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van Drie, J.; Janssen, T.; Groenendijk, T.

DOI

[10.1515/eujal-2017-0009](https://doi.org/10.1515/eujal-2017-0009)

Publication date

2017

Document Version

Final published version

Published in

European Journal of Applied Linguistics

License

Other

[Link to publication](#)

Citation for published version (APA):

van Drie, J., Janssen, T., & Groenendijk, T. (2017). Improving writing in social studies through professional development: Effects on teachers' beliefs, classroom practice and students' writing. *European Journal of Applied Linguistics*, 5(2), 273-308. <https://doi.org/10.1515/eujal-2017-0009>

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Jannet van Drie*, Tanja Janssen and Talita Groenendijk

Improving writing in social studies through professional development: Effects on teachers' beliefs, classroom practice and students' writing

<https://doi.org/10.1515/eujal-2017-0009>

Abstract: Although academic literacy is an important goal in secondary education, many students struggle with it, particularly with disciplinary writing. There is a need for a closer integration of writing with instruction in subject areas. We designed and implemented a practice-based professional development program aimed at improving teachers' ability to teach writing within social studies. We distilled five design principles from meta-analyses of effective writing instruction, which teachers (twelve subject- and Dutch Language teachers) used to design lessons in their own classes. Effects of the program on teachers' beliefs about writing instruction were measured with a questionnaire. Although no changes in beliefs were found, teachers indicated in a learner report that they had learned a lot about integrating writing in their lessons. After six months teachers reported that they felt more able to use the design principles and still used them in their lessons. Three interventions are described in more detail in this paper. Effects on students' writing and knowledge of writing were measured using pre- and post-writing-tasks. Results showed a significant positive effect for the writing-instruction groups. We conclude that the professional development program enabled teachers to teach disciplinary writing within social studies and to improve students' writing as well.

Keywords: academic writing, writing in the disciplines, social studies, practice-based professional development

***Corresponding author: Jannet van Drie**, Research Institute of Child Development and Education, University of Amsterdam, Nieuwe Achtergracht 127, 1018 WS Amsterdam, E-Mail: J.P.vanDrie@uva.nl

Tanja Janssen, Research Institute of Child Development and Education, University of Amsterdam, Nieuwe Achtergracht 127, 1018 WS Amsterdam, E-Mail: T.M.Janssen@uva.nl

Talita Groenendijk, Research Institute of Child Development and Education, University of Amsterdam, Nieuwe Achtergracht 127, 1018 WS Amsterdam, E-Mail: t.groenendijk@uva.nl

1 Introduction

Writing and learning to write are of paramount importance in secondary education. Not only is writing a tool for recording and sharing information, it is also an important instrument for learning, as writing about material read or presented in class may enhance students' learning about content, and at the same time familiarize them with discipline-specific ways of writing (Bangert-Drowns et al. 2004; Klein and Boscolo 2016).

However, many students struggle with writing. In recent years, teachers and researchers complained about first year students' lack of writing skill in Dutch higher education (Bonset 2010; Kuiken and Van Kalsbeek 2014; Van Eerden and Van Es 2014). According to the critics students' texts suffer from flaws with regard to spelling, style, structure and use of jargon. Students often do not differentiate between main and side issues, and/or simply copy-paste information from sources. Moreover, students' sense of self-efficacy is low; they often do not feel adequately prepared for writing in academic genres when they enter higher education (Kramer and Van Kruiningen 2015). All in all, it appears that the minimum standards for writing are not met at the end of Dutch secondary school (Expert Group Learning Trajectories 2009).

This problem is not unique for the Netherlands. In the United States, for instance, 20 % of the students in Grades 8 and 12 scored below the basic level on the writing portion of the National Assessment of Educational Progress (National Center for Education Statistics 2012). And a large-scale assessment in Germany on language competencies found that the texts of one-third of the students in Grade 9 were below standard (Klieme 2006).

One possible explanation is that writing is not taught adequately in secondary schools. The pervasive perception is that writing is a discipline-neutral, all-purpose ability, and that the teaching of writing belongs solely to the literacy classes (cf. Moje 2008; Mottart et al. 2009). However, writing is not discipline-neutral; each school subject has its' own preferred forms of discourse, its' own rhetorical demands and ways of reasoning, specific to the given discipline. Therefore, teachers in the content areas would do well to teach students their discipline specific writing requirements and types of writing.

In practice, however, little attention is paid to writing in the disciplines. Subject teachers usually confine themselves to providing some directions for the structure and layout of writing products, and pay little or no attention to the writing processes involved: generating ideas, organizing, revising and so on (De Oliveira 2011; Holdinga 2013; McCarthy Young and Leinhardt, 1998; Mottart et al. 2009). Nor is much attention given to specific characteristics of genres, goal and audience awareness, or language use (Van der Leeuw and Meestringa 2011).

Subject teachers hesitate to integrate literacy elements into their lessons, as they believe it is time-consuming and their main focus is on covering content, because extended writing tasks are not included in Dutch national exams for the (social) sciences, in contrast to the Anglo-Saxon tradition. Moreover, subject teachers may feel ill-equipped to teach writing. Teaching disciplinary writing requires, for example, knowledge of appropriate ways to present ideas in a text, and of instructional strategies to teach disciplinary writing, topics which are not part of pre-service teacher education in the Netherlands. Furthermore, textbooks for school subjects rarely provide support for teaching discipline-specific writing. Writing in the disciplines, then, is an important focus for professional development.

In this article we report the outcomes of a professional development program aimed at improving subject teachers' abilities to teach writing within social studies. We will describe the rationale behind the program and its' effects on teachers' beliefs and practices, and on students' writing. Furthermore, we will describe how writing was integrated in content lessons for three subjects and the effects of these lessons on students' writing.

1.1 Writing in social studies

Social studies study human beings in their surrounding world; the world as it was in the past and as it is in the present, in their own country and in others. They study complex processes and phenomena that can be described, explained, compared, and evaluated with the use of domain-specific concepts. These concepts are often difficult to understand, as they are abstract or used differently in everyday language (i.e., 'market' in economics, 'scale' in geography). In most schools in the Netherlands subjects as history, geography, and economics are taught as separate subjects. So, when using the term social studies, we refer to the distinct school subjects of history, geography, civics, economics, philosophy, and the arts.

Writing is considered essential to learn the substantive and procedural forms of knowledge of a specific discipline (Monte-Sano 2010). Disciplinary learning can be considered a form of critical literacy as it stresses how knowledge is produced in the disciplines (Moje 2008), by being active producers of that knowledge through writing.

When writing in social studies students face various difficulties as they have to combine their content knowledge and disciplinary reasoning abilities with their knowledge of how to present their ideas in discipline-specific forms of text. Studies in history, for example, show that students tend to list information instead of making an argument and supporting it with critically examined evidence (Leinhardt 2000; McCarty Young and Leinhardt 1998). Students tend to

engage in ‘knowledge telling’ instead of ‘knowledge transforming’ (Bereiter and Scardamalia 1987).

In Writing in the Disciplines (WID) the emphasis is on introducing students to a disciplinary community, where they are to learn the discourse of that community and become familiar with its preferred genres, reasoning structures, and types of arguments. Science education, for instance, not only strives to inform students about the ‘laws of science’ but also to teach them to communicate about science, and to participate in the societal debate on science related issues (Yore et al. 2003). In other words, a geography student must learn to write like a geographer, a history student like a historian, and so on.

Although many agree on the importance of learning to write in the disciplines, Moje (2008) concludes that thus far the development of integrated secondary literacy programs has not been very successful, because too little attention has been paid to the question what exactly constitutes literacy practices within the specific disciplines and how these interrelate. Although research has been done on writing in history (Coffin 2006; De La Paz and Felton 2010; Monte-Sano 2010; Van Drie et al. 2014), research on writing in other social studies subject-areas is limited. Still, there is evidence that integrating writing and domain-specific reasoning approaches can be effective for disciplinary writing and reasoning. Studies showed positive effects on students’ writing for combined historical reasoning and writing instruction (De La Paz 2005; De La Paz and Felton 2010; Van Drie et al. 2015).

Writers use different genre structures to organize relations between text components, and thereby among knowledge elements, which may result in different kinds of learning (Klein 1999). Several researchers have described the advantages of a genre-based approach for learning to write and writing to learn (Klein, 1999; Martin et al. 1987; Martin 2009; Rose 2009). In this approach, the concept of genre can be roughly defined as the way in which texts are organized to achieve their communicative purpose. Texts with the same purpose will have more or less similar linguistic features and structure. In learning to write, students must acquire knowledge about linguistic features of genres, and to apply this knowledge in their writing.

Genres that are prominent in social studies include explanation, compare-and-contrast, and argumentation. Composing an *explanation* could be an effective task for supporting students’ understanding and reasoning in the domain of social studies. The rhetorical aim is to inform readers about and give them insight into causes and effects of a particular social (historic or geographic) phenomenon. Previous research indicated that composing explanations has beneficial effects on students’ learning in science (Chambliss et al. 2003; Klein 2004).

In *compare-and-contrast* texts, differences and similarities between two or more objects or phenomena are described on several dimensions. The task usual-

ly involves writing from two or more source texts. Wong et al. (1997) and Kirkpatrick and Klein (2009) developed interventions to improve the quality of students' compare-and-contrast texts; both found positive effects on text quality.

Argumentation, finally, is an essential skill in almost every school subject. The purpose of argumentative texts is to persuade the reader, by presenting claims and evidence, considering opposing positions, and providing counter-arguments. By generating and evaluating arguments, students may change their understanding and deepen their insight into concepts. Several interventions to improve students' argumentative texts were found to positively influence students' learning as well as the quality of their writing (De la Paz and Felton 2010; Midgette et al. 2008; Nussbaum and Schraw 2007).

1.2 Effective writing instruction

What does good writing instruction entail? In the past decades several meta-analyses of writing intervention studies have provided indications of effective practices for learning-to-write (Hillocks, 1986; Graham and Perin 2007) as well as writing-to-learn (Bangert-Drowns et al. 2004; Graham and Hebert 2011). We wish to highlight five instructional approaches from these meta-analyses which proved effective for helping adolescent students to write well and/or to use writing as a learning tool: writing strategy instruction, study of model texts, prewriting activities, collaborative writing, and the use of authentic writing tasks.

Writing strategy instruction involves the explicit and systematic teaching of strategies for planning, revising, and editing texts. The writing process is divided into smaller steps, to diminish the writer's cognitive load and to optimize his or her control over the writing process. The writing strategies may include general processes, such as brainstorming, or genre-specific strategies, for instance, specific steps for writing a persuasive text. Mnemonics are used to help students memorize the steps they have to carry out during writing, or recall the elements that their texts should contain (cf. the TREE strategy: Topic sentence, Reasons, Explain each reason, and Ending; Harris and Graham 2009).

The instructional approach consists of six stages: develop and activate knowledge, discuss the strategy, model it, memorize it, support it, and finally independent performance (Harris and Graham 2009). Modelling the strategy is a distinctive and effective element of strategy instruction (Fidalgo et al. 2015). During modelling, students can observe either an expert writer (usually the teacher) or fellow students at work.

In their meta-analysis Graham and Perin (2007) found large positive effects of writing strategy instruction on the quality of adolescent students' writing. Bene-

ficial effects of writing strategy instruction on learning have also been demonstrated in several disciplinary fields, such as literature (Lewis and Ferretti 2011), and history (De la Paz and Felton 2010).

Studying text models is a product-oriented, reading-then-writing approach to the teaching of writing. It involves students analyzing examples of a particular type of text and then attempting to emulate the critical elements of these examples in their own writing. The assumption is that students learn criteria for judging writing through studying text examples, and learn to apply these criteria to their own texts. Results for the study of models are mixed (Hillocks 1986), or positive but small (Graham and Perin 2007). However, Janssen and Overmaat (1990) found large effects for the study of models on the quality of Grade 10 students' persuasive essays. The study of models was found to be more effective than a process-oriented approach.

Prewriting activities are activities prior to writing the text itself, such as free writing, group discussions, reading topic-related material, or using a concept map or table to organize ideas. These activities can diminish the writer's cognitive load during writing. In their meta-analysis Graham and Perin (2007) found a small positive impact of such activities on writing quality. Kirkpatrick and Klein (2009) found a large effect of teaching students to organize information from sources in a table on the quality of students' compare-and-contrast essays.

Collaborative writing refers to all kinds of arrangements where students help each other with (aspects of) their writing. Students work together to plan, draft and/or revise their compositions, for instance, by providing peer feedback on each other's texts. Graham and Perin (2007) found strong effects of collaborative writing activities on the quality of students' texts. The effect of collaborative writing on learning about socio-scientific issues was studied by Felton et al. (2009). They found that joint deliberation followed by writing was significantly more effective on learning than individual writing.

Authentic tasks emphasize that writing is a form of communication. To foster students' communicative awareness, teachers should provide writing tasks in which students write with a real purpose in a real (or semi-real) context for a real (or at least imagined) audience of readers. Readers must be involved in the communication process, during as well as after writing. Several studies indicated that such an approach may have beneficial effects on the quality of students' writing (Evers-Vermeul and Van den Bergh 2009; Rijlaarsdam et al. 2009).

Although a variety of effective writing practices have been identified in research, this knowledge generally does not reach teachers in the social studies at secondary level, at least not in the Netherlands. One way to acquaint teachers with effective writing practices and to stimulate them to implement these practices in their content lessons is practice-based professional development.

1.3 Effective professionalization

Professional development programs (PD) aim to increase teachers' knowledge and skills and/or changes their beliefs, leading to improved instruction or classroom practices that foster students' learning (Desimone 2009). In order to study the effects of PD, Desimone (2009) proposed a conceptual framework: (1) teachers first experience effective PD, (2) this leads to an increase of teachers' knowledge and skills and/or changes in their beliefs, (3) resulting in improved instruction or classroom practices, and (4) increased student learning. Especially the effect of PD on student learning has been less investigated (cf. Desimone 2009; Guskey 2013). Recently, positive effects have been found for PD-programs aimed at improving writing instruction, including effects on students' writing performances (cf. Harris et al. 2012; McKeown et al. 2016). However, these studies were focused on primary school teachers. Effects of PD-programs on disciplinary writing for subject teachers in secondary education have hardly been investigated.

Studies of professional development identified five core features of successful, high-quality PD: (1) a focus on subject matter content, based on theory, and on how students learn that content; (2) opportunities for teachers' active learning, for instance by inquiry, discussion, practice, or observation of good practices; (3) alignment with teachers' own goals, their goals for students, but also with the school context; (4) co-operation or exchange between teachers, preferably of the same school, and (5) sufficient time for teachers to integrate their new knowledge into their classroom practices (Desimone 2009; Garet et al. 2001; Van Veen et al. 2010). In addition, individual coaching of teachers has been recommended, to encourage a sustained implementation of new teaching practices (Kretlow and Bartholomew 2010; McKeown et al. 2016). Finally, Harris et al. (2012) advised to use materials that are identical to those used in the classroom and to provide feedback on teachers' performance. However, these features of PD do not guarantee success. In a recent review Kennedy (2016) found for several characteristics both positive and negative outcomes, suggesting that it is not the characteristics per se that lead to positive outcomes, but how they function in the specific context.

In writing intervention research, teachers most often implement lessons and materials designed by researchers, or researchers implement the writing intervention themselves (Koster et al. 2015). To stimulate sustainable change in teachers' teaching practices, a more powerful approach might be to ask teachers to design lessons themselves based on specified design principles. In this way they can adapt the intervention to their specific teaching and school context and to their needs. Creating a 'community of learners' (Brown and Campione 1994), in which researchers and teachers work together, is a fruitful way of working with such an approach (Toorenaar and Rijlaarsdam 2012).

1.4 Aims and research questions

The first aim of this study was to develop and implement a practice-based professional development program intended for social studies teachers who wish to improve the quality of their secondary school students' writing. Secondly, we wanted to get insight into the effects of the program on teachers' beliefs, learning experiences, and classroom practices with regards to writing instruction. We examined whether the PD-program enabled teachers to develop lessons using five design principles, derived from writing intervention research: writing strategy instruction, studying text models, prewriting activities, collaborative writing and authentic tasks (see Section 1.2). Lastly, we were interested in the effects of these lessons on students' writing performance and knowledge of writing. Figure 1 depicts the main variables in our study, and how they are related. The figure is based on the conceptual framework for studying effects of professional development, proposed by Desimone (2009).

The research questions were:

1. What are the effects of the PD-program on teachers' beliefs in the domain of writing instruction? What did teachers learn?
2. What are the effects of the PD-program on teachers' classroom practices?
3. What are the effects of writing lessons designed by the teachers as part of the PD-program on students' (a) writing performance, and (b) knowledge of writing?

Figure 1: Main variables and their relations

2 Method

The professional development program we designed aimed to increase teachers' knowledge about effective writing instruction and to help them to implement that knowledge in their own (social sciences) classroom practices. We investigated the effects of our PD by measuring (changes in) teachers' beliefs, efficacy in teaching writing, their learning experiences from the PD and (changes in) classroom practice. Both pre- and post measures were used. Furthermore, we measured students' writing performance and knowledge of writing, using pre- and post tests. When a control class was available, we compared the experimental group to the control group, to gain more robust findings.

2.1 Participants

Twelve teachers of six secondary schools spread across the Netherlands, participated in the program. The teachers taught the following school subjects: geography, economics, philosophy, history, the arts, civics, and language arts. They were all experienced teachers, with an academic degree (four women, eight men). They participated voluntarily, however to enhance interaction and learning between the teachers and to create a shared responsibility for following this program we ensured that two teachers from each school participated (see Section 1.3). Furthermore, we encouraged the participation of a social studies teacher and a language arts teacher from the same school, as writing is a central part of Dutch language education. However, this was not always possible. Schools were asked to agree with the teachers' participation in this program, to provide them with time to participate and to support activities to implement project findings.

In sum, ten classes participated in the writing intervention (247 students) in two of the highest tracks of Dutch secondary education: higher general education and pre-university education. Students' grade level varied from Grade 7 to Grade 12. Students in these grades are between 12 and 18 years old. Five teachers also had a control class (in sum 102 students). Parental consent was obtained for all students who participated in this study. In section 3.3 we will report the outcomes of three of these interventions.

2.2 Professional development program

The PD was implemented during one school year (2014–2015) and consisted of five three and half hour meetings and one meeting at the end of the program. The

meetings were scheduled once a month, between September and January, and teachers implemented their lessons from January to May.

The program focused on five design principles for effective writing instruction (see Section 1.2): writing strategy instruction, studying text models, prewriting, collaborative writing, and authentic tasks. These principles were explained and illustrated with examples by the researchers during the meetings. We discussed whether and how the principles could be used in the various subjects and contexts, in an attempt to bridge the gap between theory and practice. The focus was on three text genres often used in social studies: explanation, compare-and-contrast, and argumentation (see Section 1.1). In addition, we addressed topics such as how to assess students' texts. An overview of the program is provided in Appendix 1.

From the third meeting onwards teachers worked on the design of their own writing intervention. First they identified what the focus of their lessons would be, based on writing related 'problems' they had experienced in their classes. The teachers designed a series of lessons to address these 'problems', based on one or more of the design principles. In this phase, teachers (both from the social-sciences and language-arts) and researchers worked in a 'community of learners', each contributing their own specific expertise while discussing and providing feedback on each other's designs. Some teachers chose to work in teams and designed one intervention collaboratively. All in all, nine lesson units were developed.

In the design of our PD-program, several characteristics of effective PD (see section 1.3) become visible: a focus on content and how students learn this (domain-specific writing); content based on theory (the design-principles for effective writing); opportunities for active learning; alignment with teachers' beliefs and context (designing lessons for their own classes); and collective participation (with teachers from other subject-matters including language arts and researchers specialized in writing and domain-specific learning).

2.3 Instruments and analyses

2.3.1 Teacher outcomes

We measured (changes in) teachers' beliefs, efficacy in teaching writing, their learning experiences from the PD and (changes in) classroom practice using several self-report instruments. All in all, teachers were asked to fill in six questionnaires, at pretest and posttest, and to write a short reflection and a learner report at posttest only.

Teachers' beliefs and efficacy. Both teachers' beliefs about writing and writing instruction and their self-efficacy were measured using various existing and validated questionnaires: the Writing Beliefs Inventory (White and Bruning 2005), the Writing Orientation Scale (Graham et al. 2001), the Teacher Efficacy Scale for Writing (Gibson and Dembo 1984), and a questionnaire measuring teachers' efficacy in providing high quality instruction (Rietdijk et al. submitted). The questionnaires were translated in Dutch and tested by Rietdijk et al. (submitted), and slightly adapted to the purpose of our study (see for examples of items and the reliability of scales: Appendix 2). Every teacher filled in the beliefs- and efficacy-questionnaires at the beginning and after the professional development program. We used GLM analyses (repeated measures) with teachers' scores on the questionnaire scales as dependent variables and measurement moment (pretest/posttest) as within-subjects factor to check for differences.

Teachers' learning experiences. To gain insight in teachers' learning experiences, all teachers filled in a questionnaire with open ended questions about their experiences with the PD-program and what they had learned from it, after the program ended. Item examples are: "What did you gain from participating in this project?", and "What elements of the program did you appreciate most?". Teachers' answers were analyzed for the number of times particular learning experiences and elements of the program were mentioned.

Classroom practices. To gain insight into whether teachers' instructional practices had changed as a result of the PD-program, we asked teachers to fill in a questionnaire at the beginning and after the PD-program, asking them how often they implemented three aspects of high quality instruction: teaching learning and thinking strategies, differentiating, and promoting active learning. The questionnaire was based on Rietvelt et al. (submitted), and contained 31 items to be answered on a five point scale (1 = never, 5 = always). The reliability of the three scales was satisfactory (Cronbach's alpha .77 – .93; see also Appendix 2). For the analyses GLM analyses (repeated measures) were used, with teachers' scores on the three scales (teaching strategies, differentiating, and promoting active learning) as dependent variables, and moment of measurement (pre/posttest) as within-subjects factor.

In addition, each teacher wrote a short reflection on the implementation of their intervention. Furthermore, they filled in a short questionnaire six months after the program ended. They were asked to indicate in retrospect how often they used the design principles before the program started, and to indicate to what extent they still used the five design principles, six months after the program ended (3-points scale: never, sometimes, often; Cronbach's alpha use before .46, use after six months .68). They were asked to do the same for their perceived abilities in using the design principles in their own practice (3-points scale: not,

to some extent, good; Cronbach's alpha use before .62, use after six months .59). Data were analyzed using paired sample t-tests.

2.3.2 Student outcomes

Writing performance. To measure improvement in the quality of students' writing a writing task was administered at pretest and posttest. These tasks were adapted to the subject, level and genre chosen by the teacher. The pre- and post-tasks for each class were similar, although the content differed. Topics were chosen that were part of the curriculum at the time the test was administered, to ensure that a lack of content-knowledge did not influence the results. The tasks are described in Section 3.

The quality of students' texts was assessed using a rubric that contained three main criteria: Genre-specific writing quality, General writing quality, and Domain-specific quality. Genre-specific writing quality contained sub criteria for the introduction, the middle and the closing of the text (maximum score 14). A different rubric was developed for each genre. General writing quality encompassed the sub criteria audience-orientation, coherence, language use and spelling (maximum score 18). And lastly domain-specific quality referred to the adequate use of subject-specific concepts and content (maximum score 12).

Teachers were trained to use this rubric, and then scored their own students' texts. To check the interrater reliability, 78 student texts on philosophy, history and geography were rated by an independent second rater (one of the authors). Texts were rated on the criteria for genre and for general writing (6 criteria); domain-specific criteria were not included as teachers have more expertise in that area. Correlations between raters over the six criteria (Spearman's R) were acceptable, ranging from .68 to .83 ($p < .01$), depending on the school subject.

For the two interventions (history and philosophy) with a control group, univariate analyses with pretest scores as co-variate were used, for the other intervention (geography) paired samples t-tests were used to evaluate changes in students' writing performance due to the intervention.

Knowledge of writing. To measure (changes in) students' knowledge of writing a writing task was used at pre- and posttest, based on Schoonen and de Gloppe (1996), which asked students to write a short text (email) to advise a friend how to write a text for that specific subject. The task was adapted for each school subject and for each text genre (i.e., how to write a comparison for geography, or an argumentation for history). The texts were analyzed for the number and content of students' recommendations. Two main categories of writing knowledge were distinguished: knowledge of the writing product or the writing process. Furthermore,

it was established whether the recommendations were related to the school-subject and the text-genre. The recommendation ‘You should back your claim with arguments from historical sources.’ was, for example, coded as: writing product, genre-specific (argumentation) and subject-specific (history), and ‘First, make a list of the information you want to write about.’ was coded as: writing process.

Interrater agreement was calculated between the first author and a research assistant on about 30 % of the letters of advice, equally spread over each group (project, condition, pre or post measurement) and chosen randomly within each group. Agreement was high (Cohens’ Kappa varying between .92 and 1.00). Data were analyzed using GLM (repeated measures), with students’ mean scores on the types of advice as dependent variables, and measurement moment (pre/post) as the within-subjects factor. In case of a control group, condition (experimental/control) was added as the between-subjects factor.

3 Results

Following our research questions we will first report on the effects of the PD-program on teachers’ beliefs and learning experiences, and next on the effects on teachers’ classroom practices. To answer the third research question on effects on students’ outcomes we will describe three cases: teacher interventions for geography, history and philosophy. These three interventions differ with respect to school-subject, text-genre taught, school year and level of students, as well as collaboration between social studies and Dutch Language teachers, and thus represent the broad array of interventions that were developed and implemented by participants of the PD-program.

3.1 Teachers’ beliefs and learning experiences

The first research question concerned the effects of the PD-program on teachers’ beliefs in the domain of writing instruction and teachers’ learning experiences. In Table 1 we present the mean scores on the writing beliefs questionnaires, at pretest and posttest. It shows that the teachers were inclined to view writing as a transaction and/or a way of learning, rather than as a means of transmitting expert knowledge. In general they favored the view that the teaching of writing must focus on explicit instruction, more than on correctness of forms or natural learning.

Although the teachers appear to score somewhat higher on most beliefs variables at posttest, GLM analyses (repeated measures) showed that the differences between pretest and posttest were not significant at $p < .05$ level.

Table 1: Mean scores and standard deviations on teacher-beliefs questionnaire at pre- and posttest ($N=12$)

	Pretest	Posttest
	<i>M (SD)</i>	<i>M (SD)</i>
Writing as transmission	2.4 (.50)	2.6 (.24)
Writing as transaction	3.5 (.50)	3.5 (.47)
Writing as testing	3.1 (.40)	3.2 (.46)
Writing as learning	4.1 (.34)	4.0 (.44)
Correct writing	2.9 (.30)	2.9 (.52)
Explicit instruction	3.9 (.42)	4.0 (.35)
Natural learning	3.3 (.62)	3.5 (.45)

Note: All scales on a five-point scale (1= totally disagree, 5 = totally agree).

Outcomes on self-efficacy in teaching writing are presented in Table 2. Teachers' self-efficacy was on average quite high, both at pretest and posttest. However, they considered themselves less competent in differentiating, that is in adapting their lessons to students' different ability levels. Again, no significant differences were found between pretest and posttest (GLM analyses, repeated measures, $p > .05$).

Table 2: Mean scores and standard deviations on self-efficacy questionnaire at pretest and posttest ($N=12$)

	Pretest	Posttest
	<i>M (SD)</i>	<i>M (SD)</i>
Efficacy in teaching writing	3.4 (.38)	3.5 (.36)
Efficacy in teaching strategies	3.5 (.45)	3.5 (.77)
Efficacy in differentiating	2.8 (.43)	2.9 (.38)
Efficacy in promoting active learning	3.7 (.29)	3.8 (.52)

Note. All scales on a five-point scale (1 = I am not good at this, 5 = I am very good at this)

With regard to their learning experiences, teachers indicated that they learned a lot from the PD-program. When asked what they learned, teachers mentioned

tools and learning activities to integrate writing instruction in their lessons most often (11 times). They also indicated that they had learned about the importance of collaboration between language and social studies teachers (4 times), the role of text-genres (3 times), the importance of planning in writing (1 time), and how to evaluate students’ texts (1 time). They appreciated that many clear examples of the design principles were presented and discussed during the training and that the design principles were evidence-based. They also appreciated the discussion with the other teachers as they brought in both a language and domain specific perspective and the constructive feedback on the lessons they designed.

3.2 Classroom practices

What were the effects of the PD-program on teachers’ classroom practices? Table 3 shows how often teachers reported implementing three elements of high quality instruction in their classroom: teaching learning and thinking strategies, differentiating according to students’ achievement levels and promoting active learning. At pretest the teachers indicated they implemented these practices ‘sometimes’ in their lessons. At posttest they scored somewhat higher on all three scales than at pretest. However, this trend was not significant ($p > .05$).

Table 3: Mean scores and standard deviations for frequency of implementing elements of high quality instruction at pretest and posttest ($N=12$)

	Pretest	Posttest
	<i>M (SD)</i>	<i>M (SD)</i>
Frequency teaching strategies	3.2 (.82)	3.4 (.82)
Frequency differentiating	2.6 (.72)	2.8 (.47)
Frequency promoting active learning	3.5 (.55)	3.7 (.37)

Note: Scores on a 5-pointscale: 1 = never, 2 = seldom, 3 = sometimes, 4 = often, 5 = always.

Six months after the PD-program had ended teachers were asked to indicate how often they used the design principles before the program and now. We asked about modelling the writing process for students as a separate item, as teachers occasionally included modelling as an element in the lessons they designed, but not as part of teaching writing strategies. The outcomes (see Table 4) show an increased use of the design principles six months after the program, especially for modelling writing and prewriting. A paired samples t-test on the total scores

showed a significant difference between the scores before and after the program ($t(11) = -5.904$; $p = .000$), indicating an increased use of the design principles after the program.

The outcomes for the teachers' perceived ability to teach writing in their lessons (see Table 4) show higher scores 'after six months', especially for teaching writing strategies and using prewriting activities. A paired samples t-test indicated a significant difference between the total scores prior to the project and after the project ($t(11) = -6.760$; $p = .000$). Teachers thus felt more able to teach the design principles after the program than before.

Table 4: Mean scores and standard deviations for teachers' self-reported use of instructional elements and perceived ability before and six months after the program ($N=12$)

	Use before <i>M (SD)</i>	Use after six months <i>M (SD)</i>	Ability before <i>M (SD)</i>	Ability after six months <i>M (SD)</i>
Teaching writing strategies	1.83 (.72)	2.08 (.51)	1.83 (.83)	2.41 (.51)
Modelling writing	1.36 (.50)	2.00 (.77)	1.67 (.78)	2.33 (.65)
Collaborative writing	1.90 (.70)	2.18 (.60)	2.08 (.67)	2.25 (.62)
Prewriting activities	1.67 (.65)	2.08 (.79)	1.58 (.67)	2.33 (.65)
Studying text models	1.58 (.67)	2.00 (.60)	2.00 (.85)	2.41 (.66)
Authentic writing tasks	1.83 (.72)	2.25 (.62)	1.83 (.72)	2.25 (.75)
<i>Total</i>	<i>1.69 (.43)</i>	<i>2.10 (.39)</i>	<i>1.83 (.44)</i>	<i>2.33 (.37)</i>

Note. All scales on a three-point scale (use: 1 = never, 2 = sometimes, 3 = often; perceived ability 1 = not able, 2 = to some extent, 3 = good)

3.3 Three writing interventions and their effects on student learning

To answer our research question regarding the effects of the designed interventions on student outcomes we will describe three cases: writing compare-contrast texts in geography (teacher Lea), argumentative texts in history (teacher Rick), and argumentative texts in philosophy (teachers Karel and Bert) (names are changed for privacy reasons). Each case starts with a brief description of the lessons, after which the outcomes on the quality of students' writing and knowledge of writing are presented.

3.3.1 Writing intervention in Geography

Intervention. The focus of Lea's lessons was to improve the way her 7th grade students (30 students, higher general and pre-university education) wrote geographical comparisons between countries. Her experience was that students' texts contained incomplete sentences and that they faced difficulties when systematically comparing two countries. They often tended to describe characteristics of one country and forgot to mention characteristics of the other country. Lea used several of our design principles to design two lessons to address this problem.

The first lesson started with an instruction on differences between European countries with respect to landscape, climate, culture and demography. Next, the focus was on how to make a systematic comparison. First, Lea asked students' to write down as many differences as they could between two items she showed them (a bottle of soft drink and a bottle of whiskey), which were subsequently discussed with the whole class. One of the outcomes was that dimensions or categories are needed on which the two products can be compared (i.e., color, material, size). Lea linked this to comparing two countries, which is also done using dimensions such as landscape, climate and culture. She *modelled* comparing two countries, using a scheme to order information systematically; the dimensions in the rows, the countries in the columns (*prewriting activities*). Next, the steps were discussed with the students, after which they wrote down the following steps: read the assignment; reformulate for yourself what is asked in this assignment; read the sources; gather information; order information in a scheme; write down a first draft of the text; reread your text and rewrite it. At the end of the lesson Lea asked her students to give examples of connectives that could be used in a comparison, which she wrote down on the blackboard.

In the next lesson, students wrote a comparison between two countries in pairs, using the steps and scheme from lesson 1 (*prewriting activities* and *collaborative writing*). Next, another pair assessed the text and marked shortcomings: language and comparing issues were marked in green; content in red. Furthermore, they wrote down tips to improve the text (*collaborative writing*). The original pairs then studied the markings and tips of their peers and noted tips and suggestions for themselves about what to do the next time they made a geographical comparison.

Results. A pre-posttest design was used to test the effects of Lea's intervention. To test the effects on text quality, students were asked to write a letter to a family, to advise them which country they should go on holiday to. They had to compare two countries in their letter, and different countries were used for the pre- and post-writing tasks. Results are presented in Table 5. Paired samples t-tests indicated that the quality of the texts was significantly higher at the posttest compared to the pretest for genre-specific ($t(28) = -5.431$; $p = .000$) and general writing ($t(28) =$

-4.597; $p = .000$). No significant differences were found for domain-specific aspects. Appendix 3 contains an example of a pretest and posttest written by one of the students.

Table 5: Mean scores and standard deviations on writing performance at pretest and posttest

	Pretest $N = 29$ $M (SD)$	Posttest $N = 29$ $M (SD)$
Genre-specific*	5.58 (1.32)	7.66 (2.06)
General writing*	5.93 (2.05)	8.52 (2.75)
Domain-specific	4.41 (1.52)	4.35 (1.42)

* Sign. difference between pre- and posttest

Table 6 shows the mean number of tips or recommendations per student on how to write a geographical comparison, at pre- and posttest. Students provided about four tips on average in their pretest letter, and about six in their posttest letter. Repeated measures showed that this difference is significant, $F(1,28) = 4.907$; $p = .035$, indicating an increase in students' knowledge about writing.

Students also produced significantly more domain-specific tips with respect to geography-specific subject matter, and more product- and process-oriented tips at posttest than at pretest, respectively $F(1,27) = 22.022$; $p < .001$, $F(1,27) = 5.518$; $p = .026$, and $F(1,27) = 7.299$; $p = .012$. No significant differences were found for genre-specific tips.

Table 6: Mean number of tips given by students in their letter of advice, at pretest and posttest

	Pretest $N = 30$ $M (SD)$	Posttest $N = 30$ $M (SD)$
Total number of tips*	4.27 (2.70)	5.55 (2.31)
Domain-specific*	.17 (.38)	1.79 (1.84)
Genre-specific	1.59 (1.30)	1.97 (1.61)
Type of advice		
-product related*	1.14 (1.22)	2.17 (1.93)
-process related*	2.17 (1.85)	3.38 (1.68)

* Sign. difference between pre- and posttest

Teacher experiences. In her written reflection Lea indicated that overall she was satisfied with her lessons. The students told her that the lessons were interesting and related to what they had learned in Dutch Language classes, in particular the part about connectives. They found the prewriting scheme very useful. According to Lea, the class was actively involved in all activities. Lea indicated that although she felt somewhat insecure at the start of the project about teaching writing, this feeling disappeared during the program. She experienced the value of relating to knowledge learned in Dutch Language classes and ‘how easy it is to do something with language while teaching geography’. Moreover, she noticed clear improvements in the quality of her students’ writing. However, finding a balance between teaching geographical content and paying attention to language is a dilemma which Lea still needs to solve.

3.3.2 Writing intervention in history

Intervention. Historical empathy and using historical sources to substantiate one’s claims are important goals in history education. For several years Rick used a writing task when teaching his 8th grade students (higher general secondary education) about the Industrial Revolution and the social conditions in the Netherlands. In this task students took the perspective of a specific person of that time (i.e., a female worker, a pastor, a factory owner) and wrote a letter about their views on the social conditions to a committee investigating workers’ living and working conditions (a so-called empathy task, see de Leur et al. 2015). Rick noticed that, although his students were able to write from the chosen perspective, the texts were often badly structured and their argumentation fell short. Furthermore, students often just started writing instead of first thinking about what to write. To address these problems, Rick redesigned his lessons and added writing instruction related to this particular task. In addition, he asked the language arts teachers what the students already knew about writing argumentative texts and formal letters. It turned out that students knew little about these topics, so the language arts teacher then rearranged the curriculum and taught students’ how to write formal letters. These lessons included instruction about the demands of a formal letter, evaluating and rewriting a letter, and giving feedback on each other’s letters.

The intervention took five lessons. In the first lesson the task was introduced to the students. It was an semi-authentic task, as it was situated in a more or less realistic setting and the text’s goal and audience were clear (*authentic writing task*). Furthermore, students already had sufficient background knowledge about the Industrial Revolution. Next, the focus was on argumentation in history, which the teacher modelled and discussed with the students (*modelling*). Next, students

practiced this on a new question using a worksheet (*prewriting activities*). The second lesson focused on finding, selecting and ordering information from historical sources from a local archive. For this a scheme was used in which students could list the arguments and counterarguments they planned to use (*prewriting activities*). At the end of the lesson there was a short reflection on what went well and what was difficult. During the third lesson students could continue with this task and handed in their scheme at the end of the lesson. The teacher then checked the schemes and gave students feedback on them. Finally, lessons 4 and 5 were spent writing the final text.

Results. To test the effects of this intervention a pre-post quasi-experimental design was used ($N_{\text{exp}} 29$; $N_{\text{cont}} 28$). The control group (same year and level) received the same writing task about the Industrial Revolution and was also given five lessons to complete it, however they did not receive the instruction about historical argumentation and the schema for ordering arguments, nor did they receive the Dutch language lessons on writing a letter.

At pretest and posttest students wrote an argumentative letter from the perspective of a historical person. In the pretest-task they wrote a letter from the perspective of a person who fled to the Netherlands in the 17th century, and who wanted to convince his/her family to join them in the Netherlands. For the post-task the teacher selected three letters written during the intervention. Students were asked to write a response to one of these letters, from the perspective of a member of the committee.

Table 7 shows the mean scores and standard deviations. No difference between the conditions was found at pretest. Students in the experimental condition scored significantly higher at the post test compared to the control condition for genre-specific criteria ($F(1,47) = 28.14$; $p = .000$) and general writing criteria ($F(1,47) = 5.89$; $p = .019$), but not for domain-specific aspects of writing.

Table 7: Mean scores and standard deviations for writing performance at pretest and posttest

	Pretest		Posttest	
	<i>Experimental</i> <i>N = 27</i> <i>M (SD)</i>	<i>Control</i> <i>N = 25</i> <i>M (SD)</i>	<i>Experimental</i> <i>N = 27</i> <i>M (SD)</i>	<i>Control</i> <i>N = 27</i> <i>M (SD)</i>
Genre-specific*	6.41 (1.56)	6.44 (1.71)	9.37 (1.21)	7.33 (1.47)
General writing*	10.15 (2.46)	9.68 (2.01)	10.26 (1.72)	9.00 (1.73)
Domain-specific	7.26 (1.02)	7.00 (1.71)	6.74 (1.56)	6.52 (.94)

* Sign. difference between pre- and posttest

Table 8 shows the mean number of tips provided by students at pretest and posttest on how to write a historical argumentative text. A GLM (repeated measures) analysis showed that the mean number of tips differed significantly between conditions, $F(1,46) = 4.805$; $p = .033$. Overall, the experimental group produced more tips at posttest than the control group.

There was also an effect of condition on the nature of students' tips. Compared to the control group, the tips of the experimental group at posttest more often concerned the genre of an argumentative text, $F(1,46) = 16.145$; $p < .001$, and the writing product, $F(1,46) = 6.491$; $p = .014$. Both groups produced significantly more domain-specific, historical content tips at posttest. However, there was no difference between conditions in this respect.

Table 8: Mean number of tips given by students in their letter of advice, per condition, at pretest and posttest

	Pretest		Posttest	
	<i>Experimental</i> <i>N</i> = 25 <i>M</i> (<i>SD</i>)	<i>Control</i> <i>N</i> = 26 <i>M</i> (<i>SD</i>)	<i>Experimental</i> <i>N</i> = 25 <i>M</i> (<i>SD</i>)	<i>Control</i> <i>N</i> = 28 <i>M</i> (<i>SD</i>)
Number of tips*	4.80 (2.14)	5.15 (2.56)	4.80 (2.12)	4.00 (1.85)
Domain-specific	.04 (.20)	.16 (.43)	.28 (.46)	.25 (.59)
Genre-specific*	2.08 (1.44)	2.65 (1.77)	2.44 (1.69)	1.32 (1.12)
Type of advice				
-product related*	1.88 (1.67)	2.00 (1.27)	2.32 (1.68)	1.46 (1.53)
-process related	1.80 (1.32)	2.31 (2.06)	2.08 (1.41)	2.46 (1.45)

*Sign. difference between conditions

Teacher experiences. According to the teacher the students found it hard that they had to write so much; writing three texts (also pre and post) and a 500 word text in a relatively short period, proved a burden for these students. However, prewriting turned out to be effective for these students. It helped them to search and order information and to think about the text they wanted to write. The collaboration with the language arts teacher went well, and it made sense for the students to use what they learned in the language class in history. It turned out be easy to cross the borders between the subjects by attuning the curricula's and referring to each other's curriculum.

3.3.3 Writing intervention in philosophy

Intervention. Karel and Bert, teachers of philosophy and language arts respectively, decided to work together and design one intervention in which the lessons philosophy and language arts were both focused on teaching argumentative text writing to 11th grade students (pre-university level). Argumentation is taught in both school subjects, although from a different perspective. Teachers normally hardly refer to what students learn in the other subject about argumentation.

During the philosophy classes students had studied social and political theories from Plato to present times. The goal of the intervention was to prepare students to write an argumentative philosophical essay on this topic. First, students wrote an argumentative philosophical essay. This text was used as pretest, but also as input in one of the subsequent lessons. During the first lesson, philosophy teacher Karel modelled writing an argumentative text for philosophy (*modelling*). Students took notes and were given room to ask questions. In the next language lesson, students analyzed a philosophical text written by an expert (*studying text models*). Bert provided the students with several questions regarding the introduction, middle and closing of the text, with a particular focus on how the text was structured and the language used to structure it. During the class discussion the teacher constantly linked what this expert did to what students could do while writing their own text. In the third lesson (philosophy) students reviewed each other's texts, written at the start of the intervention, using a rubric, after which they discussed their findings (*collaborative writing*). During the next two lessons, students practiced what they had learned by writing an essay on a new topic and discussed the content of the texts in groups (*prewriting activities*). An additional goal for this particular lesson was to prepare students for an upcoming test.

Results. A pre-posttest quasi-experimental design was used to test the effects of the intervention on students' argumentative writing and knowledge of argumentative writing (Nexp 28 ; Ncont 11). At pretest students wrote an argumentative text about whether or not they agreed with the ideas of philosophers such as Hobbes, Locke and Rousseau, that in a natural state all people were equal and independent. They had to relate this to their view on human beings and the 'social contract'. At posttest students wrote an argumentative text on their ideas about the foundation of a just society, in relation to the ideas of two self-chosen philosophers.

Table 9 presents students' mean scores on the writing tasks. At pretest the control condition scored significantly higher on general writing ($F(1,34) = 8,327$; $p = .007$). The experimental group scored significantly higher at the posttest on general writing ($F(1,32) = 9,94$ $p=.004$), but not on the other criteria.

Table 9: Mean scores and standard deviations for writing performance, per condition, at pretest and posttest

	Pretest		Posttest	
	<i>Experimental</i> <i>N</i> = 26 <i>M</i> (<i>SD</i>)	<i>Control</i> <i>N</i> = 10 <i>M</i> (<i>SD</i>)	<i>Experimental</i> <i>N</i> = 26 <i>M</i> (<i>SD</i>)	<i>Control</i> <i>N</i> = 9 <i>M</i> (<i>SD</i>)
Genre-specific	8.42 (1.85)	8.60 (1.07)	9.19 (2.06)	8.56 (1.33)
General writing*	10.46 (2.08)	12.60 (1.71)	11.65 (2.24)	10.56 (1.59)
Domain-specific	6.84 (1.54)	7.50 (1.43)	7.42 (2.30)	8.22 (1.72)

* Sign. difference between pre- and posttest

Table 10 presents the mean number of tips students provided in their letters on how to write an argumentative text about a philosophical issue, as well as the nature of these tips, at pre- and posttest.

The two conditions differed significantly in the overall number of tips provided by students, $F(1,27) = 7.557$; $p = .011$. Students in the experimental group incorporated more tips on average in their letter at posttest than students in the control group. No significant differences between conditions were found for the nature of the tips.

Table 10: Mean number of tips given by students in their letter of advice, per condition, at pretest and posttest

	Pretest		Posttest	
	<i>Experimental</i> <i>N</i> = 26 <i>M</i> (<i>SD</i>)	<i>Control</i> <i>N</i> = 9 <i>M</i> (<i>SD</i>)	<i>Experimental</i> <i>N</i> = 22 <i>M</i> (<i>SD</i>)	<i>Control</i> <i>N</i> = 11 <i>M</i> (<i>SD</i>)
Number of tips*	8.31 (2.92)	9.22 (5.29)	9.59 (3.03)	7.18 (3.03)
Domain-specific	.46 (.76)	.56 (1.13)	.41 (.59)	.64 (.92)
Genre-specific	4.08 (2.49)	3.22 (2.39)	4.45 (2.02)	4.00 (1.95)
Type of advice				
-product related	6.19 (3.39)	5.56 (4.30)	8.41 (3.91)	5.27 (2.19)
-process related	1.42 (1.55)	1.44 (1.88)	1.00 (1.48)	1.91 (1.92)

*Sign. difference between conditions

Teacher experiences. Karel and Bert were positive about their lessons in their self-reflection. Students were quite interested during the modelling phase as it gave

them an idea how to go about writing an argumentation. Studying an expert text also worked well, although it was hard to select a suitable text with the right level of difficulty for the students. The teachers were also satisfied about the peer review assignment. Students enjoyed reading and reviewing each other's work and the rubric gave them guidance on what aspects to comment on. Lastly, Karel and Bert indicated that working together was very fruitful, as there was quite some overlap between their subjects language and philosophy. They concluded that the curricula of both subjects should be better aligned to each other.

4 Conclusions and discussion

To improve teachers' abilities to teach writing within the domain of social studies we designed and implemented a practice-based professional development program and investigated its' effects on teachers' beliefs, efficacy, learning experiences and teaching practices, as well as on the quality of students' writing and their knowledge of writing. Central to this PD-program was the idea that teachers themselves designed lessons for their classes, based on five design principles of evidence-based approaches to writing education that were derived from the research literature: writing strategy instruction, studying text models, prewriting, collaborative writing, and authentic tasks.

Our first interest was in the effects of our program on teachers' beliefs, efficacy and learning experiences. The beliefs- and efficacy-questionnaires did not show differences in teachers' beliefs, which might be explained by the small number of participants ($N=12$) and the low reliability of some of the scales. An additional explanation might be that the participating teachers were not an average group of teachers, but teachers already interested in domain-specific writing, which motivated them to take part in this program. The high scores on self-efficacy at pretest support this assumption. Additional instruments, however, provided more information on what teachers learned during the program. In the learner reports teachers indicated that they learned much from the program. More specifically, the design principles and the examples discussed during the program, provided the teachers with practical suggestions for integrating writing instruction in their lessons. This changed their teaching practices, as was shown by their answers to the delayed questionnaire, six months after the program. Teachers reported that they used the design principles significantly more often in their lessons, and that they felt more able to do so than at the start of the program. So, with regard to our second question it appears that the PD-program changed teachers' classroom practices. Finally, the three cases we presented provided specific examples of the writing interventions

designed and the various ways in which the design principles were incorporated in them.

Our second interest was in the effects of teachers' writing interventions on students' text quality and knowledge of writing, for which we examined three cases: for geography, history and philosophy. For geography, paired samples *t*-tests showed an improvement on students' text-quality, and an increase in their knowledge of writing. For history, a comparison with a control group also showed an increase in students' knowledge of writing for the experimental group. Furthermore, we found that the experimental condition scored significantly higher for genre-specific and general writing criteria, but not for domain-specific quality (e.g. historical knowledge, use of concepts). This is not surprising, given that the control group had spent the same amount of time on domain-specific aspects. The increased attention for writing in the lessons was not detrimental for domain-specific knowledge, as the experimental group did not score lower on this aspect than the control group did. For philosophy, the significantly higher scores of the control group on text quality disappeared at posttest, indicating that the experimental group improved most. In addition, the experimental group provided significantly more writing tips compared to the control group, indicating increased knowledge of writing. Still, we have to be careful when interpreting these outcomes, as the groups in this intervention were small, especially the control group ($N = 11$). In conclusion, this study shows that training teachers to integrate writing in their subject-specific lessons can be effective as it increases their ability to do so, and can result in improvements in students' writing and increase their knowledge of writing.

The present study has several limitations. We assessed a package of professional development, not its specific features (Wayne et al. 2008). As we did not systematically compare our PD-program with other programs, we cannot pinpoint which of the elements of the PD was most powerful. Randomized controlled trials could provide more information on this. However, as argued by Van Veen et al. (2012), small-scale studies, as ours, are needed to gain insight in how things work and to provide assumptions that can be tested in large-scale studies. Another limitation of our study is that we relied quite heavily on questionnaires. Drawbacks of questionnaires are that they provide only quantitative data and self-reported data that could be biased. To overcome this, other types of data, such as in-depth interviews and classroom observations could have provided additional information. In our study, the learner reports provided additional information to the questionnaires, however these are also self-reported data. Based on a careful analysis of different research methods, Desimone (2009) concludes – that although questionnaires are often criticized – researchers should choose their instruments based on their quality and appropriateness to answers particular

research questions. Furthermore, she argues that ‘Teacher surveys that ask behavioral and descriptive questions, not evaluative, questions about teachers’ professional development experiences and teaching have been shown to have good validity and reliability’ (p. 190). In this particular study we made use of already existing and validated instruments that enabled us to answer our research questions within the limited time of this project (16 months).

Although we did not investigate which of the characteristics of our PD-program was most powerful, based on the teachers’ evaluative responses we do have indications of its strong points. First, teachers designed lessons based on design principles for their own students and teaching context, instead of implementing researcher-designed lessons (cf. Koster et al., 2015). This contributed to a feeling of ownership and the possibility to adapt the principles to the specific teaching context. Second, by comparing the outcomes of the lessons to a control group, teachers could experience how the new approach worked and differed from their ordinary approach. This might have motivated them to keep using the design principles. Furthermore, the ‘community of learners’ approach was appreciated: working with a relatively small group of twelve teachers and the diversity of expertise that was brought in. This laid ground for constructive discussions and feedback, in which both a language and domain-specific perspective were included. Future research should test whether these strong points are indeed powerful ingredients for PD. Randomized controlled trials could be used to compare the effects of specific aspects of the PD, while holding the content of the PD constant (cf. Wayne et al. 2008). This research should also incorporate effects on student learning, preferably in an (quasi)-experimental setting, as it provides more information on the effects of the intervention. Still, the PD-program could be further improved by adding individual coaching and feedback on the lessons conducted followed by another round of designing lessons, as suggested by McKeown et al. (2016). The additional effect of individual coaching could also be investigated in future research. Furthermore, as suggested by Wayne and colleagues (2008), it could be investigated whether the same results can be found when the program is delivered by other trainers.

From the literature it was already known that the design principles can be a powerful means to improve students’ writing (Graham and Perin, 2007). This study indicates that these principles can also be powerful for teaching domain-specific or disciplinary writing. It shows that the principles enabled teachers to design their own writing instruction within social studies and that the teachers incorporated these design principles in their teaching practices. These findings thus add to the ecological validity of these principles.

The question remains, however, how to integrate writing instruction in the curriculum of the different subjects, in such a way that it is in balance with

domain-specific aspects. A genre-based approach is a fruitful way to do so, as in the text genres domain-specific reasoning and writing come together, for example, causal reasoning in economics, arguing in philosophy or comparing in geography. Still, as text genres differ between school subjects, more needs to be known about the communalities and differences between genres in different disciplines or school subjects. This relates to Stevens and colleagues' (2005) point of comparable understanding across school subjects, by making similarities and differences between disciplinary aspects more explicit, for example, differences and similarities between arguing in history and philosophy. This knowledge is needed not only for teachers, but should also be explained to students so their understanding of the specifics of a particular discipline increases.

In order to improve domain specific writing, subject-matter teachers and first language teachers should work more closely together. A drawback of the compartmentalization in school-subjects is that teachers are not aware of each other's curriculum and students think school-subjects are not related, which hampers transfer between subjects. School organizations should therefore enable teachers to work together more closely, and to design learning trajectories in collaboration.

Acknowledgements: This study was supported by the Netherlands Organisation for Scientific Research (grant number 405-14–505). We are grateful to Arie Westerhout, Douwe Dijksterhuis, Evah den Boer, Frans Diederer, Gianna Troiani, Henri Boer, Jan de Kort, Johan van Driel, Joop van der Kuip, Lieke Holdinga, Roderik Egberink, and Safrien van de Leemkolk and their students for participating in our study. Furthermore, we would like to thank Daphne van Weijen for her feedback on this manuscript.

References

- Bangert-Drowns, Robert. L., Marlene M. Hurley & Barbara Wilkinson. 2004. The effects of school-based writing to learn interventions on academic achievement: A meta-analysis. *Review of Educational Research*, 74(1). 29–58. doi: 10.3102/00346543074001029
- Bereiter Carl & Marlene Scardamelia. 1987. *The psychology of written composition*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Bonset, Helge. 2010. Nederlands in voortgezet en hoger onderwijs: Hoe sluit dat aan? [Dutch in secondary and higher education: How does it correspond?] *Levende Talen Magazine*, 3, 16–20.
- Brown, Ann L. & Joseph C. Campione. 1994. Guided discovery in a community of learners. In Kate McGilly (ed.). *Integrating cognitive theory and classroom practice: Classroom lessons*, 229–270. Cambridge, MA: MIT Press/Bradford Books.

- Chambliss, Marilyn J., Lea A. Christenson & Carolyn Parker. 2003. Fourth graders composing scientific explanations about the effects of pollutants: Writing to understand. *Written Communication*, 20(4). 426–454. doi: 10.1177/0741088303260504
- Coffin, Caroline. 2006. *Historical discourse: The language of time, cause and evaluation*. New York: Continuum.
- De La Paz, Susan. 2005. Effects of historical reasoning instruction and writing strategy mastery in culturally and academically diverse middle school classrooms. *Journal of Educational Psychology*, 97(2). 139–156.
- De La Paz, Susan & Mark F. Felton. 2010. Reading and writing from multiple source documents in history: Effects of strategy instruction with low to average high school writers. *Contemporary Educational Psychology*, 35. 174–192. doi: 10.1016/j.cedpsych.2010.03.001
- De Leur, Tessa, Carla van Boxtel & Arie Wilschut. 2015. 'Just imagine...': Students' perspectives on empathy tasks in secondary history education. *International Journal of Historical Learning, Teaching and Research*, 13(1). 69–84.
- De Oliveira, Luciana. C. 2011. *Knowing and writing school history. The language of students' expository writing and teachers' expectations*. Charlotte, NC: Information Age Publishing.
- Desimone, Laura M. 2009. Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3). 181–199. doi:10.3102/0013189X08331140
- Evers-Vermeul, Jacqueline & Huub van den Bergh. 2009. Schrijf voor de lezer. Over effecten van lezersgericht (her)schrijven op de kwaliteit van instructieve teksten. [Write for the reader. On the effects of reader oriented (re)writing on the quality of instructive texts]. *Levende Talen Tijdschrift*, 10. 14–23.
- Expert Group Learning Trajectories. 2009. *Referentiekader taal en rekenen: De referentieniveaus*. [Reference framework language and arithmetic: The referential levels]. Enschede: Ministerie van OCW.
- Felton, Mark F., Mercé Garcia-Mila & Sandra Gilaber. 2009. Deliberation versus dispute: The impact of argumentative discourse goals on learning and reasoning in the science classroom. *Informal Logic*, 29(4). 417–446.
- Fidalgo, Raquel, Mark Torrance, Gert Rijlaarsdam, Huub van den Bergh, & M. Lourdes Álvarez. 2015. Strategy-focused writing instruction: Just observing and reflecting on a model benefits 6th grade students. *Contemporary Educational Psychology*, 41, 37–50.
- Garet, Michael S., Andrew C. Porter, Laura Desimone, Beatrice F. Birman, & Kwang Suk Yoon. 2001. What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915–945. doi: 10.3102/00028312038004915
- Gibson, Sherri & Myron Dembo. 1984. Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76. 569–582. doi:10.1037/0022-0663.76.4.569
- Graham, Steve, Karen Harris, Barbara Fink & Charles MacArthur. 2001. Teacher efficacy in writing: A construct validation with primary grade teachers. *Scientific Studies of Reading*, 5. 177–202.
- Graham, Steve & Michael Hebert. 2011. Writing to read: A meta-analysis of the impact of writing and writing instruction on reading. *Harvard Educational Review*, 81(4). 710–744. doi: 10.17763/haer.81.4.t2k0m13756113566.
- Graham, Steve & Dolores Perin. 2007. A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology*, 99(3). 445–476. doi:10.1037/0022-0663.99.3.445.

- Guskey, Thomas R. 2003. What makes professional development effective? *Phi Delta Kappan International*, 84(10). 748–750.
- Harris, Karen R. & Steve Graham. 2009. Self-regulated strategy development in writing: Premises, evolution, and the future. *British Journal of Educational Psychology Monograph Series II*, (6). 113–135. doi: 10.1348/978185409X422542.
- Harris, Karen R., Kathleen Lane, Steve Graham, Steven Driscoll, Karen N. Sandmel, Mary Brindle, & Christopher Schatschneider. 2012. Practice-based professional development for strategies instruction in writing: A randomized controlled study. *Journal of Teacher Education*, 63. 103–119.
- Hillocks, George. 1986. *Research on written composition: New directions for teaching*. Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills, National Institute of Education.
- Holdinga, Lieke. 2013. *Zaakvakdocenten en hun visie(s) op het ontwikkelen van de schrijfvaardigheid van havo/vwo-bovenbouwleerlingen*. [Social studies teachers and their view(s) on developing students' writing skills in upper secondary education]. Amsterdam: Universiteit van Amsterdam; Scriptie in het kader van de masteropleiding Academisch Meesterschap.
- Janssen, Tanja & Marianne Overmaat. 1990. *Tekstopbouw en selvaardigheid. Een onderzoek naar de effecten van twee experimentele methoden voor tekstopbouw*. [Text structure and writing; A study of the effects of two experimental methods to teach text structure]. Amsterdam/Lisse: Swets & Zeitlinger, Forum 8.
- Kennedy, Mary M. 2016. How does professional development improve teaching? Review of Educational Research. Advance online publication. doi: 10.3102/0034654315626800
- Kirkpatrick, Lori C. & Perry D. Klein. 2009. Planning text structure as a way to improve students' writing from sources in the compare-contrast genre. *Learning and Instruction*, 19(4). 309–321. doi: 10.1016/j.learninstruc.2008.06.001.
- Klein, Perry D. 1999. Reopening inquiry into cognitive processes in writing-to-learn. *Educational Psychology Review*, 11(3). 203–270.
- Klein, Perry D. 2004. Constructing scientific explanations through writing. *Instructional Science*, 32(3). 191–231. doi:10.1023/B:TRUC.0000024189.74263.bd.
- Klein, Perry D. & Pietro Boscolo. 2016. Trends in Research on Writing as a Learning Activity. *Journal of Writing Research*, 7(3). 311–350. doi: 10.17239/jowr-2016.07.3.01.
- Klieme, Eckhard. 2006. *Zusammenfassung zentraler Ergebnisse der DESI-Studie*. [Summary of the main results of the DESI study]. Retrieved from http://www.kmk.org/fileadmin/Dateien/veroeffentlichungen_beschluesse/2006/2006_03_01-DESI-Ausgewaehlte-Ergebnisse.pdf (accessed 14 December 2016).
- Koster, Monica, Elena Tribushinina, Peter F. de Jong & Huub van den Bergh. 2015. Teaching children to write: A meta-analysis of writing intervention research. *Journal of Writing Research*, 7(2). 300–324. doi: 10.17239/jowr-2015.07.02.2
- Kramer, Femke & Jacqueline van Kruiningen. 2015. Moeilijker, langer, serieuzer. [More difficult, longer, more serious]. *Tijdschrift voor Taalbeheersing*, 37(2). 187–216.
- Kretlow, Allison G. & Christina C. Bartholomew. 2010. Using coaching to improve the fidelity of evidence-based practices: A review of studies. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 33(4). 279–299. doi: 10.1177/0888406410371643
- Kuiken, Folkert & Alice van Kalsbeek. 2014. De ontwikkeling van taalbeleid binnen Geesteswetenschappen aan de Universiteit van Amsterdam. [The development of language policy in the Humanities]. *Dutch Journal of Applied Linguistics*, 3(2). 154–169.

- Leinhardt, Gea. 2000. Lessons on teaching and learning in history from Pauls' pen. In Peter N. Stearns, Peter Seixas & Sam Wineburg (eds.), *Knowing, teaching, and learning history. National and international perspectives*, 223–245. New York: New York University Press.
- Lewis, William E. & Ralph P. Ferretti. 2011. Topoi and literary interpretation: The effects of a critical reading and writing intervention on high school students' analytic literary essays. *Contemporary Educational Psychology*, 36(4). 334–354. <http://dx.doi.org/10.1080/10573560903120656>
- Martin, Jim R., Frances Christie & Joan Rothery. 1987. Social processes in education: A reply to Sawyer and Watson (and others). In I. Reid (Ed.), *The place of genre in learning: Current debates*. Geelong: Deaking University Press.
- Martin, Jim R.. 2009. Genre and language learning: A social semiotic perspective. *Linguistics and Education*, 20(1), 10–21. doi: 10.1016/j.linged.2009.01.003
- McCarthy Young, Kathleen & Gaea Leinhardt. 1998. Writing from primary document: A way of knowing in History. *Written Communication* 15(1). 25–68. doi:10.1177/0741088398015001002
- McKeown, Debra, Mary Brindle, Karen R. Harris, Steve Graham, Alyson A. Collins & Megan Brown. 2016. Illuminating growth and struggles using mixed methods: Practice-based professional development and coaching for differentiating SRSD instruction in writing. *Reading and Writing*, 29(6). 1105–1140. doi 10.1007/s11145-016-9627-y
- Midgette, Ekaterina, Priti Haria & Charles MacArthur. 2008. The effects of content and audience awareness goals for revision on the persuasive essays of fifth- and eighth-grade students. *Reading and Writing*, 21(1–2). 131–151. doi:10.1007/s11145-007-9067–9.
- Moje, Elisabeth. 2008. Foregrounding the disciplines in secondary literacy teaching and learning: A call for change. *Journal of Adolescent and Adult Literacy*, 52(2). 96–107. doi 10.1598/JAAL.52.2.1
- Monte-Sano, Chauncey. 2010. Disciplinary literacy in history: An exploration of the historical nature of adolescents' writing. *Journal of the Learning Sciences*, 19. 539–568. doi 10.1080/10508406.2010.481014
- Mottart, André, Peter Van Brabant & Piet-Hein van de Ven. 2009. Schrijven bij diverse schoolvakken. Een verkenning. [Writing in the disciplines; An exploration]. *Levende Talen Tijdschrift*, 10(4). 14–20.
- National Center for Education Statistics. (2012). *The Nation's Report Card: Writing 2011*. Washington D.C.: Institute of Education Sciences, U.S. Department of Education.
- Nussbaum, E. Michael & Gregory Schraw. 2007. Promoting argument-counterargument integration in students' writing. *The Journal of Experimental Education*, 76(1). 59–92. doi: 10.3200/JEXE.76.1.59–92.
- Rietdijk, Saskia, Tanja Janssen, Daphne van Weijen, Huub van den Bergh & Gert Rijlaarsdam. submitted. Teaching writing in primary education: Classroom practice, time, teachers' beliefs and skills.
- Rose, David. 2009. Writing as linguistic mastery: The development of genre-based literacy pedagogy. In Roger Beard, Debra Myhill, Jeni Riley & Martin Nystrand (Eds.), *The SAGE handbook of writing development* (pp. 151–166). London: SAGE. doi:10.1016/j.jslw.2011.03.001
- Rijlaarsdam, Gert, Martine Braaksma, Michel Couzijn, Tanja Janssen, Marleen Kieft, Mariet Raedts, Elke van Steendam, Anne Toorenaar & Huub van den Bergh. 2009. The role of readers in writing development: Writing students bringing their texts to the test. In Roger

- Beard, Debra Myhill, Jeni Riley & Martin Nystrand (eds.), *The SAGE handbook of writing development*, 436–452. London: SAGE Publications.
- Schoonen, Rob & Kees de Glopper. 1996. Writing performance and knowledge about writing. In Gert Rijlaarsdam, Huub van den Bergh & Michel Couzijn (eds.), *Theories, models & methodology in writing research*. 87–107. Amsterdam: Amsterdam University Press.
- Stevens, Reed, Sam Wineburg, Leslie R. Herrenkohl & Philip Bell. 2005. Comparative understanding of school subjects: Past, present, and future. *Review of Educational Research*, 75(2). 125–157.
- Toorenaar, Anne & Gert Rijlaarsdam. 2011. Instructional theory of Language Lessons. A design study to validate the communities of learners concept in the language curriculum. *L1-Educational Studies in Language and Literature*, 11. 57–89.
- van Eerden, Anouk & Mik van Es. 2014. *Meten en maximaliseren van basale schrijfvaardigheid bij eerstejaarsstudenten in het hoger beroepsonderwijs*. [Measuring and improving the basic writing skills of first year students in higher education]. [Doctoral thesis]. Groningen: Rijksuniversiteit Groningen.
- Van der Leeuw, Bart & Theun Meestringa. 2011. Eisen aan schrijfvaardigheid in de bovenbouw havo/vwo. [Writing requirements in the higher grades of secondary education]. *Levende Talen Tijdschrift*, 12(2). 14–24.
- Van Drie, Jannet, Carla van Boxtel & Martine Braaksma. 2014. Writing to engage students in historical reasoning. In Perry Klein, Pietro Boscolo, Lori Kirkpatrick & Carmen Gelati (eds.), *Writing as Learning Activity*, 94–119. Leiden: Koninklijke Brill NV. doi:10.1163/9789004265011_006
- Van Drie, Jannet, Martine Braaksma & Carla van Boxtel. 2015. Writing in History: Effects of writing instruction on historical reasoning and text quality. *Journal of Writing Research*, 7(1). 123–156. doi: 10.17239/jowr-2015.07.01.06
- Van Veen, Klaas, Rosanne Zwart & Jacobine Meirink. 2012. What makes teacher professional development effective? A literature review. In Mary Kooy & Klaas van Veen (eds.), *Teacher learning that matters: International perspectives*. 3–21. New York: Routledge.
- Wayne, Andrew J., Kwang Suk Yoo, Pei Zhu, Stephanie Cronen & Michael S. Garet. 2008. *Educational Researcher*, 37(8). 469–479. Doi: 10.3102/0013189X08327154
- White, Mary J. & Roger Bruning. 2005. Implicit writing beliefs and their relation to writing quality. *Contemporary Educational Psychology*, 30. 166–189. doi: 10.1016/j.cedpsych.2004.07.002
- Wong, Bernice Y.L., Deborah L. Butler, Sheryl A. Ficzere & Sonia Kuperis. 1997. Teaching adolescents with learning disabilities and low achievers to plan, write, and revise compare-and-contrast essays. *Learning Disabilities Research & Practice*, 12(1). 2–15.
- Yore, Larry, Gay L. Bisanz & Brian Hand. 2003. Examining the literacy component of science literacy: 25 years of language arts and science research. *International Journal of Science Education*, 25(6). 689–725.

Appendix 1. Overview of the Professional Development program

Meeting	Topic	Short description
1	Effective writing instruction	Introduction to the five design principles. Application of the design principles on a writing task teachers brought with them.
2	Genres in social studies	Comparison of writing tasks teachers brought with them. Introduction to characteristics of writing tasks, and genres in the social sciences. Example of addressing text genres in social studies (using a video-fragment)
3	Assessing text quality Designing lessons	Introduction to different ways of assessing text-quality. Assessment of different texts by teachers individually and whole-group discussion of outcomes. Discussion of first ideas for the intervention.
4	Examples of writing in various school subjects Designing lessons	Presentation of several examples of writing instruction in social studies (related to design principles). Feedback on and discussion of design of intervention lessons.
5	Use of rubric for assessing text quality Designing lessons	Training use of rubric. Feedback on and discussion of design of intervention lessons.

Appendix 2. Item examples and reliability of scales in the teacher questionnaires

Scale	Items	Item examples	Cronbach's alpha pretest	Cronbach's alpha posttest
<i>Beliefs about writing</i>				
Writing as transmission	6	The key to good writing is to report accurately on what experts think	.74	*
Writing as transaction	13	Writing helps me to understand the complexity of ideas.	.71	.76
<i>Beliefs about writing instruction</i>				
Correct writing	7	Students should be reminded to use correct spelling.	*	.65
Explicit instruction	4	It is important to teach students strategies for planning, checking and correcting their texts.	.58	*
Natural learning	6	Students gradually learn the requirements to which written texts should comply by writing and responding to other's texts.	.80	.60
Writing as testing	3	Writing assignments are mainly a way of testing.	*	*
Writing as learning	5	Writing can help to learn domain-specific content.	*	.62
<i>Self-efficacy beliefs</i>				
Efficacy in teaching writing	16	When students' writing improves greatly, it is usually because I have found a more effective teaching approach.	.73	.74
Efficacy in teaching strategies	7	Asking students to explain which writing strategy they use.	*	.90
Efficacy in differentiating	9	Adapting writing lessons to students' different ability levels.	.60	.57
Efficacy in promoting active learning	15	Asking questions that encourage students to think.	.51	.87

Scale	Items	Item examples	Cronbach's alpha pretest	Cronbach's alpha posttest
<i>Classroom practice</i>				
Teaching strategies	7	Frequency of asking students to explain which writing strategy they use.	.87	.93
Differentiating	9	Frequency of adapting writing lessons to students' different ability levels.	.85	.77
Promoting active learning	15	Frequency of asking questions that encourage students to think.	.85	.80
Use of design principles	6	How often did you use modelling writing before (now six months after) the PD.	*	.68
Ability in using design principals	6	?How able did you feel before the PD to teach students writing strategies?	.62	.59

Note: * = alpha < .50

Appendix 3. Example of a student text written at the pretest and posttest

Pretest

POPULATION SWEDEN: Sweden is sparsely populated. It has fewer inhabitants than Greece

POPULATION GREECE: Greece is a bit between sparse and densely populated. Greece has more inhabitants than Sweden.

CLIMATES SWEDEN: There is between 400–600 cm of precipitation and that is less than in Greece. Sweden has a continental climate.

CLIMATES GREECE: There is between 600–800 cm of precipitation and that is more than in Sweden. Greece has a Mediterranean climate.

CULTURE SWEDEN In Sweden there are especially many Protestants. Swedish is spoken most.

CULTURE GREECE: Their faith is mainly Eastern orthodox. Multiple languages are spoken in some parts.

NATURAL DISASTER/LANDSCAPE SWEDEN: Sweden has mountains and countryside along the coast.

NATURAL DISASTER/LANDSCAPE GREECE: It has many mountains and much less countryside than Sweden

Posttest

Hello Mr. and Mrs. Kruger,

I understand that you want to go on vacation and do not know which country is more suitable. Ireland and Italy are the two countries you are trying to choose between. I'll try to help you decide.

Ireland has fewer inhabitants than Italy so it will be slightly quieter there. If you prefer hustle and bustle then you'd better go to Italy.

Ireland has a maritime climate and there is a little more rain annually than in Italy. In Italy you have a Mediterranean climate and a transitional climate, so the climate can vary. Italy is usually warmer than Ireland so you can probably go to the beach and sunbathe there more often.

In both Ireland and Italy the majority of the population is Roman Catholic.

There are mountains both in Italy and in Ireland, so if you like mountains then both are suitable.

In Italy you will enjoy delicious Italian food, which the Italians are known for of course. In Ireland you won't encounter many famous dishes. You will mainly come across dishes that the Irish really like.

Italy is known as a holiday destination and will certainly be visited regularly by many tourists. If you do not like such hustle and bustle so much then you will enjoy the quiet Irish countryside more. It is still quite cold in Ireland in summer, so you will have to take your jackets and gloves with you. In Italy it can be bloody hot then, and you can wear short t-shirts and shorts.

The conclusion therefore is that if you love hot countries and warm beaches then you can better go to Italy. If you prefer cold, quiet and slightly greener countryside more, then you can best go to Ireland. I hope I have given you enough information about the 2 countries for your holiday. Good journey already!

Greetings NAME.