A LINGUISTIC ANALYSIS OF TEACHER TRAINEES’ REFLECTIVE JOURNALS

ZSUZSA GONDA
ELTE Eötvös Loránd University
gonda.zsuzsa@btk.elte.hu
https://orcid.org/0000-0002-6387-6566

Abstract

Since the year 2000, there has been an increasingly noteworthy emphasis on fostering reflective thinking among teacher trainees in Hungary as well. One instrumental approach for enhancing reflective thinking is through the use of reflective journals. These reflective journals encompass idiomatic representations of metacognitive processes that not only ponder over actions but also consider linguistic usage. Metacognitive-reflexive procedures and facets of metapragmatic awareness become linguistically explicit within the confines of reflective journals. The research inquiries in this study are as follows: how can we ascertain the reflective nature of examined texts, how can sentences in the journals be linked to various levels of reflectivity, and what types of linguistic components serve as illustrative markers of reflexive discourse. The present investigation scrutinises the reflective journals of 20 university students from a pedagogical and functional cognitive pragmatics perspective, employing both quantitative and qualitative methods for content and text analysis. Identifying linguistic elements that convey reflexivity has the potential to heighten the consciousness of teacher trainees regarding their use of reflexive language and deepen their reflective thinking processes.

Keywords: reflective thinking, reflective journal, metacognition, sentence creation, reflexive language use

1. Introduction

1.1. A reflective approach to teacher education

The reflective approach is a comprehensive theory of problem-solving that aims to formulate, evaluate, draw conclusions from and become aware of different teaching experiences, with the help of which the effectiveness of teacher training can be enhanced and the basis of a professional development model can be developed (Gulya et al. 2020; Sántha 2008: 89). At the core of the concept of reflective thinking is the systematic and conscious self-evaluation of teacher trainees, building a link between theoretical knowledge and practical experience in order to let go of the teaching patterns that have been fixed during their own education and to be able to continuously develop professionally (Aldahmash et al. 2017; Gulya et al. 2020; Korthagen 2004). The reflective thinking process is mostly characterised in terms of levels in various national and international studies (Gulya et al. 2020). The present study is based on Hatton and Smith’s model, which divides the reflective process into four levels (Table 1). This model is the most helpful for the linguistic analysis of the study, because it includes the most important level components to which different linguistic constructions can be related. Although Nurfaidah and her colleagues further develop Hatton and Smith’s (1995) model by incorporating Pysova’s approach, the extended model provides more value for studies with an educational aspect (Nurfaidah et al. 2017; Gulya et al. 2020).
Table 1. Levels of reflectivity according to Hatton and Smith (1995)

<table>
<thead>
<tr>
<th>Level of reflectivity</th>
<th>Features</th>
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</thead>
<tbody>
<tr>
<td>Description</td>
<td>The journal is not reflective. It is a simple statement of events related to teaching, without cause and effect relations or explanations.</td>
</tr>
<tr>
<td>Descriptive reflection</td>
<td>Reflective type. It contains explanatory elements in addition to the description of events, but these are more descriptive and less complex.</td>
</tr>
<tr>
<td>Dialogical reflection</td>
<td>Reflective. The description of events is complemented by a qualification, with explanations of an event from different points of view. The author of the text also evaluates themselves, analysing their own actions.</td>
</tr>
<tr>
<td>Critical reflection</td>
<td>Reflective. The author not only relates what they have experienced to their own teaching-learning process, but also generalises. In addition to analysing their own actions, they also consider educational policy and social aspects.</td>
</tr>
</tbody>
</table>

There are a number of methodological solutions and tools for developing a reflective approach, which are an integral part of the courses accompanying the practice teaching of teacher trainees (Sántha 2008). One of these is professional reflection, which is "deliberate, purposeful, structured thinking about learning, linking theory and practice, seeking change and development, aiming at a specific goal" (Hunya: 2014). Accordingly, professional reflection can generally be divided into three parts: describing the pedagogical situation, arguing for the method chosen for the situation and reflecting on the consequences of actions (Antalné et al. 2013). One of the main tools for documenting professional reflection is the reflective diary. The reflective diary is a basically written form of professional reflection that records, in chronological order, experiences and emotions related to the planning and application of teaching, while analysing, evaluating and rethinking the given actions and beliefs (Gulya et al. 2020, Szivák 2014). The use of reflective diaries in teacher education has several advantages for teacher trainees (Gulya et al. 2020: 56). It helps them

- describe what and how they have learned during the course and how they feel about it
- become autonomous in the learning process
- formulate a critical reflection about the learning process
- select the appropriate solution for the pedagogical situation in their individual context
- develop their linguistic skills when writing foreign language diaries.

Although the benefits in terms of language use include the development of foreign language skills, reflective texts in the mother tongue also contribute to the development of the language skills of teacher trainees, for example in the choice of linguistic constructions for self-expression, the use of professional language and the development of coherent thought.

Two types of reflective diaries can be distinguished in terms of content. One is unstructured journaling, where teacher trainees are not given any prior criteria. The advantage of this type is that it allows for a more individual approach, allowing the teacher trainees to define the topic and focus of the diary themselves (Sántha 2008: 89; 2020). The disadvantage, however, is that the texts are less coherent and often remain at the level of describing experiences, i.e. the aspect of reflectivity is often overshadowed. In the case of a structured reflective diary, the teacher supports the writing of the reflective text with a predefined set of criteria. The advantage of this is that the structure of the text becomes more orderly, but it may not reveal experiences that would be crucial for learning to teach (Sántha 2008: 89; 2020). The disadvantage of both types is that they do not help teacher trainees formulate the language of the reflective diary.

Indeed, one of the many difficulties of writing an effective reflective diary is language. Simon, in her study on the relationship between teacher trainees and reflective writing, says: "As a training institution, however, we are confronted every day with the difficulties of self-reflection, even among those who are undergoing theoretical and practical training. In many cases, they are only able to
express the activity itself, or some of its components” (Simon 2018: 56), i.e., according to Hatton and Smith's (1995) model, texts are typically evaluated at the level of Description or Descriptive Reflection. Linguistic elements expressing a reflective approach would not only make the constructed text itself more structured, but would also support teacher trainees in the linguistic modelling of reflective metacognitive processes.

In the present subsection, the concept of reflectivity has been primarily interpreted from a pedagogical point of view, but the aim of the study is not only to examine the reflective way of thinking but also to analyse the sentences and linguistic elements expressing reflexivity and to explore the characteristic constructions. I analyse reflexive language from the perspective of cognitive functional pragmatics, more specifically from the perspective of metacognition and metapragmatic awareness. In the sections on language use, I distinguish linguistic constructions reflecting reflective thinking from the pedagogical point of view by using the term ‘reflexive’. A further aim of the study is to produce a short language use guide for teacher candidates with a view to raising awareness of and supporting reflective language use.

1.2. The reflective diary as a text type

Normative text typology categorises different texts by applying sequential and/or content, functional and/or structural criteria, which distinguish between narrative, descriptive and argumentative texts (Tátrai 2006: 216). The reflective diary is a special type of text that cannot be clearly classified into a particular category of normative text typology, as it has narrative, descriptive and argumentative features. If we compare these categories with the table of levels of reflective thinking presented in Table 1, which defines the content, function and structure of the text, we can see that at the levels of Description and Descriptive Reflection, the different ways of constructing descriptive scenes will be dominant, while at the levels of Dialogical and Critical Reflection, argumentative and analytical constructions will be dominant. Narrative linguistic elements link the text as a whole, as the author seeks to organise the text temporally, to link events in time, thus creating coherence in the text.

In addition, the set of expectations that speakers have about a given text type plays an important role in defining normative text typological categories (Tátrai 2006: 216). In the case of the reflective diary, it is primarily a monologic text describing and analysing events that happened to the speaker, in which the speaker's attitude towards his or her own cognitive activity plays a central role. Since the speaker's task in the reflective diary is to linguistically represent various metacognitive operations, it is worth approaching the reflective diary from a pragmatic perspective (Tolcsvai 2001: 335-336; cited in Tátrai 2006: 160).

Language as a social mental activity has a dual purpose: on the one hand, it allows speakers to intersubjectively understand the world, and on the other hand, it allows them to establish and maintain interpersonal relationships (Tátrai 2006: 214). In the light of reflective thinking it can be stated that intersubjectivity is strongly present in reflective diary writing, as the author accesses a representation of their own world, in which the basic referential scene is the teaching practice. In the context of the genre of the reflective diary, the joint attentional scene of the physical world consists of the space-time relations of diary writing, the social world of the sociocultural elements of the teaching situation, and the mental world of the interpretive components of the teacher's role and activities (cf. Tátrai 2017: 927-952). In the case of reflective diaries, the construction of referential scenes refers to beliefs and impressions about teaching practice and also implies the activation of the teacher trainee's background knowledge. Although the reflective diary is essentially monologic in nature, it facilitates building interpersonal relationships, as teacher candidates interpret the actions of themselves and others in the context of an interpersonal relational system ('teachers’ work community / educators’ society') in reflective diaries (Tátrai 2006: 214). Furthermore, a small part of reflexive text production in the context of teacher training is also characterised by a social, dialogic discursivity, as the author often addresses the reader, i.e. the seminar teacher who has given the reflective task and who will then interpret the completed text (Hercz 2016).
1.3. Metacognition and metapragmatic awareness in the reflective diary

Requirements of the reflective diary as a text genre imply that there will be a strong presence of both explicit and implicit reflexivity in these texts, i.e. linguistic representations of metacognitive operations that relate to both the activity and language use. The interpretation of one's own activity, thought process is a metacognitive process. Metacognitive operations are closely related to language since attention to one's own thinking, self-monitoring and language awareness are variants of reflection (Hámori 2020: 273), and therefore reflective thinking and metacognitive operations are closely related. Thus, the linguistic features of reflective thinking are also reflected in metacognitive language constructions.

The conceptualisation of metacognition in educational-psychological research starts from Flavell, who interpreted it primarily as conscious cognitive operations on the learning process and memory along with their linguistic representations (Flavell 1979). The most widely used model of metacognition is the work of Nelson and Narens, who divide metacognitive operations into two levels. The first level is the object level, which is related to cognitive activities, and the second level is the meta-level, which controls the object level. There is a continuous flow of information and feedback between the two levels (Nelson–Narens 1990). The model of metacognition further contains the levels of reflectivity, since units of text without reflexive elements, which are mainly descriptive, reflect the performance of cognitive operations at the object level, whereas units of text that reveal cause and effect relationships and interpret pedagogical situations in a broader context already show the feedback and controlling role of meta-level thinking operations. In the reflective diary, these levels are obviously not sharply separated from each other, but reflection on the learning process can only be established when metacognitive operations, in addition to the use of language, also include the evaluation of one's own learning process.

The exploration of language use related to metacognition and reflective thinking is possible through the study of meta-language, metadiscourse, and metapragmatic awareness (Hámori 2020). At the heart of metapragmatic awareness is the reflexivity of dynamic meaning-making. This reflexivity relates to linguistic constructions, the cognitive processes required for their use, and sociocultural expectations (Kuna-Hámori 2019; Tátrai 2020). This paper takes a broad interpretation of the concept of metapragmatic awareness, including not only reflections on linguistic activity but also linguistic elements that refer to actual meaning-making, which may be related to a discourse type such as reflective diary (Kuna-Hámori 2019). In reflective diaries, an important aspect is the level of metacognitive operations (object level/meta level) at which the linguistic representations of metacognitive processes in different attentional scenes can be classified (Verschueren 1999), since in the case of the meta level we can rather speak of adaptive processing of a given scene. In terms of their explicitness, metapragmatic reflections appear in language use on a scale ranging from the implicit (e.g. verb tense, use of suffixes) to the explicit (e.g. discourse markers, word classes, clauses) (Verschueren 1999: 188).

2. The research method

The analysis of reflective thinking journals prepared by teacher trainees plays an important role in understanding the reflective thinking process in both national and international research (Gulya et al. 2020; Hercz 2016; Pauw - Van de Ven 2012; Ryan 2011; Sántha 2008, 2020). At first, the methodology of reflective thinking research focused mainly on content analysis, and was mainly aimed at analysing and evaluating pedagogical situations. Later, the methodology of understanding the process became more complex, with the introduction of questionnaire studies, text analysis and the processing of interview situations based on video recordings (Sántha 2020). However, these studies approach the process of reflective thinking primarily from a pedagogical perspective, and do not consider linguistic aspects. Linguistics, among the above-mentioned, can mainly relate to research based on text analysis. The study of reflective texts produced by teacher trainees is of particular
importance, since “they help to explore the mindset behind the corpus of texts” (Sántha 2020: 27). Although the aim of this study is not specifically to investigate the reflective thinking process from a pedagogical perspective, a sort of content analysis is certainly necessary for mapping reflective linguistic elements and linking them to various levels of reflection.

The research is based on the reflective diaries of 20 student teachers. The reflective diaries were written by the students in the spring semester of the 2019/2020 academic year during the pandemic when education was forced to switch to digital. The theme of the reflective diaries is to describe and interpret teaching experiences during the digital education period. Of the 20 teacher candidates, 5 are men and 15 are women. The length of the reflective journals varies, the shortest being 8 sentences and the longest 58 sentences, with a total of 454 sentences. The 20 reflective diaries are essentially monologic, diary-style accounts, with only 7 texts having a letter-like form of address at the beginning of the text, but this formula did not affect the basic nature of the text. In the analysis, I did not take these forms of address into account (cf. Hercz 2016).

The diaries were processed with a combination of deductive, theory-driven and inductive, data-driven logic (Sántha 2021). The basic units in the linguistic analysis of reflective diaries were the sentences and the clauses of compound sentences. “A sentence expresses a scene, a statement constructed by the speaker that represents a temporal event related to a thing constructed as existing, usually in relation to another thing” (Tolcsvai Nagy 2017: 396) Coding at the level of sentences proved to be viable, as the sentences were suitable in their length and structure to express a complex idea, but sufficiently closed and short to be related to a specific reflective level in terms of both metacognitive operations and levels of reflectivity.

The first step in the analysis of the texts was to establish the reflexive nature of the texts, with each sentence being coded according to the separation of the object level and the meta level. This was followed by identifying the functions of sentences containing reflexive elements and assigning them to levels of reflectivity according to the Hatton and Smith’s (1995) model (Nurfaidah et al. 2017). Finally, the reflexive linguistic elements of sentences related to levels of dialogic reflexion were explored. The study attempts to present the meaning of the sentences through a combination of formal and linguistic factors. The reliability of the analysis was ensured by intracoding. The interval between the two coding processes was 1 month, with a 92% agreement.

3. Results

3.1. The appearance of reflexivity and metacognition

The reflexive nature of the sentences in the texts studied can be defined by using the model of metacognition (Nelson–Narens 1990). Reflexive thinking can also be interpreted as a type of metacognition, where sentences at the object level are related to description and sentences at the meta-level are related to other levels of reflectivity (Nurfaidah et al. 2017). Although there is a continuous connection and feedback between sentences, as between levels in the metacognition model, in order to achieve text coherence, content analysis can be used to identify sentences with a descriptive, demonstrative function. As reflected in the examples, these sentences, in terms of content, refer primarily to the time and place of the teaching practice, the schedule, content and form of the teaching practice, and the demonstration of the teaching environment:

(1) Gyakorlatomat a Békásmegyeri Veres Péter Gimnáziumban vézem.
   ‘I do my teaching practice at the Veres Péter High School in Békásmegyer.’

(2) Így magyarból összesen 6 órám van egy héten, [...].
   ‘So I have 6 lessons of Hungarian a week, [...]’

1 Throughout the paper, citations from Hungarian works appear in the author’s English translation.
Sentences with a descriptive, demonstrative function are an integral part of the reflective diary, since the effort to communicate events in a factual way enables students to draw conclusions from their observations and experiences and to apply them later in a given pedagogical situation. Of the total 454 sentences analysed, 158 were descriptive and demonstrative. All the reflective diaries examined contained sentences with a descriptive, demonstrative function. However, since the study aims primarily to explore and develop the linguistic formulation of reflective thinking of teacher trainees, it focuses on sentences at the meta-level, where sentences with reflexive function already appear. The study of sentences with reflexive function is presented in relation to the levels of reflectivity.

3.2. Functions of reflexive sentences and their relation to levels of reflectivity

The analysis of the sentences in the reflective diaries was firstly based on content (Hercz 2016; Pauw–Van de Ven 2012; Sántha 2021). During the analysis, I coded each sentence according to the level of reflectivity. Sentences at the object level with a descriptive function were assigned to the level of Description, which are essentially neutral baseline structures (Hámori 2020; Tátrai 2011). Sentences at the meta level were classified according to further levels of reflectivity. I classified sentences at the meta-level into three categories according to their content: sentences at the level of descriptive reflection are those that have some reflective features but are not complex enough to determine cause and effect. Sentences at the level of descriptive reflection can basically be divided into two categories: they express emotions about a given situation in a linguistically explicit way, or they formulate evaluative judgements or qualifications about the given situation. These types of sentences are basically neutral constructions that represent the author's own perspective (Hámori 2020). In sentences at the level of dialogic reflection, the focus is on self-evaluation, which means that they typically represent the author's own perspective. Self-evaluation was usually performed by the students on the basis of three different sets of relations: one is the evaluation of themselves without comparison to others, for example, identifying points for improvement; the second is the evaluation of the relationship with the mentor teacher; the third is the evaluation of their work with students. The sentences at the level of critical reflection aim to generalise, one type of generalisation being when the students make comments on the teachers' society and the state of education, and express their opinions with reasons, and the other when they make generalisations about their own university education and their fellow teacher trainees. Sentences at the level of critical reflection often contain linguistic elements that construct an external perspective in addition to the author's own. The sentences associated with various levels of reflectivity are illustrated by the main content elements in Table 2.

<table>
<thead>
<tr>
<th>Level of reflexivity</th>
<th>Sample sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>A Toldy Ferenc Gimnáziumban az egyik 8. osztályt tanítottam magyrból az elmúlt egy évben. ‘At Toldy Ferenc High School, I have taught one of the 8th grade classes in Hungarian for the past year.’</td>
</tr>
<tr>
<td>Descriptive reflection</td>
<td>– Emotional expression: Egy síbaleset miatt sajnos ki kellett hagynom két hetet a második félévben a gyakorlatból. ‘Unfortunately, I had to miss two weeks of the second semester due to a skiing accident.’</td>
</tr>
</tbody>
</table>
Assessment of the situation:
Nálam nem hozott sok újat ez a digitális átállás, eddig is a Google Classroomot használtam, annyi különbséggel, hogy most azon a felületen is írnak teszteket, ami-kért pontokat kapnak.

'For me, this digital switchover has not brought much new, I had been using Google Classroom, with the difference that now they also write tests on that platform, for which they get points.'

Self-assessment:
Amiben mindenképp fejlődnöm kell (bár ezt talán majd a tapasztalat hozza-mágyal), hogy gördülékenyebben tudjam javítani a diákok által küldött feladatokat (ez különösen a magyar esetén nehéz).

‘An area where I definitely need to develop (although perhaps experience will bring this naturally), is that I should be able to evaluate students’ home assignments more smoothly (this is particularly difficult in the Hungarian lesson).’

Evaluation of the relationship with the mentor:
Amikor pedig a mentorom is rész vett az órán, utána mindig hasznos tanácsokkal látott el, melyeket igyekszem a továbbiakban az óraterveimbe és az általam összeállított tananyagokba beépíteni.

‘When my mentor attended the lesson, he always gave me useful advice afterwards, which I tried to incorporate into my lesson plans and the teaching materials I prepared.’

Evaluation of the relationship with the students:
A magyaros csoportom egyszer kérte tőlem, hogy egy anyagrészt inkább szedjék ketté, mert soknak érzik a többi teendő mellett, de ezt leszámítva eddig pozitív visszajelzéseket kaptam a feladatokra.

‘My Hungarian group once asked me to split a piece of material in two because they felt it was too much to do, but apart from that, I have received positive feedback on the assignments so far.’

Evaluation of the educational situation and its participants:
Általánosságban úgy látom, hogy a digitális oktatás nagyon sok nehézséggel járt/jár pedagógusokra, szülőkre és gyerekekre nézve egyaránt.

‘In general, I find that digital education has been/is very difficult for teachers, parents and children.’

Assessment of university education and the situation of teacher trainees:
Most van az az idő, amikor valóban hálát adhatunk azért, hogy az egyetemen tanulhassunk az IKT eszközökkről és a sokszínű tanítási módszerekről.

‘Now is the time to be truly grateful for the opportunity to learn about ICT tools and diverse teaching methods at university.’

Table 2. Levels of reflectivity in the sentences of the reflective diaries

A reflective diary serves the learning process and the development of the reflective approach of teacher trainees if the text contains elements that can be linked to each level of reflectivity (Gulya et al. 2019; Ryan 2011). The distribution of sentences in the reflective diaries studied according to the level of reflectivity is illustrated in Figure 1.
Figure 1. Distribution of sentences in the reflective diaries (454 sentences) by level of reflectivity

Figure 1 shows that most of the sentences in the reflective diaries are descriptive, followed by the level of dialogic reflection in terms of the number of sentences, then descriptive reflection and finally critical reflection. The results clearly show that in the reflective diaries studied, the teacher trainees tend to focus on describing the situation and evaluating their own teaching, and to a lesser extent on the teaching situation and the training process, with two out of 20 teacher trainees not including any sentences that could be linked to the level of critical reflection. Based on the results, I will therefore analyse the sentences that can be associated with the level of dialogic reflection, which reach the expected level of reflectivity and contain at least one example of good practice in the linguistic expression of reflective thinking from each of the teacher trainees in the study. However, individual differences are also considerable here, with some texts containing only one sentence that can be classified as meeting the level of dialogic reflection, which represents 7.6% of the total number of sentences in the text. In comparison, the highest proportion of sentences of this type in a text containing sentences that can be linked to the level of dialogic reflection is 31.11%. On average, 25% of the sentences in the reflective diaries can be linked to the level of dialogic reflection.

3.2. The linguistic elements of reflexivity at the level of dialogic reflection

3.2.1. Implicit linguistic elements of reflective diaries

In the analysis of reflective diaries, I consider as reflexive language elements all linguistic structures that contain linguistic signs or concepts related to reflective activity (Hámori 2020). Reflexive language elements, like linguistic signs of metacognition, in the texts under study, the linguistic form of sentences that can be related to the level of dialogic reflection, “range from the explicit to the implicit (e.g. hesitation, verb mode), as well as less explicit, semi-explicit allusions (e.g. discourse markers and adverbs such as ugye, hát, mondjuk, szerintem), and conceptual, fully explicit metacognitive reflexions” (Hámori 2020: 285). However, closely related to the analysis is the linguistic framing of perspectives and roles: “constructions representing one’s own or a speech partner’s perspective (e.g. I cannot argue for it; what do you think?), constructions containing a neutral starting point (e.g. this is a very important thing; that’s what it’s about), and reference to an external perspective (e.g. this has been modelled in several ways)” (Hámori 2020: 286).
Among the implicit linguistic markers, the use of verbs in the first person and past, present or future tenses is dominant in dialogic reflective sentences. The use of verbs implicitly indicates the author’s metapragmatic awareness and the characteristic perspective of the text, which is particularly determining in a reflective text. This formulation, typical of the level of dialogic reflections, implies, in terms of the process of contextualisation, that the point of origin is not essentially neutral, since the referential centre is provided by the speaker, which in the following sentences corresponds to the subject of consciousness (Sanders–Spooren 1997; Tátrai 2020):

(4) Eddig sem dolgoztam keveset, hiszen az iskolában töltött 6-7 óra után mindig kellett otthon is készülnöm 2-3 órát, [...]; Igyekszem beszélgetni velük az érzéseikről, gondolataikról [...]; így biztosan fogom használni a jövőben akkor is, [...].
‘I haven’t worked less so far, because after 6-7 hours at school I always had to prepare 2-3 hours at home, [...]; I try to talk to them about their feelings and thoughts [...]; so I will definitely use it in the future, [...].’

These types of sentences and clauses in reflective diaries are important because they reflect that the author reports the events through their own filter, they define the referential scene, and it is through their interpretation that the lecturer can read the temporally organised sequence of events (Tátrai 2017: 927–931). The temporal arrangement of events and the definition of the referential centre also show that the author is not only describing but also interpreting and reflecting. This is indicated by the term surely, which is explicit in terms of indicating metapragmatic consciousness, but does not become formally marked by making the meaning available through the mental functioning of the speaker. The use of time markers also indicates to the reader whether the author is coming to the end of a series of events, they are either reflecting retrospectively and evaluating the events, or they are indicating, by their use of present tense, that they are still in the process of gathering experience. By using future tense verbs, the reflecting person also indicates what tasks they would like to carry out in the future, which also indicates a reflective activity, as they are identifying new development opportunities and goals for themselves based on their experiences.

Another characteristic of dialogic reflective sentences is that the perspective is broadened, and the use of the verb in the first person is replaced by a plural form. In this type of sentences, the referential centre is either the community of teachers, which also shows that the teacher candidates have identified with the role of teachers and that this defines their relationship both with other teachers and with students:

(5) Azt gondolom, hogy egyáltalán nem lehet elvárni azt az ütemű haladást, mint amit az iskolai órák keretein belül el tudunk érni az egyes csoportokkal, (hanem alkalmazkodni kell az anyag milyenségével és mennyiségével kapcsolatban is az adott körülményekhez).
‘I don’t think you can expect to progress at the pace that you can achieve with each group in the classroom (rather, you have to adapt the type and amount of material to the circumstances).’

The plural verb form may also refer to working together with students. In these sentences, the use of the plural shows that the teacher trainee experiences the process of learning and teaching as a shared activity with the students:

(6) Természetesen igyekszem kihasználni az internet adta lehetőségeket, de az eddig használt tankönyveket, munkafüzetet sem dobtuk el, sokszor abban dolgozunk közösen a videós óra során.
‘Obviously try to take advantage of the Internet, but we have not thrown away the textbooks and workbooks we have used so far, we often work together in them during the video lessons.’
Among the implicit linguistic elements, another determining factor at the level of dialogic reflection is the use of comparative and superlative adjectives, which indicate the speaker’s evaluation of a given activity or idea, showing the level at which the speaker evaluates themselves in a given process: to be able to improve more easily, to teach topics that are easier to understand, to develop more effectively. Among the implicit linguistic elements, the use of the verbal suffix -hat/het ‘can, may’ is also typical, with which the speaker expresses opportunity or possibility and which reflects that they have thought about possible solutions of a situation, making suggestions for their future activity: students can edit this if they have ideas; I can train myself, so they can learn by playing, I can use digital tools all the time.

3.2.2. Semi-explicit linguistic elements typical of reflective diaries

Semi-explicit reflexive references typically take the form of adverbs and the postpositions in reflective diaries. The majority of adverbs seek to clarify the temporal relations of events (e.g. egyelőre ‘for the time being’, most ‘now’, majd ‘later’) and most of them refer to the present as marked by the referential centre:

(7) Egyelőre a lehetőségek tesztelési fázisában vagyunk. ‘For the time being we are still in the testing phase of the options.’

(8) Most különösen fontos nekik a kommunikáció, ezért is igyekszem így felépíteni az óráimat. ‘Communication is particularly important for them now (most), which is why I try to structure my lessons in this way.’

(9) [...] egyre inkább belejövök majd a távoktatásba, és így idővel könnyebb lesz majd a helyzet. […] ‘I’m getting more and more used to online teaching, so it will later (majd) get easier over time.’

The similar trinity in the process of reflection observed in the use of verb tenses can also be detected, since egyelőre expresses retrospective reflexion, most is used to interpret something from the present, while majd marks a reflection on the future. The most typical postposition is szerint ‘according to’ (10), and the personal pronoun szerintem ‘according to me’ (11), which appears frequently in the texts, is also decisive. It allows speakers to express their opinions and makes the scene available through the speaker's own inferential process (Kugler 2015: 86). These phrases are also linked to the referential centre in the examples and mark the interpretative starting point of the event. The formulation of both reflections and conclusions is a crucial element of reflective journals.

(10) Az eddigi megfigyeléseim szerint elég változó a tanulók aktivitása ezeken a kontaktórákon. ‘From my observations so far, the activity of the students in these contact lessons is quite variable.’

(11) Szerintem nálunk egészen zökkenőmentesen ment az átállás […]. ‘I think the transition went quite smoothly for us […].’

Compound sentences are construction types in which there is no grammatical dependency between the clauses, but the proximity and order of the clauses is characteristic (Kugler 2017: 818). The relationship between coordinating compound clauses can be marked by conjunctions. In the reflective journals under study, the expression of reflective thinking is most often facilitated by causally related coordinating clause relations. The most frequent causal conjunctions in the texts studied are: ezért ‘so’, hiszen ‘as, since’, így ‘so’, mivel ‘as, since’.
(12) Ezen a héten sikerült a mentortanárom által tartott kontaktórába is bekapcsolódnom, de sajnos mindkettőnk tapasztalata az volt, hogy elég kevés tanuló szólt hozzá a témához, ezért kicsit tartok tőle, hogy mennyire lesz működőképes a hétfői órám velük. ‘This week I also managed to get involved in the lesson of my mentor teacher, but unfortunately what we both experienced was that very few students commented on the topic, so (ezért) I’m a bit worried about how productive my Monday lesson will be.’

(13) Ezekre az órákra is sokkal időigényesebb felkészülni, hiszen a diasorokat el kell előkészíteni, anyagokat kell megosztani, feltölteni, javítani és visszaküldeni. ‘It is also more time-consuming to prepare for these lessons, as (hiszen) the slides have to be prepared in advance, materials have to be shared, uploaded, corrected and returned.’

(14) A költői képek röpdolgozatot kétszer írták meg: egyszer rendszerhiba miatt katasztrofális eredmények születtek, emiatt gyakorlásnak és próbának tituláltam a dolgozatot, így a héten az éles dolgozatot is megírták egy proprofs.com-on készített kérdőív segítségével. ‘The tropes quiz was written twice: once with disastrous results due to a system error, thus I called it practice and a mock test, so (így) they wrote the sharp test this week with a questionnaire created with proprofs.com.’

(15) Egyébként az anyaggal is jól haladunk, mivel egész évben jó tempóban sikerült tanulnunk, nem lemaradva, hanem egy kis előnyel vágótunk bele a távoktatásba. ‘Anyway, we are doing well with the material as (mivel) we have been studying at a good pace all year we are not falling behind, we have a head start in e-learning.’

The examples show, based on the intention of directing attention, that the order of cause (antecedent) and effect (consequent) is also influenced by the reflective thinking of the person making the statement. In the case of cause and effect, there is an inferential relation between the clauses, i.e. the teacher trainee interprets the situation from their experience e.g. ezért, így ‘so, therefore’. However, in the case of the explanatory relation, the author emphasises the cause, i.e. the solution they have chosen to a problem.

3.2.3. Explicit linguistic elements typical of reflective diaries

In the analysis of reflective journals, we can also observe fully explicit, conceptual reflexive language elements. I consider as reflexive language elements all linguistic structures that contain concepts related to reflective activity (noun, adjective, verb) (cf. Hámori 2020). In the texts under study, nouns that frequently appear in connection with reflective thinking can typically be divided into two groups. The first group includes those that express emotions related to the experience described: disappointment, doubt, success (Hu. csalódás, kétség, siker). In the second group are terms that fall under the concept of reflection, such as consequence, observation, opportunity, experience, feedback, change (Hu. következmény, megfigyelés, lehetőség, tapasztalat, visszacsatolás, változtatás). Adjectives that can be associated with reflective thinking include those that qualify the teacher trainee’s activity or refer to their state of mind: enjoyable, useful, efficient, little, easy, difficult, normal, ordinary, variable (Hu. élvezetes, hasznos, hatékony, kevés, könnyű, nehéz, normál, rendes, változó). Verbs that can be associated with reflective thinking can be associated with basic cognitive operations or the expression of emotions. The most common verbs in reflective diaries can be divided into different groups according to their meaning. The first group includes perceptual terms that help to describe the scene to be reflected: notice, watch, see, experience (Hu. észrevesz, figyel, lát, megtapasztal). These verbs indicate that the interpretation of the situation is based on the author’s observations, starting the explanation of the situation from his own point of view. The second group consists of verbs expressing emotions and beliefs: admit, believe, enjoy, feel, be happy, like (Hu. bevall, hisz, élvez, érez, örül, tetszik). The emergence of emotions in reflective
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Journals is particularly important, as affective factors and beliefs greatly influence the formation of the teacher’s role (Gulya et al. 2019). The third group includes expressions related to critical thinking, which help explore the reasons for a particular pedagogical activity: emerge, think, conclude, find, learn, know (Hu. felmerül, gondol, leszűr, talál, tanul, tud). The fourth group is made up of verbs that express the author’s intention to reflect further on the activity that is reflected upon and help the author formulate conclusions about themselves and about the general context: want, adapt, develop, use, try, try, do (Hu. akar, alkalmazkodik, fejlődik, használ, igyekszik, próbál, tesz).

Of the 116 sentences at the level of dialogic reflection, only 9 are elementary sentences, the other 107 are complex sentences. The majority of complex sentences are composed of more than two clauses, and the relations between clauses within a sentence can be diverse. Therefore, what follows are subordinating clause relations that are dominant in reflective journals. A prototypical subordinating clause relation is a type of construction in which there is a grammatical dependence between the clauses. The subordinating clauses in reflective diaries are typically of the type that are formed by a coordinate clause with the hogy conjunction. “Main clauses that reveal the functioning of a thinking, considering, feeling (etc.) subject from the starting point of the manifestation are more abstract than the representation of the scenes being performed. In reporting their own mental processes, the manifestere must observe and express their own mental, emotional events. Will, feeling, opinion, belief, and related mental contents are also processed in a matter-like (more or less defined) way, but also treated as mental space” (Kugler 2017: 824). In the reflective journals studied, at the level of dialogic reflection, the main clause of the subordinate clauses expressing reflective thinking typically contains the verbs expressing the reflective thinking listed above, so the scene in the focus becomes the reflective process itself:

(16) Azt látom, hogy nagyon elkezdtek együtt dolgozni, amit lehet, megbeszélnek és megosztanak egymással, legyen az bármilyen tantárgy, és ez egy nagyon jó dolog.
‘I see that they are really starting to work together, discussing and sharing what they can, whatever the subject is, and that’s a very good thing.’

(17) Úgy érzem, kezd kicsit normalizálódni a helyzet és a diákok is beállnak egyfajta rendszerbe, így már sokkal kevesebb levelet kapok este 10–11 fele a diákoktól.
‘I feel that the situation is normalising a little bit and the students are getting into a sort of system, so I get a lot less letters from students at 10-11pm.’

(18) Gondolkozom azon is, hogy megpróbálok saját készítésű videót csatolni a következő anyagrészhez, de ehhez még szükségem van egy kis kísérletézésre és tanulásra, mert nincs tapasztalatom az ilyesmiben.
‘I’m also thinking about attaching a video of my own making to the next material, but I need to experiment and learn a bit more, because I don’t have any experience in this kind of thing.’

The examples also show that the primary role of main clauses containing reflexive verbs is contextualisation, as they express the consciousness of the speaker (Kugler 2017; Tátrai 2011), which in this case may not only contain reflections and metacognitive signals related to the linguistic activity but also provide a framework and filter for reflection on the given pedagogical situation. The typical examples presented also reflect the fact that the order of the clauses in the subordinate clause relationship is characterised by the main clause and the coordinate clause. On the one hand, this is beneficial for easier comprehension and faster processing, and on the other hand, it focuses attention on the scene of the clause, while the primary function of the main clause remains contextualization and the determination of mental space. This type of arrangement of clauses in reflexive texts is decisive because the arrangement of clauses is motivated by the need to direct attention and the author’s intention is to “observe the given scene in just that way (and not in another way)” (Kugler 2017: 790). The author’s reflexion and reflective way of thinking is again in the focus.
3.2.4. Good practices for writing reflective diaries

The study analysed the reflective thinking of teacher trainees mainly through the reflexive language elements and structure of meta-level sentences in reflective diaries, which are related to the level of dialogic reflection. The revealed linguistic structures and sentence construction strategies provide an opportunity to develop a methodological guide to support students in the formulation of reflexive texts. Based on the analysed diaries, the following main sentence construction strategies should be used by students when writing reflexive texts:

- creating sentences in the first person, expressing their own point of view
- awareness of the reflective activity as a temporal event to the referential centre (use of past tense verbs: retrospective reflection, use of present tense verbs: reflection on the current process, use of future tense verbs: inferential, generalising reflexion)
- subordinating complex sentences with contextualising reflexive verbs in the main clause e.g.: felmerül ‘arise’, gondol ‘think’, leszűr ‘conclude, find’, talál ‘find’, tanul ‘learn’, tud ‘know’
- forming subordinate complex sentences with clauses that are causally related, e.g. with the conjunctions ezért ‘so’, hiszen ‘since’, így ‘so’.

In addition to the strategies of sentence formation, the use of nouns that can be classified as reflexive and the use of adjectives that evaluate the activities of the teacher trainee are important in the language of reflective journals. The presence of these linguistic elements in reflective journals further reinforces the evaluative character of the text. The construction of reflexive sentences based on the analysed diary texts can be supported by the following sentence-level writing exercises (Tóth 2006):

- Completing sentences (e.g.: include the following nouns in a sentence of your reflective journal: observation, experience, opportunity, change (Hu. megfigyelés, tapasztalat, lehetőség, változtatás)! Add the following adjectives to each sentence in your reflective diary: enjoyable, useful, effective, difficult, stressful, disappointing (Hu. élvezetes, hasznos, hatékony, nehéz, megterhelő, kiábrándító).
- Finishing sentences (e.g.: Finish the following sentences and then incorporate them into your reflective diary: In the teaching practice I learned about myself that...; In the teaching practice I improved in that...; In the teaching practice I observed about myself/students/colleagues that...; In the teaching practice I often reflected that...; In the teaching practice I was challenged that...; In the teaching practice I was supported that...).
- Sorting sentences (e.g.: Sort sentences written in the first person and sentences not in the first person from your reflective diary! Note the proportions of the two groups. On the basis of your sorting, state how your own point of view is reflected in the text. Sort the sentences from your reflective diary into present, past and future tenses. Examine the extent to which your reflective diary covers the whole process of teaching practice.
- Analysis of sentences (e.g.: Look at the following compound sentences with a side order. Examine the sentences in terms of cause and effect. What happened and why? Write similar sentences in your own reflective diary. Motivation is particularly important for students, which is why I try to structure my lessons in a playful way. I have taught stylistics in Hungarian, so I put particular emphasis on the analysis of literary texts. I have also worked a lot, because after 6-7 hours at school, I always had to prepare 2-3 hours at home. Preparing for the introductory lessons is much more time-consuming, as the slides have to be prepared in advance).
- Simplifying sentences (e.g.: Formulate the meaning of the following multiple compound sentence in a simple sentence. I was happy to start with the Hungarian lessons, because I felt it was easier to start with less abstract, more accessible topics that still allowed for creativity.)
Transforming sentences (e.g.: Transform the following elementary sentences into subordinate clauses with conjunctions! According to my observations, students like playful tasks. Mostly, I need to improve my communication with colleagues. I had difficulty in consistently improving my papers. I have experienced the punctuality of my lessons as a success.)

4. Summary

The study analysed the reflective journals of 20 teacher trainees on their teaching practice from the perspective of pedagogy and functional cognitive pragmatics. The crossover of the two disciplines allowed the content and way of thinking about the reflective diaries to be linked to the linguistic framing. The starting point for establishing reflexivity was provided by Nelson and Narens’s model (1990), according to which sentences at the object level do not contain linguistic elements of reflective thinking, but form the basis for the use of language at the meta-level that shows reflexivity, which typically refers back to the findings at the object level. The application of the model has also shown that the Description level of reflectivity is at the object level, while the other levels (Descriptive, Dialogical and Critical reflection) are at the meta-level. Constant interaction between levels of the model is the organising force of the texts of reflective journals.

The analysis proved that the sentences of the reflective diaries can be linked to different levels of reflectivity on the basis of their meaning. This type of categorisation of sentences showed that specific language use can be observed at different levels of reflectivity. While the level of Description is typically dominated by the neutral point of view, the levels of Descriptive Reflection and Dialogic Reflection are dominated by the author’s own point of view, while the level of Critical Reflection is dominated by a kind of external point of view (Hámori 2020). These differences between perspectives also determine the strategies of sentence construction. Since the aim when writing reflective journals is to reach at least the level of dialogic reflection, the study focused on the linguistic elements of sentences at this level.

Several previous studies have shown that the development of reflective thinking in teacher trainees is often complicated by language difficulties (Simon 2018). If the sentences of the reflective diaries studied, which can be linked to dialogic reflection, and the language elements in the sentences that represent reflexivity are considered as a kind of good practice, a language use guide can be compiled that supports teacher trainees in reaching higher levels of reflectivity through language use.

Although sentence construction strategies and typical word use can greatly help the development of reflective thinking, they do not necessarily create coherence in the reflective journal as a text. In order to develop textual coherence, it would be worthwhile to further investigate reflective diaries at the text level. Describing the order of sentences in the text, assigned to different levels of reflectivity, would outline different text-editing patterns, which could be used to create coherent paragraphs and then text. To this end, it is worth developing a good practice in which teacher trainees code sentences in their own texts according to levels of reflectivity, thus raising awareness of their reflexive language use and developing their reflective thinking.

References


