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Contributions of Design in the resignification of the school environment: Application of research instruments to give voice to students

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ABSTRACT
Education based on hierarchical and passive teaching in relation to student participation no longer seems to be sufficient to guarantee learning. Several initiatives have sought to enhance educational processes based on project-based teaching and problem solving. This research is based on concepts such as Participatory Design and Project-Based Learning, used as auxiliary tools to the learning processes for the final grades of Elementary School in the after-school period, in a school on the outskirts of the city of Porto Alegre, RS. In this research, the application of two qualitative data collection instruments is presented. One of them applied after the first month of activities, based on an instrument developed by the Porvir Institute, where students talk about happiness in the educational environment. The other applied after seven months of research, and in it, students gain a voice about the Design laboratories they were part of.

Keywords: Design, Project-Based Learning, Education.

1 INTRODUCTION

For Bonsiepe (2011), Design presents a vast humanist bias since it assumes the exercise of interpreting the needs of social groups and elaborating viable, emancipatory proposals, in the form of instrumental and semiotic artifacts. Design goes beyond the condition of an aesthetic and functional tool in the creation of products and services to gain potential for individual and social development. Addressing these possibilities, Bonsiepe (2012) emphasizes: it is necessary to practice the "pedagogy of design". This was a personal conviction of the author about the benefits that the knowledge of Design can bring to a general education.

Believing this, this article begins. We seek to understand new possibilities for the "use" of Design inserted as an extracurricular component in the school reality, discussing issues such as accessibility and stimulation of local culture. The objective of this research was to understand how students perceived learning from the design process experienced through Design laboratories inserted in the after-school period.

The study carried out in a state elementary school in Porto Alegre relied on the methodological tool Project-Based Learning (PBL), where students collaboratively with learning facilitators decided which would be the anchor subjects that should support their learning processes. Based on this, we present, in this article, some reflections of the students about the practices experienced in three Design laboratories. These labs were named Product Design, Graphic Design, and Design for Permaculture, and the practices took place over the course of ten months.

These collaborative spaces aimed at the transposition of higher education in Design to elementary school, seeking to adapt the language, implement the methodology and review the research problems suggested by the students. The theoretical support was based on the reading of several authors, indispensable for the understanding of the themes addressed and the construction of a scientific approach.

The work was developed from theoretical elements developed in a doctoral thesis. The research that gave rise to this article was submitted to the Research Ethics Committee of the Federal University of Rio Grande do Sul, and all documentation was approved, including the presentation of the Free and Informed Consent Form to the parents and guardians of the students and the Term of Assent to the students.

2 ACTIVE LEARNING METHODOLOGIES: FROM STUDENT AUTONOMY TO PARTICIPATORY DESIGN

We learn from the moment we are born from concrete situations that little by little we manage to expand and generalize through induction. We also learn from ideas and theories in order to test them later in the concrete world, through deduction. Learning can also take place when someone more experienced speaks to us, or even when there is a direct development through experimentation based on questions, research, activities and projects. What we mean by this is that learning is active, based on the context in which each person finds themselves (BACICH and MORAN, 2018).

Although it seems clear to us that the learning process is largely heterogeneous in a general aspect, and individualized for each lived experience, there are distinct orientations that emanate from different currents that seek to understand man and his way of learning.

Nucleated in three historical theories of human knowledge is the innatist (or naturist or biological) current, where in a simplistic way it considers that at birth the person already brings with him the "scaffolding" to learn, undervaluing social influence. The environmentalist theory is, in turn, represented by behaviorism that reduces learning to the absolute determination of the environment. And, finally, there is the interactionist theory, strongly linked to Piagetian and/or Vygotskyan constructivism, where what is effectively innate in learning and the substantial contribution of the social in the learning process are dialectically integrated, a conception that constitutes, nowadays, the

most coherent psychological-pedagogical paradigm, from the scientific-humanist point of view (DÍAZ, 2000).

Like Diáz (2000), an interactionist approach to learning is adopted in this research, although alternative contributions that correspond to this conception are not discarded. This review seeks to deepen the learning anchored in the autonomy and co-creation of learning, discussing the possibilities of Codesign for the aesthetic and functional resignification of school environments, involving students as subjects of the process. It is important to emphasize that this dialogue with the author-educators will bring us some subsidies for the forwarding of the fieldwork and some conclusions about the reality found. It is known, however, that the bibliography used does not exhaust the immense literature dedicated to autonomy in education and the search for active teaching methodologies.

The first aspect that will be taken into account is the current model of education in Brazil, a reflection of the era in which it was conceived: the industrial revolution. In this model, students are educated as on an assembly line, to make standardized education efficient. In this way, they sit in rows of neat desks, listen to an "expert" in the presentation of a topic and still have to remember the information received in an evaluative test. In this educational environment and model, all students should receive the same education. The weakness of the traditional method is that not all students arrive in the classroom prepared to learn. Some lack adequate training in the material, have no interest in the subject or simply do not feel motivated by the current educational model (BERGMANN, SANS, 2016. p. 6).

Parallel to the "industrial" model of teaching, what has been seen in Brazil over the years is a constant deterioration of the working conditions of educators and, consequently, of the education offered, especially in public schools. For many decades, there has been a favorable discourse in relation to the valorization of education, however, as Gadotti & Romão (2004) point out, what is seen in practice is a series of questions about the management of resources and the lack of community participation in the definition of school priorities.

For Gadotti & Romão (2004), the paradigmatic crisis affects the school and it asks itself about itself, about its role as an institution in a postmodern and post-industrial society, characterized by the globalization of the economy, communications, education and culture, by political pluralism, by the emergence of local power. In this society, there is a growing demand for participation and autonomy against any form of uniformity and the desire to affirm the uniqueness of each region, each language, etc. How to translate this at school?

The democratic management of the school effectively happens when it is based on an efficient political-pedagogical project, elected based on the competence and leadership of its managers. For Gadotti & Romão (2004), the political-pedagogical project of a school must be inserted in a context of diversity, where each scenario is the result of a process of development of its own contradictions. In

the face of this, that arrogant pretense of knowing in advance what the results of the project will be for all the schools in an educational system disappears.

In Brazil, the autonomy of the school is supported by the Federal Constitution promulgated in 1988, where "participatory democracy" (Art. 1) is instituted, creating instruments that enable the people to exercise power "directly". Also, in relation to education, the Federal Constitution establishes as principles the pluralism of ideas, pedagogical conceptions, and the democratic management of public education. With this we can affirm that autonomy is and should be part of the nature of education (GADOTTI and ROMÃO, 2004, p. 36).

From a democratic and autonomous atmosphere that is breathed in the school, students are inspired to place themselves as protagonists in their learning processes. Therefore, it is important, as educators, to constantly review the notion and awareness of our actions for the flourishing of this autonomy. We can begin these questions by perceiving our view as members of the school community and subjects inserted in a political-pedagogical practice. Is this a gaze that accompanies and sees power or is it a gaze that judges, and observes above all limitations and shortcomings? The enriching contribution of Freire (1987) regarding the autonomy of students points a direction for the construction of a truly respectful look at the construction of knowledge that reaches the school.

From these attentive looks at the way of learning, as opposed to passivity in learning, active methodologies and hybrid learning gain space in research and application in classrooms (BACICH and MORAN, 2018).

Active methodologies emphasize the student's leading role, their direct, participatory and reflective involvement in all stages of the process, experimenting, designing, creating, with the guidance of the teacher; blended learning highlights the flexibility, mixing, and sharing of spaces, times, activities, materials, techniques, and technologies that make up this active process (BACICH and MORAN, 2018, p. 48)

In addition to the appropriate use of active methodologies for learning, the preparation of school environments for the use of children and adolescents is also capable of generating autonomy since the student is able to access materials and take responsibility for educational spaces together with educators. For this accountability to occur, the spaces must be adequate, respecting ergonomic issues inherent to the age of the users.

Another important aspect for autonomy at school is the possibility of including diverse materials in learning. Getting out of the place of the same everyday classroom practices and perceiving materials that can be reused can be a power in experiments and educational practices. Therefore, combining materials discarded by families or companies that are aligned with this purpose is something possible to do in schools. An example of this happens at the Ayni school (Ayni, 2018) with the reuse of leftover wood donated by furniture companies around Guaporé (RS). These leftovers are

transformed into wooden toys in the school itself, encouraging the sustainability movement and the discussion about reducing the use of plastic in the manufacture of toys. There is also the creation of creative possibilities, as the child builds his or her toys.

With these examples, one can raise a question: what relations do these participatory methodologies have with the Design processes? It is believed in the importance of the subject's participation in the construction of environments for their use, whether physical or intellectual, especially in the context of the child and educational spaces. Thus, active teaching and autonomous learning are articulated with Participatory Design, since the potential for action in both spheres imprints a shift from passive relationship to engagement in experiences that are meaningful.

According to Sanders (1992) under the name of Participatory Design, movements of collective creativity in the development of products and industrial processes have been taking place in Europe since the 1970s. In countries such as Norway, Sweden, and Denmark, the Collective Resources Approach was organized so that workers were involved in industrial production, with the aim of developing new systems of work based on their own experiences in those jobs.

As with active learning methodologies, Participatory Design has a less hierarchical and centralized focus on project development. Within the new perspectives of the Design process, co-creation also emerges as a new proposal, in this area the emphasis is on the personalization of products and services that includes the active participation of the client. They are involved in the generation of ideas and decision-making pertinent to Design (SANDERS AND STAPPERS, 2008, p. 8).

At first, it is important to conceptualize co-creation and co-design. For Sanders and Stappers (2008), co-creation can be understood as any act of collective creativity, shared by two or more people. It is, therefore, a very broad term, "with applications ranging from the physical to the metaphysical and from the material to the spiritual, as can be seen by the exit of internet search engines" (SANDERS AND STAPPERS, 2008, p. 13). Codesign, in turn, is related to a specific instance of co-creation, it refers to the collective creativity between designers and non-designers working together in a design process.

Chart 1 presents a parallel between traditional design practices and emerging practices. Developed by Sanders and Stappers (2008), the table shows, according to the authors, that we are moving from categories that involve product design to purpose design. In the table, what you see on the left are the traditional disciplines, centered around a product or a technology. On the right, the designer acquires the necessary skills to design and expertly shape products such as brand identities, interior spaces, buildings, consumer products, among others.

Table 1 - Traditional and emerging design practices

Traditional design disciplines focus on the design of 'products'...	While emerging design disciplines focus on designing for a purpose.
Visual Communication Design	Design to experiment with
Interior space design	Design for emotion
Product Design	Design to interact
Information Design	Design for sustainability
Architecture	Design to serve
Planning	Design to transform

The impact of new design activities means that there is a certain change of focus in the role of the designer, designer and researcher. To give voice to users' different levels of creativity, designers can take on the role of facilitators. According to Sanders and Stappers (2008), there are four levels of creativity and, for each of them, the designer researcher must develop different approaches in order to stimulate the flourishing of creative practice (Chart 2).

Table 2 – Four levels of creativity

Level	Kind	Motivated by	Objective	Example	Approach of the Design Researcher
1	Do	Productivity	Execute something.	Organize My Herbs and Spices	Lead
2	Adapt	Appropriation	Do things for me.	Beautify my ready meal.	Orientate
3	Build	Affirm one skill or competence.	Do with my own hands.	Cooking with a recipe.	Provides tools for creative expression needs.
4	Create	Inspiration	Express My Creativity	Creating a dish.	Offer the opportunity to start over.

We see that Design is increasingly including research in the development of actions, creating scenarios of opportunities for designers, users and researchers. Inquiry oriented towards day-to-day problem-solving is becoming more prominent in the curricula of Design programmes, establishing more cohesive links with the social sciences, health sciences and humanities. An example of this is that some schools are including participatory design techniques, ethnography, and psychology in the curriculum of engineers (Stappers et al. 2007a, Stappers, Hekkert, and Keyson 2007b).

In practice, we now see industrial designers with many years of experience in product development who are taking on new roles as design researchers. Joint project teams will be much more diverse than they are today. Future Codesign will be a close collaboration between all stakeholders in the design development process, along with a variety of professionals with hybrid design/research skills. These team participants will vary in various types of culture simultaneously: disciplinary culture, company culture, ethnic culture, worldview, mindset, etc.

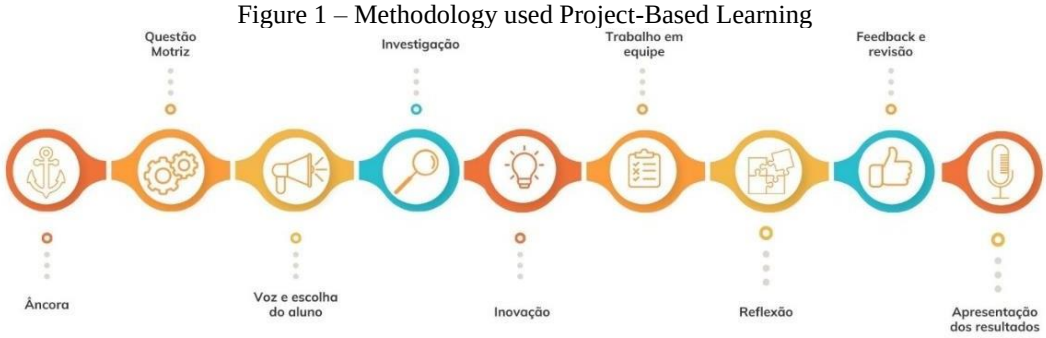
It is believed, therefore, that designers will be an integral part of the creation and exploration of new tools and methods for generative thinking in design, and useful in learning processes carried out in formal education. In the future, it will be these professionals who will create the tools for non-designers to be able to express themselves creatively.

3 DESIGN METHODOLOGY FOR CHILDREN'S LEARNING FROM DESIGN

In this research, the pedagogical potential of Design is explored through the crossing of information between design practices for pedagogical instrumentalization and practices that aim to solve everyday problems, inherent to Design. Believing in the pedagogical potential of Design is possible since previous experiences have followed similar paths. The experience of EdaDe – Education of young people and children through Design, elaborated by Fontoura (2002) in Florianópolis (SC), gives us significant support in conducting this project. For this author, teaching with Design as a tool allows, among other things, to develop in children skills applicable to the real world, such as critical and creative thinking; sensitivity; troubleshooting; measurement; written, verbal and graphic communication; negotiation and conflict resolution; leadership and teamwork, as well as creating opportunities for the construction of new knowledge and understanding; as well as teaching thematically and making use of an interdisciplinary pedagogical approach.

As a methodological guideline adopted in this research, Project-Based Learning (PBL) developed by Bender (2014) was used, as can be seen in Figure 1

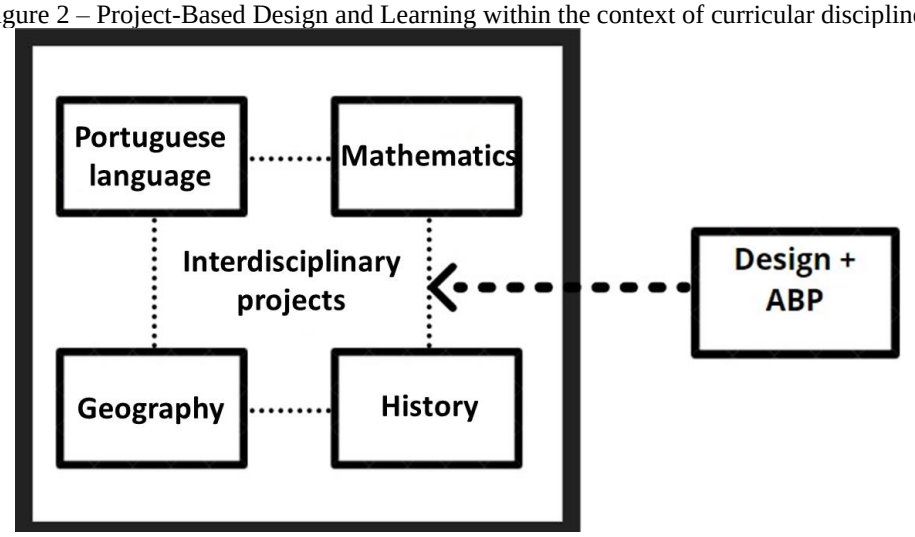
Figure 1 – Methodology used Project-Based Learning



Source: Bender (2014)

In the research that originated this article, there was the option of incorporating Design as an extracurricular discipline, offered in the after-school period, in a model conceived and developed in such a way that there is integration of contents and simultaneous dialogue between the activities of the curricular disciplines. In addition, Design has also been incorporated as a method of project development in all disciplines, based on a structuring of problem-based activities. Thus, the Design process is instructed from specific attributions of the area, and as a method of project organization, simultaneously (figure 2).

Figure 2 – Project-Based Design and Learning within the context of curricular disciplines

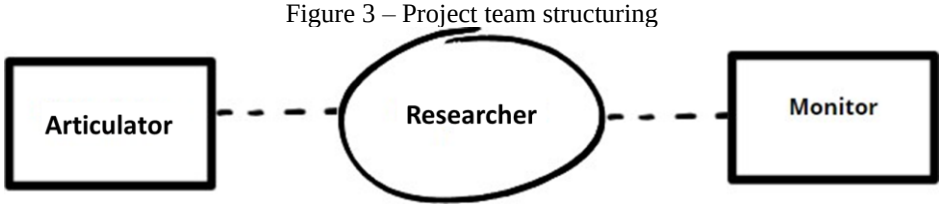


Source: Author

In the structure of this project there are three distinct roles for the realization and orientation of the activities towards the students, they are the articulators, mediators and facilitators. The team members (mediators and facilitators) are students and professionals from areas of knowledge such as product design, graphic design, visual arts and environmental engineering. The articulators are always school employees interested in maintaining a link with the Political Pedagogical Project.

The structuring and organization of the activities was under the responsibility and supervision of the author of this article, as well as the presentation of the research method to the project team (figure 3).

Figure 3 – Project team structuring



Source: Author

4 RESULTS

This research was organized from the implementation of activities originating from three axes of Design, namely Product Design, Graphic Design and Design for Permaculture. The Permaculture Design laboratory aimed to propose reflections and practices that sought to address education through permaculture and social protagonism. As a project proposal, students, monitors and facilitators established the development of a collective garden at the school. The school's vegetable garden was born from the reflections of students in circles conversation, on walks in the woods surrounding the school and in the classroom. The project consisted of presenting the benefits of the initiative to the school community, as well as verifying the technical feasibility for this task from the acquisition of materials and inputs. After the project was approved, the team chose the location of the garden and the area to be used for planting. Some elements were considered to make this choice, thus, it was thought of a nearby water source, sun exposure, evaluation and optimization of the soil, and, finally, to request in the school community some seeds to be planted to optimize the school menu.

It was decided that melon, pumpkin, corn, cucumber, black-eyed peas, black beans and radishes would be planted. The space of each bed was defined and the maximum dimensions of each species were studied, as well as the main characteristics of each one regarding the care required for its maintenance. Before the cultivation, tests were carried out to verify the soil, in addition, the students were carrying out fertilization from the development of efficient microorganisms, bacteria, fungi and yeasts that exert the decomposition of organic matter, increasing the fertility of the soil. Figure 4 (A) shows the students fertilizing the vegetable garden, installing signposts (Figure 4 (B), and building the beds, Figure 4 (C, D).

The school's vegetable garden began to bear fruit six months after planting. In the first harvest, the food was sent to the school cafeteria and incorporated into the students' diet.

Figure 4 – Students enrolled in the Permaculture Design Laboratory. (A) Fertilization of the vegetable garden. (B) Installation of signaling medians. (C, D) Execution of the construction sites.

Source: Author

Design experiences were also lived in the Graphic Design Laboratory. Fundamental issues to Graphic Design were worked on in the final years of elementary school, such as initiation to color theory, graphic expression through drawings, illustrations, types of strokes, exercises to stimulate creativity and introduction to photography. The monitors brought questions about cultural identity and the basic premises for the execution of a graphic project.

As the main activity of this laboratory, there was the graphic revitalization of the wall of the school cafeteria. This space is in a place of constant circulation, characterized by ancient artistic manifestations of students who once occupied that place. Thus, the paint was quite worn, the humidity of the environment was also in charge of making his own illustrations, and, in addition, the superimposition of old graffiti harmed the notion of belonging of the students who are now in school.

At first, a brainstorming was carried out in the classroom so that the students could graphically manifest what they would like to illustrate on the wall, as can be seen in figure 5 (A). After this activity, the group came up with a concept for the characterization of the space. Thus, it was defined that images and texts that portrayed the daily lives of the students would be inscribed there. All the themes worked on in the Laboratories served as inspiration at this time. In this way, Permaculture, resignification of spaces, art, Design, gender, race, urban violence, moral harassment were some of the issues that were present in the great "Mural of Our Daily Life" title of this project.

The word "Google", for example, occupied a prominent position in the design of the wall, it was inscribed centrally, as seen in figure 5(B). For most of the students in this project, access to technology is still quite scarce, few students had, at times other than in the project, the opportunity to carry out any type of research on the internet, one can see the fascination provoked after this contact.

The words "Nêgo" and "Favela", figure 5 (C) were also chosen by the group to decorate the wall. This choice refers to issues such as honor and pride in relation to skin color and place of origin, and more, it concerns the unity of the fight against racism and for the right to life, ensuring the maxim that reverberated in the project - representation matters!

Figure 5 – Students enrolled in the Graphic Design Laboratory. (A, B) Installation of illustrations to be reproduced. (C) Beginning of paintings.

Source: Author

After the preparation of the space, the students were able to experience the long-awaited moment of performing their graphic expressions on the wall. For a week, all laboratories provided space for this activity.

In the Product Design Laboratory, there was a concern to explore with the students practices anchored in problem solving, going through the characteristic design phases of Design, such as: acquisition of information, search and definition of concepts, morphological, aesthetic, technical and structural detailing, production and post-production of product.

Thus, having established the issues that should guide the progress of the Laboratory, the group decided that it would carry out an investigation into the spatial problems of the school. For two weeks, the classes, divided into project teams, took notes, recorded images and some verbalizations with the users – colleagues and themselves – about the use of the school spaces and the problems related to the lack of accessibility, safety and comfort found in these places.

With the awareness of the comfort, well-being and safety to which the students were or (were not) exposed on a daily basis, the design problem was defined: to develop a living area in the space commonly known by everyone in the school as the "Dirty Corner" (figure 6). This place, located in a recess in the courtyard, was used by the school administration for a long time as an open-air warehouse, where classes, chairs and all kinds of material that could be reused were being thrown.

Figure 6 – Space selected for redesign by students

Source: Author

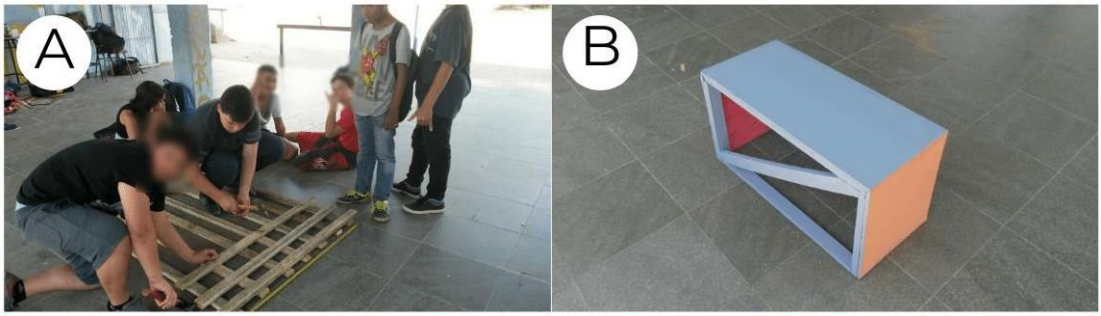
The students designed and described alternatives to improve the chosen space, so, after diagnosing the environment and possible improvements, a compilation of actions was organized by the group. Models were developed to assist in the visualization and understanding of the concept of scale with the help of mathematics classes (figure 7).

Figure 7- Development of models. (A) Student developing model individually. (B) Group applying scale to mockup elements

Fonts: Author

The development of the furniture was carried out by the students in partnership with the Product Design monitors who carried out the processes of wood cutting, sanding of the pieces, fixings from fittings, gluing and painting (figure 8).

Figure 8 – (A) Students developing furniture. (B) Student-developed bank.



Source: Author

In line with the assembly of the furniture, another group of students was responsible for preparing the area of the new space (figure 9).

Figure 09 – (A) Group preparing the new space. (B) Student painting the walls of the space

Source: Author

The "new corner" as soon as it was finished generated commotion and pride in the group of students, who were able to present the new space to the school community, and enjoy it for a few days. Figure 10 shows the result of the re-signified space.

Figure 10 – "New corner" finished, space for reading and games designed by the students

Source: Author

5 DESCRIPTION OF THE QUALITATIVE ANALYSIS

With the first month of project and research activities installed in the school, it was understood necessary to give voice to the students in relation to the educational path experienced, especially in relation to the new project practices involving Design.

Twenty students (ten girls and ten boys) were invited to compose the focus group, all enrolled between the 6th and 9th grades of elementary school. The choice of the focus group participants was made in order to form a heterogeneous group, representative of the one hundred students enrolled in the project, where gender, race and diverse economic situations were contemplated.

The activity replicated questions from the questionnaire used in the research Our School in (Re)Construction. At this stage, the objective was to reflect on the protagonism of young people in relation to the educational space in which they are inserted. The focus of the questions was on happiness, so the students were invited to make a brief report about the "school of their dreams" with their classmates and monitors.

In this activity, the questions were as follows:

1) What content would make you happiest?;
2) What way of learning would make you happiest?
3) What kind of classroom would make you happiest?
4) Thinking about the physical conditions of the school, what are the things that cannot be missing for the school of your dreams?;
5) What educational resources would make you happiest?

6) What main focus/goal of the school would make you happiest.

The second moment of analysis was carried out seven months after the beginning of the project activities. It was considered necessary to present the questions about Design after this passage of time so that it would be possible for the students to understand the general ideas about design disciplines, until then, foreign to the reality of each one.

In this way, some inquiries about Permaculture Design, Graphic Design and Product Design were carried out

1 - Regarding the laboratories presented in this project, which one did you most identify with? 2- What do you mean by Permaculture Design?

3 – What do you mean by Graphic Design?

4 – What do you mean by Product Design

5- What do I consider most important in relation to the project activities in the after-school period?

The use of this instrument proved to be useful since it provided tangible answers about important characteristics of the target audience of the research. Aspects related to the understanding of Design and its applications were also highlighted. With this instrument, we get to know new nuances of the students involved in the research, and we value these results for decision-making in future research modeling. In addition, we can understand some behaviors during the learning process, thus improving our daily listening, reflecting on the possibilities of continuous improvement in the school environment.

6 DISCUSSION OF RESULTS

In the first analysis instrument presented to the students, after the first month of the project, questions used in the research Our School in (Re) Construction, by Instituto Porvir (2019), were replicated. In relation to the contents that would make the students happier, the answers represented the desire for more exploratory outdoor activities, and the implementation of dynamics associated with technology, arts and culture.

To the question that brought up "What way of learning makes you happiest?" Students answered: "Learning using technology, learning by doing projects that involve hands-on activities, and learning by interacting inside and outside of school."

For the students in the focus group, the classroom that makes the students interviewed happiest is the one that "uses environments inside and outside the school, has varied furniture, where the tables can be organized in groups."

When asked about physical issues of the school, the group summarizes some ideas, such as: "A school with a lot of green area, sports courts and equipment, having internet, large and open spaces

that can be used." The educational resources that made these students happiest were "Games and educational games, carrying out projects."

The students observe that the focus or goal of a school that will make them happy is to "prepare for ENEM and the job market".

The students also left their impressions in the second analysis, also qualitative, where themes related to Design laboratories were questioned. In relation to the students' personal identification with each laboratory, the practices experienced in Graphic Design gained more followers, followed by Permaculture Design and Product Design. When asked what they meant by Permaculture Design, the students answered that they believe it is about "knowing the natural species and adapted to the conditions of the soil and the surrounding climate". There were also answers such as "studying ways to conserve and expand the biodiversity of the ecosystem of which I am a part" and, in fewer numbers, some students mentioned that Permaculture would be "a sustainable production of crops without using chemical inputs".

Regarding what the students understood about Graphic Design, the alternatives expressed were very concentrated between "translating ideas with written messages and shapes" and "organizing my ideas (drawings, paintings, texts) based on a research, and thinking of ways to communicate it". In addition, answers such as "learning to draw and write in different spaces" emerged. Some students, in a smaller number, suggested that the practices of Graphic Design were focused on the use of computer programs, and, finally, it was mentioned that the practices inherent to this qualification of Design were related to "drawing what comes to my mind", As the answers could be combined, we realized that there was the internalization by the students of the possibilities of Graphic Design, as well as the breadth of this design area.

Questions regarding the Product Design Laboratory were also asked. When asked what they meant by Product Design, some respondents said they understood it to be the creation of products from the disposal of materials. In addition, they dialogued with each other and concluded that the product project concerns the observation of users, research for similar products, outline of alternatives, planning, production and use of discarded products. A smaller group of respondents reached a consensus that Product Design is the area responsible for testing and tweaking existing products to discover the possibility of improvements in new products.

Finally, in this data collection instrument, we asked the question "What do I consider most important in relation to the design activities in the after-school period? Among the answers that emerged, most converged on the idea of learning in structuring projects. Another large portion agreed that the most important thing was to meet new friends. There were also those who found the activities tiring and boring and who would not participate in the project again.

7 FINAL THOUGHTS

The designer, in the words of Margolin (2006) is not only a citizen, he is also a collaborator responsible for the future paths of his society. Freire (2000) in his reflexive incursions declared that for him it was not enough to have consciousness, but to produce awareness, and this means going beyond the spontaneous vision of reality and experiencing a critical exercise of the same reality, thus demanding a position and action.

In the first investigations of the research group at the school, what was sought was the understanding of that context. The multiple realities that involve a primary and elementary school, in a peripheral region of the city, lacking human, social and economic resources. It is up to the designer to reflect on his practice, for which answers are sought to understand the "other" – other, this one, different from our cultural parameters, above all to academia and the labour market. At this point in the project, it is necessary to have a displacement towards the universe of others.

The presentation of the craft of Design needs to be translated into an accessible language, valuing above all the culture of people's daily lives, of popular manifestations, of the pulverized segments of society as integral parts of social construction. In that context – underprivileged children, susceptible in many ways – "Design" is probably just a nice word. It is necessary to build a revaluation of the popular, opening new horizons for the communication of material and symbolic activities.

At the time of presentation and proposal of this project, mediators and facilitators, fearfully stepping on new ground, visualize the spaces and interactions that occur in it, listen to the stories, relearn how to communicate with children and experience the role of being a teacher.

The knowledge of reality, of slang, of greetings, of the resignification of fashion, of the predominant musical style, involves respect for the usual symbols in the peripheral schools of Porto Alegre, and more, in the peripheral schools of the east zone of Porto Alegre, improving this cut for the context of the school.

Recognizing symbols involves decoding and perceiving them as messages and then interpreting them in light of the values assigned to them. The designer's work aims to integrate this fragmented knowledge of popular culture into a specific language of Design, which moves from the singular to the universal. In this project it was up to us, as a team, to see the research object not simply as an object, but as a human action with symbolic representations. As a result, little by little, the individual abilities of the elementary school students involved in the research were manifested. Here we read oral, written, graphic, spatial, musical, interpersonal, intrapersonal, bodily and logical skills.

The opportunities generated from the daily interaction between the project participants and the researcher allow us to identify the directions of action research based on self-reflection. The collaboration and negotiation between the researcher and the members of the research brings to this stage of the work one of the main characteristics of this type of research, which is the democratic

impulse to decision-making. In this sense, all actors assess the context and identify opportunities capable of contributing to social change.

Design, in this scenario, is capable of integrating the heterogeneities that arise in a collective work, in a coherent set, passing, however, from a set of attributes disconnected from each other. With this, it is possible to talk about the otherness experienced when thinking and carrying out projects, including within educational environments, since it presupposes the willingness to respect other project cultures, with values, ways of thinking and acting inherent to each subject, and thus see them with a look that seeks the best solutions.

At the end of the project, what is sought is to identify paths that show the formation of cultural identity in the school, in the figure of the students participating in the project. An identity that translates the profile of the people who live in that peripheral zone – peripheral areas in the political and geographical sense – seeking the inclusion of local particularities in the form of products and services that present universal quality, and enabling, even if occasionally, the construction and enhancement of intrinsic characteristics of the community. Figure 70 shows an illustrated synthesis of how we perceive the process of inserting the designer in the school context

In this article it was possible, therefore, to present the first impressions of the research group that seeks to insert Design actions in the school reality of elementary school students in a state school in the city of Porto Alegre. After the first month of the project, we invite the students to reflect on what their dream school would be. After seven months of the project, we developed another data collection instrument, this time seeking information on how the students understood the Design laboratories and their practices. From these analyses, we can perceive general ideas about how that group relates education and happiness, and also, how they perceived the inclusion of Design in that context.

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