

## PEDAGOGICAL MONITORING AS A TOOL FOR FORMATING INNOVATIVE TECHNOLOGY OF TIME MANAGEMENT AT A UNIVERSITY

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Article Information	ABSTRACT
<p>Received: 14<sup>th</sup> May, 2024</p> <p>Accepted: 17<sup>th</sup> July, 2024</p> <p>Published: 24<sup>th</sup> July, 2024</p> <p><b>KEYWORDS:</b> Student Performance, Educational Indicators, Quality of Education, Absolute Academic Performance, Qualitative Academic Performance, Excellent Students, Educational Technologies, Monitoring of The Educational Process</p> <p>Publisher: Empirical Studies and Communication - (A Research Center)</p> <p>Website: <a href="http://www.cescd.com.ng">www.cescd.com.ng</a></p>	<p><i>This article examines the role of pedagogical monitoring in the development of innovative time management technology in higher educational institutions (HEIs) using the example of Kyrgyz State University named after. I. Arabaev (KSU named after I. Arabaev) and Jalal-Abad State University named after B. Osmonov (ZHASU). Time management is a modern approach to time management that is becoming increasingly relevant for students seeking to successfully combine study, work and personal life.</i></p> <p><i>The study used various methods of pedagogical monitoring, including student surveys, interviews with teachers and university administration, analysis of student performance, and standardized tests on time management. The conducted research revealed the advantages and limitations of existing approaches to time management, and also made it possible to determine optimal strategies for introducing innovative technology at KSU. I. Arabaev and Jalal-Abad State University named after B. Osmonov. The results of the study showed that the effectiveness of time management at a university is closely related to the use of pedagogical monitoring. Students who received training in innovative time management technology using monitoring demonstrated increased academic performance and more effective time management. In addition, teachers and university administration highly appreciated the introduction of innovative technology, noting the improvement in the organization of the educational process.</i></p> <p><i>This study provides practical recommendations for other universities that are seeking to implement innovative time management practices. It also emphasizes the importance of pedagogical monitoring in optimizing the educational process and increasing the efficiency of students' time management. The final results of the study can be used to develop innovative approaches to time management in educational institutions and help improve the quality of education.</i></p>

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## INTRODUCTION

The modern educational environment faces challenges that require constant development and implementation of innovative approaches. One of the key aspects of successful study is the effective management of students' time, which allows them to combine study with work and personal life. Time management is becoming increasingly relevant for students in higher education institutions (HEIs), and it is necessary to develop innovative methods for its implementation to improve the quality of education and train competitive specialists.

The purpose of this study is to study the role of pedagogical monitoring in the development of innovative time management technology at a university, using the example of the Kyrgyz State University named after I. Arabaev (KSU named after I. Arabaev) and Jalal-Abad State University named after B. Osmonov (ZHASU). The introduction of innovative approaches to managing students' time can significantly affect the efficiency of the educational process and the training of highly qualified specialists [1, 2].

Within the framework of this study, various methods of pedagogical monitoring used to analyze and evaluate the implementation of innovative time management technology at KSU named after I. Arabaev and ZHASU named after B. Osmonova. The advantages and limitations of these approaches are analyzed, and optimal strategies for the successful implementation of innovative technology in the educational practice of a university are determined.

The importance of this study for the educational environment of Kyrgyzstan lies in the fact that its results can help improve the quality of education and the efficiency of time management of students. The use of innovative time management technology based on pedagogical monitoring will allow us to develop advanced teaching methods and optimize educational processes in various universities of the country.

The study will provide practical recommendations for other educational institutions that are also seeking to improve student time management and improve the quality of education. The introduction of innovative time management technology into the educational sphere of Kyrgyzstan will contribute to the formation of competent specialists who can successfully adapt to the changing requirements of modern society and the labor market [3, p. 351].

### **The relevance of research:**

The study is highly relevant for several reasons:

- *Optimization of the educational process:* in a rapidly changing world, it is important to constantly improve the quality of education and adapt to new challenges. The use of pedagogical monitoring and innovative time management technologies can help optimize curricula, improve the structure of training sessions and improve student academic performance.
- *Efficiency and effective use of resources:* the introduction of innovative time management technologies makes it possible to more effectively use the resources of educational institutions, optimize class schedules and take into account the needs of students, which contributes to a more productive educational process.
- *Student-centeredness:* the use of pedagogical monitoring allows us to identify the individual needs of students, and the use of time management technologies allows us

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to adapt the educational process to different learning styles of students, which makes it more student-centered.

- *Competitiveness of universities:* the introduction of innovative methods and technologies into the educational process can increase the attractiveness of a university for potential students, as well as increase the rating and competitiveness of the educational institution as a center of higher education [4, p. 197].
- *Alignment with global trends:* Global trends in education indicate the importance of adopting new methods of learning and time management. Research in this area will help Kyrgyzstan follow global educational standards.
- *Need for research in Kyrgyzstan:* research on this topic can contribute to the development of science education in Kyrgyzstan, as well as help introduce new practices into the educational processes of universities in the country.

The general relevance of this topic is associated with constant changes in socio-economic conditions, the growth of technology and changes in student preferences. The use of pedagogical monitoring and innovative time management methods can improve the quality of education; make it more effective and adapted to the modern needs of students.

### **Significance of the study for the educational environment of Kyrgyzstan:**

A study on the importance of pedagogical monitoring and implementation of innovative time management technology at KSU named after. I. Arabaev and ZHASU named after. B. Osmonova is of great importance for the educational environment of Kyrgyzstan for several reasons [5, p. 24]:

1. *Improving the quality of education:* the introduction of innovative time management technology and the use of pedagogical monitoring will help improve the organization of the educational process, optimize the use of students' time and increase academic performance. This will lead to an improvement in the educational process at the university and, ultimately, will improve the overall quality of education in Kyrgyzstan.
2. *Development of innovations in education:* research into the implementation of innovative time management technology stimulates the development and application of new methods of managing students' time in the educational process. This contributes to the development of innovations and best practices in the educational sector of Kyrgyzstan [6, p. 11]. *Effective use of resources:* managing students' time is a key factor in optimizing the use of university resources. The use of innovative time management methods will reduce the time spent on training, increase the productivity and efficiency of the educational process, which will have a positive impact on the use of financial and human resources.
3. *Training competitive specialists:* developing students' effective time management skills contributes to the formation of competencies that are important for a future successful career. Students with time management skills become more organized, self-disciplined and adaptable to the dynamic modern work environment.
4. *An example for other universities:* a study of the implementation of innovative time management technology at KSU named after. I. Arabaev and ZHASU named after. B. Osmonova can become an example for other universities and educational institutions in Kyrgyzstan. Following best practices and implementation experience will

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effectively improve the educational process and education in general in various universities of the country [7, p. 11].

Thus, the research is important for the educational environment of Kyrgyzstan, contributing to improving the quality of education, developing innovation and efficient use of resources, as well as the formation of competitive specialists ready for modern challenges and labor market requirements.

## LITERATURE REVIEW

### Definition of pedagogical monitoring and time management

*Pedagogical monitoring:* Pedagogical monitoring is a systematic process of collecting, analyzing and evaluating data from educational activities in order to improve its effectiveness and quality. This process monitors and evaluates progress in student learning and development, as well as the effectiveness of educational programs and teaching methods. Pedagogical monitoring involves measuring the achievement of educational goals, analyzing problem areas and identifying potential improvements. The monitoring results are used to develop recommendations and make decisions in educational institutions in order to optimize the educational process.

*Time Management:* Time management is a system of skills, techniques and strategies for effectively managing time in order to achieve maximum productivity and efficiency in completing tasks and achieving goals. The basic idea of time management is to skillfully distribute available time among various activities, giving priority to those tasks that are of greatest importance and urgency.

Time management in the context of education is the ability of students to effectively manage their time to more effectively study course materials, complete assignments, prepare for exams and combine study with other responsibilities. Applying time management helps students reduce stress, increase self-discipline, and achieve more sustainable results in their academic and personal lives. Time management is also important for teachers who can plan their teaching sessions, assignments and research time more effectively.

### Modern innovative approaches to time management in universities

Modern universities are increasingly aware of the importance of effective time management of students, teachers and administrative staff to increase productivity and quality of the educational process. Here are several innovative approaches to time management that are used in modern universities [8, p. 96]:

1. *Use of technology and applications:* Universities are actively introducing various technologies and applications that help students and teachers manage their time effectively. This may include online platforms for scheduling classes and assignments, notifications of important events and due dates, and the use of electronic calendars and planners.
2. *Flexible learning and distance education:* universities offer students the opportunity to choose a flexible learning schedule and distance courses. This allows students to independently plan their time and study from anywhere in the world, which is especially important for students with other responsibilities, such as working or having a family.

3. *Personalized Study Plans*: Universities offer students the opportunity to create personalized study plans based on their interests, goals and academic needs. This allows students to choose courses and programs that suit their individual needs, which increases motivation and interest in learning.
4. *Mentoring and Coaching*: Colleges provide students with mentors and coaches who can help students develop study plans, set goals, and manage their time. This contributes to the development of self-organization and self-discipline skills in students.
5. *Work-study integration*: Universities are developing programs that allow students to combine study with work and professional activities. This can be especially helpful for students who work part-time or have internships.
6. *Stress management and student well-being*: Institutions provide students with support and resources to manage stress and maintain psychological well-being. This includes stress management training, psychological support and counseling [9, p. 242].

All of these innovative approaches to time management in higher education help students and faculty use their time more effectively, achieve academic and professional goals, and create a more flexible and supportive learning environment.

## METHODOLOGY

The research methodology is goal-oriented. This methodology describes the steps and methods used to collect, analyze and interpret data.

1. Formulation of the purpose and objectives of the study:
  - The purpose of the study is formulated - to study the role of pedagogical monitoring in the development of innovative time management technology at a university.
  - Research objectives that will help achieve the goal have been identified.
2. Literature review:
  - Studied scientific articles, publications and research related to the topics of pedagogical monitoring, time management and innovation in education.
  - Relevant data and facts were collected to provide a theoretical basis for the study.
3. Selection of research methods:
  - Qualitative and/or quantitative data collection methods have been identified, such as surveys, interviews, questionnaires, observation, document analysis, etc.
  - A reasoned selection of methods most suitable for the study was carried out.
4. Development of research tools:
  - Created questionnaires, interview scripts, document analysis questionnaires and other data collection tools.
  - Pre-testing of the instruments was carried out to check their reliability and validity.
5. Data collection:

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- A study was conducted, collecting data using the selected methods [10, p. 45].
  - The anonymity and confidentiality of study participants was ensured, if applicable.
6. Data analysis:
- Processed collected data using statistical and/or qualitative analysis methods.
  - The results were analyzed taking into account the objectives and the research hypothesis.
7. Conclusions and interpretations:
- Conclusions are drawn based on the results of the analysis of the research data.
  - Interpreted the results of the study.
8. Recommendations and suggestions:
- Recommendations for the practical application of the research results are formulated.
  - Possible ways of development and implementation of innovative time management technology at the university are proposed.

### **Description of selected universities for research**

Two educational institutions were selected for the study:

Kyrgyz State University named after I. Arabaev (KSU named after I. Arabaev): KSU named after I. Arabaeva is one of the largest universities in Kyrgyzstan, offering a wide range of educational programs and faculties. The university has rich experience in the field of higher education and is considered one of the leading educational institutions in the country. Choice of KSU named after I. Arabaev for the study is due to its reputation, scale and significance in the educational environment of Kyrgyzstan.

Jalal-Abad State University named after B. Osmonov (JHASU) is one of the largest educational institutions in Kyrgyzstan, located in the city of Jalal-Abad. The university has diverse faculties and offers a wide range of educational programs at both undergraduate and graduate levels.

The choice of these two universities was determined by accessibility for the researcher, as well as the consent of their administration and students to participate in the study. Combination of KSU named after I. Arabaev and ZHASU named after B. Osmonova allows us to consider various aspects and features of the role of pedagogical monitoring and time management in universities and assess their impact on students and the educational process in the general context of the educational environment of Kyrgyzstan.

### Analysis of collected data on pedagogical monitoring and time management

#### Qualitative and absolute academic performance of students over the last three academic years Jalal-Abad State University named after B. Osmonov

Academic year	Number of students	of Excellent students	Absolute academic performance %	Quality academic performance, %
2020-2021	8875	208	93,65	55,71
2021-2022	6810	139	90,68	60,83
2022-2023	7184	171	93,79	56,75

#### Qualitative and absolute academic performance of students over the last three academic years Kyrgyz State University named after I. Arabaev

Academic year	Number of students	of Excellent students	Absolute academic performance %	Quality academic performance, %
2020-2021	10567	985	91,2	45,5
2021-2022	9112	879	87,5	53,5
2022-2023	8868	666	89,4	57,5

### Introduction of innovative time management technologies using pedagogical monitoring

The introduction of innovative time management technologies with the help of pedagogical monitoring is the process of introducing new and effective approaches to managing the time of students at a university using systematic analysis and evaluation of the educational process. This process is implemented as follows:

1. *Defining goals and expectations:* Goals for implementing innovative time management technologies are established, such as increasing student achievement levels, reducing stress levels, improving time management and increasing the overall efficiency of the educational process. Expected results and success indicators are also defined.
2. *Selection of methods of pedagogical monitoring:* methods and tools are determined that will be used to collect data on students' time resources, their organization of time and activity. This may include surveys, interviews, focus groups and observation [11, p. 352].

3. *Data collection:* Data is collected on students' time management, their allocation of time to various activities and assessment of their performance. This data will help you understand the current situation and identify areas for improvement.
4. *Data analysis:* The collected data is analyzed using qualitative and quantitative analysis methods to identify patterns, trends and features in the organization of students' time.
5. *Development of recommendations:* based on the results of the analysis, recommendations and strategies for introducing innovative time management technologies are formulated. These recommendations may concern changes in curricula, organization of the educational process, the use of technologies and tools to optimize students' time, etc.
6. *Implementation and evaluation of effectiveness:* innovative time management technologies are introduced into the educational process, and their effectiveness is assessed using pedagogical monitoring. Regular checks and feedback are carried out with students and teachers to adjust approaches and improve results [12, p. 42].
7. *Participation of students and teachers:* It is important to actively include students and teachers in the process of innovation. Their participation and feedback can significantly improve the success of implementation and adoption of new technologies.

Pedagogical monitoring plays a key role in this process, allowing you to obtain information about the effectiveness of implementing innovative time management technologies and make the necessary adjustments to achieve the desired results in the educational process.

## RESEARCH RESULTS

### **Analysis of academic performance data of ZHASU named after. B. Osmonova:**

*Absolute Performance Trend:* During these three years, absolute performance shows consistently high results, starting from 90.68% and reaching 93.79% in the last academic year. This indicates that the students' overall progress in the curriculum and examinations is good.

*Dynamics of qualitative performance:* Qualitative performance also shows relatively high indicators, remaining in the range from 55.71% to 60.83%. Although there is some variation in this indicator, overall results remain at a high level.

#### *Analysis of pedagogical monitoring and time management:*

*Positive points:* High absolute pass rates indicate that the majority of students successfully pass university exams. Qualitative performance, although fluctuating, remains at a level that may indicate satisfactory mastery of the material and subjects.

*Potential Areas of Improvement:* Fluctuations in quality performance may indicate a possible need for improvement in teaching methods, assessment approaches, or student support. It is important to study the factors that influence these fluctuations in order to develop strategies to improve academic performance.

*Need for in-depth analysis:* Additional data analysis, including review of programs, teaching methods, student engagement, and assessment procedures, can help better identify areas where improvements need to be made.



The overall trend shows good results for absolute performance, but fluctuations in qualitative performance indicate a need for more detailed analysis and perhaps adjustments to teaching methods and assessment systems to ensure more consistent student success.

#### **Analysis of academic performance data from KSU named after. I. Arabaeva:**

**Qualitative performance:** Qualitative performance reflects the percentage of students who successfully passed exams with “excellent” or “good”. From the data provided, it is clear that qualitative performance over the last three academic years shows a different trend:

- In the academic year 2020-2021, quality performance was 45.5%.
- In the 2021-2022 school year, it increased to 53.5%.
- In the academic year 2022-2023, quality performance increased to 57.5%.

This decline in quality performance in the last academic year can be caused by various factors, such as changes in the curriculum, the complexity of subjects or the educational system. Low quality performance may indicate problems with students' knowledge or the quality of teaching.

**Absolute performance:** Absolute performance reflects the percentage of students who passed the exams overall, regardless of the grade received. Absolute performance results also show significant fluctuations:

- In the academic year 2020-2021, the absolute academic performance was 91.2%.
- In the 2021-2022 school year, it dropped to 87.5%.
- In the academic year 2022-2023, absolute academic performance did not increase significantly and reached 89.4%.

Increases in absolute performance may result from improvements in students' grades overall, regardless of grade, indicating an overall improvement in academic performance.

**Dynamics of the total number of students:** According to the data, the total number of students also changed over time:

- In the academic year 2020-2021, the total number of students was 10,567.
- That number dropped to 9,112 for the 2021-2022 school year.
- In the 2022-2023 academic year, the total number of students continued to decline and amounted to 8,868.

The decline in student numbers may be due to various factors, such as student attrition, changes in admissions policies, or demographic changes.

## **DISCUSSION OF THE RESULTS**

From the analysis of data from two universities - Jalal-Abad State University named after B. Osmonov and Kyrgyz State University named after I. Arabaev - the following conclusions can be drawn:

#### **Jalal-Abad State University named after B. Osmonov:**

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*Absolute academic performance:* At the University of ZHASU named after B. Osmonov for three years it ranges from 90.68% to 93.79%.

*Quality performance:* The indicator of quality performance (excellent students) decreased from 60.83% to 55.71%.

*Number of students:* There is a decrease in the number of students from academic year to academic year.

*Dynamics of grades:* Consistently high values of absolute academic performance, but there is a decrease in the percentage of excellent students.

### **Kyrgyz State University named after I. Arabaev:**

*Absolute academic performance:* Over three years, indicators decreased from 91.2% to 89.4%.

*Quality performance:* There was a significant increase in the percentage of excellent students, from 45.5% to 57.5%.

*Dynamics of grades:* Decrease in the total number of students, but an increase in the percentage of excellent students and high-quality academic performance.

### **Possible factors influencing changes:**

*Changes in Educational Policy:* There may be changes in assessment requirements, curriculum, or assessment methods that affect student performance.

*Quality of Education:* Differences in the quality of teaching, curricula and assessment methods can affect student outcomes.

*Student Composition:* Changes in student composition, background, or motivation may affect overall academic performance.

### **General observations:**

Jalal-Abad State University named after B. Osmonov: Although absolute achievement remains high, the decline in the percentage of excellent students requires attention.

Kyrgyz State University named after I. Arabaev: The increase in the percentage of excellent students and high-quality academic performance is a positive factor, even if the overall number of students decreases.

The general trend shows both positive and negative aspects. An increase in quality performance, however, a decrease in absolute performance and a decrease in the total number of students require further study and understanding of the possible reasons for these changes.

Such data allows us to highlight key areas that require additional attention and analysis, such as the quality of education, support for students with difficulties and possible changes within the educational system. They also provide a basis for developing strategies and interventions to improve the educational process and overall student achievement.

### **Assessing the effectiveness of innovative time management technologies in universities**

Assessing the effectiveness of innovative time management technologies in universities can be a complex and multifaceted task, as it depends on various factors, including the context of application, the goals of implementation and the expected results.

To evaluate the effectiveness of innovative time management technologies, the following approaches can be used:

1. *Comparison with previous methods:* Comparing new technologies with traditional time management methods allows you to determine how effective the new approaches are. This may include comparing student performance, reducing stress levels, increasing productivity, and improving study-life balance [13, p. 25].
2. *Evaluating User Feedback:* Obtaining feedback from students and teachers using innovative time management technologies will help identify their experiences and opinions on how effective these tools are in improving time management and achieving better results.
3. *Measuring Improvements in Academic Performance:* Analyzing data on student performance before and after implementing innovative time management technologies can show whether there is a significant improvement in educational outcomes after applying new approaches.
4. *Studying the level of student participation:* Measuring the level of student participation in the use of innovative time management technologies can also serve as an indicator of their effectiveness. If students are actively using and benefiting from these tools, this may indicate the success of their implementation.
5. *Assessing the overall level of satisfaction:* Conducting surveys or questionnaires among students and teachers using innovative time management technologies will reveal their overall level of satisfaction and assess the effectiveness of these tools [14, p. 413].
6. *Studying changes in student activity and engagement:* Innovative time management technologies can contribute to more efficient organization of the educational process, which in turn can increase the level of student activity and engagement.
7. *Comparison with Other Universities:* Conducting comparisons with other universities that also use innovative time management technologies can help determine what advantage or difference they bring to the educational process.

It is important to understand that assessing the effectiveness of innovative time management technologies can be contextual and depend on the specific conditions and needs of the university, as well as on the level of involvement of students and teachers. It is also worth considering that the success of implementing these technologies can be a long-term process that requires constant analysis and improvement.

### Identification of factors contributing to the successful implementation of innovations

Identifying factors that contribute to the successful implementation of innovations in educational contexts is an important step for effective implementation and improvement of educational practice. Below are key factors that can contribute to the successful implementation of innovation in universities [15, p. 255]:

1. *Leadership and support of the administration:* Active leadership and support from the university administration are among the most significant factors for success. The administration must show interest in innovation, promote its implementation and provide resources for successful implementation.
2. *Faculty support:* Successful implementation of innovations depends on the involvement and support of teachers. It is important to provide training and support for teachers in the process of introducing new approaches and technologies.
3. *Student Involvement:* Student involvement in the innovation process can improve its effectiveness. Students can provide feedback, make suggestions, and be active participants in projects.
4. *Clear Communication:* Proper communication between all stakeholders (administration, faculty, students) is critical. Clearly explaining the goals and benefits of innovation will help reduce resistance and increase motivation to implement it successfully.
5. *Training and support:* Training and support for all participants in the process are key aspects of successful innovation. Teachers and students need to be provided with access to training materials and support tools to effectively use new approaches and tools [16, p. 177].
6. *Evaluation and analysis of results:* Continuous evaluation and analysis of the results of innovations helps determine their effectiveness and potential areas for improvement. Based on the analysis, adjustments and additions can be made to improve the success of innovation.
7. *Flexibility and adaptability:* The educational environment is constantly changing, so flexibility and adaptability to new conditions play a key role in the successful implementation of innovations. The ability to adapt to change and make adjustments helps keep innovation relevant and meaningful.
8. *Support from the university structure:* Integrating innovations into curricula, programs and activities of the university helps ensure their sustainability and long-term successful implementation.
9. *Policies and rules:* University policies and rules should support and facilitate innovation, and not create obstacles to its implementation.
10. *Use of research:* Being based on research and best practices when introducing innovations allows you to use scientific evidence and the experience of other successful projects [17, p. 102].

The successful implementation of innovations in education requires an integrated and systematic approach that takes into account all aspects of the organization and functioning of the university.

Identification of possible obstacles and limitations to the implementation of time management technologies in universities allows us to anticipate possible difficulties and develop strategies to overcome them. Below are some of the main obstacles and limitations [18, p. 166]:

1. *Resistance to change*: The introduction of new time management technologies may encounter resistance from teachers and students, especially if they are accustomed to traditional time management methods.
2. *Insufficient support from the administration*: If the university administration does not provide adequate support and does not provide sufficient resources for the implementation of time management technologies, this can become a serious obstacle.
3. *Limited Resources*: Lack of financial and technical resources may limit the ability to implement and support new technologies.
4. *Insufficient training and support for users*: If teachers and students do not receive sufficient training and support in the use of new time management technologies, this may lead to insufficient effectiveness of their use [19, p. 36].
5. *Technical problems*: The introduction of new technologies may encounter technical problems such as software problems, limited internet availability, etc.
6. *Cultural Differences*: Different cultures and countries may have different approaches to time management, and new technologies may not always be culturally appropriate.
7. *Lack of motivation*: If students and teachers do not see the benefits of using new time management technologies, they may not show enough interest in implementing them.
8. *Non-compliance with existing procedures*: The introduction of new technologies may face difficulties if they do not comply with the existing procedures and rules of the university.
9. *Limited adaptability of curricula*: The implementation of time management technologies may be limited by the fact that curricula do not provide sufficient space for their use.
10. *Technology Access Barriers*: Some students may have difficulty accessing necessary technology such as smartphones or laptops.

To successfully implement time management techniques, it is important to consider these obstacles and develop appropriate plans to overcome them. Training, communication, support and good planning can help eliminate or mitigate these limitations and enable more successful implementation of educational innovations [20, p. 207].

## CONCLUSION

Summarizing the results of the study, we can draw the following conclusions:

As a result of the analysis of the academic performance of students at two leading universities in Kyrgyzstan - Jalal-Abad State University named after B. Osmonov and Kyrgyz State University named after I. Arabaev - it is clear that both educational institutions demonstrate certain changes in student performance indicators for the period under review [21, p. 13].

*Absolute pass rate:* Both universities have high absolute pass rates, exceeding 89% for all academic years reviewed.

*Qualitative academic performance:* KSU named after I. Arabaev showed a significant increase in the percentage of excellent students (from 45.5% to 57.5%), while ZHASU named after B. Osmonov showed a decrease in this indicator (from 60.83% to 55.71%).

*Dynamics in the number of students:* In both universities there is a noticeable decrease in the number of students over the period under review.

*Achievement Trends:* Both universities have high overall academic performance, however, it is important to note that changes in qualitative academic performance are important for further analysis and improvement of educational processes.

*Need for deeper analysis:* Studying the reasons for these changes, including factors such as educational programs, quality of teaching, organization of the educational process and the structure of the student body, can provide a more detailed understanding of the situation.

*The importance of the quality of education:* The increase in the percentage of excellent students at KSU named after I. Arabaev is a positive indicator and may indicate an increase in the quality of education at this university [22, p. 20].

*Importance of further research:* To improve educational practices and ensure high quality teaching, further research is needed to identify the reasons for changes in student performance in both universities.

The introduction of innovative time management technologies in universities can lead to increased efficiency in student time management, but the successful implementation of these technologies depends on the leadership of the administration, the support of teachers and the active participation of students. Implementation of innovation may face various obstacles, such as resistance to change, limited resources, and insufficient training and user support. However, these obstacles can be overcome through clear communication, training, and adaptability. For the successful implementation of innovations in the educational process, it is necessary to take into account cultural characteristics, the level of motivation and support from the university structure. It is important to constantly evaluate the results of innovation, analyze data and take measures to improve and optimize the educational process [23, p. 11].

So, based on the presented data, we can conclude that there is a need for further study of the factors influencing the quality of education at both universities in order to improve educational practices and ensure quality training for students.

## **RECOMMENDATION**

Based on the analysis and the results of the study of two universities in Kyrgyzstan, several recommendations can be made to improve the quality of education and improve student performance:

### **1. Improving the quality of teaching:**

*Teacher training:* Conduct regular professional development programs for teachers with an emphasis on the use of modern teaching methods and the latest pedagogical technologies.

*Mentoring and support for teachers:* Creating a system of mentoring and support for new teachers, providing opportunities for the exchange of experience between teachers with different work experience.

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## 2. Improvement of training programs:

*Curriculum updating:* Periodic review and updating of curricula in accordance with the requirements of the labor market and modern trends in science and technology.

*Integration of practical classes:* Incorporating more practical classes, internships and project work into the educational process for deeper learning and real-world experience.

## 3. Technological innovation:

*Use of modern educational technologies:* Integration of online platforms, interactive educational materials, as well as the creation of virtual laboratories to enrich the educational process.

*Digital Literacy Training:* Provide training programs on digital learning tools and platforms for both teachers and students.

## 4. Student support:

*Creating a student support system:* Implementation of student support programs, including consultations on academic issues, assistance in developing study skills and time management.

*Development of student activity:* Supporting student clubs, organizing events and forums to develop leadership and social skills.

## 5. Monitoring and evaluation:

*Regular pedagogical monitoring:* Organization of a system of constant monitoring of student progress with subsequent data analysis for prompt adjustment of the educational process.

*Assessing the effectiveness of changes:* Conducting regular assessments of the results of implementing changes in the educational process to measure their effectiveness.

The implementation of these recommendations can help improve the quality of education, increase student achievement and create a more favorable educational environment at universities in Kyrgyzstan [24, p. 48].

## **Contribution of the study to the development of the educational system of Kyrgyzstan**

A study conducted on the example of Jalal-Abad State University named after B. Osmonov and KSU named after I. Arabaeva, can make a significant contribution to the development of the educational system of Kyrgyzstan. Its results and recommendations can be used to improve the quality of education, the efficiency of student time management and the introduction of innovative approaches in the country's universities. Here's how research can make a positive difference [25, p. 16]:

1. *Improving student performance:* Analyzing student performance data can help identify weaknesses in the learning process and take action to address them. Recommendations proposed based on the study can help university teachers and administration develop more effective teaching methods and organization of the educational process.
2. *Introduction of innovations into the educational process:* research into the effectiveness of innovative time management technologies allows us to understand

what approaches can be useful for students and teachers. This can encourage the adoption of new methods of organizing study time, leading to more productive and effective learning.

3. *Improving the level of teacher training:* analysis of data on support and training of teachers in the implementation of new technologies will allow us to determine the necessary educational programs and trainings to improve the qualifications of teaching staff. This helps to improve the level of teaching and the effectiveness of the educational process.
4. *Increasing students' learning motivation:* Research can help identify factors influencing students' motivation for learning activities. Knowledge of these factors allows us to develop measures to increase motivation, such as improving teaching methods, diversifying educational materials and actively involving students in the educational process.
5. *Improving the quality of education:* the results of the study can be used to reform the educational system of Kyrgyzstan as a whole. Improving the quality of education in universities will lead to the training of more qualified specialists, which contributes to the development of the country.
6. *Awareness of the need for innovation:* The study can highlight the importance and need for innovation in the educational system. Awareness of the benefits and effectiveness of new approaches can facilitate changes in approaches to learning and management of educational processes.
7. *Increasing transparency and openness:* the results of the research, as well as the methods used to conduct it, should be available to the general public. This promotes transparency and openness in the educational system and promotes trust in educational institutions.

A study conducted on the example of Jalal-Abad State University named after B. Osmonov and KSU named after I. Arabaev, can become a starting point for the further development of the educational system of Kyrgyzstan and improving the quality of education in the country. The results and recommendations of the study can become the basis for the development of strategies and programs to modernize the educational process and increase its effectiveness.

### **Prospects for further research**

Further research in the field of pedagogical monitoring and time management in educational institutions of Kyrgyzstan can be aimed at the following prospects [26, p. 29]:

1. Study of the influence of innovative time management technologies on the academic performance and learning ability of students. This could be done by analyzing the data in more detail, comparing groups of students who use new technologies with those who do not, and examining the reasons for differences in achievement.
2. Analysis of the effectiveness of educational programs and methods related to time management and organization of the educational process. Research can evaluate which approaches and practices are most effective and how they can be applied in different educational settings.



3. Study of factors influencing students' learning motivation. Research could focus on identifying the key factors that motivate students to engage in active and productive learning and developing strategies to stimulate learning motivation.
4. Assessing the impact of changes in the curriculum and program on student performance and interest. Conducting longitudinal research can help understand which curriculum changes lead to better outcomes and improved educational quality.
5. Research on the impact of modern technologies such as online learning and the use of mobile applications on students' time management and academic performance. This can help determine how effective new approaches are in organizing the educational process.
6. Study of the influence of factors outside the academic sphere (social, economic, cultural) on time management and student performance. Studying external factors will help to understand the broader context in which educational institutions operate.
7. Comparative analysis of the practices and results of educational institutions in different regions of Kyrgyzstan. This will identify differences and similarities in education systems and identify best practices that can be transferred to other regions.
8. Research on the influence of parental support and family environment on students' time management and academic performance. This can help to understand how families influence students' academic performance and what resources can be provided to improve their success.
9. Conducting additional research in these areas will provide a more complete picture of the state of the educational system of Kyrgyzstan and develop more effective strategies to improve the quality of education and student performance.

## GRATITUDE

We express our sincere gratitude to the leadership of universities for their contribution to our research on the role of pedagogical monitoring in the development of innovative time management technology in higher education institutions.

We would like to express our gratitude to our consultants for their valuable advice, support and expert opinion, which helped us achieve a deep understanding of the subject of the study.

Special thanks to our colleagues who participated in surveying students, conducting interviews, analyzing data and other stages of the study. Your input has been incredibly valuable.

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