

# SCHOOL MANAGEMENT SYSTEMS

## This module aims to:

- Explain the concept of school management system
- Present the most widespread information (management) systems in the Czech school environment
- Identify the main features of the online classbook
- Explore the main functions of electronic gradebook

## What digital skills does the module support for teachers?

- Continuing professional development
- Teaching
- Student leadership
- Analysis of learning outcomes; feedback and planning

## Introduction

When you enter a school, you will be introduced to a large number of previously unknown objects. You will know that they exist, but you will only be able to experience their concrete form when you are in the reality of the particular school you are entering as a new teacher. These are mainly people (your pupils, colleagues, school staff, pupils' parents...), things (the school and its equipment, textbooks, tools...) and systems (school rules, curriculum, school communication strategy, school information system...). This module introduces you to a key component of the school environment that has significantly facilitated and streamlined the management, administrative and communication processes of the school, especially in the last 20 years - school management systems, of which electronic classbooks and electronic gradebooks are an integral part.

## School management system

An information system can generally be understood as a set of people, methods and technical means for collecting, storing, analysing and presenting data for the purpose of providing information to a variety of users in different professions. School management (information) systems (SMS), understood in a narrower sense (i.e. SMS as software), most often provide for the secure storage of information relevant to the school's activities, its further processing for school management, for communication within the school, as well as with parents and other authorities. SMS should create conditions for faster, more flexible and more effective decisionmaking by school management.

The most common school management systems include the following modules:

### **School registry and administration**

- Electronic gradebook (classification, information module for parents)
- Electronic creation of timetables
- Substitutions
- Electronic sorter
- Attendance system
- Pupil and staff records

### **Food system**

### **Economics, accounting, asset accounting**

### **Management control** - legislative framework

### **Educational network** - learning management system (LMS), curricula, library system

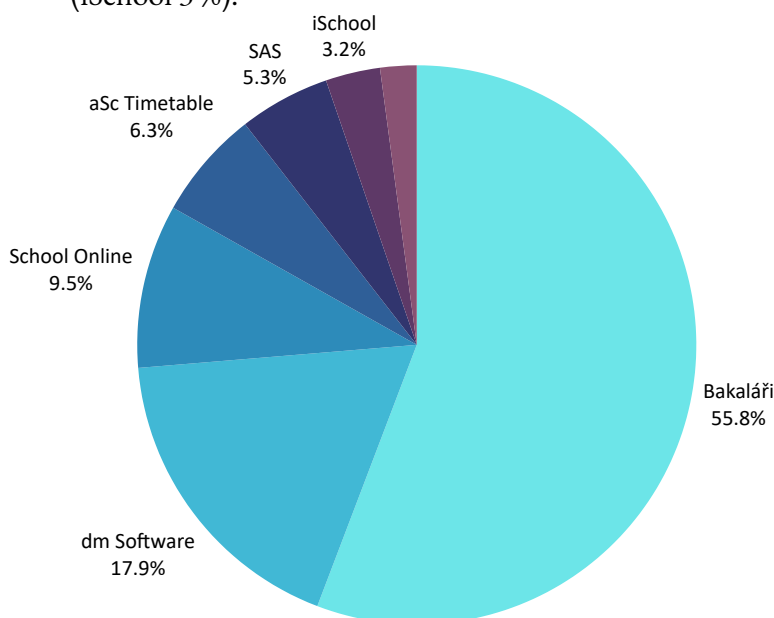
**File service** (document management, document lifecycle)

**Email communication**

**Access, rights and roles of IS users**

It may be surprising to learn that 95.25% of Czech schools (1) used some kind of electronic management (information) system to manage school agendas in 2017. The cumulative percentage will be even higher today, but official information of this kind is not traceable, so we are relying on slightly outdated data.

Thanks to the survey by the Czech School Inspectorate (2), we also know that by far the most widespread system is Bakaláři (Bachelors, 53 %), followed by dmSoftware (17 %), Škola OnLine (School online, 9 %), aSc Rozvrhy (Sc Timetable 6 %), SAS (5 %) and iŠkola (iSchool 3 %).



*The most widespread management systems in schools in the Czech Republic in the year 2017*

It is also worth mentioning here that many users (teachers, principals...) of these IS complain about their outdated information architecture, unnecessary complexity, lack of clarity and lack of usability. In general, these IS are not very intuitive to use, although their producers usually use this as a selling point.

1) <https://ondrej.neumajer.cz/i-digitalizace-ceskeho-skolstvi-ma-nektere-vyborne-vysledky/>

2) <https://www.csicr.cz/cz/Aktuality/Tematicka-zprava-Vyuzivani-digitalnich-technologie>

## Selected information systems of Czech schools

### Bachelors

URL: <https://www.bakalari.cz/>

The most widespread school management system contains, for example, the following modules: pupil and staff records, school register; online gradebook; timetable, substitution, school events plan, graduation timetable; classbook; topic plans; entrance exams, inventory, etc.

Its comprehensiveness is also evidenced by areas that you might not expect at first glance - for example, in response to the COVID-19 pandemic, schools were given the opportunity to distribute to pupils and parents the information they needed to return their children to school, to keep records of pupils and teachers who tested positive and, in the case of teachers, vaccination data. There were also the reports needed to organise the testing in terms of presessional teaching or printing test certificates.

Many larger schools also use the library module, which catalogues all the books in their collection, but also allows them to manage loans themselves or print barcodes to identify the books in their collection.

### School online

URL: <https://www.skolaonline.cz/>

Its main advantage is that it is a cloud service - its installation does not burden the school's servers, and the school does not have to worry about managing and updating the whole system. The downside to this is that if the service goes down for a while, the school has no control over it and has to wait for it to come back up, something that some teachers have complained about in the case of School Online.

In addition to the traditional modules described above, the online school includes, for example, the possibility of keeping an overview of its outdated information architecture, unnecessary complexity and lack of clarity, and a high degree of user-unfriendliness. In general, these are IS that are not entirely intuitive to use, although this is usually used as a selling point by their producers. In educational work in the school's after-school club and club. Thanks to data sharing with the school registry, educators do not have to worry about updating contact details and only manage student departures.

# Electronic classbooks

Electronic classbooks are a common part of the school environment and it can be assumed that in the coming years we will rarely encounter the classic paper classbook. In the electronic classbook (which has been part of compulsory school documentation for many years), the teacher in both primary and secondary schools records, as in the paper classbook, the material covered, attendance, substitutions and other information. Most of the available solutions are relatively stable, secure, simple and clear. Certainly, with the advent of electronic notebooks, some of the phenomena that characterise the school environment have disappeared:

- Investigating the loss of a textbook ;-)
- The tedious counting and checking of hours taught per term or school year, absences in class, absences of individual pupils, absences of certain pupils in subjects and other data

Main functions of the electronic classbook:

- Registration of subjects and curriculum
- Registration of absences
- Attendance and examination records
- Registration of projects
- Registration of events, courses
- Overview of missed lessons - excused, unexcused (in individual weeks)
- Overview of missed lessons in courses (number of lessons and percentage statistics)
- Overview of lessons taught by teachers in certain periods (lessons and their fulfilment)
- Print all reports as in a classic class book (for archiving)
- Online access to absences for parents
- Possibility for parents to set up e-mail notifications of student absences
- Online access to absences for pupils
- Access all functions from your computer, tablet and mobile phone

t: Please contact in bootstrapwebtemplates.com

School Management System © 2023 (Version: 2.0)

Powered by: Bootstrap Web Templates

# Electronic gradebook

The electronic gradebook has inherited the basic features of the classic gradebook and added some advantages. The teacher writes grades, notes, praise or other messages in it. The e-gradebook can usually be accessed by the teacher via the Internet at any time and from anywhere, and the parents of the students can check the grades at any time. In addition to grades, students and parents can see messages in the gradebook. Parents can also send messages to the school. This makes communication much faster than the legendary exchange of written messages between parents and teachers in paper gradebooks. There is also no risk of the message not reaching the recipient.

Electronic pupil records usually allow for various developmental, organisational and communication functions according to the needs of the school and teachers. If the functions are used appropriately, e-gradebooks are quite user-friendly. They allow a combination of different types of assessment, varied information about the content and objectives of teaching and school events. Parents can be involved not only through the progress monitoring mentioned above, but also through surveys, questions about the content of school work or about their child's own performance.

The main function of the electronic gradebook:

- entry of marks, weighted average
- recording verbal evaluation (praise, comments)
- listing of grades and verbal evaluation (printable)
- communication with parents in the form of messages
- communication with the school in the form of messages
- online access to classification for parents
- for parents, the possibility of setting up e-mail notifications about the student's classification
- online access to classification for the student
- access to all functions from your computer, tablet or mobile

The screenshot shows the JumpRope e-gradebook interface. The course is 'ALGEBRA 9 TRM 3 OF 3 (1)' and the unit is 'Intro to Graphing'. The interface includes a navigation menu on the left with 'Assessments' and a list of activities like 'Intro Classwork', 'Quiz 1', 'Graphing Homework', etc. The main area displays a table of student performance with columns for 'Academic' and 'Character Total'. Each student's row includes a progress bar and numerical scores for various skills and totals.

	I can plot points on a graph.	I can write equations to model situations.	I can use a graphing calculator.	Academic Total	I can complete my work on time.	Character Total
<b>Class Average: 3.2</b>	3.2	3.3	3.1	3.2	2.6	2.6
<b>Overall Mastery: 3.2</b>						
Abernathy, Garrett	3.7	3.0	4.0	4.0	3.7	1.0
Alcock, Amanda	3.0	2.0	4.0	3.0	3.0	4.0
Aranda, Caligula	3.0	3.0	4.0	2.0	3.0	4.0
Bergeron, Clint	2.7	3.0	2.0	3.0	2.7	4
Campos, Charles	4.0	4.0	4.0	4.0	4.0	1.0
Cedillo, Paulo	2.7	1.0	4.0	3.0	2.7	1.0
Diaz, Dimitri	2.0	4.0	1.0	1.0	2.0	2.0
Fajardo, Fulco	2.3	2.0	3.0	2.0	2.3	3.0
Garica, Araxi	3.7	4.0	3.0	4.0	3.7	3.0
Gomez, Serafin	3.7	3.0	4	4.0	3.7	2.0
Humiston, Lauren	2.7	2.0	2.0	4.0	2.7	1.0
Limon, Calquin	3.0	4.0	2.0	3.0	3.0	3.0
Mcdonald, Edward	3.3	2.0	4	4.0	3.3	1.0
Mireles, Sulamita	3.7	3.0	4.0	4.0	3.7	1.0
Moreau, Daniel	3.0	4.0	2.0	3.0	3.0	4.0
Powell, Dong	3.7	4.0	4	3.0	3.7	3.0
Richard, Clara	4.0	4.0	4	4.0	4.0	3.0
Robles, Corin	3.3	4.0	4.0	2.0	3.3	4.0

JumpRope e-gradebook