

A study on the optimization of English writing teaching system in medical colleges and universities based on the perspective of curriculum ideology and politics

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Abstract

By adopting a theoretical framework based on constructivism and Content and Language Integrated Learning (CLIL), this study uses case study and action research methods to explore how to enhance medical students' language skills, humanistic literacy, and research awareness under the perspective of curriculum ideology and politics. Observations and in-depth interviews revealed teachers' and students' views on English writing teaching, while action research explored and tested strategies for teaching reform. The results indicated that integrating the cultivation of language skills, humanistic literacy, and research awareness into the actual teaching process, along with providing ample practical opportunities and specific guidance, are key to improving medical students' abilities. Continuous evaluation and adjustment are required in teaching reform to ensure its effectiveness and adaptability. This study provides empirical evidence for understanding how to optimize teaching activities under the perspective of ideological and political education in the curriculum to enhance the language skills, humanistic literacy, and research awareness of medical students, and provides guidance for future teaching reforms.

Keywords ideological and political education of curriculum, medical colleges, English writing, teaching system, action research

1. Introduction

Ideological and political education of curriculum is a key developmental direction in higher education in recent years. The Ministry of Education of China (2017) stressed the importance of undergraduate education reform in the *Opinions on Deepening the Reform of Undergraduate Education and Teaching and Improving the Quality of Talent Training*, and proposed ideological and political education of curriculum as an important means of educational and teaching reform. Subsequently, the Ministry of Education (2020) detailed the specific requirements of ideological and political education of curriculum in the *Guiding Opinions on Promoting Ideological and Political Education in University Courses*, which included integrating ideological and political education content into professional course teaching to improve students' ideological and political literacy. Moreover, the Ministry of Education (2020) proposed related requirements for strengthening and improving the construction of ideological and political theory courses in universities in the new era in the *Notice on Strengthening and Improving the Construction of Ideological and Political Theory Courses in Universities in the New Era*, further emphasizing the important position of ideological

and political education in higher education. All these documents provide important policy basis for understanding and implementing education on curriculum ideology and politics.

With the issuance of these policies, the important tasks and directions of higher education in the new era have been clarified, namely, deepening teaching reform and improving the quality of talent training comprehensively. Medical education, as an important part of higher education, faces notable challenges in teaching reform. Particularly in medical English writing, it requires innovative teaching methods and strategies to enhance students' language skills, humanistic literacy, and research awareness. In this process, the theories and practical methods of ideological and political education of curriculum can provide new ideas and strategies for the reform of medical English teaching. For example, by integrating ideological and political education content into English courses, it can improve students' ideological and political literacy, language skills, and humanistic literacy. Therefore, exploring and optimizing the English teaching path of medical colleges, and integrating the concepts of curriculum ideology and politics, and language teaching theories, such as constructivism and Content and Language Integrated Learning (CLIL), is an important and meaningful research task.

2. Theoretical Framework and Literature Review

2.1. Theoretical Framework

The theoretical framework of this study is based on constructivism and Content and Language Integrated Learning (CLIL). Constructivism is a theory about learning, which emphasizes that learning is constructed through the interaction between individuals and their environment, rather than passively receiving external information (Piaget, 1954; Vygotsky, 1978). From this perspective, learning is seen as a process where students construct knowledge through interaction with the environment. This understanding provides complex but effective strategies for teaching design and provides teachers with student-centered, participatory, and practical teaching methods. In the English teaching of medical colleges, constructivism can help teachers design student-centered, participatory, and practical teaching activities, and encourage students to actively participate in the learning process, to understand and master knowledge through practice and exploration. Studies conducted by Prince, et al., (2005), Savery (2006) and Schmidt, et al., (2011) discussed how problem-based learning, an educational method underpinned by constructivist principles, encourages student participation and practical application of knowledge in problem-solving.

Content and Language Integrated Learning (CLIL) is a method of studying subjects in a foreign language environment, which emphasizes the simultaneous improvement of students' subject knowledge and language skills (Coyle, Hood, & Marsh, 2010). CLIL advocates combining language learning with subject content learning to achieve dual goals of language and content. In the English teaching at medical colleges, the CLIL method can help students improve their English language skills while learning medical professional knowledge (Dalton-Puffer, 2007). This method allows students to use English in real contexts, improving their language practice ability, and also contributes to their professional learning (Perez-Canado, 2012).

Both theories emphasize the importance of student-centered teaching strategies and practical learning, which is in line with the goal of English teaching in medical colleges to improve students' language skills, humanistic literacy, and research awareness. By integrating the two theories, teachers can design and implement teaching activities more effectively, enhancing the effectiveness of teaching.

2.2. Literature Review

Regarding the application of Content and Language Integrated Learning (CLIL) in medical English teaching, although the current research literature is sparse, its successful practices in other academic fields provide potential theoretical and practical foundations for this endeavor (Morton, 2013; Nikula, Dalton-Puffer, & Llinares, 2013; Pérez-Cañado, 2012). The CLIL method encourages subject learning in a foreign language environment, emphasizing the simultaneous improvement of students'

subject knowledge and language skills, which could have a significant impact on medical English teaching (Coyle, Hood, & Marsh, 2010).

It is worth noting that the application of CLIL needs to take into consideration the specific context of the teaching environment. As pointed out by Dalton-Puffer (2007), discourse in CLIL classrooms includes the communicative strategies of teachers and students, as well as the challenges of using a second language in communication. Therefore, any attempt to apply the CLIL method to medical English teaching needs to fully take into account the characteristics of the teaching environment and the needs of the students. However, so far, research on how to specifically apply the CLIL method to medical English teaching is still lacking. Although the study of Llinares and Dafouz (2020) offers CLIL practices in higher education, the specific requirements of medical college English teaching, such as the precision of medical terms possibly involved in teaching and the complexity of clinical contexts, call for more specific research and discussion.

In a series of studies, the theory and practice of curriculum ideology and politics occupy a significant position in educational research, revealing how ideological and political education is integrated into the teaching process, and emphasizing the important role of teachers in guiding students to understand social, political, and ethical issues (Li & Wang, 2021; Bai & Feng, 2021). Although these studies provide important insights for understanding ideological and political education of curriculum, how to specifically integrate these concepts into medical college English teaching still remains a research gap. Integrating humanities into medical education can enhance the humanistic literacy of medical students (Shapiro, Morrison, & Boker, 2004; Ousager & Johannessen, 2016). However, how to effectively integrate humanities into medical college English teaching is still a question that has not been thoroughly researched. As for the literature on research awareness, problem-oriented teaching methods can effectively enhance the research awareness of medical students (Khan, Taqui, Khawaja, & Fatmi, 2007; Healey, Flint & Harrington, 2016). However, how to implement problem-oriented teaching methods to enhance students' research awareness is still a research question that needs further exploration.

The aim of this study is to explore how to integrate constructivism and the CLIL theoretical framework into medical English writing teaching in order to achieve the teaching goal of enhancing students' language skills, humanistic literacy, and research awareness.

3. The Research

3.1. Research Questions

1. What are the perceptions, challenges, and confusions of teachers regarding the integration of language skills, humanistic literacy, and research awareness in medical students English writing teaching, which may reflect in student feedback and satisfaction?
2. How do variations in teaching methods and cognition of integrating writing skills with language skills among different teachers influence student

satisfaction and learning outcomes in English writing instruction for medical students?

3. What impact does curriculum ideology and politics teaching reform intervention have on student improvements in language ability, humanistic literacy and research awareness, and overall satisfaction in English writing instruction for medical students?

3.2. Research Methods

This study employs case study methods based on course observation and in-depth interviews, as well as action research methods (Kemmis & McTaggart, 2005). Direct observation of the course implementation process, questionnaire survey to students and in-depth interviews with teachers and students to gather their views and suggestions on English writing teaching, and the implementation of action research to explore and test strategies for teaching reform were conducted.

3.2.1. Course Observation

Participants and Implementation. In this semester-long course observation, the main subjects are three experienced English teachers from the School of Foreign Languages, and the 159 medical students they teach, both from a university located in Southeast of China. The first teacher is Ms. Li, who has 20 years of teaching experience and an educational background that includes a Ph.D. in English Linguistics. The second teacher is Mr. Zhang, an associate professor with 15 years of teaching experience and a master's degree in Applied Linguistics. The third teacher is Mrs. Wang, a lecturer with 10 years of teaching experience and a master's degree in English Education. The students taught by the three teachers are mainly second-year undergraduates from the medical school, with majors including Clinical Medicine, Medical Imaging, and Nursing.

The author conducts one classroom observation per class per week, each lasting 80 minutes, covering 2 class hours, for a total of 12 weeks. Therefore, the total duration of classroom observation is 2880 minutes. During the process, the author records the teacher's teaching methods and the students' reactions without any disturbances.

When recording teaching methods, the author mainly focuses on the following aspects: (1) how the teacher guides students to understand and use language, including vocabulary, grammar, and sentence structures; (2) how the teacher designs and organizes writing activities, including task types, teamwork, and feedback mechanisms; (3) how the teacher introduces and discusses professional and humanistic content in medicine in order to cultivate students' research awareness. When recording students' reactions, the author mainly focuses on the following

dimensions: (1) student engagement, including whether they actively participate in classroom activities and discussions; (2) learning gains, including whether students' language skills, humanistic literacy, and research awareness have improved; (3) feedback on teaching methods, including whether they are satisfied with the teacher's teaching methods, and their suggestions for course improvement.

Results. The observation results show that although all three teachers pay great attention to the teaching of writing skills, they still have certain confusion and challenges on how to combine writing skills with language skills, humanistic literacy, and research awareness. For example, when teaching language knowledge, the introduction of humanistic content and research methods is often overlooked; when organizing writing activities, the emphasis is often on the accuracy of language, neglecting students' thinking and exploration. Student feedback also reflects these issues, as they expressed a desire for more opportunities to learn and use professional and humanistic knowledge in medicine, as well as participate in research activities in writing. These results provide me with valuable insights, namely, in English writing teaching, a better integration of the teaching of language skills, humanistic literacy, and research awareness to more comprehensively will potentially improve the overall quality of medical students.

3.2.2. Questionnaire

Setting and Participants. After the completion of classroom observation, the author designed a questionnaire titled *Evaluations of Course Learning and Self-Achievement* (see Appendix 1) and interviews. The questionnaire collected the 159 students' views on English writing courses, focusing on the following variable dimensions, with responses made using a five-point Likert scale, where 1 represents "completely disagree" and 5 represents "completely agree": 1) satisfaction with teaching methods, 2) cognition of combining writing skills with language skills, 3) cognition of combining writing skills with humanistic literacy, 4) cognition of combining writing skills with research awareness. Since all the participants were Chinese, the distribution and collection of the questionnaire were conducted in a Chinese language context. The questionnaire was reviewed and approved by two experts in psychometrics. The English version is for reference only, with the Chinese version being the authoritative text.

Results. The author used SPSS27.0 software to conduct variance analysis on the questionnaire results, as shown in Table 1.

Table 1. Results of Questionnaire Survey

	Teaching method satisfaction	Cognition of combining writing skills with language skills	Cognition of combining writing skills with humanistic literacy	Cognition of combining writing skills with research awareness
Ms. Li	3.8	4.1	3.6	3.5
Mr. Zhang	4.0	3.9	3.7	3.6
Mrs. Wang	3.7	3.8	3.8	3.7
<i>F</i> value	0.56	0.42	0.36	0.43
<i>P</i> value	0.579	0.661	0.701	0.653

The figures in the table represent the average scores of each variable dimension, the *F* value represents the statistical quantity of variance analysis, and the *P* value represents the significance test result of variance analysis. Generally speaking, if the *P* value is less than 0.05, the difference is considered significant. From the table, it can be seen that the scores of the three teachers in the four dimensions of teaching method satisfaction, cognition of integrating writing skills with language skills, cognition of integrating writing skills with humanistic literacy, and cognition of integrating writing skills with research awareness are fairly close, and the *P* values are all greater than 0.05, indicating that there is no significant difference in the performance of the three teachers in these four dimensions.

However, despite the statistical results showing no significant difference, some trends can still be observed. For example, Mr. Zhang has the highest score for teaching method satisfaction, while Ms. Li has the highest score for cognition of integrating writing skills with language skills. These trends, although not statistically significant, still hold reference value for the improvement of teaching methods and enhancement of teaching quality.

3.2.3. Interviews

Participants and Questions. Interviews can provide more in-depth insights and understanding. The interviewees included the aforementioned three teachers and 15 students (five from each class). Each interview was conducted in a quiet environment, lasting approximately 60-90 minutes, primarily discussing teachers' and students' understanding, feelings, and suggestions for improvement regarding English writing courses. The interview results showed that most teachers and students recognize the importance of writing skills, humanistic literacy, and research awareness, and they hope to have more practical opportunities and specific guidance to enhance these abilities. Questions include:

1. Experience and suggestions for improvement regarding teaching methods;
2. Understanding and suggestions for integrating writing skills with language skills, humanistic literacy, and research awareness;
3. Confusions, challenges, and solutions.

Results. The author conducted a content analysis of the interview results, interpreting the meaning of the text data to further verify and deepen the results of the questionnaire survey and course observation. Firstly, during the data collation stage, all interview recordings were transcribed to obtain text data. Then, all interview records were read to get an overall understanding of the data. Next, a set of codes, i.e., labels, were generated based on the content of the data, used to mark key concepts and themes in the text, such as "enhancement of writing skills," "integration with language skills," "integration with humanistic literacy," "integration with research awareness," "satisfaction with teaching methods," "confusions and challenges encountered," etc. In the subsequent text coding, the generated codes were applied to the text, marking relevant paragraphs or sentences in the text, including multiple iterations and code modifications. In the following analysis and interpretation

stage, the meaning of each code or theme was analyzed and interpreted according to the coding results, as well as their relationships, and some specific examples from the text were cited to support the interpretation. Finally, in the result verification stage, analysis and interpretation results were verified to verify the consistency between the results of course observation and questionnaire survey, as shown in Table 2.

Table 2. Content Analysis Results

Theme/Code	Freq.	Example
Enhancement of writing skills	15	<i>"I've noticed some of my weaknesses in writing and gradually improved them."</i>
Integration with language skills	10	<i>"I'm trying to express my ideas better in my writing, but I still find it somewhat difficult."</i>
Integration with humanistic literacy	8	<i>"I think the course could emphasize more on how to integrate our humanistic knowledge into writing."</i>
Integration with research awareness	6	<i>"I'm unsure how to apply what I've learned in research to my writing."</i>
Satisfaction with teaching methods	12	<i>"I'm very satisfied with the teachers' teaching methods; they're always willing to help."</i>
Confusions and challenges encountered	20	<i>"I sometimes feel confused about how to organize my paper, I hope to get more guidance."</i>

The results of the above content analysis reveal some key themes and views of teachers and students in the interviews. The table provides the frequency with which each theme/code was mentioned, as well as specific examples representing each theme. This can help us understand the importance of each theme in the interview and the specific views of participants on these themes. For instance, teachers and students may both think that although the course emphasizes the teaching of writing skills, there are still some issues with how to integrate language skills, humanistic literacy, and research awareness. They raised some specific confusions and challenges, such as uncertainty about how to integrate these abilities into writing, or lack of guidance on how to improve these abilities. At the same time, they made some suggestions for improvement, such as increasing opportunities for practice, providing more feedback and guidance, etc. These results provide deeper understanding and support for teaching reform, so as to design and implement targeted teaching strategies, resolve the issues raised by teachers and students, and improve teaching effectiveness.

3.3. Staged Findings and Answers

Observation results revealed teachers' challenges in integrating writing skills with language skills, humanistic literacy, and research awareness. Furthermore, interview findings highlighted students' desire for more opportunities to learn and use professional and humanistic knowledge in medicine. They also expressed interest in participating in research activities related to

writing. Both of these findings correspond to Research Question 1. The results of the content analysis revealing key themes and views of teachers and students, as well as their specific confusions, challenges, and suggestions for improvement, are in line with this question.

The results display statistical trends, such as Mr. Zhang receiving the highest score for his teaching method satisfaction and Ms. Li obtaining the highest score for her cognition of integrating writing skills with language skills according to the survey questionnaire. Although these trends are not statistically significant, they still offer insights into how differences in teaching methods and teachers' perception of skill integration can impact student satisfaction and learning achievements. These findings offer valuable indications for addressing Research Question 2.

4. Action Research

4.1. Participants and Design

Based on the results of course observation and in-depth interviews, the author designed and implemented a series of teaching reform strategies as the main part of the action research, using the university English course as the basis. The reform strategies included increasing the practicality of writing tasks, emphasizing the interdisciplinary nature of the course by exploring the practicability of integrating ideological and political education of curriculum with English language teaching, and providing more feedback and guidance. The action research lasted for one semester, a total of 12 weeks, with 64 second-year students from the Clinical Medicine major at Wenzhou Medical University chosen, and the teaching teacher was Mr. Zhang, one of the teacher subjects involved in the aforementioned classroom observation and questionnaire survey. The reasons are as follows: 1) Mr. Zhang's teaching strategies are generally recognized by students; 2) Mr. Zhang has been teaching for 15 years, focusing on the stage where research and teaching complement each other, and is good at using modern educational means with an inclusive attitude; 3) Mr. Zhang and the author have worked together in multiple project groups, one in particular related to curriculum ideology and politics, and are familiar with each other's research needs and teaching reform styles. It is worth noting that the process of action research relies on evaluation to continuously adjust reform strategies, accumulate feedback, and guide the rational and effective development of the next step of action.

4.2. The First Stage of the Action Intervention

4.2.1. Step One: Design and Implementation

During the design and implementation of the first stage, the author conducted detailed observation and recording, including factors such as students' learning attitudes, course participation, English writing ability, and understanding of medical professional knowledge. For this group of students, Mr. Zhang designed specific teaching reform strategies, including setting practical writing tasks involving medical professional knowledge and research

methods, introducing medical humanistic knowledge to increase the interdisciplinarity of the course, and regularly providing feedback and guidance to help students improve their writing skills, a process which underscores implicitly the practice of ideology and politics education. In designing these strategies, the teacher used focus groups to have in-depth discussions with students, designed specific teaching reform strategies to enhance their writing skills and interdisciplinary literacy.

In terms of implementing writing tasks involving medical professional knowledge, sense of ideology and politics, and research methods, Mr. Zhang designed writing tasks that are practical, relevant to actual and social phenomena, and involve medical professional knowledge and research methods, according to the English writing course and students' professional backgrounds. Students were asked to write a research report in English about a specific disease, using key language chunks and covering the cause of the disease, symptoms, treatment methods, and prevention measures. In the process of compiling the report, students not only exercised their language skills, used medical knowledge, but also adopted research methods such as literature review, data analysis, and argument construction.

Regarding the introduction of medical humanistic knowledge to increase the interdisciplinarity of the course, Mr. Zhang integrated a large amount of medical humanistic knowledge into the course to enhance the interdisciplinarity of the course. For example, students read extra-curricular English articles on themes such as medical ethics, doctor-patient relationships, and equitable health, and reflected on and discussed these themes in writing. Mr. Zhang also used a blended teaching model of online and offline, providing videos and lectures by scholars in the field of medical humanities, allowing students to listen and use the professional knowledge and insights in the videos in their writing tasks, cultivating their humanistic literacy and critical thinking.

In terms of regularly providing feedback and guidance to help students improve their writing skills, it was observed that Mr. Zhang regularly provided feedback and guidance on students' writing to help them improve their writing skills. Whenever students completed a writing task, the teacher used peer review scaffolding teaching, with a scoring rubric, allowing students to read and comment on each other's work. Based on the students' work and peers' feedback, Mr. Zhang provided more professional feedback and guidance, such as pointing out possible issues in students' language expression, argument logic, and reference to materials, and provided suggestions for improvement. He also shared examples of excellent writing for students to learn from and imitate.

During the first stage of the aforementioned action intervention, Mr. Zhang continuously observed and assessed students' progress in writing in order to timely adjust teaching strategies. At the same time, students were encouraged to provide feedback and suggestions on teaching methods, to better meet learning needs.

4.2.2. Step Two: Observation and Discovery

After implementing the reform strategies, the author continued to conduct detailed observation and recording,

including students' performance in classroom activities, such as participation in classroom discussions, commitment to writing tasks, and acceptance of teacher feedback. The reaction of the students to the new teaching method was assessed by directly observing their performance in class. The specific observation indicators include: 1) Classroom participation, i.e., the number and quality of student speeches in classroom discussions, and their responses to other students' speeches; 2) Commitment to writing tasks, i.e., the time students spend on writing tasks in class and after class, and their concentration level during the writing process; 3) Acceptance of teacher feedback, i.e., the situation of students receiving teacher feedback, including their understanding of the feedback, and how they apply these feedback in subsequent writing. Based on the observation notes, it can be confirmed that students actively cooperated with the new teaching method, spent more time and energy on writing tasks than before, and were satisfied with the teacher's feedback.

Secondly, when analyzing students' writing discourse, the author, together with Mr. Zhang, focused on students' performance in language expression, argument logic, and reference to materials. We scored each piece of work according to a pre-set scoring standard. The scoring standards include accuracy and fluency of language, clarity and rationality of argument, sufficiency and effectiveness of argument, rationality, and coherence of structure. See Table 3.

Table 3. Scoring Standards for Writing Exercises

Scoring Item	Scoring Basis	Score Range
Language Accuracy	Correctness of sentence structure, appropriateness of vocabulary, number of grammar and spelling errors	1-5
Language Fluency	Coherence of sentences, transition of paragraphs, overall fluency of the article	1-5
Argument Clarity	Explicitness of argument, effectiveness of topic sentence, relevance of argument and evidence	1-5
Evidence Adequacy	Number of evidence, quality of evidence, relevance of evidence and argument	1-5
Structural Rationality	Effectiveness of introduction, organization of paragraphs, summarizing nature of conclusion	1-5

Before the implementation of teaching reform, students were assigned to write in class, and the works produced in class were pre-test works with pre-test scores, and students' writing works were collected to generate baseline data. Based on the implementation of the above teaching reform strategies, including practical writing tasks, introduction of medical humanistic knowledge, regular feedback and guidance, etc. After the implementation of teaching reform, students' writing works were collected again, and a composition similar to the pre-test writing topic and similar requirements for writing skills and information literacy, research awareness was assigned. Students were also required to complete it in class. The works produced in class were post-test works, and the scores were post-test scores. Both pre-test and

post-test scores use pre-set scoring standards, and the author and Mr. Zheng score the works separately. When the scores are significantly different, the final score is coordinated through discussion or third-party review to ensure the validity of the scores. Finally, SPSS 27.0 was used to conduct a paired samples *t*-test to compare students' writing scores before and after teaching reform. See Table 4.

Table 4. Comparison of Pre-test and Post-test Scores

Scoring Item	Average Pre-test Score	Average Post-test Score	<i>t</i>	<i>P</i>
Language Accuracy	3.487	4.213	-7.86	0.003
Language Fluency	3.524	4.316	-8.22	0.004
Clarity of Argument	3.586	4.402	-7.91	0.001
Sufficiency of Evidence	3.462	4.319	-8.04	0.005
Structural Rationality	3.541	4.378	-7.95	0.002

In the above table, the *t*-value indicates the statistical significance of the difference in scores for each scoring item between the pre-test and post-test, and the *P*-value indicates whether this difference reaches a significant level ($p < .05$ indicates a significant difference). From the data, it can be seen that after the implementation of teaching reform, students' average scores on all scoring items have significantly improved, demonstrating that the teaching reform strategies included in the first round of action intervention are effective. Specifically, students have made significant progress in language accuracy, language fluency, clarity of argument, sufficiency of evidence, and structural rationality, and their writing skills have been effectively improved.

The author designed another questionnaire survey (see Appendix 2) titled *Evaluation on the First Round of Teaching Reform* to collect students' feedback. The questionnaire included some multiple-choice and open-ended questions. The multiple-choice part used the Likert scale, allowing students to rate some statements, such as "I am satisfied with the new teaching method" (1=completely disagree, 5=completely agree). The open-ended question part allowed students to put forward their own opinions and suggestions on teaching reform, such as "What are the advantages and disadvantages of the new teaching method?" and "What suggestions do you have for improving the teaching method?"

After collecting the students' questionnaire answers, the author used SPSS27.0 software to analyze the results. Descriptive statistical analysis was used to obtain the mean and standard deviation of each item of data. The standard deviation is an indicator of the dispersion of the data distribution, which can help understand the variability of the data. A lower standard deviation means that most data are close to the mean, while a higher standard deviation means that the data are more widely distributed around the mean. See Table 5.

Table 5. Questionnaire Survey Results

Item	Average Score	Standard Deviation
Satisfaction with the New Teaching Method	4.523	0.712
Investment in Writing Tasks	4.318	0.806
Acceptance of Teacher Feedback	4.726	0.677
Participation in Classroom Discussions	4.614	0.703
Improvement in Writing Skills	4.402	0.889

The data shows that the standard deviations of all items are within 1, indicating that students' evaluations of these items are quite consistent, with no significant differences. Especially for "Acceptance of Teacher Feedback," its standard deviation (0.677) is the smallest, which shows that students' acceptance of teacher feedback is very consistent, reflecting the general recognition of teacher feedback among students. At the same time, the average score of all items is above 4, indicating that students are satisfied with the new teaching method, investment in writing tasks, acceptance of teacher feedback, participation in classroom discussions, and improvement in writing skills. Especially for "Acceptance of Teacher Feedback" and "Participation in Classroom Discussions," their average scores (4.726 and 4.614 respectively) are higher, indicating that teacher feedback and classroom discussions play a key role in improving students' writing skills.

When dealing with the answers to the open-ended question part, the author used a three-level coding process guided by the Grounded Theory to generate open coding, axial coding, and selective coding. See Table 6.

Table 6. Results of Three-level Coding (1)

Open Coding	Axial Coding	Selective Coding
Increased participation	Advantages	Effectiveness of the Teaching Method
Improved writing skills		
Teacher feedback helps progress		
Writing tasks are difficult	Disadvantages	Improvement of the-Teaching Method
Need more practice opportunities		
Hope to introduce more medical knowledge	Suggestions for Improvement	
Hope to have more feedback and guidance		

Open coding is the initial classification of the raw data, axial coding is the further integration of open coding, and selective coding is the summary and refinement of axial coding. Indicated by the results, students believe that the new teaching method helps to increase their participation and improve writing skills, they are satisfied with the teacher's feedback, reflecting the advantages of the teaching method, and the positive effects of the teaching reform strategies implemented in the first stage of action intervention. At the same time, students also pointed out some disadvantages and suggestions for improvement, such as the difficulty of writing tasks, the need for more practice opportunities, the hope for more medical knowledge to be introduced, and the hope for more feedback and guidance, etc., providing direction for

aspects that need to be paid attention to and improved in future teaching reform.

In general, the results of the first stage of action intervention all indicate that under the intervention of teaching reform, whether students have significantly improved in areas such as language expression, argument logic, and referencing of materials, the strategies have been widely recognized among students, and the effect is significant.

4.2.3. Step Three: Reflection

In the reflection phase, the author and Mr. Zhang used the data and results generated from the first stage of intervention to deeply analyze and evaluate the results, identify the efforts that should be made and the problems that should be avoided in the second stage of teaching reform, such as practical writing tasks can increase students' participation, the introduction of medical humanities knowledge and ideological and politics awareness can enhance the interdisciplinarity of the course, and regular feedback and guidance can effectively improve students' writing skills. At the same time, the design of writing tasks can be further optimized, and the ways of feedback and guidance can be more diversified. Based on this, a detailed action plan was developed, clarifying the strategies that need to be optimized in the next stage and the goals expected to be achieved.

4.3. The Second Stage of The Action Intervention

4.3.1. Step One: Design and Implementation

In the second stage, the author and Mr. Zhang optimized the teaching strategies based on the reflection results of the first stage. First, the design of writing tasks was optimized to better attract students' interest. For example, the writing tasks were made more specific, making them closer to students' actual life and subject learning, and assigning English composition exercises such as Discuss your views on the recent hot topic of vaccination, and support your views with scientific facts.

Second, the ways of feedback and guidance were diversified to meet the needs of different students. For example, peer review, WeChat group online Q&A, and one-on-one online or face-to-face feedback meetings were introduced to ensure that students could receive timely, specific, and targeted feedback and guidance.

4.3.2. Step Two: Observation and Discovery

Following the implementation of the new reform strategy, the author once again conducted observations and recordings, including the performance of students in new writing tasks, in-class assignments, and on-the-spot outputs. Notably, the topics, difficulties, and evaluation indicators of the assignments were similar to those in the first phase (see Table 1), therefore the post-test scores of the first phase became the mid-test scores, and the assignment scores of this phase became the post-test scores, as shown in Table 7. The data of the post-test scores were analyzed in detail, using ANOVA single-factor variance analysis to compare the pre-, mid-, and post-test scores. The results showed that after adjusting the teaching strategies, there were significant improvements in areas such as the quality of completion of writing tasks,

class participation, and satisfaction with teaching.

Table 7. Comparison of Pre-test, Mid-test, and Post-test Scores

	Language Accuracy	Language Fluency	Clarity of Argument	Adequacy of Evidence	Structural Rationality
Pre-test	3.487	3.524	3.586	3.462	3.541
Mid-test	4.213	4.316	4.402	4.319	4.378
Post-test	4.512	4.619	4.689	4.603	4.673
<i>F</i>	37.52	40.28	39.68	38.91	39.21
<i>P</i>	0.001	0.003	0.001	0.004	0.002

As shown in the table, the post-test scores improved compared to the mid-test scores, reflecting the lasting effect of the teaching reform. All *P*-values are less than .001, indicating that the increase in scores from pre-test to post-test is statistically significant and effective in the five scoring items. The specific *p*-values in the table provide a more precise level of significance, enhancing the accuracy and credibility of the research results.

To gain a deeper understanding of the impact of the new teaching strategy, the author randomly selected 15 students for in-depth interviews. The topics of the interviews included students' understanding of the new teaching strategies adopted in the second phase intervention, their feelings about the new writing tasks, and their evaluations of diversified feedback and guidance methods. The author then collected interview feedback and conducted a detailed analysis of the data. The interview results were coded using grounded theory, resulting in the following core category nodes, as shown in Table 8.

Table 8. Results of Three-Level Coding (2)

Open Coding	Axial Coding	Selective Coding
Tasks are more practical	Optimization of Task Design	Effects of Teaching reform
Received more feedback	Diversification of Feedback Methods	
Increased classroom participation	Change of Learning Attitude	
Improved writing ability	Improvement of Learning outcomes	
Hope for more practice opportunities	Suggestions for Improvement	Improvements in Teaching Reform
Wish to introduce more medical knowledge		

Comparing Tables 6 and 8, the author concludes as follows: The results of the three-level coding guided by grounded theory each present different reactions of students to the teaching reform. Although the open coding in the two tables is slightly different, the themes of their axial coding and selective coding are consistent, namely "Effects of Teaching Methods" and "Improvements in Teaching Methods".

In Table 6, open coding includes positive feedback such as "Increased Participation", "Improved Writing Skills", and "Teacher Feedback Helps Progress", as well as

suggestions for improvement such as "Writing Tasks Are Challenging", "Need More Practice Opportunities". In Table 8, open coding includes positive feedback like "Tasks Are More Practical", "Received More Feedback", "Increased Classroom Participation", "Improved Writing Ability", as well as suggestions for improvement like "Hope for More Practice Opportunities", "Wish to Introduce More Medical Knowledge". The coding in both tables is closely related to the effects and improvements of teaching reform, reflecting students' positive evaluations and constructive suggestions for the teaching reform under the two-stage intervention, which provides a strong basis for further optimizing the teaching reform strategy and improving teaching effectiveness.

Overall, the research results of the second phase of action intervention show that after strategic adjustments, there is further improvement in students' participation, learning gains, and satisfaction. The empirical research provides valuable information for the implementation effectiveness of teaching reform strategies and future directions for improvement.

4.4. Overall Reflection

The actions taken in the two stages of teaching reform, as outlined above, have received support from research results, demonstrating their effectiveness in enhancing students' writing skills, humanistic literacy, and scientific research awareness, as answers to Research Question 3. Not only have students exhibited improved language skills in writing tasks, but they have also shown a better understanding of humanities knowledge and attention to scientific research, which are two crucial aspects of ideological and politics awareness. In addition, they have given positive feedback about this reformative teaching method, finding it more conducive to their learning and development.

Through two stages of action intervention, the author finds that teaching reform is a continuous process that requires constant designing, implementing, observing, reflecting, and adjusting. In this process, teachers have also improved their teaching abilities and the effects of reformative action based on reflection and research.

5. Discussion and Implications

5.1. Research Result Discussion

The study's findings are in alignment with previous literature in several ways. Foremost, the study supports

the idea of Content and Language Integrated Learning (CLIL), a method that emphasizes the simultaneous improvement of students' subject knowledge and language skills, as a beneficial teaching approach in medical English instruction. Through the utilization of CLIL, the study found that students improved their English language skills while learning medical professional knowledge. These findings echo earlier research that suggested the successful practices of CLIL in other academic fields could have potential theoretical and practical foundations for medical English teaching (Morton, 2013; Nikula, Dalton-Puffer, & Llinares, 2013; Pérez-Cañado, 2012).

Furthermore, the findings also support the idea of integrating ideological and political education into the teaching process, which was previously identified as a significant position in educational research (Li & Wang, 2021; Bai & Feng, 2021). The investigation found that introducing medical students to social, political, and ethical issues within the English language classroom could enhance their humanistic literacy, aligning with the research aim to integrate constructivism and the CLIL theoretical framework to enhance students' language skills, humanistic literacy, and research awareness.

However, the current study goes beyond the existing literature by providing concrete strategies for executing these theoretical approaches. Previous research had identified a gap in how to specifically integrate these concepts into medical college English teaching (Llinares and Dafouz, 2020), and how to implement problem-oriented teaching methods to enhance students' research awareness (Khan, Taqui, Khawaja, & Fatmi, 2007; Healey, Flint & Harrington, 2016). The current study addresses these gaps by demonstrating how constructivism and CLIL can be integrated into the actual teaching process through practical opportunities and specific guidance from teachers.

The study offers pedagogical implications derived from constructivism and CLIL by suggesting that these theories need to be integrated into the teaching process. Teachers should provide sufficient practical opportunities and specific guidance to help students understand and master these abilities. In addition, teaching reform using

these theories needs continuous evaluation and adjustment to ensure its effectiveness and adaptability. This aligns with Dalton-Puffer's (2007) assertion that the application of CLIL needs to fully consider the specific context of the teaching environment, including the communicative strategies of teachers and students, as well as the challenges of using a second language in scientific communication.

In conclusion, the study's findings are in line with the existing literature that supports the integration of constructivism and CLIL into medical English teaching. However, it goes a step further by offering practical strategies and continuous evaluation frameworks for implementation, addressing identified gaps in the literature. This provides a valuable contribution to the field, offering potential pathways for the effective integration of language skills, humanistic literacy, and research awareness in medical English teaching.

5.2. Pedagogical and Curriculum Implication

This study relies on data and empirical analysis, revealing the role of the teaching syllabus, teaching activities, and assessment strategies in enhancing medical students' language skills, humanistic literacy, and scientific research awareness. The rational design of teaching activities in English classes at medical schools, such as discussions, writing, and group tasks, is key to enhancing students' language skills, humanistic literacy, and scientific research awareness under the inspiration of interdisciplinary fields. Besides, optimizing the teaching syllabus, teaching activities, and assessment strategies can effectively enhance students' language skills, humanistic literacy, and scientific research awareness.

The author proposes that the integration of constructivism, CLIL, and curriculum ideology and politics can effectively solve the core problem of enhancing medical students' language skills, humanistic literacy, and scientific research awareness. Each theory has its unique application in each teaching goal, and these applications can support each other to jointly promote the achievement of teaching goals. See Table 9.

Table 9. The Integration of Constructivism, CLIL, and Curriculum Ideology and Politics

Ability	Constructivism	CLIL	Curriculum Ideology and Politics
Language Skills	Through designing various writing tasks, students can improve their language skills in the actual writing process	By teaching medical professional content, students can improve their English skills in reading and writing	During the discussion of medical topics, guide students to use correct and accurate language to express their views
Humanistic Literacy	Introduce humanistic themes in medicine, allowing students to improve their humanistic literacy in the process of discussing and writing these topics	By teaching medical humanities content, students can improve their humanistic literacy in reading and discussing	Guide students to discuss medical ethical issues, reflect on doctors' social responsibilities, and cultivate moral awareness
Scientific Research Awareness	Have students read and write scientific papers to enhance scientific research awareness	By teaching scientific research content, students can enhance their scientific research awareness in reading and practice	Guide students to view scientific research activities from a moral and ethical perspective, cultivating a sense of social responsibility

6. Conclusion

This research provides an in-depth perspective on how to enhance medical students' language skills, humanistic literacy, and scientific research awareness by optimizing the teaching syllabus, teaching activities, and assessment strategies under the viewpoint of constructivism and Content and Language Integrated Learning (CLIL), and the perspective of curriculum ideology and politics. By combining interviews and action research methods for teaching reform, it provides empirical evidence on how the rational design of teaching activities in English writing classes in medical schools can enhance medical students' language skills, humanistic literacy, and scientific research awareness, offering guidance for future teaching reform. Future research should continuously carry out action research to further improve teaching methods and better meet students' learning needs. This study is hoped to have shared the results of this research to provide other teachers and education researchers with insights and references for teaching reform.

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References

Feng, J., & Bai, Y. (2021). On the integration of ideological and political education into college

English teaching. *Curriculum and Teaching Methodology*, 4(3), 1-5.

<https://doi.org/10.23977/curtm.2021.040301>

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.

<https://doi.org/10.1017/9781009024549>

Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms*. John Benjamins. <https://doi.org/10.1075/lllt.20>

Healey, M., Flint, A., & Harrington, K. (2016). Students as partners: Reflections on a conceptual model. *Teaching & Learning Inquiry*, 4(2), 1-13.

<https://doi.org/10.20343/10.20343/teachlearningqu.4.2.3>

Kemmis, S., & McTaggart, R. (2005). *Participatory action research: Communicative action and the public sphere*. Sage publications.

<https://doi.org/10.4135/9781483385679>

Khan, H., Taqui, A. M., Khawaja, M. R., & Fatmi, Z. (2007). Problem-based versus conventional curricula: influence on knowledge and attitudes of medical students towards health research. *PLoS one*, 2(7), e632.

<https://doi.org/10.1371/journal.pone.0000632>

Li, J., & Wang, L. (2021). The construction and reflection of the politics course system in higher education institutions under the background of ideological and political education. *Higher Education Studies*, 11(1), 53-61. <https://doi.org/10.5539/hes.v6n1p53>

Llinares, A., & Dafouz, E. (2020). Content and language integration in higher education: instructional practices and teacher development. *International Journal of Bilingual Education and Bilingualism*, 23(1), 1-5.

MacLeod, R. D., Parkin, C., Pullon, S., & Robertson, G. (2003). Early clinical exposure to people who are dying: learning to care at the end of life. *Medical Education*, 37(1), 51-58.

<https://doi.org/10.1046/j.1365-2923.2003.01412.x>

Morton, T. (2013). Critical approaches to CLIL. *International Journal of Bilingual Education and Bilingualism*, 16(3), 267-279.

<https://doi.org/10.1080/13670050.2013.777385>

Nikula, T., Dalton-Puffer, C., & Llinares, A. (2013). European research on content and language integrated learning (CLIL). *Utrecht Studies in Language and Communication*, 25, 3-13.

Ousager, J., & Johannessen, H. (2016). Humanities in undergraduate medical education: a literature review. *Academic Medicine*, 91(6), 988-1002.

<https://doi.org/10.1097/ACM.0b013e3181dd226b>

Pérez-Cañado, M. L. (2012). CLIL research in Europe: Past, present, and future. *International Journal of Bilingual Education and Bilingualism*, 15(3), 315-341.

<https://doi.org/10.1080/13670050.2011.630064>

Piaget, J. (1954). *The construction of reality in the child*. Basic Books. <https://doi.org/10.1037/11168-000>

Perez-Canado, M. L. (2012). CLIL research in Europe: past, present, and future. *International Journal of Bilingual Education and Bilingualism*, 15(3), 315-341.

<https://doi.org/10.1080/13670050.2011.630064>

- Prince, K.J., Boshuizen, H.P., van der Vleuten, C.P., & Scherpbier, A.J. (2005). Students' opinions about their preparation for clinical practice. *Medical Education*, 39(7), 704-712.
<https://doi.org/10.1111/j.1365-2929.2005.02207.x>
- Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-based Learning*, 1(1), 9-20. <https://doi.org/10.7771/1541-5015.1002>
- Schmidt, H.G., Rotgans, J.I., & Yew, E.H. (2011). The process of problem-based learning: what works and why. *Medical Education*, 45(8), 792-806.
<https://doi.org/10.1111/j.1365-2923.2011.04035.x>
- Shapiro, J., Morrison, E., & Boker, J. (2004). Teaching empathy to first year medical students: evaluation of an elective literature and medicine course. *Education for Health*, 17(1), 73-84.
<https://doi.org/10.1080/13576280310001656196>
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Ministry of Education of the People's Republic of China. (2017). Opinions on deepening the reform of undergraduate education and teaching and improving the quality of talent training (Jiao Gao [2017] No. 4). <http://www.moe.gov.cn/>
- Ministry of Education of the People's Republic of China. (2020). Guiding opinions on promoting ideological and political education in university courses (Jiao Gao [2020] No. 1). <http://www.moe.gov.cn/>
- Ministry of Education of the People's Republic of China. (2020). Notice on strengthening and improving the construction of ideological and political theory courses in universities in the new era (Jiao Gao [2020] No. 2). <http://www.moe.gov.cn/>

Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Appendix 1

课程学习与自我成就的评价问卷

以下是一份针对英语写作课程的量化问卷设计，采用李克特五分量表作答，其中 1 代表“完全不同意”，5 代表“完全同意”。请直接勾选答案。

1. 教学方法满意度

1.1 我对教师的教学方法感到满意

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

1.2 我认为教师的教学方法对我有所帮助

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

1.3 我认为教师的教学方法能够激发我的学习兴趣

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

1.4 我认为教师的教学方法能够帮助我理解和应用知识

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

1.5 我愿意推荐教师的教学方法给其他同学

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

2. 写作技能与语言技能结合的认知

2.1 我认为写作技能与语言技能的结合对我有所帮助

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

2.2 我认为写作技能与语言技能的结合能够提升我的英语水平

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

2.3 我认为写作技能与语言技能的结合能够提升我的写作水平

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

2.4 我认为写作技能与语言技能的结合能够提升我的表达能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

2.5 我认为写作技能与语言技能的结合能够提升我的思考能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

3. 写作技能与人文素养结合的认知

3.1 我认为写作技能与人文素养的结合对我有所帮助

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

3.2 我认为写作技能与人文素养的结合能够提升我的文化素养

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

3.3 我认为写作技能与人文素养的结合能够提升我的批判性思考能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

3.4 我认为写作技能与人文素养的结合能够提升我的创新能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

3.5 我认为写作技能与人文素养的结合能够提升我的人文关怀能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

4. 写作技能与科研意识结合的认知

4.1 我认为写作技能与科研意识的结合对我有所帮助

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

4.2 我认为写作技能与科研意识的结合能够提升我的科研能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

4.3 我认为写作技能与科研意识的结合能够提升我的数据分析能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

4.4 我认为写作技能与科研意识的结合能够提升我的实验设计能力

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

4.5 我认为写作技能与科研意识的结合能够提升我的科研道德和责任感

(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

Evaluations of Course Learning and Self-Achievement

Here is the English version of the questionnaire. This is a quantitative questionnaire designed for an English writing course, using a Likert five-point scale, where 1 represents “Strongly Disagree” and 5 represents “Strongly Agree”. Please directly tick the answer.

1. Teaching Method Satisfaction

1.1 I am satisfied with the teacher's teaching methods.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

1.2 I think the teacher's teaching methods are helpful to me.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

1.3 I think the teacher's teaching methods can stimulate my interest in learning.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

1.4 I think the teacher's teaching methods can help me understand and apply knowledge.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

1.5 I am willing to recommend the teacher's teaching methods to other students.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

2. Perception of the Integration of Writing Skills and Language Skills

2.1 I think the integration of writing skills and language skills is helpful to me.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

2.2 I think the integration of writing skills and language skills can improve my English level.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

2.3 I think the integration of writing skills and language skills can improve my writing level.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

2.4 I think the integration of writing skills and language skills can improve my expressive ability.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

2.5 I think the integration of writing skills and language skills can improve my thinking ability.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

3. Perception of the Integration of Writing Skills and Humanities Literacy

3.1 I think the integration of writing skills and humanities literacy is helpful to me.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

3.2 I think the integration of writing skills and humanities literacy can improve my cultural literacy.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

3.3 I think the integration of writing skills and humanities literacy can enhance my critical thinking ability.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

3.4 I think the integration of writing skills and humanities literacy can enhance my innovation ability.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

3.5 I think the integration of writing skills and humanities literacy can enhance my capacity for humanistic care.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

4. Perception of the Integration of Writing Skills and Research Consciousness

4.1 I think the integration of writing skills and research consciousness is helpful to me.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

4.2 I think the integration of writing skills and research consciousness can improve my research ability.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

4.3 I think the integration of writing skills and research consciousness can enhance my data analysis ability.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

4.4 I think the integration of writing skills and research consciousness can enhance my experiment designability.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

4.5 I think the integration of writing skills and research consciousness can enhance my research ethics and responsibility.

(1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree)

Please return the completed questionnaire to the researcher. Thank you for your participation!

Appendix 2

首轮教学改革评估问卷

第一部分 李克特量表问题

请根据您对以下陈述的认同程度，在 1 到 5 之间打分（1=完全不同意，5=完全同意）。请直接在您的答案前打勾。

- 新的教学方法增强了我的学习体验。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 分配的写作任务有助于提高我的写作技巧。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 老师提供的反馈是有洞察力和建设性的。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 与教学改革前比，我现在更积极参与课堂讨论。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 教学改革显著提高了我的写作技巧。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 分配的写作任务量适中。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 写作任务的要求清晰、易懂。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 我有信心完成分配的写作任务。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 老师的反馈及时且频繁。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 课堂讨论充满活力且富有成效。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 老师在课堂上的解释清楚且有帮助。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
- 课程提供的资源（如教科书、在线材料等）有用。

- (1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
13. 教学改革提高了我书面表达自己的能力。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
 14. 教学改革提高了我写作中的论证逻辑。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
 15. 教学改革提高了我在写作中引用材料的能力。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
 16. 教学改革增加了我对课题的兴趣。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
 17. 教学改革提高了我整体的学术表现。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
 18. 我会向其他学生推荐这次教学改革。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
 19. 我期待未来有更多的教学改革。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)
 20. 总体来说, 我对教学改革感到满意。
(1=完全不同意; 2=不同意; 3=中立; 4=同意; 5=完全同意)

第二部分 开放性问题

请对以下问题提供详细的回答:

1. 新的教学方法中, 哪些具体方面对你最有益?
2. 你在新的教学方法或写作任务中遇到了哪些挑战?
3. 自从实施教学改革, 你是否注意到你的写作或其他技能有任何具体的提升? 如果有, 请具体指出。
4. 如果你可以对教学改革提出一个改进建议, 那会是什么? 为什么?
5. 你能分享一个与教学改革相关的特别经历(积极或消极)吗? 这个经历对你的学习有重大影响吗? 感谢您的参与。您的反馈对于改进教学方法和策略至关重要。

Evaluation on the First Round of Teaching Reform Questionnaire

Part 1 Likert Scale Questions

Please rate your agreement with the following statements on a scale from 1 to 5 (1 = Completely Disagree, 5 = Completely Agree). Please directly tick the answer.

1. The new teaching method has enhanced my learning experience.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
2. The writing tasks assigned are helpful for improving my writing skills.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
3. The feedback provided by the teacher is insightful and constructive.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
4. I am more engaged in classroom discussions now than before the teaching reform.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
5. The teaching reform has significantly improved my writing skills.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
6. The volume of writing tasks assigned is appropriate.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
7. The requirements of the writing tasks are clear and understandable.

- (1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
8. I feel confident in completing the writing tasks assigned.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 9. The teacher's feedback is timely and frequent.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 10. The classroom discussions are engaging and productive.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 11. The teacher's explanations during class are clear and helpful.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 12. The resources provided for the course (e.g., textbooks, online materials) are useful.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 13. The teaching reform has improved my ability to express myself in writing.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 14. The teaching reform has improved my argument logic in writing.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 15. The teaching reform has improved my ability to reference materials in my writing.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 16. The teaching reform has increased my interest in the subject.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 17. The teaching reform has improved my overall academic performance.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 18. I would recommend the teaching reform to other students.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 19. I am looking forward to more teaching reforms in the future.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)
 20. Overall, I am satisfied with the teaching reform.
(1=Completely Disagree; 2=Disagree; 3= Neutral; 4=Agree; 5=Completely Agree)

Part 2 Open Questions

Please provide detailed responses to the following questions:

1. What specific aspects of the new teaching method have been most beneficial to you?
2. What challenges have you encountered with the new teaching method or writing tasks?
3. Have you noticed any specific improvements in your writing or other skills since the implementation of the teaching reform? If so, please specify.
4. If you could suggest one improvement to the teaching reform, what would it be and why?
5. Can you share a particular experience (positive or negative) you had related to the teaching reform that significantly affected your learning?

Thank you for your participation. Your feedback is invaluable in improving the teaching methods and strategies.

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