



Regular Article

Students' approaches to scientific essay writing as an educational method in higher education: A mixed methods study

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ARTICLE INFO

Keywords:

Academic writing
Essay
Higher education
Mixed methods
Interprofessional learning

ABSTRACT

Purpose: To describe students' approaches to essay writing as part of their academic studies. As a theoretical framework Lavelle's five approaches was used.

Methods: A descriptive study with a mixed methods design. Two questionnaires to the same student group, early ($n = 39$) and at the end ($n = 37$) of their studies, and three focus group interviews ($n = 19$) were conducted. The participants were nurses, physiotherapists, occupational therapists, social workers, and teachers who were part of a master's degree programme at an institute of health sciences at a university in Norway.

Results: Mostly, the students took an impulsive and unplanned approach to essay writing. However, the students affirmed that essays were a method in which they could combine their theoretical knowledge and clinical experiences. When writing essays in groups, the students developed more reflective and critical thinking than when they wrote alone. The teacher's role was more of a supervisor than a traditional teacher. Four categories of Lavelle's writing approaches were found namely, spontaneous-impulsive, elaborative, reflective revisionist, and procedural, of which the spontaneous-impulsive and elaborative categories were most prominent.

Conclusions: Approaches to essay writing can be developed in a more reflective and critical way among students in higher education and the teacher's role can be developed into more of a supervisor than a traditional teacher. Higher education is an arena for building a relationship between theory and practice and using academic essay writing as a method can promote this process.

1. Introduction

Scientific essay writing has been recognized as a valuable tool for learning and assessment (Lavelle et al., 2013). Researchers (Helberget et al., 2021; Shields, 2010) have argued that scientific writing, like essay writing, can be a form of communication as well as stimulate students' learning and be a valuable tool for teachers to base their assessments on. According to Lavelle et al. (2013), higher education is an important arena in which to prepare students as users of research and as skilled clinical practitioners. Using scientific written methods, i.e., essays, in higher education courses promotes students' critical thinking and reflection ability (Bailay et al., 2015; Friberg & Lyckhage, 2013). However, there is no automatic relation between students' theoretical education and clinical practices (Lavelle et al., 2013; Tsai, 2015). Using scientific written essays not only promotes students' critical thinking and reflection ability but also deepens their competence as professional caregivers by building a relationship between theory and practice

(Lavelle et al., 2013; Tsai, 2015).

Students may have considerable difficulty developing their conceptions of essay writing (McCune, 2004). In all essay writing, argumentation is regarded as a vital component. However, studies also show that students have only partial or incorrect understanding of the concept's argumentation (Helberget et al., 2021; Wingate, 2012). High-quality argumentative essays can be a challenge for students to write (Kellogg & Whiteford, 2009). Students can have resistance to academic writing, which can be based on anxiety, poor academic performance, and a lack of recognition of the importance of having writing skills (Martinez et al., 2011).

Academic writing supports students' use of their interpretation and understanding of subjects. However, teachers do not have insight into students' thoughts about the subject, nor do they know how students have interpreted and integrated their knowledge with earlier experiences about the subject (Friberg & Lyckhage, 2013; Lavelle et al., 2013). Researchers (Callinan van der Zee & Wilson, 2018) have argued that it is

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particularly the dialogic character of the essay that can generate new forms of knowledge however, essay writing is a complex process for students to learn and master. Another study (Altinmakas & Bayyurt, 2019) underlined that, when students are integrated with staff and peers who are supportive during the essay writing process, this contributes to significant opportunities for academic integration.

An ambition in higher education is to improve students' critical thinking and ability to engage in critical approaches to various literature sources (Friberg & Lyckhage, 2013). Scientific essay writing has been recognized as a valuable tool for learning, development of critical thinking, and assessment among undergraduate nursing students (Lavelle et al., 2013). Researchers have suggested that writing is linked to reflection and perspective changes and personal and professional growth (Lavelle et al., 2013).

1.1. Theoretical background

Shields (2010), highlights that essay writing requires a formal style, a formal structure and analytical thinking. The writing process includes understanding the essay question, searching for literature, synthesizing the literature, preparing a first draft, self-reflecting, making final edits and submitting. Shields (2010, p. 5) maintained that essay writing is a process that provides opportunities to include both one's theoretical knowledge and clinical experiences.

The quality of the writing outcomes is dependent on students' writing approaches. As the basis for our self-report questionnaire, we were inspired by Lavelle's (1993) measurement instrument, the *Inventories of Processes in College Composition (IPCC)*, which originally was composed of five writing approaches: 1) spontaneous-impulsive; 2) collaborative; 3) low self-efficacy; 4) reflective-revisionist; and 5) procedural. Lavelle hypothesized that elaborative and reflective revisionist approaches are linked to a deep process involving metacognition, which focuses on the global level and proactive engagement in writing. The other approaches are linked to a more superficial linear and passive process of writing, in other words, a surface approach. Lavelle et al. (2013) conducted research with undergraduate nursing students regarding the factor structure of writing, as measured by the IPCC. A screening test indicated *four factors* that accounted for 37% of the variance. Only factors with four or more items were used. The four factors were spontaneous-impulsive, elaborative, reflective revisionist, and procedural. The IPCC instrument, with four factors, has shown opportunities to differentiate the approaches that students take between a deep writing approach and a surface approach (Lavelle et al., 2013, p. 61). A deep writing approach takes a proactive position geared towards making a new meaning and using strategies such as complex revision, while a surface writing approach, which is primarily reproductive, involves using a listing strategy and achieving a linear or an *ordered* outcome (Lavelle & Bushrow, 2007). All aspects of the writing environment need to be analysed and coordinated to foster a deep approach, including providing clear expectations for high-quality writing, providing model essays, providing timely and meaningful feedback, and encouraging students to reflect on the process (Lavelle et al., 2013). The study is based on earlier research and theory on academic writing, particularly the essay genre, and based on Lavelle and colleagues' (2013) IPCC instrument, which aims to test the instrument on students in higher education. Lavelle et al. (2013) suggested that the IPCC can be used with both teachers and students to deepen their theoretical framework for writing. The aim of the present study was to describe students' approaches in relation to essay writing as part of their academic studies and learning process. The research question was formulated as follows:

What academic writing approaches do students take in scientific essay writing in higher education?

2. Methods

2.1. Design

The study had a descriptive and mixed method design, including quantitative and qualitative data (Creswell & Creswell, 2018). By using a mixed method approach, we wanted to deepen and broaden the students' knowledge about the writing approaches, which were measured with the IPCC instrument (Lavelle et al., 2013). Qualitative data were collected through focus group interviews to obtain a more complete understanding of the phenomenon of essay writing.

2.2. Context, participants, intervention, and procedures

The students were recruited from 2017 to 2019 from two interprofessional higher education groups, one studying multicultural understanding and one studying rehabilitation. These studies are part of a master's degree programme at an institute of health sciences at a university in Norway. The participants were nurses, physiotherapists, occupational therapists, social workers, and teachers.

At the beginning of the study, the students were introduced to the essay genre, followed by essay writing in groups and as individuals under the supervision and, finally, the ultimate assessment of the essay. The main purpose of the introduction of the essay genre was to change the study approach from classroom-centred to more student-active, where the students' multidisciplinary knowledge and diverse experience were used as a resource in the education programme. During the study, the students were divided into interprofessional groups by the teacher. All groups included at least three professions (at least one nurse participated in each group). The students had the task of preparing themes for the following gatherings. During the autumn term, the students authored an individual essay. Later in the term, they started the second and third essays in groups, which was completed in the spring. The theme for the essays followed the theme for the courses. Usually, the students could choose between 2 and 3 different subjects. These essays were evaluated by the teachers. An important part was supervision, discussions, and expert lectures during the study.

The survey that contained the IPCC questionnaire was conducted twice with the same two classes. Test 1 was performed with the students early in the study, and test 2 was performed at the end of the study. Student participation in the study was voluntary. The questionnaires were distributed to the students in the classroom. If the students did not want to answer the questionnaire, they could submit an incomplete questionnaire. The respondents who answered the questionnaire consisted of a group of 39 (test 1) and 37 (test 2) students. Between test one and test two, the students had written three essays.

The focus groups were conducted at the end of the study. The researchers informed all the students about the study and the time and place for the interviews. The students who decided to participate engaged in direct contact with the researcher. Three interprofessional focus group interviews were performed with five to eight students in each group ($n = 19$). The students in the focus groups also answered the IPCC questionnaire.

2.3. Measures

2.3.1. Questionnaire

The questionnaire was inspired by Lavelle et al. (1993, 2013). Lavelle (1993) studied students' attitudes and approaches to writing skills and strategies for academic writing at the undergraduate level and developed a questionnaire based on the results. The questionnaire was translated into Norwegian and then back to English for validation. The questionnaire consisted of 72 statements. The variables were evaluated using the following five-point Likert scale: 5 = strongly agree, 4 = partly agree, 3 = neither agree nor disagree, 2 = partly disagree and 1 = totally disagree. In this study, we included 20 statements that were shown to be

relevant in Lavelle and colleagues' (2013) study among nursing students. The statements we have used are described in Table 1.

2.3.2. Focus groups

The interviews took place at the university at the end of the study. A semi-structured interview guide was developed, which consisted of three sections, namely, the questions on the approach to academic writing, question on the development of new knowledge and effects in clinical practice, and some follow-up questions. The focus groups were performed from the first and last authors with assistance by a secretary. The interviews lasted from 60 to 90 min each. We used an audio recorder to record the interviews. The purpose of the interviews was to gain knowledge about the informants' experience of education, its structure, teaching methods, and forms of evaluation, as well as their own experience of learning. Focus groups can bring forth interpersonal dynamics into a study, more than individual interviews can, and are suitable when exploring common experiences, attitudes, and views (Kvale & Brinkmann, 2018).

2.4. Data analysis

The quantitative data analyses were based on the structure that Lavelle et al. (2013) found relevant in her study conducted among nursing students; these data indicated via a screen test the presence of four factors, namely, spontaneous impulsive, elaborative, reflective revision, and procedural. One factor, namely, low self-efficacy, which was also found in the earlier study by Lavelle (1993), was therefore not used. We chose to analyse data from these four emerging factors based on Lavelle et al. (2013). The quantitative data obtained according to these four factors, which had a total of 20 items, were examined using IBM SPSS. Table 2 in the Results section shows each factor, the number of items per factor, and the means, standard deviations, and reliabilities for each scale.

The qualitative data were analysed by using a deductive thematic analysis (Braun & Clarke, 2006, 2019). The deductive process was a result of logical interpretation and the analysis of Lavelle's theoretical standpoints and descriptions of the four approaches (factors). This was a six-step analysis process. Step 1 consisted of familiarizing ourselves with the data, where we read and reread the interview transcripts and noted and discussed our initial ideas for coding that dealt with students' approaches to essay writing. Step 2 consisted of generating initial codes, where all the relevant data that formed patterns about different approaches were transferred into initial codes. Step 3 consisted of searching for themes, where we used the research question and the theoretical framework of Lavelle et al. (2013) to guide the sorting of the initial codes into potential subthemes and themes. Step 4 consisted of reviewing themes, where we reviewed the potential themes, extracted descriptive quotations, and further developed the thematic map. All themes were discussed iteratively until a consensus was reached. Step 5 consisted of abstracting, defining, and naming the themes. Finally, in step 6, we reviewed the themes regarding the research question and theoretical framework. The results are presented through descriptive statistics, depending on, and interpreted by the experiences of the participants, which they discussed in the focus group interviews.

Table 1
Means, standard deviations, and reliabilities of factors.

| No | Scale | Items | Mean | Std. Deviation | Alpha |
|----|------------------------|---------|------------------------------|----------------|-------|
| 1 | Spontaneous-Impulsive | 6 items | Test 1: 3.43 Test 2: 3.41 | 0.60 0.51 | 0.98 |
| 2 | Elaborative | 6 items | Test 1: 2.52 Test 2: 2.56 | 0.61 0.64 | 0.78 |
| 3 | Reflective Revisionist | 4 items | Test 1: 2.62 Test 2: 2.71 | 0.88 0.73 | 0.96 |
| 4 | Procedural | 4 items | Test 1: 3.11 Test 2: 3.17 | 0.93 0.79 | 0.98 |

Table 2
Means of factors and items for test 1 and test 2.

| Factors with items | Test 1 (2017) Mean | Test 2 (2019) Mean |
|---|--------------------|--------------------|
| Spontaneous-Impulsive | Test 1 | Test 2 |
| Revision is a one-time process at the end. | 3.72 | 3.68 |
| Often, my first draft is my finished product. | 3.82 | 3.75 |
| I never think about how I conduct my writing. | 3.49 | 3.53 |
| My writing 'just happens', with little planning or preparation. | 3.36 | 3.47 |
| I often do written assignments at the last minute and still get a good grade. | 3.92 | 3.64 |
| <i>The teacher is the most important audience.</i> | 3.92 | 2.39 |
| Elaborative | Test 1 | Test 2 |
| Having my writing evaluated scares me. | 3.18 | 3.50 |
| I expect good grades on essays or papers. | 2.44 | 2.33 |
| Writing makes me feel good. | 2.44 | 3.15 |
| <i>I tend to give a lot of description and detail.</i> | 3.31 | 2.45 |
| I can write a term paper. | 1.92 | 1.90 |
| I keep my theme or topic clearly in mind as I write. | 1.85 | 2.00 |
| Reflective Revisionist | Test 1 | Test 2 |
| I put a lot of myself in my writing. | 2.15 | 2.17 |
| <i>I use written assignments as learning experiences.</i> | 1.64 | 2.11 |
| The reason for writing an essay truly does not matter to me. | 3.56 | 3.67 |
| Drafting an essay or paper is making a new meaning. | 3.13 | 2.89 |
| Procedural | Test 1 | Test 2 |
| When writing an essay, I stick to the rules. | 1.74 | 2.05 |
| <i>There is one best way to write a written assignment.</i> | 3.77 | 3.68 |
| I complete each sentence and revise it before going on to the next. | 3.64 | 3.75 |
| Writing is like a journey. | 3.28 | 3.19 |

2.5. Ethical considerations

The study was approved by the Norwegian Centre for Research Data (NSD) No. 60306. Research ethical guidelines were followed. The participants signed consent forms and were informed that they could withdraw from the study at any time, that the confidentiality of their personal information would be maintained and that their anonymity would be preserved. Data were transcribed and anonymized accordingly. It was emphasized that participation was voluntary and that the respondents could withdraw at any time without providing a reason for doing so.

3. Results

Rather than faculty experiences, this study emphasizes how the students experienced the student-active approaches. The focus group interviews with the students, i.e., the qualitative part of the study, are highlighted in the narrative text. The results from the analysis of the quantitative data show that for the four factors, there were no significant differences between test one and test two (Table 1). In test 2, *spontaneous-impulsive* was shown to have a mean slightly lower than that in test 1, while *elaborative* had a slightly higher mean in test 2 compared to that in test 1. *Reflective revisionist* had the highest change between tests 1 and 2, while the procedural factor also had a slightly higher score in test 2 than in test 1. The students had a so-called superficial linear or passive writing process at the beginning of the study, whereas the second test showed a light advance in an in-depth writing approach. The reliabilities measured with Cronbach's alpha were high for each factor (0.78–0.98).

Table 2 highlights the four factors and the items (statements) included in each of the four factors. The *spontaneous-impulsive* factor showed a mean of agreement with statements at levels 3.36–3.92 (test 1) and 2.39–3.68 (test 2). For the procedural factor, the result was a mean of 1.74–3.77 (test 1) and 2.05–3.75 (test 2), while the mean for *elaborative* changed from 1.85 to 3.31 (test 1) to 1.90–3.50 (test 2). *Reflective revisionist* changed from 1.64 to 3.56 (test 1) to 2.11–3.67 (test 2). These results indicate that the respondents had a more surface approach than a

deep approach to essay writing after the intervention was conducted between the two tests.

In the following, the four factors with their items will be presented and interpreted, including data from the qualitative data analyses.

3.1. Spontaneous-impulsive

Some students had a *spontaneous-impulsive* approach and reported starting their writing process “at the last minute” because they believed their first version was the final version. After the introduction to and practice in authoring an essay, the level of agreement with the statement level was reduced. The study indicates that the processes of essay writing over time give the students motivation to read and reflect on the actual theme. Over time, the teacher was no longer the most critical audience. There was a movement from a passive and linear process to a more active and sustainable knowledge-based development in which reflection was central.

“I think I will have to reflect on whatever I do ... You do it very thoroughly when you are going to write an essay, but you should take it with you and do it even when you are not writing an essay.”

The writing rules were perceived as diffuse rules, and the respondents found it difficult to comment on each other’s work. Most of the students could see essay writing as an evaluation format that caused them to feel both stressed and insecure. Respondents with a *spontaneous-impulsive* approach testified to the need for a deeper approach to writing.

3.2. Elaborative

All the respondents described an elaborative approach as highlighting good discussions through pointed questions, which in turn led to better conclusions and more credible answers. The item *I tend to give a lot of description and details* naturally had a decrease in the mean from test 1 to test 2. One strength of authoring an essay was the opportunity to share experiences with one another in group work and to link theories and research to one’s own experiences.

“The experiences of all group members were good to have while working. Cooperating with others made the discussions better; it led to more and deeper issues and finally to better conclusions in the text.”

The collaborative writing approach made writing a positive experience. The respondents experienced the emotion of feeling good and sensing well-being and security by writing in groups. The respondents said that elaborative approaches also increased their creativity. The students not only felt a sense of well-being in the writing process but also felt that writing was fun. This was especially true when essay writing gave them room to make jokes and engage in a lighter writing style. Some of the students enjoyed provoking the reader a little and overturning common conventions in writing. This approach is possible when drafting an essay, but it could be difficult when writing other forms of scientific work. One student group described the essay as a “scientific causerie”.

3.3. Reflective revisionist

The respondents made comparisons with how they wrote in the current study and how they had written in earlier assignments. They assessed essay writing as being more personal and practical. By thinking through the text and filling it in with their own experiences, their writing process was made *reflective* and created a deeper understanding of the theme. In the quantitative part of the study, the students showed that they used the written assignments as learning experiences; the scores of this factor increased from test 1 to test 2.

Writing could be an orientation to knowledge building, which in turn makes it easier to reflect and remember what one has learned. The

approach or writing style experienced by the respondents provided an in-depth study of the subject.

“If the content is more personal and closer to practice, then it may be easier to wonder and get into it (ability). Without personal experience, it is important that the text comes out so that you can relate to it and then understand subjects from the subjective experiences of the author.”

A *reflective revisionist* approach implies a willingness to take charge of one’s writing to make meaning both for oneself and one’s audience. The students reported that they used written assignments as learning experiences, and this factor increased after test 2.

3.4. Procedural

Most of the respondent groups wanted clearer guidelines and rules in terms of both content and execution. They did not see a clear distinction between what they had previously written, for example, while pursuing their bachelor’s degree. The qualities that one could see in the context of the *procedural* approach were that it was difficult, the rules were diffuse, and the theory versus one’s own experience was unclear. The students problematized the concept of “personal” to query how personal one should be and how much one’s own experiences could be included in the text.

“Well, I have to say that for my part, I am a bit concerned with the structure; you just said something about structure; that was a great headline. I do not know if I understood ... before you said it really.”

Some respondents compared the study with previous assignments; they recognized themselves in the essay writing, and they ultimately concluded that it was truly nothing new. These results were supported by the quantitative data presented in Table 2. The item *There is one best way to write a written assignment* showed a decreasing mean value from test 1 to test 2.

4. Discussion

The purpose of the present study was to describe students’ approaches to essay writing as part of their academic studies. As a theoretical framework Lavelle’s (1993) five approaches were used. Most of the respondents took a surface approach to the writing process at the beginning of their studies, which means that the students took an impulsive and unplanned approach to scientific essay writing, where the *spontaneous-impulsive* and *procedural* approaches were the most prominent. However, some students in the present study developed a more reflective and critical approach when conducting essay writing and affirmed that essay writing was a method by which they could combine their theoretical knowledge and clinical experiences, particularly when writing in groups. This result is supported by earlier research (Altinmakas & Bayyurt, 2019; Helberget et al., 2021; Shields, 2010). Friberg and Lyckhage (2013) pointed out that producing an essay provides an opportunity to bridge the gap between theory and practice. For students in higher education, the understanding and integration of knowledge and skills acquired earlier in life, as well as the new knowledge they receive in the education program through scientific discussions, can develop their competence as healthcare workers.

It is not self-evident that students have a positive attitude towards writing. Most of the respondents in the present study enjoyed the essay format of writing. However, previous research (Bailay et al., 2015; Callinan et al., 2018; West et al., 2019) has highlighted several common challenges the students make when they author an essay, i.e., misunderstanding the research question, having poor structure and flow, being too descriptive rather than critical/reflective, using too many words or too few words per issue, and/or making statements or arguments that are not supported by the literature. These challenges were also highlighted in the present study. Shields (2010) maintained that a student

must fully understand the question, search for material, leave enough time to prepare a good draft and self-assess the draft before seeking and acting on peer and tutor feedback. The intention for higher education must be to strengthen the *elaborative* and *reflective revisionist* factors (Lavelle et al., 2013). Students reported in the survey that they tended to give many descriptions and details in their writing work, but this factor decreased after the second test. This outcome can provide a clue to learning. An instrument such as the IPCC (Lavelle et al., 2013) can serve institutions with tools to help improve the quality of students' writing and thereby the quality of their learning outcomes.

To become successful essay writers, students need good instruction and dedicated supervision. McCune (2004) found in her study of psychology students and their essay writing that despite teachers' well-developed conceptions of essay writing, the students found it difficult to engage with the guidance they were given about their essays in meaningful ways. Crook and Nixon (2021) pointed out that students now have access to essay mills on the internet, which has become a very large industry. Higher education institutions have opportunities to highlight essay writing as a pedagogic method and facilitate a good learning environment for students to achieve essay writing skills. There is a need for teachers to provide model essays, offer timely feedback and promote deep reflective processes (Lavelle et al., 2013). A way to develop teacher integrity is to identify competence gaps and promote good practices (Löfström et al., 2015). In the present study, the students were taught about essay writing. Hence, the staff had to develop their own pedagogic competence about the essay genre in advance, which could have contributed to the positive attitude the students had towards essay writing. Awdry and Newton (2019) pointed to the fact that creative assessment measures that promote learning and engagement in assessment tasks can help make students decide to not pay someone else to write their assignments for them.

Like Lavelle et al. (2013), this study showed that students can develop a more elaborative and critical approach. The students highlighted that collaborating in groups made the discussions deeper. Löfström et al. (2015) maintained that collaboration between students is vitally important for learning. In group sessions, students should be allowed to use their own theoretical knowledge and clinical experiences in the writing process. Students' interest and motivation levels increase, and their insight and perspective levels increase. Higher education is an arena for building a relationship between theory and practice, and using the academic essay format, also in group sessions, can promote this process. The process of writing is not static but rather dynamic; the teacher is more of a supervisor than a traditional teacher. Thus, over time, the overall approach to essay writing can improve among students, which can benefit their future roles as professionals.

4.1. Limitations

The use of a mixed method seems relevant in this study. The number of respondents was small, and there were limited opportunities for more advanced statistical analyses; however, the qualitative data provided valuable and in-depth information for interpreting and understanding the results (Creswell & Creswell, 2018). The study was conducted with only two study programs at one university. Therefore, some changes may have occurred by chance. In addition, mixed methods were used. The trustworthiness and rigour of the study were maintained by including the aspects of credibility, dependability, confirmability, and transferability in the methodological consideration process (Lincoln & Guba, 1985). The sample was purposive and based on certain inclusion criteria, which ensured credibility. The strengths of the current study include that the researchers performed focus group interviews and that the data were transcribed verbatim. The researchers were all working at the university at the time of the study and had a preunderstanding of the essay genre, which can be seen as both a strength and a limitation. The researchers strove to provide a clear description of the context, the participants, procedures, measures, and the interpretation process.

Dependability was reached by questioning the respondents regarding the same areas of interest in both the survey and the interviews. Confirmability was obtained by presenting representative quotations in the Results section to show similarities and differences in the transcribed text. The mixed methods checklist by Fetters and Molina-Azorin (2019) was used for quality assurance in the paper. While the culture of higher education students at a Norwegian university is reflected in the results, the theme of essay writing is universal and of international interest. While the data cannot be generalized, they can be transferred to similar contexts.

5. Conclusion

Students' approaches to essay writing in higher education show that different approaches and writing formats can be challenging when students are not familiar with the genre. The current study shows that the students mostly enjoyed the essay writing format, even though the students mostly took an impulsive and unplanned approach to writing. The students' mastery of the essay format increased with their learning about essay writing and their experience with writing, particularly writing in groups. Teachers in higher education play a central role in teaching students' knowledge about writing essays to heighten the quality of their writing and their writing outcomes. Educators at the university level are responsible for ensuring that the pedagogical methods stimulate the candidate's reflective ability and deepen the level of argumentation and conclusions.

Ethical considerations (also in the main document)

The study was approved by the Norwegian Centre for Research Data (NSD) No. 60306. Research ethical guidelines were followed. The participants signed consent forms and were informed that they could withdraw from the study at any time, that the congeniality of their personal information would be maintained and that their anonymity would be preserved. All phases of the study were conducted according to the Declaration of Helsinki (2001). Data were transcribed and anonymized accordingly. It was emphasized that participation was voluntary and that the respondents could withdraw at any time without providing a reason for doing so.

Funding information

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Availability of data and materials

The dataset analysed is not publicly available due to a written agreement between the researchers and the study participants stating that no one but the authors of this article may read the transcripts, but anonymized data can be obtained from the corresponding author upon reasonable request.

Credit author statement

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by Berit Misund Dahl and Marianne Frilund. The first draft of the manuscript was written by Berit Misund Dahl and Marianne Frilund and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

All authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

The authors wish to thank the participants for their contributions to this study.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssaho.2022.100389>.

References

- Altınmakas, D., & Bayyurt, Y. (2019). An Exploratory study on factors influencing undergraduate students' academic writing practices in Turkey. *Journal of English for Academic Purposes*, 37, 88–103. <https://doi.org/10.1016/j.jeap.2018.11.006>
- Awdry, R., & Newton, P. M. (2019). Staff view on commercial contract cheating in higher education: A survey study in Australia and the UK. *Higher Education*, 78, 593–610. <https://doi.org/10.1007/s10734-019-00360-0>
- Bailay, A., Zanchetta, M., Velasco, D., & Pon, G. (2015). Building a scholar in writing (BSC): A model for developing students critical writing skills. *Nurse Education in Practice*, 15, 524–529. <https://doi.org/10.1016/j.nepr.2015.07.006>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Callinan, C. J., van der Zee, E., & Wilson, G. (2018). Developing essay writing skills: An evaluation of the modelling behavior method and the influence of student self-efficacy. *Journal of Further and Higher Education*, 42(5), 608–622. <https://doi.org/10.1080/0309877X.2017.1302564>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative & mixed methods approaches* (5th). Sage Publications.
- Crook, C., & Nixon, E. (2021). *How internet essay mill websites portray the student experience of higher education* (Vol. 48). The Internet and higher Education. <https://doi.org/10.1016/j.iheeduc.2020.100775>
- Fetters, M. D., & Molina-Azorin, (2019). A checklist of mixed methods elements in a submission for advancing the methodology of mixed methods research. *Journal of Mixed Methods Research*, 13(4), 414–423. <https://doi.org/10.1177/2F1558689819875832>
- Friberg, F., & Lyckhage, E. D. (2013). Changing essay writing in undergraduate nursing education through action research: A Swedish example. *Nursing Education Perspectives*, 34(4), 226–232.
- Helberget, L., Vasset, F., Frilund, M., Teige, B., & Molnes, S. I. (2021). A model of guidance and reflection in practice studies for nursing students. *International Journal of Education Research Open*, 2. <https://doi.org/10.1016/j.ijedro.2021.100060>
- Kellogg, R. T., & Whiteford, A. P. (2009). Training advanced writing skills: The case for deliberate practice. *Educational Psychologist*, 44(4), 250–266. <https://doi.org/10.1080/00461520903213600>
- Kvale, S., & Brinkmann, S. (2018). *Doing interviews* (2.Ed). Sage Publications.
- Lavelle, E. (1993). Development and validation of an inventory to assess processes in college composition. *British Journal of Educational Psychology*, 63, 475–482. <https://doi.org/10.1111/j.2044-8279.1993.tb01073.x>
- Lavelle, E., Ball, S. C., & Maliszewski, G. (2013). Writing approaches of nursing students. *Nurse Education Today*, 33(1), 60–63. <https://doi.org/10.1106/j.nedt.2011.10.021>
- Lavelle, E., & Bushrow, K. (2007). Writing approaches of graduate students. *Educational Psychology*, 27(6). <https://doi.org/10.1080/01443410701366001>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, Calif: Sage.
- Löfström, E., Trotman, T., & Furnari, M. (2015). Who teaches academic integrity and how do they teach it? *Higher Education*, 69, 435–448. <https://doi.org/10.1007/s10734-014-9784-3>
- Martinez, C. T., Kock, N., & Cass, J. (2011). Pain and pleasure in short essay writing: Factors prediction university Students' writing anxiety and writing self-efficacy. *Journal of Adolescent & Adult Literacy*, 54(5), 351–360. <https://doi.org/10.1598/JAAL.54.5.5>
- McCune, V. (2004). Development of first-year students' conceptions of essay writing. *Higher Education*, 47, 257–282. <https://doi.org/10.1023/B:HIGH.0000016419.61481.f9>
- Shields, M. (2010). *Essay writing: A student's guide*. Los Angeles, Calif: Sage.
- Tsai, C. (2015). Essay: Freedom. *Journal of bioethical inquiry*, 12(1), 97–98. <https://doi.org/10.1007/s11673-015-9615-y>
- West, H., Malkolm, G., Keywood, S., & Hill, J. (2019). Writing a successful essay. *Journal of Geography in Higher Education*, 43(4), 609–617. <https://doi.org/10.1080/03098265.2019.1655720>
- Wingate, U. (2012). Argument!" helping students understand what essay writing is about. *Journal of English for Academic Purposes*, 11, 145–154. <https://doi.org/10.1016/j.jeap.2011.11.001>