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Constructing desirable professional identities: Linguistic analysis of student teachers' reflection on project-based learning

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Under the framework of linguistic discourse analysis, the study sets to explore the specific lexicogrammatical choices through which student teachers construct their role and the challenges they faced during their teaching in their written reflections. The study draws on 40 graduate student teachers' reflective texts on project-based learning implementation during their practicum. By examining the grammatical means through which student teachers framed processes and participants and the semantic relations among them, the analysis foregrounds aspects of self-representation and the tensions faced in the construction of student teachers' desired professional identities within their assessed reflective writing.

KEYWORDS

identity, I-statement analysis, written reflection, student teacher, lexicogrammar

Introduction

Notwithstanding the complexity of the concept as well as persistent and recently emerging criticisms to the content and the role of reflection (Akbari, 2007; Beauchamp, 2015; McGarr et al., 2020), reflective practices in various formats have been well established as a core component of Teacher Education programs worldwide. As an ongoing process of professional development, interweaving between "theory" and "practice," reflection in Teacher Education is seen "as an intraformative process aimed at supporting the development of a teacher identity" (Graus et al., 2022, p. 1).

Research on how student teachers develop their professional identities through and within reflective practices has attracted a growing interest during the last decades (Beauchamp and Thomas, 2009; Graus et al., 2022). Under the framework of theorizing teacher identity as "being constructed, maintained, and negotiated primarily through discourse" (Varghese et al., 2005, p. 35), this strand of research focuses on the analysis of narratives and interviews (Alsup, 2006; Trent, 2010; Arvaja, 2016), dialogic interactions (Urzúa and Vásquez, 2008) and reflective journals (Graus et al., 2022) in order to explore aspects of the personal and the professional which are negotiated, shaped and reshaped in the development of student teachers' identities. However, the ways language-in-use, that is, specific lexicogrammatical choices, mediates in the construction of identities in student teachers' reflective texts, has been studied to a lesser extent (Wharton, 2012; Muchnik-Rozanov and Tsybulsky, 2019). In this sense, the present study is considered as an attempt to contribute some insights on how student teachers negotiate their emerging teacher identities by exploring the linguistic means they deploy in their reflective writing assignments on a project-based learning (PjBL) implementation during their practicum.

The approach adopted in the study adheres to the strand of discourse analysis rooted in linguistics, which is concerned with "the structure of language and how this structure functions to make meaning in specific contexts" (Gee, 2011, p. 8). We suggest that linguistic discourse analysis

can contribute to the exploration of reflective subjects' identities by tracing how future teachers manage their projected self through language, in an attempt to perform identities that are in line with the principles of the project method and with the expectations of the assessors. We further discuss some implications of the approach of analysis for research and practice in student teachers' reflection within their initial education.

The reflective assignment in teacher education

Reflection is a cyclical process (Rodgers, 2002; Lee, 2005), an integral part of the teacher's training and work, aiming at continuous professional development and improvement of teaching practice (Husu et al., 2008; Minott, 2008). In Teacher Education curricula, reflective writing assignments, often following the practicum experience, are considered part of student teachers' academic requirements in order to successfully accomplish their degree. Such reflective assignments have been characterized as "high stakes" (Ross, 2011), which by definition impose high burdens on student teachers. Although a detailed review of the issues and the challenges presented in the literature falls beyond the scope of the present study, two main points are to be mentioned, which we consider directly related to the present research: the hybrid nature of the genre of reflection and assessment issues.

Embedded in institutional settings, reflective assignments hybridize a number of different genres or "text-types" circulating in the academy, such as narrative recounts, descriptions, explanations and discussions (Ryan, 2011). Although they are considered more informal and situation-dependent, reflective assignments still retain many of the features of formal academic prose (Nesi and Gardner, 2012). Thus, this form of writing places particular demands on students because genre specifications (personal involvement, questioning, and self-criticism) run in contrast to the still dominant, prestigious genre of the academic essay (Creme, 2005; Wharton, 2012; Vassilaki, 2017). Students may resist such personal writing (Tummons, 2011), either because they may be unwilling to expose themselves, experiencing vulnerability (Tan, 2021), or they may feel uncomfortable with the writing conventions of foregrounding the "I" (Wharton, 2012) and unease to operate "outside an exacting but familiar academic context" (Nesi and Gardner, 2012, p. 250). Such tensions often remain unresolved, leading to "routinization [...] that undermines the notion of reflection as deep thinking" (Beauchamp, 2015, p. 127), and "unreflective reflection" (Alsup, 2006,

Assessment issues seem to further complicate students' disposition towards reflection as both a process and a product (Luk, 2008; Tan, 2021). The expectations of the institutional community are very likely to lead the individual to construct an identity that is positively inclined towards the requirements of the assessor (Boud, 2001; Wharton, 2012). This may turn reflection, a supposedly transformative and emancipatory process into a "display of conformity" (MacFarlane and Gourlay, 2009, p. 458) to dominant institutional or vocational discourses.

In order to reconcile such tensions, students often become strategic when they compose their reflective assignments (Ross, 2011, 2014), and resort to "impression management" tactics (Ball, 2000, as cited in McGarr et al., 2020, p. 903). An illustrative presentation of these strategies is provided by Thomas and Liu (2012). In analyzing student teachers' reflective E-portfolios, they identified a recurrent pattern in the content and the structure of the

reflective assignments they examined, which they refer to as "Sunshining": Student teachers attempt to showcase the best part of their teaching, to ameliorate problematic incidents, and to ultimately prove to their evaluators that they have "learnt their lesson." The process of Sunshining includes the sub-processes of "buzzwording," "blameshifting" and "downtoning." Blameshifting apparently refers to processes whereby "the 'reflecting' prospective teachers blame others for their mistakes even when they clearly feel guilty" (Thomas and Liu, 2012, p. 315), while downtoning is described as the tendency of student teachers to downplay the importance of unfortunate instances of their teaching.

An alternative proposal to confront such issues of honesty and authenticity in students' reflections comes from Ross (2014). She essentially suggests "to work with, rather than ignore, concepts of addressivity, dialogue and performance in high-stakes reflective practices" (p. 220). Informed by a Bakhtinian perspective on the dialogic nature of writing (see Lillis, 2003), Ross (2014) research provides evidence that student teachers do experience their reflective writing in terms of audiences and performance, "they are writing to be seen, to produce an image of themselves and to engage their audiences" (Ross, 2014, p. 231). Therefore, she proposes a reconceptualization of the notion of "authenticity" in reflection as more "an aesthetic than a narrative gesture" (Ross, 2014, p. 231). Such a conceptualization can then open up a creative, dialogical space wherein student teachers can perform identities, working with figuration and imagination and exploring various modalities of expression.

Acknowledgment of the performativity nature of student teachers' reflection signals a change of perspective in the way students compose their reflections and educators evaluate them. Instead of seeking for "honesty" and "authenticity," creativity and imagination could be sought for, in tune with a transformative reflective pedagogy, which would encourage students to negotiate their developing professional identities within a safe learning space (see Alsup, 2006; Creme, 2008; Vassilaki, 2017). Such a perspective could also inform research on student teachers' reflections and provide a framework towards an understanding and/or an interpretation of the identities they construe in their reflective texts.

Analyzing written reflections

While there is quite extensive research on analyzing reflections under various perspectives and with a multiplicity of purposes, in terms of the methods of analysis adopted, the vast majority of this research applies to the content (the "what") of the reflection. To our awareness, research on the language of reflective essays, i.e., "how" these texts, whether written or multimodal, are laid down and what particular linguistic/semiotic resources are exploited—is rather limited. However, the available studies on the language of reflection seem to provide noteworthy insights towards understanding and ultimately developing teachers' reflective practices.

Luk (2008) studied the schematic structures (macro-level) and the rhetorical and linguistic resources (micro-level) employed in six student teachers' reflective reports on their teaching practicum. On the micro-level, Luk identified certain linguistic elements such as linking devices, hedges and intensifiers, through which student teachers presented their reflections as a constant reviewing and transformative process. Such linguistic devices were successfully employed in high quality reflective texts. She cautiously concludes that raising reflective genre awareness

and developing reflective writing abilities in student teachers can possibly enhance high-quality reflective abilities.

Specific linguistic resources deployed by student teachers in their written reflections were also examined in a recent study by Muchnik-Rozanov and Tsybulsky (2019), with the ultimate aim to explore how language behavior is related to student teachers' professional growth and identity formation. The researchers draw on Systemic Functional Linguistics (SFL; Halliday and Matthiessen, 2004) to identify linguistic patterns of group- and self-focused narratives, verb phrases and expressions indicating future-oriented narratives, and "intensification markers" which denote emotionally loaded references, throughout science student teachers' reflective texts at two chronological points during an academic year. It is claimed that such a research approach to student teachers' reflective writing can trace aspects of their professional empowerment and identity development in the context of their practicum experience.

Within the SFL framework, an earlier study by Romero (2009) explored the autobiographies of three in-service teachers which were produced in the context of a continuing education program in order to enhance critical reflection. A small-scale analysis of processes and participants across important aspects in the teachers' identity formation highlighted how past learning experiences and influences shaped their professional selves and the ways they operated in their teaching.

The issue of how reflective subjects construct their identities in writing was explored in Wharton (2012) who analyzed postgraduate student teachers' reflective reports on a collaborative task. In her analysis, Wharton combined the transitivity framework of SFL and the I-statement analysis tool, initially proposed by Gee et al. (2001) and further elaborated in the work of Ushioda (2010) on language learners' reflections. I-statement analysis is a form of discourse analysis where different I-statements are categorized in terms of the type of predicate that accompanies "I" (Gee, 2011, p. 153) so as to examine "how people speak or write in the first person to describe their actions, feelings, abilities, goals and so on, and how they thus construct particular socially situated identities for themselves through language" (Ushioda, 2010, p. 46). In Wharton's (2012) study, the analysis of salient participants ("I" and "we"), salient processes and the semantic relations among them highlighted how student teachers projected an identity positively inclined towards the task and the group process. Difficulties and challenges which were faced during the process were downplayed by manipulating linguistic resources, through which writers constructed an identity in accordance with the expectations of the task and the demands of the institutional setting.

A common fundamental assumption of the aforementioned research studies is the constitutional role of language in identity shaping. To put it in Gee's (2011) words, "there are important connections among saying (informing), doing (action), and being (identity)" (p. 8). Examining the language that student teachers deploy in writing their reflections may provide researchers and educators with a more nuanced understanding of the challenges, the reservations, the options and the limitations student teachers face in their writing. In this vein, the present study was set to explore the linguistic means student teachers deploy in their reflective writing assignments on a project-based learning (PjBL) implementation during their practicum. Reflection on PjBL implementation presents an even greater research interest since PjBL is still considered as a non-mainstream teaching method—at least in the Greek Primary Education setting—and student teachers are more likely to be cautious and feel uneasy towards working within this framework (see Tsybulsky and Oz, 2019).

Methods

Purpose of the study

The overall aim of the study was to explore student teachers' attitudes towards the implementation of PjBL through a systematic analysis of their written reflections. More specifically, the analysis focuses on the linguistic choices through which student teachers construct their writer identities in order to investigate how they construe their role/position vis a vis the challenges they faced during their PjBL teaching. We particularly concentrate on the linguistic patterns through which participants and processes are represented in writing so as to explore whether student teachers enact identities as active agents/originators of a situation or, on the contrary, as passive recipients of problematic situations and difficulties which, in turn, are attributed to other participants or factors included in the teaching process. We ultimately seek to explore on the one hand, how student teachers perceive the implementation of PjBL and, on the other hand, what their linguistic choices suggest about the quality of their reflections.

Participants

In order to investigate the research questions, a discourse analysis was carried out on the reflective texts of 40 student teachers who had successfully completed the last semester of their four-year Bachelors' Degree in Primary Education at a university in Central Greece. During the last semester of their studies and in the context of the fourth component of their practicum in local Primary Schools, student teachers are required to design and implement a medium-scale PjBL unit, and to subsequently submit, among other things, a written reflection on the experience. In order to support student teachers in their reflections, prompts were provided along three axes (analysis and evaluation of student activities/actions, analysis and evaluation of instructional actions, and future applications). Two student cohorts (approximately 200 students) were informed about the research after the assessment of their portfolios, and 40 of them agreed to participate by providing consent to the use of their reflective texts for research purposes. Their written reflections on the PjBL implementation experience constituted the initial dataset of the study.

Analysis

The analysis was applied in four consecutive steps. Initially, the entire dataset was analyzed thematically and the following thematic categories emerged: (a) time, (b) student interest, (c) content understanding, (d) active student involvement, (e) teaching objectives, (f) use of tools and materials, (g) how to start the project, and (h) future applications. In the next step, tendencies manifested by student teachers in their responses were coded after the codification model introduced by Yesilbursa (2011). Fragments of texts that conveyed to the reader a positive perception of the thematic category under examination were categorized with a positive tendency and received the code R +. Statements that had a negative connotation and related to problematic aspects of the process were classified as reflection with a negative tendency and coded R – (e.g., "I would say

TABLE 1 Classification of semantic categories of verbs.

Semantic categories	Examples	
1. Need-obligation	have to, be obliged to, be forced to, need	
2. Sense	see, hear, be heard	
3. Report–ascertainment	find that, notice that, identify that	
4. Knowledge	acquire, learn, understand, know that	
5. Action	plan, study, help, work, examine, employ, lose	
6. Ability—capacity	manage, accomplish, achieve, can, be able to	
7. Expression—declaration	propose, say, announce, complain, express	
8. Limitation—difficulty	have difficulty, be confused, be distracted,	
9. Intention—expectation	want, ask, expect, refuse	
10. Previous experience	(not) be used to it	
11. Thought	think, remember, have reservations about	
12. Feelings	cheer, dislike, get excited, get tired, get bored	

TABLE 2 "Animate" subjects.

Categories of grammatical subjects	Number of instances	
First person singular ("I")	57	
First person plural ("we")	19	
Noun "the pupils"	92	
Noun "the teacher of the class"	2	

that the topic of this project did not initially excite the young pupils very much" 1).

At this phase of the analysis, a very positive attitude towards the implementation of PjBL was evident, with student teachers expressing positive judgements about both their personal action and the process in general in comparatively higher frequencies (see Kaldi and Zafeiri, 2022). Therefore, we were intrigued to further investigate the student teachers' reports of problematic points in the implementation of PjBL. Accordingly, student teachers' statements who were included in the category of reflection with negative tendency and were given the code R- were gathered together and analyzed in this study.

In the third stage, a linguistic analysis of the written statements coded R– was carried out at the sentence level. The analysis was informed by the I-statement analysis as proposed by Gee (2011, see also Gee et al., 2001) and further elaborated by Ushioda (2010), and included two sub-phases: first, the identification of the grammatical subjects of the sentences, which are either explicitly stated or implied, and second, the identification of the verbs or verbal expressions corresponding to these subjects. Verbs and verbal expressions were then grouped in wider

categories according to their meaning, as they emerged from the dataset. The I-statement analysis tool offers the flexibility to adjust descriptive statement categories "to accommodate the data in a meaningful way" (Ushioda, 2010, p. 52). The semantic categories of verbs in our data comprise a combination of the categories of Ushioda (2010) and a Greek Reference Grammar (Clairis and Babiniotis, 2011).

The analysis was performed manually since grammatical subjects in Greek are marked inflectionally by the endings of the verb and explicit use of personal pronouns is opted for in cases of contrast or emphasis. Verb categories that emerged from the analysis and indicative examples are presented in Table 1.

In the fourth and final stage of analysis, after identifying and collecting the grammatical subjects of the reflective statements coded R-, two broader categories were formed: the first one included animate subjects (e.g., I/we, the pupils, and the class teacher), the second one included the inanimate or otherwise impersonal nominal subjects (e.g., "the topic," "activities," "time," etc.). Each sentence was then analyzed in terms of the semantic correspondence between the grammatical subject and the verb or verbal expression in order to specify the semantic participants and the processes attributed to them. At this stage, the analysis drew on the Transitivity Framework of Systemic Functional Linguistics (Halliday, 1994; see also Romero, 2009; Wharton, 2012).

Therefore, the correspondence between the grammatical subjects and the semantic functions/processes attributed to them are examined so as to highlight and possibly interpret how student teachers perceive the role of the teacher, the role of the pupils and the overall process of PjBL implementation, as well as the reflective process as a whole.

Findings

The grammatical subjects, which were identified in the analysis of each individual sentence in the text fragments coded as R-, were categorized, as mentioned above, into two broader categories according to whether they denote animate beings (Table 2), or objects or concepts related to the implementation (inanimate subjects; Table 3).

Correspondences among the various subjects and the semantic verb categories found in the dataset are presented in Table 4.

The numbers in the cells represent the instances of subjects and verbs identified in our dataset. Frequencies were not calculated, because as Gee (2011, p. 154) underlines, this approach of discourse analysis "is not primarily about counting things," and numbers are rather guidelines to form certain hypotheses and possible interpretations. At first sight, the relative higher number of occurrences of the nominal phrase "the pupils" in the dataset of reflective statements with a negative tendency directed us to the formation of two alternative hypotheses: either student teachers managed their reflections in tune with the pupil-centered PjBL dimension, or they "blame-shifted" (Thomas and Liu, 2012) negative aspects of the implementation to other Agents and factors of the teaching process. A closer examination of the correspondences among grammatical subjects and verb categories would check these initial hypotheses.

First-person singular (I)

The main semantic categories associated with the grammatical subject "I" are that of Action and the Need/Obligation to act in a certain

¹ Reflective texts were originally written in Greek. The extracts presented in the paper have been translated by the authors.

TABLE 3 "Inanimate" subjects.

Categories of grammatical subjects	Number of instances
"Theme/topic"	6
"Project"	4
"Activities/worksheets"	11
"Time/teaching time"	11
"(Teaching) objectives"	7
"Discipline/ coordination/ participation/ cooperation etc."	7
"Difficulty/ies"	5
Other subjects	47

TABLE 4 Correspondence between grammatical subjects: Semantic categories.

Correspondence of grammatical subjects: semantic categories					
	"I"	"we"	"the students"	"inanimate subjects"	
Need-obligation	11	1	8	2	
Sense	2	-	-	1	
Report- ascertainment	5	4	2	20	
Knowledge	-	1	4	1	
Action	14	7	7	12	
Ability-capacity	5	1	6	5	
Expression- declaration	4	1	5	-	
Limitation- difficulty	3	3	39	42	
Intention- expectation	4	1	7	4	
Previous experience	_	-	4	1	
Thought	7	-	-	1	
Feelings	3	_	12	7	

way. As shown in the following extract, student teachers tend to perceive the teacher's role in PjBL as coordinating and supporting pupils: "I offered to help them [the pupils] to write complete sentences" (ST, year 3)². However, the fact that the planning of the action is mainly attributed to the grammatical subject "I" may underline a more teacher-centered perception of their role, which contradicts basic objectives for pupils' active involvement in designing and implementing PjBL (Thomas, 2000), "With respect to the timetable I had planned, [it wasn't exactly adhered to]" (ST, year 6).

Though in most cases the grammatical and the semantic subject (the agent) coincide, there were cases where "I" was identified as the

grammatical but not the semantic subject. This is the case of verbs denoting Need/Obligation, the second verb category associated with "I." In these sentences passive voice verbal expressions, such as "I was forced to," "I was made to," construe the grammatical subject "I" more as the recipient than as the actor and originator of a problematic situation. In other words, the—often non-desirable—action undertaken by the student teacher is presented linguistically to be conditioned by other factors and circumstances that "forced" and "pushed" her to do so, such as the situation described in this example: "[although there were times when they created a small frenzy] and I often was compelled to call them back to order" (ST, year 1). In this way, passivisation is deployed as a linguistic resource to maneuver the attribution of negative aspects of the implementation to student teachers.

Verbs denoting Thought comprise the third semantic category associated with the grammatical subject "I." If verbs of Thought are combined together with the semantic categories of Expression, Intention and Feeling, it can be said that these statements project the identity of a reflective subject who expresses her thoughts, her expectations and her feelings in the context of the reflective process. This example might be then accounted as an instance of a "authentic" reflection:

"I **think** [what was most difficult for me was cooperation and sharing]. I then **realized** [that it was the social–emotional relationships in class that were not particularly good]" (ST, year 2).

First-person plural "We"

In the comparatively fewer occurrences of the first-person plural "We" as a subject, it is mostly associated with verbs indicating action. The associations of actions to "We" mainly refer to issues of the PjBL design, which was done by student teachers collaboratively in groups before the implementation in class. Three occurrences of the grammatical subject "We" that are associated with difficulties during the implementation, as in the next example, might be also attributed to the tendency of student teachers to distance themselves from such problematic points. "Unfortunately, we did not have time to go through all the activities" (ST, year 3).

The pupils

"Pupils" as the grammatical subject of the sentence are predominantly associated with limitations and difficulties. These limitations may arise directly from the pupils' difficulty to deal with certain tasks (Example 6) or they may be presented as a justification for activities that were not delivered as planned (Example 7).

"The only thing **they had difficulty with** was the activity in which they were asked to suggest ways of dealing with some problematic situations. They did not have many ideas there" (Example 6, ST, year 3).

"[The timetable was not adhered to], **because the pupils had forgotten to bring** the extra information I had asked for" (Example 7, ST, year 6).

In a few other cases, pupils are associated with negative feelings towards the implementation of the project as in the following example: "[Initially, when the topic of the project was announced.] **the pupils**

² Student Teachers (STs) are codified according to the primary school year they had taught to.

were frustrated and did not show much enthusiasm for participation" (example 8, ST, year 4).

So far, a clear "blameshifting" pattern can be recognized through which student teachers attempt to attribute negative aspects of the implementation to their pupils (see also Halim et al., 2011). This finding would be of no surprise concerning the need of student teachers to save face and construct a favorable identity of their selves as teachers. However, it is quite surprising that they refer to the implementation of an approach which foregrounds pupils' needs, initiative and autonomy. In other words, presenting pupils in such a negative fashion runs contrary to dominant pedagogical trends that promote innovative, pupil-centered learning approaches such as PjBL. By projecting a negative conception of the pupils and their role, student teachers run the risk of appearing to have *not* "learnt their lesson." This controversy, then, possibly underlines the tensions that student teachers experience among presenting a competent teacher identity in their reflection and at the same time, conforming to the expectations of the institutional setting.

The teacher of the class

The teacher of the class is only referred to in two cases in student teachers' statements with a negative tendency. Interestingly, both references are associated with ill-formatted pupils' habits, thus implying a form of criticism for the original teacher of the class.

"Inanimate" subjects

Moving on to the category of "inanimate subjects," it appears that student teachers attribute the greatest number of problematic points and difficulties to these subjects. In some of the cases, dimensions of PjBL implementation such as the topic (Example 9), teaching objectives, activities, time etc. are presented as hindrances to the normal flow of the teaching process. For example, "I would say that this particular topic did not initially excite the young students" (example 9, ST, year 1). In other cases, a process, the agent of which remains unidentified, is attributed as a grammatical subject to problematic situations, "At the beginning, the presentation of the topic was not satisfactorily clear, [although it did not lack the whole style of a proper presentation]" (example 10, ST, year 2). Student teachers appear to be reporting problem areas in this way, without directly stating who may be responsible for these areas. Additionally, such statements are also identified within justifications for the non-accomplishment of planned activities: "Initially, I had thought of having the pupils to make their own story, but it did not come out in the end, as there was a lot of noise and discipline was lost" (example 11, ST, year 1).

In terms of the SFL framework, this shift between participants and processes, whereby processes (i.e., verbs=actions) are linguistically represented as participants (i.e., entities=nouns), falls under the rhetorical strategy of grammatical metaphor of the ideational type. Nominalization is a powerful resource of grammatical metaphor. In fact, nominalization is widely employed in academic prose to pack information in order to achieve high density in discourse. Nominalization as well as passivisation, though, tend to obscure the participants' roles in a sequence of meaning (Halliday and Matthiessen, 2004). So, it can be claimed that in the aforementioned examples (9–11), student teachers resort to these grammatic devices either because they wish to conform to academic writing style conventions, or due to their

reluctance to explicitly hold responsibility for these problematic situations. More than a blameshifting strategy, the use of such devices also protects them from the rather inappropriate tactic of directly blaming their pupils.

Interestingly, a considerable number of these nominal subjects is associated with the category of verbs denoting report/ascertainment. In the example below, a student teacher comments on a task she had designed about old-fashioned vocations. Her pupils could not perform the task, because they had no background experience or knowledge about such vocations. Her sentence is structured in a particularly complex way without any explicit reference either to the teacher or to the pupil participants. She states, "The lack of practical experience around these vocations pointed out that a power-point presentation and a discussion in class do not suffice for such a task to be carried out" (example 12, ST, year 6). In such instances the effort to create an academic writing style can be more strongly related to the intention of student teachers to adopt a more formal way of writing that is in line with the expectations of the academic community.

Discussion and implications

In the construction of their writing identities when referring to negative tendencies in their reflections, student teacher participants of the study appear to resort to two main linguistic devices: they either directly associate problematic points of their teaching with pupils or they indirectly attribute them to other factors through the grammatical processes of passivisation and nominalization. Reference to the "I" relates mostly to mandatory action in order to handle these problematic situations.

Their linguistic choices can be partly accounted for the demands of the genre and partly for the demands of the process of reflection. The hybrid nature of reflective texts in institutional settings, lying between the essayist prose and the autobiographical narrative, might have compelled them to a more sophisticated style of writing, in which passivisation and nominalization are encouraged. In the rather conservative Greek Higher Education setting, the preconception that all academic writing should be "formal," "impersonal," "sophisticated" is still prevalent (Vassilaki, 2017). Writing in a perceived formal way may be a face preserving strategy by which student teachers aspire to meet the expectations of the assessor and the wider educational context.

With regards to the reflective process, at first sight, student teacher participants of the study seem to fall under the usual criticism reported in the literature. They are reluctant to take the responsibility for the problematic points of their teaching, they often tend to associate unfortunate incidents to pupils' dispositions, and they at times attribute ill-formed habits to pupils, even though they are implementing a learner-centered instructional method which prioritizes pupils' autonomy and abilities. On the whole, student teachers uncritically and unreflectively reported difficulties and challenges as initiated by other external, out-of-their control factors. The analysis of the linguistic resources they deployed in their written reflections seems to provide further evidence on the argument of student teachers' difficulty to move from a descriptive to a critical level of reflection.

However, we are somehow inclined, though with great caution, to suggest an alternative reading of our findings. Acknowledging the performative nature of student teachers' reflective writing, we would suggest a reading of the findings that recognizes the tensions which student teachers have to reconcile in the performance of their multiple identities through language. They are simultaneously students and

teachers; they attempt to perform student identities which are much approved in the academy as well as professional identities of the teachers they aspire to become. They do want to become "good," "efficient," "competent" teachers. Then, through their linguistic choices they construe their imagined, desired identities (Beauchamp and Thomas, 2010).

Such an interpretation of findings obviously is in need of further evidence, either by the analysis of positive marked tendencies in student teachers' reflective texts, or the examination of a larger array of linguistic resources. Findings could further be coupled by students' interviews on their writings. Limitations of the study essentially refer to the specific research setting and the practices applied in it. Nonetheless, in line with recent appeals in the literature (Ross, 2014; McGarr et al., 2020; Tan, 2021), findings of our study may also point to the need for a redefinition of practices and assessment with respect to reflection in Teacher Education Institutes—at least, in our geopolitical academic settings. Such a redefinition could benefit from the introduction of alternative non-conventional modes of reflection (dialogical texts, life-stories, and poems) and the demystification of "academic writing" from its supposedly "high" prestige. What is more, in the words of McGarr et al. (2020),

[If] the performative nature of reflections leads to the individual constructing a particular version of the 'self', perhaps the task for students should be in unpacking their constructions and exploring the [...] techniques they employ and the possible reasons for presenting themselves in the manner in which they have. Using these past reflections as artefacts to be interrogated has the potential to open conversations for students presently foreclosed by the current approach to reflection (p. 907).

In this process of reflecting on reflection, the development of student teachers' language awareness could prove an important supporting tool. We would endorse a conceptualization of language awareness which encapsulates both traditional understandings of the notion and critical perspectives. In the latter sense, critical language awareness (CLA) entails not only consciousness raising about language properties and language practices but also "a critical awareness of how these practices are shaped by, and shape, social relationships and relationships of power" (Clark et al., 1991, p. 52). Critical language awareness can provide a pedagogical framework (Ivanič, 1998; Janks, 1999) through which student teachers can recognize how "writing in a particular way means appearing to be a certain type of person" (Ivanič, 1998, p. 339). SFL analysis, which was adopted in the study, can provide tools for student teachers to reflect on the linguistic resources they deploy to construct processes and participants in their writings, and subsequently develop an awareness of how they construe their roles in discourse. The development of this awareness could support student teachers to reconceptualize reflective writing as an act of identity positioning and further empower them to gain control over their own discourse. They might then be more confident to take the risk to challenge dominant patterns of "successful" reflective writing, explore various ways of self-expression and develop deeper engagement with their reflective assignments.

Conclusion

The present study was set to explore the linguistic choices through which student teachers construct their writer identities in order to investigate how they construe their role/position vis a vis the challenges they faced during their PjBL implementation practice. The analysis identified associations of grammatical subjects with processes and participants and examined semantic configurations that connect agents with actions. At first sight, findings of the analysis seem rather discouraging; student teachers' reflective writing appears rather as a display of conformity to the alleged assessment and institutional requirements than as a "means by which [student] teachers can become more in tune with their sense of self and with a deep understanding on how this self fits into a larger context which involves others" (Beauchamp and Thomas, 2009, p. 182). At the same time, findings highlight the need for a reconceptualization of current reflection practices and exploration of alternative means and supporting tools for student teachers' reflections, at least with respect to the particular Higher Education context where the study was conducted.

In conclusion, although attending to the micro-level of particular linguistic structures and devices may sound somehow trivial, this kind of examination can possibly provide researchers and educators with a more nuanced understanding of the challenges and the limitations student teachers face in their reflective writing and consequently inform reconsideration of established reflection practices in Teacher Education.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

Author contributions

EK and EV contributed to conception and design of the study. EK performed the data codification and the data analysis. EV wrote the introductory and the literature review sections of the manuscript. EK wrote the methods section. Both authors contributed to the results and discussion sections. EV contributed to manuscript revision. All authors contributed to the article and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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