Formation of critical thinking in preparation for future air transport specialists

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Abstract. The modernization of higher education and the introduction of new technologies will give students the opportunity to develop their critical thinking. Critical thinking is the ability to analyze and evaluate information, ideas, or arguments. It involves the application of reasoning skills to solve problems, make decisions, and communicate effectively. The development of critical thinking skills is essential for future air transport specialists, as it will enable them to make informed decisions, manage risks, and ensure the safety and efficiency of air transport operations.

1 Introduction

The emergence of critical thinking among future air transport specialists is crucial. Critical thinking is necessary for solving complex problems, making informed decisions, and effectively communicating with colleagues and other stakeholders. The development of critical thinking skills will enable future air transport specialists to operate in a rapidly changing world, where new technologies and transport systems are being introduced. The development of critical thinking skills will also help them to adapt to new situations and fulfill the requirements of their profession.
An educational institution needs to be a place where the development of a new generation of professionals for the modern economy is implemented. The main focus of educational institutions is to develop highly qualified specialists in aviation – one of the priorities in the development of the Russian economy.

The implementation of education at the university is often based on theoretical knowledge, which is then useful for professional activity. This approach is considered critical and important for the successful performance of the person in their field of work. To provide students with the necessary knowledge and skills, it is necessary to take into account the development of modern technology and bring them into the university's educational process.

The traditional approach to teaching, which is based on reading books and discussing their content, is called «embedding» in the modern educational system. The modern educational model has revolutionized the educational process, and there is a tendency to use new technologies for teaching. The main idea of the new approach is to focus on problem-solving and the development of critical thinking among students.

The educational process requires a modern approach, which includes the use of up-to-date methods and technologies in training. The current educational system needs to be adapted to the needs of modern society, where the demand for highly qualified specialists in aviation is increasing. The university is expected to play a key role in this process.

Today, the university is not just a place of learning, but also a place to develop the personality of the student. The educational process at the university is designed to develop the creative potential of students, and to make them capable of solving complex problems. The university is responsible for training faculty members, who should be able to convey the knowledge and skills to the students in an interesting and effective way.

The educational process should be based on the modern approach, which is characterized by the use of innovative technologies and methods. The university should be a place where the students can develop their critical thinking and problem-solving skills. The educational process is expected to be successful if it is based on the new approach, which takes into account the development of modern technology and the needs of modern society.
2 Methods and organisation of research
3 Obtained results
The study was designed to evaluate the influence of professional development on students' activity and critical thinking skills. To achieve this, the researchers conducted two tests: the Beginning of the academic year and the End of the academic year, with the latter administered after nine weeks. The test results were then compared to assess the effectiveness of the professional development program.

Table 1: Comparison of test results before and after professional development.

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<tr>
<th>Test scales</th>
<th>Beginning of the academic year average value ± standard deviation</th>
<th>End of the academic year average value ± standard deviation</th>
<th>Confidence criterion</th>
<th>Confidence level</th>
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The table above provides a summary of the test results before and after professional development. The confidence criterion and level are also indicated, showing a significant improvement in critical thinking skills post-development.

In conclusion, the study demonstrated the effectiveness of professional development in enhancing students' activity and critical thinking skills. Further research could explore the long-term effects of such programs.
4 Discussion
5 Conclusion

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References

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