WORKING GROUP A

Integrating Digital Skills and Competences In VET Curricula And Programmes

[Türkiye]
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 Türkiye Vocational and Technical Education System

- In Turkish education system, VET programs are available for students in secondary education and higher education levels. In secondary education level, VET is structured as a four-year education and training program.
Vocational and Technical Education School Types

- **Vocational and Technical Anatolian High School**
  - Anatolian Vocational Program
  - Anatolian Technical Program
  - Vocational Training Center Program

- **Multi-Program Anatolian High School**
  - Vocational and Technical Anatolian High School
  - High School
  - Anatolian Imam Hatip High School
  - Vocational Training Center Program

- **Vocational Training Center (MEM)**
  - Vocational Training Center Program
Occupational Field and Branch Structure

• Preparation and updates on vocational and technical education programs are depend on European and Turkish Qualifications Frameworks, international trends and developments, changes in business world and job definitions, national and international occupational standards, national qualifications, labor market requirements, national and international classifications are made accordingly.

• In vocational and technical Anatolian high schools, education programs are implemented in **53 fields** (Metal Technology, Motor Vehicle Technology, Plastic Technology, Rail Systems Technology, Textile Technology, Transportation Services etc.) and **114 branches** within the scope of these fields.

• In Vocational Education Centers, education and training are carried out in **39 fields and 193 branches** within the scope of these fields.

• This field and branch structure is updated based on the contributions and participation of relevant field experts, sector, professional organization, university and other stakeholder representatives and achievements, taking into account national and international occupational standards, demands of the sector, scientific and technological developments.

• For detailed information; [https://meslegimhayatim.meb.gov.tr/](https://meslegimhayatim.meb.gov.tr/)
Qualification Types and Levels of the Qualifications Framework of Türkiye
Four Steps to Take in Integrating ICTs in TVET
Digital transformation of TVET and skills development systems

Source: International Labour Organization (2020)
Digitalising learning pathways and guidance

- The combination of school and work-based actors (teachers and supervisors) and actions (intertwining learning activities at both locations) is what makes TVET unique as a specific field.

- According to the ILO (2020), six types of digital learning hold promise for a TVET and skills development system:

  - **Distance Learning and Assessment**: Learn anywhere and anytime
  - **Simulation**: Modelling of work-environments in digital worlds
  - **Flipped Classroom**: Receive knowledge at home/online, practice skills in class
  - **Gamification**: Using game incentives schemes to increase motivation
  - **Open Education (Resources)**: Increasing access to education by removing restrictions to content
  - **Personalisation**: Enabling each student to study according to their own abilities and aspirations
TVET in a Digital World

Digitalisation

- Emerging technologies
- Internet
- Mobile Devices
- MOOCs
- Technology in the class etc.

TVET & Skills Development

- Education and training institutions
- Students
- Labour Market
- Social Partners
- Government etc.

ETF
European Training Foundation
Open Educational Resources (OER) in TVET

open textbooks, lecture notes & presentations, multimedia, audio, illustrations, animations, assignments, quizzes
Vocational And Technical Education Application Platform: «MET-UP»

- **Augmented reality (AR)** and **virtual reality (VR) technologies** provide a more efficient learning environment as they can provide concrete examples in the learning process. In order for augmented reality technologies to be used successfully in schools, it is necessary to provide content suitable for curriculum requirements.

- Vocational and Technical Education Application Platform **MET-UP** is a digital material library and interaction application developed by the Ministry of National Education.

- MET-UP has a user-friendly interface and the learning materials have been developed in an easily accessible and understandable way. With MET-UP, teachers or master trainers can transfer the information needed by the student or trainee with a 3D digital material library without the need for a different technology.

- By transferring the material you want to use from the realistic 3D digital material library to your mobile device, you can scale the 3D digital models to any size and view them 360 degrees.
Vocational And Technical Education Application Platform: «MET-UP»

- 150 content studies are carried out in line with the course curriculum in accordance with the achievements in the fields of Electrical-Electronics Technology, Renewable Energy Technologies, Machinery and Design Technology, Motor Vehicles Technology, Aircraft Maintenance, which are taught under the General Directorate of Vocational and Technical Education.

- MET-UP supports the fast and easy access to the material desired by its users, with the prolongation of the attention span of the students or trainees, the wide range of materials it offers with the AR application, the work safety and the savings it provides in many different aspects. It provides free accessibility from different technological platforms (mobile phone, tablet, computer).

- This project is carried out in cooperation with UNICEF.
- For detail information please visit https://play.google.com/store/apps/details?id=com.milliegitimbakanligi.metup&pli=1
Vocational And Technical Education Application Platform: «MET-UP»

Distance Education Processes

• Along with the pandemic process experienced all over the world, changes and innovations have been experienced in the education process in our country.

• The distance education system (access to distance education, quality of distance education, capacity of distance education) has come to the fore in order to provide public education services effectively with distance education methods during the pandemic process. Distance education access processes are available at all grade levels.

• In addition to being provided through Türkiye's digital education platform EBA (Education Informatics Network), it started broadcasting on television channels TRT (Turkish Radio and Television Corporation) EBA İLKOKUL, TRT EBA ORTAOKUL and TRT EBA LİSE. Distance education was carried out for all grade levels (1 – 12 grades).
"Fostering STEAM Education in Schools"

- EDUSIMSTEAM aims to use information and communication technologies in innovative learning environments to transfer developing and changing practices to multi-disciplinary fields and to share scenarios based on real life problems with all educational stakeholders in online platforms.

- The Innovative Online Platform to be supported by simulations is of great importance for the sustainability of the project.

- The project is conducted by the Ministry of National Education, General Directorate of Innovation and Educational Technologies, and will be implemented with the contributions of 10 European partners. It also serves parallel objectives with the practices of innovative and flexible learning environments supported by the European School Network and will contribute to the exploitation of STEAM education in our country and in Europe.
"Fostering STEAM Education in Schools"

Activities
• WP1 – The Design of the Project
• WP 2 – Teacher Training & New Training Curriculum
• WP3 – Scenario Development - EDUSIMSTEAM Learning Scenarios
• WP4 – Establishing the Innovative Online Platform (IOP)
• WP5 – A Practical Guide for Policy Makers
• WP6 – Project Monitoring
• WP7 – Project Evaluation & Dissemination

Outputs
• EDUSIMSTEAM Needs Analysis Report : The main purpose of this report is to provide pedagogical reference on education policies to be implemented throughout the project.
• Edusimsteam Learning Scenarios: A collection of STEAM Education scenarios for simulating STEAM practices in SimuLearn
• Pilot Teacher Training Platform: Online teacher training platform for organizing teacher trainings
• Guidance for STEAM Scenarios
• STEAM Education Strategies for Best Practices
"Fostering STEAM Education in Schools"