Digital
Facilitator
Trainer Role

DIGITAL TOOLS AND BEST PRACTICES

IN THE USE OF GAMIFICATION, DATA ANALITYCS AND ARTIFICIAL INTELLIGENCE IN EDUCATION

TURKEY RESEARCH REPORT

DIGITAL FACILITATOR TRAINER ROLE

RESEARCH REPORT TÜRKİYE

Cooperation for innovation and exchange of good practices

VET – Vocational Education and Training

DigiFacT

Information

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Derivable author	Osmaniye Il Milli Eğitim Müdürlüğü, Türkiye

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National Report Turkey

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Best Practices of using AI, gamification, and data analysis in digital education

Digitalization in Turkey started in 2003. Since 2010, especially e-government applications; all public institutions, all universities and all municipalities have been digitised. In this way, all services are done online and all transactions are recorded. Accordingly, the number of services provided is increasing day by day and new solutions are integrated into the systems.

However digitalization in education in Türkiye started in 2007 with the activation of the MEBBIS system.

MEBBİS[1] (Ministry of National Education Information Systems is a school management information system web software that was launched by the Republic of Turkey Ministry of National Education in January 2007. It is a system that includes the entire process from the registration of a student to school until his/her graduation. It is developed by the Information Processing Department and covers all electronic services offered by the Ministry of National Education.

In the e-school system, student registration, transfer procedures, grade entries, absenteeism procedures, exam information, application and preference processes for centrally held exams (LGS, AYT, TYT, etc.), document processes (appreciation, thanks, honor, etc.), weekly course program entries, received documents, e-score Card, branch written averages, announcements and information entries through many modules.

Apart from the e-school module, there is the e-school Parent Information System (e-school VBS) opened for parents to monitor the school status of the students. In this system, students' absences, course schedule, behavior grades, exam dates, announcements made by the school, entrance documents of central exams or preference results can be followed by answering a few security questions after entering the Identity Number and school number through this system.

Many people who have a role in education thanks to MEBBİS teacher input; teachers, principals, administratives staff, students and parents can log into the system. And for this just enter the address mebbis.meb.gov.tr. The system can be accessed after the specified user name, password, security code. Through this system, individuals can perform e-investment transactions, personnel transactions, public education transactions, e-school, e-mobile, open education institutions transactions, e-academy transactions, e-dormitory transactions, e-scholarship transactions and paperwork.

You can enter the Ministry of National Education Information Systems with your username and password. If you do not have a username and password, you cannot enter the system. You can obtain this information from the school administration where you are affiliated.

EBA: Eğitim Bilişim Ağı

EBA[2]: Eğitim Bilişim Ağı or EBA is an educational content network in Turkey, founded by the Ministry of National Education. The site is designed and run by the Innovation and Educational Technologies General Directorate, which is affiliated with the Ministry. The purpose of the network is the integration

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[1] https://mebbis.meb.gov.tr/

[2] www.eba.gov.tr

of technology to education when required, and the network gives online access to course materials to teachers and students under the FATIH project. Parents and teachers can also access EBA.

Educational material is uploaded to eba.gov.tr categorically and the contents have expanded throughout the years; especially during the Covid-19 period. In March 2020, when the Covid-19 pandemic started in Turkey TRT EBA TV was founded as a collaboration between TRT and EBA for primary, secondary and high schools on three different TV Channels to provide students education from home.

EBA: Eba is a social ethics platform prepared by the Ministry of National Education. It provides great support to education by giving free lessons to all students. It is the abbreviation of Education Information Network.

With this system, communication between teachers has become easier. EBA provides more convenience to students than it provides to teachers. A student entering EBA can access a very rich content. The student who enters EBA can easily access the notes, presentations and images shared by other students and can benefit from these materials as they wish.
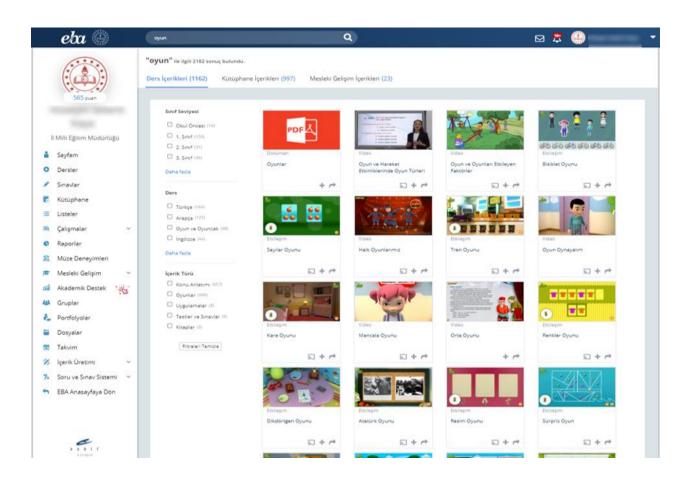
The EBA system contains a whole world. EBA briefly;
- To offer different, rich and educational content,
- To disseminate the informatics culture and to ensure that it is used in education,
- To respond to your content-related needs,
- To exchange information with the social network structure,
- To contribute to the lessons with its rich and ever-growing archive,
- To be able to reconstruct and produce knowledge from knowledge while learning,
- Including students with different learning styles (verbal, visual, numerical, social, individual, auditory learning),
- To bring all teachers together on a common ground and to enable them to direct education together,
- It is a social education platform designed to use technology as a tool, not an end.

EBA for teachers

It is designed so that they can collaborate effectively with their colleagues and share educational exchanges with their students. Our teachers; They can participate in educational discussions, share educational posts, send studies to their students, and follow the studies and upcoming events within the groups they create or follow in EBA Ders. In addition, they can contribute to the vision of the Ministry of National Education to export e-content to the whole world with the content they produce using the content development tools available here.

EBA for students

It has been designed so that they can do much more productive work and get paid for their work. With EBA Ders, our students can work, communicate and share with their classmates and teachers. In addition, our students can follow the homework and exercises sent by their teachers instantly from the calendar, and they can work on any subject they want whenever they want. They can continue to learn both at school and outside of school by sharing, voting and participating in activities at school.

Due to the pandemic, distance education has become mandatory. Thanks to EBA, which has the Distance Education feature, 5 million students instantly attended the lesson with their teachers and friends in the virtual classroom.

MEB assistant

The Ministry of National Education launched the Meb Assistant program, which works with artificial intelligence, to assist visitors at http://www.meb.gov.tr.
EBA Assistant has been put into practice in EBA, the national online education network serving at https://eba.gov.tr/.

EBA academic support

"EBA, the digital education platform of the Ministry of National Education, has developed an EBA Academic Support program for 11th and 12th grades."[3]

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[3] https://eba.gov.tr

It takes the students directly to the smallest piece of information they need, without the need for them to re-work all the subjects from start to finish, by constantly monitoring the performances of the students, instantly identifying the subjects they are missing and suggesting the tests with the special missing correction lists for the students thanks to its smart suggestion system.

In the EBA Academic Support System, each student moves towards their university goals with the study strategy suggested by the artificial intelligence supported system. The system allows students to choose different strategies such as "work from scratch", "close the gaps" and "load on questions".

The Academic Support System analyses the student's practice exam questions and answers to test questions, the difficulty parameters of the questions and the order in which they are solved, and compares them with their goals in order to estimate how well the student understands a subject. As a result, the system decides whether to propose the next topic or not.

Tools and instruments for digital education

Digital tools and platforms are becoming more and more integral to our social and working lives. Digital learning increases students' access to education and knowledge that empowers students with a mindset and capabilities that sets them up for success in their present and future. Moreover digital tools have important advantages for making processes more consistent, secure, efficient, and effective. As institutions support staff and students across a broader range of geographies with a broader set of needs, the case for digital solutions only grows.

Communication, collaboration, and task management tool - Google Classroom,

Google Classroom, which is developed by Google, is a free blended learning that aims to simplify creating, distributing and grading assignments. The primary goal of Google Classroom is to streamline the process of sharing files between teachers and students.[4]

Google classroom integrates a variety of Google Applications for Education to manage students and teacher communication. Students can be invited to join a class through a private code or be imported automatically from a school domain. Each class creates a separate folder in the respective user's Google Drive, where the student can submit work to be graded by a teacher. Teachers can monitor each student's progress by reviewing revision history of a document, and being graded, teachers can return work along with comments and grades.

After joining a google class, students can get work from their teacher and communicate with their classmates. They can join a class with a class link sent by the teacher and a class code sent or told by the teacher. The teacher can see students' name, photo, and email address. Other students in the classes can view their name and photo. Guardians connected to students' account can view their name and photo. Google Workspace or domain administrators can view their name, photo, and email address.

Communication, collaboration, and task management tool –Microsoft Teams

Microsoft Teams is one of the ultimate messaging apps for organizations, institutions, schools—it is a workspace for real-time collaboration and communication, meetings, file and app sharing. All in one place open and accessible for everyone.[5] Microsoft Teams have four team types and these are:

- Class (teacher-led team featuring assignments)
- Professional Learning Community (PLC) (professional development, in-service training and peer-led educator working group)
- Staff (leader-led meetings for management, administration, etc.)
- Other types of meetings (clubs, study groups and extracurricular activities)

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[4] https://classroom.google.com
[5] https://www.microsoft.com/en-ww/microsoft-teams/teams-for-work?market=af

Media production – Emaze

Emaze is an online web-based presentation creator that can be used to build and edit presentations on any personal computer. Teachers can create their own quizzes, surveys, trainings, certifications, and forms with Emaze's automated wizard and watch the scoreboard to keep track of the engagement.[6]

Teachers can choose either from ready-made templates or create and personalize their own templates from scratch. You can insert unlimited videos, images and media so you can be sure about your content is the most engaging and you always get the results you need.

Media production – SlideShare

SlideShare is an online platform which allows you to upload your content in the form of PDFs, PowerPoint slides, videos, and other presentations. Presentations can be searched, viewed, read, shared and downloaded by anyone. With 60 million monthly visitors. SlideShare is the most popular presentation-sharing website in the world and it is a free-of-cost website. SlideShare automatically optimizes content for mobile phones, so you can be sure that your content is visible to all users. Slideshare content also ranks high in Google search results.[7]

Task management tool – Google Drive

Google Drive is a part of Google Workspace. It is a safe place to back up and access all your files from any device. You can easily invite others to view, edit or leave comments on any of your files or folders. Google accounts get 15 GB of storage, shared across Google Drive, Gmail and Google Photos.[8]

Google Drive is an all-encompassing software that helps teams work faster. As a task management tool, Google Drive can be used by students, groups and teams of all sizes to manage upcoming tasks, assign performance or project works, tasks, homeworks and works to team or group members, and collaborate within the platform.

In addition to being a great task management software and is used by thousands of groups and teams for project management, remote work, and overall team collaboration. To use Google Drive you simply sign up on the website and start your workspace within

Evaluation and Testing Tool – Quizzes

Quizzes encourage pupils' self-awareness of progress and self-assessment. By taking quizzes, pupils get instant feedback on their responses. And this can help them identify areas they need to develop themselves and highlight progress for them to be proud of. Quizizz is useful in multiple classroom situations. Quizizz assessments help students to recall facts and prepare themselves for traditional tests while the interactive lessons encourage more in-depth learning.[9]

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[6] www.emaze.com

[7] https://www.slideshare.net

[8] drive.google.com

[9] https://quizizz.com

Collaborative tool – MindMeister

Mindmeister is an online mind mapping collaborative tool. It is a powerful technique that helps you to visualize your thoughts and share them with the others. Mindmeister is a web-based mind map maker that provides an infinite canvas for brainstorming, note taking, project planning and countless other creative tasks and it is easy to use and no download is required for it. You can also use MindMeister mobile app to realize your tasks wherever you are and whenever you want.[10]

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[10] https://www.mindmeister.com

Mapping of skills and competences required in educators for using these digital tools and instruments

General digital skills and competences required

- To take the attention of the students to the topic of the lesson and increase their learning motivation
- To create original virtual content in their subject due to the level of their students
- To be able to adapt ready-made activities, presentations and modules into their lessons and share their products with others.
- To consider the level of their target group of students and choose tools that suit their level of learning and needs.

Communication tools and instruments such as Google Classroom and Microsoft Teams:

- To send emails, post to the stream, send private comments on assignments, and provide feedback on work.
- To have full control over student comments and posts.
- To communicate with parents through individual emails or through Classroom email summaries which include class announcements and due dates.
- To facilitate online discussions between students and create group projects within the Classroom. In addition, students can collaborate on Google Docs which have been shared by the teacher.
- Students will take their ownership in their learning through use of technology. Classroom offers numerous ways to make learning interactive and collaborative.
- To differentiate assignments, include videos and web pages into lessons, and create collaborative group assignments.

Media production – Emaze and SlideShare

- To prepare their own presentations or use ready-made ones and make their lessons more engaging
- To give tasks to the students to collaborate in teams or groups and improve their soft skills.
- To enable students use their smartphone apps in realizing school tasks
- To engage students with the teaching task and make them explore it.

Task management tool – Google Drive

- To get to know the tool and its possibilities before implementing it, making sure that it has the characteristics that better align with your audience and that you can explain its use.
- To use the tool both for your own courses organization and for students to manage their ownindividual and collaborative tasks and work.
- To actively use the tool and update its content, assuring that students will find the

platformuseful in a daily context.

- To store files in the cloud (on Google's servers), synchronize files across devices, and share files.

Evaluation and testing tool – Quizzes

- To help support active learning, facilitate team-building activities, and foster peer-to-peer learning.
- To save paper forms and time by using online evaluation forms and students can read questions on their devices and can read them at their own pace.
- To implement a clear criterion for evaluation and testing priorly communicated to students
- To create more attractive testing exercises through digital tools, including gamification elements like rankings and badges.
- To evaluate their participation, collaboration and attendance through apps like Quizziz, not simply results in numbers. To use analytics tools to keep track of students and act based on the data analyzed.
- To make students aware of their results and allow them to know their progress as well.

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