



OUR DIGITAL VILLAGE Co-designed digital education in rural areas

EVALUATION TOOLKIT



Erasmus + KA2: Partnership for innovation - Forward-looking Projects
Project Number: 101087107
D3.2 - Training Outline



Co-funded by
the European Union

Document information		
Leader	Universidad de Alicante / Centro Per Lo Sviluppo Creativo “Danilo Dolci”	
Contribution and Revision	All partners	
Call	ERASMUS-EDU-2022-PI-FORWARD-LOT1	
Project Number	101087107	
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Contents

1. INTRODUCTION	4
2. TARGET AUDIENCE	6
3. DIGCOMPEDU FRAMEWORK.....	8
4. DATA COLLECTION METHODS	14
QUESTIONNAIRES	14
INFORMAL FEEDBACK EVALUATION	17
SELF ANALYSIS CO-EVALUATION MEETINGS.....	19
5. EVALUATION PLAN	21
6. TOOLS AND SOFTWARE	23
7. REPORTING AND FEEDBACK MECHANISMS	25
8. ETHICAL CONSIDERATIONS:.....	26
9. CONCLUSION.....	28
10. ANNEXES	30
QUESTIONNAIRE FOR EDUCATORS PRE - TRAINING	30
QUESTIONNAIRE FOR EDUCATORS POST - TRAINING.....	32
QUESTIONNAIRE FOR SCHOOL LEARNERS PRE-TRAINING (12 – 18 years old) .	35
QUESTIONNAIRE FOR SCHOOL LEARNERS POST-TRAINING (12 – 18 years old)	
.....	36
QUESTIONNAIRE FOR ADULT LEARNERS PRE-TRAINING (18+ years old).....	38
QUESTIONNAIRE FOR ADULT LEARNERS POST-TRAINING (18+ years old).....	40
QUESTIONNAIRE ICT TECHNICIANS POST TRAINING	42
INFORMAL FEEDBACK COLLECTION TEMPLATE.....	44
DATA COLLECTION TEMPLATE FOR CO-EVALUATION MEETINGS	46
NATIONAL DATA COLLECTION TEMPLATE FOR PARTNERS	50



1. INTRODUCTION

In the rapidly evolving digital landscape, the "Our Digital Village" (ODV) project emerges as a beacon of innovation and empowerment, aimed at bridging the digital divide and fostering a digitally literate society. At the heart of this ambitious initiative lies a commitment to enhancing digital literacy, increasing community engagement, and providing equitable access to digital resources. This Evaluation Toolkit document is designed as a comprehensive guide to systematically assess the effectiveness, impact, and overall success of the ODV project's interventions and activities.

The primary objective of the ODV project is to improve digitalization in rural areas and among diverse demographic groups, including educators, learners, and the wider community. By doing so, the project seeks to equip communities with the necessary skills to navigate the digital world confidently, critically, and creatively. Furthermore, the project aims to enhance community engagement by leveraging digital technologies to foster collaboration, communication, and a sense of belonging among community members. Another crucial goal is to increase access to digital resources, ensuring that everyone, regardless of their socio-economic background, can benefit from the opportunities offered by digital technologies.

To ensure the ODV project's objectives are met effectively, the Evaluation Toolkit provides a structured framework for assessing the quality, effectiveness, and relevance of the project's activities and outputs. It serves as a critical instrument for project stakeholders to measure progress, identify areas for improvement, and make informed decisions regarding the future direction of the project. The toolkit is designed to facilitate a comprehensive evaluation process, incorporating both qualitative and quantitative methods to capture a holistic view of the project's impact.





The Evaluation Toolkit is divided into several sections, each tailored to address specific aspects of the project's evaluation needs. It begins with an overview of the evaluation objectives and methodology, followed by a great overview of the DigCompEdu framework, detailed guidelines on implementing the evaluation process, including the use of pre- and post-methodology questionnaires, focus groups, and case studies. The toolkit also outlines the key performance indicators (KPIs) and metrics for assessing digital literacy improvements, community engagement levels, and access to digital resources. Additionally, it includes templates and tools to facilitate data collection, analysis, and reporting, ensuring a standardized approach to evaluation across all project activities.



2. TARGET AUDIENCE

Our Digital Village is designed with a multifaceted target audience in mind, aiming to bridge digital divides and foster digital literacy and engagement across various sectors of society. The primary target groups include:

- **Educational Institutions:** This includes both formal and non-formal educational providers such as schools, universities, youth centres, and NGOs. These entities are critical for the dissemination and implementation of the project's digital literacy materials and methodologies.
- **Teachers and Trainers:** Educators from various institutions who will directly engage with the project's tools and resources to enhance their digital and pedagogical skills. They play a pivotal role in transferring knowledge and fostering digital literacy among learners.
- **Learners:** This group spans across age groups, including young and adult learners from rural communities who will directly benefit from improved digital skills and competencies through the ICT courses offered by the project.
- **Community Organizations and Public Institutions:** Municipalities and community-based organizations that will benefit from increased digital awareness and capacity to support digital transformation in rural areas.
- **Policy Makers and Stakeholders:** Individuals and entities involved in policy-making processes who will gain insights into the digital needs of rural communities, thereby influencing policy and educational reforms towards greater digital inclusion.
- **Private Sector Representatives:** Businesses and employers who will ultimately benefit from a workforce equipped with the digital and transversal skills necessary for the modern labour market.

The diverse nature of the target audience necessitates a comprehensive and tailored approach to evaluation. The evaluation toolkit, therefore, is designed to



capture the varied impacts of the project across different demographics, literacy levels, and needs. For instance, educators' capacity building will be assessed through their ability to integrate digital tools into teaching, while learners' progress will be evaluated based on improvements in digital competencies. Community organizations' engagement levels and policy makers' actions towards digital inclusion will also serve as critical indicators of the project's success.

In designing the evaluation methods, special consideration is given to the unique contexts of rural communities, ensuring that the tools are accessible and relevant. This approach ensures that the project not only meets the immediate needs of its target audience but also contributes to long-term sustainable development and digital inclusion in rural areas.





3. DIGCOMPEDU FRAMEWORK

The advent of the digital age has precipitated a seismic shift in the educational landscape, compelling educators to augment their traditional pedagogical skills with digital competencies. In response to this exigency, [the European Digital Competence Framework for Educators \(DigCompEdu\)](#) offers a meticulously crafted schema to guide educators through the development, assessment, and augmentation of their digital skills. This transformative framework is structured around six pivotal areas, each targeting critical digital competencies vital for effective, modern teaching methodologies.

1. Professional Engagement

Central to DigCompEdu is the notion of Professional Engagement, which underscores the integration of digital technologies into all facets of an educator's professional development. This area emphasizes the imperative for educators to:

- Continuously Develop Professionally, leveraging online platforms and resources to stay at the forefront of technological and pedagogical innovations.
- Engage in Digital Collaboration, harnessing the power of online communities to exchange resources, strategies, and insights, thus fostering a culture of continuous improvement and shared best practices.
- Manage Digital Identity with prudence, cultivating an online presence that mirrors one's professional achievements and competences, and serves as a beacon for digital literacy and responsibility.

2. Digital Resources

Digital Resources proficiency is fundamental, enabling educators to adeptly select, create, and manage digital content. This area is built upon competences that empower educators to:



- Select Digital Resources with discernment, evaluating their pedagogical value and alignment with learning objectives.
- Create and Modify Resources, tailoring digital content to meet the diverse needs of learners and enriching the educational experience.
- Efficiently Manage Resources, ensuring digital materials are organized and accessible, thus facilitating seamless learning experiences.

3. Teaching and Learning

The Teaching and Learning domain explores the integration of digital technologies to enhance educational delivery. It includes competencies that enable educators to:

- Design Pedagogically Sound Digital Learning Experiences, embedding digital tools into lesson plans to stimulate interactive and engaging learning.
- Develop Digitally Enriched Learning Environments, which cater to varied learning styles and preferences, making education more inclusive and adaptive.
- Adopt Adaptive and Personalised Learning Approaches, harnessing technology to customize education, addressing individual learner profiles and needs.

4. Assessment

In the realm of Assessment, digital technologies are pivotal for devising effective evaluation strategies and offering meaningful feedback. This area advocates for competencies in:

- Innovating with Digital Assessments, utilizing digital tools for comprehensive evaluations of learner progress.



- Providing Digital Feedback, leveraging online platforms to offer timely, constructive critiques that promote learner growth.
- Analysing Learning Data, employing digital assessment results to refine and enhance pedagogical approaches.

5. Student Empowerment

Student Empowerment focuses on activating students' engagement and autonomy through digital technologies. Competencies include:

- Fostering Online Participation and Collaboration, encouraging the use of digital platforms for collective student projects and discussions.
- Implementing Personalised Learning Solutions, applying technologies that tailor educational content and methodologies to fit unique student needs.
- Educating on Digital Citizenship, equipping students with the knowledge to navigate the digital world responsibly and ethically.

6. Facilitating Students' Digital Competence

- Educators are tasked with guiding the development of Students' Digital Competence, ensuring learners are well-versed in:
- Acquiring Basic Digital Skills, foundational for navigating today's digital society.
- Exercising Digital Critical Thinking, essential for discerning the reliability of online information.
- Engaging in Digital Creativity and Collaboration, utilizing technology for creative expression and teamwork.

Implementing DigCompEdu calls for an integrated approach that not only fosters digital competence among educators but also cultivates a learning environment ripe for digital exploration and discovery. Educational institutions must commit to





providing ongoing professional development, equipping educators with the necessary resources, and fostering a supportive culture that champions digital innovation.

This holistic stance on digital competence ensures both educators and learners are aptly prepared to meet the multifaceted challenges and seize the opportunities presented by the digital future. The embrace of the DigCompEdu framework signifies a pivotal step toward a more effective amalgamation of digital technologies in education, heralding a new era of enriched teaching and learning experiences.

In summation, DigCompEdu emerges as an indispensable framework for steering the educational sphere through the complexities of the digital revolution. By delineating explicit competencies across six key areas, DigCompEdu empowers educators to not only refine their teaching practices but also to equip their learners with the critical digital skills necessary for success in a hyper-connected world. Furthermore, DigCompEdu kindles a reflective dialogue on the transformative potential of technology in education, advocating for a pedagogical shift towards innovation, inclusivity, and adaptability. Ultimately, the comprehensive adoption of DigCompEdu's competencies fosters an educational paradigm where both educators and learners are poised to thrive in the digital age, ensuring the education system evolves in tandem with the demands of an increasingly digital world.

By fostering a commitment to the continuous development of digital competencies, DigCompEdu stands as a testament to the enduring relevance and efficacy of educators in shaping the future of education in the digital epoch.

In the construction of our evaluation toolkit for new technology courses in schools, a meticulous selection process was undertaken to identify the DigCompEdu area that most accurately align with the objectives and scope of our





evaluation. After careful consideration, the area of "Teaching and Learning" and "Professional Engagement" were chosen as the focal points for our evaluation efforts. The rationale behind this selection rests on several foundational pillars that underpin the goals of the toolkit and the nature of the interventions being assessed.

Teaching and Learning:

This area directly addresses the core of our evaluation toolkit—the effective integration of digital technologies into teaching practices to enhance the learning experience. Our questionnaires are designed to capture the nuances of how educators employ digital tools and resources to foster engaging, dynamic, and inclusive educational environments. By focusing on Teaching and Learning, we aim to assess the immediate impact of technology courses on educators' abilities to:

- Design and implement digital learning activities tailored to diverse learner needs.
- Encourage active participation and collaboration among students through digital platforms.
- Utilize digital assessment tools to monitor progress and provide timely feedback.

This competency area is crucial for understanding the direct application of digital skills in pedagogical contexts, making it a natural fit for our toolkit's objectives.

Professional Engagement:

Recognizing that the impact of digital technologies extends beyond the classroom, the Professional Engagement competency encapsulates the broader digital competencies required by educators in today's interconnected world. This area emphasizes the importance of continuous professional development,





collaborative networks, and the management of digital identity within professional communities. Our decision to include Professional Engagement in our evaluation toolkit reflects our understanding that:

- The effectiveness of technology integration in education is not only about in-class practices but also about how educators develop professionally through digital means.
- Participation in professional digital communities and networks plays a significant role in the continuous improvement and sharing of best practices.
- Educators' digital identity and online presence contribute to their professional growth and the dissemination of knowledge within the educational community.

By evaluating Professional Engagement, we aim to shed light on the holistic development of educators as digital citizens and professionals, further enriching our understanding of the impact of technology courses.



4. DATA COLLECTION METHODS

In this project, we adopt a multifaceted data collection strategy using different methods.

QUESTIONNAIRES

As a primary method we will use questionnaires tailored to assess the digital competencies as outlined in the DigCompEdu framework. This approach is pivotal for understanding the digital landscape across various educational settings. The questionnaires, employing a Likert scale format, are designed to capture a wide spectrum of attitudes, values, and behaviors, facilitating a nuanced analysis of digital competencies among different demographic groups within the educational sector.

To ensure inclusivity and comprehensiveness in our data collection, the questionnaires are customized for four distinct demographic groups: young learners, adult learners, educators, and ICT technicians. This customization allows for the collection of data that is not only relevant to each group's specific digital competency needs and challenges but also reflective of their unique interactions with digital technologies.

- **For School Learners (12-18):** The questionnaire captures their digital engagement and learning experiences with a special emphasis on age-appropriate content. It aims to gauge not only their proficiency with digital tools but also their ability to work collaboratively and solve problems creatively, reflecting on how digital environments influence these vital skills.
- **For Adult Learners (18+):** Tailored to adult participants, this questionnaire explores digital skills essential for continuous learning and professional growth. Additionally, it assesses soft skills crucial in the digital age, such as effective teamwork in digital contexts and the ability to tackle professional

challenges through innovative solutions, highlighting the role of digital tools in enhancing these capabilities.

- **For Educators:** Focused on educators, this questionnaire evaluates how digital technologies are integrated into teaching practices and the educators' ongoing digital professional development. Beyond technical skills, it investigates educators' effectiveness in nurturing an environment that promotes teamwork, critical thinking, and problem-solving among students, crucial for a productive and engaging learning atmosphere.
- **For ICT Technicians:** Directed at ICT technicians, the questionnaire delves into their support for and development of digital infrastructure within educational settings. It also assesses their soft skills, including the ability to collaborate on digital projects, troubleshoot technical issues efficiently, and communicate effectively with educational staff to meet their digital needs.

When responding to a Likert scale questionnaire, participants will see each statement followed by a scale from 1 to 5, where they rate their level of agreement or disagreement. Here's how to interpret and use this scale:

- **Strongly Disagree:** You completely disagree with the statement. This is rated as '1', indicating the lowest level of agreement.
- **Disagree:** You mostly disagree with the statement, with some reservations. This is rated as '2', showing a lower level of agreement.
- **Neutral:** You neither agree nor disagree with the statement, or maybe you're undecided. This is rated as '3', representing a neutral stance.
- **Agree:** You mostly agree with the statement, though there could be minor reservations. This is rated as '4', showing a higher level of agreement.
- **Strongly Agree:** You completely agree with the statement without any reservations. This is rated as '5', indicating the highest level of agreement.

How to Use the Scale:

- Read Each Statement: Carefully read each statement in the questionnaire.
- Reflect: Think about how much you agree or disagree with the statement based on your personal feelings, opinions, or experiences.
- Select Your Response: Choose the number (1 to 5) that best reflects your level of agreement with each statement.
- Be Honest: Provide honest responses to ensure the accuracy of the data collected.
- Complete Every Item: Try to answer all items in the questionnaire for the most effective results.

In addition to Likert scale questions, each questionnaire includes open-ended questions. These are strategically incorporated to gather qualitative insights, allowing participants to elaborate on their experiences and perceptions regarding digital competencies. This blend of quantitative and qualitative data collection enriches the analysis, providing a more detailed understanding of the digital competency landscape across the educational spectrum.

The use of Likert scale questionnaires, complemented by open-ended questions, offers several advantages:

- Sensitivity and Nuance: Detecting subtle differences in attitudes towards digital competencies.
- Ease of Administration: Facilitating broad participation while ensuring the reliability of the data collected.
- Depth of Insight: Offering both quantitative and qualitative perspectives on digital competencies.
- Alignment with DigCompEdu: Ensuring a structured and comprehensive assessment of digital competencies.



By adopting this detailed and differentiated approach to data collection and analysis, the project seeks to offer valuable insights into the digital competencies of young learners, adult learners, educators, and ICT technicians. The goal is to inform and shape effective policies and practices that advance digital education, ensuring that all stakeholders are equipped to thrive in a digitally connected world.

INFORMAL FEEDBACK EVALUATION

Informal evaluation is a key tool for understanding participants' experience and learning during the development of our courses. Unlike formal evaluations, informal evaluation seeks to capture participants' impressions and opinions in a more relaxed and conversational manner. This approach allows us to collect genuine, real-time feedback, which is invaluable for adjusting and enriching the learning process.

Steps for conducting informal evaluation:

- **Relaxed atmosphere:** Ensure that questions are asked in an informal and friendly atmosphere to encourage openness and honesty in the answers.
- **Clear Communication:** Explain to participants that their feedback is crucial to improving the course and that there are no right or wrong answers.
- **Active Listening:** Pay attention to what participants say and how they say it. Often, the most valuable observations are found between the lines.
- **Write it down:** Even if the conversation is informal, take note of relevant comments so that you can review and analyse them later.
- **Follow-up:** If an area for improvement or a common challenge is identified, consider following up with concrete actions or further discussion



Open questions for the informal evaluation:

1. "Do you feel that your technology skills have improved since you started the course?"
2. "Do you notice any progress in your cross-cutting skills, such as teamwork or problem solving?"
3. "So far, what is one new thing you have learned about coding (or the relevant technology from the course) that you find most interesting?"
4. "Do you think the course content has been presented in a way that is easy to understand?"
5. "Are there any tools or resources that you have found particularly useful or eye-opening?"
6. "Have you encountered any challenges in the course, how did you overcome them?"
7. "How would you rate your level of participation and motivation in the course?"
8. "Do you think this course would be beneficial to other colleagues of yours - why?"
9. "Are there any aspects of the course that you would change or improve?"
10. "How did you rate the support you received from the course instructors and technicians?"

SELF ANALYSIS CO-EVALUATION MEETINGS

Co-evaluation meetings with an RMA approach seek to facilitate a space for dialogue and deep reflection among members of the educational community, including students, educators and members of the rural community. This approach, centred on the maieutic technique of question and answer to stimulate critical thinking and self-discovery, promotes active and reciprocal participation of all involved. These meetings are opportunities to collectively explore the quality, impact, relevance and motivational effect of the implemented activities, as well as to link them to the previous self-analysis workshops, in a framework of constructive and collaborative reflection.

Adjustments to be considered:

- **Question-Driven Dialogue:** Use open-ended questions as the main tool to guide discussion, encouraging participants to explore their own experiences and perceptions in depth.
- **Reciprocal Interaction:** Foster an atmosphere where participants not only respond but also raise questions, stimulating genuine two-way dialogue.
- **Joint Reflection and Discovery:** Prioritise moments of collective reflection that allow participants to discover together valuable insights and learning derived from the activities.

Adjusted Open Questions for Co-evaluation Meetings with RMA Approach:

1. "What personal learnings do you consider you have gained through the activities and how have these influenced your perspective or practice?"
2. "Reflecting on the wider community, in what ways do you think the activities have contributed to community development or well-being?"
3. "Thinking about relevance, how do the activities align with your or the community's needs, are there examples you can share?"

4. "Connecting to previous experiences, such as the self-analysis workshops, how do these encounters complement or deepen our current understandings or actions?"
5. "What changes have you perceived in the motivation of the participants towards the topics discussed, and could you describe a situation that illustrates this?"
6. "From your point of view, what aspects of the activities could be enriched and in what way?"
7. "Are there any significant experiences within the activities that you would like to highlight for their educational or transformative value?"

Co-evaluation meetings with RMA approach are opportunities to collectively explore the quality, impact, relevance and motivational effect of the implemented activities, as well as to link them to the previous self-analysis workshops, in a framework of constructive and collaborative reflection.

5. EVALUATION PLAN

The pre-post evaluation methodology is an essential tool for gauging the effectiveness of educational programs. By collecting data before (pre) and after (post) an educational intervention, this approach allows for a direct comparison of participants' knowledge, skills, and attitudes, providing clear insights into the program's impact. The significance of employing a pre-post evaluation lies in its ability to offer measurable evidence of learning progress and behavioral changes, thus informing future teaching strategies and curriculum development. Adopting this methodology ensures educational interventions are both impactful and aligned with the evolving digital competencies required in modern education. Furthermore, the objective of this assessment is to measure the impact of new technology courses on learners and educators in schools through a pre and post-evaluation methodology.

1. Baseline Measurements (Pre-Course Evaluation):

- Timing: Conduct baseline measurements 1-2 weeks before the commencement of the technology courses.
- Method: Distribute pre-course questionnaires to both learners and educators to assess their initial competencies, attitudes towards digital learning, and soft skills related to digital technology use. For educators, the focus will be on their digital pedagogy skills, whereas for learners, the emphasis will be on digital literacy and soft skills development.

2. Post-Project Evaluations:

- Timing: Conduct post-course evaluations within two weeks of course completion.
- Method: Redistribute the initial questionnaires with additional items reflecting on the overall course experience, knowledge gained, and soft



skills development. Compare these results with baseline measurements to assess growth, achievements, and areas for improvement.

3. Long-Term Follow-Up (optional):

- Timing: A follow-up evaluation 3-6 months after the course completion.
- Method: Employ a brief online survey focusing on the long-term retention of skills and knowledge, continued application of learned digital competencies, and any sustained changes in attitudes toward digital technology.



6. TOOLS AND SOFTWARE

For the evaluation of new technology courses in schools, employing the right mix of tools and software is crucial for effective data collection, analysis, and project management. Here's a concise guide on the tools and software that will support the evaluation process:

1. Survey Platforms:

- Google Forms will be utilized to distribute the different questionnaires tailored for each collective—educators, young learners, adult learners, and ICT technicians. These platforms are user-friendly, accessible, and support a wide range of question types, making them ideal for collecting responses in an online format. At the same time, the questionnaires will be distributed in a plain text template format to print it if necessary.
- Features: The platform offers ease of use, anonymity for respondents, and automatic data compilation, which simplifies the analysis process.

2. Data Analysis Software:

- SPSS (Statistical Package for the Social Sciences) could be employed to interpret survey results, identify patterns, and measure the impact of the courses.
- Features: This tool supports a variety of statistical tests, data visualization, and are widely used in academic and professional research, making them suitable for evaluating the effectiveness of educational interventions.

3. Dissemination and Feedback Collection:

- For the dissemination of questionnaires and collection of feedback in a format accessible to all partners, ****Google Drive**** will be used. This cloud storage platforms will serve as central repositories for all project-related documents, including questionnaires, translations, and responses.



- Features: Easy file sharing, version control, and access from anywhere enhance collaboration and ensure that all partners have access to the materials they need.

This comprehensive toolkit, combining survey platforms, data analysis software, and project management tools, is designed to support a robust evaluation plan. By utilizing these tools, the project aims to effectively measure the impact of new technology courses, facilitate seamless project management, and ensure that findings are accessible to all partners and stakeholders.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Proposal number: 101087107.

7. REPORTING AND FEEDBACK MECHANISMS

After the completion of both main stages of the evaluation (pre and post), the University of Alicante will take the lead in synthesizing the gathered data into an extensive and detailed report. This report will highlight the key findings, outline the significant differences observed between the pre- and post-evaluation stages, and provide an in-depth analysis of the impact of the new technology courses on various groups, including educators, young learners, adult learners, and ICT technicians.

Reporting and Feedback Mechanisms:

1. Comprehensive Report Creation: The University of Alicante will compile the collected data, utilizing advanced statistical methods to identify and articulate the significant changes and trends. This report will encompass:

- An executive summary of key findings
- A detailed analysis of the pre- and post-evaluation data.
- Insights into the effectiveness of the technology courses.
- Recommendations for future iterations of the program based on the findings.

2. Report Dissemination: The final report, along with a summary of the feedback and recommendations for future actions, will be disseminated through various channels, including:

- The project's website and social media platforms.
- Email newsletters to stakeholders and participants.
- Publication in relevant educational and technological forums and journals.

The University of Alicante's commitment to producing a comprehensive report and facilitating feedback mechanisms underscores the project's dedication to transparency, continuous improvement, and stakeholder engagement. By

effectively reporting the findings and incorporating feedback, the project aims to enhance the educational landscape and better prepare both educators and learners for the challenges and opportunities of the digital age.

8. ETHICAL CONSIDERATIONS:

In conducting evaluations for new technology courses in schools, it's critical to adhere to stringent ethical guidelines to protect participants' privacy and uphold the integrity of the research. This involves several key considerations to ensure the respectful and lawful handling of personal data, along with maintaining the trust and safety of all individuals involved.

Informed Consent: Every participant must be fully informed about the evaluation's purpose, what their participation entails, how their data will be used, and their right to withdraw at any point without consequence. Obtaining informed consent is the first step in respecting participant autonomy and ensuring voluntary participation.

Anonymity and Confidentiality: Protecting participants' identities and the confidentiality of their responses is paramount. This means anonymizing data to remove any personal identifiers and securing all collected information to prevent unauthorized access or disclosure.

Transparency and Data Use: Participants should clearly understand how their data will be utilized in the evaluation process. This includes details on data analysis, access, and the dissemination of results, ensuring transparency throughout the research process.

Ethical Approval: Particularly when involving minors or vulnerable groups, securing ethical approval from an institutional review board or ethics committee is essential. This verification ensures the evaluation's design respects ethical standards and participants' well-being.



Data Protection Compliance: Adhering to data protection laws, like the GDPR in the European Union, is crucial for safeguarding personal data against loss, theft, and unauthorized disclosure. Implementing robust data protection measures is a legal requirement and ethical obligation.

Respect for Participant Autonomy: The evaluation must acknowledge participants' autonomy, ensuring their participation is free from coercion. Special attention is needed when dealing with vulnerable populations to ensure they understand the evaluation and consent process fully.

Addressing Ethical Issues: A clear mechanism should be in place for reporting and addressing any ethical concerns that arise during the evaluation. Providing participants with contacts within the study team and an independent ethics committee offers a route to report concerns.

Feedback to Participants: Offering participants a summary of the evaluation findings acknowledges their contribution and reinforces the principles of transparency and reciprocity.

By embedding these ethical considerations into the evaluation plan, the project not only ensures compliance with legal and ethical standards but also fosters an environment of trust and respect. This approach is fundamental to conducting meaningful and responsible research in the digital education landscape.



9. CONCLUSION

As we conclude this comprehensive evaluation toolkit for assessing the impact of new technology courses in schools, it's crucial to reflect on the journey we've embarked upon, and the path laid out before us. This document has meticulously outlined the objectives, target audience, methodologies, tools, and ethical considerations necessary for a robust evaluation of educational interventions. Through the pre- and post-evaluation methodology, tailored questionnaires, strategic use of digital tools, and a steadfast commitment to ethical research practices, we aim to capture a holistic view of how digital technologies can transform teaching and learning. At the same time, items related to soft skills such as critical thinking, teamwork or problem solving were added to improve the deepness of the questionnaires.

Integral to the success of this endeavor is the unwavering commitment of all partners involved in the evaluation process. The collaboration, dedication, and active participation of each partner are fundamental for the correct functioning of the project. This collective effort ensures that the evaluation not only adheres to the highest standards of rigor and integrity but also reflects the diverse perspectives and experiences within our educational communities.

The essence of this toolkit is not just in its methodology, or the tools employed but in its potential to foster a culture of continuous improvement, innovation, and inclusivity in education. By systematically gathering and analyzing data, we're not only measuring the impact of technology on educational outcomes but also paving the way for future advancements. The insights derived from this evaluation will serve as a beacon, guiding educators, policymakers, and stakeholders toward effective integration of technology in educational settings, ensuring that teaching and learning processes are not only modernized but also made more engaging, accessible, and effective.



In a world where technology constantly reshapes the boundaries of education, this evaluation toolkit stands as a testament to our commitment to ensuring that educators and learners are equipped to thrive. As we move forward, let this document be a reminder of the power of thoughtful evaluation to drive positive change, enhance digital literacy, and prepare future generations for the challenges and opportunities of the digital age. The implementation of this evaluation toolkit is just the beginning. It represents a step towards a deeper understanding of digital education's impact and potential. The journey of learning and adaptation continues, fueled by our collective efforts, insights, and the unwavering belief in the transformative power of education.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Proposal number: 101087107.

10. ANNEXES

QUESTIONNAIRE FOR EDUCATORS PRE - TRAINING

Answer the following questions with a score from 1 to 5 where 1 is the lowest score and 5 is the highest score. 3 is considered neutral.

	1	2	3	4	5
I use various internet sites (websites) and search strategies to find and select a wide range of digital resources.					
I create my own digital resources and modify existing ones to suit my teaching needs.					
I securely protect sensitive content.					
I carefully consider how, when, and why to use digital technologies in the classroom.					
I supervise my learners' activities and interactions in the online collaboration environments we use.					
When my learners work in groups or teams, they use digital technologies to acquire and document knowledge.					
I use digital technologies to allow learners to plan, document, and assess their learning independently.					
I use digital assessment strategies to monitor learners' progress.					
I analyze all available data to identify learners who need additional support.					
When proposing digital tasks, I consider and address potential issues such as equal access to devices and digital resources.					

I use digital technologies to offer personalized learning opportunities to learners.					
I use digital technologies to enable learners to actively participate in class.					
I propose tasks that require learners to create digital content.					
I design and execute learning projects that involve new technologies.					
I facilitate safe and accessible online learning spaces, ensuring the inclusion of all learners.					
I use involve robotics in the classroom to teach and design concepts,					
I use involve coding in the classroom to teach and design concepts,					
I use involve microcontrollers in the classroom to teach and design concepts,					
I use involve 3D modelling and printing in the classroom to teach and design concepts,					
I use involve web development, in the classroom to teach and design concepts,					
I critically evaluate the applications of new technologies, in educational contexts, always seeking to improve and innovate in my teaching practices.					

Other comments:

QUESTIONNAIRE FOR EDUCATORS POST - TRAINING

Answer the following questions with a score from 1 to 5 where 1 is the lowest score and 5 is the highest score. 3 is considered neutral.

	1	2	3	4	5
I use various internet sites (websites) and search strategies to find and select a wide range of digital resources.					
I create my own digital resources and modify existing ones to suit my teaching needs.					
I securely protect sensitive content.					
I carefully consider how, when, and why to use digital technologies in the classroom.					
I supervise my learners' activities and interactions in the online collaboration environments we use.					
When my learners work in groups or teams, they use digital technologies to acquire and document knowledge.					
I use digital technologies to allow learners to plan, document, and assess their learning independently.					
I use digital assessment strategies to monitor learners' progress.					
I analyze all available data to identify learners who need additional support.					
When proposing digital tasks, I consider and address potential issues such as equal access to devices and digital resources.					
I use digital technologies to offer personalized learning opportunities to learners.					

I use digital technologies to enable learners to actively participate in class.					
I propose tasks that require learners to create digital content.					
I design and execute learning projects that involve new technologies.					
I facilitate safe and accessible online learning spaces, ensuring the inclusion of all learners.					
I use involve robotics in the classroom to teach and design concepts,					
I use involve coding in the classroom to teach and design concepts,					
I use involve microcontrollers in the classroom to teach and design concepts,					
I use involve 3D modelling and printing in the classroom to teach and design concepts,					
I use involve web development, in the classroom to teach and design concepts,					
I critically evaluate the applications of new technologies, in educational contexts, always seeking to improve and innovate in my teaching practices.					
My use of digital technologies has significantly enhanced my ability to facilitate team collaboration and demonstrate leadership.					
My capacity to empathize with learners' individual experiences and challenges with digital learning has increased.					
The scheduling of the course sessions was convenient for me.					

The location/online platform used for the course was accessible and convenient.					
Accessing course materials was easy.					
I encountered technical difficulties during the course.					
Communication from the organizers regarding course updates and information was clear and effective.					
The registration and enrollment process for the course was straightforward.					
There was sufficient support for logistical or technical issues.					
The duration of the course was appropriate for covering all the intended content					

1. How have the new technologies or methodologies enhanced your pedagogical practices?

2. Are there areas you still find challenging, and how do you plan to address them

3. Other comments:

QUESTIONNAIRE FOR SCHOOL LEARNERS PRE-TRAINING (12 – 18 years old)

Answer the following questions with a score from 1 to 5 where 1 is the lowest score and 5 is the highest score. 3 is considered neutral.

	1	2	3	4	5
I use educational apps to learn about new topics of interest.					
I participate in digital activities that require teamwork, using digital tools.					
I create simple projects using robotics or programming					
I design simple objects that could be created with a 3D printer.					
I explore and apply emerging technologies such as involve robotics, coding, microcontrollers, 3D modelling and printing and web development					
I implement critical thinking and problem-solving strategies in digital environments.					
I use new technologies for applied technology projects, integrating coding and electronics skills.					
I contribute to activities with emergent technologies adapted to my real needs.					
I describe how digital technologies can be used to solve everyday problems					

Other comments:

QUESTIONNAIRE FOR SCHOOL LEARNERS POST-TRAINING (12 – 18 years old)

Answer the following questions with a score from 1 to 5 where 1 is the lowest score and 5 is the highest score. 3 is considered neutral.

	1	2	3	4	5
I use educational apps to learn about new topics of interest.					
I participate in digital activities that require teamwork, using digital tools.					
I create simple projects using robotics or programming					
I design simple objects that could be created with a 3D printer.					
I explore and apply emerging technologies such as involve robotics, coding, microcontrollers, 3D modelling and printing and web development					
I implement critical thinking and problem-solving strategies in digital environments.					
I use new technologies for applied technology projects, integrating coding and electronics skills.					
I contribute to activities with emergent technologies adapted to my real needs.					
I describe how digital technologies can be used to solve everyday problems					
Using digital technologies has made me more effective in working collaboratively with peers and taking on leadership roles in group projects.					

I feel more capable of understanding and empathizing with my classmates' experiences and challenges in digital learning environments.					
I have seen an improvement in my ability to think critically and solve complex problems through digital activities and resources.					
The scheduling of the course sessions was convenient for me.					
The location/online platform used for the course was accessible and convenient.					
Accessing course materials was easy.					
I encountered technical difficulties during the course.					
Communication from the organizers regarding course updates and information was clear and effective.					
The registration and enrollment process for the course was straightforward.					
There was sufficient support for logistical or technical issues.					
The duration of the course was appropriate for covering all the intended content.					

Other comments:

QUESTIONNAIRE FOR ADULT LEARNERS PRE-TRAINING (18+ years old)

Answer the following questions with a score from 1 to 5 where 1 is the lowest score and 5 is the highest score. 3 is considered neutral.

	1	2	3	4	5
I perform administrative tasks online and help others to do so.					
I collaborate in digital environments and effectively use collaborative digital services.					
I maintain respectful behavior in digital environments and manage my digital identity.					
I create digital content adapting tools to my needs and share my creations.					
I apply basic principles of robotics and programming in technological projects.					
I design simple websites and evaluate the usability of websites.					
I improve my digital skills and help others to do the same.					
I identify opportunities and apply emerging technologies practical solutions to everyday problems.					
I explore and apply emerging technologies such as robotics and coding to develop innovative projects.					
I implement critical thinking and problem-solving strategies in digital environments.					
I effectively use microcontrollers for applied technology projects, integrating coding and electronics skills.					
I contribute to web development with basic knowledge of HTML and CSS, creating websites that meet real needs.					



Other comments:



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Proposal number: 101087107.

QUESTIONNAIRE FOR ADULT LEARNERS POST-TRAINING (18+ years old)

Answer the following questions with a score from 1 to 5 where 1 is the lowest score and 5 is the highest score. 3 is considered neutral.

	1	2	3	4	5
I perform administrative tasks online and help others to do so.					
I collaborate in digital environments and effectively use collaborative digital services.					
I maintain respectful behavior in digital environments and manage my digital identity.					
I create digital content adapting tools to my needs and share my creations.					
I apply basic principles of robotics and programming in technological projects.					
I design simple websites and evaluate the usability of websites.					
I improve my digital skills and help others to do the same.					
I identify opportunities and apply emerging technologies practical solutions to everyday problems.					
I explore and apply emerging technologies such as robotics and coding to develop innovative projects.					
I implement critical thinking and problem-solving strategies in digital environments.					
I effectively use microcontrollers for applied technology projects, integrating coding and electronics skills.					
I contribute to web development with basic knowledge of HTML and CSS, creating websites that meet real needs.					

My engagement with digital technologies has significantly enhanced my ability to work collaboratively and assume leadership roles in group settings.					
I've developed a greater capacity to empathize with the digital learning experiences and challenges faced by my peers.					
I've noticed an improvement in my critical thinking and problem-solving skills through engaging with digital learning activities and resources.					
The scheduling of the course sessions was convenient for me.					
The location/platform used for the course was accessible and convenient.					
Accessing course materials was easy.					
I encountered technical difficulties during the course.					
Communication from the organizers regarding course updates and information was clear and effective.					
The registration and enrollment process for the course was straightforward.					
There was sufficient support for logistical or technical issues.					
The duration of the course was appropriate for covering all the intended content.					

Other comments:

QUESTIONNAIRE ICT TECHNICIANS POST TRAINING

Answer the following questions with a score from 1 to 5 where 1 is the lowest score and 5 is the highest score. 3 is considered neutral.

	1	2	3	4	5
The impact of ICT activities on learners learning and motivation is significant.					
I have observed concrete improvements in learners' digital competencies following their participation in the activities.					
The educational content provided is accessible and understandable for learners.					
The presentation of the educational content is suitable for facilitating learning.					
The ICT tools provided are appropriate and effective for teaching.					
The ICT tools are user-friendly for teachers and trainers.					
I have specific suggestions that could improve the quality and effectiveness of the ICT activities.					
The technical support for teachers and trainers during the ICT courses is sufficient and effective.					
The scheduling and organization of ICT activities were convenient.					
ICT activity locations/platforms were accessible and suitable.					
Participants showed high engagement in ICT activities.					
Participants committed to applying learned ICT skills.					
Logistical arrangements met participant needs.					

Participants contributed ideas and feedback actively.					
Participants were open to adopting new ICT tools/methods.					
Effective communication for logistical queries was in place.					

Other comments:



INFORMAL FEEDBACK COLLECTION TEMPLATE

Provide the most significant findings in an informal and narrative manner

QUESTION	NARRATIVE FEEDBACK
Do you feel that your technology skills have improved since you started the course?	
Do you notice any progress in your cross-cutting skills, such as teamwork or problem solving?	
So far, what is one new thing you have learned about coding (or the relevant technology from the course) that you find most interesting?	
Do you think the course content has been presented in a way that is easy to understand?	
Are there any tools or resources that you have found particularly useful or eye-opening?	
Have you encountered any challenges in the course, how did you overcome them?	
How would you rate your level of participation and motivation in the course?	
Do you think this course would be beneficial to other colleagues of yours - why?	
Are there any aspects of the course that you would change or improve?	



How did you rate the support you received from the course instructors and technicians?	
--	--

Other comments:



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Proposal number: 101087107.

DATA COLLECTION TEMPLATE FOR CO-EVALUATION MEETINGS

QUESTION 1: What personal learnings do you consider you have gained through the activities and how have these influenced your perspective or practice?" GENERAL CODE: 1. Personal learning and its influence

SUBCODE	Key findings	Narratives (examples)
1.1. Personal reflection and self-knowledge		
1.2. Practical application of learnings		
1.3: Change of perspective or approach		

QUESTION 2: "Reflecting on the wider community, in what ways do you think the activities have contributed to community development or well-being?"

GENERAL CODE: 2. Contribution to community development or well-being

SUBCODE	Key findings	Narratives (examples)
2.1. Positive community impact		
2.2. Encouraging community collaboration		
2.3. Recognition of community needs		

QUESTION 3: "Thinking about relevance, how do the activities align with your or the community's needs, are there examples you can share?"

GENERAL CODE: 3. Alignment of activities with needs

SUBCODE	Key findings	Narratives (examples)
3.1. Direct relevance and applicability		
3.2. Suggestions for improvement or adaptation		
2.3. Diversity of needs and responses		

QUESTION 4: "Connecting to previous experiences, such as the self-analysis workshops, how do these encounters complement or deepen our current understandings or actions?"

GENERAL CODE: Connection with previous experiences

SUBCODE	Key findings	Narratives (examples)
4.1. Integration with previous learning		
4.2. Deepening of knowledge		
4.3. Innovation and evolution of practices		

QUESTION 5: "What changes have you perceived in the motivation of the participants towards the topics discussed, and could you describe a situation that illustrates this?"

GENERAL CODE: Changes in motivation towards the topics covered

SUBCODE	Key findings	Narratives (examples)
---------	--------------	-----------------------

5.1. Increase in motivation and interest		
5.2. Identification of motivational factors		
5.3. Strategies to keep motivation high		

QUESTION 6: "From your point of view, what aspects of the activities could be enriched and in what way?"

GENERAL CODE: Aspects of activities to be enriched

SUBCODE	Key findings	Narratives (examples)
6.1. Thematic areas to deepen		
6.2. Pedagogical methods and techniques		
6.3. Teaching resources and materials		

QUESTION 7: "Are there any significant experiences within the activities that you would like to highlight for their educational or transformative value?"

GENERAL CODE: Significant experiences within the activities

SUBCODE	Key findings	Narratives (examples)
7.1. Key learning moments		
7.2. Transformative experiences		
7.3. Examples of success and improvement		

NATIONAL DATA COLLECTION TEMPLATE FOR PARTNERS

The following template has been designed to facilitate the collection and presentation of evaluative data from the courses delivered under the project. This tool is essential to capture the direct and indirect impacts of educational interventions on various stakeholders, including educators, youth and adult learners, as well as ICT technicians.

It is essential that each project partner completes the template by providing detailed information specific to their country and institution. They should include the most significant findings from each pre- and post-course questionnaire, highlighting notable changes in participants' competences and perceptions. This process will not only help to evaluate the effectiveness of the courses offered but will also provide a solid basis for future improvements and adjustments in project activities.

In addition, a synthesis of informal feedback collected during the courses should be included. This qualitative information is invaluable for understanding participants' experiences and opinions in a less structured context, allowing for agile and relevant adjustments to the methodology or content of the courses.

Each section of the template is clearly delineated to ensure that the information is easy to enter and interpret. This will ensure that all partners can effectively contribute to the collective evaluation process, facilitating a comprehensive and detailed view of the project's impact both qualitative and quantitative methods to capture a holistic view of the project's impact.

The Evaluation Toolkit is divided into several sections, each tailored to address specific aspects of the project's evaluation needs. It begins with an overview of the evaluation objectives and methodology, followed by a great overview of the DigCompEdu framework, detailed guidelines on implementing the evaluation process, including the use of pre- and post-methodology questionnaires, focus



groups, and case studies. The toolkit also outlines the key performance indicators (KPIs) and metrics for assessing digital literacy improvements, community engagement levels, and access to digital resources. Additionally, it includes templates and tools to facilitate data collection, analysis, and reporting, ensuring a standardized approach to evaluation across all project activities.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Proposal number: 101087107.

Template

Country:	[Name of Country]
Institution:	[Name of Institution]
Data Collection Period:	[Start Date] to [End Date].

SECTION 1 LIKERT QUESTIONNAIRES

1. QUESTIONNAIRE FOR EDUCATORS

Pre-course evaluation:

Enter a graph with the answers given for each question by the educators in the pre-training questionnaire

Post-course evaluation:

Enter a graph with the answers given for each question by the educators in the post-training questionnaire

Open-ended question narrative synthesis:

2. QUESTIONNAIRE FOR SCHOOL LEARNERS (12 – 18 YEARS OLD)

Pre-course evaluation:

Enter a graph with the answers given for each question by school learners in the pre-training questionnaire

Post-course evaluation:

Enter a graph with the answers given for each question by school learners in the post-training questionnaire

Other Comments

3. QUESTIONNAIRE FOR ADULT LEARNERS (18+)

Pre-course evaluation:

Enter a graph with the answers given for each question by adult learners in the pre-training questionnaire

Post-course evaluation:



Enter a graph with the answers given for each question by adult learners in the post-training questionnaire

Other Comments

4. QUESTIONNAIRE FOR ICT TECHNICIANS

Post – course evaluation:

Enter a graph with the answers given for each question by ICT trainers in the post-training and provide the most significant narrative findings, if any.

Other Comments

SECTION 2 INFORMAL FEEDBACK TEMPLATE

Feedback Session:

Insert here the FILLED template of data collection for the informal feedback collection (template at page 39 of the present Evaluation Toolkit document)

Other Comments



SECTION 3 CO-EVALUATION MEETINGS

MEETING 1

Insert here the FILLED template of data collection for the first co-evaluation meeting (template at page 40 of the present Evaluation Toolkit document)

MEETING 2

Insert here the FILLED template of data collection for the second co-evaluation meeting (template at page 40 of the present Evaluation Toolkit document)

MEETING 3



Insert here the FILLED template of data collection for the third co-evaluation meeting (template at page 40 of the present Evaluation Toolkit document)

Other Comments



This Document is available under the Creative Commons license CC BY-NC-SA 4.0.

You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material

Attribution — You must give [appropriate credit](#), provide a link to the license, and [indicate if changes were made](#). You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

NonCommercial — You may not use the material for [commercial purposes](#).

ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the [same license](#) as the original.

No additional restrictions — You may not apply legal terms or [technological measures](#) that legally restrict others from doing anything the license permits.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EACEA. Neither the European Union nor the granting authority can be held responsible for them. Proposal number: 101087107.