

SCIENTIFIC RELEVANCE FOR THE DISCIPLINE

The project is grounded on the realization that beneath the visible layer of products (of whatever nature) that come out of Design classes, there is a vast continent of very relevant academic and scientific tools that precede them. This invisible territory comprises all sorts of exercises, project briefs, assignments, and prompts, that are the essential trigger to those outcomes. Hence, this project aims to start bringing to the surface — in the form of an accessible and open-ended archive — that invisible body of work. And, in doing so, to make it available for further reflection and applications, both inside and outside academia. We consider that making that vast corpus of scientific knowledge available to the Design education community is a crucial contribution to the production of better exercises and, consequently, better learning experiences as well as design practices; but also, as a renewed basis for an improved training of cross-disciplinary competencies, and, therefore, to foster more positive outcomes within organizations and institutions that may benefit from designers' input.

EXPECTED ECONOMIC AND SOCIAL IMPACT

A crucial outcome is the creation of indicators for measuring impacts on educational, economic, social, environmental, and cultural levels. Such indicators, either positive or negative, will allow us to diagnose and refine teaching/learning tools. Among the direct impacts (resulting from filling existing knowledge gaps):

- to improve the teaching/learning process;

Among indirect impacts (through dissemination):

- to enhance lifelong learning;
- to better design practice tackling the challenges of today's world.

Among the core competencies we search to improve the boost relation with different production and business systems as transversal competencies, we aim to have better design solutions to society and the economy.

A potential impact is expectable from crossing our findings with global data at the aforementioned five levels. Thus, REAP opens new research areas: design exercises can stimulate design learning, but also design collaboration and cooperation.

RESEARCH PLAN AND TASKS

This embryo project is intended as a starting point for a more ambitious project aiming to be a significant survey of a particular and common teaching/learning tool applied in graduate and undergraduate Design courses worldwide — assignments, exercises, and prompts. Such a project, which naturally implies the use of broader means, requires a previous iteration to assert the applicability of the tools used to do it. Namely:

- a call that is, simultaneously, credible, appealing, and reassuring;
- an understandable and accessible survey matrix that is both universal and specific (to be valid to different types of assignments in different areas of Design);
- an analysis matrix and a platform adequate to gather and organize the collected information, to make it usable in several ways (accessible to a network schools, teachers and researchers, as starting point to further analysis and discussions, etc.)

As such, this embryo project deals with building and testing these tools and means and is structured around the following tasks.

(Please refer to the project timeline — fig.2 — in Poster1)

Task 1. Project Management

Project Management starts on day one and lasts until the final day of the project. It includes monitoring the timetable and the ongoing planning of the work of each researcher. It also guarantees an efficient relationship with the CIAUD structure regarding bureaucratic and financial issues. Finally, it has a key role regarding the external contacts and the preparation of the REAP expansion project.

Task 2. State of the Art

Many books and papers address Design education (not to mention the broader field of Art education). However, relatively few publications focus on the subject of the design assignment and design exercises, and of those most concern Graphic Design.

Although the group members are familiar with this work, it is necessary to conduct a systematic and comprehensive survey of the relevant literature.

Task 3 - Pilot (in-house reflection-in-action)

3.1 - Gathering in-house exercises - In parallel with literature review the group will gather exercises, and the description of how they were applied and improved, from within the professional network of the members.

3.2. - designing a preliminary matrix - Based on in-house assignments and exercises, which are prepared to apply in the next phase. The goal is to create a proto-tool that will allow us to describe the assignments in all their dimensions.

Task 4. Academic context – establishing the basis of the REAP taxonomic system

4.1 - collecting the assignments - The Faculty of Architecture of the University of Lisbon; ESAD from IPL; ESART from IPCB and IADE, Universidade Europeia will be the four initial schools to work with. We will collect a sample of their assignments with the following criteria - a) 1st cycle programs related with Product design and Communication Design; b) assignments from the Design Studio Courses.

The sample can be described as a convenience sample but nevertheless has the benefit of integrating public and private schools, as well as both universities and polytechnics.

The group will then design and test a preliminary call to be sent to teachers in a few chosen courses, requesting the submission of some of their assignments.

The call should: a) guarantee their willingness to be involved b) obtain answers that may be easily compiled, classified, and organised.

In order to do this, we need to accomplish the following tasks:

- using the group's comprehensive knowledge of the field of Design Education in Portugal to **define a list of potential respondents to the call**
- elaborate a call that may be both appealing and reassuring** to overcome possible resistance from those contacted (such as concerns about the purpose and destination of the material received, protection of authorship, etc.)
- compile a final list of potential respondents** among a selected group of educators in national Design courses
- distribute the call**

4.2 - Test the preliminary matrix with the gathered exercises by categorising the information.

4.3 - Adjusting and redesigning the REAP matrix; We can make adjustments to the matrix after conducting a critical analysis and comprehensible classification of the gathered information.

MILESTONE 1 - THE REAP TAXONOMY - A PROPOSED MODEL

4.4 - establishing the parameters to design the platform system's architecture; The collected and interpreted data will feed a database that forms the future archive and must be designed to allow for future growth, access, and research.

Task 5 - Building the REAP database and the preliminary platform

5.1 - REAP Database Creation - The archive structure will partially depend on the nature of the material received and what that it reveals about our subject.

However, the matrix to organize the collection of design assignments/exercises should fulfil a dual function. On the one hand, aggregating all the material received, finding common denominators, and, on the other hand, identifying the fundamental differences. Furthermore, it will allow us to classify the exercises, assignments, and prompts into different typologies.

5.2 - designing a preliminary platform - the database will be at the centre of a platform that will enable people to use the archive in critical, operational, and selective ways. To do so, the team will need to work together with a software engineer to establish the architecture and interface of the system.

Task 6 - Testing the REAP preliminary platform

A test with a sample of students, teachers, and practitioners will monitor how it is used, the strengths, weaknesses, and potential improvements to implement before scaling up to other courses and knowledge areas.

MILESTONE 3 - preliminary results from the REAP platform usage and potential

Task 7 - Preparing the scale-up (expansion) of the REAP project

One of the purposes of the Embryo projects is to prepare a call for funded research projects. That preparation is the final phase of the REAP embryo project.

Among the tasks to be developed we highlight:

- selecting schools (at national and international level) in which to collect assignments;
- prepare the system to integrate assignments from other education cycles and other courses (inside Design programs)
- develop a set of workshops to test the taxonomy and its potential of use;
- develop the basis of a teachers' network (to be based in the platform)
- set a plan to expand REAP into professional contexts/consultancy/collaboration with companies and institutions
- link REAP with other research platforms.

Task 8 - Communication/ Dissemination

REAP activities and intermediate and final results will be disseminated through a website of the project and the publication of two papers. Moreover, we will create a seminar by the end of task 5 in which we intend to make public the REAP taxonomy and REAP platform and discuss it with academics, researchers, and practitioners.

MILESTONE 2 - REAP seminar - the beginning of a network

EXPECTED SCIENTIFIC RESULTS

The construction of a **platform (beta version)** of ready to store an archive of exercises, assignments, and prompts, accessible to the academic community.

The creation of two matrices, one for collecting and organizing such material, and easily applicable to a broader recollection of samples on a global scale; and another for analyzing and improving exercises and design practices.

The production of **two papers** to be submitted to indexed journals.

An **updated State of the Art** of publications devoted to exercises' assignments and prompts used in Design education and practice, but also in some adjacent fields that might be of interest (Architecture, Visual Arts, Performing Arts, Engineering, etc.)

Several instances of scientific dissemination of the data collected and some preliminary results through the creation of a **website** devoted to the **archive, publications**, and the organization of a **seminar**.

BUDGET: € 7.500,00

The budget of REAP research project supports:

Task 1 - an intense activity of gathering data and classifying it;

Task 2 - the development of a platform to disseminate generated knowledge

Being so we will invest in **human resources** by contracting a scholarship for 5 months which implies an expense of **4889,35** euros (based on BI scholarship from FCT plus volunteer social security and scholar insurance); This person will be dedicated to **Task 1**; An amount of **2500 euros** will be spent on the **acquisition of services**, i.e. contracting the development of the platform's system which is related with **Task 2**. The remaining **110,65 euros** will support daily administrative expenses.

Human Resources	4889,35
Service Acquisition	2500,00
Current Expenses	110,65
Total	7500,00