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Research project
"Development of learning and training activities on
Digital Prevention"
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Background and statement of the problem

The DARE "Digital lifelong prevention" project works to enhance tools, knowledge, and processes that allow us to exploit the tremendous potential of data to define, monitor, and even predict health trajectories for the sake of health promotion & prevention with a lifelong perspective.

In particular Spoke 1-Enabling Factors and Technologies for a Lifelong Digital Prevention focuses on methods and acts as a Solution Provider for the other Spokes. Its objectives are: lowering and breaking down barriers to adopting innovative, sustainable, interoperable, high quality, and effective digitally enabled solutions for prevention; co-create with stakeholders a personalised prevention roadmap for future healthcare incorporating digital solutions along the whole prevention path.

The work package WP6 "Education, Training and Career Pathways" will coordinate all training and retraining activities.

The research project is part of WP6 whose aim is to address the lack of qualified personnel and improve the level of digital skills in the context of health prevention. In order to achieve this goal, the following tasks are planned in particular:

Task 6.1 - Establishing education, research, and career pathways. Enhancement of university post-graduate courses and PhD programs focusing on essential and advanced digital and computational skills in healthcare with a particular focus on prevention and health promotion. The target group includes the current workforce, those working in the research setting of real-world data and their applications.

Task 6.2 - Professional retraining and advanced training courses. This task will develop and deliver advanced post-graduate courses: i) at the individual level to better prepare professionals to hold emerging positions in the digital era, such as Data Stewards and Data Custodians; ii) at the organization level (e.g., ethics committees and local authorities), to bridge the digital divide.

Task 6.3 - Enhancing and supporting human resources. This task will create career opportunities in academia and industry for the fixed-term staff recruited within this initiative.

The target of these training and re-training programmes are technical and non-technical students or professionals that would achieve new knowledge and competences or reskill in their professional field in digital prevention.

Research questions or hypothesis, aim, objectives and deliverables

In order to implement the activities described above and to achieve the desired results of WP6, it will be necessary to design the training and retraining courses, implement them and deliver them in a blended format through specific learning environments. Specific didactic approaches dedicated to adult training through a multimedia approach will be adopted, collecting and coordinating the material prepared by the partners in order to identify an organic and time-based training pathway. Innovative teaching strategies involving collaborative learning (debate, case-studies, simulations, etc.) will be favoured, including live interaction with learners, so as to accompany them in the use of the multimedia material, and also to identify distance solutions for the verification of acquired skills. In addition, it will be necessary to develop a catalogue of the DARE project's training offerings that includes training and retraining activities for the different targets.

Therefore, initially, a literature review of the teaching and learning processes for competence development and upskilling will be necessary. In line with the learning theories of constructivism and socio-constructivism, which focus on the learning process rather than the content, more and more learning environments are beginning to emphasise the role of the learner in creating their own meaning in different learning situations, actively engaging with the content through accommodation and

assimilation (Piaget, 1969) or through social interaction (Vygotsky, 1978).

Secondly, it will be necessary to coordinate all DARE partners in order to collect their training proposals in the field of digital prevention and support them in the design and implementation of these online and blended courses also supporting them in the identification of the most appropriate certification systems for professionals such as open badges or micro-credentials.

Activity plan

The activity plan includes:

- Literature review;

- Comparative analysis of texts and articles on the subject of teaching and learning processes for competence development and professional development to identify the most popular formats on learning design, exploring the relationships between content types and teaching/learning methods;

- Developing a DARE training offer that includes the pedagogical approaches adopted with particular reference to the description of innovative teaching strategies that can be activated and tested within a digital learning blended environment and the recognition of learning certification such as micro-credentials;

- Design and implementation of the training and re-training programmes proposed by DARE partner (objectives, competences, teaching methods, tools, formative and summative evaluation).