



Constructivism in Writing Learning in Elementary School; Systematic Literature Review

Risnandar Sudarman^{1*}, Vismaia S. Damaianti¹, Yeti Mulyati¹,
Soni Mulyawan Setiana²

¹Universitas Pendidikan Indonesia, Indonesia

²Universitas Komputer Indonesia, Indonesia

Email: *risnandarsudarman@upi.edu

Abstract. This study aims to enhance learners' writing competence in line with their individual talents and interests, structured through the stages of pre-learning, core activities, and closing. Competence development is facilitated through constructivist principles, applied during the writing process based on specific themes within various text genres. Within the constructivist framework, learners actively engage in sorting, selecting, and organizing content areas (writing topics) as a foundation for their writing. Subsequently, learners refine their work by editing, revising, and ultimately publishing their writing for reader engagement, appreciation, feedback, and assessment. This study employs a systematic literature review methodology, analyzing a total of 65 journal articles across four databases, focusing on primary school writing instruction, constructivist learning models, and their applications in writing pedagogy. The review process involved identification, primary data selection, data extraction and synthesis of results. The findings of this review will offer insights into effective instructional strategies to support writing skills development in primary school contexts, emphasizing the role of constructivism in the writing learning process.

Keywords: Writing Learning in Elementary School, Constructivism in Learning, Elementary School, Systematic Literature Review

1. Introduction

Humans as social creatures always interact with the environment and communicate using language [1]. Writing as one of the skills to communicate in writing as a language medium with a certain language style to convey ideas and ideas, organise and convey their thoughts, clarify ideas and process information in written form. By having the ability to write, a person can encourage himself to organise ideas, clarify thoughts, receive and process information in written form [2, 3]. Writing is an activity of pouring ideas or ideas through written language. Ideas or ideas in writing can be in the form of feelings, opinions, and our experiences. The main purpose of writing, as a medium to convey emotions, ideas, goals, and plans, is to help individuals communicate more successfully in today's communicative world [4]. Writing

learning is seen as an effort to increase students' potential to have writing skills. For this reason, learning to write in primary schools is a form of interaction and a form of communication using language [1]. Therefore, writing instruction plays an important role in developing learners' communication skills, especially in primary schools, where writing instruction forms the foundation for future linguistic interactions.

Writing learning is seen as an effort to improve students' competence in using language as a medium of communication [9, 10] Writing learning is an effort to support and motivate students to express themselves through writing, or may involve instructional components designed to modify student behaviour. According to [11] writing learning is one of the unique learning styles, writing emphasises the process and results, this shows that writing is not necessarily owned by someone but takes time to produce. For this reason, writing is a skill that writers use to reflect their thoughts and express their feelings, so writing is not just writing words in a sentence, or writing one sentence with another sentence to form a planned paragraph, organising their ideas, determining and using a paragraph framework, finding meaning and pouring it into coherent language.

In learning to write, a foundation is needed for students to formulate ideas and ideas in the form of writing. Constructivism is a method of using experience to help students develop new knowledge in their cognitive structure [2]. Constructivism is the practice of using experience to develop or structure new information in students' cognitive structures [6]. Many skills are required during the construction process, including the capacity to recall and articulate experiences, compare, make decisions (justifications) about similarities and differences, and prioritise certain experiences over others [7]. An important premise is that students develop their knowledge actively. The learner's mind takes input from outside reality and selects which of what he or she learns is useful in everyday life [8]. Learning is a continuous energetic process and not a passive perception of teaching [8]. A more recent view of constructivist perceptions of learning suggests that learning outcomes should result from knowledge construction processes and that learning objectives should be determined from authentic learning processes with clear goals [8].

Constructivist theory aims to answer how individuals develop critical thinking by trying to make sense of situations [8]. Jerome Bruner put forward the idea of constructivism in 1966. This theory, which is based on the ideas of cognitive theory and sometimes referred to as cognitive constructivism, states that humans develop their own understanding and knowledge of the world by experiencing things and reflecting on those experiences [13]. Constructivism, according to Felder (2012), Gordon (2008), Neo et al. (2009), has become a powerful theory to describe how people take in new knowledge and learn about the world around them [14]. According to Rusman (2013), constructivism is a teaching method where each student must search and modify complex material, compare it with the prevailing norms, and edit it as needed [6]. People can actively receive knowledge and 'construct' new types of knowledge by combining previously acquired knowledge, the main purpose of constructivist theory is to clarify how individuals interpret their environment and provide meaning, on the other hand, it is difficult to define constructivism precisely [8].

To that end, constructivist theory as conceptualised by thinkers such as Jerome Bruner, provides insight into how students construct critical thinking and interpret their environment. Through reflection on experiences, learners create their own understanding of the world, combining knowledge in ways that are meaningful to them. Constructivism, supported by theorists such as Dewey, Piaget, Vygotsky and Bruner, emphasises the role of active learning, where learners continuously refine their understanding by integrating new information with

their existing knowledge base. These theoretical foundations underline the value of writing as a reflective and communicative skill essential for lifelong learning. Constructivism thus serves as a foundation for learners in orienting, restructuring ideas, using ideas, and revisiting them in learning to write.

To support this foundation, a structured framework is needed to guide learners in articulating their ideas through writing. Constructivism, a learning approach centred on using experience to construct new knowledge, offers strategies for teaching writing. By actively constructing knowledge, learners engage in recalling experiences, comparing concepts, making judgements, and prioritising information, thus fostering a deeper understanding of the writing process. Within this framework, learners interact with information, determine its relevance to their lives and engage in learning as an active and dynamic process, rather than as a passive reception of facts. Therefore, learning to write is based on constructivism, emphasising the process of knowledge construction as well as the development of clear learning objectives rooted in authentic learning experiences. This approach is for learners to explore language as a medium to express themselves with instruction aimed at encouraging creativity and communication through written language.

Thus, the research focused on: how is constructivism implemented in writing learning from 2013 to 2023; what are the advantages of constructivism implemented in writing learning in primary schools; what are the weaknesses of constructivism implemented in writing learning in primary schools; and what are the recommendations for the implementation of constructivism in writing learning in primary schools? As for solving these problems, a systematic literature review on the implementation of constructivism in learning to write in elementary schools was conducted. Systematic literature review as a research method aims to find and synthesize research comprehensively referring to specific questions using organized, transparent and replicable procedures. The main objective in this study was to describe the implementation of constructivism in learning to write in primary schools in terms of year of publication, keywords by topic, level of study, country of researcher, journal indexer, materials used, research methods applied, data collection tools, sample study group and data analysis techniques.

2. Method

The method in this study uses a Systematic Literature Review with the PRISMA protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyzes). Systematic Literature Review has 4 (four stages), namely: planning/identification, search and selection of primary data, data extraction and data synthesis. The following describes these stages.

2.1. Planning

At this stage, activities were carried out to identify or formulate the problem, an objective review, so that this review contained the following problem formulation:

1. How is constructivism implemented in writing lessons from 2013 to 2023?
2. What are the advantages of constructivism implemented in learning to write in primary schools?
3. What are the drawbacks of constructivism being implemented in learning to write in primary schools?

4. What are the recommendations for the implementation of constructivism in learning to write in primary schools?

2.2. Primary Data Search and Selection

In accordance with the research topic, keywords were used in the search. Only publications from the Google Scholar, Garuda, Taylor and Francis, Science Direct, and Semantic Scholar databases from the years 2013 to 2023 were included in the search. The groups were merged and thoroughly examined in the abstract, title, and keywords of the database-indexed publications. Lastly, the reference list of the papers included in the systematic review also contained possibly pertinent research. The research team created the include and exclude criteria, taking into account the inclusion criteria from the scoping study, which included the following: the year period, the article's language, and the article's theme in relation to the research topic. After screening, 150 papers in total were found that met these criteria:

1. After the 150 articles were filtered according to the year of publication, 125 of them were found to be suitable.
2. Ninety of the 125 articles were found to be eligible after being filtered based on the abstract and title.
3. After 90 articles were filtered according to the content/topic compatibility, 65 of them were examined for this study's analysis.

2.3. Data Extraction

The categories of author, year, purpose, method, theoretical perspective, and important findings were among the data that were taken from the last 65 articles and put into an Excel spreadsheet to show trends and provide a summary of the material.

2.4. Data Analysis

Select articles were read multiple times in order to obtain a general understanding of the material. Subsequently, the reading concentrated on the outcomes of every section of the article and the interpretation that aligned with the study topic through extraction. On the progressivism of writing instruction, 65 articles were reviewed.

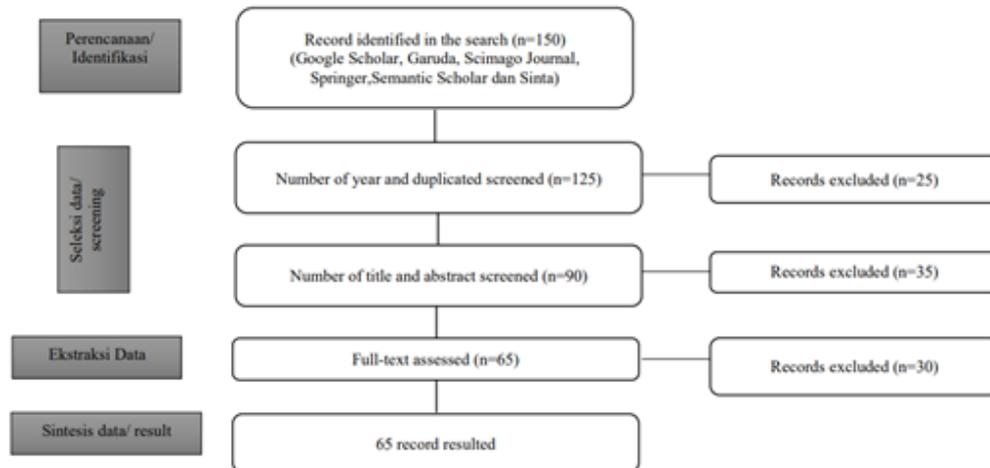


Figure 1. Flow Diagram

3. Results and Discussion

3.1. Research Results

The findings of the literature analysis review were based on 65 publications published between 2016 and 2023 that were found to be pertinent to the subject matter covered in this research. By means of the inclusion criteria for pertinent research, the articles underwent additional categorization according to the attributes of the study or its moderating variables, specifically: year of publication, keywords based on the topic, study level, researcher country, journal indexer, materials used, research methods applied, data collection tools, sample study group and data analysis techniques. The data is presented in the image visualization as follows.

1. Studies by Year of Publication

The distribution of research from 2016 to 2023 recognises the trend in constructivist approaches, underlining the recent growth in relevant research, especially in primary education. Details of the distribution of the study results are presented in the following graphical Fig. 2.

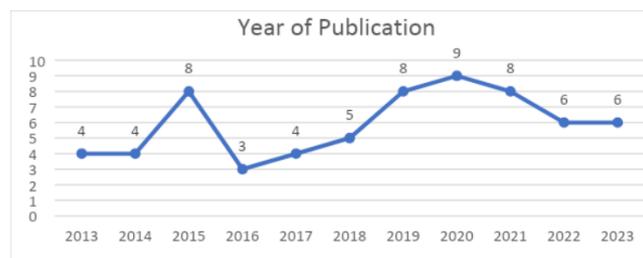


Figure 2. Year of Publication

2. Study by Keyword

This systematic review study contained 4 (four) keywords, namely: constructivism in learning, constructivism in learning in primary schools, primary school writing instruction and constructivism in primary school writing instruction. The graphic illustration shows the percentage of these terms as follows (see Fig. 3).

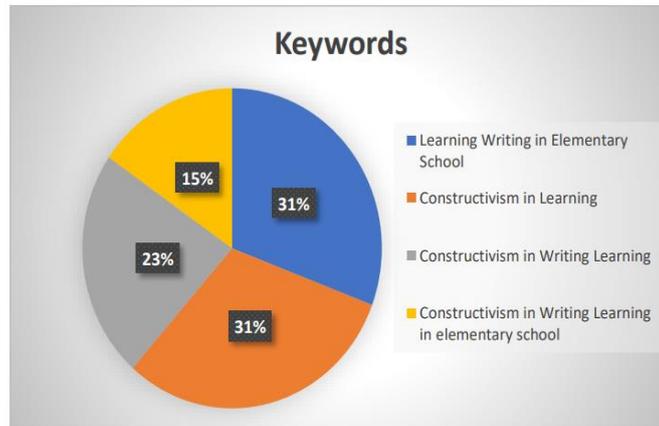


Figure 3. Keywords

3. Study Based on Journal Indexers

Details of the distribution of studies based on journal indexers related to constructivism in learning to write in elementary schools, it is concluded that the results of studies related to constructivism in learning to write in elementary schools are mostly published in 40% of the research were published in journals that were indexed by Google Scholar, whereas 34% were published in Semantic Scholar, 14% in Digital Reference Garba, 6% in Procedia, and 5% in Taylor & Francis. The following is visualized in the form of a graphic image (see Fig. 4).

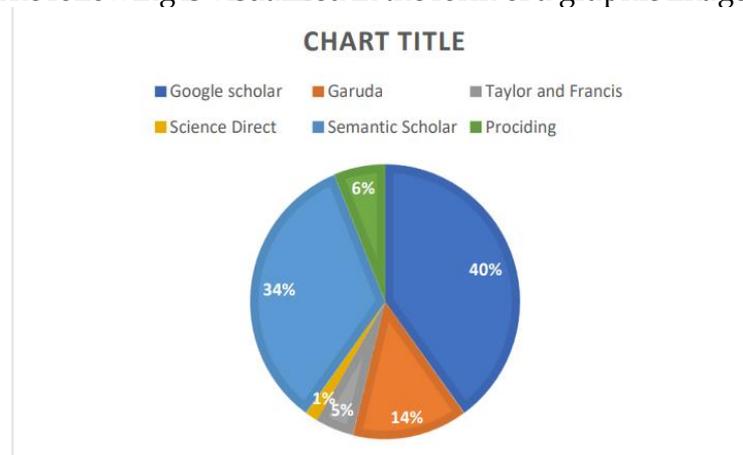


Figure 4. Journal Indexer

4. Study by Education Level

The study used data in this systematic review study based on education level is presented in the following graphic visualization (see Fig. 5).

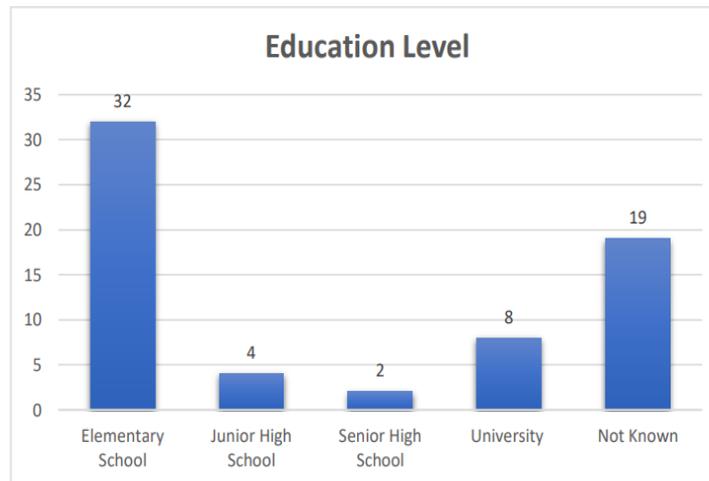


Figure 4: Education Level

Figure 5. Education Level.

5. Study by Researcher Country

The study used data in this systematic review study based on the researcher's country is presented in the visualization of graphic images (see Fig. 6).

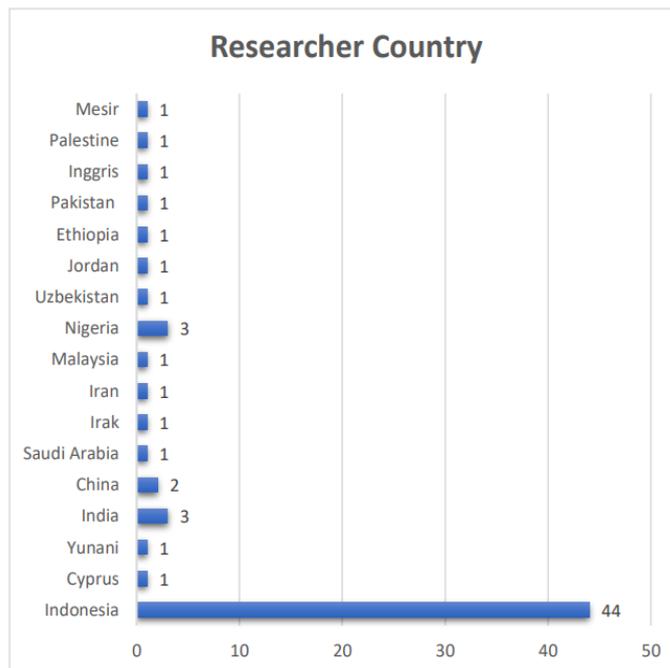


Figure 6. Researcher Country

6. Study Based on Material Used

The study used data in this systematic review study based on the material used is presented in the visualization of graphic images (see Fig. 7).

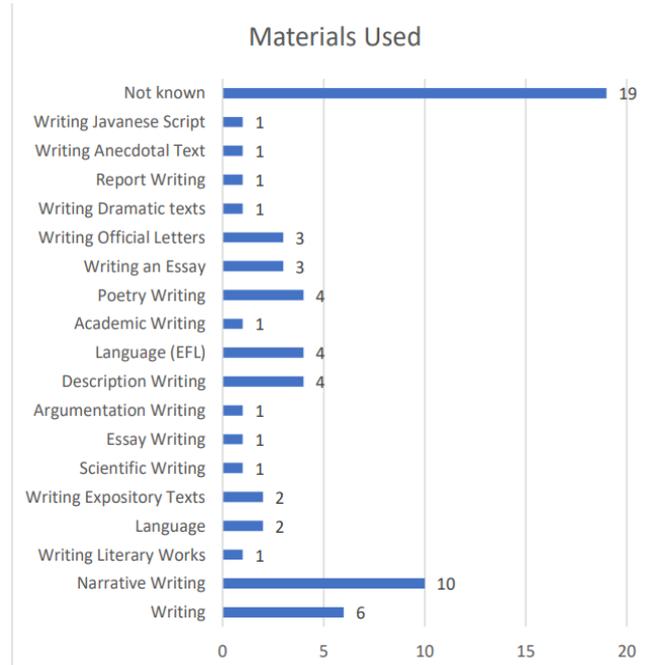


Figure 7. Material Used

7. Study Based on Research Methods Applied

The focus on instructional techniques and learning outcomes was reflected in the variety of research methods used in the examined studies, most of which were qualitative in nature. Research methodology visualization sheds light on the most common methods used in constructivist studies. The study used data in this systematic review study based on the applied research method is presented in the visualization of graphic images (see Fig. 8).

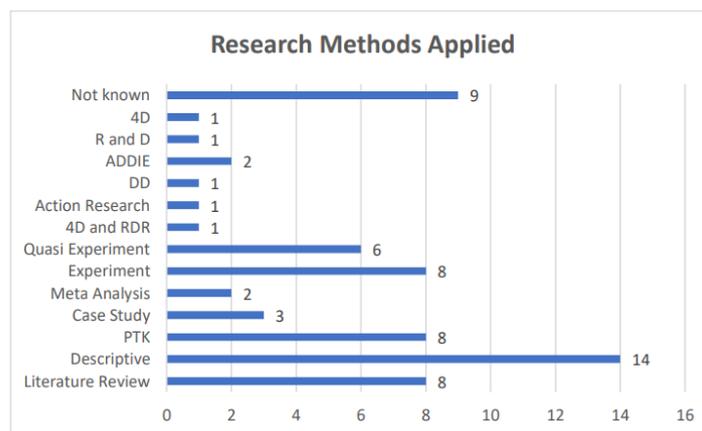


Figure 8. Research Methods Applied.

8. Studies Based on Data Collection Tools

The study used data in this systematic review study based on data collection tools is presented in the visualization of graphic images (see Fig. 9).

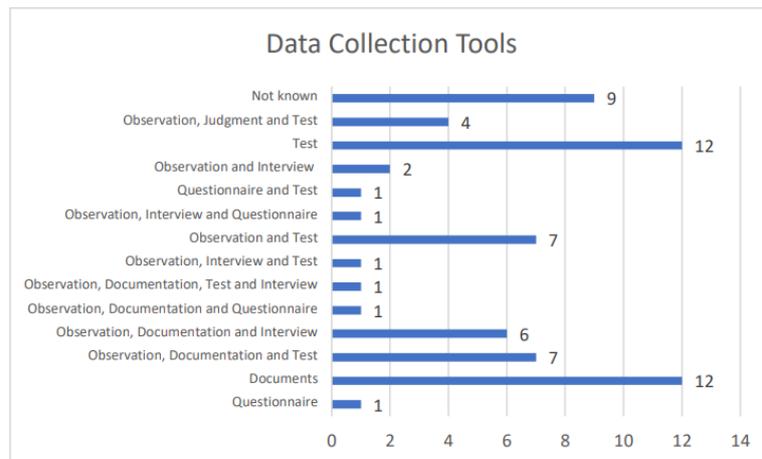


Figure 9. Data Collection Tools.

9. Study by Study Group Sample

The studies used as data in this systematic review study based on the sample study group are presented in the visualization of graphic images (see Fig. 10).

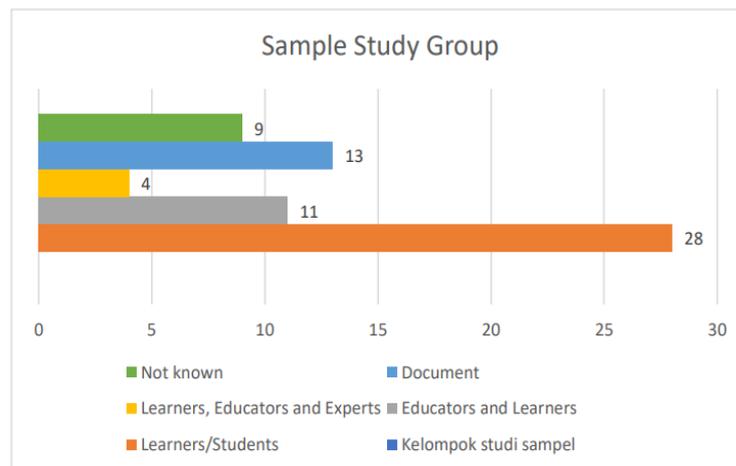


Figure 10. Sample Study Group.

10. Studies Based on Data Analysis Techniques

The study used data in this systematic review study based on the data analysis technique presented in the visualization of graphic images (see Fig. 11).

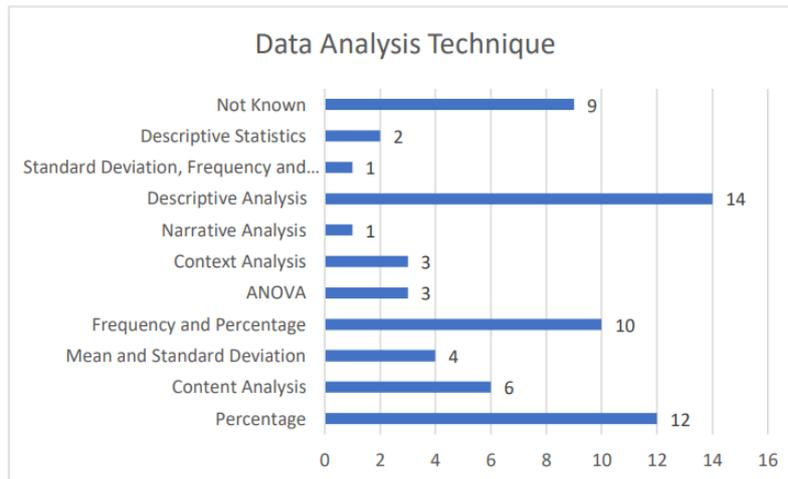


Figure 11. Data Analysis Technique.

3.2. Discussion

One of the main goals of primary school Indonesian language and literature classes is writing instruction [5]. Writing learning is seen as an effort to increase students' competence in communicating messages through the use of written Indonesian language [1]. Thus, teaching pupils to write serves the following purposes: (1) to help them grasp how to express themselves in writing; (2) Promote early and unrestricted written expression among children; (3) Assist pupils in utilizing appropriate and harmonic language patterns while writing [1]. Rivers (1989) defines writing as not simply taking notes, copying something that has already been written, or reproducing something that has been read or heard in writing. It is a process of thought where the writer arranges these ideas, develops them, and then forms them into a paragraph that starts with a topic sentence, continues with supporting details, and ends with a conclusion [12]. Writing for this study, writing is the ongoing process of discovering how to find the most effective language to communicate one's thoughts and feelings. writing requires facts and ideas to write about and mastering the necessary grammar rules that connect words to form meaningful sentences [15].

In this study, constructivism as a structure with integrated and sequential phases assists learners in creating their own knowledge in the context of their own experiences. According to constructivism, knowledge is created by humans via their interactions with things, events, environments, and other people [7]. Constructivist foundations for writing instruction emphasize four key ideas: (1) creating information rather than acquiring it; (2) thinking and analyzing rather than accumulating memory; (3) comprehending and applying rather than repeating back; and (4) being active rather than passive (Marlowe & Page, 2005; [16] In elementary school writing instruction, constructivism is based on the following principles:

- 1) After receiving sensory information, the learner acts upon it and eventually interprets it.
- 2) The process of learning involves creating meaning and meaning systems. There are several layers to learning.
- 3) Education takes place mentally. While physical activity is important, it is insufficient on its own.
- 4) Language is used in learning. Vygotsky thought there was a close relationship between language and learning.
- 5) Education is a communal endeavor.

- 6) Education is placed in context. We don't take facts out of the contexts and circumstances in which they belong.
- 7) It need knowledge to be able to learn. Structure and the creation of meaning are based on knowledge. We can learn more the more we are aware of.
- 8) Learning is not something that can be done quickly. Students examine material, consider it, apply it, practice it, and conduct experiments with it.
- 9) Since motivation stimulates the learner's sensory organs, it is a crucial element. Ease of learning is facilitated by a variety of factors, including extrinsic rewards, enjoyment, satisfaction, curiosity, and accomplishment. The foundation of our contemporary higher education system is rooted in cognitive and behaviorist theories. [16]

A transformative method to teaching writing in elementary school is supported by constructivism. In contrast to rote memorization, this pedagogical paradigm encourages the generation of information through interaction and discovery, which is in line with students' developmental needs. This study looked at constructivism in elementary school writing education using a number of fundamental ideas:

1. Active Learning: Constructivism promotes students' active interaction with the materials, creating a lively learning atmosphere.
2. Contextual Learning: By placing knowledge in real-world contexts, students are able to relate new ideas to their own experiences.
3. Development of Collaborative and Social Skills: Constructivist methods improve communication and social skills, which are essential for peer cooperation on writing assignments.
4. Self-directed Exploration: By promoting concept expression, students become more independent in their knowledge generation.

Constructivism's significance for teaching writing in elementary schools: (1) Constructivism provides a theoretical framework for lifelong learning, which makes learning more enjoyable; (2) it emphasizes learning how to think and understand; (3) students' personal initiative and investment in journals, research reports, physical models, and artistic representations are part of constructivist assessment; (4) constructivism fosters social and communication skills through negotiation, collaboration, and idea exchange; (5) this approach works by engaging the creative instinct in developing students' ability to express knowledge in a variety of ways; and (6) it helps learners retain and transfer new knowledge into real life and evaluate their contributions in ways that are socially acceptable [15].

Based on the literature review, there are systematic advantages of constructivism in teaching writing in primary schools, as follows:

- 1) Increasing student engagement and fostering positive attitudes toward learning.
- 2) Promoting systematic and creative thinking skills.
- 3) Supporting skills transfer to real-world contexts through application-based tasks.
- 4) Constructivism in learning writing in elementary school has advantages because learners are mentally enabled in constructing their own knowledge based on the cognitive structure they already have.
- 5) The advantages of constructivism learning are training systematic thinking, motivating to be more creative and providing a conducive learning environment, and providing a conducive learning environment [17].
- 6) In the context of learning to write, especially writing descriptions, the application of constructivism can improve students' skills because they are given the opportunity to

- think creatively and imaginatively based on their own experiences and the teacher acts as a facilitator and mediator who supports this learning process, with an emphasis on the success of students in organizing their experiences into meaningful knowledge. [18].
- 7) The advantage of constructivism in learning to write in primary schools lies in its ability to direct all students' potential so that they become more motivated during the teaching-learning process. The constructivism method is considered effective because it can have a positive impact on students' learning outcomes, which in turn improves their writing skills. In addition, the application of constructivism learning is proven to be able to change students' attitudes from initially passive or less engaged in learning to more active and engaged over time. This shows that constructivism can create a more dynamic and interactive learning environment, which is very important in teaching writing at the primary school level. [19].
 - 8) The advantages of constructivism approach in learning writing in elementary school include: (1) Research shows that the constructivism approach can improve narrative essay writing skills among primary school students, with significant improvements from cycle to cycle; (2) Constructivism encourages active learning, where students are more involved and engaged in the learning process. This approach is in line with the idea that students should express their ideas explicitly, which can lead to more active participation during the learning process; (3) The constructivism approach has been shown to lead to gradual improvement in writing skills through learning cycles, suggesting that it is an effective method for continuous skill development and (4) The application of constructivism has a direct and positive impact on the learning process, as shown by the improved performance in narrative writing tasks among students. [20].
 - 9) There are a number of noteworthy benefits to using the constructivism method while teaching writing in elementary schools. First of all, this method encourages student participation in the learning process, which is crucial for the improvement of writing abilities. Secondly, the application of the constructivism approach has been proven effective in improving the ability to write anecdotal texts in grade 4 students of SDN Tidung Makassar, with the level of writing ability categorized as high and the level of learning completeness reaching the set criteria. In addition, students who learned to write anecdotal texts using the constructivism approach showed courage and no longer felt afraid, which enabled them to write well. The aspect of accuracy in language use also seemed to improve in students who applied this approach. This was inversely proportional to the control group that did not use the constructivism approach, where students' anecdotal text writing ability was categorized as low. Overall, the constructivism approach supports students in constructing their own knowledge through active interaction with the learning materials, which in turn improves their writing skills significantly." [21].

As for the results of the literature review, there are systematically weaknesses in constructivism in teaching writing in elementary schools, as follows:

- 1) Students with limited prior knowledge may struggle without sufficient guidance.
- 2) Teachers require specialized skills and additional resources to facilitate constructivist learning effectively.
- 3) The approach may demand more time and resources, limiting feasibility in some educational settings.
- 4) The weaknesses of constructivism in learning writing, including description writing, may include the following aspects: (1) constructivism relies heavily on students' personal

experience as the basis for constructing new knowledge, so students who have limited or less relevant experience may face difficulties in connecting the learning material with what they already know; (2) the teacher's role in constructivism, the teacher should be able to identify students' cognitive structure and adjust the learning approach accordingly. This requires considerable expertise and experience from teachers, as well as time and resources that may not always be available; (3) constructivism-based learning often requires longer time and more resources than traditional learning methods. This can be a constraint in educational environments that have limited time and resources and (4) although collaboration is an important aspect of constructivism, not all students may be comfortable or effective in collaborative learning situations, so some students may prefer to work independently and may not get the full benefit of a constructivistic approach [18]. [18].

- 5) The weaknesses of the constructivism approach to writing learning in primary schools may include the following aspects: (1) constructivism emphasizes on the formation of knowledge through students' real experiences, however, this can be a weakness if students do not have enough or relevant experiences to relate to the learning materials, so they may struggle to build a solid understanding of the topics taught; (2) teachers need to be able to create a learning environment that supports and challenges students to think critically and explore [6]. This requires skills and resources that may not always be readily available, as well as requiring greater time and effort from the teacher to plan and implement the learning; (3) some students may require more explicit structure and guidance than is usually provided in constructivist approaches, so without clear structure, students may feel confused or undirected in their learning. [22].
- 6) The weaknesses of constructivism approach in learning writing in primary schools include: (1) The application of constructivism often requires more time compared to traditional learning methods. Teachers need to observe and ensure that each student understands the knowledge being conveyed, which can be time-consuming; (2) Some teachers may not be fully skilled in applying the constructivism approach, which requires an active role of the teacher as a facilitator and not just as a conveyor of information; (3) Students may have difficulty in expressing their ideas, thoughts or ideas into writing. This could be due to a lack of motivation or poorly developed writing skills and (4) A large number of students in one class can reduce the effectiveness of constructivism as teachers may find it difficult to give sufficient attention to each student [20].

Future research might examine how constructivism is applied in various cultural contexts and evaluate its long-term effects on students' writing abilities. Studies that compare various teaching philosophies could confirm constructivism's efficacy in elementary school. Furthermore, using digital tools to improve constructivist learning outcomes offers a worthwhile research direction. The results of the literature review systematically recommended constructivism in writing instruction in primary schools, as follows:

- 1) Constructivism's philosophical tenets provide an intellectual foundation that will assist educators in fostering a collaborative, learner-centered environment that fosters critical thinking and experience-based learning [8].
- 2) Constructivism gives pupils the chance to look for information directly, examine it, and then consider it. This understanding necessitates modifications to the methodology, setting, and subject matter of teacher education; these modifications are driven by

constructivist pedagogy, which trains teachers to become learners. Constructivism is therefore important as a teaching theory for the education of future generations since it focuses on raising the general caliber of students [23].

- 3) Constructivism offers valuable insights for interpreting learning objectives and creating learning-supportive environments. Constructivist theory of learning holds that each person builds their own knowledge by bringing their own experiences, interests, and background knowledge to a learning environment [16].
- 4) Seven goals are outlined by Honebein (1996) for the creation of constructivist learning environments: (1) impart knowledge of the process of creating knowledge; (2) impart knowledge of and appreciation for various points of view; (3) incorporate learning into relevant and realistic contexts; (4) foster a sense of voice and ownership in the process of learning; (5) incorporate learning into social situations; (6) promote the use of various modes of representation; and (7) foster self-awareness in the process of creating knowledge [24].
- 5) The author offers the following recommendations in light of the writing and discussion's outcomes: 1. It is anticipated that the Constructivist Learning Approach will motivate students to share what they already know about the topics under discussion during the invitation phase. 2. Using a constructivist learning approach, students are supposed to satiate their curiosity about the local natural occurrences during the exploration phase. 3. The Constructivist Learning Approach: Students are supposed to develop a new understanding of the things they are learning throughout the Explanation and Proposed Solution Phase. 4. Constructivist Learning Approach: Students are expected to be able to assess the superiority of their beliefs and provide solutions to the challenges presented during the Making Action Phase [25].
- 6) In light of these discoveries, the investigator suggests the following: 1. Instructors should understand how important it is to use writing skills in the classroom; 2. When teaching writing skills, students need to get a lot of practice. 3. In order to effectively apply constructivism tactics in English language instruction, teachers should receive adequate training in this area; 3. Students' writing performance improves with increased exposure to this skill; 4. It is suggested that educators give up acting as judges and stop punishing their pupils when they make mistakes. They ought to understand that making errors is a necessary part of learning and that it is an inevitable occurrence. It is recommended that educators support their students' participation in the assessment process and educate them on how to assess both their own and their peers' written works. 5. Instructors should lead their students through exercises and techniques that improve their ability to produce information and manage their writing [12].

This study confirms that by encouraging kids to actively learn through discovery, expression, and teamwork, constructivism greatly enhances primary writing instruction. Students develop the critical thinking and creative abilities necessary for good writing by building information from their own experiences and interactions in the classroom. Teachers that use constructivism facilitate rather than dictate information, encouraging students to engage in reflective learning, develop narrative and descriptive abilities, and freely communicate their views. However, the study draws attention to the shortcomings of conventional constructivist applications. Relying too much on students' past experiences might make learning more difficult for individuals who don't have the necessary background knowledge, and the role of the teacher in facilitating takes a lot of time and

skill. Furthermore, constructivist techniques can need more time and money than conventional methods, which can be problematic in environments with limited resources.

More research is required to integrate constructivist teaching approaches with digital and adaptive learning tools in order to meet the requirements of high-impact information technology journals and match this research with modern educational practices. For example, integrating learning analytics, interactive digital writing tools, and AI-powered learning platforms might improve the constructivist framework's suitability for use in contemporary classrooms. Through automated scoring systems, these tools could facilitate real-time feedback on student work, encourage engagement through gamified and immersive environments, and promote tailored learning routes. Students would be better prepared for the digital demands of contemporary education if constructivist approaches placed a strong emphasis on digital literacy.

Lastly, investigating constructivism's scalability via Open Educational Resources (OER) and cloud-based platforms may broaden its appeal and make constructivist writing training available anywhere. By including these components, this study would become more pertinent and applicable in today's technologically advanced learning environments, establishing it as a significant addition to constructivist pedagogy in the digital era. Focusing on how constructivism, in conjunction with digital resources, might promote writing proficiency in the era of information technology would be extremely beneficial for this study's cutting-edge relevance in both IT and education. This method would be appealing to teachers looking for creative ways to improve learning results and student engagement in elementary education by fusing cutting-edge technology with fundamental teaching concepts.

4. Conclusion

Learning to write in elementary school (SD) is a form of interaction and a form of communication using language. In learning to write, a foundation is needed for students to formulate ideas and ideas in writing. Constructivism is the process of creating new knowledge in learners' cognitive structures by drawing on their experiences. Many skills are required for the construction process, including the capacity to recall and articulate experiences, the ability to compare and decide what is similar and what is different, and the capacity to favor one experience over another. Therefore, constructivism in learning writing in elementary school has advantages because learners are mentally enabled in constructing their own knowledge based on the cognitive structure they already have. Thus, constructivism as a foundation for learners in orientation, restructuring ideas, using ideas and reviewing in learning to write.

References

- [1] Sudarman, R., Yarmi, G., & Ansoriyah, S. (2023). Menulis Teks Deskripsi Bertemakan Lingkungan Sosial. *Fon: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 19(1), 81-101.
- [2] Taufik, M., Yusuf, M. J., & Rijal, A. S. (2020). Constructivism learning in writing of literary works. *Elite: English and Literature Journal*, 7(1), 102-111.
- [3] Feriyanti, D., & Apriliawati, R. The Implementation of Constructivism in Writing Analytical Exposition Text. *Jurnal Pendidikan dan Pembelajaran Khatulistiwa (JPPK)*, 4(9).
- [4] Srour, K., Aqel, M., & Shawish, J. I. (2021). Enhancing EFL secondary school students' writing skills through a suggested model based on constructivism. *Education in the knowledge society (EKS)*, 22, e23937-e23937.

- [5] Indihadi, D. (2018). TEKNIK “BRAIN STORMING” DALAM PEMBELAJARAN MENULIS DI SEKOLAH DASAR. *Jurnal Siliwangi: Seri Pendidikan*, 4(1).
- [6] Efgivia, M. G., Rinanda, R. A., Hidayat, A., Maulana, I., & Budiarto, A. (2021, October). Analysis of constructivism learning theory. In *1st UMGESHIC International Seminar on Health, Social Science and Humanities (UMGESHIC-ISHSSH 2020)* (pp. 208-212). Atlantis Press.
- [7] Suhendi, A., Purwarno, P., & Chairani, S. (2021). Constructivism-based teaching and learning in Indonesian education. *KnE Social Sciences*, 76-89.
- [8] Triantafyllou, S. A. (2022). Constructivist learning environments. In *Proceedings of The 5th International Conference on Advanced Research in Teaching and Education*.
- [9] Indihadi, D. (2018). Pembelajaran Menulis Berbasis “Brainstorming”. *Indonesian Journal of Primary Education*, 2(2), 91-95.
- [10] Halidjah, S. (2017). Implementasi Pendekatan Proses Dalam Pembelajaran Menulis Cerita Pendek. *Jurnal Kajian Pembelajaran dan Keilmuan*, 1(2), 31-40.
- [11] Mahmud, H. (2019). Upaya Meningkatkan Keterampilan Menulis Dengan Teknik RCG (Reka Cerita Gambar) Pada Siswa Kelas VI SDN Rengkek Kecamatan Kopang, Kabupaten. Lombok Tengah Tahun Pelajaran 2017/2018. *JISIP (Jurnal Ilmu Sosial dan Pendidikan)*, 1(2).
- [12] Fahady, S. S. (2019). Impact of Using a Constructivism Strategy to Enhance EFL University Students' Writing Skills. *Opción: Revista de Ciencias Humanas y Sociales*, (19), 2941.
- [13] Akpan, V. I., Igwe, U. A., Mpamah, I. B. I., & Okoro, C. O. (2020). Social constructivism: Implications on teaching and learning. *British Journal of Education*, 8(8), 49-56.
- [14] Xu, Z., & Shi, Y. (2018). Application of constructivist theory in flipped classroom-take college English teaching as a case study. *Theory and Practice in Language Studies*, 8(7), 880-887.
- [15] Selim, M. M. T. (2022). *A Constructivism-Based Program to Develop the Writing Skills of EFL Preparatory Stage Students* (Doctoral dissertation, Mansoura University).
- [16] Aljohani, M. (2017). Principles of “constructivism” in foreign language teaching. *Journal of Literature and Art Studies*, 7(1), 97-107.
- [17] Wahyuni, E. S. (2013). Constructivism Learning Model in Writing Arguments and Description in Indonesian Language of Bogor Agricultural University Student. In *2nd International Seminar on Quality and Affordable Education (ISQAE)* (p. 102).
- [18] Fitria, I. (2012). Penerapan Model Pembelajaran Konstruktivisme Untuk Meningkatkan Keterampilan Menulis Deskripsi siswa kelas V SDN 183 Pekanbaru.
- [19] Sarpika, E., Hambali, H., & Arief, T. (2017). Pengaruh Pembelajaran Konstruktivisme terhadap Kemampuan Menulis Siswa pada Mata Pelajaran Bahasa Indonesia Kelas V SD Negeri Mangasa I Kecamatan Somba Opu Kabupaten Gowa. *JKPD (Jurnal Kajian Pendidikan Dasar)*, 2(1), 204-218.
- [20] Hasranawati, H., Bakri, M., & Dipalaya, T. (2023). Penerapan Pendekatan Konstruktivisme Untuk Meningkatkan Keterampilan Menulis Karangan Narasi Siswa Kelas V SD Negeri 6 Wakorumba Selatan. *EMBRIO PENDIDIKAN: JURNAL PENDIDIKAN DASAR*, 8(1), 59-70.
- [21] Muhdar, A., Saputri, A., & Azzahra, A. A. (2022). Penerapan Pendekatan Konstruktivisme dalam Pembelajaran Menulis Teks Anekdote pada Siswa Kelas 4 SDN Tidung Makassar. *Jurnal PGSD Universitas Lamappapoleonro*, 1(1), 88-99.

- [22] Wijaya, H. (2016). Meningkatkan Kemampuan Menulis Puisi Melalui Penerapan Strategi Pembelajaran Konstruktivis Siswa Kelas V. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran*, 4(02).
- [23] Pundir, R., & Surana, A. (2016). Constructivism learning: A way to make knowledge construction. *The International Journal of Indian Psychology*, 3(10), 345-359.
- [24] Bhattacharjee, J. (2015). Constructivist approach to learning—an effective approach of teaching learning. *International Research Journal of Interdisciplinary & Multidisciplinary Studies*, 1(4), 23-28.
- [25] Anastasha, D. A., & Movitaria, M. A. (2020). Constructivist Learning Approach to Improve Student Response and Outcomes Learning. *Proceeding IAIN Batusangkar*, 1(3), 73-78.
- [26] Akkaya, N., & Kırmızı, F. S. (2010). Relationship between attitudes to reading and time allotted to writing in primary education. *Procedia-social and behavioral sciences*, 2(2), 4742-4746.
- [27] Bhattacharjee, J. (2015). Constructivist approach to learning—an effective approach of teaching learning. *International Research Journal of Interdisciplinary & Multidisciplinary Studies*, 1(4), 23-28.
- [28] Cooper, R. (2007). An investigation into constructivism within an outcomes based curriculum, *Issues in Educational Research*, 17(1), 15-39.
- [29] Bruner, J. S. (1961). The act of discovery. *Harvard Educational Review*, 31(1), 21-32.
- [30] Dewey, J. 1916. *Democracy and Education*. The Free Press.
- [31] Eigbeonan, A. B. (2013). Effective Constructivism For The Arch-Design Studio, *International Journal of Architecture and Urban Development*, 3 (4), 5-12.
- [32] Felder, R. M. (2012). Engineering education: A tale of two paradigms. *Shaking the foundations of Geo-Engineering education*, 9-14.
- [33] Ev, G. (1995). Radical constructivism. A way of knowing and learning.
- [34] Gordon, M. (2008). Between Constructivism and Connectedness. *Journal of Teacher Education*, 59(4), 322-331.
- [35] Hopkins, J. R. (2011). The enduring influence of Jean Piaget. *APS Observer*, 24.
- [36] Loyens, S., Rikers, R., & Schmidt, H. (2007). Students' conceptions of distinct constructivist assumptions. *European Journal of Psychology of Education*, 22(2), 179-199.
- [37] Marlowe, B. A., & Page, M. L. (2005). *Creating and sustaining the constructivist classroom*. Corwin Press.
- [38] Neo, M., & Neo, T. K. (2009). Engaging students in multimedia-mediated Constructivist learning—Students' perceptions. *Journal of Educational Technology & Society*, 12(2), 254-266.
- [39] Piaget, J. (1973). *To understand is to invent* New York: Grossman.
- [40] Rusman. 2013. *Model-model Pembelajaran*. Jakarta: PT Grafindo Persada.
- [41] Sanjaya, D. H. W. (2006). Strategi pembelajaran berorientasi standar proses pendidikan.
- [42] Tarigan, H. G. (1986). Menulis: sebagai suatu keterampilan berbahasa. (No Title).
- [43] Woolfolk, A. E. (1993). *Educational psychology*, Boston: Allyn and Bacon.
- [44] Vygotsky LS (1978). *Mind in Society*, Harvard University Press, Cambridge.