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Teacher Practices for Teaching Writing in Greek Primary Schools
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Corresponding Author:	ASIMINA M. RALLI, Phd National and Kapodistrian University of Athens: Ethniko kai Kapodistriako Panepistemio Athenon Ilissia, Athens, GREECE
Corresponding Author Secondary Information:	
Corresponding Author's Institution:	National and Kapodistrian University of Athens: Ethniko kai Kapodistriako Panepistemio Athenon
Corresponding Author's Secondary Institution:	
First Author:	ASIMINA M. RALLI, Phd
First Author Secondary Information:	
Order of Authors:	ASIMINA M. RALLI, Phd
	Ioannis C. Dimakos, Phd
	Julie Dockrell, Phd
	Asimenia Papoulidi, Phd
Order of Authors Secondary Information:	
Funding Information:	

Abstract:	Developing writing skills is a central part of the education curriculum in many countries, yet numerous children have difficulties in producing written text. To our knowledge there is no systematic study examining the ways in which Greek teachers adapt their writing instruction strategies to accommodate the needs of their students. The aim of the present study was to identify the approaches teachers employ while teaching writing in Greek primary schools and to examine the nature and frequency of these different aspects of teaching writing. We replicated and extended the Dockrell et al. (2016) study, using the "not so simple view of writing" framework. One hundred and three teachers responded to an online questionnaire, which consisted of questions regarding their academic qualifications and their specific teaching practices. The majority of the sample felt prepared and enjoyed teaching writing. However, almost all of the teachers found teaching writing challenging and half of them reported that supporting struggling writers was difficult for them. Overall, teachers reported more work at word level, occurring almost weekly, than at text level. Differences between Grade levels they taught were also evident for specific domains of writing. Recommendations for future research and implications for educational practice are provided.

Response to Reviewers:	Dear editors, we are submitting our revised paper in the 2-3 points you raised, regarding a phrase in the abstract, the capitalization of G in gade and the inclusion of the small sample size in the limitations. We are looking forward to hearing from you, hoping that the manuscript satisfies you and is suitable now for publication. Thank you once again for all the constructive feedback!!! We do remain at your disposal in case of any further information needed.

| | Sincerely, |
| | Asimina, M. Ralli |

Teacher Practices for Teaching Writing in Greek Primary Schools

Asimina M. Ralli[1], Ioannis C. Dimakos[2] Julie E. Dockrell[3] and Asimenia Papoulidi[4]

[1] Department of Psychology, National and Kapodistrian University of Athens,

Athens, Greece.

ORCID ID: https://orcid.org/0000-0001-5052-0459

[2] Department of Education & Social Work, University of Patras, Patras,

Greece

ORCID ID: https://orcid.org/0000-0002-9450-4626

[3] Department of Psychology & Human Development, Institute of Education,

University College London, London, United Kingdom

ORCID ID: https://orcid.org/0000-0003-3595-6064

[4] Department of Social Work, University of West Attica, Athens, Greece.

ORCID ID: https://orcid.org/0000-0001-6189-5053

Correspondence concerning this article should be addressed to Asimina Ralli, Department of Psychology, National and Kapodistrian University of Athens, School of Philosophy, University Campus, Room 544, 5th floor, Athens GR 15784, Greece. Email: asralli@psych.uoa.gr

Declarations

Availability of data and material: The datasets generated and/or analysed during the current study are available from the corresponding author after request.

Ethics approval: Ethical approval was obtained from the Institute of Educational Policy (a branch of the Greek Ministry of Education and Religious Affairs). All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Consent to participate: Informed consent was obtained from all individual participants included in the study.

Teacher Practices for Teaching Writing in Greek Primary Schools

Abstract

Developing writing skills is a central part of the education curriculum in many countries, yet numerous children have difficulties in producing written texts. To our knowledge there is no systematic study examining the ways in which Greek teachers adapt their writing instruction strategies to accommodate the children's needs. The aim of the present study was to identify the approaches teachers employ while teaching writing in Greek primary schools and to examine the nature and frequency of these different aspects of teaching writing. We replicated and extended the Dockrell et al. (2016) study, using the *Not so Simple View of Writing* framework. One hundred and three teachers responded to an online questionnaire, which consisted of questions regarding their academic qualifications and their specific teaching practices. The majority of the sample felt prepared and enjoyed teaching writing. However, almost all of the teachers found teaching writing challenging and half of them reported that supporting struggling writers was difficult for them. Overall, teachers reported more work at word level, occurring almost weekly, than at text level. Differences between Grade levels they taught were also evident for specific domains of writing. Recommendations for future research and implications for educational practice are discussed.

Keywords: writing, teaching writing, primary school, Greek teachers, *Not so Simple View of Writing*

Teacher Practices for Teaching Writing in Greek Primary Schools

Writing is a multidimensional higher order skill (Dombey, 2013), which plays a critical role in educational and professional success (National Commission on Writing [NCW], 2003); yet many children struggle to become competent writers (National Center for Educational Statistics [NCES], 2012). Learning to write requires time in combination with systematic and effective instruction (Graham, 2018; Graham et al., 2012; Koster et al., 2015). Developing writing skills is a central part of the education curriculum in many countries (National Assessment of Educational Progress, 2007; Torrance et al., 2012) but both the nature and intensity of writing instruction varies within and across countries and it has been argued that in some countries writing instruction is insufficient (Graham, 2019).

In this study we examine the teaching of writing in Greek primary schools. Greek language has a transparent orthography and a rich morphology with complex syllable structure, and lexical stress (see Protopapas, 2017). For transparent orthographies, such as Greek, the regularity of the orthography reduces the demands in spelling but the complexity of the morphology of the language increases the demand on text generation (Arfé et al., 2016; Seymour et al., 2003). The Greek national curriculum sets detailed educational goals and proposes specific methods for the attainment of content subjects such as language, math, history, and geography. Teachers adopt a holistic language approach, which combines elements of phonics instruction and whole language teaching approaches. Writing allows children to express and share their ideas with others and, as such in the Greek educational context written text production should serve a communicative and functional purpose and emerge naturally. All writing tasks need to have meaning for children and promote their creativity (Karantzola et al., 2013). For first grade primary school children, alphabet knowledge is considered a prerequisite for developing writing skills. Greek teachers adopt a textual approach which focuses on the requirements of producing effective texts. The teaching writing procedure is organized in stages (pre-writing, writing, post-writing). In the pre-writing stage, the general planning of the appropriate teaching steps is defined and scaffolded by the teacher. In the writing stage, the first draft version of the text is produced by the child, and in the post writing stage there is the evaluation of the first draft by either the child or the teacher. Nevertheless, the time sequence of the three stages is not necessarily linear in practice, and all three stages are thought to be interrelated (Oikonomakou &

Sofos, 2014). The writing stages structure during writing production is important because it enhances the processing of self-evaluation. For instance, in the post writing stage the child is supported to evaluate the first version via self-evaluation. Teaching writing in Greek speaking school age children begins as soon as they enter primary school. However, different aspects of morphological awareness skills, which develop before the formal initiation of literacy instruction, have a unique effect on spelling (Grigorakis & Manolitsis, 2021). Given the complexity of the Greek language morphology and the explicit curricular goals, primary school teachers continue to report that children have difficulties in writing until they finish primary school (Matsagouras, 2007), however to our knowledge, to date, no research studies have examined the ways in which Greek primary school teachers teach writing or their views about writing instruction.

Frameworks of Writing Development

One of the main purposes of writing is to transmit information (of different kinds). Effective writing skills also allow children to express their ideas, succeed in education and enter the workplace. Writing enhances learning, in terms of both children's reading comprehension (Hebert, Gillespie, & Graham, 2013) and subject content knowledge (Bangert-Drowns, Hurley, & Wilkinson, 2004). According to the Greek national curriculum, writing is a means of creativity, which allows the child to express themself freely (Karantzola et al., 2013). The process of writing is underpinned by both cognitive and linguistic processes. Several decades of basic research, stemming from the seminal work of Hayes and Flower (1980) with adults, has identified the key factors that children need to master in order to become competent writers across different writing genres. For novice writers, struggling writers or children with learning difficulties and Developmental Language Disorder producing, written texts is often constrained by transcription skills (spelling and handwriting) (Dockrell et al., 2014; Puranik & Alotaiba, 2012; Ralli et al. 2021; Sumner et al., 2016), and linguistic competence (Dockrell et al., 2009; Koutsoftas, 2016). Over time the importance of these lower-level transcription skills reduces and higher-level writing skills including sensitivity to genre and purpose, use of rhetorical devices and textual organization become more important in writing proficiency (Berninger et al., 1995). The development of these writing competencies is captured in the N*ot so Simple View of Writing* (Berninger & Winn, 2006) which reflects transcription skills, executive functions and idea

generation at word, sentence and text level. The Greek curriculum standards for written text production in Grades 1 to 6 include punctuation, transcription, text structure, text types, cohesion and coherence which are consistent with the *Not so Simple View of Writing* framework (Institute of Education, n.d.). This writing framework can inform core elements for writing instruction and has been used to evaluate teachers teaching of writing in previous studies (Dockrell et al., 2016; Yeung et al., 2017).

Teachers Teaching Writing: Research Evidence

Writing instruction in schools can be captured in two complementary ways: the amount of time spent on writing instruction and the aspects covered in the writing curriculum. The What Works Clearinghouse (WWC) Practice Guide recommends that on average an hour a day should be spent on writing in primary schools (Graham et al., 2018). Evidence suggests that the time and attention devoted to teaching writing at primary schools varies across countries (Bañales et al., 2020; Coelho, 2020; Gilbert & Graham, 2010; Graham, 2019). For example, teachers in Grades 3 and 4 in the United States reported spending only 15 min a day in writing instruction (Brindle et al., 2016), while a sample of Dutch primary school teachers reported spending two lessons per month on writing. This is the minimum recommended by the Dutch Inspectorate (Rietdijk et al., 2018). In Taiwan 50% of Chinese language arts teachers (Grades 1 through 3) reported teaching writing just once a week or less often (Hsiang et al., 2020). Overall, there is an indication that the quantity of writing instruction is insufficient.

A more nuanced question relating back to writing frameworks would examine the occurrence of different writing activities, at different points in development and for different lengths of time. Following this line of enquiry Dockrell et al. (2016) found that teachers in England reported working with children on word-level activities several times a week and on sentence-level activities weekly. By contrast, planning, reviewing and revising-related activities tended to happen only monthly. The limited time devoted to planning and revising also has been demonstrated in other studies (Cutler & Graham, 2008; Graham et al., 2020).

In a national opinion survey in 249 first through third Grade teachers, only 39% of teachers agreed that their children showed adequate writing skills (Graham et al., 2008). Teachers also indicated that 23% of their children experienced difficulties with handwriting.

Reports of writing difficulties are markedly higher in children with learning difficulties who score lower than their peers on handwriting, grammar, spelling, sentence fluency and writing quality (Graham et al., 2017).

Although teaching writing is a primary goal of compulsory education in many countries, evidence suggests that many children are not proficient writers by the time they complete their compulsory education (Graham & Rijlaarsdam, 2016). The National Assessment of Educational Progress in the United States (U.S.) (NCES, 2012) assessed 24,100 and 28,100 children in Grades 8 and 12 respectively, engaged with writing tasks, and reported that only 24% of the children in both Grades performed at the proficient writing level. Together these findings highlighted the need for changes in the US education agenda so that the time devoted to writing is increased (Graham et al., 2012; NCW, 2003).

Teachers' instructional practices in writing at the same Grade-levels are generally similar within and across countries (Graham & Rijlaarsdam, 2016). The primary difference lies in the degree to which these practices are applied. Many different factors contribute to how writing is taught at school (Graham, 2019). For instance, the composition of the classroom and the number of children might affect writing instruction (Gilbert & Graham, 2010). In addition, teachers' dispositions towards writing affect the adopted classroom writing practices. Teachers' efficacy and beliefs can also promote or impede writing instruction (Graham, 2018). Several lines of evidence suggest that delivering high-quality writing instruction is impacted by teachers' preparation to teach writing, their confidence in their competence to teach it and the pleasure they derive from teaching it (Brindle et al., 2016; Dockrell et al., 2016; Graham et al., 2020; Hsiang et al., 2020; Kiuhara et al., 2009; Rietdijk et al., 2018).

Dockrell et al. (2016) found that 90% of the teachers in England reported that they liked to teach writing and felt they were effective teachers of writing. Furthermore, 59% of the respondents answered they had very good or outstanding training to teach writing, while the remaining reported that it was adequate. By contrast, the majority of teachers in Graham's et al. (2020) survey in Norway, reported that their college preparation to teach writing was inadequate, although they viewed more positively their in-service preparation. This finding is consistent with Hsiang's et al. (2020) study in Taiwan, where teachers reported that they were not adequately

prepared to teach writing. In fact, the amount of time they spent in writing instruction was predicted by their beliefs about teaching writing and their perceived efficacy, a finding which is consistent with an observational study with fourth and sixth Grade teachers in the Netherlands (Reitdijk et al., 2018).

According to research evidence, the quality of an education system depends on teachers. Therefore, it is essential for teachers to feel self-efficacious to develop effective teaching strategies (Dibapile, 2012). It is noteworthy that recently many researchers from different countries are conducting national studies in relation to teaching writing, a fact that reinforces the need for such a kind of study in Greece (Bañales et al., 2020; Brindle et al., 2016; Dockrell et al., 2019; Dockrell et al., 2016; Graham et al., 2020; Hsiang et al., 2020). Despite its importance, to date there is no information about the ways in which teachers in Greece approach the teaching of writing and there is no systematic study examining the ways in which Greek primary school teachers adapt their writing instruction strategies to accommodate their children's needs. The present study aims to address this gap by identifying primary school teachers' views and approaches for teaching writing in Greece.

Purpose of the Present Study

The aim of the present study was to identify the approaches for teaching writing in Greece and to examine the nature and frequency with which the different aspects of the writing process were addressed, by replicating and further extending the Dockrell et al. (2016) study, based on the *Not so Simple View of Writing* framework. The study was underpinned by three research questions:

1. How do teachers in Greek primary schools feel about their preparation for teaching writing, and what training have they received?

2. Which components of the *Not so Simple View of Writing* framework do Greek primary school teachers focus on and how frequently does this occur?

3. What teaching practices do Greek primary school teachers report using to support
    children's development of written text? Does this differ between Grades and do teachers
    use any specialized programs to support their teaching?

    We reasoned that Greek primary school teachers would feel competent in teaching
writing given previous research, the current Greek educational curriculum (writing is embedded
within content areas) and Greek teachers' training For the second research question we
anticipated that, given the rich morphology of Greek language, primary school teachers would
focus on complex aspects of spelling such as word roots, punctuation, the teaching of word
classes and grammatical function of words and this would happen more frequently for Grade 4 to
6 teachers than Grade 1 to 3 teachers (Dockrell et al., 2016; Graham et al., 2020). Finally, given
the Greek educational curriculum we predicted that Greek teachers would use practices such as
text construction and text modelling and these practices would differ between Grades (Dockrell
et al., 2016; Graham & Perin, 2007).

Method

Participants

    One hundred and three (103) teachers from primary schools in Greece participated in the
study. Most of the respondents were classroom teachers, while remaining respondents were head
teachers, specialist teachers (e.g., foreign language teachers) or belonged to the special education
personnel. Initially, 126 teachers responded to our call for participation in the study, however,
only the responses of 103 teachers were further analyzed. The remaining 23 respondents were
excluded because they taught at multiple classrooms during the same school year. Participants'
details are reported in Table 1.

Table 1

Characteristics of Teachers who Responded to the Questionnaire

Variable	N	%
Gender		
Male	9	8.7
Female	94	91.3
Age		
18-24	8	7.8
25-34	54	52.4

35-44	14	13.6
45-54	24	23.3
55-65	3	2.9
Role in the school		
Head teacher (or Principal)	5	4.9
Specialty teacher	8	7.8
Classroom teacher	77	74.8
Special education personnel	13	12.6
Teacher grade		
grades 1 to 3	45	43.7
grades 4 to 6	58	56.3
Years teaching (total)		
<5	30	29.1
5-10	39	37.9
11-15	9	8.7
>15	25	24.3
Years teaching in the current school		
<1	34	33
1-3	23	22.3
4-10	29	28.2
>10	17	16.5
Highest degree earned		
Doctoral degree	2	1.9
Master's degree	43	41.7
Postgraduate diploma	4	3.9
University degree	51	49.5
Academy degree	3	2.9
Teaching writing expertise		
Yes	6	5.8
No	97	94.2

Questionnaire

An online questionnaire examining the teaching of writing based on the Dockrell et al. (2016) study was used for data collection. The initial English questionnaire was adapted in the Greek language (forward and backward translation) and for Greek educational system (Ralli et al., 2018). It was also pilot tested involving a small group of teachers ($N = 20$). Short linguistic clarifications were implemented after pilot testing to make the items of the questionnaire more readable and easier to understand.

The final questionnaire consisted of ten sections (overall McDonald's omega coefficient was $\omega = .93$). The first two sections included eight statements about teachers' demographic

characteristics (gender, age), education and experience. The third section asked teachers about their competence in teaching writing and included one Likert-type scale item about their preparation to teach writing and eight Likert-type scale statements, from «strongly agree» to «strongly disagree» related to teaching competency. This section was followed by questions related to their students' demographics and their performance in writing. The main section of the questionnaire contained 36 Likert-type scale items related to the components of the *Not so Simple View of Writing* framework, examining the frequency of writing approaches used by teachers. Specifically, there were three items about handwriting, nine items about spelling, three items about punctuation, ten items about composition of text at word, sentence, and text level, four items about practices that teachers employ to support the structure of the written text, seven items related to planning, reviewing and revising. There were also thirteen items in relation to practices and materials for teaching writing and five items about assessment of children's progress in writing. All sections included an open-ended question where respondents could add any alternative approach which they might also use or clarify their responses. Finally, there were two multiple choice questions about school policy regarding teaching writing. The Greek version of the questionnaire is available from the corresponding author.

Procedure

The questionnaire was created using Google Forms. School principals were reached by e-mail and phone and agreed to participate in the study. The link of the questionnaire was disseminated to the head teachers and teachers at the primary schools. Completion of the questionnaire was voluntary, and teachers were invited to participate in the study by completing the online questionnaire. Ethical approval was obtained from the Institute of Educational Policy (a branch of the Greek Ministry of Education and Religious Affairs). The online format of the questionnaire did not provide data on how many people accessed the form, how many attempted to complete it but did not submit their responses nor how many decided not to participate. The sample size represents the number of teachers who willingly completed the survey.

Data Cleaning and Management

Of the initial one hundred twenty-six (126) teachers who participated in the study, analyses were based on the reports of one hundred and three (103) who completed all questionnaire items. Twenty-three (23) teachers were excluded from the analysis because they

reported teaching in all Grades, as such it was not possible to classify responses by educational level.

Results

Approach to Analysis

We followed the same procedures as Dockrell et al. (2016), checking the responses to Likert-type scales for skewness and kurtosis and performing MANOVA tests for the various domains of writing. In addition, we report below McDonald's omega (ω) coefficients for internal consistency for the domains of writing.

The results of our analyses are presented in three sections, according to the research questions. The first section presents the results of teachers' views about teaching writing and the training they have received. The second section presents teachers' views on the components of the writing process targeted and the frequency with which these occur. The final section includes information on teachers' approaches to the teaching of writing and their use of specialized programs.

Teachers' Preparation for and Views about Teaching Writing

Forty seven percent of the respondents reported their "preparation to teach writing" as adequate and 40% as very good. Seventy-five percent of the respondents reported either agreeing or strongly agreeing that "they liked to teach writing" and the same percentage of teachers reported "they were effective teachers of writing". Sixty two percent of the teachers agreed and 32% agreed strongly with the statement that "teaching writing was challenging" but 59% felt "they were able to help children who struggled with writing". Sixty two percent of the respondents reported either agreeing or agreeing strongly with "the use of models for writing instruction to guide them in their classroom". However, 61% agreed that that "there were limited resources to support children's writing". None the less 63% of the teachers "felt capable of recognizing effective techniques to support their children's writing" and 76% "liked to write".

We also examined whether the grade in which teachers taught influenced their views. To examine whether there was any association between grade and teachers' views, a chi-square test was performed. However, there were no significant differences between grade 1 to 3 teachers

and grade 4 to 6 teachers on any of the following items: "the challenges of writing instruction" ($\chi^2 = 1.633$, $df = 3$, $p = .652$), "the use of models for instruction writing" ($\chi^2 = 1.565$, $df = 4$, $p = .815$), "the limited available resources" ($\chi^2 = 6.417$, $df = 5$, $p = .268$), "the ability to support struggling writers" ($\chi^2 = 3.589$, $df = 4$, $p = .466$), "their effectiveness in writing instruction" ($\chi^2 = 2.707$, $df = 3$, $p = .439$), "their preference in teaching writing" ($\chi^2 = 1.643$, $df = 4$, $p = .801$) and "their ease in helping children who struggle with writing" ($\chi^2 = 3.001$, $df = 5$, $p = .700$).

Domains of Teaching in Relation to the Components of the Not So Simple View of Writing Framework

Transcription

Initially, the frequency that teachers reported that they supported "handwriting" or "typing" was examined. McDonald's omega coefficient was $\omega = .53$. The coefficient is below conventionally accepted levels, so results for this section should be seen with caution. Teachers reported that "practice in handwriting" occurred sometimes during the year both in grades 1 to 3 (lower) and grades 4 to 6 (upper), while 40% of respondents reported that they never did this ($M_{lower} = 1.51$, SD 1.68; $M_{upper} = 1.29$, $SD = 1.63$) and none of the teachers responded that "they supported children in typing or letter writing speed accuracy". Only three respondents provided further information in the open-ended section, in which they were asked to report any other technique they used with the children. One teacher indicated that "some children get training in writing capital and small letters", the other one mentioned "copying from the board" and the third one mentioned "joint writing (the child is holding the teachers' hand while writing)".

Spelling

Teachers' practices of spelling instruction were investigated through nine items. McDonald's omega was $\omega = .85$ for these items. Table 2 presents the means (*SD*s) by grades and for each reported item. To avoid a possible Type I error, given the different mean comparisons conducted, Bonferroni corrections were applied. The new accepted level of significance was 0.005 for the analysis run on the nine spelling items. As the Table 2 shows, "applying knowledge of spelling conventions" and "exploring the meaning, use and spelling of affixes", as well as "explicit instruction of word families, roots and origins", "explicit instruction in the use of suffixes and prefixes" and "analyzing words into subcomponents" occurred on average several

times a week, whereas "explicit instruction of vowels, consonants, syllables and homonymous families" occurred, on average, monthly. An initial MANOVA examined grade group differences across the spelling items. There was a statistically significant difference in teachers' reported focus on the items by grade taught (Wilks' $\lambda = .47$, $F_{9,93} = 2.9$, $p = .005$, partial $\eta^2 = .21$). Subsequent univariate testing indicated that teachers in lower grades (1-3) reported more frequently focusing on "sounding out phonemes", which was reported to be happening weekly ($F_{1,101} = 12.803$, $p = .001$, partial $\eta^2 = .113$), on "explicit instruction of vowels, consonants, syllables and homonymous", which was also reported to be happening weekly ($F_{1,101} = 11.87$, $p =.001$, partial $\eta^2 = .105$) as well as "analyzing words into subcomponents" which was also reported to be happening weekly ($F_{1,101} = 8.064$, $p =.004$, partial $\eta^2 = .079$), than teachers teaching in upper grades (4-6).

For the other six items related to "spelling" ("explore the meaning", "use and spelling of affixes", "explicit instruction of word families, roots and origins", "explicit instruction in the use of suffixes and prefixes", "check spelling using vocabulary bank, dictionaries and spellchecker", "apply knowledge of spelling conventions", "use of common lexical sequences (e.g., etc.), visual patterns and analogies") there were no significant differences between the grades taught. A mean score for the nine spelling items was also estimated. The score reports how often teachers focused on "spelling" in their teaching of writing. All the teachers reported focusing on "spelling" and, on average, this was occurring weekly, but there was large variation across the respondents ($M = 3.09$, $SD = 1.00$). Five respondents provided further information in the open-ended question where they could add any other technique they used. Of these, one mentioned "a specific Greek program which uses the visual lexicon (Mavromati, 1995)", and the others mentioned activities such as "child-to-child spelling correction", "spelling of unknown words twice a week", "explicit instruction of word components", "organization of small word competitions with opposites, synonyms etc."

Table 2

Mean (SDs) of Teachers' Reported Frequency for Teaching Spelling (0 = Never to 6 = Every Day)

	grade 1 to 3 ($n = 45$)	grade 4 to 6 ($n = 58$)	Total ($N = 103$)	Never (%)	Several times a year (%)	Monthly (%)	Weekly (%)	Several times a week (%)	Every day (%)
Explore the meaning, use and spelling of affixes	3.60 (1.33)	3.60 (1.34)	3.60 (1.33)	2.9	6.8	9.7	17.5	34.0	29.1
Sound out phonemes *	3.48 (1.57)	2.31 (1.71)	2.82 (1.75)	13.6	17.5	7.8	15.5	25.2	20.4
Explicit instruction of vowels, consonants, syllables and homonymous *	2.95 (1.67)	1.82 (1.62)	2.32 (1.73)	18.4	23.3	11.7	14.6	18.4	13.6
Explicit instruction of word families, roots and origins	3.60 (1.4)	3.41 (1.29)	3.49 (1.34)	2.9	6.8	11.7	22.3	29.1	27.2
Explicit instruction in the use of suffixes and prefixes	3.31 (1.59)	3.36 (1.38)	3.33 (1.47)	2.9	11.7	15.5	16.5	25.2	28.2
Check spelling using vocabulary bank, dictionaries and spellchecker	2.42 (1.57)	2.44 (1.63)	2.43 (1.6)	15.5	16.5	17.5	20.4	19.4	10.7
Apply knowledge of spelling conventions	4.20 (1.28)	4.06 (1.22)	4.12 (1.24)	1.9	3.9	5.8	11.7	21.4	55.3

Analyze words into subcomponents *	3.91 (1.27)	3.10 (1.45)	3.45 (1.43)	3.9	8.7	12.6	14.6	33.0	27.2
Use of common lexical sequences (e.g., etc.), visual patterns and analogies	2.28 (1.47)	2.27 (1.59)	2.28 (1.53)	13.6	22.3	22.3	13.6	20.4	7.8

* $p < 0.005$

3
4   ***Punctuation***
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6   There were three items that examined teachers' targets for "punctuation", and
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8   McDonald's omega was $\omega = .94$. Table 3 presents the means (*SD*s) by grade for each reported
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10   item. In order to avoid a possible Type I error, given the different mean comparisons conducted,
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12   Bonferroni corrections were applied. The new accepted level of significance was 0.016 for the
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14   analysis run on the three punctuation items. As the Table 3 shows, in total, "explicit instruction
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16   of punctuation at the end of sentences", "explicit instruction of semi-colons and colons", as well
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18   as "explicit instruction of speech marks related to a dialogue" occurred on average weekly. An
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20   initial MANOVA examined differences by grade taught across the spelling items. There was a
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22   statistically significant difference in teachers' reported focus on the items by grade taught
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24   (Wilk's $\lambda = .850$, $F_{3,99} = 5.84$, $p = .001$, partial $\eta^2 = .150$). Subsequent univariate testing indicated
25
26   that teachers in lower grades (1-3) reported more frequently focusing on "explicit instruction of
27
28   punctuation at the end of sentences" which was reported to be happening on average several
29   times during a week ($F_{1,101} = 14.89$, $p = .0001$, partial $\eta^2 = .129$) than teachers from upper grades
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31   (4-6). Also, teachers of the first three grades (lower) reported a greater focus on "explicit
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33   instruction of semi-colons and colons" since teaching was reported to occur weekly ($F_{1,101} =$
34   7.63, $p = .007$, partial $\eta^2 = .070$), than teachers of the upper grades. A mean score for the three
35
36   punctuation items was computed, reflecting the frequency with which teachers reported focusing
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38   "on punctuation" in their teaching of writing. All the teachers reported focusing on "punctuation"
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40   and, on average, this was occurring weekly, but there was large variation across the respondents
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42   ($M = 2.99$, $SD = 1.50$). Four respondents provided further information in the open-ended
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44   question, in which they were asked to report any other technique they used in practice. Of these,
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46   the first mentioned "completion of punctuation marks in relevant exercises", the second reported
47   "use of colored markers to highlight punctuation marks" and the third one mentioned "acoustic
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49   practice".
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Table 3

Mean (SDs) of Teachers' Reported Frequency for Teaching Punctuation (0 = Never to 6 = Every Day)

	grade 1 to 3 ($n = 45$)	grade 4 to 6 ($n = 58$)	Total ($N = 103$)	Never (%)	Several times a year (%)	Monthly (%)	Weekly (%)	Several times a week (%)	Every day (%)
Explicit instruction of punctuation at the end of sentences *	4.08 (1.34)	2.86 (1.77)	3.39 (1.7)	5.8	16.5	7.8	11.7	18.4	39.8
Explicit instruction of semi-colons and colons *	3.31 (1.39)	2.48 (1.59)	2.84 (1.55)	4.9	22.3	16.5	12.6	27.2	16.5
Explicit instruction of speech marks related to a dialogue	3.08 (1.47)	2.44 (1.56)	2.72 (1.55)	4.9	23.3	21.4	11.7	22.3	16.5

* $p < 0.016$

In sum, according to the mean scores for the nine spelling items and the mean scores for the three punctuation items, Greek primary school teachers reported focusing on "spelling" and "punctuation" on a weekly basis. By contrast, teachers of both lower and upper grades reported that practice in handwriting occurred sometimes during the year, while none of them supported children in typing and letter writing speed accuracy. In relation to spelling, grade 1 to 3 teachers focused more frequently on "sounding out phonemes", "explicit instruction of vowels, consonants, syllables and homonymous" and "analyzing words into subcomponents" than grade 4 to 6 teachers. In relation to punctuation, "explicit instruction of punctuation at the end of sentences" and "explicit instruction of semi-colons and colons" was reported to occur more frequently by grade 1 to 3 teachers.

Text Generation

Teachers' focus on text generation was also examined. Text generation includes word, sentence, and text level work. Within each construct separate skills are the focus of instruction. To avoid a possible Type I error, given the different mean comparisons conducted, Bonferroni corrections were applied. The new accepted level of significance was 0.012 for the analysis run on the four word-level work items, 0.016 for the analysis run on three sentence-level work items, and 0.01 for the analysis run on the five text-level work items.

Word-level Work. Four items examined teachers' focus on "word-level" work in relation to the production of written text, and McDonald's omega was $\omega = .80$ for these items. Table 4 presents the means (*SD*s) by grades of reported word-level foci. As the Table shows, in total, focusing on "word-level work" was almost a regular occurrence, with the use of "expanding and extending their vocabulary in written tasks by linking to prior knowledge" and "teaching word classes and the grammatical function of words" reported to occur weekly, while "using wide range of vocabulary in inventive ways" and "contrasts that highlight differences/similarities between words" to occur monthly.

An initial MANOVA examined grade group differences across the word-level items. There were no statistically significant differences in teachers' reported focus by grade taught. A mean score for the four word-level items was computed. On average, word-level work was

occurring almost weekly but there was large variation across the respondents ($M = 2.77$, SD

1.09). There were no responses to the open-ended question in this section.

Table 4

Mean (SDs) of Teachers' Reported Frequency for Teaching at Word, Sentence and Text Level (0 = Never to 6 = Every Day)

	grade 1 to 3 (n = 45)	grade 4 to 6 (n = 58)	Total (N = 103)	Never (%)	Several times a year (%)	Monthly (%)	Weekly (%)	Several times a week (%)	Every day (%)
Word level									
Contrasts that highlight differences/similarities between words	2.17 (1.35)	2.22 (1.47)	2.20 (1.41)	10.7	28.2	19.4	16.5	22.3	2.9
Expand and extend their vocabulary in written tasks by linking to prior knowledge	3.24 (1.28)	3.12 (1.43)	3.17 (1.36)	2.9	12.6	12.6	25.2	29.1	17.5
Wide range of vocabulary in inventive ways	2.42 (1.37)	2.77 (1.42)	2.62 (1.40)	5.8	17.5	26.2	20.4	19.4	10.7
Teach word classes and the grammatical function of words	2.93 (1.43)	3.24 (1.21)	3.10 (1.32)	2.9	13.6	9.7	31.1	29.1	13.6
Sentence level									
Draw children's attention to differences in meaning	2.00 (1.5)	2.44 (1.25)	2.25 (1.38)	11.7	22.3	20.4	23.3	19.4	2.9

between specific
grammatical structures

Explicit instruction in complex sentence grammar *	1.77 (1.47)	2.87 (1.40)	2.39 (1.52)	13.6	17.5	21.4	19.4	19.4	8,7
Highlight features of different types of sentences	1.84 (1.27)	2.41 (1.46)	2.16 (1.40)	11.7	25.2	22.3	23.3	10.7	6.8

Text level

Teacher reads own writing	1.48 (1.51)	1.15 (1.48)	1.30 (1.50)	46.6	15.5	10.7	19.4	3.9	3.9
Require children to vary the formality of written language	2.33 (1.10)	2.58 (1.10)	2.47 (1.11)	2.9	18.4	26.2	35.0	15.5	1,9
Teach children to make choices in relation to topics and ideas	2.17 (1.23)	2.39 (1.26)	2.30 (1.25)	8.7	18.4	25.2	33,0	10.7	3.9
Analyze forms of texts	2.28 (1.50)	2.77 (1.28)	2.56 (1.39)	9.7	14.6	17.5	35.0	14.6	8.7
Instruction in paragraph construction and the linking of ideas	2.28 (1.39)	2.77 (1.31)	2.56 (1.36)	6.8	18.4	18.4	33.0	14.6	8.7

* for word-level text generation: $p < 0.012$, for sentence-level text generation: $p < 0.016$ and for text level: $p < 0.01$.

Sentence-level Work. Three items examined teachers' focus on "sentence level" work in relation to the production of written text, and McDonald's omega was $\omega = .88$ for these items. Table 4 presents the means (SDs) by grades for reported sentence-level items. As the Table shows, in total focusing on sentence-level work was reported as happening on average monthly for all the three items. An initial MANOVA examined differences by grades taught across the sentence-level items. There was a statistically significant difference in teachers' reported focus on the items by grade (Wilks' $\lambda = .841$, $F_{3,99} = 5.90$, $p = .001$, partial $\eta^2 = .152$). Subsequent univariate testing indicated that teachers in the upper grades (4-6) reported more frequently focusing on "explicit instruction in complex sentence grammar" ($F_{1,101} = 14.90$, $p = .0001$, partial $\eta^2 = .129$), which happened on an almost weekly basis, than teachers in the lower grades (1-3). No significant differences were found for the items about "highlighting features of different types of sentences" and "drawing children's attention to differences in meaning between specific grammatical structures". A mean score for the three sentence-level items was computed, reflecting the frequency with which teachers reported focusing on sentence level items in their teaching of writing. All the teachers reported focusing on sentence level on average, monthly, but there was large variation across the respondents ($M = 2.27$, $SD = 1.30$). There were no responses to the open-ended question in this section.

Text-level Work. Five items examined teachers' focus on "text level" work (McDonald's omega was $\omega = .78$) in relation to the production of written text. Table 4 presents the means (SDs) by grades taught for the reported text-level items. As the Table shows, in total «focusing on text-level work» was reported as happening on average monthly for the practices "analyzing forms of texts", "using instruction in paragraph construction" and "linking of ideas". On the other hand, "requiring children to vary the formality of written language", "teach children to make choices in relation to topics and ideas" was reported to occur on a monthly basis, while the practice that "the teacher reads own writing" was reported to occur less frequently, several times during the year. An initial MANOVA examined differences by grade across the text-level items. There were no statistically significant differences in teachers' reported focus by grades taught. A mean score for the five text-level items was computed, reflecting the frequency with which teachers reported focusing on text level items in their teaching of writing. All the teachers reported focusing on "text level" on average, several times during the year, but there was large

variation across the respondents ($M = 2.24$, $SD = .95$). There were no responses to the open-ended question in this section.

In sum, despite the large variation across the respondents, word-level work was occurring almost weekly, sentence level work was occurring monthly and text level work was occurring several times during the year. For word level work teachers focused on "expanding and extending children's vocabulary in written tasks by linking to prior knowledge", and "teaching word classes and the grammatical function of words". For sentence level work teachers mainly focused on "explicit instruction in complex sentence grammar". Last, for text level work, teachers typically were working on "analyzing forms of texts" and "instructing their classrooms in paragraph construction and the linking of ideas". There were no grade group differences in relation to "word-level" and "text-level" work, whereas in relation to "sentence-level" work grade 4 to 6 teachers focused more frequently on "explicit instruction in complex sentence grammar" than grade 1 to 3 teachers.

Executive Functions

Planning, Reviewing, and Revising. There were seven items that focused on planning, reviewing and revising (McDonald's omega was $\omega = .86$). Table 5 presents the means (*SD*s) by grade taught. Similarly, to avoid a possible Type I error, given the different mean comparisons conducted, Bonferroni corrections were applied. The new accepted level of significance was 0.007 for the analysis run on the seven planning, reviewing and revising items. As Table 5 shows there was a marked variability across the items, but in general some aspects of "planning, reviewing, and revising" were reported monthly, except for "proofread-check the draft for spelling", "punctuation errors", "omissions" and "repetitions", which were reported to occur weekly, while the practice of "completing a rough draft on computer before producing a handwritten version" almost never occurred. An initial MANOVA examined differences by grade across the items. There was a statistically significant difference by grade taught (Wilks' λ $= .85$, $F_{7,95} = 2.26$, $p =.03$, partial $\eta^2 = .14$). Subsequent univariate testing indicated that teachers from the upper grades (4-6) reported more frequent use of "planning, noting and developing initial ideas on paper" ($F_{1,101} = 8.76$, $p = .004$, partial $\eta^2 = .080$), on average monthly, in comparison to teachers teaching in lower grades (1-3). On average "planning, reviewing, and

revising" was occurring monthly (M = 1.99, SD = 1.00). Only one respondent provided further information in the open-ended question mentioning planning again.

Table 5

Mean (SDs) of Teachers' Reported Frequency for Teaching Planning, Reviewing and Revising (0 = Never to 6 = Every Day)

	grade 1 to 3 (n = 45)	grade 4 to 6 (n = 58)	Total (N = 103)	Never (%)	Several times a year (%)	Monthly (%)	Weekly (%)	Several times a week (%)	Every day (%)
Revise - change and improve the draft	2.13 (1.53)	2.41 (1.32)	2.29 (1.41)	12.6	16.5	27.2	24.3	11.7	7.8
Draft - develop ideas from the plan into structured written text	2.24 (1.36)	2.48 (1.18)	2.37 (1.26)	8.7	17.5	21.4	35.9	12.6	3.9
Children complete a rough draft on computer before producing a handwritten version	0.42 (0.94)	0.58 (1.21)	0.51 (1.10)	76.7	8.7	5.8	4.9	2.9	1.0
Plan, note and develop initial ideas on paper *	1.66 (1.49)	2.48 (1.30)	2.12 (1.43)	17.5	14.6	29.1	22.3	9.7	6.8
Present-prepare a neat, correct and clear final copy	2.04 (1.55)	2.60 (1.26)	2.35 (1.42)	13.6	15.5	17.5	35.0	11.7	6.8
Encourage children to create a handwritten draft before a word-processed draft	1.02 (1.54)	1.27 (1.55)	1.16 (1.54)	55.3	9.7	13.6	9.7	7.8	3.9

|								
Proofread-check the draft for spelling and punctuation errors, omissions and repetitions	3.17 (1.52)	3.10 (1.30)	3.13 (1.40)	1.9	14.6	13.6	30.1	17.5	22.3

* $p < 0.01$

In total, most "planning, reviewing, and revising" items were reported to occur monthly. All aspects of "planning, reviewing, and revising", apart from "proofreading" were reported to occur more frequently in upper grades than in lower ones.

Capturing the Not So Simple View of Writing

A repeated measures ANOVA with grade groups taught as the between groups factor and domains of teaching as the repeated measures factor examined the frequency with which the different domains of teaching were reported to be taught. Means and standard errors are presented in Figure 1. There was a significant effect of domain, ($F_{5,505} = 43.981$, $p = .0001$, partial $\eta^2 = .303$), as well as an interaction by grade taught ($F_{5,505} = 15.337$, $p = .0001$, partial $\eta^2 = .132$). As Figure 1 illustrates the teachers of the lower grades (1-3) focused more on teaching spelling and punctuation skills, while the teachers of the upper grades (4-6) focused more on text generation (word, sentence, text level), as well as on planning, reviewing, and revising.

Figure 1

Means (SE) of Reported Frequency of Teaching across Domains of Writing (0 = Not Taught to 5 = Taught Daily)
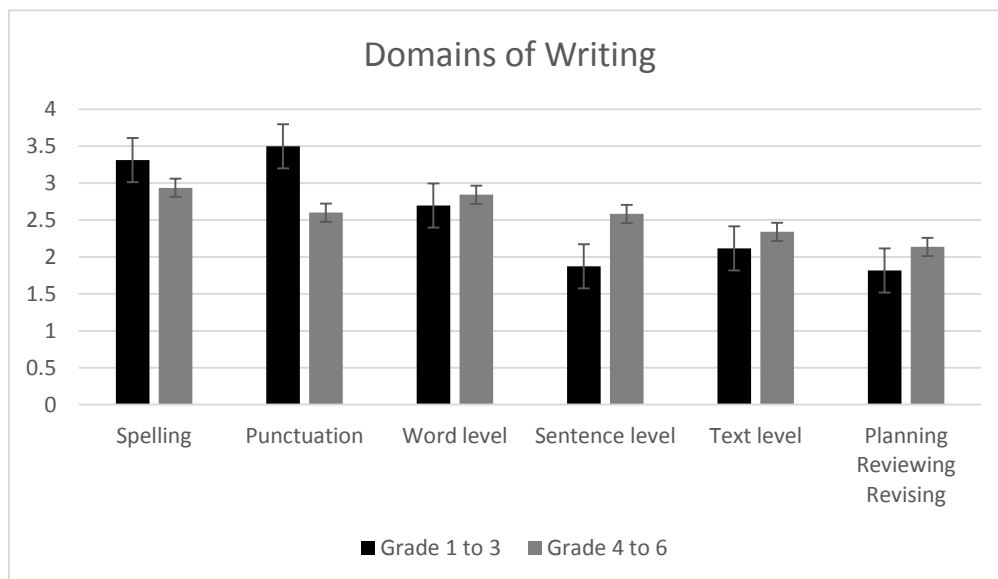
Reported Teaching Practices to Support Writing Development

Thirteen items examined teachers' "practices to support writing development" (McDonald's omega was $\omega = .88$). Table 6 presents the means (SDs) by grades taught for reported teaching practices items. To avoid possible Type I errors, given the different mean comparisons conducted, Bonferroni corrections were applied. The new accepted level of significance was 0.003 for the analysis run on the thirteen items. As the Table shows, overall teachers reported using, on average monthly, pedagogical approaches such as "prior brainstorming to create visual map" ($M = 2.47$, $SD = 1.13$), "sentence or story starter" ($M = 2.41$, $SD = 1.03$), "discuss and evaluate own and/or others' writing" ($M = 2.32$, $SD = 1.05$), "sentence combining" ($M = 2.19$, $SD = 1.01$), "teaching and repeating the way of writing specific textual genres" ($M = 1.90$, $SD = 1.06$), "model a piece of writing", "explaining vocabulary choices", ($M = 1.81$, $SD = 1.09$), "constructing texts with children" ($M = 1.71$, $SD = 1.05$), and "tools such as use of visual aids to support the production of written text (e.g., word tables, pictures)" ($M = 2.09$, $SD = 1.16$) and "structured worksheets" ($M = 1.79$, $SD = 1.02$), while they used "peer assessment" ($M = 1.52$, $SD = 1.10$), and "model writing strategies with small groups of children" ($M = 1.48$, $SD = 1.28$) occasionally. On the other hand, they used less frequently (several times during the year) "interactive whiteboards" ($M = 1.33$, $SD = 1.48$), while they used rarely during the year "individual interactive whiteboards" ($M = 0.24$, $SD = 0.55$). An initial MANOVA examined differences by grades taught across teachers' strategies to support writing. There were no statistically significant differences in teachers' reported practices to support writing by grade taught. A mean score for the thirteen items was computed, reflecting the frequency with which teachers reported using practices to support writing development. There was not a statistically significant difference by grades taught. However, it was observed that lower grade teachers (1-3) tended to use "visual aids" and "the practice of constructing texts with children" more frequently than upper grade teachers (4-6). Moreover, in lower grades, teachers were using more "hands-on strategies" in support of their children's development of writing skills. Other writing activities such as "the use of models, sentence combining and peer assessment" that have been shown to enhance children's writing were less evident in the present study. In fact, the majority of teachers reported they were never "using interactive whiteboards" and "individual interactive whiteboards". On the other hand, teachers from grades 4 to 6 reported more frequent use of techniques such as "discussion and evaluation of own and/or others' writing", "sentence combining" and "teaching and repeating the way of writing specific textual genres".

     In sum, teachers reported using techniques such as brainstorming, structured worksheets, visual aids and sentence combining on average monthly, whereas peer assessment and modeling writing strategies with small groups of children were reported to occur several times during the year. Interactive whiteboards were used rarely used.

Table 6

Mean (SD) of Teachers' Reported Strategies for Supporting Writing Development (0 = Never to 5 = Every Day)

	grade 1 to 3 (*n* = 45)	grade 4 to 6 (*n* = 58)	Total (*N* = 103)	Never (%)	Occasion ally (%)	Monthly (%)	Weekly (%)	Every day (%)
Use of interactive whiteboards	1.35 (1.55)	1.32 (1.44)	1.33 (1.48)	41.7	22.3	12.6	6.8	16.5
Discuss and evaluate own and/or others' writing	2.17 (1.05)	2.43 (1.06)	2.32 (1.05)	5.8	17.5	25.2	41.7	9.7
Model a piece of writing, explaining vocabulary choices	1.73 (1.15)	1.87 (1.04)	1.81 (1.09)	13.6	26.2	28.2	29.1	2.9
Prior brainstorming to create visual map	2.57 (1.21)	2.39 (1.07)	2.47 (1.13)	4.9	19.4	16.5	41.7	17.5
Sentence or story starter	2.53 (0.96)	2.32 (1.08)	2.41 (1.03)	2.9	19.4	23.3	41.7	12.6
Model writing strategies with small groups of children	1.55 (1.25)	1.43 (1.32)	1.48 (1.28)	32.0	20.4	19.4	23.3	4.9
Use of visual aids to support the production of written text (e.g., word tables, pictures)	2.42 (1.15)	1.84 (1.12)	2.09 (1.16)	10.7	19.4	31.1	27.2	11.7

Peer assessment	1.46 (1.07)	1.56 (1.12)	1.52 (1.10)	16.5	39.8	24.3	13.6	5.8
Use of individual interactive whiteboards	0.24 (0.52)	0.24 (0.57)	0.24 (0.55)	81.6	12.6	5.8	--	--
Constructing texts with children	1.95 (1.04)	1.53 (1.02)	1.71 (1.05)	8.7	40.8	26.2	18.4	5.8
Structured worksheets	1.84 (1.12)	1.75 (0.94)	1.79 (1.02)	12.6	23.3	38.8	22.3	2.9
Sentence combining	1.97 (1.15)	2.36 (0.87)	2.19 (1.01)	5.8	19.4	31.1	36.9	6.8
Teaching and repeating the way of writing specific textual genres	1.68 (1.18)	2.06 (0.93)	1.90 (1.06)	11.7	23.3	31.1	31.1	2.9

Discussion

Although teaching writing is a primary objective of schooling in many countries, many children do not receive adequate writing instruction and are not becoming proficient writers (Graham, 2019; Graham & Rijlaarsdam, 2016; Torrance et al., 2012). Using the "Not so Simple View of Writing" framework, this study examined Greek primary school teachers' views about their preparation and training to teach writing, the frequency and extent to which different aspects of the writing process are addressed, and the teaching practices they used in order to support children's writing development.

As predicted given previous research, the current Greek curriculum (writing is embedded within content areas) and Greek primary school teachers' training, the majority of the teachers in this study felt prepared and enjoyed teaching writing, a finding which is consistent with previous studies in England (Dockrell et al., 2016) and in Chile (Bañales et al., 2020). In addition, teachers felt they were able to identify effective strategies to enhance their children's writing. Despite their reported effectiveness, enjoyment, and preparation for teaching writing, almost all Greek primary school teachers found teaching writing challenging and almost half of the participants reported that supporting children who face difficulties in writing was not easy for them, a finding which was also reported in Dockrell et al. (2016) study. This is likely impacted by the limited resources that teachers reported having available to support children's writing. Lack of resources places additional demands on teachers' abilities to find appropriate material and provide intensified instruction to children who face difficulties.

Teacher knowledge is important to inform writing instruction, but effective writing instruction depends on what is taught and how frequently writing is taught. Therefore, teachers were asked to report on the content and frequency of the writing activities they employ by assessing elements of the *Not so Simple View of Writing* (Berninger & Amtmann, 2003; Berninger et al., 2002). In relation to "transcription", teachers reported that "practice in handwriting" occurred sometimes during the year, without significant differences between teacher's Grades. According to previous research, handwriting instruction can improve not only children's handwriting, but other aspects of their writing performance as well (Berninger et al., 1997; Graham et al., 2000; Jones & Christensen, 1999). In a national study with a random

sample of primary school teachers from across the United States, Graham et al. (2008) found that 90% of the participating teachers indicated that they spent 70 minutes a week teaching handwriting. Similarly, Dockrell et al. (2016) found that practice in handwriting in England was reported to occur on average weekly across both lower and upper Grades (key stages), although 2% of teachers reported that they never did this. These differences between the countries in the frequency of teaching handwriting can be attributed to differences in terms of the curriculum and the style of handwriting taught in elementary schools. For instance, cursive writing is not customary in the Greek educational system and this is also depicted in the national education curriculum which does not require or suggest any specific time to be dedicated to teaching handwriting since print writing is used in the classrooms. To our knowledge this is the first study that reports data on the frequency of teaching handwriting in Greek primary school children raising the question about the impact of printing and potential writing fluency. Future research is needed to fully determine how handwriting is taught in Greek schools and its impact on writing productivity.

"Spelling" and "punctuation" were reported to occur weekly, although there was large variation across the respondents. Similarly, Dockrell et al. (2016) found that all the teachers reported focusing on spelling on a weekly basis. It is important to clarify that the Greek spelling system is different from other spelling systems. For example, it is much more transparent than English in the representation of phonology. Moreover, the Greek spelling system is characterized as a shallow orthography because there is consistency in grapheme-phoneme correspondences (Protopapas & Vlahou, 2009), whereas English is characterized as deep orthography, with higher level morphological constraints (Porpodas, 2001). According to Porpodas (2006), "Greek is phonologically opaque as there is a one-to-many phoneme– grapheme mapping and therefore spelling cannot always be predictable from phonology" (p. 192). Therefore, there are specific rules in relation to spelling which raise challenges for instruction.

Also, as it was anticipated, given the rich morphology of Greek language, significant variation between teachers was found in relation to specific spelling items. For example, teachers from Grades 1 to 3 gave more emphasis on specific spelling techniques such as "sound out phonemes" which was reported to occur weekly whereas for the older cohort this occurred monthly. Important differences between the two Grade groups were also identified in terms of "punctuation", with the younger cohort teachers (Grades 1-3) reporting "using explicit

instruction of punctuation at the end of sentences" several times within a week whereas the upper cohort teachers (4-6) just weekly. Similarly, "explicit instruction of semi-colons and colons" was reported to occur weekly by Grade 1 to 3 teachers and monthly by Grade 4 to 6 teachers. This progression to more complex aspects of punctuation reflect a systematic and graduated approach to instruction.

Teachers reported more work at "word level", occurring almost weekly, than at "text level", which was reported to occur several times during the year. The emphasis on word-level work was also reported in the study by Cutler and Graham (2008) and was even more prominent in the study by Dockrell et al. (2016). It is well documented that teachers devote more time on lower-level writing skills, such as word-level work, in the initial stages of learning to write and as children become more competent writers, they give more emphasis on higher level writing skills. Nonetheless the limited attention to text level work on a regular basis will reduce both children's ability to practice writing coherent texts and the feedback that is embedded in the Greek approach to writing pedagogy.

"Planning, reviewing and revising" was reported to occur only monthly, which is consistent with previous findings (Dockrell et al., 2016; Graham et al., 2003). The same pattern of findings was also confirmed by a very recent study (Graham et al., 2020) which found that planning, revising and motivation were only addressed once or twice a month by the majority of teachers in Norway. On the contrary, planning strategies were taught more often in the study of Brindle et al. (2016) in the United States. Planning, reviewing and revising differences between Grade levels were evident in the present study. Teachers in Grades 4 to 6 reported "using the practice of planning, noting and developing initial ideas on paper" more frequently (on average monthly) than teachers from Grades 1 to 3. This is likely reflected in the higher executive function demands that children face in upper Grades. It would be important for future studies to consider higher order cognitive skills as well, such as inference making and the ability to infer the mental states of others, since they have not been included in the present study (Kim, 2016; Kim & Schatschneider, 2017).

Finally, given the Greek educational curriculum we predicted that Greek primary school teachers would use practices such as "text construction" and "text modelling" and these practices would differ between Grades (Dockrell et al., 2016; Graham & Perin, 2007). Our results did not support this prediction, although a tendency was observed with teachers from Grades 1 to 3 to

report more frequently "the use of visual aids (e.g., word tables, pictures)" to support the production of written text and "the practice of constructing texts with children". Other practices that involved the use of interactive whiteboards were never used by the majority of Greek primary school teachers.

Limitations and Future research

Despite the study's strength as this is the first one to examine Greek primary school teachers' views and approaches to the teaching of writing there are several limitations. The first of them is related to the sample size of the study, which may not be able to accurately reflect the characteristics of the population. Moreover, as an online anonymous questionnaire was used, there are no data on the number of teachers from each school who answered the questionnaire nor the representativeness of the data of Greek teachers. Therefore, it was not possible to make between school or region comparisons. In addition, although demographic data provided valuable information about the sample, it may be that teachers who chose to complete the questionnaire might be feeling more confident and effective or they might be driven by their interest in writing. As such, caution must be exercised when interpreting and generalizing the findings of the study. Future research with a larger and more representative sample size could further examine Greek primary school teachers' strategies for supporting writing development. Moreover, apart from self-report measures, future research should also apply observational and qualitative methods to examine whether teachers reported practices are evident in their classroom practice. Overall, the above-mentioned limitations of the present study highlight the need for further studies with a more representative sample of Greek primary school teachers from different schools and Grade levels.

Implications for Educational Practice

The results of the present study depict the current situation in relation to teaching writing in Greek primary schools and highlight the need for changes in teaching practices for writing. Primary school teachers need to be better trained in innovative strategies for supporting writing. They should also be encouraged to use a variety of practices in their writing instruction in classroom. In addition, the limited available resources (textbooks, worksheets) that teachers report having in relation to written text production require actions for their enrichment. There are

also implications for the Greek national curriculum where more emphasis should be placed on writing and an understanding of models of writing. More specifically, the domains of sentence level (in particular for lower grade teachers) and text level work which were found to be less frequently taught by teachers should be better addressed and teachers should be given specific guidelines for their instruction. The adaptations in the Greek National curriculum would also require new textbooks with more exercises that would focus on all the domains of the *Not so Simple View of writing* framework and particularly in the domains that were found to be less frequently taught in the classrooms.

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