=0,000$ Cramer's $V=0,715$
	HYPOTH	$\chi^2=27,592$, $df=2$, $p=0,000$ Cramer's $V=0,801$
Metacognitive strategies	GLOPLA	$\chi^2=15,719$, $df=2$, $p=0,000$ Cramer's $V=0,605$
	EVALID	$\chi^2=23,824$, $df=2$, $p=0,000$ Cramer's $V=0,744$
	REHIDE	$\chi^2=25,604$, $df=2$, $p=0,000$ Cramer's $V=0,772$

Moreover, no statistical differentiations were detected for the types of bilingualism.

3.1.2. While-writing Stage

On the most creative stage, the while-writing, a major number of both cognitive and metacognitive strategies were used efficiently so that pupils achieve their goals. Particularly, almost all pupils adopted local rereading (33 reports) efficiently or relatively efficiently level (97,6%) unlike other cognitive strategies. Pupils reread locally either to detect and correct their mistakes, or to revise (16 reports) their compositions, or finally, to come up with further related ideas (12 reports) (see Table 5). A pupil mentioned on local rereading: *"I read everything I have written in these two sentences to check whether I have missed a spelling mistake because I wasn't careful enough about the spelling"* (pupil 18).

Table 5.

Descriptive indices for while-writing strategies employment

Categories	Codes	Inefficient use	Relatively efficient use	Efficient use
Cognitive Strategies	LORERD	2,3%	20,9%	76,7%
	RETRIW	4,7%	27,9%	67,4%
	AVOIDA	14,0%	37,2%	48,8%
	ELABOR	23,3%	30,2%	46,5%
	TRANSL	25,6%	53,5%	20,9%
	MAKCON	34,9%	41,9%	23,3%
	LOCREV	34,9%	30,2%	34,9%
	RESIDS	16,3%	34,9%	48,8%
	RECALL	20,9%	53,5%	25,6%
Metacognitive strategies	EVALPR	34,9%	44,2%	20,9%
	MONLPR	32,6%	32,6%	34,9%
	PLANN	30,2%	37,2%	32,6%
	ERCORW	32,6%	37,2%	30,2%
	REHSTR	44,2%	39,5%	16,3%
	EVPATA	41,9%	34,9%	23,3%
	FEEDBA	34,9%	41,9%	23,3%

Other cognitive strategies that were employed by the participant bilingual writers were those of retrieval (25 reports), avoidance (23 reports) and elaborating (21 reports). It is noted that the pupils were trying to retrieve ideas in this stage, too,

from their background knowledge, in order to enrich the content of their story ("*...I thought what I will add! Last week I watched a cartoon on tv and I will use some parts of it in my story!*"), however avoiding perplexed plots and elaborated vocabulary. As marked by a pupil "*I thought of something funny but I don't know how to describe it in Greek, so I'll skip it*" (pupil 22). In some cases pupils recalled (9 reports) in order to constrain from making mistakes or to improve their thoughts. One of the participants said: "*...when I have trouble expressing something I'm thinking about, I choose to write something else. I prefer using words I already am aware of, than searching them or trying to recall, despite the fact that my story will be less exciting*" (pupil 7).

There were 21 reports on the strategy of elaborating while writing, when pupils' goal was to extend their writing as much as possible. A pupil commented on that: "*I want my stories to be long and rich of information, because our teacher told us to write the more we can*" (pupil 2). A large majority of the pupils tried to use connecting words and linkages (18 reports) so that their stories be coherent: "*I want the reader to make sense of my text, so when I compose I am concentrated on using temporal connections and be specific. Many pupils don't do so and you can't really say what they've written about*" (pupil 40).

Another also efficiently employed cognitive strategy proved to be translating (19 reports). The pupils who mentioned it claimed that they translated into Greek all the ideas they generated: "*When I have to write something, I think about the topic firstly in Albanian and then I am saying it in Greek and, lastly, I write it down*" (pupil 41).

Considering metacognitive strategies, a large part of the pupils were positive in evaluating (32 reports) and monitoring local production (27 reports), while many were those who were referred to the strategy of planning (26 reports). As mentioned: "*I am thinking what I am going to say with these words. When I write I am careful to write it correctly so that it makes sense. When I finish it, I read it again so as to be ascertained that I've said everything I had thought*" (pupil 15).

The metacognitive strategies of rehearsing the text structure (15 reports) and evaluating each paragraph (8 reports), were not employed effectively since, according to quantitative data, the 44,2% and 41,9% accordingly, make ineffective use of them, in reference to the goal of writing.

Another strategy that was employed on the while-writing stage is error correction (26 reports). Error correction seems to occur while pupils write ("*When I realize that I have written something wrong I correct it immediately*") or when pupils review their writings at the end, to spot mistakes and correct them ("*When I have completed a whole paragraph I read it again to find any mistakes. I don't want anybody to think that I am a bad student and don't know how to write a story*"). Concurrently, some pupils mentioned seeking for feedback (7 reports) as a metacognitive strategy that aids them improve their writing. As remarked "*...I do my best. I want to be a good writer and I try hard for this. I think that the more I study and practice, the better writer I become*".

Some considerable statistical differentiations were discovered through chi-square χ^2 and Monte Carlo independence tests for the pupils of different writing levels and types of bilingualism. Accordingly, the Cramer's V test indicated significant correlation between the variables of competence level and type of bilingualism with the effective use of writing strategies (see table 6).

Table 6.

Differences between good-weak writers and successive-simultaneous bilinguals in cognitive and metacognitive strategies use

Categories	Codes	Weak-Good Writers	Successive-Simultaneous Bilinguals
Cognitive Strategies	ELABOR	$\chi^2=15,062$, df=2, p=0,001 Cramer's V=0,592	
	TRANSL	$\chi^2=7,330$, df=2, p=0,026 Cramer's V=0,413	$\chi^2=9,649$, df=2, p=0,008 Cramer's V=0,474
	MAKCON	$\chi^2=12,539$, df=2, p=0,002	$\chi^2=11,042$, df=2, p=0,004
		Cramer's V=0,540	Cramer's V=0,507
	LOCREV	$\chi^2=16,196$, df=2, p=0,000 Cramer's V=0,614	
	RESIDS	$\chi^2=6,485$, df=2, p=0,039 Cramer's V=0,039	
Metacognitive strategies	RECALL	$\chi^2=7,604$, df=2, p=0,022 Cramer's V=0,421	$\chi^2=7,465$, df=2, p=0,024 Cramer's V=0,417
	EVALPR	$\chi^2=14,437$, df=2, p=0,001 Cramer's V=0,579	
	MONLPR	$\chi^2=6,504$, df=2, p=0,039 Cramer's V=0,389	
	PLANN	$\chi^2=10,785$, df=2, p=0,005 Cramer's V=0,501	
	ERCORW	$\chi^2=23,547$, df=2, p=0,000 Cramer's V=0,740	$\chi^2=6,661$, df=2, p=0,036 Cramer's V=0,417
	REHSTR	$\chi^2=21,713$, df=2, p=0,000 Cramer's V=0,711	
	EVPATA	$\chi^2=25,880$, df=2, p=0,000 Cramer's V=0,776	
	FEEDBA	$\chi^2=11,650$, df=2, p=0,003 Cramer's V=0,521	

3.1.3. Post-writing Stage

In the post-writing stage, a mediocre number of the bilingual students employed the strategies of rereading the whole text composition (17 reports), transcribing (16 reports) as well as revising (reports) all text. As pupils mentioned, they usually read the text they had composed (*"I read what I've written to check it..."*), to confirm the correctness and cohesion of their written production (monitoring production) (23 reports), to restore spelling and syntax mistakes (29 reports) (*"I check the writing again at the end and I look-up some words to correct every*

mistake I spot" - pupil 19), evaluate the total production (16 reports) and their skills in writing (12 reports).

The quantitative analysis for the data that stemmed from this stage indicated that bilinguals tended to handle the cognitive strategies more effectively than the metacognitive ones (see Table 7). In particular, the cognitive strategies of rereading and transcribing are employed efficiently by the 41,9% and 51,2% accordingly. On the contrary, all metacognitive strategies seemed to be employed inefficiently on the post-writing stage.

Table 7.

Descriptive indices for post-writing strategies employment.

Categories	Codes	Inefficient use	Partially efficient use	Efficient use
Cognitive strategies	REREAD	23,3%	34,9%	41,9%
	TRANSC	20,9%	27,9%	51,2%
	REVISIN	32,6%	39,5%	27,9%
Metacognitive strategies	ERRCOR	39,5%	32,6%	27,9%
	MONPRO	32,6%	37,2%	30,2%
	EVAPRO	37,2%	34,9%	27,9%
	EVAABI	44,2%	27,9%	27,9%

The χ^2 and Monte Carlo independence tests along with Cramer's V test highlighted significant differentiations concerning the effective strategy use of post-writing strategies by the two writing competence groups, as shown at Table 8.

Table 8.

Differences between good-weak writers in cognitive and metacognitive strategies use

Categories	Codes	Weak-Good Writers
Cognitive strategies	REREAD	$\chi^2=13,606$, $df=2$, $p=0,001$ Cramer's V=0,563
	TRANSC	$\chi^2=11,892$, $df=2$, $p=0,003$ Cramer's V=0,526
	REVISIN	$\chi^2=9,946$, $df=2$, $p=0,007$ Cramer's V=0,481
Metacognitive strategies	ERRCOR	$\chi^2=17,894$, $df=2$, $p=0,000$ Cramer's V=0,645
	MONPRO	$\chi^2=23,525$, $df=2$, $p=0,000$ Cramer's V=0,740
	EVAPRO	$\chi^2=18,837$, $df=2$, $p=0,000$ Cramer's V=0,662
	EVAABI	$\chi^2=20,883$, $df=2$, $p=0,000$ Cramer's V=0,697

Concerning the strategies employment by the two types of bilinguals, successive and simultaneous, no statistical differentiations were found.

3.2. Difficulties in Writing

Regarding the difficulties encountered by bilinguals at a lexical level, it seems that the use of appropriate vocabulary (27 reports) and spelling (27 reports) constitute the most frequently confronted hurdles (see table 9). As many of the participants mentioned: *"I can't spell every word"* (pupil 33), and *"sometimes I am at short of words, I can't recall the word I want to use"* (pupil 2).

Table 9.

Categories and codes regarding writing difficulties

Categories	Codes	Interpretation	Occurrences
Word level	USAPVOC	Use of appropriate vocabulary	27
	CORSP	Correct spelling	27
Text level	GENID	Generating Ideas	31
	ORGID	Organizing Ideas	32
	CONPLA	Content planning	36
	SYNTAX	Syntax	14
	CORGRAMM	Correct grammar	23

The general difficulties that were recorded focused on the production (31 reports) and organization of ideas (32 reports) and planning the content while thinking about the topic (36 reports). Some pupils mentioned that syntax represents also an obstacle for the completion of a successful short story (14 reports). The correct use of the grammatical rules of the Greek language (23 reports) is also a difficult point when writing in L2 (*"I usually mistake the genders. They differ in Albanian and I am confused when I am in a hurry to finish my writing. I have improved myself in the articles, though!"*- pupil 5)

The quantitative analysis indicated that bilingual pupils face greater difficulties in selecting appropriate, matching vocabulary (32,6%), spelling words (30,6%) and the overall planning of the content of their writings (25,6%) (see table 10).

The differentiations uncovered by the independence tests (χ^2 and Monte Carlo) regarding both writing competence level and type of bilingualism indicated significant correlations with the difficulties encountered in creative writing (see table 11).

Table 10.

Descriptive indices of difficulties on while-writing phase

Categories	Codes	Low	Fair	High
Word level	USAPVOC	37,2%	30,2%	32,6%
	CORSP	37,2%	32,6%	30,2%
Text level	GENID	27,9%	51,2%	20,9%
	ORGID	25,6%	51,2%	23,3%
	CONPLA	16,3%	58,1%	25,6%
	SYNTAX	67,4%	27,9%	4,7%
	CORGRAMM	46,5%	41,9%	11,6%

Table 11.

Differences between good-weak writers and successive-simultaneous bilinguals in cognitive and metacognitive strategies use

Categories	Codes	Weak-Good writers	Successive-Simultaneous bilinguals
Word level	USAPVOC	$\chi^2=20,930$, $df=2$, $p=0,000$ Cramer's $V=0,698$	$\chi^2=6,503$, $df=2$, $p=0,039$ Cramer's $V=0,389$
	CORSP	$\chi^2=19,523$, $df=2$, $p=0,000$ Cramer's $V=0,674$	$\chi^2=6,088$, $df=2$, $p=0,048$ Cramer's $V=0,376$
Text level	GENID	$\chi^2=10,942$, $df=2$, $p=0,004$ Cramer's $V=0,504$	
	GENID	$\chi^2=11,674$, $df=2$, $p=0,003$ Cramer's $V=0,521$	
	CONPLA	$\chi^2=14,388$, $df=2$, $p=0,001$ Cramer's $V=0,578$	
	CORGRAMM	$\chi^2=11,983$, $df=2$, $p=0,002$ Cramer's $V=0,528$	

4. Concluding Remarks

The results of the research demonstrate that bilingual pupils employed a wide range of cognitive writing strategies, such as retrieving, rereading, avoidance, elaborating and translating. Many metacognitive strategies were also employed through all stages, like monitoring, planning, rehearsing, error correction, evaluating and seeking for feedback. Regarding the volume of strategies recorded, the most 'strategy generating' stage was accented to be the while-writing one.

The findings highlighted some remarkable differences regarding the two levels of L2 language proficiency and types of bilingualism (simultaneous-successive).

The less skilled writers made use of limited strategies and dealt with greater difficulties. Furthermore, they showed lower competence in the macro-processes of writing, narrow metacognitive awareness and metacognitive strategy use, in contrast to the good writers who were more efficient in their strategy use. The findings are in line with earlier research (Silva & Brice 2004; Ehrman et al. 2003), that have confirmed that good writers are more effective than their weaker counterparts in researching and generating ideas, hypothesizing. Moreover, the weak writers differ significantly regarding their use of metacognitive strategies, such as global planning, evaluating ideas and rehearsing ideas before writing (Ferrari et. al. 1998; Griva et al. 2009). The weak writers faced greater difficulties in the lexical level, like selecting the appropriate vocabulary and spelling, in contrast to the good writers, who focused on the macro process of writing demonstrating less difficulty in production and organization of ideas.

In reference to the use of strategies by the simultaneous and successive bilinguals, no significant differentiations were indicated regarding the pre-writing and post-writing strategies. Some noteworthy statistical differentiations were observed between the pupils of two types of bilingualism at the while-writing stage. Simultaneous bilinguals were proved more efficient in choosing effective cognitive strategies, such as making connections, recalling and the metacognitive strategy of self-correcting. In reverse, successive bilinguals turned to translating. Previous research confirms this result as skilled writers and writers with higher L2 proficiency are less likely to use L1 while writing in L2 than the weaker ones (Victori 1999; Sasaki 2002; Lee 2003; Sousa et al. 2011).

In addition, successive bilinguals dealt with extensive difficulties, in selecting proper vocabulary as well as spelling.

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