TEACHING METHODS OF CREATING SCIENTIFIC STYLE TEXTS FOR MASTER AND PHD STUDENTS

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Abstract

Academic writing is an obligatory discipline of study in masters and doctoral studies. The assimilation of this subject should develop the student's skills to create analytical and scientific texts.

Therefore, studying academic writing is part of the study of rules of the scientific community. These rules are learned step by step, by writing texts and discussing them with different readers, giving and receiving feedback.

Collaborative peer-review, as a learning approach, is also useful as it strengthens feedback and collaboration skills. In many academic communities, texts are written by collaboration, and scientific publications go through a peer-review process in which experts in the field read and comment on manuscripts.

Academic writing requires a review of previously done research. When searching for existing articles based on existing research, students should understand the methods of finding scientific works and be able to critically evaluate sources of information. The subject of the study and discipline largely determine which sources students should use in their work.

The aim of teaching academic writing at the master's or doctoral level is to achieve a high quality of research papers submitted for the defense of the degree.

The main task of the programs is also the development of research skills in students, teaching them to search for the information they need, such as:

a) Viewing new literature on the subject (limiting the search to novelties) or visiting the library and locating the theme of interest in the catalogue;

b) Performing a search for information related to the subject in the databases of libraries;

c) Selection of interesting sources of information from references in the research literature that were found in databases;

d) Acquaintance with the style of citation adopted in a particular program.

Different topics may have their own citation practices, for which students receive guidance from program or librarians. It is recommended that you familiarize yourself with the practice of citing sources early in the writing process.

Thus, the library is an indispensable resource for the formation of skills and training of students to create scientific texts.

The Ilia State University used two teaching methods for master and PHD Students: Project method and Peer review method.

The proposed article details the results of a study that compares the two teaching methods, their effectiveness and preference, as well as a comparison of the quality of written papers submitted for defense of the degree, after the training phase of both methods.

Keywords: Innovation, academic writing, master's thesis, scientific style, research projects.

1 INTRODUCTION

Modern higher education is impossible without research activities, the results of which the student must be able to present in the academic language.

In scientific communication, written speech, the basic unit of which is text, remains the main form of communication. A scientific text is considered a complex integrative object, which is not just a fragment of special scientific knowledge of a certain subject area, but also a fragment of the culture of representatives of the scientific community (Bailey, St., 2015, 79). Determining the features of the construction of a scientific text, modeling its structure, identifying the national and cultural specifics of scientific communication and overcoming stable cultural stereotypes is an important task of modern education.

Within the framework of almost every discipline studied, students receive training tasks that require the ability to find and evaluate various kinds of information; analyze what is read and critically comprehend it; highlight the main ideas and structure your own text. The set of skills and abilities that are formed in the process of completing these tasks underlines a special type of literacy, which in the modern paradigm of education is defined as "academic literacy", the key component of which is "academic writing".

The need to improve the quality of master's or doctoral works, scientific publications submitted to high-ranking journals requires the search for new effective pedagogical technologies.

In most well-known universities, "academic writing" as an academic discipline with a well-developed scientific and methodological base has existed since 1960-70 and occupies a central place in a complex of other disciplines aimed at developing the skills and abilities of academic literacy. Over the past decades, the issues of teaching written communications have attracted a lot of attention from researchers. In the works of Coffin et al., Thompson Gr. and many other scientists, issues of scientific communication and the development of a culture of scientific speech are considered; The role of writing in the modern university analyzes foreign experience and the possibility of its use in education; Various concepts of teaching a course of academic writing are discussed.

At Ilia State University, as well as at many universities, the academic writing center is actively working; specialized courses are created on online educational platforms, webinars are organized, which is a help for students and research staff.

The study of "academic writing" includes not only the methods of writing and constructing a scientific text, but also the search for scientific literature, the methods of its use, citation methods and a reference point in scientific library databases. The course covers a number of details young researchers should take into consideration and includes two components: acquiring academic writing techniques and conducting research on a specific topic.

Within the framework of the academic writing course, the student-oriented teaching model includes a textbook, reference lecture materials and video lessons. These resources enable students to familiarize themselves with theoretical materials independently and to devote lectures and seminars to discussing different questions and problematic issues, developing practical writing skills in students, critical writing and analytic thinking skills through peer reviews.

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Academic writing requires a review of the previously done research. When searching for existing articles based on existing research, students should understand the methods of finding scientific works and be able

to critically evaluate sources of information. The subject of the study and discipline largely determine which sources students should use in their work.

The main task is also to develop students' research skills, teaching them to search in the field of information, for example:

a) Viewing new literature on the subject (limiting the search to novelties) or visiting the library and locating the theme of interest in the catalogue;

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Different topics may have their own citation practices, for which students receive guidance from program or librarians. It is recommended that you familiarize yourself with the practice of citing sources early in the writing process.

The present paper assesses the effectiveness of the innovative teaching model - “Peer review method” which was compared to “Project method” in the academic writing course.

2 METHODS REVIEW AND RESULTS

The Ilia State University used two teaching methods for master and PHD Students:

1) Project method - during the semester, the student gradually got acquainted with the standart and rules for creating chapters of a scientific text. As they mastered the rules, students got acquainted with principles of academic writing, such as mastering the scientific style, summarizing, creating a bibliography, searching for scientific articles, which maybe default meant close cooperation of students with library staff. After mastering the principles of writing specific chapters, they write a simulation work - they independently create the text of the corresponding chapter for an article, the topic of which they choose themselves. This method includes more time for theoretical material on seminar.

2) Peer review method - together with the library staff, an agreement is reached to use the authors’ work for studying purposes by the students who have already written a master's or doctoral work. After the consent of the authors, the main text of the master thesis is worked out in order to create obvious errors in all chapters. During the semester, students get acquainted with the principles of writing a specific chapter of a scientific work, their task is to get acquainted with the work proposed by the library, find errors, and write a detailed review describing the errors and ways to correct them. This method includes more multimedia materials, such as video seminars or guides from library.

The paper looks at the observation of 200 undergraduates the same faculty. 100 students took the academic writing course with “Project method”, while the other hundred students took the one with the “Peer review method”. The paper compares result and assessments in specific components of the course.

The group of students taking the course with the second model received relatively higher marks in their homework tasks. This group of students also had fewer problems and difficulties while doing their homework as the teacher had devoted more seminar hours to practical work, discussion of mistakes instead of explaining theoretic material as it was the case with the other group of students taking the course with Project method.

The tables (Table.1 and Table.2) below show the redistribution of student assessment results during the semester, as a percentage:

%	homework	mid-term exams	final exam
91-100	8	16	14
81-90	12	18	16
71-80	52	26	32
61-70	8	13	11
51-60	6	9	7
Less Than 51	14	18	20

Table 1. Distribution of grades of students studying with Project method

%	homework	mid-term exams	final exam
91-100	21	14	17
81-90	34	34	29
71-80	24	24	21
61-70	9	11	15
51-60	8	9	7
Less Than 51	4	6	11

Table 2. Distribution of grades of students studying with Peer review method

The comparison of final assignments has demonstrated that the students who had taken the course with Peer review method obtained above the average standard in all four criteria of assessment, whereas only 62 % of students who had taken the course with Project method demonstrated performance above minimum criteria.

It should be taken into account that the number, volume and complexity of homework assignments in both groups was the same, only the approach to their execution differed. The type of the exam did not differ.

The diagrams (Diagram.1 and Diagram.2) show that the students of the second group have higher scores in the intermediate and final exams, which indicates the high quality of the learned material, since the exams were carried out identically.

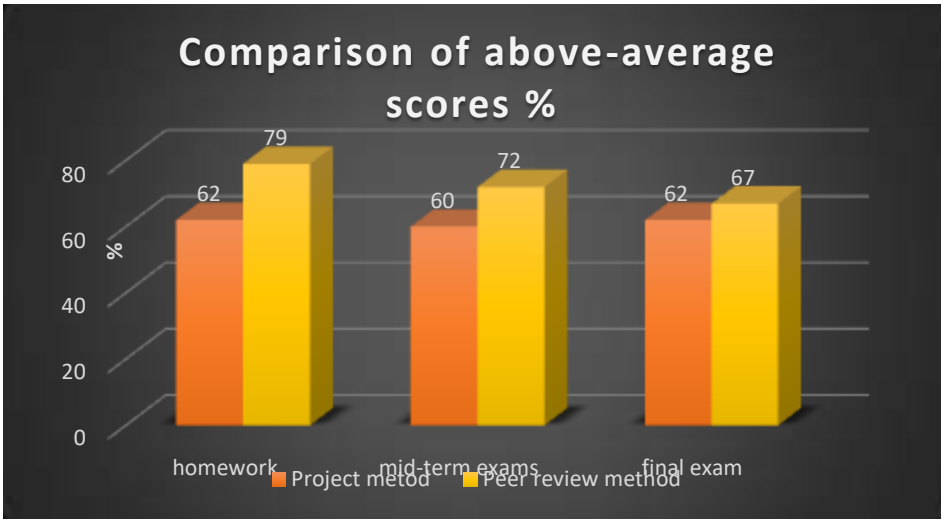

Diagram 1. Comparison student's results of above-average scores % with both methods

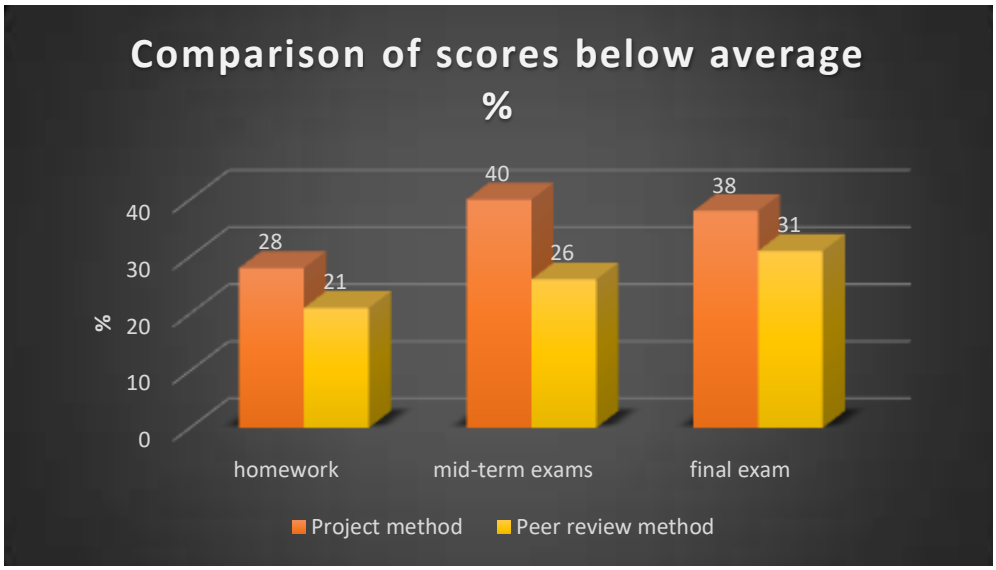

Diagram 2. Comparison student's results of scores below average %, with both methods

But the most significant result is the quality of master's theses written after the students had completed this course.

In groups where the second method was used, students had fewer questions and problems when writing a master's thesis. Reviewing these works, we can unequivocally say that their quality in terms of scientific and academic indicators is much higher than these parallel groups. It also speaks of the transfer of acquired theoretical knowledge into practice, which is the most important issue in education.

3 CONCLUSION

In conclusion, we can say that the article does not attempt to oppose the Project method and Peer review method, but rather highlights the advantages of the peer review method and emphasizes its effectiveness in enhancing students' creative thinking, analytical and argumentative skills; develop speaking, debating, teamwork and effective communication skills as the emotional contacts created through collaborative bug-finding tasks force students to listen to peers.

The results of the study showed that teaching academic writing using the peer-reviewed learning model is much more effective and productive for both students and teachers than teaching with the traditional approach.

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