Report on the activity in the framework of the European Inventor Network

To be sent to:
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Name of the alumnus who implemented the activity

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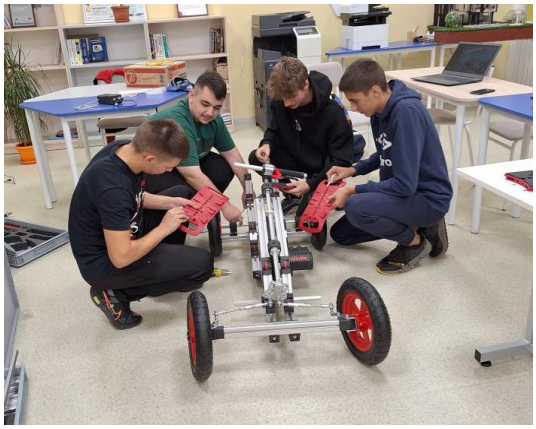
Short description of the activity

The program engages students in the fundamentals of electronics, mechanics, and sustainable thinking by using the Skedu Pro Kit Electric, an educational set designed for building a compact electric vehicle. Learners assemble and personalize their own battery-powered electric vehicle with belt-driven motors, exploring concepts such as eco-friendly transportation, energy efficiency, and technological creativity. Through this process, the kit supports the development of basic engineering skills, problem-solving, and collaboration among participants. With the support of mentors, students join weekly interactive workshops that combine practical construction activities with guided discussions on intelligent mobility and green technologies, concluding with a public presentation that showcases the learning outcomes and completed vehicles.

Date and place of the activity

October 2025 – January 2026
Weekly practical and theoretical sessions were conducted every Thursday at the school's STEM laboratory, focusing on electronics, mechanics, sustainable mobility, and the step-by-step construction of the electric vehicles.



15 November 2025 – Open lesson and interactive demonstration for primary school students, introducing the principles of electric mobility and hands-on engineering.

5 December 2025 – Official visit by representatives of an international educational engineering brand, who observed the students' work, discussed technical aspects of the project, and provided professional feedback on the implementation and design process.

12 December 2025 – Public exhibition and project presentation in Blagoevgrad, where students showcased their completed vehicles and explained the engineering process and sustainability aspects.

20 January 2026 – Official school recognition event, during which the team received the "Team of the Year" award for innovation, teamwork, and educational impact.

Audience (number and age of the participants)

The activity directly involved approximately **15 primary level students (grades 3–4)** as the official target group of the initiative.
In addition, **10 upper secondary students (aged 16–18)** were actively engaged in the design, construction, and presentation phases of the project.
Through public demonstrations, school events, and educational outreach activities, the initiative further reached approximately **40 additional students and teachers** from the wider school community.

Outcomes and achievement

The activity resulted in the successful construction and demonstration of fully functional small electric vehicles, enabling students to apply principles of electronics, mechanics, and energy efficiency in a real-world context. Through hands-on work, participants developed essential skills such as teamwork, problem-solving, critical and creative thinking, and basic engineering design.
The project fostered a strong sense of collaboration and shared responsibility, with students actively contributing ideas, improvements, and technical solutions throughout the process. The high level of engagement and commitment demonstrated the effectiveness of project-based STEM learning in motivating students and deepening their understanding of sustainable technologies.
The activity gained significant visibility through public and educational presentations, where students confidently explained their work and showcased the results of their efforts. External recognition and positive feedback confirmed the high quality of implementation and the educational value of the initiative.
Overall, the project strengthened students' interest in STEM fields and sustainable mobility, encouraging continued participation in future innovation-driven educational activities.

"A highly impressive example of how students can transform technical knowledge into meaningful, future-oriented innovation. The project combines creativity, responsibility, and sustainability in a way that reflects both educational excellence and strong vision." – Industry expert at an innovation event

Recommendations

Based on the experience and outcomes of this activity, it is recommended to further expand hands-on STEM initiatives that combine engineering, sustainability, and real-world problem solving. Practical, project-based learning has proven highly effective in increasing student motivation, deepening understanding, and fostering long-term interest in innovation and technology.
Future activities could build on this model by encouraging interdisciplinary collaboration, integrating additional technological components, and creating more opportunities for public demonstration and knowledge sharing. Strengthening partnerships with educational and industry stakeholders would further enhance the impact and sustainability of similar initiatives.
Overall, continued support for experiential learning projects of this type can significantly contribute to developing future-oriented skills and promoting sustainable thinking among young learners.

Attachments:

A complete set of supporting materials, including photo and video documentation from the construction process, workshops, public presentations, and award recognition, has been attached and sent by email as requested.