

## Writing challenges and support for elementary students: facial emotions study

Nguyen Thi Xuan Yen<sup>1</sup>, Nguyen-Bich-Thy Bui<sup>1</sup>, Thien-Vu Giang<sup>2</sup>

<sup>1</sup>Department of Primary Education, Ho Chi Minh City University of Education, Ho Chi Minh City, Vietnam

<sup>2</sup>Department of Psychology, Ho Chi Minh City University of Education, Ho Chi Minh City, Vietnam

### Article Info

#### Article history:

Received Nov 17, 2024

Revised Mar 30, 2026

Accepted May 14, 2026

#### Keywords:

Curriculum reform  
Educational support strategies  
Facial-emotional tracking  
Lower elementary students  
Vietnamese students  
Writing skills

### ABSTRACT

Writing is one of the first basic skills that promote successful learning and mental health of elementary students. The 2018 Vietnamese curriculum reform has created challenges in the formation and practice of writing skills of lower elementary students. The primary research questions address: i) the key cognitive challenges in students' writing performance; ii) the emotional experiences associated with writing tasks; and iii) the instructional strategies employed to enhance writing skills. Using a mixed-methods study design on 159 students and 12 teachers, through writing tests, facial action coding system (FACS) and semi-structured interviews, we recorded important insights. The findings showed that second-grade students demonstrated a higher significant advancement in writing. First-grade students mainly exhibit positive emotions with writing tasks. In contrast, second-grade students experience a higher prevalence of negative emotions. This shift suggests that as academic expectations increase, students have greater stress and emotional challenges, necessitating supportive interventions. This study's findings can contribute to the national curriculum development, guide effective teaching practices, and contribute to wider discussions on educational reform within the Vietnamese context.

*This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.*



### Corresponding Author:

Nguyen-Bich-Thy Bui

Department of Primary Education, Ho Chi Minh City University of Education

No. 280, An Duong Vuong Street, Cho Quan Ward, Ho Chi Minh City, Vietnam

Email: [thybnb@hcmue.edu.vn](mailto:thybnb@hcmue.edu.vn)

## 1. INTRODUCTION

Writing is a foundational skill for academic success and lifelong learning. It enables students to express thoughts, ideas, and knowledge [1], [2]. In early elementary education, writing development lays the groundwork for future academic learning [2], [3]. However, for lower elementary students, writing presents unique challenges as they begin to understand and use a language [4]. In the context of Vietnam, these challenges are compounded by the recent curriculum reforms aimed at modernizing education and improving student outcomes [5].

The 2018 General Education Curriculum of Vietnam marks a shift from traditional education toward competency-based and student-centered approaches [6]. It aims to enhance education quality by promoting critical thinking, creativity, and problem-solving [5], [6]. In the Vietnamese language arts curriculum, lower elementary students are expected to master not only basic literacy but also the ability to construct complete sentences and short paragraphs that reflect coherence and communicative intent [7], [8]. These expectations are more demanding than the prior 2006 education curriculum, which focused mainly on mechanical writing and rote memorization, and are also closer to international benchmarks emphasizing authentic, functional writing tasks [7]. For young learners still acquiring fundamental literacy skills, these shifts can create additional cognitive and affective pressures [9].

Despite the growing recognition of writing as both a cognitive and emotional process, research on lower elementary writing challenges in Vietnam remains scarce. Existing studies have primarily focused on cognitive difficulties—such as limited vocabulary, syntactic errors, and lack of idea organization—while overlooking the emotional dimension of writing [4], [10], [11]. Recent international research underscores that emotions significantly influence writing performance by shaping attention, memory, reasoning, and information retrieval [12], [13]. According to Pekrun's control-value theory [14], students' emotions are closely tied to their appraisal of task value and perceived control, influencing motivation and engagement during writing tasks. Similarly, Fredrickson's broaden-and-build theory [15] highlights how positive emotions broaden students' cognitive resources, whereas negative emotions can narrow their focus and hinder idea generation.

Typically, teachers can access students' final work but not the emotions they experience during the writing process. Tools such as the facial action coding system (FACS) make it possible to capture real-time emotional expressions during authentic writing tasks, offering insights into students' affective states [16]. However, research on emotional engagement in authentic assessment remains limited [14]. Understanding these emotions can inform teaching practices and help provide targeted support, particularly for students whose emotional difficulties affect performance [14]. Given this research gap, this study aims to investigate both the cognitive and emotional challenges that lower elementary students face when developing writing skills under the 2018 Vietnamese language arts curriculum. Additionally, this study seeks to identify the pedagogical strategies teachers employ to support students in overcoming these difficulties.

This study offers new insights into two key aspects. First, it combines cognitive and emotional perspectives to analyze writing performance, an approach rarely applied in the Vietnamese context. Second, it integrates facial emotion tracking with writing assessment and teacher interviews, offering a triangulated method to capture the full complexity of young learners' writing experiences. This multi-dimensional approach provides new insights into the emotional trajectories and skill development of early writers under a reformed curriculum. To address these issues, this study focuses on the following research questions:

- What cognitive challenges do lower elementary students encounter in writing performance under the 2018 Vietnamese language arts curriculum?
- What emotional challenges do lower elementary students experience during the writing process under the 2018 Vietnamese language arts curriculum?
- What strategies do teachers implement to support lower elementary students in overcoming these challenges under the 2018 Vietnamese language arts curriculum?

## **2. METHOD**

### **2.1. Research approach**

This study used a mixed-methods approach, combining quantitative and qualitative data to examine lower elementary students' writing performance and emotional experiences. Quantitative data included writing tests and FACS analysis, while qualitative data came from semi-structured teacher interviews and classroom observations. This triangulated approach provided a comprehensive understanding of students' cognitive and emotional challenges in writing.

### **2.2. Participants**

This study involved two participant groups: students and teachers. For the group one, a total of 159 students were selected, comprising 77 first-grade students and 82 second-grade students. The selection was carried out using stratified random sampling to ensure representation across school areas and school types in Table 1. A power analysis using G\*Power indicated a minimum of 111 students were required to detect a medium effect size ( $r=0.3$ ) with 95% power at a 0.05 significant level. The actual sample size of 159 exceeded this threshold, ensuring adequate statistical power [15]. For the group two, 12 teachers participated in the study. The teachers were selected based on their teaching experience and grade level.

### **2.3. Instruments**

#### **2.3.1. Writing tests**

The writing tests were designed to evaluate the students' abilities to write sentences and short paragraphs. The assessment tasks are aligned with the 2018 Vietnamese language arts curriculum standards. For first-grade students, the writing test focuses on sentence completion and basic writing tasks. For the second-grade students, the writing assessment focuses on paragraph writing tasks, as seen in Figure 1.


To ensure content validity, the writing test items were reviewed by three experienced primary education specialists, all of whom have over 10 years of experience in teaching and curriculum development. The test items were judged to be age-appropriate and aligned with core competencies in the Vietnamese

language arts curriculum. moreover, inter-rater reliability was established during the scoring process by training two independent raters using a standardized rubric. Cohen's kappa coefficient ( $\kappa=0.83$ ) indicated substantial agreement between raters.

**Table 1. The demographic distribution of the student participants**

Information	1st-grade students		2nd-grade students		Total	
	N	%	N	%		
Gender	Male	41	53.25	43	52.44	84
	Female	36	46.75	39	47.56	75
School area	Urban	29	37.66	27	32.93	56
	Suburban	31	40.26	29	35.36	60
	Rural	17	22.08	26	31.71	43
School types	Public	46	59.74	55	67.07	101
	Private	31	40.26	27	32.93	58

Grade 1

- Fill in the blanks to complete the sentences based on the picture.  
Example: I and my friends \_\_\_\_\_.
- Replace pictures with the correct words to form complete sentences.  
Example:  shines its warm light. (Replace the picture with the word "sun".)
- Write 1-2 sentences about the picture of the race between a turtle and a rabbit.

Grade 2

- Write a thank you or apology note based on given scenarios.
  - When a classmate lent you a ruler...
  - When you arrive late to class...
- Name the picture with an appropriate title of the Mid-Autumn Festival scene.
- Write a paragraph (4-6 sentences) about a favorite school item.




Figure 1. The writing tests for grade one and two

### 2.3.2. Emotion system

The FACS is adopted to measure the students' emotional experiences while engaging in writing tasks. Developed by Szajnberg [16], FACS is a comprehensive system for categorizing facial movements by their appearance on the face. They categorize emotional states into two types: positive and negative emotions. For example, "cheek raiser" and "lip corner puller" can explain for positive emotion. Contrast, "lowered brows", "nose wrinkling", and "lip corner depressor" can signal negative emotions.

To enhance reliability, four trained observers underwent FACS certification and independently coded facial expressions during writing activities. Inter-coder reliability was computed using percentage agreement, which reached above 85% across all sessions, ensuring consistency in emotional data collection. Additionally, observers used the same standardized observation form and followed a consistent 30-minute coding protocol per session.

### 2.3.3. Semi-structured interviews

Semi-structured interviews were conducted in this study. The teachers were interviewed to explore their strategies for supporting students' writing development and addressing observed challenges. The interviews focused on specific aspects of teaching writing, including strategies, assessment methods, and resource needs. The interview guide was reviewed by an expert panel to ensure construct validity. To ensure trustworthiness and credibility, member-checking was employed-teachers were invited to review their transcripts and interpretations for accuracy. Table 2 presents the main questions used to guide the interviews.

**Table 2. Main questions for semi-structured interviews**

Question	Description
1	What strategies do you use to help students overcome challenges in writing?
2	How do you assess students' writing progress and provide feedback?
3	Can you provide examples of successful interventions or activities that have improved students' writing skills?
4	How do you address students' emotional responses during writing tasks?
5	How do you adapt your teaching methods to cater to different learning needs?
6	What additional resources or support do you think would benefit your students in improving their writing skills?

## 2.4. Data collection

Data collection took place in the second semester of the 2023–2024 academic year. The research team obtained formal consent from school principals and participating teachers before conducting the study. Writing tests were administered to 159 students during regular class hours to minimize disruption. Students were informed that the tests were part of a study and would not be graded, helping to create a relaxed, consistent environment. FACS observations were conducted simultaneously by four trained observers, each assigned to a specific row of students. A total of six observation sessions were completed, each lasting 30 minutes. Following the tests, semi-structured interviews were held with participating teachers, lasting about one hour each, to gather insights into their strategies for supporting student writing. Teachers were assured their responses would be anonymized and used solely for research purposes.

To reduce confounding variables, several controls were implemented. Stratified random sampling ensured diversity across gender, school type, and region. Standardized testing conditions were maintained across classrooms. Observers and raters were blinded to students' academic levels to reduce bias. Additionally, teachers were selected based on similar grade-level assignments and teaching experience to ensure instructional consistency across the sample.

## 2.5. Data analysis

The study employed both quantitative and qualitative methods in three key steps. First, students' writing tests were scored based on five criteria: content, structure, spelling, word use, and cohesion. Scores were analyzed to determine overall performance and identify common strengths and difficulties. Second, the students' emotional states were analyzed using FACS [16]. Emotions were categorized into five types based on distinct facial action, as shown in Table 3. Each emotion was coded based on the presence of specific actions during the writing tasks. Observers counted the frequency of each emotional expression, providing quantitative data on the emotional states experienced by the students.

Third, qualitative data from teacher interviews were analyzed to identify instructional strategies used to support student writing. According to Reyes *et al.* [17], the coding process involved several steps. In the beginning, researchers read through the interview transcripts multiple times to become familiar with the content and to identify initial patterns. Next, using an open coding approach, researchers labeled segments of text that appeared relevant to the support strategies.

Table 3. Emotions and linked action units

Emotion	Actions
Happiness	Cheek raiser + lip corner puller
Sadness	Inner brow raiser + lowered brow + lip corner depressor
Fear	Inner brow raiser + outer brow raiser + lowered brow + upper lid raiser + lid tightener + lip stretched + jaw drop
Anger	Lowered brow + upper lid raiser + lid tightener + lip tightener
Disgust	Nose wrinkling + lip corner depressor + chin raiser

## 3. RESULTS AND DISCUSSION

### 3.1. Student performance in writing sentence and paragraph

Writing performance results reveal that both first- and second-grade students face challenges. While second graders generally performed better than first graders, especially in content and structure, key difficulties persist across both groups. Figure 2 illustrates the percentage of student performance across five key writing criteria.

For the first-grade students, cohesion was identified as the most challenging criterion, followed by structure, word use, content, and spelling, as shown in Figure 2(a). While 48.05% of students could generate several ideas, only 22.08% provided truthful and persuasive details. Structural issues were also prominent: 27.27% failed to produce complete sentences or paragraphs, 29.87% had punctuation and capitalization problems, and 42.86% produced well-structured parts. Spelling posed significant challenges, with 32.47% making over three errors and only 23.38% with no errors. Errors in word use were common, with 38.96% making more than three errors, 32.47% making one to two errors, and 28.57% with no errors. Issues with cohesion were observed, as 40.26% made over three errors, 32.47% managed one to two errors, and 27.27% made no errors.

For second-grade students, content was the most challenging criterion, followed by cohesion, structure, word use, and spelling, as shown in Figure 2(b). Half of the students generated several ideas, and 28.05% included truthful and persuasive details—an improvement over first graders. Writing structure showed moderate progress: 39.02% wrote clearly structured texts, while 29.27% still struggled with basic organization, and 31.71% had punctuation or capitalization errors. Spelling improved slightly, with only

20.73% making over three errors and 31.71% with no errors. Word use errors also declined: 23.17% made more than three errors, 53.66% made one to two, and 23.17% had none. Cohesion errors were prevalent, as 33.33% made over three errors, 36.59% made one to two errors, and 30.49% made no errors.

Previous study have examined young learners' writing challenges, primarily focusing on spelling, word use, and structure [10]. However, limited research has investigated the progression of writing skills between grade one and grade two under the 2018 Vietnamese language arts curriculum. The findings of this study indicate that second-grade students outperformed first-grade students in writing tasks, reflecting expected skill progression [7]. This study provides new evidence that second graders' challenges shift toward higher-order skills such as generating content and maintaining coherence, aspects often overlooked in prior research [18]. The observed progression can be attributed to increased exposure to writing tasks, the implementation of more advanced instructional strategies, and students' growing familiarity with writing conventions [19]. These results offer novel insights into the specific nature of writing difficulties at different stages of early elementary education.

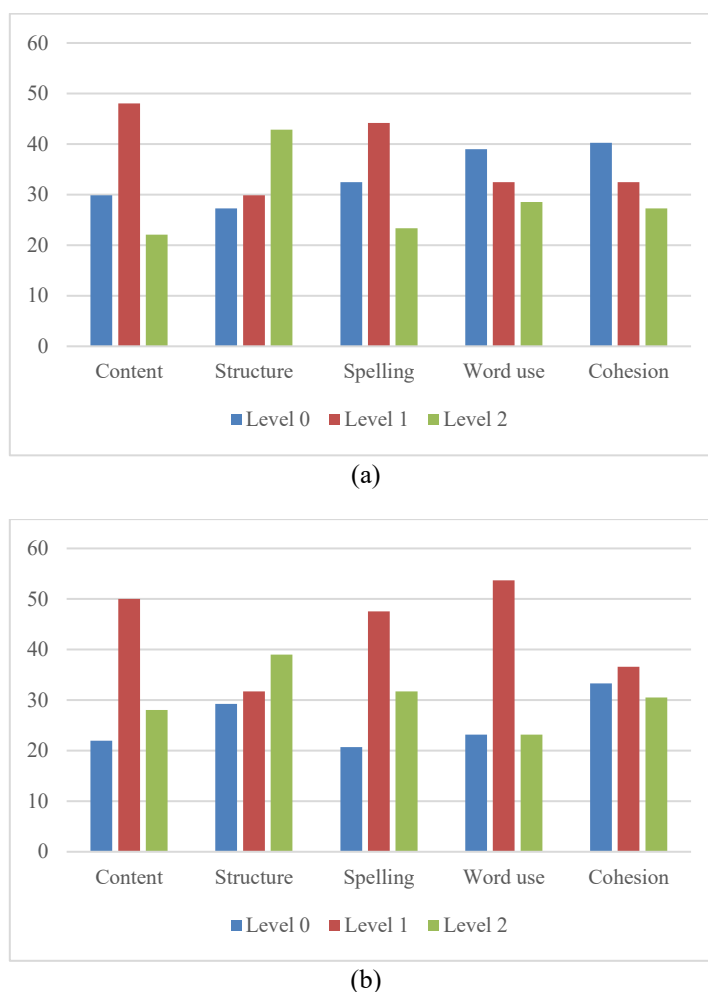


Figure 2. Student performance in writing test at (a) first grade and (b) second grade

### 3.2. Students' emotion during writing sentence and paragraph

The analysis of first-grade students' emotional states during writing tasks revealed notable variations in their experiences, as captured through the FACS. The observed emotions were categorized into five distinct types: happiness, sadness, fear, anger, and disgust. Table 4 presents the frequency and percentage of each emotional state observed among first-grade students.

Table 4 shows that happiness and sadness were the most frequently observed emotions among first-grade students, with happiness slightly more prevalent (28.77%). This suggests that many students experienced positive emotions during writing tasks. Sadness followed closely at 27.40%, indicating notable negative emotional responses. Fear (20.55%) and anger (13.24%) reflected common feelings of frustration

and anxiety, while disgust was least observed (10.05%), suggesting fewer severe negative reactions. The predominance of happiness among first graders aligns with research indicating that positive emotions enhance motivation and engagement in academic tasks [20], [21]. These findings underscore the importance of creating a supportive writing environment that fosters enjoyment and encourages students to participate actively in writing [22]. Challenges such as difficulties with cohesion and structure observed among first graders suggest that reinforcing foundational writing skills through strategies like sentence modeling and creative writing activities can further support their development [23].

Table 4. First-grade student emotional states during writing tasks

Emotion	Frequency (n=77)	Percentage (%)
Happiness	63	28.77
Sadness	60	27.40
Fear	45	20.55
Anger	29	13.24
Disgust	22	10.05

Moreover, Table 5 outlines the emotional states observed among second-grade students. For second-grade students, sadness was the predominant emotion, noted in 38.62% of the cases, suggesting that writing tasks were particularly challenging for this group. Fear was observed in 24.88% of the students, indicating significant anxiety during writing activities. Happiness was noted in 21.08% of the students, pointing to a moderate level of positive emotional responses. Anger and disgust were observed in 8.81% and 6.37% of the students, respectively, highlighting lower but still notable levels of frustration and severe negative reactions.

The higher incidence of sadness and fear among second graders suggests that writing tasks become increasingly challenging and stressful as expectations rise [14], [24], [25]. This emotional shift is concerning and points to the need for targeted interventions. Strategies to address these challenges include connecting writing tasks to students' interests, integrating engaging and motivating activities, and providing timely and constructive feedback to build confidence [1], [26]. Emotional support is also critical, as addressing students' anxieties and frustrations can significantly enhance their ability to manage writing demands [27]. As the result, first-grade students exhibited higher levels of happiness compared to their second-grade counterparts, reflecting a more positive initial attitude toward writing tasks. This contrast may be due to the relatively simpler expectations and more playful learning environments at the earlier stage. However, as students' progress to the second grade, the shift toward predominantly negative emotions such as sadness and fear highlights the increasing cognitive and emotional demands of writing tasks. While previous studies have largely focused on academic performance [28], the findings of this study provide a unique perspective by capturing the emotional trajectories associated with writing challenges. These insights emphasize the need for a dual approach between technical writing skills and emotional support.

Table 5. Second-grade students' emotional states during writing tasks

Emotion	Frequency (n=82)	Percentage (%)
Happiness	43	21.08
Sadness	79	38.62
Fear	51	24.88
Anger	18	8.81
Disgust	13	6.37

### 3.3. Teacher strategies for supporting students with writing challenges

Addressing writing challenges in first and second-grade students requires a combination of skill development and emotional support. Teachers noted that limited language exposure outside the classroom hindered language growth, citing issues such as "limited vocabulary" and "delayed language development" (Mrs. Khanh). To counter these, teachers used "interactive activities" and "storytelling" sessions to offer diverse language experiences (Mrs. Tran). Vocabulary building was a key focus, with strategies like "word maps" and context-based learning proving effective (Mr. Dung). Moreover, modeling sentence and paragraph structures was another important strategy. Teachers guided students to write about familiar topics, such as family members, using prompts and vocabulary from reading and practice. As Mrs. Mai explained, "*breaking down paragraphs into parts helped students grasp structure.*" This task-specific modeling addresses cohesion and structural challenges, complementing studies that focus on broad instructional strategies [1].

Teachers also linked writing tasks to students' interests and real-life experiences, fostering engagement. Group discussions and peer collaboration were common, with proficient writers assisting peers. Mr. Long emphasized that “*ability-based grouping promotes mutual support and a collaborative classroom spirit*” (Mr. Long). This aligns with research on differentiated instruction and peer collaboration [26]. To meet diverse needs, teachers tailored instruction using visual aids, step-by-step guidance, and individualized support. Mrs. Danh shared that “*using pictures helped students engage and reduce anxiety.*” Helping students refine their skills and build confidence, as Mr. Dai stated that, “*encouraging reflection and revision also fostered a growth mindset.*” This approach aligns with pedagogical frameworks promoting resilience [27].

Overall, teachers integrated personalized support, engaging activities, and reflective practices to help students overcome writing challenges. These strategies align with literature emphasizing contextually relevant tasks [26], while this study highlights their targeted use for issues like cohesion and content development. Modeling writing processes not only enhanced students' understanding of conventions but also helped reduce emotional barriers, fostering confidence. Additionally, ability-based peer collaboration proved effective, offering more targeted support than general collaborative strategies noted in prior studies [29].

#### 4. CONCLUSION

This study highlights the developmental progression of writing skills among first and second-grade students within the framework of the 2018 Vietnamese language arts curriculum. Second-grade students demonstrated notable improvements in content generation, structure, spelling, and cohesion compared to first-grade students, reflecting the expected growth in writing skills with advancement in education. However, persistent challenges in cohesion and content were observed across both grades, indicating the need for more targeted instructional strategies to support foundational writing development. Emotional analysis revealed a shift from predominantly positive emotions, such as happiness in first-grade students, to more negative emotions, including sadness and fear in second-grade students, as they faced increasingly complex writing demands. These findings underscore the critical importance of addressing both cognitive and emotional challenges in early writing education.

Effective teacher strategies, such as interactive activities, storytelling, and personalized feedback, were identified as instrumental in fostering writing development and promoting positive emotional experiences. These insights emphasize the need for curriculum developers to integrate engaging, contextually relevant writing tasks that support student learning and emotional well-being. Addressing the challenges faced by lower elementary students is crucial for the successful implementation of Vietnam's reformed curriculum and the broader goal of enhancing educational quality nationwide. Future research should explore the longitudinal development of writing skills, the role of teacher professional development, and the impact of emotional support interventions on writing performance. Comparative analyses of writing challenges across socio-economic or cultural contexts, alongside investigations into the use of digital tools for writing instruction, could further inform strategies to improve writing education in Vietnam and other countries.

#### FUNDING INFORMATION

This study was partially supported by the Ho Chi Minh City University of Education under the Scientific Research Project (Grant No. CS.2023.19.28).

#### AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Nguyen Thi Xuan Yen	✓									✓		✓	✓	✓
Nguyen-Bich-Thy Bui		✓			✓	✓		✓	✓	✓				
Thien-Vu Giang	✓	✓	✓	✓			✓	✓		✓	✓			

C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

**CONFLICT OF INTEREST STATEMENT**

Authors state no conflict of interest.

**DATA AVAILABILITY**

The data that support the findings of this study are available from the corresponding author, [N-B-TB], upon reasonable request. The data is not publicly available due to privacy or ethical restrictions.




**REFERENCES**

- [1] R. Bouwer and C. van der Veen, "Write, talk and rewrite: the effectiveness of a dialogic writing intervention in upper elementary education," *Reading and Writing*, vol. 37, no. 6, pp. 1435–1456, Jun. 2024, doi: 10.1007/s11145-023-10474-8.
- [2] A. Malpique, D. Pino-Pasternak, D. Valcan, and M. Asil, "Primary school teachers' adaptations for struggling writers: survey study of Grade 1 to 6 teachers in Australia," *Journal of Learning Disabilities*, vol. 57, no. 6, pp. 384–396, Nov. 2024, doi: 10.1177/00222194231211946.
- [3] E. Kennedy and G. Shiel, "The implementation of writing pedagogies in the write to read intervention in low-SES primary schools in Ireland," *Reading and Writing*, vol. 37, no. 6, pp. 1575–1603, Jun. 2024, doi: 10.1007/s11145-023-10510-7.
- [4] L. A. P. Bui and I. H. Hsieh, "Creative writing instruction for primary students: An in-depth analysis in the context of curriculum reform in Vietnam," *International Online Journal of Primary Education*, vol. 13, no. 2, pp. 109–121, Jun. 2024, doi: 10.55020/ijoipe.1467861.
- [5] K. T. Pham, X. V. Ha, N. H. Tran, and Y. T. X. Nguyen, "Curriculum reform in Vietnam: primary teachers' views, experiences, and challenges," *Education 3-13*, vol. 51, no. 3, pp. 440–451, Apr. 2023, doi: 10.1080/03004279.2022.2162829.
- [6] T. T. Ha and N. T. Duong, "Sequence of achievements of Vietnamese language subject in the new Vietnamese primary curriculum and English subject in the Australian primary curriculum: a comparative study," *Journal of English Teaching as a Foreign Language*, vol. 6, no. 1, pp. 1–12, 2020.
- [7] T. T. H. Tran, X. T. N. Ha, and D. T. L. Tam, "Requirements to be met for writing skills in Vietnamese subject and orientation to develop standards for assessing pupils' competence through writing skill," *Vietnam Journal of Educational Sciences*, vol. 19, no. 3, pp. 85–90, 2023.
- [8] N. H. Tran, T. D. Truong, H.-V. T. Dinh, L.-H. T. Do, T.-A. T. Tran, and M.-H. T. Phan, "Significance of teacher professional development in response to the current general education reforms in Vietnam: perceptions of school principals and teachers," *Problems of Education in the 21st Century*, vol. 78, no. 3, pp. 449–464, Jun. 2020, doi: 10.33225/pec/20.78.449.
- [9] I. Kurniastuti, L. A. Evanjeli, and D. P. Sari, "Teachers' challenges and strategies in teaching literacy skills for children with special needs," *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, vol. 7, no. 1, pp. 937–948, Feb. 2023, doi: 10.31004/obsesi.v7i1.3598.
- [10] T. N. Truong, "Difficulties of Vietnamese students in learning academic writing," *International Journal of Asian Education*, vol. 4, no. 2, pp. 106–114, Jun. 2023, doi: 10.46966/ijae.v4i2.340.
- [11] V. P. H. Pham and M. H. Truong, "Teaching writing in Vietnam's secondary and high schools," *Education Sciences*, vol. 11, no. 10, p. 632, Oct. 2021, doi: 10.3390/educsci11100632.
- [12] N. Hopwood *et al.*, "Understanding student emotions when completing assessment: technological, teacher and student perspectives," *International Journal of Research and Method in Education*, vol. 48, no. 2, pp. 194–209, Mar. 2025, doi: 10.1080/1743727X.2024.2358792.
- [13] M. N. Hasnine, H. T. T. Bui, T. T. T. Tran, H. T. Nguyen, G. Akçapınar, and H. Ueda, "Students' emotion extraction and visualization for engagement detection in online learning," *Procedia Computer Science*, vol. 192, pp. 3423–3431, 2021, doi: 10.1016/j.procs.2021.09.115.
- [14] J. Schlesier, D. Raufelder, L. Ohmes, and B. Moschner, "How do primary and early secondary school students report dealing with positive and negative achievement emotions in class? A mixed-methods approach," *Education Sciences*, vol. 14, no. 6, p. 582, May 2024, doi: 10.3390/educsci14060582.
- [15] H. Kang, "Sample size determination and power analysis using the G\*Power software," *Journal of Educational Evaluation for Health Professions*, vol. 18, pp. 1–12, Jul. 2021, doi: 10.3352/jeehp.2021.18.17.
- [16] N. M. Szajnberg, "What the face reveals: basic and applied studies of spontaneous expression using the facial action coding system (FACS)," *Journal of the American Psychoanalytic Association*, vol. 70, no. 3, pp. 591–595, Jun. 2022, doi: 10.1177/00030651221107681.
- [17] V. Reyes, E. Bogumil, and L. E. Welch, "The living codebook: documenting the process of qualitative data analysis," *Sociological Methods and Research*, vol. 53, no. 1, pp. 89–120, Feb. 2024, doi: 10.1177/0049124120986185.
- [18] A. Astrid, D. M. Illa, and H. Husnaini, "Difficulties in writing of the second-grade students at junior high schools in Palembang," *Wiralodra English Journal*, vol. 7, no. 2, pp. 65–77, Sep. 2023, doi: 10.31943/wejv7i2.236.
- [19] H. Ramzan and M. Hafeez, "Enhancing student's writing ability in paragraph writing through an outline strategy at primary level," *Indonesian Journal of Educational Research and Review*, vol. 4, no. 2, pp. 299–306, Oct. 2021, doi: 10.23887/ijerv4i2.37211.
- [20] Y. S. G. Kim, D. Yang, M. Reyes, and C. Connor, "Writing instruction improves students' writing skills differentially depending on focal instruction and children: a meta-analysis for primary grade students," *Educational Research Review*, vol. 34, p. 100408, Nov. 2021, doi: 10.1016/j.edurev.2021.100408.
- [21] M. Liu *et al.*, "How do topics and emotions develop in elementary school children? A text mining perspective based on free-writing text over 6 years," *Frontiers in Psychology*, vol. 14, p. 1109126, Mar. 2023, doi: 10.3389/fpsyg.2023.1109126.
- [22] M. Fartoukh and L. Chanquoy, "Expressive writing in school children: effects on well-being and working memory," *Journal of Writing Research*, vol. 11, no. 3, pp. 505–523, Feb. 2020, doi: 10.17239/JOWR-2020.11.03.04.
- [23] J. Patty, "Addressing student writing challenges: a review of difficulties and effective strategies," *Education Journal: Journal Education Research and Development*, vol. 8, no. 2, pp. 369–392, 2024, doi: 10.31537/ej.v8i2.1938.
- [24] M. Li, Y. T. Chen, C. Q. Huang, G. J. Hwang, and M. Cukurova, "From motivational experience to creative writing: a motivational AR-based learning approach to promoting Chinese writing performance and positive writing behaviours," *Computers and Education*, vol. 202, p. 104844, Sep. 2023, doi: 10.1016/j.compedu.2023.104844.




- [25] K. Bozgün, "Investigation of the relationship between primary school students' reading and writing anxiety," *International Online Journal of Primary Education*, vol. 12, no. 3, pp. 199–209, Sep. 2023, doi: 10.55020/iojpe.1182924.
- [26] P. Fiskerstrand and S. M. Gamlem, "Instructional feedback to support self-regulated writing in primary school," *Frontiers in Education*, vol. 8, p. 1232529, Jul. 2023, doi: 10.3389/educ.2023.1232529.
- [27] A. de A. Malpique, D. Valcan, D. Pino-Pasternak, and S. Ledger, "Teaching writing in primary education (grades 1–6) in Australia: a national survey," *Reading and Writing*, vol. 36, no. 1, pp. 119–145, Jan. 2023, doi: 10.1007/s11145-022-10294-2.
- [28] T. T. K. Tran, "Developing Vietnamese writing skills for first grade students," *Forum for Linguistic Studies*, vol. 5, no. 2, p. 1790, Apr. 2023, doi: 10.59400/flsv5i2.1790.
- [29] E. Sever and H. Akyol, "The impact of collaborative learning techniques on written expression, self-regulation, and writing motivation," *International Electronic Journal of Elementary Education*, vol. 14, no. 5, pp. 587–603, Jun. 2022, doi: 10.26822/iejee.2022.265.

## BIOGRAPHIES OF AUTHORS






**Nguyen Thi Xuan Yen**    is a senior lecturer of the Department of Primary Education, Ho Chi Minh City University of Education, Vietnam. She obtained a Ph.D. in Education from Hanoi National University of Education. Her main research interests include teacher professional development, and language teaching methodology in primary schools. She can be contacted at email: [yenntx@hcmue.edu.vn](mailto:yenntx@hcmue.edu.vn).



**Nguyen-Bich-Thy Bui**    is a Doctor of Education in Curriculum and Instruction. She is currently employed as a lecturer at the Ho Chi Minh City University of Education, Vietnam. Her research interests are teacher education, literacy education, learning and teaching methods, and technology integrated teaching and learning. She can be contacted at email: [thybnb@hcmue.edu.vn](mailto:thybnb@hcmue.edu.vn).



**Thien-Vu Giang**    holds a Ph.D. in Psychology. He is currently working as a psychology lecturer and research scientist in the Educational Psychology Potential Research Group of Ho Chi Minh City University of Education. His research interests are educational psychology, school counseling, mental health, clinical support for children and adolescents with special needs, and school neuropsychology. He can be contacted at email: [vugt@hcmue.edu.vn](mailto:vugt@hcmue.edu.vn).