



Project-based learning for the designing of a volteering brand

El aprendizaje basado en proyectos para el
diseño de una marca de voluntariado

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Abstract

The case study discussed in this article concerns the design of a brand for a volunteer centre of a higher education institution (*Space To Be* of the Lusíada Porto University). The methodology used by the first-year design students in 2023 was Project Based Learning (PBL). The development of the physical identity of a brand aimed to consolidate the fundamentals of design and reflect on the graphic design of brand communication. The process involved collaboration between students, teachers and the volunteer centre representative. In the PBL environment, educators and stakeholders can focus on improving and optimising the learning experience to provide students with a more complete educational experience. The learning experiences were found to be meaningful and allowed students to develop their autonomy and agility in problem solving, fundamental skills for their future work as designers.

Keywords: Project-based learning, collaborative design, brand design, student interaction, volunteering

Resumen

El estudio de caso tratado en este artículo se refiere al diseño de una marca para un centro de voluntariado de una institución de enseñanza superior (Espaço Ser de la Universidad Lusíada do Porto). La metodología utilizada por los estudiantes de primer curso de Diseño en 2023 fue el Aprendizaje Basado en Proyectos (ABP). El desarrollo de la identidad física de una marca tenía como objetivo consolidar los fundamentos del diseño y reflexionar sobre el diseño gráfico de la comunicación de marca. El proceso contó con la colaboración de estudiantes, profesores y el representante del centro de voluntariado. En el ámbito del abp, los educadores y las partes interesadas pueden enfocarse para mejorar y optimizar la experiencia de aprendizaje, proporcionando a los estudiantes una experiencia educativa más completa. Se considera que las experiencias de aprendizaje fueron significativas y permitieron a los estudiantes construir su autonomía y agilidad en la resolución de problemas, habilidades fundamentales para su futuro trabajo como diseñadores.

Palabras clave: Aprendizaje basado en proyectos, diseño colaborativo, diseño de marca, interacción entre estudiantes, voluntariado

Introduction



brand is expressed through a set of visual, verbal and symbolic elements that represent a company, product or service in a distinctive and memorable way (Wheeler, 2017). Brand identity includes components such as the logo, symbol, colours, typography, slogan, tagline, brand voice and even the personality attributed to the brand itself. Together, these components communicate the values, personality and mission of the organisation and serve to create a unique and recognisable image in society. Organisations can take many forms, including businesses, not-for-profit institutions, government agencies, community groups and others. The brand of a charity - volunteering - is social in nature and, according to Kotler and Lee (2010), focuses on organisations that play a relevant role in the community or the world.

The methodology used conforms to an active learning methodology that focuses on students who work autonomously to solve real problems, make decisions and create solutions through a final project (Becerra-Posada et al., 2022; Benavides et al., 2022; Besa, 2022; Bramwell-Lalor et al., 2020; Doyan et al., 2023; Harris and Allen, 2022; Krajcik and Shin, 2022; Madona, 2022; Nollmeyer and Torres, 2022; Robinson, 2009; Symbat, 2020). This type of learning enables the acquisition of skills necessary for professional success (Alorda et al., 2011; Guo et al., 2020; Holmes, 2012). Recent examples in the literature illustrate this integration of PBL in university education, particularly in the field of design (McCall et al., 2023; Wurst et al., 2023).

The case study illustrates the design of a physical brand for a volunteering programme promoted by a higher education institution. The brand design project was developed by first year design students in 2023. The objectives are to apply the PBL methodology to the design of a brand and to reflect on the results of the project through the iconic elements of brand design.

This article is structured as follows: first, the theoretical background introduces brand identity and the elements of visual brand design. Next, the application of the PBA methodology is explained, detailing the method used to develop the project's brand design. Finally, the results section analyses the volunteer brand design case study, and the conclusion addresses the challenges of the design project. References are provided at the end of the article.

A brand can be understood as a set of elements that identify an organisation's products or services (Kotler and Keller, 2021). Brand identity is the direction that the media (its various physical and psychological components) must take to reach its destination, which is the customer's perception (Mindrut et al., 2015). Baynast et al. (2021) describe two brand identities: physical and psychological (see Table 1).

Table 1. Components of physical and psychological brand identity

Physical Brand Identity	Psychological Brand Identity
Name Packaging, design, product	Character or personality
Brand emblems (logo, jingle, slogan, visual symbols)	Territory
Brand graphics (typography, codes, colours)	Cultural values

Source: Based on Baynast et al., 2021.

Identities de marca

The physical identity of the brand includes several elements, such as the name (patronymic, acronym, abbreviation), which may be evocative (identifying a brand and its product category), imaginative (with a prior meaning for its name), familiar (with a prefix or suffix taken from the institutional brand, for example) or a sum of names. The packaging, design or type of product also characterise and are part of its physical identity.

Brand emblems, instead, are all the elements that make up the brand, usually the logo (the name written in letters) and the symbol (a graphic sign that identifies the name, idea, product or service and can also be independent, such as a mascot). Many brands are also characterised by their jingles (musical refrain), slogans and/or brand signatures (expressions that usually accompany brands) (Baynast et al., 2021).

Finally, brand graphics are the colour codes that often appear on stationery, merchandising or brand communications. Brand identity reflects the unique characteristics of a brand (Ilanenko et al., 2020) and underlines the importance of identity for affiliation behaviour (Bagozzi et al., 2021; Gilani, 2019; Hsu-Hsin et al., 2013; Kumar and Nayak, 2019 and for small and medium-sized enterprises [SMEs]: Elikan and Pigneur, 2018).

On the other hand, psychological identity (see Table 1) represents the personality of the brand through three components: 1) its character or personality, which are "all the manifestations of the brand that help to create, maintain or change" (Baynast et al., 2021, p. 243) the image that customers have of the brand; 2) territory, which refers to the market

space in which the brand is legitimate (industry or market segment); and 3) cultural values, which derive from the defence of consumer values or the social distinction of the brand owners. For example, psychological ownership of an online brand community influences brand engagement, visitor involvement and purchase intention (Kumar and Nayak, 2019).

In this regard, Alina Wheeler does not present the same perspective as Baynast et al. (2021); the author describes identity as tangible and appealing to the senses, indicating that "it can be seen, touched, held, heard, observed and moved" (Wheeler, 2017, p. 4). The same argument is followed by Paul Rand, who refers to visual brand design as a graphic representation that identifies and distinguishes a company, product, service or organisation (Halliday and Kuenzel, 2008; Rand, 2017). However, Wheeler (2017) adds that a brand is the expression of how organisations create an emotional connection with customers, making them irreplaceable and fostering long-term relationships. The use of a brand is essential to differentiate an organisation from its competitors (Kotler and Keller, 2021).

Elements of visual brand design

As mentioned above, for Rand (2017), the visual design of a brand is a graphic or symbolic representation that identifies a company, product, service or organisation in a visually distinctive way. A visual brand usually consists of a symbol, an icon, a logo or a combination of these elements.

Paul Rand was one of the most influential graphic designers of the 20th century, leaving a lasting legacy in the field of logo design and visual identity. He was responsible for creating iconic logos for companies such as IBM, ABC, UPS and NEXT. His work has profoundly influenced the way brands are perceived and visually recognised.

In addition to Rand, another important graphic designer is David Airey (2010), who is also a brand consultant and is recognised for his contribution to the field of visual identity design and branding. His work provides insight and suggests best practice in visual brand design. The author states that "anyone can design a logo, but not everyone can design the right logo" (p. 22).

In this sense, eight essential elements need to be carefully articulated when designing a brand (see Table 2).

Table 2. Iconic elements of brand design

Iconic elements in brand design	Expression / slogan	Keywords	Concept	Examples of brands
Simplicity	"keep it simple"	Minimalism	Simplicity helps a design to be more versatile in its use and easy to recognise.	Mitsubishi, Samsung, FedEx, BBC, NHS.
Relevance	"Make it relevant"	Identity differentiation	Identity differentiation Know the customer and the company to differentiate from the rest and identify the brand.	Hawaiian Airlines, BMW, Ed's Electric, Vision Capital
Classics	"Incorporate tradition"	Trends q.b.	Trends are fresh but changing; trust is earned with a strong history and brand authenticity.	Vanderbilt University
Distinction	"Aim for distinction"	Uniqueness	Recognise the design by the pattern or outline of the shape and by its reading in black and white.	Newspaper Marketing Agency, ANNAS, Talkmore
Memorable	"commit to memory"	Brief moment	Easy-to-remember brands are impactful, easy to process and convey the brand concept.	New Bedford Whaling Museum
Reduction	"think small"	Dimension	Eliminating unnecessary elements can reinforce identity, simple design benefits versatility.	Sugo
Focus	"focus on one thing"	One attribute	Convey only the attribute that most characterises the brand, not two or three.	French Property Exhibition
Rebellion	"remember that rules are made to be broken"	Creativity	Rules guide a design, but it is often necessary to make mistakes, experiment and challenge creativity.	

Source: Based on Airey, 2010.

Simplicity is at the heart of everything, as a simple brand is easy to recognise and remember. But simplicity alone is not enough. The brand must be relevant, connecting directly with the values and needs of its target audience, while honouring tradition, evoking a sense of authenticity and trust, often translated by its longevity (Airey, 2010).





Furthermore, in the competitive world of branding, differentiation is crucial. A brand needs to stand out from the competition, either through its visual identity or its unique message. But distinction must not come at the expense of memorability. A memorable brand is one that sticks in the consumer's mind, leaving a lasting impression that stands the test of time. When simplifying and refining a brand, it is important to focus on the essential elements that define it. Reduction helps to eliminate excess, leaving only what is most important and distinctive. This approach ensures that the brand message is clear and direct, without noise or distraction (IBID.).

However, a truly effective brand must also challenge norms and stand out from the crowd. Brand challenge drives innovation and differentiation, pushing the boundaries of convention to create something truly extraordinary. In this area, Airey (2010) warns that "rules are made to be broken" (p. 39). Ultimately, the success of a brand lies in the articulation of the design elements in its composition and how it is recognised by its customers (Airey, 2010; Bierut, 2021; Wheeler, 2017).

Project-based learning methodology

Active teaching methods are pedagogical approaches that actively involve students in their own learning process, as opposed to traditional teaching methods that are mainly based on lectures and passive instruction.

The first ideas came from William Heard Kilpatrick (1871-1965) and John Dewey (1859-1952) (Dewey, 1922; Kilpatrick, 1918). In PBL, students investigate and answer a question, solve a problem or create something tangible as part of the learning process, moving away from the traditional teaching method in which students act as recipients of knowledge. The teacher acts as an initiator, source of inspiration, builder of structures and assessor of the students' work, resulting in the production of a tangible product (Graaff and Kolmos, 2007; Helle et al., 2006). Helle et al. (2006) list four key features of PBL that should be considered when developing projects, namely:

-  Problem solving;
-  Learners' ability to take initiative;
-  The creation of a final product;
-  The role of teachers as facilitators.

When it comes to using PBL, there is no strict or defined methodology. Jonassen (2011) in his book *Learning to Solve Problems: A Handbook for Designing Problem-Solving Learning Environments*, presents several methods for evaluating how to solve different problems and describes various alternative methods. Author Patton (2012) presents five stages of implementation: 1) having an idea, 2) designing the project, 3) refining the project, 4) implementing the project, and 5) publishing the project. Meanwhile, John Larmer, John Mergendoller and Suzie Boss (2015), contributors to the Buck Institute for Education - now known as PBLWorks (2024), which aims to transform education by empowering educators to effectively implement PBL in their classrooms - present the Gold Standard Project Based Learning as a basic structure with four phases on which to build the planning of the PBL process, respectively:

- ◆ Stage 1: Launch the project with an entry activity and a guiding question/baseline.
- ◆ Stage 2: Building knowledge, understanding and skills to answer motivating questions.
- ◆ Stage 3: Developing and critiquing products and answers to the motivating question.
- ◆ Stage 4: Present products and answers to the baseline question.

◆ Application of the method to the practical case

The method of applying PBL in this case study was structured in the following phases: (i) problem definition; (ii) investigation; (iii) concept development; (iv) preselection; (v) design detailing; (vi) selection. In the case study presented, the basic question is: "Can students develop a (physical) brand by interpreting the needs of a customer in a real situation? Table 3 shows the correspondence between the process plan of Larmer et al. (2015) and the phases of the design methodology used in the project.

Table 3. Correspondence between Larmer et al.'s (2015) PBL process planning, and the phases of the design methodology used in the project.

Planning the PBL process	Application of PBL in case study
Guiding question	Can students develop a (physical) brand by interpreting the needs of a customer in a real situation?
Launching the project	Defining the problem
Build knowledge, understanding and skills	Research and Conceptual Development

Develop and critique products	Conceptual development and Pre-selection
Present products	Design detailing and selection

Source: Based on Larmer et al., 2015.

Practical case The project started in the academic year 2022/2023 and lasted about two and a half months (excluding the last phase). The APB stakeholders were mainly students, teachers and the representative of the volunteer centre (the client).

The challenge was to develop a brand (physical identity) for a volunteer centre (*Espaço Ser*) *Space To Be* of the Lusíada Porto University. The teachers accompanied the whole process, from conception to development and completion of the project. A work programme was drawn up with all the necessary information. And in order to make the design process transversal, a statement of work was drawn up and made available to all the participants.

Space To Be Volunteering aims to promote social responsibility at Lusíada Porto University, involving students and the community. The organisation seeks to create projects and partnerships with public and private institutions to promote volunteering. These opportunities allow students to participate in extracurricular activities that promote civic education in the academic community. Their participation is free, organised and free of charge in solving social problems.

The design project consisted of the development of a brand for the volunteer organisation *Space To Be*. The final visual brand was to be presented through a symbol (graphic design), a logo (name of the volunteer organisation) and a composition expressing the philosophy of the social organisation. The objectives of the project were to respond to the competences to be acquired in the course and to add a reflection on the iconic elements of design based on Airey (2010).

The identified problem, which enabled the use of PBA, arose from a casual conversation with some members of the volunteer committee in a public space. Later, after realising that the challenge was part of the course programme and objectives, the course leader went into more detail with the representative of the volunteer group and drafted the work instructions.

The project was launched at the beginning of the second semester on 16 February 2023. From then on, the students started researching reference brands and designers. The students' initiative led them to research and

reflect on similar social brands (international and national), as shown in Figure 1. At the same time, the class analysed the needs of volunteering. The research phase ended with the creation of a mind map and a concept board (see figure 2).

							
MARCAS	Banco de Voluntariado	Banco Local de Voluntariado de Coruche	Banco Local de Voluntariado de Golegã	Banco Local de Voluntariado	Cruz Vermelha Portuguesa	Casa do Voluntário	Banco de Voluntariado
COMPOSIÇÃO	Símbolo e Logo	Símbolo e Logo	Símbolo e Logo	Símbolo e Logo	Símbolo e Logo	Símbolo e Logo	Símbolo e Logo
CORES	Preto, Ciano, Laranja e Azul	Preto, Roxo, Laranja e Azul	Preto e Azul bebé	Verde, Azul e Laranja	Preto e Vermelho	Azul e Vermelho	Verde, Azul, Rosa e Roxo
SETOR DE ATIVIDADE	INSTITUIÇÕES DE VOLUNTARIADO						
FAMÍLIA TIPOGRÁFICA	Letra com serifa	Letra sem serifa	Letra sem serifa	Letra sem serifa	Letra sem serifa	Letra sem serifa	Letra sem serifa

Figures 1. Analysis of similar brands
Fuente: Mariana Costa.



Figure 2. Conceptboard for inspiration
Source: Maria Sousa

The concept board allowed the ideas to be materialised through sketches and outlines using drawing materials and paint. In this conceptual development phase, the support of the teachers, as promoters of an active pedagogy in the learning process, was crucial in selecting the best digital design proposals. The class used the digital drawing programme Adobe Illustrator to create the designs, which allowed them to visualise and study the composition of the marks in a more detailed and realistic way (see Figures 3 and 4).

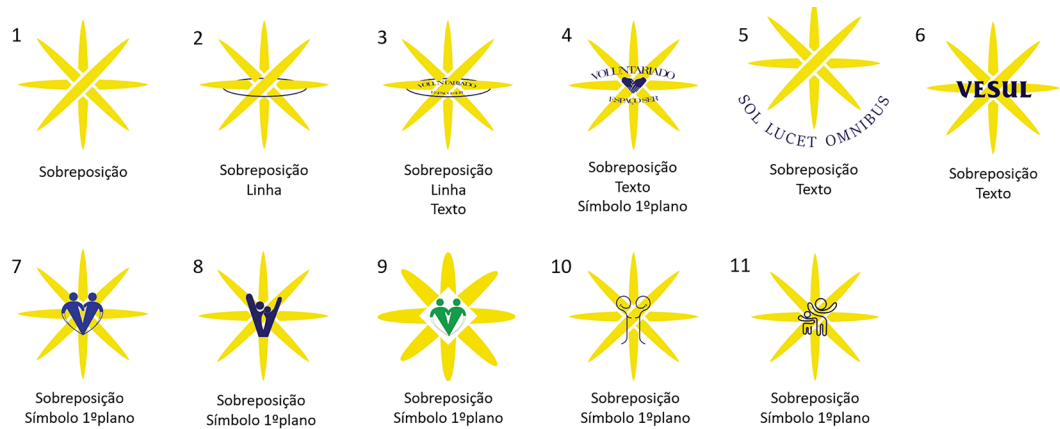


Figure 3. Digital brand studies.
Source: Inês Vasconcelos.



Figure 3. Digital brand studies.
Source: Joana Sousa

Due to the high level of enthusiasm in the class, an internal decision had to be made that was not foreseen in the work programme. The number of digital designs exceeded expectations and it was decided that each student could only submit two branding projects to the *Space To Be* volunteer representative. It was decided to hold a vote among the students and teachers, and the two branding proposals with the highest

number of votes were selected. This process opened the door to collaborative discussions from the point of view of applying the fundamentals of branding and communication.

The class council also decided that, in preparation for the pre-selection meeting, it was essential to show the brand (with colours) and the "constructive logic of the brand" in order to better communicate its composition (see Figures 5 and 6).

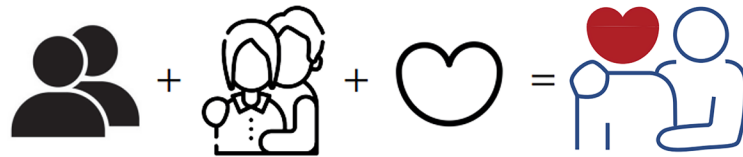


Figure 5. Constructive logic of a brand.
Source: Fátima Pinto.



Figure 6. Constructive logic of a brand.
Source: Mariana Tavares

The session entitled "Collaborative Design Project" took place on 23 March 2023 (see Figures 7 and 8). This activity was attended by students, teachers and the person in charge of the volunteer centre promoted by the Lusíada Porto University. The decision process for the selection of the brand was based on the communication of the brand in relation to the philosophy of volunteering. Many of the factors to be improved relied on the collaboration of the teaching team, in discussing the details of the design, and the students, the future designers. Each student was left with a brand to refine as a result of this dialogue.



Figure 7. Photograph of the collaborative design project session
 Source: António Brandão Raquel Antunes



Figure 8. Examples of branding proposals to select
 Source: Ana Fernandes, José Pereira y Paula Hugo.

In terms of design, the students' motivation increased. It was essential to understand the preselection and reflection of the projects in terms of learning, development and consolidation of learning. In the end, all students in the class produced a dossier (a document explaining the whole design process), a presentation (a visual summary of the project) and a poster with the brand guidelines (see Figure 9).



Figures 9 y 10. Brandguidelines of the selected branding project (left) and application of the brand on the website of the Lusíada Porto University (right).
Source: Tiago Serra (left) and Lusíada Porto University website (right)

After the submissions, the teaching team compiled the elements that they considered to be the most significant of the project into a single digital file to be sent to the members of the volunteer organisation. Figure 11 shows a visual summary of all the numbered branding projects. The evaluation of the subject design project was independent of the choice of brand, as it was not communicated until the following academic year, 2023/24.



Figura 11. Completed volunteer branding projects, numbered and summarised on one slide.
Source: Class of first year Design students at Lusíada Porto University.

The final solution corresponds to number 11 in Figure 11. This was the brand chosen to represent the volunteering organisation.

Analysing the projects through the lens of the iconic elements of brand design (see Table 2), it can be considered that projects 2 and 11 are characterised by their simpler design, which may correspond to easy recognition.

On the other hand, in terms of physical identity (see Table 1 and Figure 9), the brand name corresponds to "*Volunteering at Space To Be*". The name was materialised in a visual symbol (two outlines of people with a heart in the middle), a logo (name) and a denomination (ULusíada). At the same time, the brand was communicated on the products, considering the use of colours and typography when applying the brand graphics.

The psychological identity of the brand encompasses its personality, the way it connects with customers (Baynast et al., 2021), which from a design perspective (Airey, 2010) can refer to the concept of brand relevance. Territory (Baynast et al., 2021), within the market space, is directly related to its distinctiveness (Airey, 2010). The cultural values of the brand alone are not taken into account, but from another perspective, the "*Space To Be*" is a valence of the Lusíada Porto University. The volunteering programme promotes identification with the university and vice versa.

Discussion of the results

In line with the findings of the case study, it was found that the use of the PBL method provided greater opportunities to apply knowledge and develop skills in the search for practical solutions, based on structuring the challenge/project around solving real-world problems.

The application of this method to brand design highlighted the four key characteristics identified by Helle et al. (2006): firstly, (real) problem solving, as the chosen brand was representative of the *Space To Be* volunteer organisation (Espaço Ser); secondly, the students' capacity for initiative, taking into account the response to the challenges, in developing strategies, planning the work and including and reflecting on design practices; thirdly, the actual product created by all the students, which can be communicated in their individual portfolios or even serve as an inspiration for future work; and finally, the role of the teachers as facilitators, to which the important collaboration of the volunteer representative is added.

The authors even consider that the most significant moment of the design process, considering the application of the PBL method, was the collaborative design project session. Clearly, the students realised that each piece of work "responded to the problem" and at the same time they understood that "there are many solutions to the same problem".

Reflecting on the steps taken, we realised that they could have been arranged differently, less clearly defined or even extended. The existence of an opening session, where the problem could be presented in the first person, could have clarified some design decisions. In addition, a site visit would have been beneficial so that future designers could interact more with the target audience (and not just with volunteer representatives). Adaptability is also relevant to active learning, for example when the class council decided on the voting method for each student's two brand proposals or how to present them during the pre-selection.

Projects 3, 4, 8 and 10 were considered to be of low relevance as they had difficulties in linking and communicating the brand values and the identification as a help centre (figure 11). Volunteering at *Space To Be* is a new programme, so communicating tradition may not be an easy task, except for the use of the institutional colours of the Lusíada University (blue and yellow) presented in proposals 1, 2, 3, 5, 6, 9 and 11.

Airey (2010, p.30) states that "the distinctiveness of a brand is the perceived uniqueness of its black and white outline" and its differentiation from the competition, and in this analysis all the suggestions in Figure 11 were unanimous in their view of distinctiveness. However, distinctiveness can also refer to being memorable, quickly conveying its concept and remaining in people's minds. Simplification of the brand, in its refinement of excess, carries significant weight in terms of reduction, direct and focused communication and its versatility when applied to products.

By analysing the design reflected here against the brand choices made by the volunteer members who did not have these design criteria, the authors clearly understood the choice of brand proposal 11 (see Figures 9 and 10). Brand innovation 11 is characterised by challenging norms, appears to be designed by a child, connects with its target audience (young and old) and shows its creative and distinctive side.

Conclusion In the first year of the Design course, four major projects are developed over the course of the first and second semesters. However, the project with the highest student acceptance was the third one - the design of a volunteer brand - which is presented in this article.

The correspondence between the process planning of Larmer et al. (2015) and the phases of the design methodology resulted in the practices used in the practical case (see Table 3). They managed to emphasise the importance of reflection and evaluation throughout and at the end of the design process, qualities already highlighted by some authors in the literature review (Helle et al., 2006).

In PBL there are several areas that educators and stakeholders can focus on to improve and optimise the learning experience. Some areas may

need further attention and development, namely technology integration, assessment strategies, inclusive practices, assessment of interpersonal skills, creation of flexible learning spaces, programmatic alignment of project-based curriculum units, student reflection and feedback, and research and evaluation processes. By addressing these areas, educators and educational institutions will be able to further increase the impact and effectiveness of project-based learning and provide students with a complete and meaningful educational experience. It is hoped that future studies will continue to address some of the gaps identified above. However, it is felt that the learning experiences were meaningful and allowed students to develop their autonomy and agility in problem solving, fundamental skills for their future work as designers. ●

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