

OPEN INOVATION AND COLLOBORATIVE PROJECTS

REVITALIZING AND TRANSMITTING HERITAGE AND LOCAL MEMORIES: BUILDING COLLABORATIVE PROCESSES BETWEEN DESIGN AND CRAFTS

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ABSTRACT

The purpose of this communication is to present a collaborative project founded in fostering interdisciplinary dialogue in formal, informal and culturally plural learning contexts, considering educational practices and projectual alternatives to the non-participatory model, centered in the classroom.

We intend to undertake ways of projecting in the future the material and immaterial heritage and memory kept within human and material diversity.

Product designers are conventionally educated to read, understand and work in obedience to norms. The norm denies the unique and diverse. Gathering artisans, designers and artists, along with students from the Visual Arts and Technologies Degree (from Lisbon's Polytechnic ESELx) we aim to go further. The presented case takes place in the Portuguese villages of Nisa and Coruche.

Bringing students in context (providing them ways to assess and understand local memory) awakes senses and reasons to consider identity (human, natural and material), arising the perception that a product exceeds its objectivity and that both culture and identity acquire new expressions through it. Our purpose is to reflect on the application of collaborative and participative methodologies in design teaching, contributing for the research and development of approaches in active collaboration of learning, through knowledge of practical problems in real scenarios.

KEYWORDS

Collaborative Platforms, Educational Contexts, Interaction Design, Creative Practices, Interdisciplinarity.

1. INTRODUCTION

The experience we present has been developed at the curricular unit of Project II¹, and it has been designed for the students of the 2nd year from the Visual Arts and Technology Degree, at the Superior School of Education in Lisbon, Portugal. By designing such projects, it is our desire to seek for projectual and collaborative alternatives to the standard teaching model, which is traditionally focused in the classroom and not participatory.

The identity of our team is defined by its multidisciplinary and its research/action involvement. The group in the field integrated: visual arts agents; graphic, interaction and product designers; engineers and master craftsmen. Designed within a polytechnic institution, our project distinctiveness also bases itself on the attention given and the predisposition to reflect on both the local and the global scale issues. Crucial to the development of the project has been the immersion of the students within the local communities: with its people, their culture, their technical expertise and knowledge, their identity, their memory but also within the sense of their future aspirations. Characterizing our action we highlight: our interdisciplinary, the importance given to practice and experimentation as research forms; the observation and compliance of the local material and immaterial culture, of their built-in knowledge, their techniques, raw materials and the regional technologies still deposited in productive activities.

The consideration of the worldview and the investigative resources arising from several branches of design, visual arts, engineering and the local players, allowed us to, at each moment, conjecturally reframe the emerging problems, to observe them from different perspectives and to ponder its various levels of complexity. By this conception and conceived in observation, experience and response to the needs and aspirations of small human groups our project was humanized, going beyond the observation of the average man. In this process, through immersion, a material and immaterial product is encouraged and developed, not for, but with the community. In this way – decentering the design process from the designer – we became more able to make it focus on the user and the contexts of production and use, thus creating added value to the project.

2. THE PROJECT

This is the framework and scope of the collaborative project, which we have designed and present here. Bringing together students from Product and Interaction Design, within a Visual Arts course; agents from the various areas mentioned above and integrating them with two specific groups: the craftsmen of Quartz Inlaid Pottery and its resident community in Nisa, Alto Alentejo, and the Cork Industry and its natural community in Coruche, Ribatejo, Portugal - our purpose was to implement, to observe and to reflect on the application of collaborative and participatory methodologies in teaching and research in design.

By doing so, our purpose was to contribute to the research and creative development of prospective and projective approaches in design teaching and research; and to produce a decentre of the design student from itself, refocusing him on the user and in the production contexts. Challenging him to the creation of services and experiences able to revitalize and transmit heritage and local memories, in addition to or beyond to actual objects. An aspiration that only was able to achieve through the involvement of the students in real life scenarios, merging them within the local communities.

The involvement of Interaction Design in the process has performed the link between the local and the global dimensions. In traditional engineering – pursued to be situation-independent – human were considered to be functional elements – in a way as machine elements. In today's world, the materials themselves are also changing from hard to soft, and even machine parts need to communicate with each other, in order to the parties work together. In such a context, performance is more important than function; in such circumstances,

¹ A curricular unit that comprises the branches of Product and Interaction Design.

engineering and design go beyond the framework of artifacts (Fukuda, 2013); in this research model and project-active action, endowing novel insights, it was necessary to draw local and global interface channels, and thus enable feedbacks.

Therefore, in pair with collaborative platforms of local nature, our project has create collaborative platforms of global dimension. In this process the local diversity (human nature, material and immaterial) has assumed a significant role garnering, by interaction with third, collective recognition of the unique and distinctive cultural specificity. Since according to Hall ([1992] 2004) one of the strands of globalization is to achieve the strengthening of local identities or creating new identities, since globalization discloses the local culture on a global level, transmitting to others their unique specificities and distinctiveness, thereby leading to recognition of the collective.

Bringing together the experiences and the outcomes, such platforms will enable to turn the dissemination of the experiences and results obtained from new working groups, as to receive a feedback view of the above, virtually providing the debate and reflection, of local and global dimension.

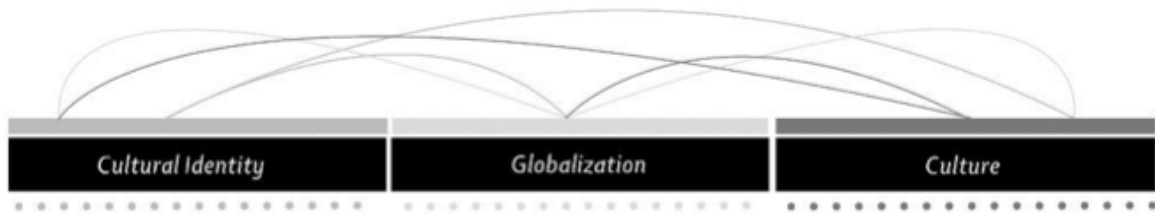


Fig. 1 - Scheme that represents the problematic of globalization according to Stuart Hal (Rijo, 2014).

Currently globalization is connecting distant areas but at the same time it can disconnect past and present everywhere. It is up to the designer to play the role of key mediator allowing these different realities to link. For us it seems appropriate that this reflection is made, enabling the cultural heritage to acquire new contours. Understanding design as an activity directly involved in the contexts in which it operates and dialogues, we argue that only by the transversal knowledge of the historical and socio-cultural reality can levels of excellence and truly interesting results be achieved.

It's important to keep in mind that *“both the culture and cultural identity of a community result from the merging of its heritage with its history and evolution over time. Belonging to a particular local identity means self-knowledge and being different from the global”*(Rijo, 2014, 151). Augé (1994) discusses the problem of how to grasp the place or space and why it creates emotional relationships. The author designates the location – an anthropological space - as an identity, a relational and historical space, which creates and fosters interpersonal relationships, moving in time and space and very well defined.

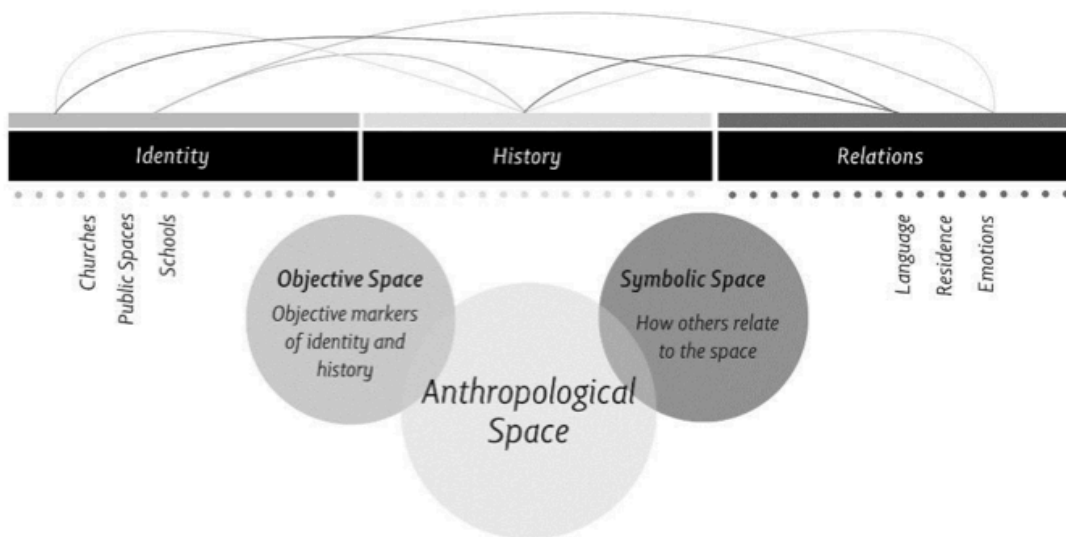


Fig. 2 - Scheme that represents anthropological space according to Marc Augé (Rijo, 2014).

The possibility of a design research that allows a fruitful dialogue between design and crafts, having as reference successful interaction projects between visual artists, designers, artisans and its communities, reinforces the opportunity, the interest and the importance of this project.

Performed so, the interaction of the designer with the actual problems and the real active communities and their practices will lead to the design of strategies, tools or environments able of research development in the areas involved in. Practice-based and practice-lead, inherent methods shall be created and tested through the doing and the interaction.

2.1. METHODOLOGY

“The nonlinear systems - where the acumulative iteration acts, chance, evolution (adaptation, variability, etc.) and change - tend toward a larger number of solutions, of ways. At the bifurcation point they can be diverted into a completely new state. [...] Disciplines and specialties are hiatuses (interruptions in space or time) useful for distinguishing and classifying reality [...]. [...].

The problem does not lie in to divide the world into separate files for study, but in believing that the world is really like that and to only focus our vision a certain parts of the map [...].

In the transdisciplinary landscape, when we face a problem when we discover a contradiction, the programs (the generally prescriptions) are insufficient; local vision that characterizes the *simple thought* (Morin) or *of simple localization* (Arnold Whitehead) is not enough. This thought is no more than a starting point [...] insufficient to discover the ways and to describe the links beyond the local.” (Juez,2002:124-130)²

Willing to act within *transdisciplinary landscape*, allowing some time for the exploration/ experimentation of non-linear systems (with time for reformulation of proposals throughout the preliminary design phases) we have proposed this project for one semester long – yet with distinct and well defined goals, formalized in several presentation moments along the way.

Bringing together artisans and designers, it was our intention to develop a collaborative project founded in the fostering of interdisciplinary dialogue between learning contexts of formal, informal, cultural and generationally plural characteristics³.

Seeking alternative educational and projective practices to the non-participatory model centered on the individual in the classroom, in the unambiguous communication and in the knowledge specialization – immersive experience – was to a crucial factor in our methodology, allowing a decentering from the self known experience, research and expectations, incorporating elements from the immersive environment (whether from the material or immaterial scope). Advancing our capacity for envisioning possible future realities; endowing novel insights, since the designer's work is prospective.

The integration of practice as part of the method also features our action - *practice-based* and *practice-led* (Candy, 2006) - considering: whether the practice and the reflection about the results of the practice; whether

² «Los sistemas no lineales – donde actúan la iteración acumulativa, el azar, la evolucion (adaptación, variabilidad, etcétera) y el cambio – tienden hacia un número mayor de soluciones, de caminos. En el punto de bifurcación pueden desviarse hacia un estado completamente nuevo. [...] Las disciplinas y sus especialidades son hiatos (interrupciones en el espacio o en el tiempo) útiles para distinguir y calificar la realidad [...]. [...].

El problema no radica en dividir el mundo en archivos separados para estudiarlo, sino en creer que el mundo es realmente así y focalizar nuestra visión tan solo sobre ciertas partes del mapa [...].

En el paisaje transdisciplinario, cuando confrontamos un problema, cuando descubrimos una contradicción, los programas (las recetas consabidas) resultan insuficientes; no basta la vision local que caracteriza al *pensamiento simple* (Morin) o de *localización simple* (Arnold Whitehead). Este pensamiento no es más que punto de partida [...] insuficiente para descubrir los caminos y describir los vínculos más allá de lo local.» (Juez,2002:124-130).

³ If the collaboration was easy and naturally driven between the artists, the artisans, the product, graphic and interaction designers, the same is not to be said about the integration of the engineers for we have not outlined the project with them from the very beginning and they have integrated the project as remote consultants, with no students or engineering teachers integrating the residences alongside our students. A gap to be filled in the next opportunity.

the created artifact as a source of new knowledge and inquiry; or yet a search capable of lead to new knowledge or to a new action on the practice. In this way proceeding to knowledge about the practice or within the practice. A matter of nature in design practice, as in areas of the creative practice, where the results of research are often non-linguistic or ineffable, a knowledge which is transferable and communicable, not only to the benefit of the investigator or the commissioning agent (Büchler & Biggs, 2008). Moreover, we refer to practices which, through the exercise inherent to each of the disciplines involved, many times open doors to the discovery of "something" that could not have been discovered by any other means (Büchler & Biggs, 2008).

In fieldwork we have also appealed to the research tools from the social sciences and humanities, specially in the scope of anthropology and ethnographic, allowing us to observe the conjectural changes, rather than thinking from fixed models - non adaptive by inherence.

Without knowing what was to be expected from them, our students have started the semester with two cultural visits: one to Nisa and one to Coruche – by that way their attention was not to be captured by one linear objective yet. Back in the polytechnic a challenge was presented to them, in the context of the curriculum units of Product and Interaction Design: - The revitalizing and transmitting of heritage and local memories, building collaborative processes between design and crafts.



Fig. 2 – Working process

At the curricular unit of Product Design – assuming drawing as a multisensorial research tool – the process has started with the narration of memories. It urges here to make a note: at this stage the quest for memories was not ment to collect registers from the past, but to gather indexes from the first experience of the students in both fields of immersion. In fact we mast bear in mind that a significative part of the current production is based on the past, on an amount of data collected from the stories, the memories and the past experiences from a chosen focus group/ or the average man. A path that was not at all what was intended here.

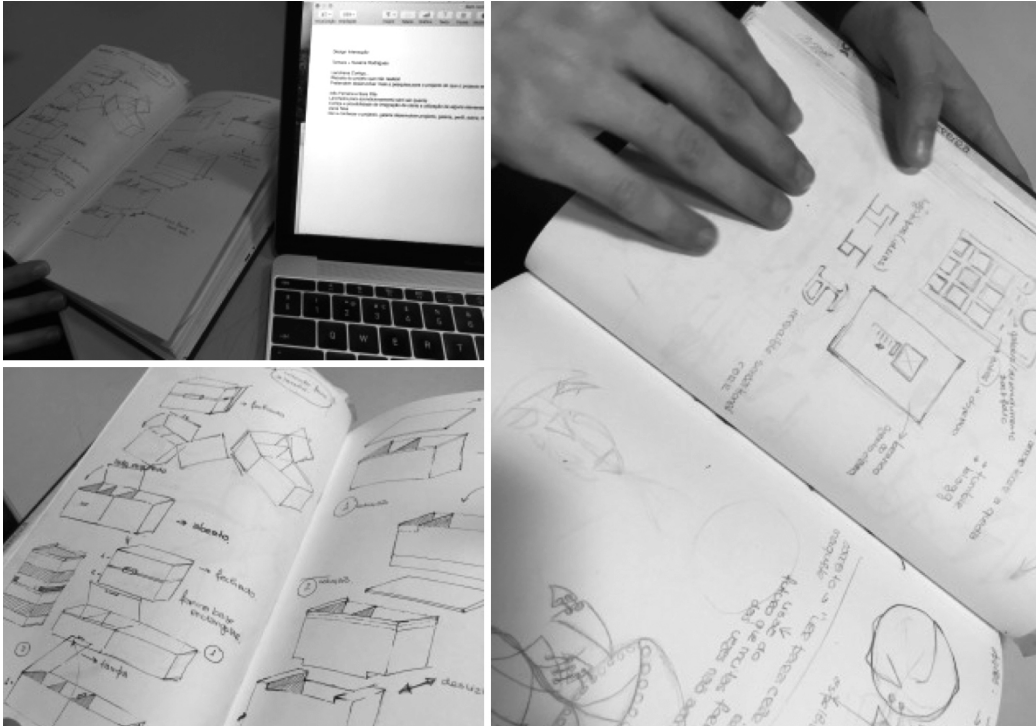


Fig. 3 – Students work concerning memory exploration.

As Fukuda (2015) notes: psychology has brought a new measure – Expectation Satisfaction. That was the goal we intended to achieve. To do so, *adaptation, variability and change* (Juez, 2002:124) are required.

Struggling with contingences of time, the need to teach the program contents and to maintain evaluation records - an anchor point is launched: a call for the designing of a lunchbox (constraining the options to the use of local raw materials). From this point on the investigation proceeds: arising from the several dimensions involved a state of the art is made; materials, techniques and technologies are analysed.

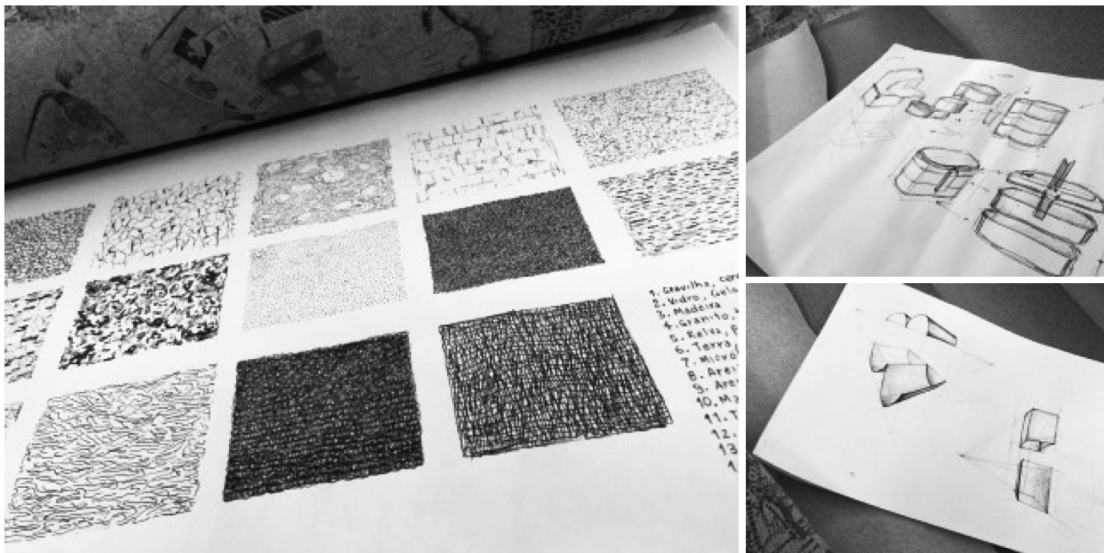


Fig. 4 – Student work concerning textures and materials

Not losing sight of *adaptation, variability and change* the struggle now is to deconstruct the ideas that appear made up, finalized! For the revitalizing and transmitting heritage; the building of collaborative platforms and the *expectation satisfaction* as not yet been served. So several other work stages are launched, with research to be communicated by sketch: questions on ergonomics and human factors and on market and target group. By this stage with the diversity of information assessed, the student is *being diverted into a completely new state* (Juez,2002:124) and he is now ready to counter-propose a (de)brief in order to best respond to the challenge that was initially released to him: - The revitalizing and transmitting of heritage and local

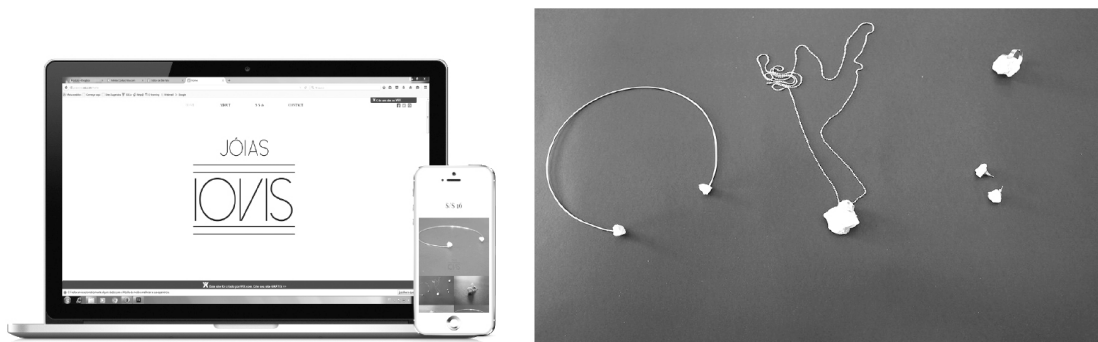


Fig. 6 – Student project with recourse to the technique of Nisa’s quartz inlaid pottery.

The final goal of the Interaction Design module was that each students group could develop a collaborative platform using web 2.0 tools, in order to create a web repository, able to allow the sharing and/or disclosure of the products developed in Product Design. By this process the students had to understand how the use to new/digital technologies resources could help the preservation of local identity and memory, as to offer a new perspective of material culture. This approach, allows the students to realize the interaction and communication with the other.



Fig. 7 – Example of a collaborative platform developed by students.

Observing the projects accomplished by the two focus groups we have concluded that the local diversity and the integration of teachers and students in plural collaborative platforms, culturally and generationally, has assumed a leading role in the progress of the process in cause: either widening our capacity for envisioning possible future realities; either by endowing novel insights, or providing opportunity to reframe the theoretical issues by confrontation with real problems and their consequent consideration under various levels of complexity (rational, emotional, relational, technical and technological), highlighting the speculative capacity beyond the strictly logical and analytical thinking, increasing the development of new courses of action (innovation).

3. GOALS

“Successful design projects require effective collaboration and healthy conflict.

Within the scope of design, healthy conflict isn’t necessarily negative or turbulent. Instead, it’s a process for arriving at a shared understanding. In the course of a design project, teams have to make decisions about the overall design direction, the details about the product, and how the project will proceed, among many others. Through the process of aligning on these decisions, designers experience conflict.” (Brown, 2013)

Via our action, we have brought together students and artisans in a design, social responsibility and sustainability project.

Our purpose was to identify, characterize and contextualize the cultural identity and technique that defines the contexts of action in question, and to understand the people and the agents that have contributed to this identity construction, i.e.: who composes it, who consumes it and who appropriates it. We believe that by the knowledge of a set of processes and transactions that characterizes it, we can (re)learn the shared culture of a

Having completed this phase of the project, the next goal will be to adjust the scheduling of the process. After the project conclusion, being the students first approach to product design concept and methodologies, we were able to realize, that the students faced some difficulties in prototyping, for that reason we understood to be necessary to widen the scheduling, allowing the students to have more time to explore different materials as to prototype, facilitating the problem solving and prototyping process that can only be successful when you use a attempt/error methodology.

3.1. OUTCOMES

“The design process ends when the team has made sufficient decisions to define the product. That definition addresses all the established goals (decisions early in the project) and respects all the technical constraints (perhaps later in the project). That definition is sufficiently documented for a production team to implement the product. Design is therefore measured along two dimensions: quality and moving the project forward [...]” (Brown, 2013)

Seeking alternatives to the educational models, focused in the classroom, in addition to top-level research, will shall stimulates mediation, interaction and social intervention. By the same route, this actions widen the perceptual field of the various participants, as the reading levels of equity realities and material and immaterial cultural heritage in the presence, of individual and collective memory, of scientific knowledge, techniques and technologies, contributing also for the consideration of different levels of meaning, as providing and propelling the developing of a new action.

Materializing the results obtained, by means of our work it was intended, in the short term, to create an open source library, designed as a database, in order to be nourished with the information collected in the aforementioned, as in future working contexts.

4. CONCLUSION

According to the UNESCO Universal Declaration on Cultural Diversity (2002): cultural diversity contributes to the intellectual, emotional, moral and spiritual satisfactory, and constitutes one of the essential elements in the transformation of urban and social reality. It is to recognize that culture and knowledge takes diverse forms across time and space, being the common heritage of humanity, therefore should be recognized and affirmed for the benefit of present and future generations.

To achieve this, the designer must assess the differentiating features in order to obtain an identity representation of the site and that it develop an emotional relationship with the receiver, that is, the designer must create a visual image based on the differentiating attributes of the site with the aim of strengthening the identity of the same.

The designer, as a professional project, contributes to this cultural diversity is perceived and perceived by many people, preserving it to an intangible level.

In accordance with this guiding principles, the methodology and practice projectual proposed reinforces the above basic principles, expanding the scope of the concept and projective practice; in teaching and research in design. A reality that leads us to defend the methodological proposal presented here: Founded in practice and integrated on the collaborative platforms in teaching and research in design. We intend to provide a tool that facilitates the acquisition, transmission, mobilization and future implementation of research skills and collaborative work, fundamental to the designer as a competent and responsible agent.

The overlook to our experience in the classroom, at school and in the community as an effective training tool (Dreeben,1976) and its subsequent observation of the student corpus, that preferably looks for a Degree in Visual Arts and Technologies in the context of the Lisbon Polytechnic Institute, elapsed the critical reflection that we have proposed to undertake.

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