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## Relationships between primary teachers' beliefs and their practices in relation to writing instruction

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Teachers' beliefs are directly connected to their practices and have an impact on students' educational experiences and results. The aim of this study was to describe and examine the relationship between beliefs and practices linked to teaching students to write in the first four years of primary school. A total of 255 Portuguese primary school teachers participated in the study. A 52-item questionnaire was used to evaluate their beliefs, preferred activities and classroom organisation procedures in relation to writing instruction. Beliefs and classroom organisation procedures were subjected to factor analysis, whereas activities were considered individually. The analysis of teachers' beliefs revealed two different factors: (1) code-based beliefs and (2) meaning-based beliefs. The analysis of teachers' classroom organisation revealed three different factors: (1) pairs or small groups; (2) individual; and (3) whole classroom. Most of the participating teachers emphasised both explicit teaching and informal learning methods. There were significant associations between beliefs and activities and beliefs and classroom organisation procedures supported by code vs. meaning beliefs. However, the different associations revealed in the study showed that teachers combine multidimensional aspects in their writing instruction theory and practice.

**Keywords:** beliefs; practices; teaching; written language; primary school

### Introduction

According to several authors (Clark and Peterson 1986; Pajares 1992; Poulson et al. 2001; Van Driel and Verloop 2002; Pederson and Liu 2003; Woolley, Benjamin, and Woolley 2004; Shin and Koh 2007), teachers' beliefs influence teaching practices and have an impact on students' educational experiences and results. However, the relation between beliefs and practices is referred by Fang (1996) and Vaughn, Moody, and Shumm (1998) as a relation governed by consistency and inconsistency patterns as there often exists contextual constraints as school/national policies or external evaluations that inhibit teachers' actions (Valencia and Wixson 2000; Lam and Kember 2006).

One set of beliefs that appear to have important implications for the teaching of written language is the assumptions and beliefs that teachers make and hold about teaching and learning (Bruner 1996; Gipps, McCallum, and Brown 1999). More specifically, Fitzgerald (1999) and Cunningham and Fitzgerald (1996) argue that teachers' decisions are shaped by their beliefs about literacy and literacy instruction.

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Teachers' beliefs and practices about early literacy instruction have been traditionally organised into two polarised main approaches and have been the object of a great deal of research on literacy teaching (Rayner et al. 2001; Treiman 2001). The first approach, which is often referred to as phonics/skills or code-based argues that, in first place, students should focus on individual letter–sound relationships, and that repetition and practice will enable them to recognise and write words accurately and correctly (Ehri et al. 2001). This approach emphasises bottom-up processing with little recourse to higher level knowledge. In other words, children must learn to convert unfamiliar printed words into their familiar spoken forms by learning the correspondence between graphemes and phonemes. Code-based activities include teaching children how to name and write letters, rhyme words, relate letters to the sounds they make and sound out words (Torgesen et al. 1994; Foorman et al. 1998; Torgesen et al. 1999; Rayner et al. 2001). These practices are often associated with synthetic methods of literacy teaching (Ehri et al. 2001).

The second approach, known as the whole language or meaning-based, postulates that students should be holistically immersed in written language as soon as they start primary school i.e. by reading books and writing their own stories. According to the proponents of this approach, reading and writing are communicative activities (Goodman 1992; Dahl and Freppon 1995; Teberosky and Colomer 2003). They hold that readers form hypotheses about which words they will encounter, and gather just enough information to test their hypotheses. In this top-down process, it is thought that children will become literate if they are placed in an environment that is rich in print and are encouraged to explore it. Meaning-based activities may include reading stories to children, using the context to figure out the words, and writing their own experiences. Frequently these practices are associated to global methods of literacy teaching (Goodman 1992).

The first studies to analyse teachers' beliefs about early literacy instruction in primary grades were specifically focused on reading and found clear differences between these two approaches (Duffy and Metheny 1979; DeFord 1985; Jiménez and Hernández 1986).

DeFord (1985) assessed primary teachers' beliefs about reading and evaluated the theoretical orientation to reading profile. The measure consisted of 28 statements gauging teachers' overall orientations toward skills-based or meaning-based reading instruction. In addition, 14 teachers were observed in their classrooms. Results suggested a high correlation between teachers' beliefs and practices.

Duffy and Metheny (1979) developed a propositional inventory for assessing primary school teachers' beliefs about reading, and reported that these can be structured beliefs, based on beliefs about the importance of basal texts and decoding skills, or unstructured beliefs, based on beliefs about the importance of motivation, comprehension and the diversity of written materials. These authors also performed field observations that have revealed high consistency between these beliefs and classroom practices.

Jiménez and Hernández (1986) studied the instructional reading beliefs of 70 primary school teachers. Based on responses to a 37-item questionnaire, teachers were classified as pursuing two distinct approaches: teachers who place more emphasis on meaning, following a top-down framework; and teachers who especially emphasise decoding (phonemes or syllables), adopting a bottom-up framework.

More recently, researchers have found that these two approaches are not as polarised or contradictory as these early studies had revealed.

Baumann et al. (2000) analysed surveys of 1207 teachers from pre-kindergarten to the fifth grade in what concerns reading and writing-teaching actions. They reported that teachers in fact adopted a balanced, eclectic perspective, combining elements from both the skills and the global perspectives. A number of other studies that also looked at teachers' practices concerning reading and writing in the initial years of schooling produced similar results (e.g. Pressley, Rankin-Erikson, and Yokoi 1996; Rankin-Erikson and Pressley 2000; Pressley et al. 2001; Fijalkow 2003).

Other studies, specifically focused on writing instruction, have also revealed that teachers applied instructional procedures that combine the two common approaches.

For example, Graham et al. (2003) reported that primary grade teachers spent little more than an hour a day teaching writing, with most of this time devoted to teaching mechanics, grammar and usage. These basic skills were typically taught several times a week or more, whereas writing processes (planning and revising) were most often taught several times a week or less and sometimes only weekly. Most teachers also conducted mini-lessons on writing, re-taught skills, modelled writing processes and conferenced with students about their writing at least once a week. The use of invented spellings, allowing students to select writing topics, and allowing them to work at their own pace on writing assignments were relatively common practices, as were students helping each other and sharing their writing with peers. Less common – monthly or less in 60% of the classrooms – was the use of computers by students during the writing period. We should note that there was considerable variability in teachers' responses to many of the items on the questionnaires, especially ones that asked them to estimate how much actual time was devoted to teaching writing or having students write. The authors concluded that teachers took an eclectic approach to writing instruction, applying instructional procedures that cut across these two common approaches (process vs. skills).

Another example is the study by Cutler and Graham (2008). Concerned with the fact that, by fourth grade, two out of every three children in the United States do not write well enough to meet classroom demands, the authors were particularly interested in determining whether primary grade teachers' writing programmes reflected a process approach to writing instruction (emphasis is placed on the act of composing and instruction is mostly provided through informal means), a skills-based approach (emphasis placed on systematic instruction of basic writing skills) or a combination of the two approaches. The authors reported that 72% of teachers indicated that they used a process approach combined with a traditional skills approach (mixed approach). More specifically, the typical teacher placed considerable emphasis on teaching skills as spelling, grammar, capitalisation, punctuation skills, handwriting and sentence construction skills. But the typical teacher also reported using a variety of practices common to the process writing approach. This included having students plan and revise their compositions, conferencing with and help other students with their writing, share their writing with classmates, monitor their writing progress, choose their own writing topics, work at their own pace and use invented spellings.

More recently, Tolchinsky, Bigas, and Barragan (2012) also sought to provide a detailed characterisation of teachers' practices when teaching written language from preschool to the first grade in primary school. They used a 30-item questionnaire focused on practices that are directly related to the activities and content that children must learn, as well as on other dimensions like classroom organisation, planning and preparation and evaluation. Specifically with regard to instruction activities

and content, teachers reported groups of activities such as strategic reading, autonomous writing, letter recognition, explicit teaching directed at letter-to-sound correspondences, and explicit analysis of word-sounds. Based on teachers' responses, the authors reported three practice profiles. The first includes teachers with preferences for explicit instructional practices, highly focused on code activities and learning outcomes. The second involves teachers with preferences for situational practices, who are more concerned with spontaneous writing, strategic reading and occasional learning. The third entails multidimensional practices focusing on both explicit instruction and autonomous writing. Despite having questions that addressed classroom organisation (e.g. do children autonomously compose text either individually or in pairs?), this study did not specifically address the relationship between classroom organisation and teachers' profiles.

Studies that compute correlations between beliefs and specific writing instructional practices in the early grades are rare (Poulson et al. 2001; Graham et al. 2002).

Based on the analysis of 150 primary grade teachers' surveys, Graham et al. (2002) reported that activities such as students sharing writing with peers, students helping each other, invented spelling, student selection of writing topics, student/teacher conferences and teacher mini-lessons were positively correlated with a belief in natural learning. They also reported that activities such as handwriting, spelling instruction and grammar instruction were positively correlated with a belief in correctness in writing; and that natural learning includes approaches such as whole language and process writing instruction, while correctness in writing includes skills instruction.

Poulson et al. (2001) reported that analysis of the responses of 225 primary grade teachers showed that copying and the regular use of spelling lists by children were positively correlated with teachers' belief in the importance of correcting children's writing and of handwriting. These activities were also negatively correlated with teachers' belief that young writers should choose their own writing topics. The beliefs that children should write for audiences other than the teacher and that they should choose their own writing topics were positively correlated with spontaneous writing activity. This activity was negatively correlated with the belief in correctness and handwriting.

In both studies, most primary grade teachers had multifaceted beliefs about writing instruction, embracing both systematic skill instruction and informal learning methods.

In summary, many studies have shown that reality extends beyond the two typical approaches and teachers can combine elements from two apparently contradictory theories. Both orientations (code-based and meaning-based) and the theories that inspire them thus coexist to some extent; and not only individually, but combined in a perspective that has emerged in the last decade and is known in the literature as a 'balanced' or eclectic approach (Chauveau and Rogovas-Chauveau 2001; Pressley 2003, 2006).

Despite the importance of teachers' beliefs, there are few studies that have tried to describe teachers' beliefs and the relation between beliefs and specific writing teaching practices. In Portugal, analysing these relationships is particularly relevant considering the lack of studies in this area and given the contribution they could have for teacher training in the area of literacy where levels of failure are particularly high according to recent international studies (OECD 2013).

So, the aim of the present study was to describe and analyse the relationships between Portuguese teachers' beliefs and their practices with regard to writing instruction. Since few studies have analysed this issue, we prefer to pose questions rather than elaborate hypotheses. Thus, we have addressed two questions: (1) how beliefs are related to different writing activities and (2) how beliefs are related with different classroom organisation procedures.

## **Method**

### ***Participants***

The participants were 255 Portuguese primary school teachers. Their age ranged from 22 to 66 years ( $M = 34.80$ ,  $SD = 9.60$ ) and their teaching experience from 1 to 41 years ( $M = 10.68$ ,  $SD = 9.56$ ). In terms of type of school, 25 teachers were from private and 230 from public schools. Current school levels were: first grade – 53; second grade – 47; third grade – 30; and fourth grade – 38; while 87 teachers taught multiple grades. Two hundred fourteen teachers were female and 41 were male.

### ***Instrument***

Teachers were asked to complete a survey comprising four distinct sections. The first section gathered demographic information. The second assessed teachers' beliefs about how to teach writing. The third asked how often they, or their students, engaged in specific writing activities. Finally, the fourth asked teachers to indicate how often they used specific classroom organisation procedures to develop writing activities. The questionnaire itself was developed on the basis of those proposed by Graham et al. (2002) and Poulson et al. (2001).

### ***Beliefs***

The scale used to assess teachers' beliefs consisted of 24 items evaluated on a six-point Likert-type scale (1 = Strongly disagree, 2 = Disagree, 3 = Slightly disagree, 4 = Slightly agree, 5 = Agree and 6 = Strongly agree). Teachers were asked to express their level of agreement or disagreement in relation to each item.

In order to analyse the underlying factor structure of the beliefs scale, the responses of the participating teachers were analysed using exploratory factor analyses. Items that exhibited factor structure loadings of .40 or greater were used to define a factor. This revealed two factors, which accounted for 61% of total variance (see Appendix 1). Eleven items loaded on the first factor and the internal consistency reliability was .94. Ten items loaded on the second factor and the internal consistency reliability was .92. We called the first factor 'meaning-based beliefs', and the second 'code-based beliefs'. Examples of meaning-based beliefs include: 'In order to improve writing, it is important that planning strategies emerge from regular text work'; and 'Written language conventions will gradually be learned by practising written language expression'. Examples of code-based beliefs are: 'Formal and systematic instruction about writing is essential to ensuring the proper development of all the skills needed in order to write'; and 'Before beginning a written expression activity, the teacher should prepare students to write correctly'.

Three items were excluded because they had factor loadings of less than .40.

Scores for each factor were computed by calculating the mean scores for each of the items included in that factor. The higher the mean score, the greater the emphasis placed on the construct measured by that factor.

### *Activities*

The scale that enabled us to assess how often teachers undertook specific writing activities consisted of 15 items evaluated on a six-point scale with two descriptors (1 = never and 6 = daily). Teachers indicated how often each activity occurred.

The activities were generally grouped as suggested by Tolchinsky, Bigas, and Barragan (2012): process writing activities (planning texts and revising texts); decoding writing activities (copying and dictation); autonomous writing activities (texts, everyday reports, informational texts, messages, recipes/instructions/rules, stories, descriptive reports and wordlists); writing as a product activity (themed compositions and free compositions); and worksheets (spelling and grammar).

### *Classroom organisation*

The scale that allowed us to assess how often teachers used specific classroom organisation procedures to develop writing activities consisted of 20 items evaluated on a six-point scale with two descriptors (1 = never and 6 = daily). Teachers expressed how often they used each procedure.

In order to analyse the underlying factor structure of the classroom organisation scale, the responses of the participating teachers were analysed through exploratory factor analyses. Items that exhibited factor structure loadings of .40 or greater were used to define a factor. Three factors were revealed and accounted for 53% of total variance (see Appendix 2).

Five items loaded on the first factor and the internal consistency reliability was .88. Six items loaded on the second factor and the internal consistency reliability was .73. In addition, five items loaded on the third factor and the internal consistency reliability was .80.

We called the first factor 'writing in pairs or small groups'. For instance, one item was 'For text revision purposes, produces works with peers or with small groups of students'. The second factor was labelled individual writing. One example was the item 'Organises and plans written work in such a way as to teach how to write individually'. Finally, the third factor was named 'whole classroom writing'. An example was the item 'With the participation of students, collectively revises their texts to improve their productions'.

Four items were excluded because they had factor loadings of less than .40.

Scores for each factor were computed by calculating the mean scores for each of the items included in that factor. The higher the mean score, the greater the emphasis placed on the construct measured by that factor.

### *Procedure*

Prior to data collection, authorisation requests were sent to several schools. Once authorisation had been given, teachers were informed that we were gathering information about their preferences when teaching writing in the initial stages of the process of learning to read and write. Teachers participated according to their willingness.

The questionnaire was personally delivered to participating teachers and a subsequent date was agreed for its collection.

## Results

We initially produced a description of teachers' beliefs about how to teach writing. We then performed a correlational analysis of beliefs and activities and beliefs and classroom organisation:

- The values obtained for meaning-based beliefs were  $M=4.90$  and  $SD=0.88$ . Quartile analysis showed that 75% of the teachers assigned a mean score above 4.6 (between 4 – slightly agree and 5 – agree) and 50% above 5 (5 – agree).
- For code-based beliefs, the values were  $M=4.06$  and  $SD=1.10$ . Quartile analysis showed that 75% of the teachers assigned a mean score of more than 3.4 (between 3 – slightly disagree and 4 – slightly agree) and 50% more than 4.3 (between 4 – slightly agree and 5 – agree).
- The results of a paired sample *t*-test showed a significant preference for meaning-based beliefs rather than code-based beliefs  $t(254)=7.72$ ;  $p < .001$ .
- In order to explore the existence of differences between teachers' beliefs in function of the school grade, we performed two ANOVA's using grades as independent variable and teachers code-based beliefs and meaning-based beliefs as dependent variables. The results showed that there were no significant statistical differences between the four grades for meaning-based beliefs  $F(3.254)=.443$ ;  $p = .944$  and for code-based beliefs  $F(3.254)=1.262$ ;  $p = .242$ .
- In order to explore the relationships between teachers' beliefs and activities, we computed Pearson correlation coefficients.

As we can see from Table 1, both planning and revising texts (process writing activities) were positively and significantly correlated with meaning-based beliefs.

Table 1. Correlations between teachers' beliefs and activities.

Activities	Beliefs	
	Meaning-based	Code-based
Copies	-.18**	.46**
Dictates	-.13*	.41**
Themed compositions	-.12	.50**
Free compositions	.10	.08
Spelling and grammar worksheets	-.06	.32**
Texts	.40**	-.38**
Everday reports (narrative)	.24**	-.27**
Informational texts	.18**	-.13*
Messages	.21**	-.16**
Stories	.24**	-.16**
Descriptive reports	.19**	-.01
Wordlists	.15*	-.05
Recipes/instructions/rules	.03	-.04
Revising texts	.27**	-.25**
Planning texts	.19**	-.09

\* $p < .05$ .

\*\* $p < .01$ .

Revising texts was also negatively and significantly correlated with code-based beliefs. Copying and dictation (decoding writing activities) were positively and significantly correlated with code-based beliefs and negatively and significantly correlated with meaning-based beliefs. When it came to autonomous writing activities, texts, everyday reports (narrative), informational texts, messages and stories were positively and significantly correlated with meaning-based beliefs and negatively and significantly correlated with code-based beliefs. Additionally, descriptive reports and wordlists were positively and significantly correlated with meaning-based beliefs. Recipes/instructions/rules were not correlated with any of the teachers' beliefs factors. Turning to writing as product activities, themed compositions were positively and significantly correlated with code-based beliefs. Free compositions were not correlated with any of the teachers' beliefs factors. Finally, spelling and grammar worksheets were positively and significantly correlated with code-based beliefs.

In order to explore the relationships between teachers' beliefs and classroom organisation, we calculated Pearson correlation coefficients.

As Table 2 shows, writing in pairs or small groups was positively and significantly correlated with meaning-based beliefs, and negatively and significantly correlated with code-based beliefs. Individual writing was positively and significantly correlated with code-based beliefs. Lastly, whole classroom writing was positively and significantly correlated with meaning-based beliefs.

## Discussion

In this paper we have explored teachers' beliefs about written language and how those beliefs relate to written-language teaching practices.

We assumed that teachers' beliefs about written language were multidimensional constructs, as others have before us (e.g. Poulson et al. 2001; Graham et al. 2002). In both the later studies, most primary grade teachers expressed multifaceted beliefs about writing instruction. The factor analysis we performed confirmed the multidimensionality of teachers' beliefs (code-based and meaning-based beliefs). The factor analysis indicated that code-based beliefs are beliefs that consider the importance of: (a) letter-knowledge and letter-sound correspondence; (b) individual writing; (c) explicit spelling and grammar teaching; and (d) copying models.

The factor analysis also showed that meaning-based beliefs are beliefs that consider the importance of: (a) a diversity of printed materials in the classroom; (b) stimulating students to write even if they do not know how to write correctly;

Table 2. Correlations between teachers' beliefs and classroom organisation.

Classroom organisation	Beliefs	
	Meaning-based	Code-based
Pairs or small groups	.38**	-.27**
Individual	.09	.36**
Whole classroom	.13*	-.12

\* $p < .05$ .

\*\* $p < .01$ .

(c) allowing students to select their own writing topics; and (d) writing in pairs or small groups.

Another result that confirms this multidimensionality lies in the fact that 75% of participating teachers valued both types of beliefs to some extent. These results question whether meaning-based beliefs and code-based beliefs are incompatible, and reinforce the idea that, albeit apparently contradictory, the two positions do seem to coexist. The results are consistent with those obtained by Pressley, Rankin-Erikson, and Yokoi (1996) and Graham et al. (2002), where teachers displayed an eclectic approach that valued both meaning-based beliefs and code-based beliefs.

Our first research question concerned the relationships between teachers' beliefs and a number of writing activities. Our results showed that code-based beliefs are positively correlated with themed compositions, decoding writing activities (copying and dictation) and spelling and grammar worksheets. This seems to be coherent, as these activities are linked to code-based or skills instruction. These results are in line with both those reported by Graham et al. (2002), who showed that activities such as handwriting, spelling instruction and grammar instruction were positively correlated with correctness in writing, and those obtained by Poulson et al. (2001), who showed that copying and the regular use of spelling lists by children were positively correlated with the belief that teachers hold about the importance of correcting children's writing and of handwriting – skills instruction.

Our results show that meaning-based beliefs are positively correlated with process writing activities (planning and revising) and autonomous writing activities (texts, everyday reports, stories, messages, descriptive reports, informational texts and word lists). This also seems coherent, as these activities can be considered to be linked to process writing instruction. These results are in line with those reported by Poulson et al. (2001), who concluded that the belief that children should write for audiences other than the teacher – process writing instruction – was positively correlated with spontaneous writing activity. This activity was negatively correlated with the belief in correctness and handwriting.

Two writing activities – writing recipes/instructions/rules and writing free compositions – were not correlated with any of the beliefs. These results seem to contradict those obtained by Poulson et al. (2001), who showed that the belief that children should choose their own writing topics was positively correlated with spontaneous writing activity. Our results may suggest that, at least to some extent, teachers also combine autonomous activities with more teacher-centred activities, as suggested by Pressley (2003, 2006).

Turning to our second research question – how code-based beliefs and meaning-based beliefs are correlated with different forms of classroom organisation – our results show that code-based beliefs are associated with individual writing and meaning-based beliefs are associated with writing in pairs or small groups and whole classroom writing.

These results are also in line with those from Graham et al. (2002) and Poulson et al. (2001), who reported significant correlations between practices and beliefs, namely between students sharing writing with peers and students helping each other with natural learning and meaning-based beliefs.

In summary, our results seem to show that teachers' beliefs and writing instruction practices combine multidimensional aspects, applying instructional procedures that combine code-based and meaning-based writing practices. This combined approach, balanced with respect to explicit, systematic teaching of skills and holistic

reading and writing experiences, is in line with results of former studies that also report that these two approaches may not be polarised or contradictory.

Our results also seem to confirm the existence of relationships between beliefs and practices with regard to teaching written language, contradicting some international studies that showed inconsistency between teachers' beliefs and practices (e.g. Vaughn, Moody, and Shumm 1998). In early education in Portugal the external contexts' constraints, as for example external evaluations that could interfere with teachers' practices, are less likely to play an important role.

This study has implications for further research. Providing support to the relation between teachers' beliefs and writing instruction practices we can aim in future studies to understand which beliefs and practices are associated with better student outcomes in literacy.

This study has also implication for teacher training. Teacher training programmes must lead teachers to challenge their initial beliefs and explore alternative views on teaching and learning. In order to change, teachers must become aware of their beliefs because these beliefs act as filters in the learning process. As new concepts and ideas are introduced, teachers evaluate them in terms of compatibility with previous beliefs. If the new ideas are not compatible with their previous beliefs, the ideas are resisted or rejected and training programmes may lose strength and fail to achieve the desirable outcomes. Therefore, it is important that teachers have the opportunity to express their ideas about teaching and learning, to focus and clarify their thoughts and to review their personal beliefs underlying their assumptions about classroom pedagogies.

The limitations on our study may be linked to the data collection instrument. Inasmuch as this was a self-reporting questionnaire, it may be that phenomena such as social desirability and extreme response contributed to a distortion of the results.

In future research it would be important to use other ways of analysing teachers' beliefs, such as dilemmas and discussion groups. It would be also interesting to evaluate the impact that different practices have on student learning. It would be useful to carry out classroom observations in order to better characterise teachers' practices.

### Notes on contributors

Sérgio Gaitas has a Phd in Educational Psychology and is a collaborator at the Research Unit on Cognitive, Developmental and Educational Psychology (UIPCDE) of ISPA-IU. His main scientific area of research is the literacy acquisition process.

Margarida Alves Martins is full professor of Educational Psychology at ISPA-IU and head of the Research Unit on Cognitive, Developmental and Educational Psychology (UIPCDE) of ISPA-IU. Her main scientific area of research is the literacy acquisition process. She has published several articles about the importance of invented spelling programmes in kindergarten, namely in the *Journal of Writing Research*, *Applied Psycholinguistics*, *Reading and Writing*, *L1- Educational Studies in Language and Literature*, *Learning and Instruction*, *Educational Psychology* and *Reading Research Quarterly*.

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**Appendix 1. Extracted factors, factor loadings, number of items, explained variance and Cronbach's alpha for the teachers' beliefs dimension**

	Factor	
	1	2
In order to improve writing, it is important that planning strategies emerge from regular text work (19)	.89	
Written language conventions will gradually be learned by practising written language expression (15)	.88	
Interaction writing, in pairs or small groups, is essential for students, through mutual help, to exceed certain obstacles to writing and be able to write better and better (11)	.85	
It is important to encourage students to correct and modify their drafts until they reach the final version of the writings (23)	.85	
Learning to revise their written texts individually, in pairs or in small groups, is very important to improving students' writing (13)	.84	
The successive stages that students pass through until they reach the final product of their writing are very important to learning how to write well (3)	.81	
It is a good practice to let students write freely without worrying whether all their writing is immediately correct (5)	.73	
An environment where real written materials, including students' own productions, circulate facilitates the development of written expression without the constant need for formal instruction (9)	.71	
Students should choose their own writing topics (21)	.67	
In a writing session, instead of telling students how words are written, the teacher should encourage them to try to do it alone (7)	.66	
Instead of specific lessons on grammar, it is better to teach it when the need emerges from students' own writing (20)	.62	
Formal and systematic instruction about writing is essential to ensuring the proper development of all the skills needed in order to write (16)		.84
Before beginning a written expression activity, the teacher should prepare students to write correctly (10)		.81
For students to learn how to write correctly it is important for the teacher to individually correct their writings (18)		.81
In a writing session it is important for the teacher to explain to students how to write the words correctly (14)		.77
In order to write a good text it is essential to first copy letters and syllables (4)		.76
Before beginning a written expression activity, students must learn the conventions applicable to written language (22)		.74
Specific grammar classes are necessary in order to write correctly (12)		.73
Teachers must tell students what writing topics they should write (1)		.73
Because it allows greater concentration, individual writing is the best way to develop writing skills (6)		.62
In order to improve children's writing it is important to teach them strategies for planning their texts (2)		.53
Number of items	11	10
% of variance explained	43.3	17.5
Cronbach's alpha	.94	.92

**Appendix 2. Extracted factors, factor loadings, number of items, explained variance and Cronbach's alpha for the teachers' classroom organisation dimension**

	Factor		
	1	2	3
For text revision purposes, produces works with peers or with small groups of students (6)	.84		
Organises and plans writing work with students in pairs or small groups (4)	.81		
Proposes that students autonomously carry out a peer review of the texts they produce (15)	.79		
Proposes that students write in pairs (with different levels of competence) (12)	.79		
Proposes different writing activities, depending on the projects that students are involved in (5)	.52		
Proposes writing topics for students' texts (7)		.75	
Organises and plans written work in such a way as to teach how to write individually (8)		.68	
Proposes that students revise their texts individually (19)		.63	
Individually supports students in the production of their texts (11)		.62	
Individually works with students to revise the texts they produce (3)		.54	
Asks students to write texts on topics of their choice (14)		.51	
With the participation of students, collectively revises their texts to improve their productions (10)			.79
With the active and constant participation of students, organises and plans written work with the whole classroom as a group (17)			.77
Organises and plans written work with the classroom group (1)			.74
Proposes that students write texts in the classroom (20)			.72
In order to facilitate and save time, organises and plans written work with all the classroom as a group, assuming classroom control (13)			.52
Number of items	5	6	5
% of variance explained	28.4	12.9	11.3
Cronbach's alpha	.88	.73	.80