Molina-Espinosa, J.M., George-Reyes, C. y Suárez-Brito, P. (2023). Appendix 4. Foundations of the platform project and the educational system. Technical report stage 1. Project OpenEdR4C: Education 4.0 Platform to strengthen Scientific, Technological, and Social Entrepreneurship through Scaling Complex Thinking Competencies. Tecnologico de Monterrey. Retrieved from: https://hdl.handle.net/11285/650717

Appendix number & project name - stage	Appendix 4 - OpenEdR4C- Stage 1
Products, outcomes or milestones	Research activities
Name	Appendix 4. Foundations of the platform project and the educational system
Responsible	José Martín Molina Espinosa Carlos Enrique George Reyes Paloma Suárez Brito
Research activities	Design and integration. Stage to lay the foundations of the platform project and the educational system, both methodologically and technologically. Imaginative processes to envision new solutions for the future of education with interdisciplinary networks, design of tools for experimentation and learning and plan for deployment in national and international institutions.

Support evidences

As of November 2022, we have been working on stage 1 of the OpenEdR4C project: Education 4.0 Platform to Strengthen Scientific, Technological, and Social Entrepreneurship through Scaling Complex Thinking Competencies. The purpose of this stage is to lay the foundations of the platform project, both methodologically and technologically, as well as to initiate imaginative processes to envision new solutions for the future of education with interdisciplinary networks, design of tools for experimentation and learning, and planning for its deployment in national and international institutions.

The results of this first stage consist of the definition for the design of the platform, the conformation of the navigation structure, content organization, traceability of participants, generation of user profiles, navigation options, forms of interaction, strategies for the incorporation of artificial intelligence, among others.

In accordance with the design of the platform, instruments have been designed to evaluate both the contents to be incorporated and the user experience. Likewise, the requirements to work on the next stages of development and implementation have been predefined.

The following section lists the evidence supporting this annex:

1. To carry out the activities of Stage 1 of the OpenEDR4C project, 3 focus group meetings were held with IRG-R4C research professors, postdoctoral researchers and external collaborators, in order to generate the ideation and design of the platform. Figure 1. shows a screenshot of a focus group session.
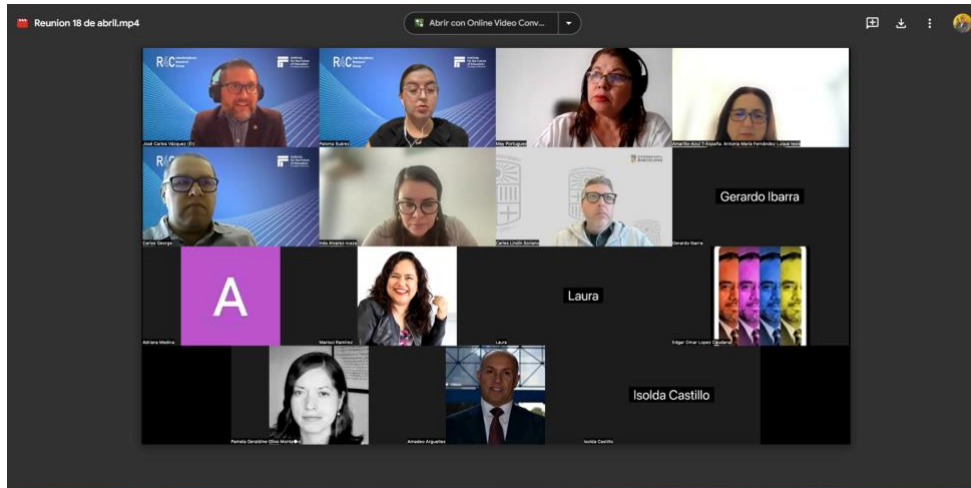
Figure 1. Focus group session.

2. The activities to be developed were socialized in the digital tool Slack. In the link you can verify the designation of tasks, follow-up and feedback. Figure 2. shows a screenshot of the Slack tool that is employed to communicate among team members. Communication is based on asynchronous posts made on channels.
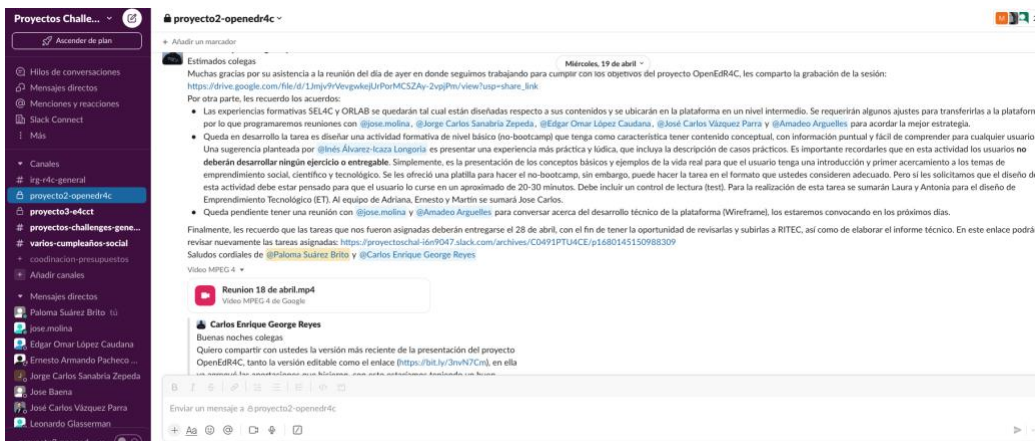

Figure 2. Screenshot of communication tool

3. Elaboration of the platform design.

In sessions with colleagues from the OpenEDR4C project, we worked on the ideation and design of the platform, both methodologically and technologically. This process was represented in a presentation that has been constantly updated.

The presentation contains: core of the platform, dynamics of user participation, outlines of training modules and problem simulation laboratory, as well as phase design. Figure 3 and 4 illustrate the document presentation that describes the technical foundations of the platform. Especially, the definition of the core information workflows and the main components of the foundation platform.
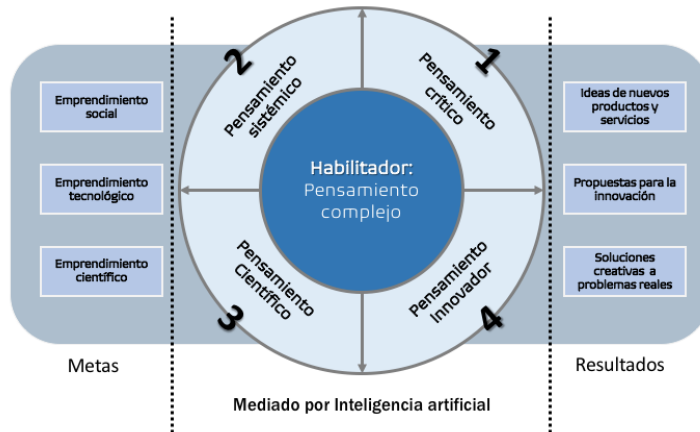
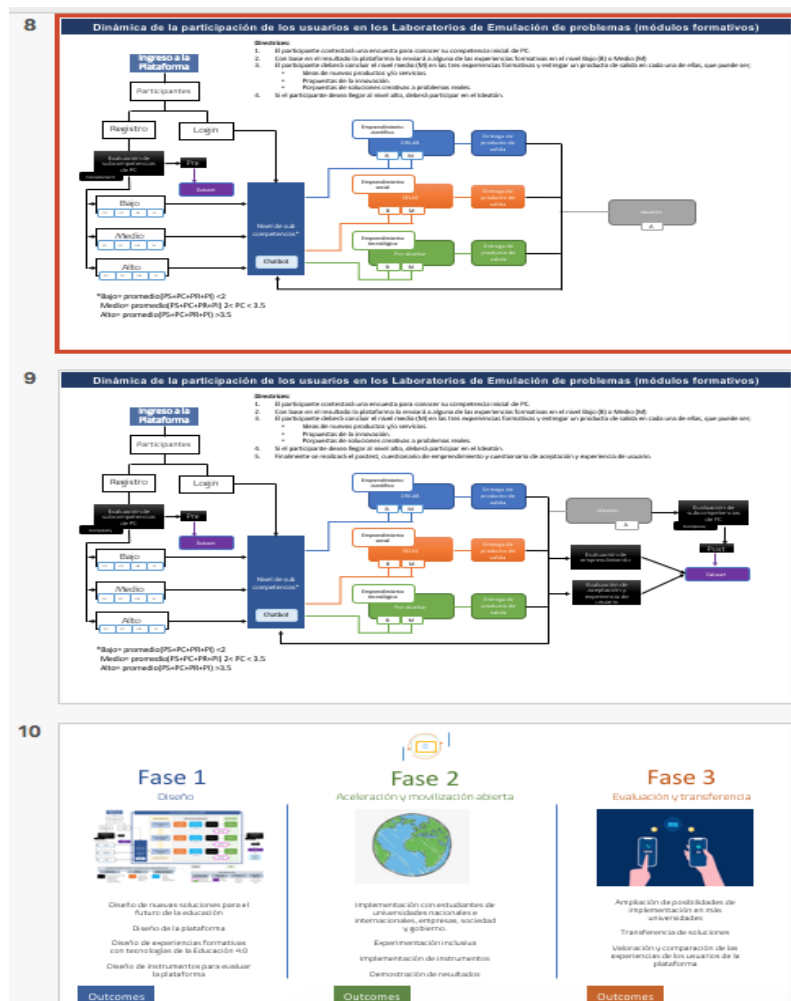Figure 3. Screenshot of foundation presentation document

Figure 4. Some screenshots that describes information workflows for the design of the platform

4. Once the platform design was outlined. Meetings were held with software development experts in order to transfer design platform main concepts. Sessions were held on 18/April/2023 and 09/May/2023. Figure 5 shows a screenshot of one of these meetings.
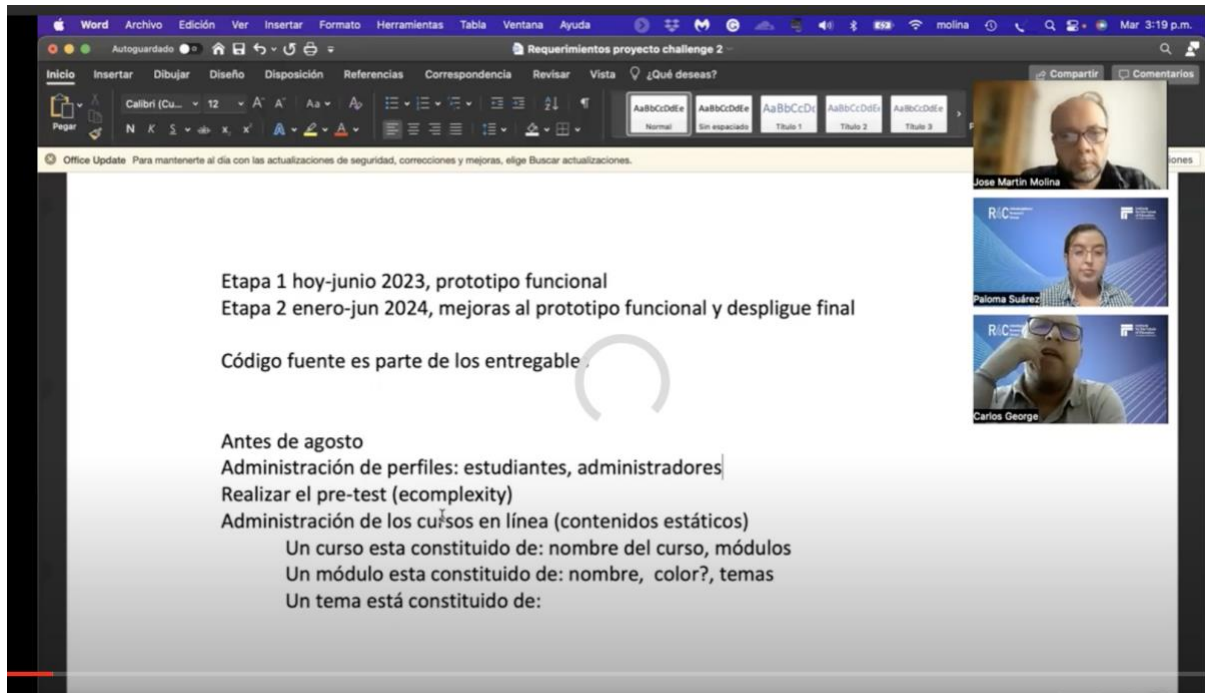

Figure 5. Screenshot during software design transfer to software experts.