

# Sử dụng bài luận phản tư để phát triển các kỹ năng tư duy bậc cao

## TÓM TẮT

Ngôn ngữ học là một thành phần thiết yếu trong các chương trình đào tạo cử nhân chuyên ngành tiếng Anh tại Việt Nam. Tuy nhiên, cách thức triển khai hiệu quả các học phần lý thuyết này vẫn chưa nhận được sự quan tâm đầy đủ từ các nhà nghiên cứu và giảng dạy ngôn ngữ. Nghiên cứu này nhằm đóng góp vào lĩnh vực còn ít được khảo sát đó; cụ thể, nghiên cứu khám phá việc sử dụng bài luận phản tư để phát triển các kỹ năng tư duy bậc cao trong một học phần Hình thái học được giảng dạy trong môi trường học ngoại ngữ. Hai câu hỏi nghiên cứu được đặt ra là (1) mức độ tham gia của sinh viên trong **hình thức đánh giá thay thế này** đến đâu và (2) sinh viên có những nhận thức như thế nào về hình thức đánh giá đó. Bốn lớp học, với tổng cộng 137 sinh viên đại học, **đã** tham gia nghiên cứu trong thời gian mười tuần. Hai bộ **dữ liệu** được sử dụng gồm các bài luận phản tư định kỳ và bảng hỏi về nhận thức của sinh viên; cả hai đều được phân tích định lượng. Kết quả cho thấy, mặc dù được đánh giá là khó, nhưng bài luận phản tư đã kích thích sự tham gia tích cực của sinh viên trong suốt học kỳ, điều này có thể được lý giải bởi những lợi ích mà họ cảm nhận được từ hình thức đánh giá thay thế này. Nghiên cứu mang lại một số hàm ý thực tiễn cho việc giảng dạy các học phần lý thuyết theo hướng hấp dẫn hơn, qua đó hỗ trợ sự phát triển kỹ năng tư duy bậc cao của sinh viên.

**Từ khóa:** *Ngôn ngữ học lý thuyết, tư duy phản biện, kỹ năng tư duy bậc cao.*

# Using the reflective essay to promote higher-order thinking skills

## ABSTRACT

Linguistics represents an essential component in English-major degree programs in Vietnam. Still, how to effectively conduct these theoretical courses has not received sufficient attention from language practitioners and researchers. This study was aimed to contribute to this under-researched area; it explored the use of the reflective essays to promote higher-order thinking skills in a morphology course conducted in a foreign learning environment. Two research questions were (1) to what extent the students were involved in this alternative assessment and (2) what were the students' perceptions of this means of assessment. Four classes, totaling 137 undergraduates, were involved in the study over a ten-week span. Two sets of data were the regular reflective essays and the students' perceptions obtained through questionnaires; both were quantitatively analyzed. The findings indicated that although deemed as uneasy, the reflective essays triggered the students' active engagement during the whole semester, which were likely to be attributed to the perceived benefits of this alternative assessment. The study holds some practical implications for the conducting of these theoretical subjects in an engaging manner which supports students' development of high-order thinking skills.

**Keywords:** Theoretical Linguistics, reflective thinking, higher-order thinking skills

## 1. INTRODUCTION

Linguistics plays a vital role in English-major undergraduate degree programs. Insights into how the target language works as a system at various levels from myriad perspectives provided through these courses are highly acknowledged as invaluable to prospective teachers of English as a foreign language, interpreters, translators, or tour guides. Johnston and Goettsc talk of language pedagogy, applied linguistics and theoretical linguistics as the three pillars of language teaching. They state that '*future language teachers are usually required to take language teaching methodology courses, but language teaching takes much more than speaking a language and how to teach it: we need to know how language works as a system so we can make informed choices in our teaching.*'<sup>1</sup> Grabe also contend that an understanding of the principles underlying language as a formal system is fundamental to teachers so that they will be able to '*engage students in ways that can lead to student autonomy, empowerment, and reflective awareness of their learning.*'<sup>2</sup> Similarly, Rothman strongly supports that a theoretical knowledge about language is a prerequisite to effective teaching; he maintains: '*No one would deny that a language teacher who is more aware of the linguistic structures of the language s/he is teaching and key issues in the general understanding of adult*

*language acquisition will make a more effective, empathetic teacher*'.<sup>3</sup>

Despite the crucial role of these theoretical linguistics courses in English-major undergraduate degree programs, previous studies have indicated the teaching and learning of these courses in Vietnam have left much to be desired. First, a heavy reliance on course books designed by English native scholars for international or English-native students can possibly pose a big challenge to the undergraduates due to both the colossal volume of disciplinary matters covered and the lack of socially and culturally relevant appealing linguistic data and activities in these materials.<sup>4</sup> Another problem identified was the predominantly teacher-centered class activities, where the students are 'passive acceptors'<sup>5</sup> of theoretical concepts and struggle with or feel terrified of uninteresting, unrealistic, and impractical tasks.<sup>6,7</sup> The deepest concern revealed from most of the studies is that there is a focus on mostly low-order thinking skills (LOTS) in both class activities and assessment. The instructors do not care much about encouraging students to be analytical and critical in their learning, and keenly discover how to apply the subject domain knowledge and skills in their current English learning and in their future job. Conducting the theoretical courses in such manner may make the courses appear far from practical to students and as a result, demotivate

students and negatively affect the students' academic outcomes.

Drawing upon insights from research into reflective writings,<sup>8</sup> I addressed these problems by using the reflective essay as additional regular assessment in tandem with the available exercises in the main currently-in-use course-book and recommended references. This study took place at four classes of Morphology for English majors at public university.

## 2. LITERATURE REVIEW

### 2.1. Reflective writing

Dewey is commonly considered to be the first and most influential theorist of the concept of '*reflective thinking*' as an aspect of learning and education. According to Dewey' s reflection is a meaning-making process that transports a learner from one experience into another with deeper understanding of its connections to other experiences.<sup>8</sup> It is the bridge that enables continuity of learning, and ensures the progress of the individual and, ultimately, society. The first fundamental element of experience is interaction. An experience essentially involves interaction between the self and the world, which could be an idea, another person, the material or natural world. Inextricably linked to the first element is continuity. A learner makes sense of each new experience based on the meaning perceived from their past experiences, as well as prior knowledge.

Various benefits of reflective practice have been identified and widely accepted in the literature. Reflective thinking is essential to both teacher's and students' learning. It is seen as '*a standard toward which all teachers and students must strive*';<sup>9</sup> it is '*perhaps the most essential piece of what makes us human, of what makes us learners*'.<sup>9</sup> Self-development is reported as a practical outcome of reflective writing.<sup>10</sup> Moon's long list of outcomes includes critical review, emotion, and learning, blending theory and practice, supporting the awareness of knowledge development, and supporting continuing and personal development.<sup>11</sup> In the nursing literature it is highlighted that reflective practice may be an effective means to reduce the perceived theory-practice gap.<sup>12</sup> Reflective capacity has been highlighted as an essential aspect of self-regulated and lifelong learning in higher education.<sup>13</sup> Fostering reflective capacity within education helps develop critical thinking skills, inform reasoning, enhance

This study was aimed to motivate students to increase deep learning and engagement among students outside class hours. It was designed to explore the use of the reflective essay as additional assessment to promote high-order thinking skills. The two research questions were: (1) To what extent were the students involved in this alternative assessment? And (2) What were the students' perceptions of this means of assessment?

professionalism among trainees. Reflection is widely regarded as a means to encourage the development of the students' higher-order cognitive skills, such as monitoring, inference, and perspective-taking. Other advantages of reflective writing include improving the learning outcomes and paving the way for transformative learning, self-confidence, engagement, and self-discovery; reflective writing was envisioned as helping to promote self-awareness in students given that critical, higher order, metacognitive skills were employed when writing reflectively.<sup>14</sup>

### 2.2. Higher-order thinking skills

Higher-order thinking skills (HOTS) is the concept of education reform and has been defined in different ways. Brookhart classifies the different definitions of HOTS into three major categories: HOTS as skills to transfer/apply what students have acquired or learnt into new contexts, HOTS as critical thinking skills, and HOTS as a holistic thinking performance ability to find and tackle a new challenge.<sup>15</sup> Brookhart states that HOTS cover logic and reasoning skills, analysis, evaluation, creation, problem solving, and decision making.<sup>15</sup>

This study adopted Marzano's taxonomy.<sup>16</sup> The thinking ability model was firstly coined by Bloom in 1956, which was revised by Anderson and Krathwohl and Marzano and Kendall.<sup>16,17</sup> These taxonomies have been widely used by experts as a basis for curriculum design, describing learning objectives, assessment and/or targeting different levels of students' thinking abilities. The revised Bloom taxonomy offers an operational definition of the distinction between lower- and higher-order thinking skills: LOTS is generally classified into the categories of understanding and retrieval, HOTS is the level at a higher level in the cognitive hierarchy - the level of analysis and utilization.<sup>16</sup> Secondly, this framework not only distinguishes between the two

but the hierarchy of the cognitive processes makes it a potential tool for designing tasks and providing effective feedback that focuses on progress towards higher-order thinking skills. This taxonomy categorizes human cognitive domain into six thinking levels, aligned as follows:

- *Remembering* is the ability to retrieve previously learned materials, e.g. terms, definitions, concepts, principles and formulas from long-term memory. This low level includes recognizing and recalling. Recognizing means recalling relevant knowledge in a long-term memory sequence. Recalling means quickly calling on relevant knowledge in long-term memory sequence.
- *Understanding* is the ability to demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas. This level includes interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.
- *Applying* is the ability to use procedures in solving problems in new contexts by applying knowledge, facts, techniques, and rules in different ways. This level includes executing and implementing. Executing means using more skills and algorithms than techniques and methods when completing a familiar task. Implementing means choosing and using a procedure to resolve unfamiliar problems.
- *Analyzing* is the ability to solve problems by separating information into certain parts by identifying the causes, detecting relationships with individual parts as well as the whole to make conclusions and support evidence of generalization. This level consists of differentiating, organizing, and attributing. Differentiating means distinguishing something relevant from irrelevant information, or something important from unimportant information and being able to show information that is relevant or important. Organizing means identifying the elements of communication or situation and recognizing how these elements unite into a coherent structure. Attributing means determining the point of view, bias, value, or intention behind the subject matter.
- *Evaluating* is the ability to provide an assessment or retain opinions to make decisions about information, validity of ideas, or quality of work based on criteria and certain standards consisting of checking and critiquing. Checking means re-examining if there are errors in a process or product; discovering the effectiveness of a procedure that is

being practiced. Critiquing means finding the accuracy of a way or procedure to solve a problem.

- *Creating* means being able to compile information in different ways by combining elements in a new pattern that is coherent and functional, or creating alternative solutions that differ from before which includes generating, planning and producing. Generating means making a hypothesis based on certain criteria. Planning means planning a procedure to complete a task. Producing means solving problems outside the plan when meeting certain specifications.

Literature has documented abundance of benefits of HOTS. Adult learners' HOTS create self-regulated learners as well as improve learning outcomes.<sup>18</sup> Several studies have shown that there is a positive relationship between HOTS and students' academic abilities. Students who have HOTS ability will have better academic abilities than students who have LOTS.<sup>19</sup> HOTS have a vital role in improving student learning ability, speed of learning, including the effectiveness of the learning process,<sup>19</sup> which leads to an increase in student academic achievement and longer-lasting, more transferable knowledge.<sup>20,21</sup> Brookhart asserts that holding students accountable for HOTS in learning enhances their motivation and learning results.<sup>15</sup> In addition to developing high cognitive capacities, the development of HOTS is also responsible for developing all-round individuals, which empowers the learners in manipulating new knowledge to solve problems in novel situations they may face.<sup>15,19</sup>

Course design needs to specifically target HOTS because HOTS are teachable and learnable.<sup>20,21</sup> To ensure successful integration of HOTS in teaching, careful consideration should be made in all aspects of teaching including teaching approach, teaching strategies, and assessment. Previous studies emphasize the alignment of learning goals, implementation of learning, and assessment towards a higher cognitive level<sup>17</sup> in order to create a culture of thinking for the teacher in preparing his/her class and to maximize students' HOTS.<sup>22</sup> In other words, it is not only the learning strategy that triggers HOTS, but assessment must be able to trigger HOTS, which is alternative assessment. Standardized tests can only measure the mastery of the content of teaching materials. HOTS cannot develop if learning is oriented towards examinations.<sup>23</sup> Repeated exposure to higher-order tasks is not sufficient.<sup>21</sup> Some suggested alternative assessments include multiple

choice, open ended problems, performance tests and portfolios.<sup>20</sup>

HOTS questions or assignments have the following characteristics: a) the solution is not predictable or does not use a direct formula, b) it is not routine, c) it is an open solution, d) it requires more work in completing it.<sup>24</sup> Assessment which only focuses on basic level, such as recalling factual knowledge, will only facilitate modest learning, but if the assessment emphasizes higher-order thinking level, it will make students learn more deeply.<sup>25</sup> Then, when students are actively involved in learning that seeks to facilitate and awaken students' HOTS, it should also be followed by an assessment that is also oriented towards HOTS.<sup>26</sup>

Research literature has indicated a number of teaching strategies to promote cognitive development. Direct instruction could effectively reduce ambiguity and confusion, but this strategy should be used sparingly. Teacher-centered presentations of information should be short (up to five minutes) and coupled with guided practice to teach subskills and knowledge.<sup>27</sup> Regarding questioning strategies, questions can be in various forms like open-ended questions, alternatives and thought-provoking questions, questions requiring students' explanation for their answers and examining their use of reasoning strategies or

Socratic techniques for discussion.<sup>28</sup> Teachers should play the role of a facilitator, giving the model for how to use HOTS in learning rather than a teacher of students.<sup>28</sup> Sincere feedback should be given in time to inform learners of their progress. The features that make classroom environment support HOTS are: (i) reflections of real-life situations and contexts; (ii) collaboration among teachers, disciplines, students; (iii) encouragement of curiosity, exploration, and investigation, (iv) responsibility for learning vested in the learner; (v) failure viewed as a learning opportunity; and (vi) acknowledgement of effort, not just performance.<sup>29</sup>

King proposed a three-step procedure with a strong emphasis on teachers' support to reduce ambiguities and confusion, and improve student's attitudes about thinking tasks.<sup>27</sup> During the first stage 1, Prerequisites, the teacher should ensure students' mastery of the subject domain via instruction, with the use of lower order thinking skills. In Stage 2 – Bridges, the teacher provides the bridge to students' higher levels of thinking. With teachers' scaffolding, students will be guided to link prior learning to new contexts and tap into their own schemata. In Stage 3 – HOTS – the students could work on their own to apply the prior knowledge and skills to new and preferably real life contexts.

### **3. METHODOLOGY**

#### **3.1. Participants**

The participants were naturally occurring groups of four classes - ENG A (n = 32), ENG C (n = 39), ENG K (n = 28), and ENG M (n = 38); the classes were relatively homogeneous with regard to their academic experience and English proficiency. They had had little or no exposure to the reflective mode during the first two years. Students' proficiency was presumably approximately B2 level, targeted at C1 to be eligible for graduation; however, most of the students were less proficient. They had learned how to write paragraphs and essays in standard academic English.

#### **3.2. Implementation**

The implementation included the following major points.

(1) Assigning homework every two weeks: Each homework consisted of two tasks, *Tests & Quizzes* and *Assignment*. The former was compulsory; the latter, optional. The questions were designed and

categorized as LOTS or HOTS basing on Marzano's taxonomy.

- Tests and Quizzes was to check students' remembering and understanding of theoretical concepts. This LOTS-based task was automatically graded.

- Assignment was a reflective essay which was aimed to promote HOTS. The assignments were designed to promote self-directed deep learning, interacting, researching, reasoning by reflecting on what they had learned or experienced. The question prompts necessitated students' reflection and use of HOTS. The questions presumed the learners' knowledge and understanding of the basics covered in each chapter. (Appendix A). The assignments were optional and quality was promoted by means of feedback which was immediate, detailed, and specific.

(2) Manually assessing the assignments and providing online feedback to each students:

Although scored on the traditional 10-point band, any poor submission was graded 5 as the minimal. This pass score was intentionally used in order not to discourage the students from any future attempt. By means of the assignments, the students were expected to go beyond their remembering and understanding of the concepts under focus. Our rubric defined two levels - '*Non-reflective*' and '*Reflective*'. The non-reflective, superficial descriptive writing level was characterized by the mere repetition of the theory; the answers just provided the previously determined definitions and characteristics, the listing out of categories, classifications without any demonstration of researching and reasoning. The grade of a non-reflective answer ranged from 5 to 6, depending on the students' command of linguistic aspects of cohesion and coherence, such as how sufficient and/or appropriate is paragraphing and controlling of organizational features. The reflective writing level concerned analyzing the concepts and/or relating the theoretical knowledge to practice and/or real-life issues. The writers demonstrated that they had added to the previously presented knowledge, exhibited reasoning, and/or their own thoughts and emotions. Grades for a reflective answer ranged from 7 to 10, depending on the extent of in-depth analysis, rigorous research, originality, and excellent command of linguistic features.

### 3.3. Data collection

This research has two types of data:

- The first data set is the regular reflective essays written by the students. The reflective essays were assigned every two weeks. The students submitted

## 4. FINDINGS

### 4.1. Students' Involvement

Although optional, the students were actively involved in the reflective essays. The lowest rate of submissions was 60.25%, which occurred only once with Class M for the first essay. The subsequent weeks saw a gradual rise in this class as well as other classes. A drop of one or two occasionally may have been due to late submission or some other reason; however, the numbers of submission in all the classes steadily increased over five essays, as can be seen in Figure 1. This finding suggests a positive influence of using the reflective essay to get the students more engaged in learning.

the essays online via Google class over ten weeks. The number of submissions, scores, and feedback were automatically recorded on the system. We measured to what extent the students' engagement was promoted and sustained by quantifying the submissions over a ten-week span.

- The second data set was the students' responses to a questionnaire to obtain the students' perspectives on the use of the reflective essay as an additional, optional, regular after-class activity. The questionnaire was administered through a Google form. Prior to the final week, the students were informed of the purpose of the questionnaire which they would receive through their email in the following week. They could either complete it anytime within the final week or choose to ignore it; their email was not a required item in the form.

The questionnaire consists of 15 questions (Appendix B). The first question concerns the informants' groups; the others address two issues under focus: (1) students' perception of the LOTS-oriented and HOTS-oriented activities in terms of motivation, students' ability to tackle, and their benefits to students' development of cognitive skills and learning objectives, and (2) students' experience when finishing the reflective essays - to what extent the reflective essays triggered the students' different types of interactions – student-content interaction and student-student interaction and students' use of HOTS. The data gained through Google form was automatically analyzed and displaced in both charts and an excel file.

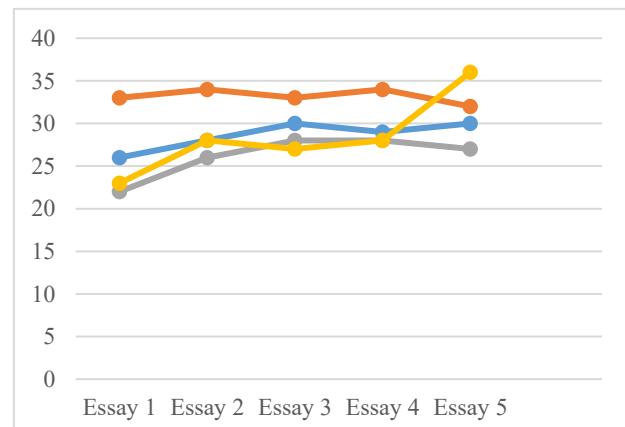
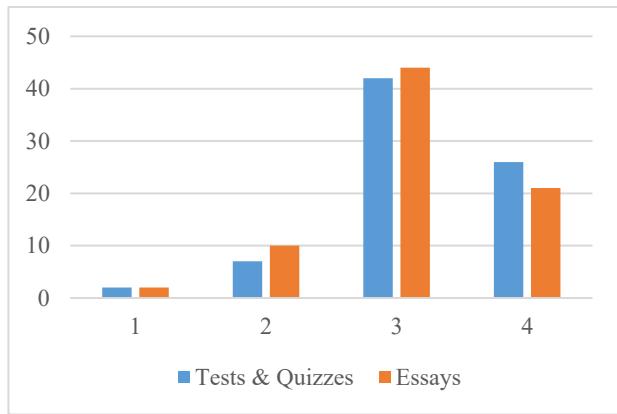


Figure 1. Numbers of submission over 4 classes.

### 4.2. Students' perceptions and experience

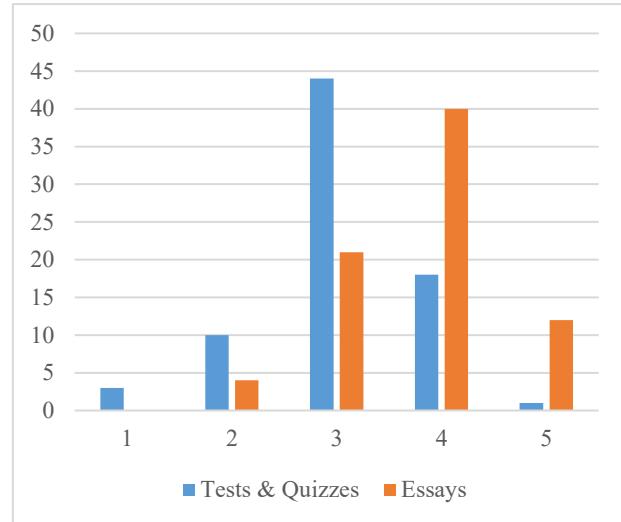
The response rate to the questionnaire was 56.93%; 78 out of 137 students completed the questionnaire and they were from all four classes A, C, K, and M (18.2%, 33.8%, 20.8%, and 27.3%, respectively).

As regards interest, means for Tests & Quizzes and Assignments were 3.19 and 3.08 on the 1-4 scale respectively, indicating most of the students were interested in both types of homework. A slight difference in mean between the two forms suggest the students generally preferred the Tests & Quizzes. This finding came as no surprise because the Tests & Quizzes were multiple choices and checked students' LOTS, which took a shorter time to complete and were far easier. Figure 2 compares the students' interest in them.



**Figure 2.** Students' interest across two types of tasks.

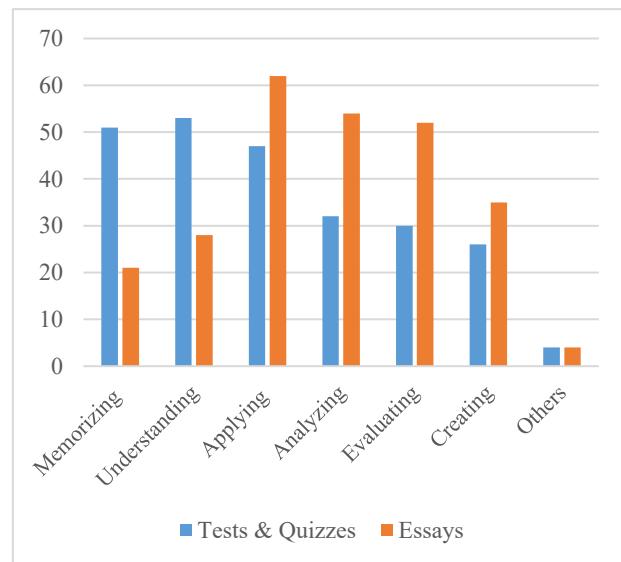
Beside the positive finding, that approximately one-fourth (26.92%) indicated that they were not interested in tasks assigned. The reason was partly revealed from the informants' answers to the questions concerning the level of difficulty of the tasks. On the 1-5 scale with 1 being 'Very easy' and 5 being 'Very difficult', Means for both Tests & Quizzes and Assignments were above average (3.05 and 3.77, respectively). A majority of students indicated that both types of homework were neutral or difficult (Figure 3). It should be noted that up to 15.6% indicated that the essays were 'Very difficult', whereas this figure for Tests & Quizzes was merely 1.3%.



**Figure 3:** Students' perception of the difficulty levels across two tasks.

Although mostly indicated as uneasy, the tasks did engage the students. This could be due to the benefits the students perceived when they finished the tasks.

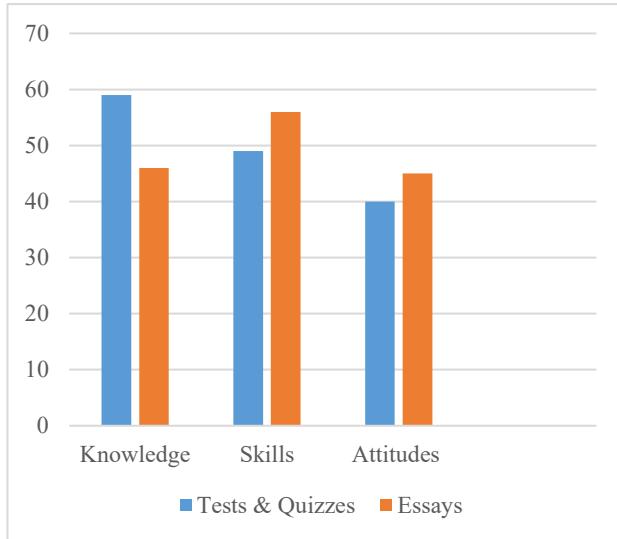
From the perspective of Marzano's taxonomy, the students tended to agree with the benefits of the tasks. The data reveals the fact that Tests & Quizzes supported the development of LOTS (remembering, understanding) and Assignments triggered the use of HOTS – applying, analyzing, evaluating and creating. Figure 4 compares the skills perceived to be promoted when the students performed the tasks assigned.



**Figure 4.** Benefits perceived across two tasks.

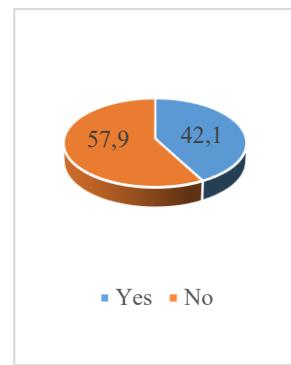
The study also investigated to what extend the two types of task were perceived to have helped the

students' development in terms of the three broad learning outcomes – knowledge, skills, and attitude. The result is presented in Figure 5. Thus, both types were perceived to have supported the development in all three targeted areas. The proportions of the students agreed to these benefits were generally high, with 79.7%, 66.2%, and 54.1% for Tests & Quizzes; 62.2%, 75.7%, and 60.8% for Essays. The results also unfold the students' higher appreciation of the essays in developing their skills and especially attitudes than the Tests & Quizzes.

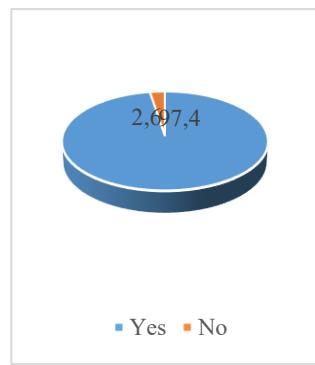


**Figure 5.** Students' perceived development of learning outcomes across two tasks.

To explore how much the reflective essays triggered student-content interaction and student-student interaction, the students were asked to indicate if they discussed with their friends and referred the references in order to complete the essays. The result showed that less than half of the students (42.1%) said they did discuss with their classmates, leaving another larger half (57.9) not to have interacted with peers in order to complete the task (Figure 6). Contrary to student-student interaction, student-content interaction was far more common (Figure 7), which seems apparent, because unless the students had reviewed the concepts and searched for information from different sources, they could not have satisfactorily completed the essays.



**Figure 6.** Student-student interaction.



**Figure 7.** Student-content interaction.

To explore whether or not the reflective essays promoted the students' employment of the HOTS, the students were asked to describe the process they usually went through in order to complete this task. Their short answers were analyzed in terms of actions. Two groups emerged: some tended to have proceeded through the steps the undergraduates are usually instructed to follow in academic writing courses; others were more research-oriented.

For the first group, the steps that they undertook were reading carefully the prompts, analyzing the prompts, making an outline, writing the draft, proofreading, and finally submitting. Some were also concerned with the three-part structure of the essay. For example,

*Excerpt (1):* Bước 1: Đọc kĩ đề và yêu cầu của assignment Bước 2 Lên dàn ý cho chủ đề cần viết Bước 3 Viết câu chủ đề Bước 4 Viết phần giới thiệu Bước 5 Viết phần thân bài Bước 6 Viết kết luận. (Step 1: Read the prompt carefully and the requirements. Step 2: making an outline for the topic. Step 3: Writing the topic sentence. Step 4: Writing the introduction; Step 5: Writing the body. Step 6: Writing the conclusion.)

For a predominant majority, the steps appeared to have been more research-oriented. The steps involved were reviewing the theory/ the technical concepts, searching the materials, analyzing and synthesizing the contents. For example,

*Excerpt (2):* Em thường ôn bài giảng trên lớp, tham khảo một số tài liệu rồi sau đó bắt đầu hoàn thành bài assignment. (I usually reviewed the lessons instructed, referred some references, then began to complete the assignment.)

*Excerpt (3):* Em thường nghiên cứu lý thuyết, tìm tài liệu có liên quan và sau đó em sẽ kết hợp lại và hoàn thành bài. (I usually studied the theory, searched relevant materials, then I synthesized and completed the task.)

As revealed from the responses, in order to search for information, the students referred not only the textbook and/or the recommended references but also the resources on the Internet, including videos.

Some students indicated that they discussed with their peers or raised questions in the class, too. For example,

*Excerpt (4)* Đầu tiên tôi sẽ đọc đè 2 đến 3 lần để hiểu đè. Sau đó tôi sẽ phân tích đè bài xem đè bài yêu cầu

## 5. DISCUSSION

Bain, Ballantyne, Mills & Nestor argue that reflective skills can be taught; nonetheless, they require practice and development over time.<sup>30</sup> This study concerns reflective writing in foreign learning environment. It was sustained and supported by the potential and properties of modern technologies. These technology-facilitated writing activities were expected to result in increased motivation, participation and interaction, leading to students' literacy development.<sup>31</sup>

This study set out with the aim of exploring the impact of implementing reflecting writing to necessitate HOTS in the undergraduates enrolled in an English Morphology course conducted online. In this study, drawing on the notion of reflective writing and associated characteristics, we designed the assignments with an aim to engage the learners deeply in the process of learning – a fully engaging experience which is highly meaningful and deeply felt, with thoughts deeply elaborated and more contextualized.<sup>32,33</sup> By drawing learner's attention to their subjective experience of language use, we put them more in control of their own learning.<sup>32</sup> The assignments were designed as tasks which were 'difficult enough to require full attention, but easy enough to become absorbed in'.<sup>32</sup>

Many of the findings of this research are congruent with the literature. The most obvious finding to emerge from this study was that the reflective essays had a positive impact on the students' learning skills and attitudes. Despite being optional rather compulsory, the assignments triggered a steadily increasing number submitted over a ten-week span, which indicated that the students were intrinsically

làm gì. Tiếp theo tôi sẽ tiến hành làm bài. Nếu trong bài làm tôi không chắc chắn phần nào tôi sẽ mở lại bài cũ để xem. Nếu có câu nào tôi không hiểu tôi sẽ hỏi lại cô giáo vào đầu giờ học của buổi tiếp theo. Vì vậy tôi thường hay mở đè trước ngày thứ 5 để sáng thứ 5 có gì không hiểu tôi sẽ hỏi cô giáo. (First of all I read the prompts two or three times in order to understand. Then I analyzed the question to grasp the requirement. Then I proceeded to finish the task. If I was unsure of some issue during the completion, I reread the lesson. If there was anything I could not understand, I asked the lecturer at the beginning of the following class. Therefore, I usually check the assignment before Thursday so that I could ask the lecturer on Thursday.)

motivated by the tasks. Their intrinsic motives must have been promoted by the encouraging teaching and learning environment with constructive and immediate feedback. According to Biggs, the students' motives, ensuing learning strategies and teaching context are interrelated.<sup>34</sup> Students' interest in the subject areas for its own sake could strongly determine their commitment to work – their readiness to work hard and commit time to their study, as can be seen from the results. Also, it is essential to point out that this must have been partly enabled by technological advancements. As Garrison and Anderson argue, communication and Internet technologies provide a high degree of communicative potential through asynchronous interaction design options;<sup>35</sup> therefore, the participants were able to maintain engagement in a learning community when and where they chose.

Another important finding was the positive impact of the reflective essays on students' development of HOTS, which was partly dependent on a deep understanding of the domain contents mastered through the performance of Tests & Quizzes with a focus on LOTS, a useful platform or starting point to progress to an in-depth comprehension of the content.<sup>34</sup> The study revealed students' active involvement in the learning process and continual engagement in HOTS. These involved applying, analyzing, and reasoning, evaluating, creating, problem solving, and/or decision making.<sup>15,16</sup> This result is consistent with that of previous studies which investigated the impact of teaching HOTS and/or exposing learners to tasks requiring HOTS.<sup>15,19,20</sup> In the implementation, to trigger HOTS, we ensured alignment of course objectives,

learning contents and assessment towards a higher cognitive level.<sup>17</sup> Throughout the course, we attended to the features that made classroom environment support HOTS: (i) reflections of real-life situations and contexts; (ii) collaboration among instructor and students; (iii) encouragement of curiosity, exploration, and investigation, and (vi) acknowledgement of effort, not just performance.<sup>28</sup> The success can also be attributed to that we also followed King's proposal of three-step procedure.<sup>27</sup> Although assigning the reflective essays as optional, which meant the grades did not matter, we devoted

## 6. CONCLUSION

Taken together, these results are significant and provide insights into the role of reflective writing in promoting HOTS in a Morphology course. The way reflective writing was conducted in this study could quite possibly be replicated in other theoretical linguistic courses in order to address the concerns unfolded in other relevant

The most obvious limitation of this study was the lack of qualitative data. Future studies concerning reflective writing should explore students' actual

time assessing, giving encouraging feedback both online and during class hours in order to reduce ambiguities and confusion, and to provide guidance as to how to write better reflective essays. We ensured students' understanding of the domain contents via in-class instruction which focused on the use of LOTs. The Tests & Quizzes served as the bridge to students' higher levels of thinking. With the reflective essays, the students had an opportunity to link learnt concepts to previous or new real life contexts.

process of finishing the essays. A longitudinal design might yield insights into the students' difficulties so that scaffolding strategies might timely be provided. Moreover, explicit instructions on how to write reflective essays might result in more satisfactory products and accordingly more positive effects. Finally, in this study, the impact of the reflective activity on motivation and involvement was identified based on the sheer number of essays submitted. In future studies, other impacts such as on students' academic outcomes could be studied.

## REFERENCES

1. B. Johnston, K. Goetsch. In search of the knowledge base of language teaching: Explanations by experienced teachers, *Canadian Modern Language Review*, **2000**, 56(3), 437–468.
2. W. Grabe, F. L. Stoller, C. Tardy. Disciplinary knowledge as a foundation for teacher preparation. *The Sociopolitics of English Language Teaching*, Multilingual Matters, Clevedon, 2000.
3. J. Rothman. Theoretical linguistics meets pedagogical practice: Pronominal subject use in Spanish as a second language, *Hispania*, **2010**, 52–65.
4. N. L. Trung, N. N. L. Ly. "Thiết kế và biên soạn giáo trình lý thuyết dạy bằng ngoại ngữ." *Tap chí Khoa học ĐHQGHN, Ngoại ngữ*, **2003**, XIX(3), 53–63.
5. V. Forrester, J. Chau. *Current developments in problem based learning within the Hong Kong Institute of Education*, The First Asia Pacific Conference on Problem Based Learning, Hong Kong, 9–11 December 1999.
6. Ho, S. T. K. *Peer teaching: A case study in an English morphology classroom*. In *Kỷ yếu Hội thảo Khoa học Quốc gia 2017: Nghiên cứu và Giảng dạy Ngoại ngữ, Ngôn ngữ & Quốc tế học tại Việt Nam* (pp. 207–215). Hanoi, Vietnam, April 7, 2017
7. Nguyen, T. M. T., Nguyen, H. D., Nguyen, L. T. T., & Doan, N. T. Students' employment of high-order thinking skills in English Linguistics Courses: A case study at VNU-ULIS. *Proceedings of An ELT Conference on Innovative English Language Teaching for Provincial Universities*, **2015**, Quảng Bình University Press, 215–220.
8. J. Dewey. *How we think: A restatement of the relation of reflective thinking to the educative process*, Heath, Boston, 1933.
9. C. Rodgers. Defining reflection: Another look at John Dewey and Reflective Thinking. *Teachers College Record*, **2002**, 104(4), 842–866.
10. M. Watson. *Building your portfolio: The CILIP guide*, Facet, London, 2008.
11. J. Moon. *Learning journals: A handbook for reflective practice and professional development*, Routledge, London, 2006.
12. J. Bailey. Reflective practice: Implementing theory, *Nursing Standards*, **1995**, 9, 29–31.

13. R. Rogers. Reflection in higher education: A concept analysis, *Innovative Higher Education*, **2001**, 26(1), 37–57.
14. A. Ramlal, D. S. Augustin. Engaging students in reflective writing: an action research project, *Educational Action Research*, **2019**, 27(4), 558–573.
15. S. M. Brookhart. *How to assess higher-order thinking skills in your classroom*, ASCD, Alexandria, VA, 2010.
16. R. J. Marzano, J. S. Kendall. *The new taxonomy of educational objectives (2nd edition)*, Corwin Press, Thousand Oaks, CA, 2007.
17. L. W. Anderson, D. R. Krathwohl. *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*, Longman, New York, 2001.
18. A. Bahri, A. D. Corebima. The contribution of learning motivation and metacognitive skill on cognitive learning outcome of students within different learning strategies, *Journal of Baltic Science Education*, **2015**, 14(4), 487–500.
19. Y. M. Heong, W. B. Othman, J. B. M. Yunos, T. T. Kiong, R. Bin Hassan, M. M. B. Mohamad. The level of Marzano higher order thinking skills among technical education students, *International Journal of Social Science and Humanity*, **2011**, 1(2), 121–125.
20. T. M. T. Nguyen, L. T. T. Nguyen. Influence of explicit higher-order thinking skills instruction on students' learning of linguistics, *Thinking Skills and Creativity*, **2017**, 26, 113–127.
21. J. M. Dubas, S. A. Toledo. Taking higher order thinking seriously: Using Marzano's taxonomy in the economics classroom, *International Review of Economics Education*, **2016**, 21, 12–20.
22. J. L. Momsen, T. M. Long, S. A. Wyse, D. Ebert-May. Just the facts? Introductory undergraduate biology courses focus on low-level cognitive skills, *CBE—Life Sciences Education*, **2010**, 9(4), 435–440.
23. H. Jones. National curriculum tests and the teaching of thinking skills at primary schools—parallel or paradox?, *Education 3–13*, **2010**, 38(1), 69–86.
24. H. Retnawati, S. Munadi, J. Arlinwibowo, N. F. Wulandari, E. Sulistyaniingsih. Teachers' difficulties in implementing thematic teaching and learning in elementary schools, *The New Education Review*, **2017**, 48, 201–212.
25. M. Weurlander, M. Söderberg, M. Scheja, H. Hult, A. Wernerson. Exploring formative assessment as a tool for learning: students' experiences of different methods of formative assessment, *Assessment & Evaluation in Higher Education*, **2012**, 37(6), 747–760.
26. C. Anderson, D. Hounsell. Knowledge practices: 'Doing the subject' in undergraduate courses, *Curriculum Journal*, **2007**, 18(4), 463–478.
27. Center for Advancement of Learning and Assessment. *Higher order thinking skills: Definitions, strategies, assessment*, Tallahassee, FL, 2011.
28. ERIC Clearinghouse on Adult, Career, and Vocational Education. *Cognitive theory-based teaching and learning in vocational education. Information Series 349*, Columbus, 1992.
29. National Center for Research in Vocational Education. *Teaching and learning generic skills for the workplace*, University of California, Berkeley, 1990.
30. J. D. Bain, R. Ballantyne, C. Mills, N. C. Nester. *Reflecting on practice: Student teachers' perspectives*, Post Pressed, Flaxton, 2002.
31. J. Marciano. Becoming Facebook Friendly: Social Media and the Culturally Relevant Classroom. *English Journal*, **2015**, 104(5), 73–78.
32. J. Shaules. Deep learning: Unconscious cognition, the intuitive mind, and transformative language learning, *Juntendo Journal of Global Studies*, **2018**, 3, 1–16.
33. J. Halbert, L. Kaser. Deep learning: Inquiring communities of practice. *Education Canada*, **2006**, 46(3), 43–45.
34. Hong Kong University. *Why and how do Hong Kong students learn? Using the Learning and Study Process Questionnaires*, Hong Kong, 1992.
35. D. R. Garrison, T. Anderson. *E-Learning in the 21st century: A framework for research and practice*, Routledge, London, 2003.

## Appendices

### Appendix A: Reflection prompts

1. Reflect on the roles of roots, stems, and affixes in shaping meaning. Describe how analyzing words into their morphemic parts has helped you guess or remember unfamiliar English words more effectively.

- After studying derivational and inflectional morphemes, discuss a time when you were unsure whether a form was grammatical or lexical. How has this distinction changed the way you view word families and grammatical patterns in English?
- Compare your reactions to affixation and conversion as word-formation processes. Which one feels more natural or creative to you as a learner of English, and why?
- Reflect on how compounding differs between English and Vietnamese. How does understanding compound structure help you interpret long or unfamiliar English words?
- Write about how abbreviation processes (like clipping, blending, or acronymy) reflect modern communication styles. Have you noticed similar trends in Vietnamese? What does this reveal about language change and creativity?

#### Appendix B: PHIẾU LẤY Ý KIẾN PHẢN HỒI

<https://docs.google.com/forms/d/1DE2fxuSgTCQeG86AgzHouuHDzcLn0yweu8FhdoSTLXc/edit>

Bảng câu hỏi này nhằm lấy ý kiến phản hồi của các bạn về lớp Morphology, phục vụ mục đích thiết kế bài kiểm tra, thi và tổ chức các hoạt động dạy học, nâng cao hiệu quả, chất lượng dạy học bộ môn.

Mong các sinh viên đọc kỹ mỗi câu hỏi và trả lời.

Xin chân thành cảm ơn thời gian và ý kiến của các em.

1. Anh/Chị là sinh viên lớp:

A

C

K

M

2. Anh/Chị có hứng thú với bài về nhà Tests & Quizzes không? Thang 1- 4

Hoàn toàn không hứng thú = 1; Không hứng thú = 2; Hứng thú = 3; Rất hứng thú = 4

3. Anh/Chị có hứng thú với bài về nhà Assignment không? Thang 1- 4

Hoàn toàn không hứng thú = 1; Không hứng thú = 2; Hứng thú = 3; Rất hứng thú = 4

4. Anh/Chị đánh giá độ khó của các bài về nhà Tests & Quizzes. Thang 1-5

Rất dễ = 1; Dễ = 2; Vừa súc = 3; Khó = 4; Rất khó =5

5. Anh/Chị đánh giá độ khó các bài về nhà Assignment. Thang 1-5

Rất dễ = 1; Dễ = 2; Vừa súc = 3; Khó = 4; Rất khó =5

6. Theo Anh/ Chị, hoàn thành các bài về nhà Tests&Quizzes có (những) tác dụng gì?

Giúp nhớ thuộc lòng các khái niệm, thuật ngữ

Giúp hiểu các khái niệm, thuật ngữ

Giúp áp dụng kiến thức bộ môn vào các vấn đề thực tiễn liên quan đến từ vựng

Giúp phân tích các vấn đề thực tiễn liên quan đến từ vựng

Giúp đánh giá các vấn đề thực tiễn liên quan đến từ vựng

Giúp thực hiện các dự án liên quan đến từ vựng

Khác

7. Theo Anh/ Chị, hoàn thành các bài về nhà Assignment có (những) tác dụng gì?

Giúp nhớ thuộc lòng các khái niệm, thuật ngữ

Giúp hiểu các khái niệm, thuật ngữ

Giúp áp dụng kiến thức bộ môn vào các vấn đề thực tiễn liên quan đến từ vựng

Giúp phân tích các vấn đề thực tiễn liên quan đến từ vựng

Giúp đánh giá các vấn đề thực tiễn liên quan đến từ vựng

Giúp thực hiện các dự án liên quan đến từ vựng

Khác

8. Anh/Chị thích gì ở bài Tests & Quizzes?

Giúp bản thân nắm, phát triển kiến thức bộ môn

Giúp bản thân rèn luyện, phát triển kỹ năng học chuyên ngành

Giúp bản thân rèn luyện, phát triển ý thức học chuyên ngành

9. Anh/Chị thích gì ở bài Assignment?

Giúp bản thân nắm, phát triển kiến thức bộ môn

Giúp bản thân rèn luyện, phát triển kỹ năng học chuyên ngành

Giúp bản thân rèn luyện, phát triển ý thức học chuyên ngành

Khác

10. Anh/chị có thảo luận với bạn bè để hoàn thành bài assignment không?

Có

Không

11. Để hoàn thành bài assignment, anh/chị thường có các bước thế nào?

12. Anh/Chị có tham khảo tài liệu, ôn bài trước khi làm Assignment hay không?

Có

Không

13. Loại tài liệu anh/chị tham khảo khi hoàn thành bài tập về nhà là:

Tài liệu chính

Tập bài giảng lưu hành nội bộ

Các tài liệu tham khảo khác được giảng viên giới thiệu

Các tài liệu, video trên Internet

14. Anh/chị muốn để kiểm tra chính thức có tỷ lệ điểm giữa 2 phần trắc nghiệm khách quan (tương đương Tests & Quizzes) và tự luận (tương đương reflective essay) là:

Trắc nghiệm 80%; Tự luận 20%

Trắc nghiệm 60%; Tự luận 40%

Trắc nghiệm 50%; Tự luận 50%

Khác

15. Anh/Chị có ý kiến gì khác liên quan đến hình thức làm bài Assignment không?