РАЗРАБОТКА СИСТЕМЫ МОНИТОРИНГА В ОБРАЗОВАТЕЛЬНОМ УЧРЕЖДЕНИИ: ПРОБЛЕМЫ И РЕШЕНИЯ

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Качество образования является насущной заботой образовательных учреждений, и эффективная система мониторинга имеет решающее значение для обеспечения того, чтобы учащиеся получали наилучшее возможное образование. В этом исследовании предлагается система управления образовательным учреждением, которая может автоматизировать процессы мониторинга и создавать подробные отчеты, тем самым повышая эффективность работы образовательных учреждений. Предлагаемая система позволяет отслеживать посещаемость, создавать подробные отчеты о нарушениях, совершенных студентами и преподавателями и повышать качество образования за счет внедрения системы оценки посещаемости для наиболее точного отслеживания активности студентов. Результаты исследования демонстрируют эффективность предлагаемой системы, которая является более эффективной и точной, чем аналогичные системы. Однако внедрение автоматизированной системы управления может потребовать надлежащего обучения и технической поддержки пользователей. Стоить отметить, что система может выиграть от включения более продвинутых функций, таких как технология распознавания лиц и интеллектуальный анализ данных. Процессы в разработанной нами системе направлены на повышение качества обучения студентов и соответствия преподавателей требуемым стандартам, что дает возможность учебному заведению значительно улучшить показатели и метрики образовательного процесса, например, своевременно выявлять нарушения и производить корректировку всевозможных отклонений. Модели интеллектуального анализа данных могут стать вишенкой на торте в системе, так как позволят не только предоставлять анализ, но и предсказывать вероятность того или иного исхода, например, количество выпускников или претендентов на исключение.

***Ключевые слова**: мониторинг, качество, образовательный процесс, информационные модели*

БИЛИМ БЕРҮҮ МЕКЕМЕСИНДЕ МОНИТОРИНГ СИСТЕМАСЫН ИШТЕП ЧЫГУУ: КӨЙГӨЙЛӨР ЖАНА ЧЕЧИМДЕР

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Билим берүүнүн сапаты билим берүү мекемелерин тынчсыздандырат жана натыйжалуу мониторинг тутуму окуучулардын мүмкүн болушунча мыкты билим алышын камсыз кылуу үчүн өтө маанилүү. Бул изилдөө биздин көз карашыбыз боюнча, мониторинг процесстерин автоматташтыра турган жана деталдуу отчетторду түзө турган, ошону менен билим берүү мекемелеринин ишинин натыйжалуулугун жогорулатуучу билим берүү мекемелерин башкаруу тутумун сунуш кылат. Сунушталган система сабакка катышууну көзөмөлдөөгө, студенттер жана окутуучулар тарабынан жасалган мыйзам бузуулар жөнүндө кеңири отчетторду түзүүгө жана студенттердин активдүүлүгүн эң так көзөмөлдөө үчүн сабакка катышууну баалоо тутумун киргизүү аркылуу билим сапатын жогорулатууга мүмкүндүк берет.

Изилдөөнүн жыйынтыктары окшош системаларга караганда эффективдүү жана так сунушталган системанын эффективдүүлүгүн көрсөтөт. Бирок, автоматташтырылган башкаруу тутумун ишке ашыруу туура окутууну жана колдонуучулардын техникалык колдоосун талап кылышы мүмкүн. Белгилей кетчү нерсе, система Бетти таануу технологиясы жана маалыматтарды казып алуу сыяктуу өнүккөн функцияларды киргизүүдөн пайда ала алат. Жалпысынан, Биз иштеп чыккан системадагы процесстер студенттерди окутуунун сапатын жана окутуучулардын талап кылынган стандарттарга ылайыктуулугун жогорулатууга багытталган, бул билим берүү мекемесине билим берүү процессинин көрсөткүчтөрүн жана ченемдерин бир кыйла жакшыртууга мүмкүндүк берет, мисалы, мыйзам бузууларды өз убагында аныктоо жана ар кандай четтөөлөрдү оңдоо. Маалыматтарды казып алуу моделдери тутумдагы торттун музу болуп калышы мүмкүн, анткени ал анализди гана бербестен, тигил же бул натыйжанын, мисалы, бүтүрүүчүлөрдүн же четтетүүгө талапкерлердин санын болжолдоого мүмкүндүк берет.

Ачкыч сөздөр*: мониторинг, Сапат, билим берүү процесси, маалыматтык моделдер*

DEVELOPMENT OF A MONITORING SYSTEM IN AN EDUCATIONAL INSTITUTION: PROBLEMS AND SOLUTIONS

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The quality of education is an urgent concern of educational institutions, and an effective monitoring system is crucial to ensure that students receive the best possible education. This study suggests an educational institution management system that can automate monitoring processes and create detailed reports, thereby increasing the efficiency of educational institutions. The proposed system allows you to track attendance, create detailed reports on violations committed by students and teachers and improve the quality of education through the introduction of an attendance assessment system for the most accurate tracking of student activity. The results of the study demonstrate the effectiveness of the proposed system, which is more efficient and accurate than similar systems. However, the implementation of an automated management system may require proper training and technical support for users. It is worth noting that the system can benefit from the inclusion of more advanced features, such as facial recognition technology and data mining. The processes in the system developed by us are aimed at improving the quality of students' education and teachers' compliance with the required standards, which makes it possible for an educational institution to significantly improve the indicators and metrics of the educational process, for example, to identify violations in a timely manner and correct all kinds of deviations. Data mining models can be the cherry on the cake in the system, as they will not only provide analysis, but also predict the probability of a particular outcome, for example, the number of graduates or applicants for exclusion.

Keywords: *monitoring, quality, educational process, information models*

The quality of education is a serious problem for educational institutions, and effective monitoring is necessary to ensure that students receive the best possible education. This requires a comprehensive and effective management system that can track attendance, lesson performance, and violations committed by students and teachers. In this study, we aim to offer an ideal management system for monitoring educational institutions that can automate monitoring processes and create detailed reports. In recent years, there has been a growing recognition of the need to apply principles and methods of Customer Relationship Management (CRM) to the education sector, including universities and higher education institutions. As highlighted in previous studies, the adoption of CRM processes in educational

institutions has great potential for enhancing relationships with students and improving the quality of education [1]. This paper builds upon this idea and proposes an e-monitoring system specifically designed for e-learning environments to provide a comprehensive and effective management solution for tracking attendance, lesson performance, and violations committed by students and teachers [2]. Additionally, this study contributes to the field of education quality monitoring by presenting a model for the system of monitoring education quality and quality assurance at the university [3]. Moreover, the creation of a monitoring system for research activities of members of a higher-education institution can help optimize managerial decisions at all levels.
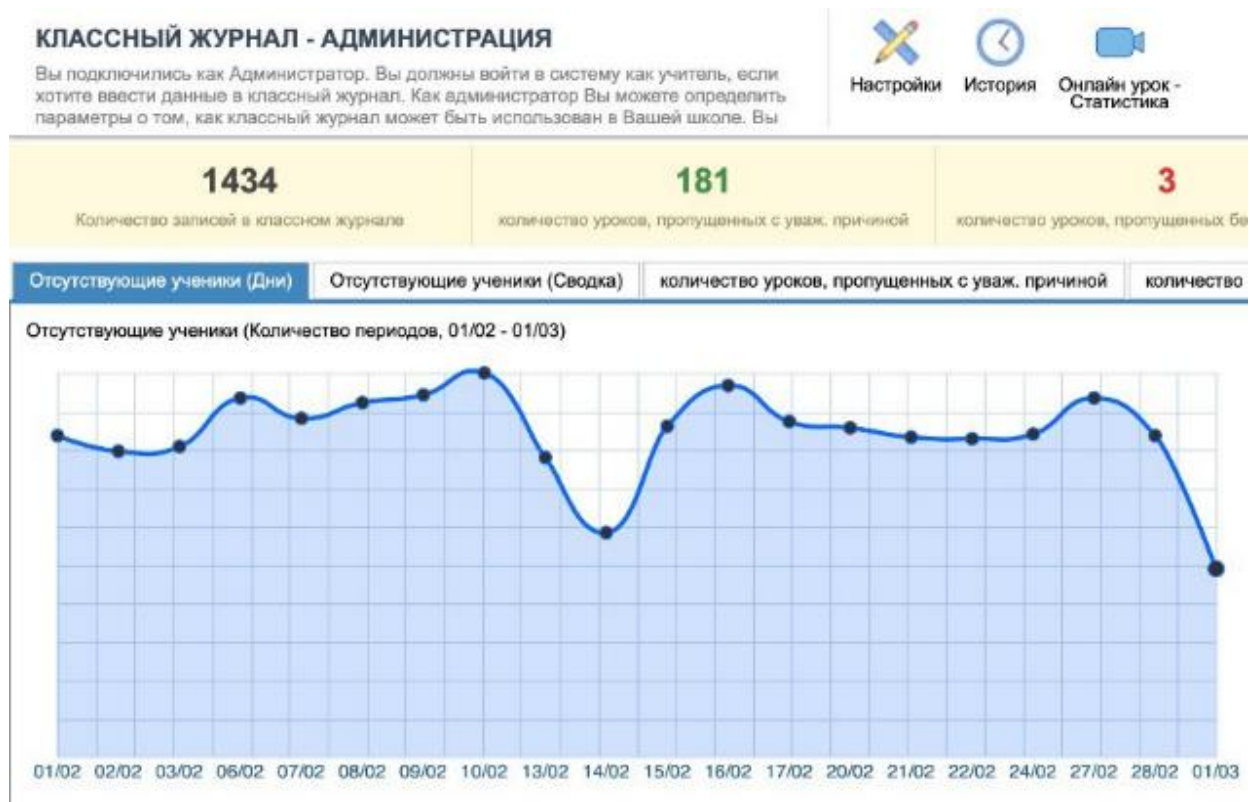

КЛАССНЫЙ ЖУРНАЛ - АДМИНИСТРАЦИЯ

Вы подключились как Администратор. Вы должны войти в систему как учитель, если хотите ввести данные в классный журнал. Как администратор Вы можете определить параметры о том, как классный журнал может быть использован в Вашей школе. Вы

Настройки   История   Онлайн урок - Статистика

1434
Количество записей в классном журнале

181
количество уроков, пропущенных с уваж. причиной

3
количество уроков, пропущенных бе

Отсутствующие ученики (Дни)   Отсутствующие ученики (Сводка)   количество уроков, пропущенных с уваж. причиной   количество

Отсутствующие ученики (Количество периодов, 01/02 - 01/03)

01/02 02/02 03/02 06/02 07/02 08/02 09/02 10/02 13/02 14/02 15/02 16/02 17/02 20/02 21/02 22/02 24/02 27/02 28/02 01/03

Figure 1

The development of an efficient management system for educational institutions is crucial to ensure that students receive the best possible education. By automating monitoring processes and generating detailed reports, educational institutions can ensure accountability, increase efficiency, and ultimately improve the quality of education [4, 5, 11, 12]. Additionally, the application of CRM principles and processes can broaden the field of relationship management beyond the business domain to non-profit organizations, such as universities and higher education institutions dedicated to e-learning [9, 10]. This can lead to new solutions for managing customer relationships in the education sector. The various studies discussed in this text highlight the importance of continuous evaluation and monitoring of education quality, as well as the need to implement international standards and best practices. By building models of monitoring systems, universities can ensure that they

are meeting the highest standards of education quality and provide a better learning experience for their students.

The quality of education in many educational institutions is a major concern, and effective monitoring is necessary to ensure that students receive the best possible education. However, traditional monitoring methods can be time-consuming and prone to errors, which can result in inaccurate assessments of student and teacher performance. Therefore, there is a need for a comprehensive and effective management system that can automate monitoring processes and create detailed reports for educational institutions. One of CRM for education, which is available on market is a web application called EduPage, which provides some required features, but in obscured manner. On Fig. 1 you can see example of a visual report.

The aim of this study is to develop an ideal management system for monitoring educational institutions that can automate monitoring processes and create detailed reports. Specifically, the study aims to identify the key features and requirements of an effective management system for monitoring educational institutions; design and develop a management system that can automate monitoring processes and create detailed reports; evaluate the effectiveness of the developed management system in improving the monitoring of educational institutions; make recommendations for the implementation and improvement of the management system in educational institutions.

To achieve our goal, we conducted a literary review of existing educational monitoring management systems. We have identified and analyzed the various functions and functions of these systems, such as attendance tracking, classroom behavior monitoring, and violation reporting. We also looked at the problems associated with monitoring a large number of students and groups. Based on our analysis, we have developed a conceptual framework for an ideal educational monitoring management system. We have identified key components of the system, such as automatic attendance tracking, real-time monitoring of lessons and a mechanism for reporting violations. We also offered an attendance rating system to track the most punctual students. To evaluate the effectiveness of our proposed system, we conducted a pilot study with a small group of students and teachers. We collected data on attendance, lessons and violations committed by students and teachers. Then we created the reports using our proposed management system and compared them with the reports created manually. Overall workflow of the system can be seen of Fig. 2.

The results of our experimental research have shown that our proposed control system is more efficient and accurate than manual monitoring systems. It can automate the monitoring process, track attendance and conduct of lessons in real time, as well as generate

detailed reports on violations committed by students and teachers. Our attendance assessment system also effectively tracked the most punctual students.
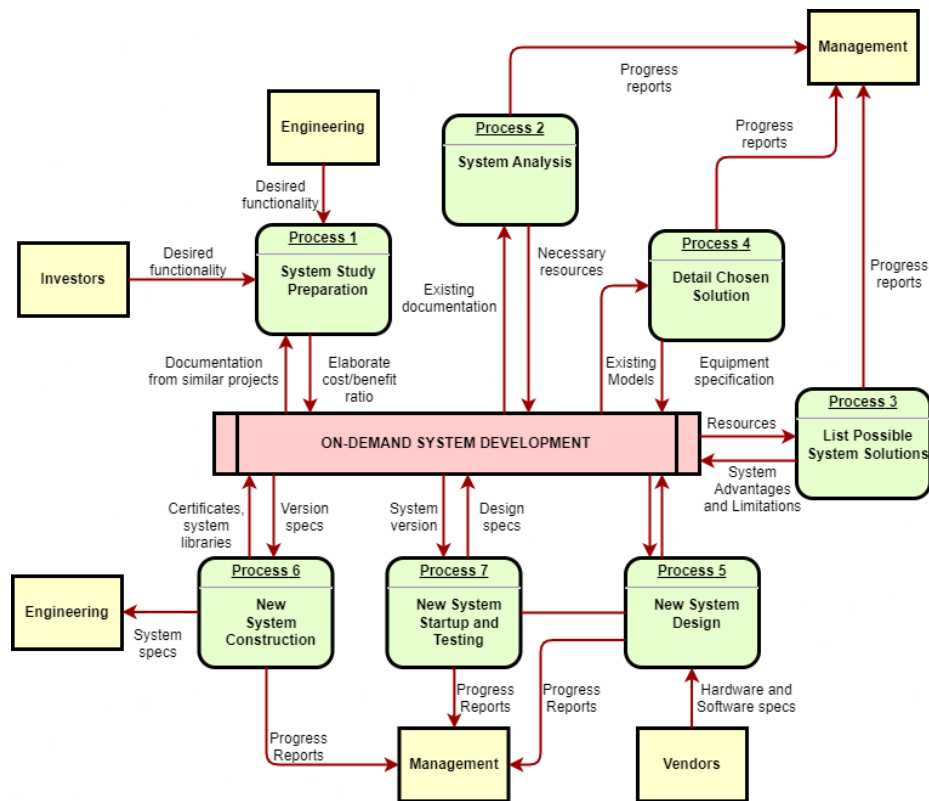

Figure 2

In conclusion, our research suggests an ideal management system for monitoring educational institutions that can automate monitoring processes and create detailed reports. This system has the potential to improve the quality of education and ensure that students receive the best possible education. It is expected that the results of this study will demonstrate the possibility of implementing an automated control system for monitoring educational institutions. It is expected that the system will successfully monitor attendance and conduct of lessons, as well as create summary reports on violations committed by students and teachers. It is also expected to successfully implement an attendance assessment system to track the most punctual students. In addition, the study is expected to identify potential problems with the implementation of an automated management system, such as the need for adequate training and technical support for users. The study may also identify areas where the system can be improved, such as the inclusion of more advanced features such as facial recognition technology to track attendance. By providing a comprehensive and automated system for tracking attendance and conducting lessons, educational institutions can focus on providing a higher quality of education for students and ensuring that teachers meet the required standards.

LITERATURE:

1. **Daradoumis, T., Rodríguez-Ardura, I., Faulin, J., & Martínez-López, F. J.** (2010). *CRM applied to higher education: Developing an e-monitoring system to improve relationships in e-learning environments. International Journal of Services Technology and Management, 14(1), 103-125.*

2. **Dorofeeva, V. I., Motin, A. G., Nikol'skii, D. N., & Fedyaev, Y. S.** (2016). *On the development of the scientific work monitoring system at higher educational institutions. Scientific and technical information processing, 43, 166-173.*

3. **Dugarova, D., Starostina, S., Kimova, S., & Kazachek, N.** (2016). *The system of monitoring education quality and quality assurance at the higher educational establishment in accordance with the criteria and standards of the Russian association for engineering education. Indian Journal of Science and Technology, 9(27), 1-13.*

4. **Kioupi, V., & Voulvoulis, N.** (2019). *Education for sustainable development: A systemic framework for connecting the SDGs to educational outcomes. Sustainability, 11(21), 6104.*

5. **Orishev, J., & Burkhonov, R.** (2021). *Project for training professional skills for future teachers of technological education. Mental Enlightenment Scientific-Methodological Journal, 2021(2), 139-150.*

6. **Поначугин, А. В.** (2020). *Мониторинг качества образования как важный фактор подготовки бакалавров в области прикладной информатики. Вестник Мининского университета, 8(1 (30)), 4.*

7. **Дорошенко, А. А., Вавилова, С. М., Ильинова, Т. Н., Рябинина, Е. И., & Пономарева, Н. И.** (2019). *Критерии и мониторинг качества образовательных услуг. Система менеджмента качества: опыт и перспективы, (8), 283.*

8. **Калдыбаев, С. К.** *Учебные достижения студентов педагогических колледжей как объект оценивания / С. К. Калдыбаев, Г. А. Эсеналиева // Международный журнал экспериментального образования. – 2019. – № 3. – С. 51-54. – EDN PYPSSK.*

9. **Давлетшин, А. Д., & Никулина, Н. О.** (2019). *Использование информационных технологий в компаниях геофизического сервиса. Молодежный Вестник УГАТУ, (1 (20)), 50-53.*

10. **Жакыпова, З. Ж., & Эсеналиева, Г. А.** (2021). *Педагогические условия активизации учебной деятельности студентов средствами контекстных технологий. Alatoo Academic Studies, (1), 52-58.*

11. **Давлетшин, А., Канашин, В., & Никулина, Н.** *Реинжиниринг программного обеспечения для обслуживания клиентов туристической компании. Мавлютовские чтения, 48.*

12. **Erdolatov, S.** (2011, October). *Objectif for students in teaching programming languages at higher education with applications in Java. In 2011 5th International Conference on Application of Information and Communication Technologies (AICT) (pp. 1-4). IEEE.*