

Collaboration between CPU and ASC in the Preparation of Future Teachers

Peter Brečka¹, Monika Valentová²

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Abstract

This paper presents the collaboration between the Faculty of Education at Constantine the Philosopher University (CPU) in Nitra and Applied Software Consultants (ASC), the developers of the school information system ascEdupage. It focuses on the implementation of the system and its importance in preparing future teachers, highlighting examples of educational materials (such as thematic plans, lesson preparations, tests, etc.) that students are introduced to and find relevant for their future professional practice. Additionally, the paper outlines the benefits and necessity of incorporating this platform into the undergraduate training of future teachers. The collaboration serves as an example of successfully integrating modern technologies into the educational system, significantly contributing to the professional development of future teachers and fostering innovation in education.

Keywords: School Information System, AscAgenda, AscEdupage, CPU, Preparation of Future Teachers

1 Introduction

In the digital era, where technology rapidly transforms everyday life, the way we learn and teach is also evolving. In this educational revolution, ascAgenda plays a significant role. It is not just an application but a platform that transforms the dynamics of classrooms, schools, and educational institutions worldwide. This comprehensive school information system offers a wide range of tools for teachers, students, and parents in over 170 countries and across 150,000 schools. The platform enables easy management of school agendas, facilitates communication between teachers, students, and parents, and provides space for interactive learning.

E-Mail: mvalentova2@ukf.sk

¹ Constantine the Philosopher University in Nitra, Dražovská 4, 949 01 Nitra.

E-Mail: pbrecka@ukf.sk

² Constantine the Philosopher University in Nitra, Dražovská 4, 949 01 Nitra.



Currently, ascAgenda is used in preschools, elementary and secondary schools, as well as in basic art schools and some sports clubs, including school clubs for children and various extracurricular activities.

A component of ascAgenda is ascEduPage, a fully integrated school system featuring a worldrenowned scheduling system (EduPage Help, 2024; Karchynskaya et al., 2024), which simplifies the creation and management of school websites. EduPage is a cloud-based school facilitates management system that communication between the school/teachers/administrative staff and students/parents. Thousands of schools use ascEduPage (hereinafter referred to as EduPage) as both a website and an internal school portal, where students, parents, and teachers can work with electronic grade books, view schedules, and manage substitutions without the need for programming. Perhaps the greatest advantage of the EduPage portal is the comprehensiveness of its services and features in one place and under one access password.

2 Key Features of Edupage

The features of EduPage are diverse, ranging from basic school agenda management to electronic grade books and e-learning with the ability to assign tasks and evaluate students through tests, etc. Students and parents have easy access to this information through an online interface. It allows teachers to quickly input grades and assessments, which are immediately available to students and their parents, simplifying and streamlining the evaluation process.

The platform also provides various tools for effective communication between teachers, students, and parents. This includes chat, emails, and announcements that help keep all parties informed. EduPage offers space for online courses, testing, and exercises, enabling students to learn and practice material outside of traditional classroom hours. Teachers, students, and parents have access to educational progress tracking through various statistics and reports provided by EduPage.

The advantages of EduPage can be summarized as follows:

- Streamlining Processes: EduPage facilitates the management and organization of school agendas for both teachers and students.
- Improved Communication: The platform provides tools for effective communication among all involved parties, increasing engagement and involvement.
- Flexibility in Education: EduPage allows access to educational materials anytime and from anywhere, supporting flexibility in learning.
- Transparency: With the electronic grade book and assessment system, the evaluation process is more transparent and accessible to students and their parents (Pisoňová et al., 2021).



EduPage offers numerous features, making it clear that targeted preparation of future teacher students is necessary for its full utilization.

2.1 Preparing Future Teachers to Work with EduPage

In connection with preparing teachers to work with EduPage, ASC s.r.o. organizes numerous training sessions and webinars. Despite sufficient support, there have been requests from practicing teachers to our Faculty of Education at CPU in Nitra to include a course in teacher training that focuses specifically on preparing teachers to work with EduPage. Teachers in schools do not have the opportunity to test specific features without actually sending the activity to students or publishing content that they only want to send as a test. This lack of access to training tools can hinder their ability to fully utilize the potential of EduPage in the teaching process. Furthermore, even though training sessions exist, many teachers still desire systematic and deeper preparation as part of their formal pedagogical education. Integrating a course focused on working with EduPage into the teacher training curriculum would effectively meet these needs, allowing them to better understand and utilize technological tools in their educational practice.



Figure 1: Login to the CPU Training School

Given this demand, during the latest comprehensive institutional accreditation of Constantine the Philosopher University in Nitra, the Department of Technology and Information Technologies at the Faculty of Education introduced the course "School Information Systems." Starting from the 2022/23 academic year, all students preparing for the teaching profession must complete this course as part of the pedagogical-psychological and social-science foundation of teacher education. Part of the course content is dedicated to working in the EduPage environment, where students have their own access accounts and act in the role of a teacher. The accounts, access, and initial contact sessions with the EduPage web interface are facilitated by a representative from ASC s.r.o., who also conducts the initial workshops



(Figure 2). During these workshops, students are introduced to the basic modules of ascAgenda and the EduPage features focused on educational activities and basic pedagogical documentation.



Figure 2: Student Workshop with ASC s.r.o.

Students become familiar with the basic activities and functions of EduPage, ranging from creating lessons and recording them in the class register to tracking attendance, creating thematic plans, and developing tests. They learn how to assign online tests, use different types of questions, and explore various student assessment options, including the development of comprehensive e-learning lesson plans. (Figure 3). They also verify specific functions from a student's perspective using the EduPage mobile application.



Figure 3: Students Familiarizing Themselves with the EduPage Environment

2.2 Preparation of Educational Materials



After completing the initial workshops, students focus on creating their own time-thematic plans and preparations within their subject areas (Figure 4). They also concentrate on developing content for selected topics, aiming to utilize the full potential of the platform. They focus on effectively using various multimedia, a wide range of tasks, and leveraging pre-existing content available in the EduPage library under the Standards.

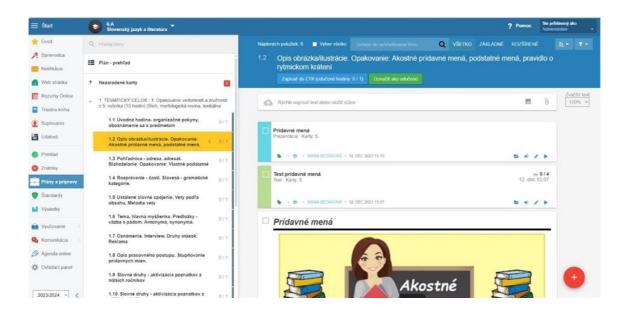


Figure 4: Example of Creating Time-Thematic Plans and Preparations

The materials include:

- Presentation: This involves creating a presentation within the EduPage environment, where widget elements can be used to prepare a very simple presentation, similar to Microsoft PowerPoint. Widgets allow for the insertion of images, tables, etc. This presentation can be displayed on an interactive whiteboard or assigned to students for viewing.
- Test: This involves creating tests, where each card contains one test question. The types of test questions available in EduPage include:
 - ABCD,
 - Fill-in-the-blank,
 - Ordering descending or ascending,
 - Blind map,
 - Categories, groups categorizing individual terms into groups,
 - Matching matching image to image, image to text, or text to text,
 - Open question.

The advantage of creating tests in EduPage is the possibility of automatic grading. After evaluating the test, it is possible to record the grade. The only exception to automatic grading is the open question, which must be manually corrected and scored by the teacher.



When creating tests, it is recommended to first prepare individual questions. Later, these prepared questions can be easily compiled into a test. The advantage of this approach is that the questions can also be used in other materials and easily modified as needed. Teachers can prepare a test in advance and assign it to students later. Tests can be assigned for online completion, allowing students to work on them using a computer, tablet, or mobile phone. EduPage materials have a responsive design, meaning they adjust to the screen size. As mentioned earlier, a significant advantage of online tests is that the system automatically grades closed questions. Teachers can also print the prepared test, distribute it to students, and correct the tests manually. EduPage can also assist teachers with grading printed tests. The results are stored in EduPage, allowing students to see where they made mistakes. The system processes the results by calculating the student's success rate based on the ratio of points obtained to the maximum possible points or by individual questions, making it easy to identify both easy and difficult questions. If performance standards from the State Education Program (ŠVP) are linked to the questions, teachers can also see which topics (standards) students have mastered and which they are struggling with. (Figure 5). EduPage allows for easy creation of question modifications, meaning the same type of question but with different numbers, for example. Such similar tasks can be grouped into a question pool. Using question pools, teachers can create tests with different variants to minimize student copying. Test variants can be created for both online and printed tests.

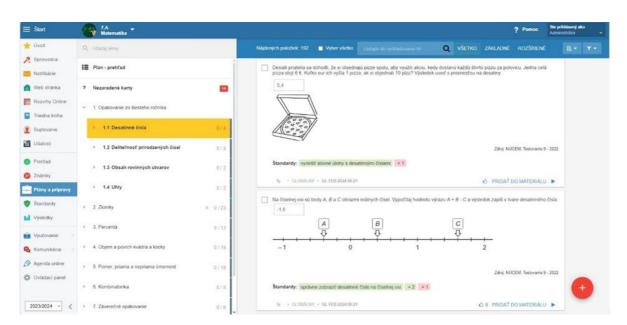


Figure 5: Example of Test Task Creation by Students

 Homework and Projects: The advantage of assigning homework and projects in EduPage is that students can see the submission deadline. Settings allow for an automatic note to be added if homework is not completed. If the homework or project does not meet the teacher's requirements, it can be returned to the



student for revision. Another benefit of this module is that students can upload their work in various file formats, such as images, photos, PDF files, or HTML files.

Besides the functions related to preparing materials and tests, EduPage also includes many other modules that we, unfortunately, do not have time to cover in our students' training. The system can track the attendance of both students and teachers, automatically calculate absences and tardiness, and regularly inform parents. For teachers and schools, this solution is also advantageous for substitute teaching. Once the information about a change in the teacher is entered into the system, it appears everywhere it is needed. The system can also integrate a canteen module, which not only offers the menu but also allows for meal sign-ups and cancellations, payment tracking, meal record-keeping, and order management.

EduPage also handles various payments that need to be made throughout the school year. Besides enabling online payments, the system allows for payment tracking and correct assignment to the student by importing payment data directly from the bank. The system also supports electronic submission of excuse notes, applications, registrations for seminars, clubs, olympiads, and other events. For school administrators, the aScOrbit module is available. This tool provides administrators with data on the schools under their jurisdiction without requiring any imports, thus reducing administrative burden. Particularly interesting for administrators is the attendance information, whether for "free lunch" programs, truancy, or declaring flu breaks. Based on attendance data, aScOrbit calculates the number and amount needed to pay for lunches and the amount to collect from parents. Administrators do not need to regularly request data from schools or check which schools have yet to provide data. They have access to all necessary information for their schools at any time (aScOrbit pre zriad'ovatel'ov, 2024).

3 Conclusion

As the significance of technology in education continues to grow, EduPage is likely to play an even more substantial role in the future. Ongoing development and innovations in this area will allow the platform to offer a broader spectrum of features and tools that better support modern educational needs. EduPage already provides an innovative and efficient approach to education with the potential to fundamentally transform the future of learning worldwide. With the increasing use of digital technologies in schools, EduPage is becoming an essential tool for teachers, students, and parents. The platform enables efficient management of educational processes, communication among all stakeholders, and customization of teaching to meet individual students' needs. This capability allows teachers to more easily monitor their students' progress, identify areas where they need assistance, and offer personalized learning plans. Furthermore, EduPage continually adds new features that reflect current trends and needs in education. For example, integration with various online tools and applications that support interactive and practical learning can significantly enrich the educational process.



Virtual classrooms, automated task assessment, digital portfolios, and various analytical tools are just some of the features that teachers and students can use to improve the efficiency of teaching and learning.

EduPage also supports the concept of lifelong learning, as it allows students to access learning materials and resources anytime, anywhere. This approach is crucial today, as education is no longer confined to classrooms but occurs continuously throughout life. Last but not least, the EduPage platform has the potential to overcome geographical and cultural barriers, contributing to equal educational opportunities for all students regardless of where they live. International collaboration and knowledge exchange can enrich educational systems worldwide and create a global community of teachers and students who learn and grow together.

For these reasons, it is essential that students—future teachers—are thoroughly prepared to work with EduPage. Preparing future teachers for EduPage is crucial not only for their personal professional growth but also for the overall improvement of the quality of the educational process. Teachers who are technically proficient and capable of using modern tools will be better prepared to motivate and inspire their students, thereby contributing to their success and development. Integrating EduPage training into teacher programs can also boost future teachers' confidence when entering the workforce, reducing the stress associated with adapting to new technological demands. Moreover, this preparation fosters a culture of continuous professional development, which is essential in today's dynamic educational landscape.

Thorough preparation of future teachers to work with EduPage is key to effectively managing their future profession, positively influencing the quality of teaching, administrative processes, and the overall operation of educational institutions.

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References

EduPage Help. (2024, June 14). https://help.edupage.org

Karchynskaya, V., Kopcakova, J., Madarasova Geckova, A., Katrusin, B., Reijneveld, S. A., & de Winter, A. F. (2024). Barriers and enablers for sufficient moderate-to-vigorous physical activity: The perspective of adolescents. *Plos one*, *19*(2).



Pisoňová, M., Papcunová, V., Brečka, P. & Selecký, E. (2021). Manažment vzdelávania. Teoretické, empirické a praxeologické aspekty riadenia vzdelávacích inštitúcií. Wolters Kluwer, Bratislava., 284. 978-80-571-0382-0.

aScOrbit pre zriad'ovateľov. (2024, June 14). https://blog.ascagenda.com/orbit/.