

Work Package 4:

Dissemination & Upscaling

Deliverable D4.6

Exploitation and Sustainability Plan



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ABSTRACT	-
KEYWORDS	Artificial intelligence, teachers, training, education, digital, digital transformation

Dissemination Level		
PU	Public	x
PP	Restricted to project partner (including the Commission)	
RE	Restricted to a group defined by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	



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1. Summary

The Sustainability and Exploitation Plan outlines the goals, outcomes, and outputs of the project. It provides an overview of the broader context in which the project operates. The plan identifies the benefits for various stakeholders, including schools (teachers and principals), policy makers, and pedagogical higher education institutions.

Each exploitation asset, addressing also intellectual property rights (IPR), the project website, social media, publications, and events, is detailed with specific plans for exploitation and sustainability.

Individual exploitation plans are outlined for each partner involved in the project.

Sustainability focuses on the long-term continuation of results, while exploitation involves actively using and applying those results for practical purposes. Both aspects are crucial for maximizing the impact of research and innovation projects.

Sustainability¹ refers to the capacity of a project to continue its existence and functioning beyond its completion or end.

Focus: It emphasizes the long-term viability and endurance of the project.

Application: Sustainable results are continuously used and exploited even after the project concludes.

Implication: Sustainability ensures that the project's outcomes have lasting impact and contribute to ongoing progress.

Exploitation² involves actively utilizing project results for specific purposes.

Use Cases: Results can be exploited in various ways, such as developing, creating, marketing, improving products or processes, shaping policies, or providing services.

Timeframe: Exploitation can occur during the project's duration or after its completion.

Outcome: It translates research concepts into concrete solutions that positively impact society.

¹ Dissemination and exploitation of research results. https://research-and-innovation.ec.europa.eu/strategy/dissemination-and-exploitation-research-results_en.

² Practical Information Dissemination and Exploitation Of Results - europa.eu. https://www.eacea.ec.europa.eu/system/files/2021-01/IA_beneficiarySpace_2020_Practical%20info_dissemination_exploitation.pdf.



2. Overview of Exploitation Assets: goals, outcomes, outputs

Note on terminology used regarding exploitation assets.

Goal: A goal can be defined as a specific, measurable, and attainable objective or target that a project should reach within a certain time frame. Goals provide a clear direction and purpose and direct efforts and actions towards a desired outcome. They help focus attention, motivate progress, and serve as a benchmark for evaluating success.

Outcome: Outcomes are the broader and more long-term effects or changes that result from the implementation of a project. They represent the intended impacts or benefits to be achieved by the project. Outcomes often refer to changes in behaviour, attitudes, knowledge or conditions of individuals, communities, or systems. Unlike outputs, outcomes are not necessarily directly measurable, but can be observed over time. For example, in an education project, improved academic performance or higher enrolment rates would be considered outcomes.

Result: The term "result" is often used synonymously with "outcome".

Output: Outputs refer to the tangible and measurable deliverables or products produced by project activities. They are usually the direct results of the project's work and can be described as the immediate outputs of a project. Outputs are usually specific, observable, and quantifiable. For example, in an education project, the number of trainings conducted, or the production of teaching materials would be called outputs.

It is important to note that the use of these terms may vary slightly in different fields and contexts. In general, however, outputs are the tangible products or services delivered, outcomes are the broader changes or impacts, and results can either refer to immediate impacts or be synonymous with outcomes.

The hypothesis behind AI4T is that bespoke training can help teachers to deconstruct their preconceptions, develop their knowledge and encourage an informed use of AI in an educational setting.

GOALS

1. To recruit a minimum of 350 volunteer schools, each with at least 4 teachers and classes of pupils aged 15 to 17.
2. To create and disseminate the training course and training materials on the topic artificial intelligence and/in education.
3. To train a minimum of 1.400 teachers.
4. To develop a website that provides specific information about training and resources related to AI in education for project users (identified target groups) and EU teachers.



OUTCOMES

1. Ensure the long-term sustainability of the project by integrating and spreading the project's outcomes through a cascading process of mainstreaming and multiplication.
2. Transfer the best practices and recommendations to other countries, contexts, and education levels.
3. Communicate conclusions from the pilots and lessons learnt to responsible Policy Makers and practitioners to prompt them to introduce changes in the education systems/curricula and foster large-scale implementation.
4. Through project deliverables engage for the upgraded Digital Action plan initiative by the EC as well as E&T 2020 goals.

OUTPUTS

Publicly available deliverables will be visible on the [project website \(resources part\)](#). For example:

- The evaluation protocol, the large-scale experimentation report, WP2 tools, evaluation report, the data collected, the analysis and recommendations produced will be transparent and accessible freely for policymakers to take informed decisions, for researchers to use and for other interested stakeholders to take them further.
- The training materials – MOOC and AI4T Textbook will be published in all five languages of the consortium, and available freely, accompanied with guidelines so that other countries, which have not participated in the first place, can use it.
- Most of the developed materials will be developed, keeping in mind that it should be transferable, or at least easily adaptable, to other school levels.
- Promotional materials (e. g. project leaflet in languages of the project partners) will be produced and distributed through the different networks.

2.1. Overview of the broader context

In the broader context of the AI4T project aims to contribute to the education sector by focusing on the hypothesis that tailored training can effectively help teachers challenge their preconceived notions, increase their knowledge, and promote informed use of AI in educational settings. The project developed a comprehensive training programme and online resources tailored to the specific needs of teachers ([Teacher training – AI4T project](#), [Textbook – AI4T project](#)). In addition, an extensive evaluation process was carried out to gather valuable insights that will serve as a basis for formulating recommendations. It is important to consider the national and EU context in which the project operates and to ensure that it is consistent with educational policies, strategies, and frameworks at both levels. By considering the broader context, AI4T aims to make a meaningful contribution to promoting the integration of AI in education and enabling teachers to use its potential effectively.

3. Benefits for stakeholders

When defining stakeholder benefits, it is important to consider the specific needs and interests of each stakeholder group - policy makers, educators (principals, teachers) and higher education institutions that train future teachers. How we can define the benefits for each group:

3.1. Policy Makers

- Validated model on teacher training on AI.
- Impact evaluation of the pilot and developed model.
- Policy recommendations at national and EU level.

Improved education policy:

The AI4T project can provide valuable insights and recommendations to policy makers, enabling them to develop informed and effective strategies for integrating AI into education. This can lead to improved educational practices, better access to AI resources and better adaptation to new technological developments.

3.2. School level: teachers, principals & teacher trainers

- Access to professional development training.
- Participate in e-community on AI in education.
- Develop and share best practices of their professional development.

Professional development opportunities:

Through the AI4T training programme and resources, educators can access tailored training to help them increase their knowledge and skills in using AI in an educational context. This will enable them to improve their teaching methods, effectively incorporate AI tools and adapt to the evolving educational landscape.

Improved teaching outcomes:

By reducing biases and promoting informed use of AI, educators can use AI technologies to increase student engagement, personalise learning experiences and improve learning outcomes. This can lead to more effective teaching practices and better student performance.



3.3. Pedagogical HE institutions

- Research and participate to the further development of AI for teachers.
- Cooperate and develop continuous professional development programme plan and resources.
- Monitor pilot implementation, collect data, and evaluate and disseminate.

Future-proofing teacher education:

The AI4T project can also support higher education institutions in equipping future teachers with the necessary knowledge and skills to effectively integrate AI into their teaching practice. This can improve the quality of teacher education and ensure that graduates are equipped to meet the demands of a modern educational environment.

Increased reputation and relevance:

By incorporating relevant AI4T outcomes, HEIs demonstrate their commitment to innovation and remain at the forefront of educational progress. This can enhance their reputation, attract talented students, and strengthen their position as high-quality institutions in teacher education.

By addressing the specific needs and interests of policy makers, educators and HEIs, the AI4T project can deliver tangible benefits that align with each stakeholder's goals and priorities.



4. Exploitation and Sustainability plan per Asset

Regular and up-to-date information on the project's activities is published on the website. Identified target groups will be informed via specific communication channels. Social networks will be another way to disseminate the project results through the profiles of organisations or individuals on Twitter (X), LinkedIn and YouTube.

4.1. IPR Issues & Consortium Agreements

The coordinator prepared and signed an IPR agreement with all partners in the first months of the project in 2021. It is based on the grant agreement signed between the coordinator and the EACEA (adopted on 22 February 2021). In it, the coordinator and the partners have agreed on the basic principles for the promotion, protection and utilisation of intellectual property. It also sets out the dissemination rules for the use of logos, brands and partner names.

All project results, with the exception of the results of WP0-Management and WP5- Quality Assurance, are to be published and made public.

This document enables the consortium to control the use of the MOOC and Textbook by external partners of the consortium. The coordinator prepared a commitment letter for those interested in using the AI4T resources (Albania and Poland), taking into account the IPR issues, the bilateral agreement and the IPR agreement, so that the external partners can make good use of logos, brands and names (AI4T project and consortium).

All project outcomes will be hosted in an online repository of open educational resources focussing on AI in education and AI in teacher training. The materials will be made available via websites of education providers in all partner countries and in the respective languages.

All project results will be published under the Creative Commons (CC) licence. The partners as authors of the content retain the copyrights, while the public has the possibility to copy, distribute and use the project results.

4.2. Website

Website: www.ai4t.eu

Web content management system: WordPress

Programmer: Sašo Stanojev



Web address or domain leased until:

Admin/Editor:

- Sašo Stanojev (saso.stanojev@gmail.com)
- Petra Bevek (petra.bevek@gov.si)
- Katja Kuščer (katja.kuscer@gov.si)

Budget available: 7.500 EUR

4.3. Social media

LinkedIn

Twitter (X)

YouTube

Budget available: No social media promotion funds were planned or used.

4.4. Publications & Recommendations

Visual identity

Available on the project's website and EPRP Platform

Budget available: 10.000 EUR

4.5. Events

NATIONAL EVENTS

Each country will design and implement national dissemination events after or during the full-scale experimentation phase. They will be mostly focused on teachers or headmasters so the AI4T resources can be disseminated and used by the target groups, within and outside of the consortium. The national events could take different formats depending on the national context and needs; webinars, working groups, events of a day or training sessions, each ministry created AI4T focused activities to present the project and foster the participants to discover and discuss the project's deliverables.



Budget available: 4000 EUR per ministerial partner

FINAL CONFERENCE (revised according to the plan)

The final conference will be organised at the end of the project to present the results of the project and some guidelines for policy makers and practitioners. Conference participants will include policy makers, school leaders, teachers, industry representatives and other stakeholders. The first day will be mainly aimed at policy makers, while the second day focusses on teachers' experiences and the exchange of practises.

The project results will be presented both in person and online, organised by the project coordinator and other partners. The programme will be designed to create parallel spaces for discussions on teachers' practises, various workshops on different topics such as policy making and round tables for researchers.

Teachers must be at the centre of the programme, as the project is run for them and by them. The discussions are designed to provide insights into teachers' practises from the perspective of policy, classroom practise and the new technological tools available to and used by them.

Planned number of participants: up to 120.

Duration: 2 conference days + 1 day for the final meeting of the project consortium.

Various stakeholders of formal and non-formal education will be invited (national/regional level: ministers, state secretaries, directors general, heads of public institutions, school headmasters, researchers, teachers; EU level: European commissioner, members of the European Parliament and other policy makers in the EU institutions, members of the DELTA working group (E&T 2020, etc.) and the media.

Budget available: 15.000 EUR



5. Individual Sustainability and Exploitation Plans per Partner

Exploitable results of the project:

- [Project deliverables](#)
- Training pathway
- [AI4T MOOC](#)
- [AI4T Textbook](#)
- [Recommendations](#)

Online and face-to-face events, workshops and discussions will be organised especially during the second part of the project for various stakeholders. Project partners will organise national events and will participate in key national and European conferences to present intermediate and results of the project, such as the BETT in UK or Educatech in France.

Some partners of the consortium are members of the group Digital Education: Learning, Teaching and Assessment (DELTA). The WG DELTA meets several times per year as well as in peer learning and the progress of the AI4T project will be reported.

5.1. France

The AI4T European project is a good starting point to convince policy makers on the transformations needed.

In France, thanks to the academic networks it runs and its close collaboration with the DGESCO and IGESR, the Department of Digital Education (DNE) has the capacity to use the results of the AI4T project to develop and promote training for all teachers and administrators on AI solutions in education. The DNE can address all public sector schools at all levels, which is 54,800 schools employing 720,000 teachers and more than 10 million students, including 4 million at the secondary level.

The training is being taught as horizontal at all the educational levels, from primary school and with inspectors, teachers and so on.

The curriculum has not been changed now but AI4T has been a motor of change. Curricula are being designed at the universities, so training introduces AI elements. It will be changed in the next 3-5 years.

We also launched innovation partnership for AI. Prototypes are being produced so Ministries can buy the content and make it open for the use of teachers.



<https://eduscol.education.fr/1911/l-intelligence-artificielle-pour-accompagner-les-apprentissages-des-fondamentaux-au-cycle-2>

The national education strategy is going to be reinforced using generative AI with considerations on GDPR compliance and digital literacy. Policy recommendations will be an input for the national education plan (V2) for beginning of 2024.

Two new digital thematic groups (Gtnum) are being supported by the Ministry to explore with researchers and academic territories the desirable uses of generative AI in the classroom, for a period of 3 years.

<https://edunumrech.hypotheses.org/11751>

<https://edunumrech.hypotheses.org/11278>

5.2. Italy

One strength of the project is to work as a European project and as a European force.

In Italy, the Ministry of Education and Merit will plan events of dissemination to promote the results of the call and the use of AI in education. The website of the AI4T project and related resources (Mooc and textbook) have been made available on the official webpage of Scuola Futura, the platform for the training of school personnel, within the framework of actions of the National Recovery and Resilience Plan (PNRR), <https://scuolafutura.pubblica.istruzione.it/web/scuola-futura/intelligenza-artificiale->

The platform will include 20,000 courses for the digital transition of the schools within 2025 with multiple training on AI and digital-related competencies with the final objective to train around 650,000 school managers, teachers, administrative staff, and around 7.5 million students in the digital arena.

Dissemination activities will be organized by the Ministry of Education and Merit in the various editions of Didacta, the fair of educational innovations held twice a year in Sicily and Florence. Additionally, through the Steam Week launched by the Ministry this February, laboratory activities promoting the experimental use of AI, robotics, and augmented reality will be promoted. Another dissemination element of Artificial Intelligence will be the “Scuola Futura Campus”, an itinerant campus that will visit all Italian regions to promote training on digital teaching and innovative teaching methodologies and digital transition, including Artificial Intelligence, and to engage school communities on the themes and challenges of the technologies of the future. Dissemination will also be carried out through online events in collaboration with Indire on the eTwinning platforms and through virtual, blended, and on-site mobility of Erasmus+ with a top-down and bottom-up approach.



Dissemination activities have also been conducted by Indire, the National Institute for Documentation, Innovation, and Educational Research, through multiple events and publications in economic and educational journals of the country, reaching up to 715,000 users, and through the Ministry of Education and Merit's "Scuola Futura" official webpage, reaching up to 650,000 users.

Furthermore, Italian educators' active engagement at the Luxemburg conference facilitated the dissemination of the project results and resources within their schools, particularly those recognized for innovation and digital competence, creating a cascade effect on other schools of the network. Internationally, dissemination has taken place at pivotal events such as the annual EMINENT conference, hosted by European Schoolnet in Rome, Indire and MIM presented the project's outcomes, especially in the context of the Italian experience. Additionally, the Italian Ministry of Education and Merit has referenced project achievements at the G7 Japanese Symposium on Digital Education and AI, affirming its global recognition and impact.

The successful results of the project will be shared at regional level through the Scuola Futura Platform reaching out to all regions and schools, as well as individual teachers and school staff members who can access the platform for personal development and lifelong learning. The resources of the project can be a source of inspiration and a starting point for national educational development and future policy and practice, tailoring the content to local needs and requirements. The analysis of traces and the evaluation reports will be exploited to address areas of interest and further development in training areas on the basis of the teachers' learning behaviours and on the results of the perception surveys.

The project seeks to transform education by embracing technology, fostering creativity, and ensuring sustainability across Italian schools. On a national level the Resilience and Recovery Plan is being implemented ensuring a substantial financial investment. Schools are an important line of investment as ecosystems where technology and pedagogy are part of the network of the learning process. STEAM strategies are considered that involve AI. AI with new technologies should be a part of the curricula. The current political landscape is pro AI and its use, everything is open to embrace the change.

5.3. Ireland

In an evolving landscape, one of the biggest challenges is to ensure a consistent understanding and application of AI across all stakeholders working with schools, curriculum developers, teacher educators, inspectors and examination boards.

The results of this project will be shared on oidetechnologyineducation.ie and disseminated widely across the Ministry including the following sections, curriculum and assessment, buildings, school governance and digital. All network opportunities, education support centre network, management and professional

association bodies and research networks will be used as vehicles to disseminate the outputs of this project. The project's outputs, along with its evaluation results and policy recommendations, will serve as a foundational element that will significantly influence Oide³ Technology in Education's planning and activities in the area of AI. Furthermore, at both national and international conferences, Oide Technology in Education will highlight AI4T as a key innovative project within their presentations and discussions.

Short-term goals:

5. Hosting an AI think-in with secondary school teachers (February 2024): Practitioners must show concretely how they use AI which is part of their response to the expression of interest call. The objectives of the day are to determine the professional learning needs, share current practice, raise awareness of practice and ethical considerations and outline the policy context. The outputs from this event will further inform the draft guidance for schools and school leaders.
6. Developing two short online courses for teachers and school leaders on AI and GenAI. The MOOC and textbook are contributing to these courses.
7. Experiment with a number of volunteer schools or school management bodies.
8. Arising out of the project recommendations a strategic oversight group has been proposed within the Ministry to lead stakeholder conversations.
9. In efforts to build on the outputs of AI4T a follow-on European project that responds to key questions from the Ministry will be considered.

H2 Learning

H2 Learning has developed a new online course for VET educators that focuses on Gen AI. This course was initiated from involvement in the AI4T project and specifically our role in creating content for the textbook. The approach in this course, which is a mix of online self-study materials and live synchronous discussion has been informed by AI4T. We also submitted a new E+ project in VET, which focuses on developing VET teachers' Gen AI competences and it has been called GenAI for VET. This project proposal builds on the work of AI4T both in terms of content and in developing a more critical perspective in relation to emerging technologies, such as Gen AI.

Two of the H2 Learning team are Polish and live in Poland. Through their contacts we have progressed the translation of the AI4T textbook to Polish and for its dissemination in Poland.

Finally, H2 Learning works with the EU Commission on a number of digital education activities, and one specific role is to support the Digital Education Learning Teaching and Assessment Working Group. Working with the Commission we have supported the dissemination of key AI4T findings at a range of DELTA WG events since its inception.

³ Partner P05 - Dublin West Education Centre – PDST changed its name at the end of 2023 to OIDE.

5.4. Slovenia

Transfer of project contents to national practices.

As WP4 leaders, we will ensure the future operation of the project website - with relevant news and resources, new versions of the AI4T Texbook, up-to-date information on various projects in the field of AI. The same applies to the existing, well-established and recognised social networks (LinkedIn, X, YouTube). The results of the project will be presented and transferred to other projects as examples of good practise (e. g. Erasmus+ project Dali4Us 2024-2027, Digital First 2024-2027, RRF⁴ project Innovative Pedagogy 5.0 2023 - 2026 and other RRF projects such as active involvement of researchers to bring insights of the use of AI in education).

The project, the pathway, the materials and the evaluation results will be publicised at home and abroad, including at various professional and scientific events (e. g. Pedagogical Institute conference in September 2024, FNM UM PCE conference in April 2024, SETCOM project conference in April 2024, etc.). We will present the project and its results appropriately at regular online meetings with school leaders organised by the Ministry's Digital Education Service.

We will coordinate and hold a meeting for policy makers and teachers in April 2024 to further utilise the results of the project and the recommendations and conclusions of the conference.

We will ensure the further use and adaptation of the learning path - 24-hour seminar (Mooc + webinars) in the Digitrajni učitelj 2023 - 2026 project. We will use the results of the evaluation to prepare new trainings for teachers and other professionals and managers in the field of AI (within the Management of digital VIZ project and the Use of generative AI project) and to adapt existing trainings. The FNM will incorporate the results of the project into study programmes.

5.5. Luxembourg

Transforming the national landscape

The project has significantly influenced Luxembourg's approach to Artificial Intelligence (AI) in education, integrating results into national Coding and Digital Sciences strategies and disseminating training materials through the national teacher training institute (IFEN) and its online platform. The AI4T project has been crucial in embedding AI into the national curriculum, particularly through the 'Digital Sciences' course and updating the Media Compass to emphasize AI and digital literacy.

⁴ Recovery and Resilience Funds.

AI4T's visibility and impact were enhanced through its presentation at the national EdTech conference, a well-attended national webinar, and consistent updates in the education newsletter and internet sites (www.edumedia.lu, www.script.lu, www.educoding.lu), positioning it as a key resource for AI in education. The project's findings are now foundational for a national training pathway on AI in education, extending its influence beyond secondary education and reshaping teacher training to equip educators with essential AI skills. This strategic effort aims to integrate AI thoroughly into Luxembourg's educational system, preparing educators to effectively use AI in their teaching practices.

AI has been implemented in two levels: digital literacy and AI literacy, so many tools haven't been used in those domains on primary education and secondary education. For instance, coding has been introduced into primary education and a literacy sciences online course is linked to AI and the AI4T project in one of the modules – using the class code resources. An evaluation via badges is being implemented for the projects being developed during the online courses, which could not have been done without the support of doing a European project on AI.

Any official guidelines have been created but the AI4T will bring this into discussion. From March, teacher's discussion spaces will be created to advance in this task. An interactive platform is being created to host the project tools (because Moodle has some problems) and a hackathon in February 2024 with students (3-day event) will be done.



6. Conclusions

The AI4T MOOC, available in five languages, is managed on GitHub, with a French version on the Fun MOOC platform. It provides a forum for interaction with partners and will foster a community of practise for at least two years. Successful participants can earn open badges. Both existing and new topics will be suggested by participants, ranging from primary school to university.

A webinar aimed at learners and teachers, to which AI4T project participants will be invited, will take place in April 2024.

Deliverables can also be viewed on the website of the project coordinator (FEI), which will maintain them for at least five years after the end of the project.

The CNR has provided the means to host the AI4T textbook, creating a stable platform for its use and further development. The textbook, which is supported by the CNR, Nantes and UNESCO, is part of a new project that will continue to utilise and develop the project resources.

All resources are open source so that external partners can adapt, implement and extend them. National projects in the partner countries can also use these resources.

