

# Web School Diary

**Krasimir Harizanov and Kristiyan Konstantinov**

Konstantin Preslavsky University of Shumen, Shumen, Bulgaria,  
emails: kr.harizanov@shu.bg, fiksit@abv.bg

## *Abstract*

*The article presents the role of web school diaries in organizing and conducting training in the Bulgarian school. Some online technologies have been explored to enable the preparation and implementation of a web school diary, in keeping with modern requirements. It is proposed that the web-based electronic diary should be created in accordance with the requirements of contemporary Bulgarian education. Here are some of the web app's capabilities can be used to evaluate students, web plans and assignments, as well as a parent's announcement of changes made during the school day. Here are some screenshots visualize the main features of the application.*

**Keywords:** web school diary; education; learning; e-learning

## 1 Introduction

The good opportunities that information technology offers are the reason for their rapid development and application in all spheres of life. One of the areas in which communication technologies are most widely used and best-valued is education.

Since the age in which we live and develop is the age of technology, the methods by which students are valued and on which their assessments are made are constantly changing in order to improve. Evaluating and visualizing ratings using information technology makes it easier for both teachers and parents to work.

Studies conducted in the field of education show that information technology and its implementation are of paramount importance as it informs and facilitates teachers, students and parents.

The key feature of the web school diary is the facilitated opportunity to obtain information that is essential in working with students for both teachers and parents. It is the development of this kind of technology that assists and structures the work of teachers, and at the same time, in their hectic daily lives, parents have the opportunity to control their children by seeing their results at school. With the proposed software, we tried to separate the most commonly used features and post-graduate profiles related to school life. The interface is built with the latest versions of HTML and CSS, enabling it to adapt to any mobile technology. The processing of the information is realized with the PHP language and the database is stored in MySQL.

A feature of the web school diary is awareness. Creating such a web application not only facilitates the work of teachers but also encourages children to make more effort. In this way, children become more responsible and consistent in learning, teachers do not burden themselves with additional work, but easily and quickly introduce ratings and absences, and parents have control over their children by getting a true assessment of what level the child's education is theirs.

The web school diary is an integral part of the life of teachers, students and parents. It is a small part of the changes that have occurred in the education system. It is developing at a rapid pace, with the main goal of improving and more productive work. Creating a new system for assessing and presenting knowledge or choosing a ready system requires decisions to be made by looking at relevant theoretical foundations.

Depending on their capabilities, there are currently several web school diaries integrated into the learning process [1] and [2] (see Fig. 1 and Fig. 2). These online applications provide access to assessments, messages, information about the school or teachers, and a description of the annual curriculum. Because of their specificity, platforms also have their positive sides and limitations. More common problems include funding, logon loss, limited features, pending authorizations, unclear management, and more.

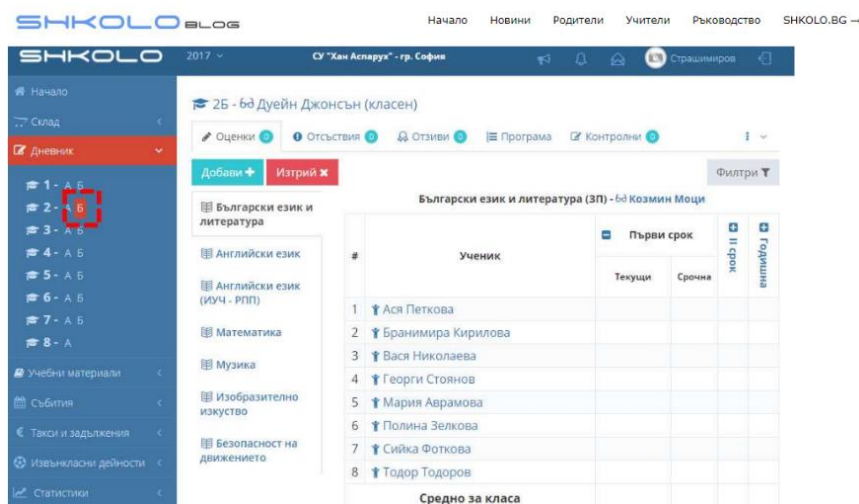


Figure 1: Web school diary – SHKOLO.BG

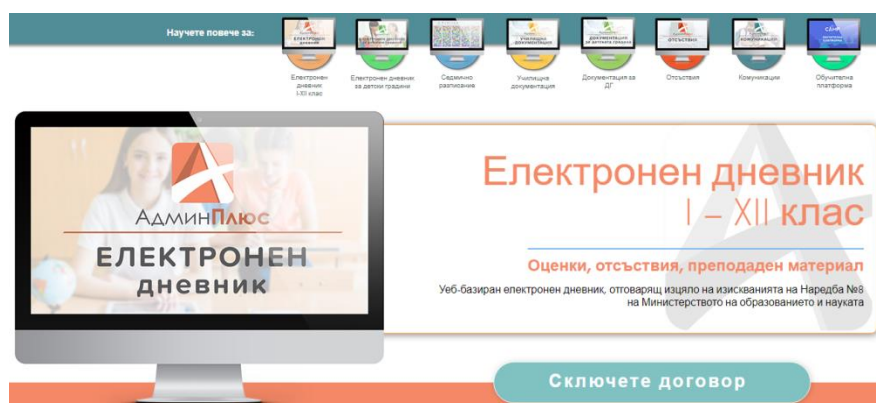


Figure 2: Web school diary - ADMIN PLUS

This paper offers an online web diary designed to integrate into the school administration, allowing quick and easy servicing of key features of web school diary functions. The application has its own installation so it can be installed on web hosting at the request of the school management.

## 2 Web School Diary

The HTML 5 and CSS 3 languages are used to visualize the interface, making application also available on mobile devices. The school information database is MySQL type. One of the most widely used web-based applications. The functional part of the application is realized through the PHP language script, widely used and preferred for dynamic content applications. The proposed web school diary has three main levels: Administrator, Teacher, and Parent, each of which has different levels of access to the application and the format of the information visualization.

The administrative role in the web school diary is designed to provide the necessary data those teachers, parents or school administration should work with. This profile features the most features, such as class and class introductions, lecturers, news, as well as many associations between syllabi, out-of-class activities, teachers and students.

One of the important functions of an administrator is to maintain an up-to-date list of teachers and their information so that parents have information, which teacher teaches in what discipline they teach. The Administrator can add (Figure 3) at any time of the school year or remove the teachers, depending on the changes in the school organization, also update their profiles.

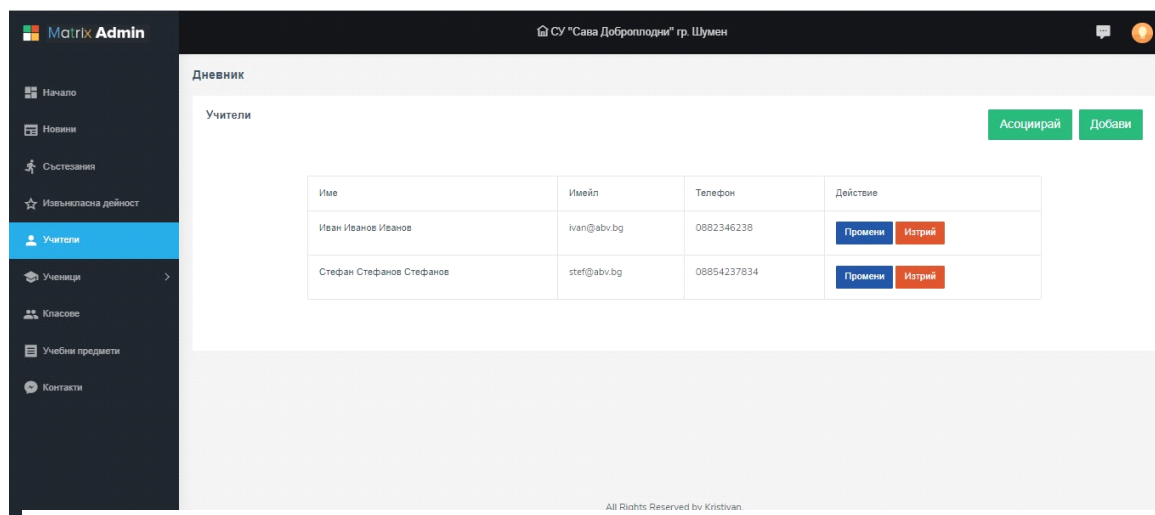
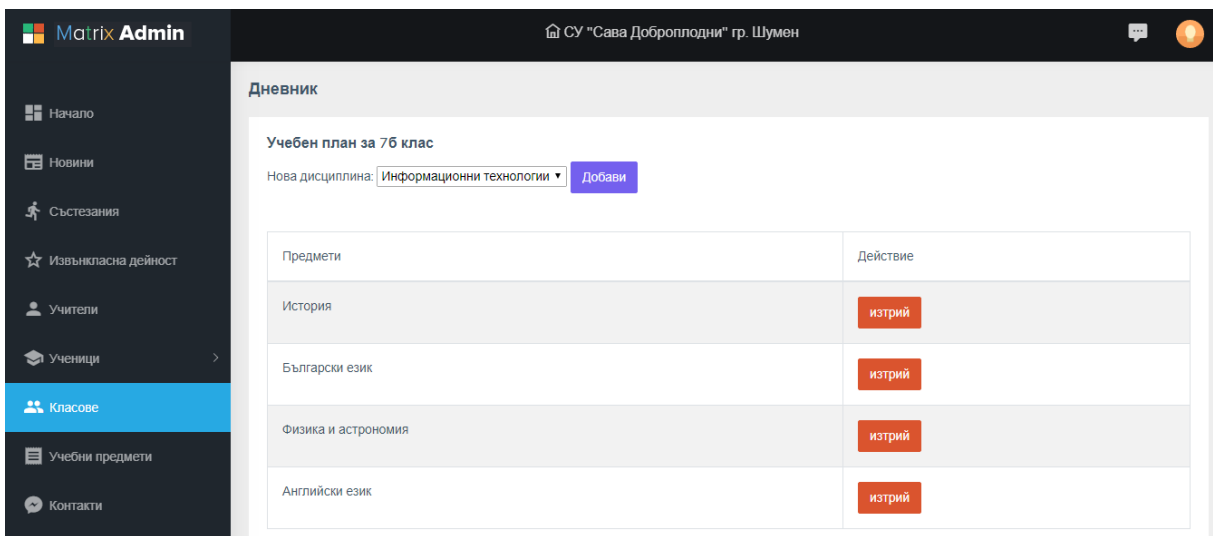


Figure 3: Add, edit, or delete a teacher

The "Teachers" menu also includes the "Associate" button. Its function is that each teacher should be associated with the subjects and classes he / she will teach. During the school year, it is very often necessary for a teacher to replace a colleague within a certain period of time, which requires associating the new teacher with the classes in which he / she will teach. Here, it is very easy to associate a teacher, discipline and class, which also affects the introduction of assessments and absences.

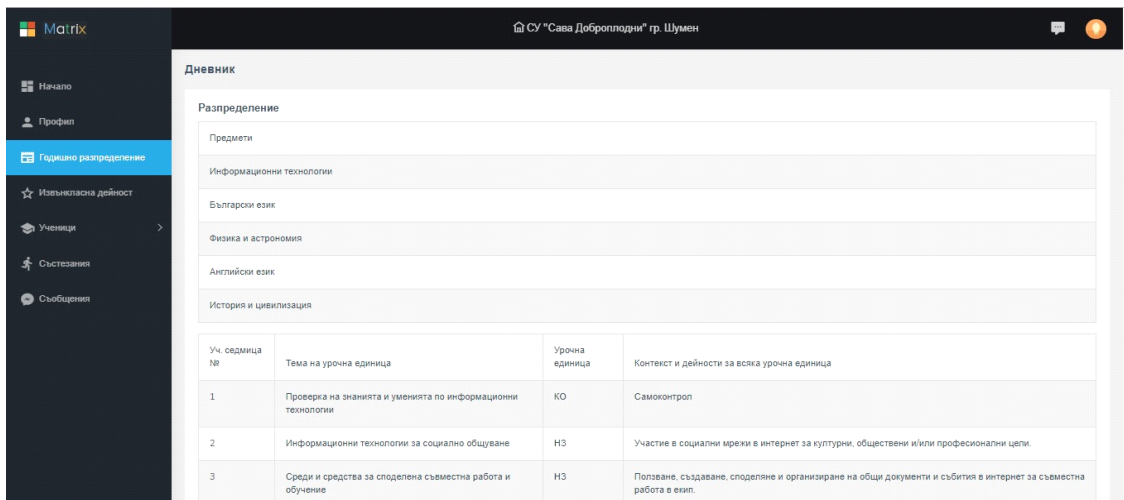
Another function of an administrator is the introduction of the disciplines. He has to introduce, for each school year, the classes in the school. The curricula for the upcoming academic year are drawn up for the entered classes and profiles. Thus, each class has associated teaching subjects and lecturers, Fig. 4.



**Figure 4:** Associating teaching subjects to a class curriculum

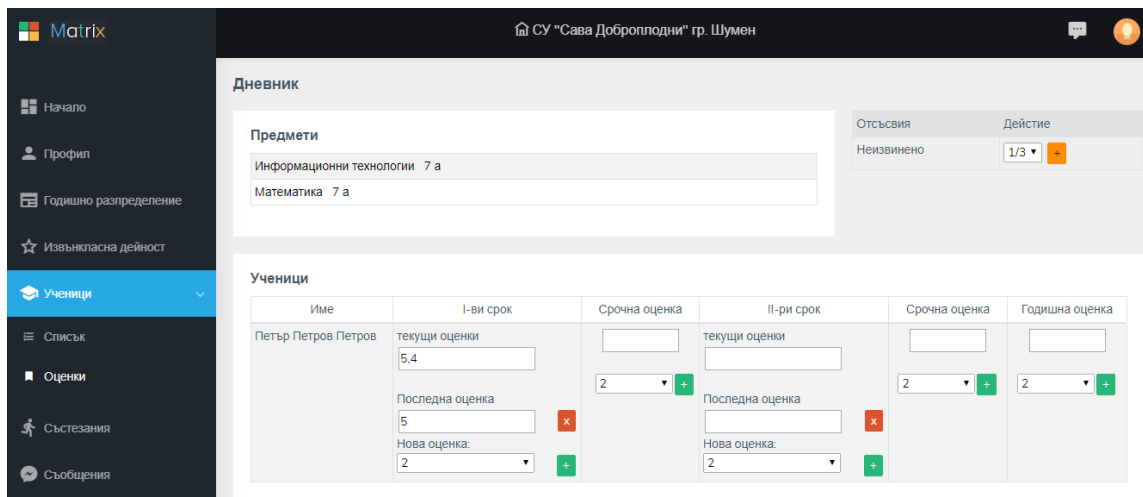
Teacher account is related to the daily introduction of teacher's notes, assessments, messages and absences to student profiles. Here are the main features that are needed for their implementation. Any changes to the learner's student profile are updated by the active lecturer and an email message notifies the parent of the changes.

From the "Annual Distribution" menu, each teacher draws up the topics, the type of lesson, the concepts and knowledge to be studied in each term unit. In practice, one teacher in a particular discipline can teach in several classes, requiring the use of the same thematic content to be repeated. Here, the thematic distribution can be associated with the classes specified by the lecturer without having to re-enter it, Fig. 5.

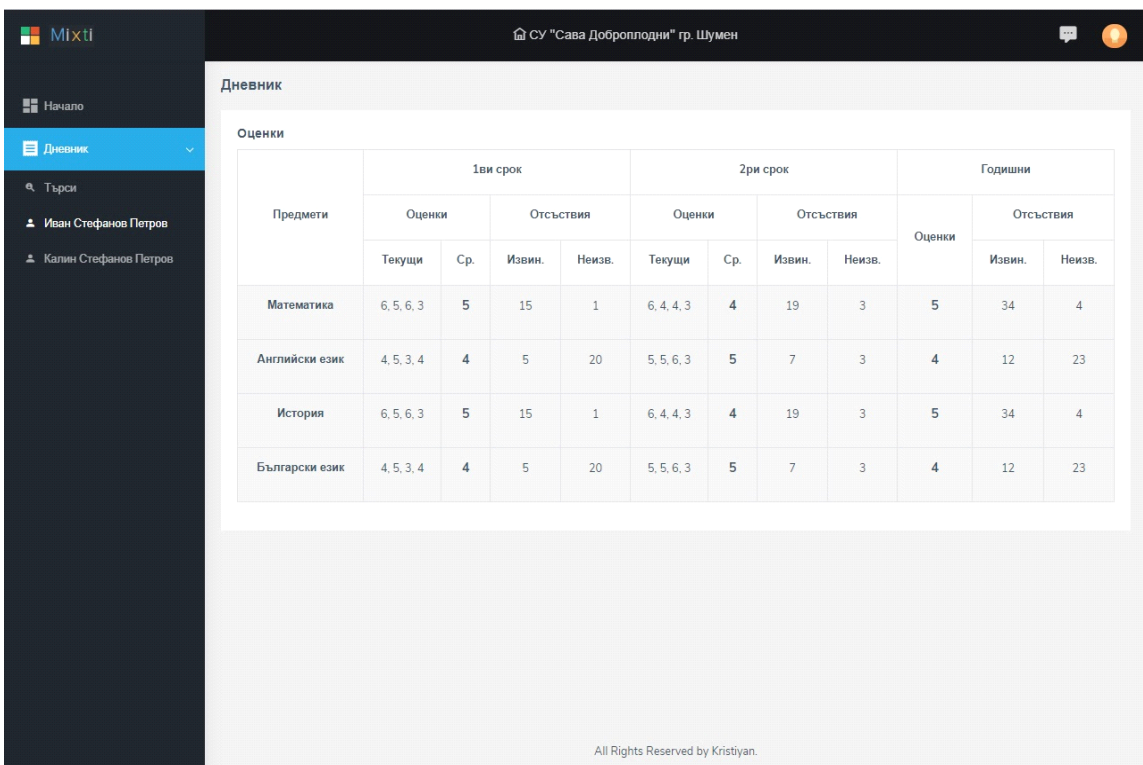


**Figure 5:** Creating and associating a thematic plan with a school discipline

One of the most important functions of a teacher is the introduction of assessments and absenteeism of students during the sessions. From the Students-> Estimates menu, the teacher chooses which of the subjects he / she is taught wishes to introduce an assessment or an inexistence absence, Fig. 6 and Fig. 7.



**Figure 6:** Entering assessments and absences



**Figure 7:** Student profile view

In the field "Current assessments" you can see all the introduced assessments so far in the chosen discipline. Thus the teacher sees the actual assessments up to the current date. The "Final Rating" area is provided for cases where the teacher would like to delete the last introduced grade. If an evaluation of a certain timeframe is introduced, then the "Final Assessment" and "New Assessment" areas will remove and become inaccessible the possibility, after a timely assessment, of editing the current grades from the school term. The time rating can be edited if the old one is first deleted and a new rating is inserted in its place.

The database also provides a list of qualitative assessments for children with SEN or those who are exempt from certain disciplines.

The last role provided in the web school diary is that of the parent. His account is pre-created by the administrator of the diary with a password he or she has chosen or has been entered ex officio. After the initial login, the parent could change their data so that they are up to date and the system can send messages to it.

The next step from the parent's initial actions in the web school diary is to identify and associate which pupil / student he / she is a guardian. For this purpose, he / she must choose from all classes and classes the student's class. When the specific class is indicated, a list of all students is displayed on the screen. From the "Select" button, the selected student associates with the parent profile, and he will no longer appear for choice to other parents in the class. If the parent has made a mistake, the "Unsubscribe" button can unsubscribe the student from your account.

From the "Diary" menu, the parent can see all associated students with it and their current status as regards assessments and absences. For each student selected from the journal, a list of the subjects in his / her curriculum, current grades, and the number of excuses and excuses for each subject are displayed.

### **3 Conclusions and Future Work**

Online web diary designed to integrate into the school administration, allowing quick and easy servicing of key features of web school diary functions, is presented.

It is envisaged to develop new functionalities related to the export of student files, the introduction of DZI (State Matriculation Exam) and NVO (national exams) assessments, and the issuing of certificates for completed specialization.

### **Acknowledgements**

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### **References**

[1] <http://shkolo.bg>.

[2] <https://login.adminplus.bg/>

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