

Developing informative writing competence in the education of literature pedagogy students in Vietnam




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ABSTRACT

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Informational texts play a crucial role in modern society and are essential within the academic and professional training of university students majoring in Vietnamese language education. As a core component of the academic curriculum, mastering informational writing is vital for their future roles as educators, directly supporting their professional development and effectiveness in teaching after graduation. This study surveyed 366 students from 11 universities in Vietnam to assess their current ability to compose informational texts. The Likert scale was used as a survey tool, complemented by a test instrument to evaluate students' competence in writing informational texts. Methods such as classroom observations and lesson reviews were incorporated, along with interviews with both teachers and students after lessons. Based on the findings, the study proposes several measures to enhance students' writing skills in informational texts within Vietnamese language education: i) developing curriculum materials aimed at improving students' writing competencies; ii) leveraging artificial intelligence (AI) to support the enhancement of writing skills; and iii) providing a series of writing exercises for practice and improvement. This study will contribute to the development of students' writing skills and serve as a basis for proposing innovations in the training program for literature teachers in Vietnam.

Contribution/ Originality: To the best of the author's knowledge, this study examines impactful strategies for developing informational writing skills among literature pedagogy students. This research is significant because the Vietnamese government emphasizes educational reform aimed at enhancing learners' competencies.

1. INTRODUCTION

In recent years, education focused on the development of both character and competence has become a central goal, particularly within higher education. The formation and advancement of writing skills in informational texts for students majoring in Vietnamese language education are crucial in the context of teacher training at the university level. These texts are not only prevalent in communication but are also a fundamental teaching content within the Vietnamese language curriculum, a subject area that students will later teach upon graduation. Unlike literary or argumentative texts, informational texts encompass a variety of types with distinct characteristics, requiring future educators to not only deepen their foundational knowledge of this text genre but also prioritize the cultivation and development of their ability to write such texts. Despite being commonly used in communication, the development of writing skills in this genre has faced numerous challenges, such as the construction of grammatically correct sentences

[1], improving linguistic fluency [2], and developing clear and systematic writing strategies [3]. Previous studies have explored solutions to these issues, but much of the research has primarily focused on relationships and factors influencing writing skill development, such as Hayes and Flower [4], Graham and Alves [5], and Marjokorpi [6]. Therefore, the objective of this study is to fill the gap in research on teaching and developing writing competence in informational texts for Literature pedagogy students. The research results hold both practical and theoretical value. Theoretically, this will serve as a reference for researchers to develop a theoretical framework for teaching the development of writing skills for future Vietnamese language educators. For educators and policymakers, the findings will offer an overarching view of the issues related to the development of writing skills for such students, enabling a deeper understanding of specific issues.

2. OVERVIEW OF THE RESEARCH ISSUE

2.1. Research on Writing Competence in Informational Texts

Research on writing competence in general, and specifically on writing informational texts, has attracted significant attention from many scholars. Written expressions are one of the most effective communication methods, enabling individuals to convey their thoughts accurately and comprehensively. Furthermore, writing is an essential skill for success in both academic and professional settings [7]. Writing skills are considered a strong predictor of an individual's success in both educational environments and the workplace [8].

Although there is a broad consensus on the importance of written communication, there is still no clear, consistent definition of this concept. At the university level, definitions of writing competence vary across different programs. Moreover, many definitions address the elements that constitute effective writing competence. Markle et al. [9] examined definitions of effective communication from seven key frameworks for general education competencies in higher education. Based on this, they defined writing competence as the ability to “communicate a variety of messages effectively; communicate through various forms; and convey messages effectively to different audiences.” This definition highlights three aspects of communication: message type (i.e., genre), medium (i.e., medium of communication), and the recipient. These aspects of communication are important in both spoken and written forms. However, these elements alone may not fully describe the specific skills required for proficient written communication.

Based on the description of rhetorical skills and the skills needed in the 21st century, members of the Council of Writing Program Administrators National Council of Teachers of English & National Writing Project [10] developed the *Success in post-secondary writing framework*, which includes: a) rhetorical knowledge: Knowledge of rhetorical elements (including understanding different purposes, recipients, contexts, genres, and forms of writing); b) critical thinking (including analyzing reading materials; evaluating the usefulness and reliability of sources; using research to support writing); c) writing processes (including planning, drafting, revising, reading over, and responding to feedback); d) knowledge of conventions (including grammar conventions at the surface level and overarching concepts related to content, organization, tone, and style); and e) composition in multimodal environments (using traditional media such as pen and paper to writing in electronic media; creating diverse forms, such as traditional essays, websites, videos, advertisements, and using electronic resources). These five aspects align with university-level writing components and a job requirements framework, encompassing all key elements of written communication. Consequently, assessment is organized based on these five components [10].

The European Higher Education Area Competencies framework divides writing competence into two categories: i) general competence (the ability to communicate in writing in the mother tongue; the ability to convey information, ideas, problems, and solutions to both expert and non-expert recipients; the ability to communicate in a second language) and ii) specific competence (skills for presenting documents and constructing arguments in writing for informed recipients; the ability to write in one's own language or other languages using appropriate types of texts in one's field; the ability to present arguments clearly and accurately in forms suited to the intended recipients; receiving

and responding to various sources of information in text, digital, spoken, or graphical form; communicating effectively with various recipients in written, spoken, and graphical forms) [11].

The Framework for learning and development outcomes proposes writing competence requirements, such as: conveying meaning in a way that others understand by writing coherently and effectively; writing after feedback; influencing others through text; presenting abstract ideas effectively; using appropriate syntax and grammar; conducting and evaluating presentations or performances; expressing thoughts and emotions through writing; writing essays or personal letters; writing in an organized manner; transitioning from general topics to specific ones in writing; communicating through non-traditional forms [11].

It is evident that each organization has its own conception of writing competence, yet there are commonalities in how writing competence is defined. Specifically, these organizations consider it from the perspectives of text genre, form, and audience. Additionally, they emphasize the importance of context and purpose in text production, skills for developing and organizing ideas, adherence to linguistic conventions, and the use of reference sources. This highlights the importance of training writing competence for pedagogy students, as it is one of the essential professional skills they need to develop before graduation.

An overview of the writing requirements from global educational and employment organizations indicates a strong focus on text genre when creating written texts. However, the emphasis on argumentative writing, which involves presenting arguments clearly, coherently, and persuasively, stands out more than informational text writing. The production of informational texts is less emphasized. The requirements for writing informational texts are mentioned in the Degree Qualifications Profile (DPQ), which sets out expectations for written communication at the bachelor's level, specifically the presentation and explanation of technical issues and professional processes in written form [12].

According to the competency model from the U.S. Department of Labor (US-DOL), writing requirements are seen as a foundational skill for overall professional competence. The writing requirements focus on types of texts such as letters, instructions, reports, graphs, charts, conveying thoughts, ideas, information, messages, and writing other types of informational texts [13].

Thus, the ability to produce informational texts among Literature pedagogy students has not been separately examined and studied. In employment competency frameworks, the ability to produce informational texts is considered within the broader context of writing competence. This situation raises the issue that specific research on the ability to write informational texts for Literature pedagogy students is necessary.

2.2. Research on Teaching and Developing Informational Writing Competence

Globally, the issue of teaching to develop informational writing competence has primarily focused on secondary school students. Research on this subject can be found in works by Duke and Bennett-Armistead [14] and Erbasan and Dedeoğlu [15], among others. However, the development of informational writing competence for Literature pedagogy students has not been adequately researched.

In Vietnam, the issue of teaching writing competency development in general, and the competency to compose informational texts in particular, has only received attention in recent years with the implementation of the 2018 General Education Curriculum. However, the ability to produce argumentative texts has garnered significantly more attention from researchers in writing instruction. While some studies have addressed the competency to produce informational texts, such discussions remain fragmented and lack systematic examination. This stems from the realities of teaching and assessing the Vietnamese language and literature subject in Vietnamese schools. First and foremost, argumentative texts have been incorporated into school curricula from an early stage, with a considerable proportion of instructional time dedicated to their composition. Additionally, the assessment of students' writing skills has predominantly focused on this type of text. As a result, research on teaching informational text writing in schools has not yet been given due attention.

Regarding the teaching of expository writing, a type of informational text, [Nguyen Thi and Do \[16\]](#) utilized a sample analysis method in reading comprehension lessons to develop expository writing competence in secondary school students. [Nguyen \[17\]](#), based on an analysis of the advantages of the process-genre approach, seven steps are proposed for teaching informational writing to secondary school students, including: preparing for writing, modeling the genre, outlining, collaborative writing, independent writing, revising, and publishing. These studies address writing competence for secondary school students; however, research on writing competence for university students, particularly for Vietnamese language education students, has not received significant attention.

There are some views suggesting that informational writing competence is already inherent in each student and thus does not need to be specifically developed. However, for Vietnamese language education students, this competence is a core competency. It not only serves academic purposes but also prepares them for their future profession. Through the learning process, students can develop the ability to teach informational writing. Without the competence to write informational texts, it would be difficult for students to acquire the ability to teach this skill, which is a core competency for future educators.

Recently, one of the researchers who has paid significant attention to this issue is [Huong Thu Thi Do](#). In her studies, she and her colleagues have focused on issues such as global concepts of writing instruction and their application to the practice of teaching writing in Vietnamese schools. She proposed a framework for developing informational writing competence for Vietnamese language education students and explored methods for teaching informational writing to these students [\[18\]](#). These works have highlighted the need to focus on informational writing competence and the ability to teach informational writing for Vietnamese language education students, as these are mandatory competencies for future language teachers to meet the requirements of the 2018 General Education Program. They also serve as a basis for determining the expected outcomes for Vietnamese Language Education students.

In summary, research on developing informational writing competence and teaching informational writing to Literature pedagogy students is an area that remains underexplored and requires attention from both global and local experts in this field.

3. RESEARCH METHODOLOGY

3.1. Research Design

To conduct this study, we surveyed a sample of 366 Vietnamese language education students from various universities with the aim of investigating the current state of their ability to compose written texts. The statistical results are shown in [Table 1](#).

Table 1. Statistics on the number of students surveyed.

No.	School name	Quantity	Percentage %
1	Hanoi National University of Education	03	0.8
2	Hanoi Pedagogical University of Education 2	89	24.3
3	Thai Nguyen University of Education	13	3.6
4	Ho Chi Minh City University of Education	12	3.3
5	Da Nang University of Education	11	3.0
6	Hue University of Education	35	9.6
7	Tay Nguyen University of Education	74	20.2
8	Hong Duc University	06	1.6
9	Hanoi Metropolitan University	111	30.3
10	University of Education - Vietnam National University	03	0.8
11	Tay Bac University	09	2.5
	Total	366	100

The experimental process was conducted with 90 third-year (Class 44) students from the Department of Vietnamese Language and Literature, Hanoi Pedagogical University 2. Among them, class K44A served as the control

group, consisting of 45 students, while class K44B, also consisting of 45 students, was the experimental group aimed at assessing the quality, output effectiveness, and the development of informational writing competence in Vietnamese language education students. This is specifically outlined in [Table 2](#).

Table 2. Subjects and experimental duration.

Experimental phase	Research class	Number of experimental students	Duration of experiment
1	K44A, 44B (HPU2)	90	From 14/04/2022 to 19/04/2022
2	K44, 44B (HPU2)	90	From 13/05/2022 to 18/05/2022

3.2. Data Collection Methods and Effectiveness of Developing Informational Writing Competence for Vietnamese Language Education Students

3.2.1. *Data Collection Method for Informational Writing Competence of Vietnamese Language Education Students

The primary tool for collecting data on the informational writing competence of Vietnamese language education students was a questionnaire. The study sample consisted of 366 students from 11 universities in Vietnam. The questionnaire was designed in two main sections: Section I collected general information about the students (name, cohort, university, gender, age); Section II focused on the following issues: 1) general understanding of informational texts; 2) awareness of informational writing skills; 3) awareness of factors influencing informational writing skills; and 4) awareness of solutions for developing informational writing skills in Literature pedagogy students' training. A 5-point Likert scale was used to measure responses, and survey participants were asked to respond seriously and truthfully to the questions in the questionnaire [19].

The consistency of scores for each criterion in the study was assessed based on the reliability of the measurement scale. To achieve this, the data collected from the survey was analyzed using percentages and frequencies to determine reliability. The study used Cronbach's alpha as a measure to evaluate the internal consistency and reliability of the questions in the questionnaire. Table 4 presents the reliability statistics of the test used to measure informational writing competence, with a Cronbach's alpha value of 0.913 across the 20 items, higher than the threshold of 0.70, indicating a high level of internal consistency [20, 21]. This indicates that the reliability of the measurements is consistent across the entire scale. The scale is considered appropriate for its intended measurement and can be used effectively. A high Cronbach's alpha value suggests that the data collected are accurate, and the research results are of high quality. Conversely, if the Cronbach's alpha value is below 0.70, it indicates low reliability, and the data should not be accepted. Variables with low Cronbach's alpha values should be removed or modified to ensure the accuracy of the research results. The Cronbach's alpha coefficient is used to assess the consistency in the informational writing competence survey, as illustrated in [Table 4](#).

Table 3. Cronbach's alpha values in the study.

Case processing summary		
Cases	N	%
Valid	366	100.0
Excluded (a)	0	0.0
Total	366	100.0

Note: a. Listwise deletion based on all variables in the procedure

Table 4. Reliability analysis of the assessment tool for measuring informational writing competence.

Reliability statistics	
Cronbach's alpha	N of items
0.913	20

To measure the level of development of informational writing competence among Literature pedagogy students through the experimental stages, we use an assessment tool, which is the *Test*. The test is used for both the control group and the experimental group. Since each competence has many indicators and manifestations, when grading, we calculate the average score based on the corresponding manifestations (with weighting). The scores obtained will be categorized into four levels based on specific manifestations, as shown in Table 5.

Table 5. Criteria for assessing informational writing competence.

Content/ Component	Criteria	Achieved Score					Total
		Excellent	Good	Average	Weak	Poor	
		5	4	3	2	1	
Identifying the object of exposition	Correctly identified, clearly and accurately presented	5					
	Correctly identified, presented relatively clearly and accurately		4				
	Correctly identified, presented unclearly			3			
	Correctly identified, presented in a disorganized manner				2		
	Incorrectly identified					0	
Organizing the essay	Complete with all three parts, fully developed content	5					
	Complete with all three parts, content summarized		4				
	Missing introduction (or conclusion), content summarized			3			
	Missing conclusion (or introduction), content summarized				2		
	Not organized into three parts					1	
How the information is organized	Information is organized appropriately, with complete and logical content	5					
	Information is organized appropriately, with relatively complete and logically arranged content		4				
	Doesn't know how to organize information suitable for the exposition object, incomplete information			3			
	Doesn't know how to organize information suitable for the exposition object, superficial content, and has many expression errors				2		
	Doesn't know how to organize information suitable for the exposition object, unable to present content					1	
Using appropriate exposition method, effectively combining methods to highlight the characteristics of the exposition object	Chooses an appropriate exposition method to highlight the characteristics of the exposition object; effectively combines exposition methods	5					
	Chooses an appropriate exposition method, but does not combine methods to highlight the characteristics of the exposition object		4				
	Chooses an appropriate exposition method, but does not combine methods, and does not highlight the characteristics of the exposition object			3			
	Chooses an incorrect exposition method, unable to write an exposition essay				2		
	Doesn't know how to write an exposition essay					1	
Using language	Uses language accurately, logically, and without spelling errors, and effectively combines rhetorical devices	5					
	Uses language accurately, logically, and combines rhetorical devices, but has 1-2 language errors		4				

Content/ Component	Criteria	Achieved Score					Total
		Excellent	Good	Average	Weak	Poor	
		5	4	3	2	1	
	Uses inaccurate language, uses some rhetorical devices, and has 3-4 language errors			3			
	Uses inaccurate language, does not use rhetorical devices, and has 3-4 language errors				2		
	Uses inaccurate language, does not use rhetorical devices, and has 5 or more language errors					1	
Using appropriate modes of expression	Uses a combination of modes of expression in exposition, highlighting the characteristics of the exposition object	5					
	Uses only one mode of expression in exposition, highlighting the characteristics of the exposition object		4				
	Uses only one mode of expression, highlights 1-2 characteristics of the exposition object			3			
	Uses incorrect mode of expression, mentions 1-2 characteristics of the exposition object				2		
	Uses an incorrect mode of expression and does not clarify the characteristics of the exposition object					1	

We determine the level of development of informational writing competence through a quantitative evaluation scale for students participating in the experiment, using five levels:

i) Level 1 (1-2 points): The student does not understand the requirements of the prompt, misidentifies the type of essay, nearly unable to write an expository essay (Rated Weak).

ii) Level 2 (3-4 points): At this level, the student correctly identifies the requirements of the prompt but presents the content in a disorganized manner; the content is incomplete and inaccurate. The student addresses approximately 30%-40% of the test's content; uses inaccurate language, does not use rhetorical devices, and makes 3-4 language errors (Rated Poor).

iii) Level 3 (5-6 points): The student achieves an average performance, correctly identifies the topic and addresses approximately 50%-60% of the required content. However, the essay still lacks an introduction (or conclusion), and the content is brief. The student knows how to select an appropriate expository method, although there is no combination of methods, especially in highlighting the characteristics of the exposition subject. The use of language is still inaccurate, with 3-4 language errors (Rated Average).

iv) Level 4 (7-8 points): The student fully understands and performs the requirements of the prompt, achieving 70%-80%. The student can identify and present the requirements relatively clearly and accurately, choose an appropriate expository method, and highlight the characteristics of the exposition subject. However, there is still a lack of smooth integration between the expository methods. The use of language is accurate and logical, with the correct application of rhetorical devices. However, there are still 1-2 language errors in the essay (Rated Good).

v) Level 5 (9-10 points): This is the highest level of the informational writing competence evaluation. At this level, the student understands and fully meets the requirements of the prompt; the student demonstrates a high level of accuracy in controlling the content and effectively combines various modes of expression in exposition, highlighting the characteristics of the exposition subject. The student selects appropriate expository methods, especially the effective combination of these methods, and uses language that is accurate, logical, with the appropriate use of rhetorical devices and vivid expressions (Rated Excellent).

*3.2.2. *Data Collection Method for Evaluating the Effectiveness of Developing Informational Writing Competence for Vietnamese Language Education Students*

Experimental Setup: The study was conducted with a sample of 90 students from K44A and K44B classes, Department of Vietnamese Language and Literature, Hanoi Pedagogical University 2. The intervention method was used to evaluate changes in students' informational writing competence before, during, and after the application of developmental measures.

Procedure: The study was conducted twice at two different timestamps. Each experimental session included the following stages:

1. **Pre-intervention Stage:** In this stage, a control group (CG) and an experimental group (EG) were selected. The first evaluation was conducted using Test 1 to assess the baseline writing competence of both groups in terms of informational writing skills.

2. **During the Intervention Stage:** The study applied several solutions to develop the informational writing competence of Vietnamese language education students. The intervention process was divided into three stages:

- i) Stage 1: Providing knowledge about informational texts.
- ii) Stage 2: Developing informational writing skills.
- iii) Stage 3: Evaluating the results of the intervention process.

These three stages were integrated into the teaching process of lessons in the "Texts - Reading comprehension and writing" module. The evaluation was carried out at two different timestamps after each intervention. The second evaluation (via Test 2) and third evaluation (via Test 3) were conducted for both the experimental and control groups.

*3.2.3. *Evaluation of Experimental Results*

After the experimental process, the study measured the level of informational writing competence in Vietnamese language education students through Test 2 and Test 3. These results were compared with the results of the control group. The experimental results were assessed both qualitatively and quantitatively. Qualitative evaluation was conducted through classroom observations, lesson reviews, and interviews with teachers and students after the teaching process. Qualitative results were gathered from classroom observations and interviews with both teachers and students. We participated in observing some lessons within the scope of the experimental teaching content for both the control and experimental classes, and the following observations were made:

1) **Regarding the teachers:** In the lessons, the teachers organized the teaching process by focusing on creating learning activities for students, emphasizing practice and exercises to develop the skills for writing informational texts, thereby improving their informational writing competence. However, in the control group, the teacher often tried to guide students to meet the learning objectives of the lesson. In contrast, in the experimental group, teaching was more flexible and adaptive, with students actively engaging in learning activities. The knowledge content of the lessons was clarified and made more specific, reducing the academic and complex nature of the content. In addition to the teacher interviews, we also gathered feedback, opinions, and thoughts from the teachers. In general, teachers agreed that the results of the lessons would improve, and students' informational writing skills would develop better if both the learning approach of the students and the teaching method of the teachers were modified. The lesson observation forms were generally rated as "Excellent," with positive evaluations of the teaching methods for developing informational writing competence.

2) **Regarding the students:** From classroom observations, students were more active and engaged in their learning content. They participated in activities that not only helped reinforce the knowledge but also strengthened their skills in writing informational texts. It can be said that students in the experimental classes studied in a more flexible, enthusiastic, and active manner, being much more confident than students in the control group.

3.2.4. *Quantitative Analysis of Results Before and After the Experiment

The results of students' work before and after the experiment in both the control and experimental classes are specifically presented in the table comparing the average scores of the evaluation criteria below:

Quantitative evaluation is conducted by grading the tests and processing the obtained scores according to the established criteria, which include:

1) Calculation of characteristic parameters such as the mean score, standard deviation, frequency, and determining the lowest and highest scores, etc., based on which students are categorized according to their level of competence.

Mean score (M) is the average of the scores achieved by the students in both groups (Control group and experimental group); this indicates the average level of students or the average writing competence in the group.

Standard deviation (SD) is a statistical measure used to determine the dispersion of a dataset that has been organized into a frequency table. The larger the standard deviation, the higher the dispersion, and vice versa. A high dispersion indicates uneven levels of competence. Therefore, if the impact of the pedagogical intervention through teaching methods does not result in significant changes, it suggests that the teaching methods may not be appropriate.

2) Testing for differences between the control and experimental groups using $\alpha = 0.05$ [22] and calculating the p-value to determine whether the difference between the two groups is statistically significant. If $p > 0.05$, the difference is not significant (the difference may occur randomly); conversely, if p is smaller than 0.05, the significance level is higher (the difference is unlikely to be random). This is based on the scientific convention that all p-values < 0.05 (i.e., less than 5%) are statistically significant. This helps to conclude whether the mean score difference between the two tests is significant (Table 5, Figures 1 and 2).

Table 6. Comparison of average scores for evaluation criteria before and after the experiment.

		N	M	SD	Experiment
Before experiment	Control group	45	25.09	5.91	$t(88)=1.762$; $p=0.081$
	Experimental group	45	27.02	4.37	
After experiment	Control group	45	26.07	4.95	$t(88)=4.984$; $p=0.000$
	Experimental group	45	30.73	3.86	

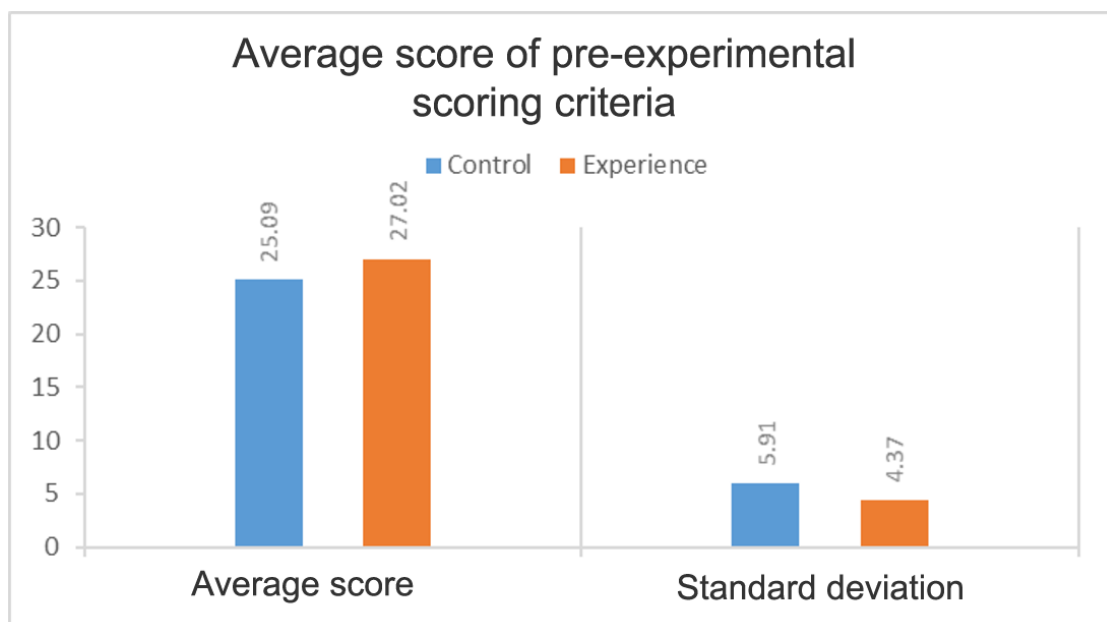


Figure 1. Average scores for evaluation criteria before the experiment.

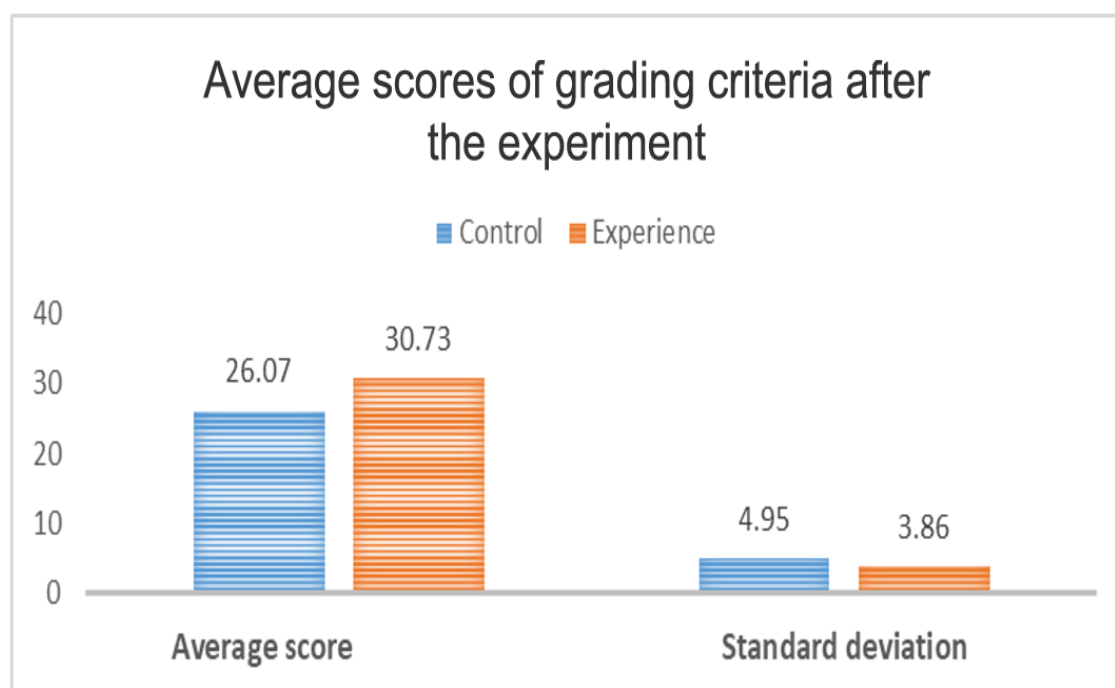


Figure 2. Average scores for evaluation criteria after the experiment.

The results from Table 6 and Figures 1, 2 show:

i) Pre-experiment stage: Both the control group and the experimental group had the following average scores: 25.09 (control) and 27.02 (experimental). The standard deviation (SD) was 5.91 (control) and 4.37 (experimental). Using an independent t-test to determine the statistical significance of the mean score differences between the two groups, the results showed $t(88) = 1.762$ and $p = 0.0081$. Since the p-value is less than 0.05, we can conclude that the academic level and writing competence of the control group and the experimental group were not significantly different before the experiment. Therefore, these two groups were used for the experimental phase in the subsequent stages.

ii) Post-experiment stage: The results for the control and experimental groups after the experiment showed average scores of 26.07 (control) and 30.73 (experimental). The standard deviations (SD) were 4.95 (control) and 3.86 (experimental). The t-test results were $t(88) = 4.984$ and $p = 0.000$. Since the p-value is less than 0.05, this indicates that the difference between the control and experimental groups is statistically significant with a high level of confidence.

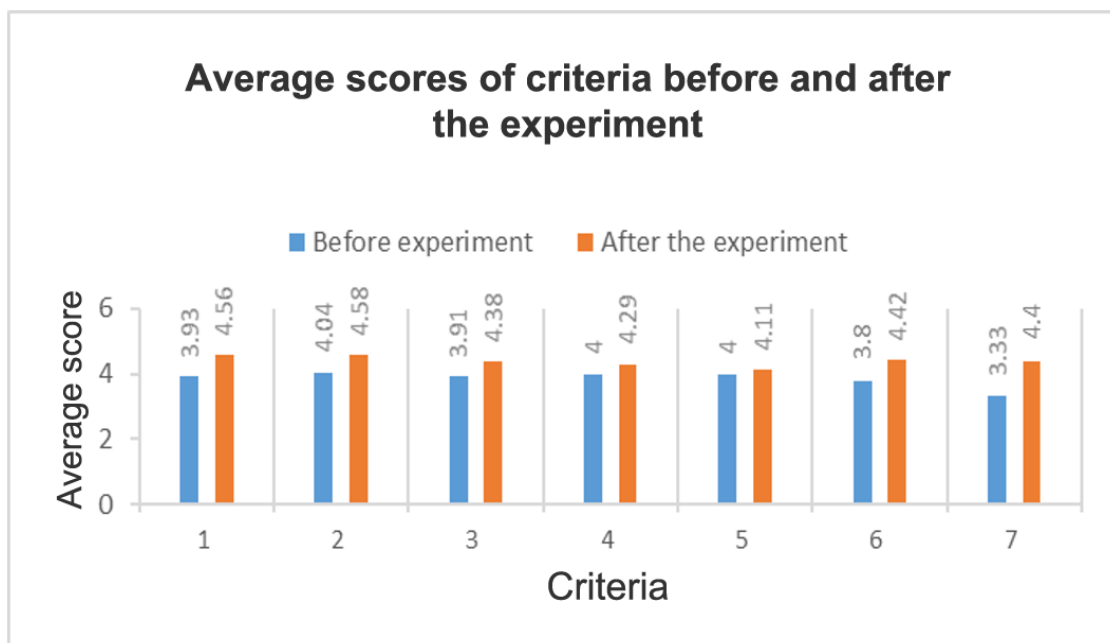
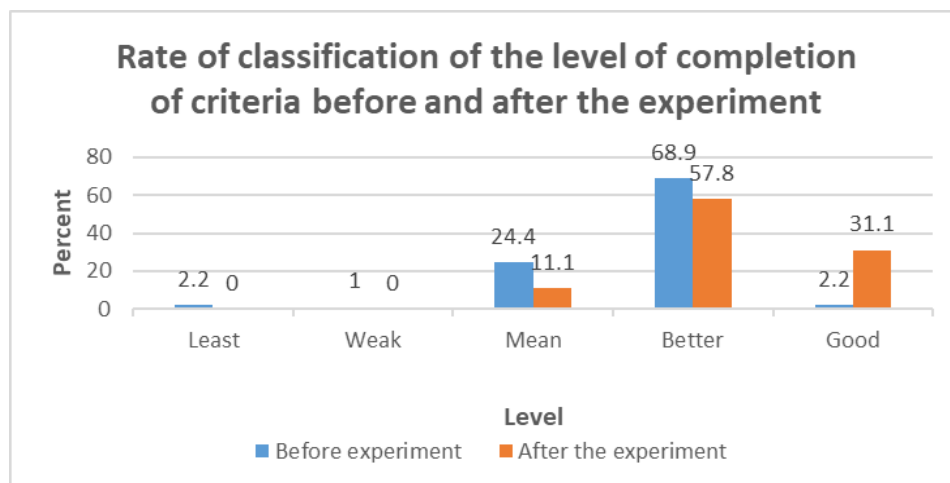
The average score for the experimental group after the experiment increased to 30.73 compared to 27.02 before the experiment, and the standard deviation decreased from 4.37 before the experiment to 3.86 after. Furthermore, since the p-value is less than 0.05, the difference in results between the control and experimental groups is significant. This confirms that there is not only a difference between the experimental and control groups but also a difference between the pre-experiment and post-experiment stages. Therefore, it can be concluded that the experimental interventions led to the development and improvement of informational writing competence in the experimental group.

3.2.5. *Quantitative Analysis of Results Based on the Components of Informational Writing Competence

Table 7 presents the results of evaluating the components of informational writing competence through the pedagogical experiment.

Table 7. Comparison of average scores for evaluation criteria after the experiment in the experimental and control groups.

		N	M	SD	Experiment
Identify the object of exposition (1)	Control group	45	4.04	0.71	$t(88)=3.738$; $p=0.000$
	Experimental group	45	4.56	0.58	
Organize the essay (2)	Control group	45	3.89	0.83	$t(88)=4.763$; $p=0.000$
	Experimental group	45	4.58	0.49	
Organize information (3)	Control group	45	3.82	0.74	$t(88)=3.679$; $p=0.000$
	Experimental group	45	4.38	0.68	
Expository method (4)	Control group	45	3.71	0.58	$t(88)=4.511$; $p=0.000$
	Experimental group	45	4.29	0.62	
Expository language (5)	Control group	45	3.6	0.78	$t(88)=3.309$; $p=0.001$
	Experimental group	45	4.11	0.68	
Use of expression modes (6)	Control group	45	3.87	0.94	$t(88)=3.187$; $p=0.002$
	Experimental group	45	4.42	0.69	
Use of supporting techniques (7)	Control group	45	3.13	0.81	$t(88)=8.497$; $p=0.000$
	Experimental group	45	4.4	0.58	

**Figure 3.** Average score results for evaluation criteria before and after the experiment in the experimental group.**Figure 4.** Classification ratio of the level of achievement for evaluation criteria before and after the experiment in the experimental group.

The results compiled from Table 7 and Figures 3 and 4 show: In each component of the informational writing competence of Vietnamese Language Education students, the average score (M), standard deviation (SD), and p-value for the control group and experimental group are clarified and specified.

These results further confirm the significant difference in scores for each component of the informational writing competence of Vietnamese Language Education students between the control and experimental groups. Observing the average scores and standard deviation, the p-value is always less than 0.05. Therefore, the p-value being less than 0.05 indicates that the difference between the two groups (control and experimental) is statistically significant. Additionally, the standard deviation for the experimental group is always smaller than that of the control group. This confirms that the experimental group, after being subjected to pedagogical interventions, performed better, with higher results compared to the control group, which did not receive any pedagogical interventions.

4. RESULTS AND DISCUSSION

4.1. *Developing A Curriculum to Support the Development of Informational Writing Competence for Vietnamese Language Education Students*

Developing a curriculum is one of the key tasks to provide full, accurate, and timely information and guidance for teaching informational writing competence to Vietnamese language education students. This learning resource equips students with essential knowledge about informational texts and the skills to write them.

The curriculum meets the following requirements: 1) It reflects the achievements of research on informational texts and informational writing competence; 2) It is diverse and rich, focusing on enhancing practical application; 3) It aims to form and develop informational writing competence in learners; 4) It is designed to cater to different levels of learners.

To develop informational writing competence for students, the curriculum designer needs to specify the tasks and actions that learners must perform. The guidelines on tasks and writing techniques serve as a reliable and comprehensive guide to help students master this activity. The curriculum should also clarify the system of learning tasks by constructing questions and exercises that maximize the knowledge, experience, and understanding that the learners bring into the learning process.

To ensure the teaching goal of developing informational writing competence for Vietnamese literature pedagogy students, the research team proposes the following seven-step curriculum development process:

1) Step 1: Research and analyze the training program for the bachelor's degree in Vietnamese language education; analyze the detailed program for the course/module on informational texts.

This step requires the curriculum designer to research and analyze the Bachelor of Education in Vietnamese language and literature training program, as well as the detailed course/module/unit on informational texts. The curriculum must closely align with the program's objectives and expected learning outcomes, ensuring that the training content and learning materials, including textbooks, make a meaningful contribution to achieving these goals. This is a crucial process in curriculum development to ensure that the instructional materials are goal-oriented, aligned with expected learning outcomes, and closely integrated with the content of the course/module/unit.

2) Step 2: Define the objectives of the curriculum

The objectives of the curriculum must be defined based on the goals and expected outcomes of the course/module/unit. Based on the research and analysis of the training program for the Bachelor's degree in Vietnamese language education, and the detailed program for the informational texts course/module/unit (from Step 1), the curriculum designer will define the objectives of the curriculum. The curriculum objectives aim to develop the qualities and competencies of the learners. Clearly defining the objectives is the foundation for developing specific chapter/section outcomes. From the expected outcomes of each chapter/section, the designer proceeds with the next steps.

3) *Step 3: Define the requirements for each chapter or lesson in the course/module/unit.*

In this step, the curriculum designer identifies the requirements for each chapter or lesson in the course/module/unit in relation to the overall objectives of the curriculum. The required outcomes are the specific qualities and competencies that students must achieve after each chapter or section. The requirements are generally categorized into three main levels: knowledge, understanding, and application.

4) *Step 4: Define core and distinctive knowledge; Questions, Exercises/Products to form skills in order to achieve the requirements for each chapter or lesson.*

At this step, attention should be given to the relationship between the selected content and the required outcomes. In other words, the curriculum designer defines the "input" elements needed to achieve the "output," which is the development of informational writing competence for Vietnamese language education students.

5) *Step 5: Collect and reference relevant materials*

Curriculum development requires building on existing research achievements. However, the materials referenced in the curriculum must have clear sources and citations, fully meeting copyright requirements as per current regulations.

6) *Step 6: Develop detailed content of the curriculum*

In this step, the curriculum designer translates the requirements outlined in the previous steps into specific knowledge and skills for writing informational texts. The knowledge units should be presented scientifically and logically, ensuring a balance between theory and practice, in line with real-world applications, and updated with the latest scientific and technological knowledge.

7) *Step 7: Review, edit, and finalize the curriculum draft*

The curriculum designer reviews and compares the content with the required outcomes and curriculum objectives to proceed with editing and revising the draft (if applicable) before it is submitted to the scientific evaluation committee.

4.2. *Developing Informational Writing Competence Through the Use of Artificial Intelligence (AI)*

For the process of creating informational texts, AI can assist in many stages of writing, from gathering information, creating outlines, drafting, to editing and finalizing the text. Specifically:

First, AI tools can help quickly search for and synthesize information from various sources, saving time and effort. Notably, AI technology can assist writers in finding information in various forms such as images, diagrams, tables, infographics, etc. These are essential and important types of information in the process of creating informational texts.

Second, AI can suggest appropriate structures and outlines for different types of informational texts, helping to organize information in a logical and coherent manner.

Third, AI tools can assist writers in completing drafts quickly, especially for those with limited vocabulary or who find it difficult to express ideas.

Fourth, AI can help writers check for spelling, grammar, and style errors, while also suggesting solutions to make the text more accurate, clear, coherent, and engaging.

Currently, many AI tools can assist in writing informational texts. Some popular tools include: i) ChatGPT, a language generation tool, which can offer suggestions or create texts based on specific requests. ii) QuillBot, a tool specialized in paraphrasing and summarizing texts. With advanced natural language processing capabilities, QuillBot not only helps users rephrase sentences smoothly and naturally but also assists in quickly summarizing content, saving time. iii) Jasper, an automatic content generation tool that can help writers quickly create drafts. Therefore, this tool can be used for various purposes such as common informational texts, blog posts, advertisements, emails, website content, etc. Key features of Jasper include: creating various types of content, from short texts such as titles and product descriptions to long articles; supporting more than 25 languages, allowing users to create content in

their native language or any language they choose; enabling users to adjust the tone of the content, from formal to friendly, humorous to serious; and integrating with other tools like Google Docs and WordPress, making it easier to create and manage content.

Some methods and approaches for using AI to develop the competency of writing informational texts for Vietnamese language education students:

First, introducing suitable AI tools for self-learning and exploration. During teaching, instructors can introduce appropriate AI applications, teach students how to search for and select modern tools, and encourage them to explore and use these tools for writing informational texts. Teachers can guide students in classifying tools, for example, AI tools that assist in idea generation, developing ideas, and creativity, as well as tools that help identify errors and edit texts, allowing students to choose tools according to their goals and needs.

Second, creating a system of exercises and tasks for students to use AI tools in writing informational texts. The development of a system of exercises and tasks for teaching informational writing to Vietnamese language education students can be done in several forms:

1) Classify exercises and tasks based on the writing process: The teacher can ask students to perform different tasks at each stage of the writing process. For each stage, students will classify and select appropriate AI tools (tools for idea generation, creating outlines; tools for drafting or finalizing the text; tools for editing and improving the text).

2) Classify exercises and tasks based on the types of AI tools used: For example, AI tools for text generation, image generation, sound, video, or synthetic generation. Depending on the type of informational text, teachers can design exercises and tasks suitable for the requirements of each text type and the intended usage. It is important that the tasks are diverse in terms of execution methods (individual or group work), with levels of difficulty ranging from easy to challenging.

Third, designing online and blended learning courses using AI tools for writing informational texts. This approach synthesizes the proposals mentioned above. When teachers design an online or blended learning course using AI tools to guide students in writing informational texts, they can propose topics for self-study, exercises/tasks, discussions, assessments, etc. Nowadays, AI tools are continuously evolving and adding new functions, supporting writers at all stages and skill levels. Therefore, the most important aspect is designing and organizing a course with clear goals, required outcomes, comprehensive and diverse topics, and appropriate teaching, assessment, and evaluation activities. This approach will maximize the advantages of online and blended learning courses as well as AI tools.

However, despite the benefits AI offers in assisting with writing informational texts, there are some considerations to keep in mind when using AI: i) AI is only a supportive tool; we should not rely too heavily on AI. Instead, we need to engage in critical thinking and creativity to produce high-quality and appropriate texts; ii) Carefully verify the information, as AI might make errors when processing and synthesizing data. Writers should double-check the information before using it; iii) Use AI consciously, avoiding over-reliance or plagiarism from AI-generated content. Pay attention to ethical issues and copyright violations.

4.3. Developing Informational Writing Competence Through a System of Exercises and Practical Training

In teaching practice, it is evident that competencies are formed and developed through students' learning activities. The exercise system for developing writing competence only produces effective results in teaching when it is built to meet several requirements: i) It must be aligned with the purpose and content of the curriculum for Vietnamese language education students. Therefore, the exercise system is closely linked to the objectives and learning content, ensuring that students achieve the required competencies and qualities after completing the program. ii) It must be appropriately challenging and foster creativity in students. The exercise system should be suitable for students' cognitive levels; it should be diverse and rich in form, and the types of exercises should require

students to flexibly apply the knowledge and skills they have learned to find innovative and unique solutions. iii) It must ensure continuity and development. The exercise system is selectively adopted and developed based on the latest research results in the specialized field. iv) It must ensure coherence and logic. The coherence and logic of the exercises should be clearly reflected in the relationship between the form and content of the exercises.

The exercise system for developing writing competence for Vietnamese language education students is built following the steps below:

1) Step 1: Define the purpose of the exercises

This is an important step in building the exercise system to develop writing competencies for Vietnamese language education students. By completing the system of exercises, students have the opportunity to effectively practice and reinforce their knowledge and skills in writing informational texts. The results of the exercises help the instructor assess the students' progress and measure their writing competencies. Defining the purpose of the exercises serves as the foundation for selecting content and exercise formats.

2) Step 2: Define the content and format of the exercises

Based on the purpose of the exercises, the instructor can choose the appropriate content and format. For each specific type of informational text, the content and format of the exercises should align with the characteristics of the text type. The focus should be on exercises related to real-life situations, creating opportunities for students to engage with the learning material in class. However, the instructor should also consider the components of informational writing competencies that need to be developed for Vietnamese language education students, integrating exercises that focus on these competencies.

3) Step 3: Finalize the exercise system

This is the step where the exercise content and format are finalized. The exercises should be organized in a logical order that fits the process of developing writing competencies for Vietnamese language education students. The exercises should be classified according to the levels of informational writing competencies: recognition, understanding, low-level application, and high-level application; following the writing process for informational texts: preparation before writing, idea generation, outlining, writing practice, and checking and editing.

4) Step 4: Use of exercises

The system of exercises is to be applied throughout the entire learning process for Vietnamese language education students. Some exercises will be performed in class, while others will be done during students' self-study time to help develop their informational writing competencies.

5) Step 5: Check and edit (If necessary)

This is the final step in the process of building exercises for developing writing competencies in Vietnamese language education students. After the system of exercises is implemented, the instructor reviews, compares, and checks the exercises against the objectives and the criteria for evaluating students' understanding to refine the exercises. If necessary, changes or adjustments can be made to ensure alignment.

The research team proposes some exercises to help develop research report writing skills for Vietnamese language education students.

*4.3.1. *Pre-Writing Exercises*

Exercise 1

What AI application would you plan to use when describing the steps of preparation before writing a research report?

Exercise 2

Identify the steps to prepare before writing for the following essay topic: Write a research report on the topic "The Role of Folklore in Written Literature."

Exercise 3

What are your thoughts on the preparation steps before writing for the following essay topic: Write a research report on the topic "Research on the reading habits of young Vietnamese people today."

- Communication purpose: The role of reading books in life.
- Materials: Online news websites.
- Ideas: Starting from the role of reading in life, the report will focus on clarifying the reading habits of young Vietnamese people today.
- Essay type: Research report.
- Applications: ChatGPT, QuillBot, etc.

4.3.2. *Finding Ideas and Outlining Exercises

Exercise 4

Find ideas for the research report on the topic "Research on the reading habits of young Vietnamese people today."

Exercise 5

For the following essay topic: Write a research report on the topic "The active role in scientific research of pedagogical students."

One student has outlined the following ideas:

- Concept of active participation in scientific research.
- The role of scientific research activities for students.
- The current situation regarding active participation in scientific research of pedagogical students.
- The role of scientific research activities in universities.

Create a detailed outline by rearranging the ideas above and adding some additional points to complete the outline.

4.3.3. *Writing Paragraphs and Text Exercises

Exercise 7

Write the introduction for the following essay topic: Write a research report on the topic "The Vietnamese greeting in communication."

Exercise 8

For the following essay topic: Write a research report on the topic "Organizing self-learning skill training for students using a competency-based approach."

Based on the following key ideas, choose one to write a paragraph:

- Developing students' skills in collecting and processing information.
- Developing students' skills in discussion and teamwork.
- Developing students' skills in self-control and evaluation.

4.3.4. *Checking, Editing, and Finalizing Exercises

Exercise 9

The following paragraph contains logical errors. Identify these errors and correct them accordingly.

In life, when you bother or affect others, you need to say "sorry". Sitting at the same desk, you accidentally touch the person writing next to you and say "Sorry". At an office, you need to find someone, maybe stop an employee and say "Excuse me, sir...". With anyone who helps you with something, no matter how small, remember to say "thank you" to express your gratitude to that person. Even with your parents, who are your closest friends, do not hesitate to say "thank you" every time you receive advice, a

gift, a caring gesture... Saying "sorry" in many situations, such as saying something wrong to someone or even when someone pushes you when you are in a hurry, always proves that you are a polite person in communication.

(According to Huy [23]).

5. CONCLUSION

Informational texts are among the most commonly used types of writing in today's society. The survey results on the ability of Vietnamese language teacher education students to write informational texts indicate that their ability to write such texts is not yet strong, despite this being a crucial text type included in the 2018 national curriculum for the Vietnamese Language subject. This may be due to a variety of subjective and objective factors. Therefore, in the context of today's rapid technological development, the increasing diversity and innovation of informational texts, researching and proposing measures to enhance the ability of Vietnamese language teacher education students to write informational texts becomes even more significant and urgent. The research findings and proposed measures, as well as the experimental results, will serve as a valuable reference for researchers in constructing a theoretical framework for teaching the development of informational writing skills for Vietnamese language teacher education students. Additionally, for educators and policymakers, the results of this study will help them view the development of informational writing skills for teacher education students at a general level, allowing for adjustments to the curriculum for Vietnamese language teacher education and teacher training policies in general, to better meet the practical demands of the current situation.

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