



NEWSLETTER N.1

ARTIFICIAL INTELLIGENCE USING INTERNET OF THINGS IN STEM EDUCATION

The **AI4STEM** project will utilize the Five Big Ideas in AI concept and a series of IoT projects to develop an educational framework on which students (8-16 years old) will be introduced to artificial intelligence through hands-on lessons, blending the Internet of Things principles, programming, and STEM learning outcomes.

By using the project results, **educators will be able to arouse their students' interest and increase their awareness** of how AI can positively affect their daily lives. Students, with the help of their teachers, will develop a series of IoT projects, such as a smart agriculture system, a weather reporting system, a home automation system, a smart garage door, etc. through which the **Five Big Ideas in AI** will be explained, namely Perception, Representation & Reasoning, Learning, Natural Interaction, and Societal Impact in order to understand what AI is, how it can simplify processes, **what impact AI can have in daily interactions** and which implications and challenges the society needs to overcome.

Specific objectives of the project:

- Providing educators with a **hands-on educational approach** to introduce students to Artificial Intelligence principles using the Five Big Ideas in AI and a series of IoT projects.
- Developing an **effective educational package that integrates AI in STEM subjects** and can be utilized in a classroom environment or through remote learning.
- Creating a community of practice for educators and learners**, through a virtual academy, which ensures continuity and further development of the project outcomes, as well as promotes collaboration and constructive discussions.

Target Groups

Direct:

- Teachers/educators of STEM subjects in upper primary and secondary education.
- Students (8-16 years of age)

Indirect:

- Parents, the educational community (trainers/academic staff).
- Policymakers, ministries of education and academic bodies.
- Other target groups are various communities and authorities in: the E&T, EdTech and STEM sectors as through the project a specific strategy will be developed for promoting the targets set by the European Commission and engaging these target groups in constructive discussions and learning initiatives.

The consortium

