

USING CINQUAIN AS A FORM OF REPRESENTATION OF NATURAL SCIENCE KNOWLEDGE

DANIELA PAHOME

Babeş-Bolyai University, Faculty of Psychology and Sciences of Education, "Tradition, Development, Innovation" Doctoral School of Didactics, Cluj-Napoca, Romania; Secondary School No. 4, Moreni, Dâmbovița County, Romania, e-mail: pahome.daniela@gmail.com

ABSTRACT

Cinquain is a poetic form, or stanza, of five lines that do not rhyme, which follows some strict rules. Cinquain is also considered to be a training means, a method, a technique, an instrument used for reflection, for synthesis of all knowledge on a particular topic (a being, an object, an ensemble of objects), towards developing one's creativity. In this research, the quintets were created by 47 university students in the last phase of a learning activity structured on the evocation-realisation of meaning-reflection model. The process of preparation and creation of quintets and the quintets created have been analysed, the conclusion being that quintets are an efficient technique in highlighting representations on a specific topic.

Keywords: *synthesis, creativity, summarisation, reflection, technique, poem*

INTRODUCTION

The literature considers the Cinquain to be a poetic form (Gardner, 2002; Herman, 2003), a poem (Steele, Meredith & Temple, 2003; Dulamă, 2008; Fadhli & Sufiyandi, 2020), a poem and a type of poetry (Aryusmar & Putria, 2014). Janeczko and Sweet (2014) stated that this type of poetry was developed about one hundred years ago by the American poet Adelaide Crapsey. They noted the similarity between the Cinquain and the Japanese poetic forms Haiku and Tanka.

Gardner (2002) states that this poetic form has five lines, and it uses a two-four-six-eight-two syllabic pattern. Other authors define the Cinquain as a five-short-verse free poem (Fadhli & Sufiyandi, 2020). Aryusmar and Putria (2014) defined the Cinquain as a five-line poem or stanza with a topic to describe (in line with the description above, we defined the Cinquain poetry as a five-line poem or stanza that has one topic to be described). Considering that the first and the last line of the Cinquain have two

syllables, whereas the others have several syllables, they noticed the similitudes between the form of the poem and the poetic form known as diamond. Herman (2003) suggests that the syllable-related requirements should be replaced by a specific number of words so that the Cinquain should be suitable for children with special needs.

Other authors describe the Cinquain as consisting of a title or the first verse, which is typically a noun; the second verse, a description usually made of two adjectives; the third verse refers to actions, generally expressed by verbs; the fourth verse expresses the feelings in relation to the topic approached; the last verse includes a word rendering the core of this topic (Steele, Meredith & Temple, 2003, p. 52; Flueraş, 2003). Owing to its simplicity, the Cinquain is seen as a popular form of poetry (Aryusmar & Putria, 2014).

Moreover, the Cinquain is deemed to be an alternative means for creative writing (Aryusmar & Putria, 2014), a teaching means by which pupils/students' writing skills may be improved (Fadhli & Sufiyandi, 2020), a training instrument (Simons, 2014), a means of expressing creativity and assessing pupils/students' understanding (Steele, Meredith & Temple, 2003, pp. 52-53).

The Cinquain is considered "a technique to elaborate the text itself, inspired from a topic under debate" (Temple, Steele & Meredith, 2003, p. 31); a "rapid and efficient technique of reflection by which a pupil/student's complex knowledge, feelings and convictions in relation to a topic are summarised and condensed" (Dulamă, 2002, p. 186; Dulamă, 2008, p. 359), a new technique of teaching creative writing (Aryusmar & Putria, 2014), an exercise (Zaharco, 2016), a method suitable for acquisition, consolidation and assessment (Marteau, 2021). The Cinquain is "an instrument of verbal organization" (Dulamă, 2002, p. 186; Dulamă, 2008, p. 359), "a rapid and efficient instrument of reflection, synthesis and summarization of concepts and complex information" (Steele, Meredith & Temple, 2003, p. 53).

In creating a Cinquain, it is recommended to respect the structure of this text (Temple, Steele & Meredith, 2003, p. 31) and it is suggested to write under the form of a short story consisting of a beginning, middle and end, and not to merely use some descriptive words (Aryusmar & Putria, 2014). These stories have at least one character (human, animal, object) (Simons, 2014).

The quintet is mostly created in the reflection phase; nevertheless, Saranciu-Gordea (2021) claims that it may also be created in the evocation phase with a view to capturing attention, increasing motivation and creating the ambience needed for conducting the lesson. In learning foreign languages, Lisnic (2018) states that the Cinquain may be applied in all phases of the lesson, in order to summarise and condense the information, especially in the evocation phase, in order to assess the acquisition of some grammar rules or in the extension phase, for creative feedback.

The quintet may be used in various subjects in school: Romanian language, mathematics, sciences, geography, history, civics, etc.

(Grigorescu, 2017). In geography, there are quintets on France and Rome (Dulamă, 2002, p. 187; Dulamă, 2008, p. 360), seismic movements, energy, the Republic of Moldova (Volontir, 2016, p. 84), entropic/environment (Fiodorciuc, 2021, p. 102). For sciences taught in primary education, there are quintets on seasons, bodies and nature (Grigorescu, 2017, p. 422), natural phenomena (rain), autumn, floods (Galben-Panciu, 2020, pp. 32-33), snow and winter (Tomescu, 2010, p. 58). The quintet has been used in teaching grammar structures in foreign languages (Lisnic, 2018). The authors creating all these quintets summarised their representations on the topic presented.

In the Romanian language school subject, the quintet seems to be used most frequently as a reflection technique relating to the study of fairytales and towards enhancing creativity (Paga, 2021), in the analysis of characters in literary texts (Antip, 2021), in defining some concepts (Dulamă, 2008), in developing aesthetic education (Panainte, 2019), in relating to the improvement of oral communication skills (Grişciuc, 2021), as a creative method (Vîntu & Ţurcan, 2011; Vlaicu, 2016), as a method to evaluate a narrative text (Zaharco, 2016). Vasiliu (2020) proposed to pupils with intellectual disabilities to create quintets based on features and actions of the characters in the images presented, to express their feelings in connection with such images and to respect the writing rules.

The quintets exemplified in the literature have various forms, depending on the arrangement of the verses on the page. The verses on the page are either aligned to the left (Dulamă, 2002; Volontir, 2016; Galben-Panciu, 2020), or in the centre, in diamond-shaped quintet (Dulamă, 2008; Tomescu, 2010; Grigorescu, 2017; Fiodorciuc, 2021). In other works, the quintets seem to rather be schemes and not poems as the words are included/framed in ovals connected by lines (Paga, 2021) or in boxes with no lines to connect them (Galben-Panciu, 2020).

Creating such a simple poem, the Cinquain, is beneficial to children as learning occurs in a more interesting and significant environment (Kautzer 2012; Aryusmar & Putria, 2014), where both utility and pleasure are combined (Vîntu & Ţurcan, 2011). The activity of writing a quintet triggers enhanced motivation to find appropriate words to render a personal experience (Harmer, 2001); it is suitable to create and organise ideas (Aryusmar & Putria, 2014), to complete something within certain limits (Wyse & Jones, 2008), to reflect on certain terms of which other pupils do not think (Simons; 2014), to rapid personal and collective reflection, and to deep understanding of knowledge (Grişciuc, 2021, p. 32). Sendova (1988) observes that the lists of words used in creating quintets reflect the creative associations of their authors and may bring about new reasoning and associations.

The activities in relation to which quintets are created provide an optimal context for the manifestation of creativity (Grişciuc, 2021) and development of creativity (Paga, 2021), for aesthetic education (Panainte, 2019), for the manifestation of logical thinking (Grişciuc, 2021, p. 32), for improvement of writing skills (Fadhli & Sufiyandi, 2020), development of the capacity of self-criticism and the discipline of reformulation (Wyse & Jones,

2008); development of oral communication skills (Marteau, 2021; Grişciuc, 2021) and for specific skills required in learning Sciences (Galben-Panciuc, 2020). Writing a quintet favours the essentialisation of knowledge (Grişciuc, 2021) and condensation of ideas on a specific theme (Zaharco, 2016).

In their studies on the quintet, researchers observed that this form was useful in learning the meaning of adjectives, nouns or verbs (Fadhli & Sufiyandi, 2020), in distinguishing between literal meaning and figurative meaning of words (Zaharco, 2016), in writing narrative and descriptive texts (Aryusmar & Putria, 2014), in improving the vocabulary used by pupils/students (Aryusmar & Putria, 2014), in analysing characters (Paga, 2021; Antip, 2021) as well as some geographic processes and phenomena (Fiodorciuc, 2021).

METHODOLOGY

Objective. The main objective of this research is to analyse the under and postgraduate students' representations on the topic included in the quintet created at the end of a short learning activity.

Participants. Three groups of students at Babeş-Bolyai University in Cluj-Napoca were invited to participate in this research. Two groups from the Faculty of Psychology and Sciences of Education were made of postgraduates studying in the "Curricular Management" (CM) Master Programme - first academic year: the first group with 13 postgraduates attending the part-time learning education programme (IFR); the second group had 17 postgraduates attending the full-time learning education programme (full-time). Most postgraduates in these two groups are teachers in pre-university education, i.e. preschools, primary schools, secondary and high schools. The third group included 17 postgraduates from the Faculty of Geography, second academic year, studying various master's specialisations provided by this faculty, who are in the second academic year of the Psychopedagogical Studies - level II and pursue to become teachers of geography in high schools. The professor who conducted the seminar activities endorsed the analysis of such activities and provided the information required to carry out the research. The under- and postgraduates allowed analysis of their quintets at the end of the activity performed.

Instruments. The information on the activities carried out was collected based on the interview method. With which groups and in what subjects was the didactic activity conducted? How was the didactic activity conducted?

Procedure. The quintets were created in seminar activities for two subjects: "Activated Methods" (group 3) and "Teaching-Learning Paradigms and Models" (groups 1 and 2). The goal of this didactic activity was to apply the Evocation-Realisation of meaning-Reflection model (ERR) and to use some student-centred methods appropriate for each phase. The ERR Model

USING CINQUAIN AS A FORM OF REPRESENTATION OF NATURAL SCIENCE ...

was applied to the topic/theme "The Black Goat" (Dulamă, 2012, p. 144). The activities were carried out on the learning platform Microsoft Teams.

Conduct of didactic activity (adaptation from Dulamă, 2012, p. 144)

Evocation Phase. Technique: Freewriting. *Task:* Use the chat room for one minute to write everything you know about the black goat.

The professor read what the students wrote on the chat, grouped the information by categories, in writing, on the chat, and orally summarised them.

Realisation of meaning Phase. Method: Quadrants. *Task:* Work in groups of four. Create a four-quadrant table following the model posted on the chat. Each group will study a topic from the quadrant. Read the text posted on the platform (Appendix 1) and fill in each quadrant with essential information written in a concise manner. Each group will post the solution on the quadrant. A representative of each group will present the solution provided by their group.

The professor asked questions for further clarification of the information provided.

Group no. 1 – Living environment	Group no. 3 - Anatomy (morphology)/description
Group no. 2 – Behaviour	Group no. 4 - Physiology (functions) (feeding, breeding, moving)

Reflection Phase. Technique: Quintet. *Task:* Write a quintet on the black goat and post it on the chat.

1. First verse – one word/title (usually, a noun).
2. The second verse is made up of two adjectives describing the topic.
3. The third verse is made up of three words expressing actions (verbs usually in gerund).
4. The fourth verse is made up of four words expressing the feelings of the person describing the topic.
5. The last verse is made up of one word expressing the core of the topic.

The professor read each quintet posted, provided immediate feedback and demanded that all errors be corrected.

Technique: Table T. *Task:* In a table T, fill in the Pro and Con arguments on hunting the black goat. Present all your arguments orally and write them on the chat.

The professor read the arguments written and discussed them with the students.

Pros	Cons

Debriefing. The professor and the students analysed the phases and the didactic methods and techniques used, as well as their importance.

Data analysis. In this paper, we analysed the process of quintet preparation, creation and assessment along with the quintets created. We analysed 47 quintets created in the reflection phase: 13 quintets provided by students in IFR (part-time learning system); 17 quintets provided by students in the full-time learning system; 17 quintets provided by students in their second academic year. We selected 12 quintets, which we considered representative of the studied theme depending on the topic tackled in verses four and five. All quintets were analysed using the content analysis method.

RESULTS AND DISCUSSIONS

Analysing the Cinquain creation process

In reference to the writing process, Troyka and Hese (2005) considered that there are six stages to cover (planning, modelling, writing, revising, editing and proofreading), while Clark (2007) proposed five writing components (pre-writing, writing, revising, publication and reflection). While performing the activities, the students used the first stage to extract from their recollections all knowledge on the black goat and wrote them on the chat. In the second stage, they read a text referring to this topic and extracted information on a certain theme, whereas in the reflection stage they each wrote the quintet and posted it on the chat when completed, with no deadlines imposed by the professor in this respect.

The main goal of writing the quintet was to summarise the essential information on the topic and to observe the rules given. On the other hand, stimulating and developing creativity was a secondary goal towards writing the quintet. Harmer (2001) recommended that the professors should “build” their creative writing gradually; nevertheless, in this case, the students received the task in writing (in full), and they worked on an individual basis, at home, yet supervised throughout the entire activity by the professor, on the learning platform. Aryusmar & Putria (2014) suggested that the professor should guide the students in choosing the topic, writing the text and elaborating on their ideas. In this case, the topic was given and the quintet writing activity was not supported by the professor who had no possibility of seeing what the students were writing before the completion of the writing activity.

The professor and the students in each group could read the quintets created by their colleagues after they were posted on the chat. While reading them, the professor provided feedback every time there were insufficient or, on the contrary, too many words. Some quintets were posted upon completion of the reflection stage, in which cases they did not receive firm and constructive feedback from the professor.

Analysing representative successful/quintets

In choosing the quintets which best *represent* this topic, we paid special attention firstly to the fourth verse and secondly to the last verse. In terms of originality, we noted quintet 9 where a quote representative for this genre was used: "The black goat's steps are clinch-like" (clinch = grapple and mutual immobilisation of the partners during a fight, Romanian Academy, 2010). Quintet 2 also stands out as original. The author addresses the black goat directly "You are always up there."

In three quintets, the black goat is seen as the queen of "the Carpathians" (Quintet 1), "of the high lands" (Quintet 7), of the "mountainous peaks" (Quintet 12). In Quintet 2, we see some representations prior to reading the text: "The man is the main enemy". Quintet 4 stands out by the emphasis laid on a key fact for this genre: "It is protected by law". We see in quintet 6 the representation of an essential characteristic: "It is a daytime species". The requirement referring to expressing the author's feelings on this topic is observed in two quintets: "Seeing it gives us joy" (Quintet 5); "I admire it like an icon" (Quintet 10). Quintet 11 includes several nouns combining the author's feelings: "Respect, compassion, envy, care / Mammal". Quintet 8 highlights the importance and value attached to this species: "Famous around the world" (Quintet 8). We note the accuracy and diversity of the students' opinions and representations of the black goat, many of which were created from previous information.

Quintet 1¹

The goat
Beautiful, black.
Wandering, defending, picking.
It is the queen of the Carpathians,
Protected
(CM student – Part-time learning)

Quintet 2

Goat
Black, nippy,
You run, jump, watch.
You are always up there,
Nimble
(CM student – Full-time learning)

¹ Due to translation from Romanian into English, some quintets no longer have eleven words.

Quintet 3

The goat
black, protected
eating, jumping, running
The man is the main enemy,
Superb
(CM student – full-time learning)

Quintet 4

The goat
black, nimble
jumping, eating, feeding
It is protected by the law,
Authentic
(CM student – Full-time learning)

Quintet 5

The goat
Black, wonderful
eating, running, jumping
Seeing its grace gives
us joy
(CM student – Full-time learning)

Quintet 6

The goat
Black, strong
climbing, eating, warning
It is a daytime species,
Rare
(CM student – Full-time learning)

Quintet 7

The goat
Black, rare
Living, hopping, shouting
Queen of the high lands,
Divine
(CM student – full-time learning)

Quintet 8

The goat
Black, precious
Hopping, running, climbing
Famous around the world,
Unique
(CM student – full-time learning)

Quintet 9

The goat
swift, protected
running, eating, hunting
"The black goat's steps are clinch-like"
Animal
(CM student – full-time learning)

Quintet 10

The goat
black, vigorous
running, looking, jumping
I admire it like an icon,
Painted
(CM student – full-time learning)

Quintet 11

The goat
agile, majestic
hopping, climbing, running
Respect, compassion, envy, care
Mammal
(Geography student)

Quintet 12

The goat
Horned, swift
Running, hopping, surviving
Frail, queen of mountainous
peaks
Protected
(Geography student)

Analysing quintets

Following the rules. Prior to the creation of quintets, the professor asked the students to follow strict rules: use a specific number of parts of speech in the first three verses (one noun + two adjectives + three verbs); the fourth verse should be a four-word sentence; the last verse should

represent the essence or the quintessence of the topic. Based on these rules, the quintet should have 11 words.

In the quintet creation process, some students brought the nouns together using the conjunction "and", this being the reason why the professor asked them to eliminate the linking word. Some students used two-word forms of the verbs (for example: "it hides out", "it climbs high") or included in the fourth verse sentences consisting of more than four words. Following the feedback received from the professor, the students changed the words in the chat. The students did not know the rule stated by Gonzales (2010) i.e. avoiding repeating the same word in their poem, however, they did not even make this mistake.

Based on the analysis of the written quintets, we see at the end that, in four of them, the second verse has no adjective, the third verse has no verb and the fourth verse does not include certain words. In three quintets, the fourth verse has too many words, most likely because the students observed the rule referring to building a sentence and overlooked the one referring to creating a four-word verse.

Representations on nomination and generalisation. Temple, Steele & Meredith (2003, p. 31) stated that there are three mental operations involved in writing the Cinquain: nomination, description, and generalisation. Although the topic of the quintet consists of two words ("Black goat"), the title of the first verse has to be made of one word only. In order to follow the rule and the topic, the first verse should be "(the) goat", the second verse should include the adjective "black" so that the reader may understand that the poem is about this species and not about goats, in general. Nevertheless, in 17 quintets, the adjective "black" has been left out, which may lead the readers to form wrong perceptions and representations as they will consider that these quintets are about the category "goat", and not about the species "black goat". We note that one quintet has no title, whereas another was entitled "The Body", where the last verse was the noun "the goat".

Following the analysis of the fifth verse (Table 4), we construe some aspects regarding generalisation. In 17 quintets (36%), the author used in verse five words referring to protection/preservation, either with the meaning that it is a protected species (by law) or with the meaning that one should behave and adopt attitudes towards protecting it. The references to "unique/one of a kind" (in three quintets) and the attributes queen, wonder, mild, beauty (in two quintets each) come in a significantly lower number of representations of the black goat.

Two nouns and two adjectives indicate scientific representations and also the fact that the authors of the quintets include the species of the black goat in the following categories: animals, mammals, protected species, rare animals. Some adjectives refer to the physical capacities of the black goat: sharp, gracious, strong, speedy. In these quintets, the fifth verse indicates a subjective perception of the topic: divine, special, superb, authentic. We also see some incorrect representations of this species: nocturnal, eternal.

Representations of the attributes of the species. To evaluate the quintets, Brown (2007) used a holistic five-element scale: content, organisation, vocabulary, language used, mechanics. Anderson (2003) stated that, when creating written texts, one should take into consideration the information on the context and the previous knowledge. In the case of quintets, students have the opportunity to exploit their previous knowledge, as well as the knowledge extracted from the text or deduced in relation to it.

In order to identify the attributes of the black goat as a species, we will analyse the adjectives used by the students in the second verse. In Table 1, we may see that the adjective "black" is used in 29 quintets; yet, for an accurate representation of the species, this adjective should have been used in all poems. We note that some adjectives indicate objective representations: protected (it is a species protected by the law in Romania), wild (it is a wild animal), ruminating (the food comes back from the stomach to the mouth to be re-chewed). Some adjectives indicate representations of some visible aspects: the colour of the coat (black, red, coppery), the appearance of the body (tall, slim, long, short, horned), specific movements (agile, swift, quick, climbing, fast). Some adjectives indicate subjective representations of the black goat: beautiful, wonderful, unique, precious, curious, fighter, great, intelligent. The seven adjectives used in three to five quintets and the 26 adjectives used in only one quintet prove the richness of the students' vocabulary.

Table 1. Adjectives used by students in the second verse of the quintets

Adjectives	No. of uses
black	29
beautiful; agile	5
protected; quick	4
wild; slim; strong	3
red-coated; majestic; robust; elastic	3
coppery, swift, nimble, tall, wonderful, rare, robust, unique, precious, vigorous, climbing, curious, horned, fast, fighter, great, big, good, long, intelligent, ruminating, short, muscular	1

Representations of the actions of the species. In Table 2, we observe that the most frequent actions of the black goat rendered in the quintets are jumping (31 quintets), fleeing and running (29 quintets). These representations were accurately correlated to reality and they indicate the students' previous knowledge. The high number of verbs used indicates actions performed on a regular basis: eating, looking. We may see that the students' attention was captured by actions such as fighting and hissing, specific manifestations of this species which were described in the text proposed for reading. Other actions relating to the black goat were mentioned in three quintets (climbing, coming down, grazing), in two quintets (climbing, defending, watching) or in one quintet (Table 2).

USING CINQUAIN AS A FORM OF REPRESENTATION OF NATURAL SCIENCE ...

Most verbs refer to the representation of the movements made by the black goat: it jumps/jumping, running/you run; fleeing/you flee, climbing/you climb; you come down/coming down; going, climbing; wandering. Some verbs indicate their representations of nutrition/feeding: eating, grazing, they ruminate. Other verbs indicate their representations of the defence-related behaviour (aiming; looking/you look/it looks; fighting; hissing; defending itself/defending; watching; warning; shouting, hiding), by comparison to other entities of the same kind (fighting; gathering). Additionally, we note that some verbs used indicate subjective representations, less typical of this species: floating, dreaming, hopping, aiming.

Table 2. Verbs used by students in the second verse of the quintets

Verbs	No. of uses
jumps/jumping	31
running/run; flees/fleeing	29
eating	8
aiming; looking/watch/watches	7
fighting; hissing	5
climbing; coming down; walking; living; grazing	3
defending itself/ defending; giving birth; looking after	2
picking, wandering, floating, dreaming, warning, feeding, hopping, shouting, hiding, surviving, contemplating, sleeping, ruminating	1

In Table 3, we grouped by categories the fourth verses from the quintets, depending on their content. In some quintets, the verse indicates representations of the place where black goats live, in others the students meet the requirement relating to representations of the author's feelings on the topic (admiration, respect, appreciation). In twenty quintets, the fourth verse stands for a conclusion. Some verses indicate the existence of some previous representations of the black goat: "The lynx is its enemy"; "The man is the main enemy"; "It is a daytime species". In eleven quintets, the students made use of some enumerations of nouns, adjectives, verbs, among which we observe some adjectives not used in the other verses: wonderful, gracious, happy, amazed, searched, admired, loved, cherished. In three quintets, these parts of speech express the authors' feelings towards the black goat: "fear, curiosity, joy, beauty"; "respect, compassion, envy, care"; "curiosity, joy".

Table 3. Groupings by categories depending on the content of the fourth verse of the quintet

<i>Identifying location</i>	<i>Conclusion</i>	<i>Nouns/ adjectives</i>
Around mountainous areas	This species deserves protection	Searched, admired, loved, cherished
It lives in mountainous areas	It is protected by law	Wonderful, gracious, stout, beautiful
Among the peaks of	It is a daytime species	Happy, amazed, admired,
	Queen of the high lands	

DANIELA PAHOME

<p>the rocky mountains</p> <p><i>Feelings</i></p> <p>I admire it from a distance</p> <p>I respect and appreciate it</p> <p>I admire and respect it</p> <p>I admire it like an icon</p> <p>I admire and protect it</p> <p>My beloved animal</p> <p>The respect I show it</p> <p>Seeing it gives us joy</p> <p>Adored wonder of nature</p>	<p>Famous around the world</p> <p>"The black goat's steps are clinch-like"</p> <p>The man is the main enemy</p> <p>Black and very beautiful</p> <p>You are always up there</p> <p>This animal is protected</p> <p>The lynx is its enemy</p> <p>A very strong animal</p> <p>It is strong and fights</p> <p>Rare interesting animal</p> <p>It is the queen of the Carpathians</p> <p>Frail, queen of the mountainous peaks</p> <p>The animal is very beautiful</p> <p>This strong animal fights</p> <p>It is strong, rapid, climbing</p> <p>It runs up and down the rocky slopes</p>	<p>loved</p> <p>Swift, Beautiful, Interesting, complex, strength, agility</p> <p>Beautiful animal, mild, unique</p> <p>Fear, curiosity, joy, beauty</p> <p>Respect, compassion, envy, care</p> <p>Curiosity, joy</p> <p><i>Verbs + nouns/adjectives</i></p> <p>Delineates, gives birth, joy, strength</p> <p>Alpine, climbing. Hopping, ruminating</p>
--	--	--

Table 4. Nouns, adjectives and verbs used by students in the fifth verse of the quintets

Nouns, adjectives, verbs	No. of uses
we preserve/ preservation/ preserved/ protected	17
mild, marvel, beauty, queen, unique/ one of a kind	2
nimble, animal, authentic, goat, special, divine, being, gracious, mammal, nocturnal, painted, strength, rare, respect, superb, lives, unique, hunted, immortal, brave	1

CONCLUSIONS

This research leads us to several conclusions. Whereas in the previous studies the elaboration of the quintets aimed at both reflecting on a specific topic and developing creativity, the main objective of this research is to summarise the main features of a species starting from the representations of students' previous knowledge, as well as from representations made based on reading a text. The quintets created indicate the existence of some previous representations on the topic and also some representations based on a text read.

Even though these quintets were created in a short timeframe, with no successive revisions, they show that the students used a vast range of nouns, adjectives and verbs, an indication of their rich vocabulary, and various representations of this topic. The analysis of these quintets shows that they include essential attributes of the species, i.e. the students have accurate (scientific) representations.

Finally, the elaboration of the quintets is an efficient technique used in emphasising the main attributes of a concept, the richness and the specificity of the representations on a particular topic of a person or a group, on the one hand, and in summarising them in a concise manner and in line with some strict rules, on the other hand.

References

- Academia Română. Institutul de Lingvistică [Romanian Academy. Institute of Linguistics] (2010). *Micul dicționar academic, ediția a II-a [Short Academic Dictionary, 2nd edition]*. Bucharest: Univers Enciclopedic.
- Anderson, N. (2003). *Practical English Language Teaching*. Singapore: McGraw-Hill.
- Antip, C.R. (2021). Metode interactive și situații problematizante în studiul textului literar (pe baza operei „Amintiri din copilărie” de Ion Creangă) [Interactive Methods and Issue-Triggering Situations in the Study of the Literary Text (based on “Memories of My Boyhood” by Ion Creangă)]. *Univers Pedagogic*, 71(3), 46-55.
- Aryusmar, A. & Putria, W. (2014). The Effectiveness of Teaching Creative Writing Using Cinquain Poetry. *Humaniora*, 5(2), 1037-1048.
- Clark, S.K. (2007). *Writing Strategies for Science*. Huntington Beach, CA: Shell Education.
- Douglas Brown, H. (2007). *Teaching by Principles: An Interactive Approach to Language Pedagogy. 3rd edition*. White Plains, N.Y.: Pearson Education.
- Dulamă, M.E. (2002). *Modele, strategii și tehnici didactice activizante cu aplicații în geografie [Activating Didactic Models, Strategies and Techniques with Applications in Geography]*. Cluj-Napoca: Clusium.
- Dulamă, M.E. (2008). *Metodologii didactice activizante. Teorie și practică [Activating Didactic Methodologies. Theory and Practice]*. Cluj-Napoca: Clusium.
- Dulamă, M.E. (2012). *Științe și didactica științelor pentru învățământul primar și preșcolar [Sciences and Didactics of Sciences for Primary and Pre-school Education]*. Cluj-Napoca: Presa Universitară Clujeană.
- Fadhli, M. & Sufiyandi, S. (2020). Cinquain Poem: A Stimulating Instructional Media in Teaching Writing. *Edukasi Jurnal Pendidikan dan Pengajaran*, 7(2), 109-117.
- Fiodorciuc, D. (2021). Metode de activizare a liceenilor în cadrul procesului de evaluare formativă la lecțiile de geografie [Methodologies to Activate High School Pupils within the Framework of the Formative Assessment Process in Geography Lessons]. In Coropceanu, E. (ed.), *Materialele conferinței științifice studențești cu participare internațională, vol. II [Materials of the Student Scientific Conference with International Participation, 2nd volume]* (pp. 99-105). Chișinău: Printing Press of the State University in Tiraspol.
- Flueraș, V. (2003). *Paideia și gândire critică [Paideia and Critical Thinking]*. Cluj-Napoca: Casa Cărții de Știință.
- Galben-Panciu, Z. (2020). Strategii didactice convergente spre dezvoltarea competențelor specifice la disciplina Științe, treapta primară de învățământ [Convergent Didactic Strategies towards Developing Specific Skills in Sciences, Primary Education]. *Revista de științe socioumane [Social and Human Sciences Magazine]*, 45(2), 23-36.

- Gardner, T. (2002). *Composing Cinquain Poems: A Quick-Writing Activity*. International Reading Association; National Council of Teachers of English. <http://www.readwritethink.org/lessons>.
- Gonzales, D. (2010). *Poetic Magic: Turning Free Writing into Verse. A Study of the List Poem, the Diamante, the Cinquain, the Quatrain, the Fibbonacci, and the Triolet*. AMS Fall 2010 Conference. Retrieved 15 January 2022, from www.debbiegonzales.com
- Grigorescu, C. (2017). Valoarea formativă a metodelor interactive folosite în învățare [Formative Value of Interactive Methods used in Learning]. *Columna*, 6, 419-425.
- Grișciuc, V. (2021). Dezvoltarea competenței de comunicare orală în cadrul orelor de limba română în treapta primară [Developing Oral Communication Skills within Romanian Language Classes in Primary Education]. In Coropceanu, E. & Braicov, A. (eds.), *Materialele Conferinței Republicane a Cadrelor Didactice*, vol. IV [Materials of the Republican Conference of the Teaching Staff, 4th volume] (pp. 241-244). Chișinău: Printing Press of the State University in Tiraspol.
- Harmer, J. (2001). *The Practice of English Language Teaching, 3rd edition*. England: Pearson Education Limited.
- Harmer, J. (2007). *How to Teach Writing*. Essex: Pearson Education Limited.
- Herman, C. (2003). Teaching the Cinquain: The Quintet Recipe. *Teachers & Writers*, 34(5), 19-21.
- Janeczko, P.B. & Sweet, M. (2014). *Firefly July: A Year of Very Short Poems*. Somerville, Massachusetts: Candlewick Press.
- Kautzer, K. (2012). *Cinquains*. WriteShop, Inc. Ontario. Retrieved 15 January 2022, from <http://www.writeshop.com>
- Lisnic, A. (2018). Strategii inovative în predarea structurilor gramaticale la limba străină [Innovative Strategies in Teaching Grammar Structures in Foreign Language]. In Coropceanu, E. & Braicov, A. (eds.), *Materialele Conferinței Republicane a Cadrelor Didactice*, vol. III [Materials of the Republican Conference of the Teaching Staff, 3rd volume], (pp. 218-221). Chișinău: Printing Press of the State University in Tiraspol.
- Martea, L. (2021). Metode activ-participative specifice formării competenței comunicative la lecțiile de limbă și literatură română [Active-Participative Methods specific to Formation of Communication Skills in Romanian Language and Literature Classes]. In Coropceanu, E. & Braicov, A. (eds.), *Materialele Conferinței Republicane a Cadrelor Didactice*, vol. IV [Materials of the Republican Conference of the Teaching Staff, 4th volume] (pp. 264-270). Chișinău: Printing Press of the State University in Tiraspol.
- Paga, T.D. (2021). Formarea competenței lectorale la elevii din ciclul primar prin intermediul basmului [Formation of Reading Skills in Pupils in Primary School using Fairytales]. *Studia Universitatis Moldaviae (Seria Științe ale Educației Sciences of Education Series)*, 145(5), 97-100.
- Panainte, I. (2019). Dezvoltarea educației estetice prin intermediul textelor literare [Developing Aesthetic Education through Literary Texts]. In Braicov, A (ed.), *Materialele Conferinței Republicane a Cadrelor Didactice*, vol. IV [Materials of the Republican Conference of the Teaching Staff, 4th volume] (pp. 335-341). Chișinău: Printing Press of the State University in Tiraspol.

USING CINQUAIN AS A FORM OF REPRESENTATION OF NATURAL SCIENCE ...

- Saranciuc-Gordea, L. (2021). *Ghid metodologic "Dezvoltarea personală" disciplină școlară în clasele primare* [Methodological Guide "Personal Development", School Subject in Primary Classes]. Chișinău: "Ion Creangă" State University of Pedagogy.
- Sendova, E. (1988). Computers as a Stimulus for Generating Ideas. *Education and Computing*, 4(3), 151-155.
- Simons, L.M.B. (2014). *Cinquain Poems*. Mankato: The Child Worlds.
- Steele, J.L. Meredith, K.L. & Temple, C. (2003). *Promovarea gândirii critice. Ghidul II [Promoting Critical Thinking. Guide II]*. Cluj-Napoca: Proiectul Lectura și scrierea pentru dezvoltarea gândirii critice [Project Reading and Writing towards Developing Critical Thinking].
- Temple, C., Steele, J.L. & Meredith, K.L. (2003). Aplicarea tehnicilor de gândire critică. Ghidul IV. Supliment al revistei *Didactica Pro...* [Applying Critical Thinking Techniques. Guide IV. Supplement of *Didactica Pro...* Magazine]. Retrieved 15 January 2022, from <http://prodidactica.md/wp-content/uploads/2016/09/4.pdf>
- Tomescu, C. (2010). Metode interactive utilizate în învățământul primar [Interactive Methods used in Primary Education]. *Analele Universității "Constantin Brâncuși" ["Constantin Brâncuși" University Annals]*, Seria Științe ale Educației [Education Sciences Series], 2, 53-60.
- Troyka, L & Hese, D. (2005). *Simon & Schuster Handbook for Writers*. New Jersey: Pearson Education.
- Vasiliu, M.M. (2020). Experițe didactice în formarea competenței de comunicare a elevilor cu dizabilități intelectuale [Didactic Experiences in Formation of Communication Skills. Pupils with Intellectual Disabilities]. *Revista de Pedagogie [Magazine of Pedagogy]*, 68(2), 181-201.
- Vîntu, V. & Țurcan, N. (2011). Creativitate și eficiență în cadrul orelor de limbă română [Creativity and Effectiveness in Romanian Language Classes]. *Analele Științifice ale USMF "N. Testemițanu" [Scientific Annals of "N. Testemițanu" USMF]*, 12(1), 57-61.
- Vlaicu, E.M. (2016). Strategii didactice moderne utilizate în orele de limba română [Modern Didactic Strategies used in Romanian Language Classes]. *Educrates*, 5, 13-17.
- Volontir, N. (2016). Modalități de stimulare și dezvoltare a creativității elevilor prin geografie [Methods to Stimulate and Develop Pupils' Creativity through Geography]. *Revista Didactica Pro..., revistă de teorie și practică educațională [Didactica Pro... Magazine, Educational Theory and Practice Magazine]*, 99(5-6), 80-85.
- Wyse, D. & Jones, R. (2008). *Teaching English, Language and Literacy*. New York: Routledge.
- Zaharco, A. (2016). Metode de dezvoltare a abilităților de receptare și apreciere a textului narativ la elevii din clasa a IV-a [Methods to Develop Skills in Receiving and Evaluating Narrative Texts in 4th Grade Pupils]. In Prican, V. (ed.), *Interuniversitaria*, 11th edition, 2nd volume (pp. 110-117). Bălți: Universitatea de Stat „Alec Russo”.