

Educational sheet 8

THE ROLE OF EDUCATION



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Visits to **Repair Cafés**, **reuse centres**, or **themed workshops** run by providers give students an insight into **practical** and **entrepreneurial approaches to repairs**.

A comprehensive **interdisciplinary approach** connects and intertwines various disciplines, levels of operation, tools, etc., into a unified, comprehensive solution and enables:

- experimental learning (demonstrate, correct, improve),
- learning with real-life challenges,
- encouraging innovative thinking.

E.G.: School challenge "**Repair, don't waste**" – students analyze, repair, and improve broken household appliances, using knowledge from several subject areas: electrical engineering (fault diagnosis, repair of electronic components), mechanical engineering (understanding of working mechanisms, replacement of mechanical parts), computer science (chip programming, data search, report writing), technical drawing (drawing plans, documenting the process), Slovenian language (writing a technical report), environmental education (calculating CO₂ emissions savings, advantages of repair), entrepreneurship (estimating repair costs, comparing with the price of a new product, preparing an offer).

E.G.: In physics, students learn about how household appliances and electronics work; in art, they redesign objects; in technical classes, they make replaceable parts; and in civics and ethics, they discuss sustainability and the right to repair.

A **multidisciplinary approach** (e.g., STEAM - Science, Technology, Engineering, and Mathematics) to the problem brings together experts from different fields, each providing their own insights into the same problem.

TEACHING/TRAINING METHODS

Frontal (traditioNal): The teacher serves as the information provider and authority figure, while students are passive recipients.

Participatory: Interaction and active participation between teachers and students; suitable for small groups.

DEMONSTRATIONS
LECTURES

PROJECTS

PROBLEMS
SOLVING

DISCUSSIONS

METHODS,
SUITABLE FOR TRAINING
SERVICE TECHNICIANS

DEMONSTRATION

explaining and demonstrating a procedure or concept, enabling students to observe and then repeat the demonstrated activity themselves

GROUP LEARNING

learning in small groups, where students collaborate, solve problems, and learn from each other through social interaction

PROJECT-BASED LEARNING

students work on practical, real-life content with tangible results for extended periods of time, often in an interdisciplinary format

The use of **augmented reality (AR)** is particularly promising in vocational education and training. It enables visualization, guidance, interaction, and simulation, which facilitate understanding of how devices work or what faults occur, and shorten learning times.



Repairing is not just a technical task; it is a lesson in responsibility, creativity, and sustainability. By incorporating repairs into schools, creative spaces, and community workshops, we are laying the foundations for long-term change in consumer habits and creating generations that will know how to think circularly.