UNDERGRADUATE AND GRADUATE DESIGN COURSES IN PARAÍBA: A BRIEF REPORT ON THE CREATION FACTORS OF BACHELOR'S AND MASTER'S DESIGN COURSES AT UFCG

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ABSTRACT

This article presents a brief report on the factors that enabled the creation of the course of Design and the Graduate Program in Design at the Federal University of Campina Grande (UFCG). Initially characterized as eminently focused on Product Design, and located in a Science and Technology Center, the Design Course evolved towards a multidisciplinary and generalist approach, with the possibility of developing products in several areas. The education of the faculty is in Design, favoring the focus in that field, which results in the recognized exceptional quality of its graduates. The UFCG Course of Design is almost forty years old and it is one of the oldest Design courses in Brazil. As a consequence of the quality of the undergraduate studies and the professor's qualifications, the Graduate Program in Design emerged in a multidisciplinary context, and it is formed by professors from several areas, such as Design, Production Engineering, Mechanical Engineering, Architecture, Education, and Systems and Computer Science. Currently, PPGDesign/UFCG offers the Course of Master's in Design.

Keywords: Design in Paraíba. Graduate Program in Design. History of Education in Design.

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1 INTRODUCTION

This article aims to present a brief report on the trajectory of Design education in Paraíba, more specifically at the Federal University of Paraíba, and in Campina Grande. The study that resulted in this article has a narrative and documentary character. The shortage of documents due to losses over forty years of changes and updates was a limiting factor for the execution of the research. At the same time, we can assume that there is an urgent need to rescue what is possible to trace the history of this landmark of higher education in the Northeast region, which to this day delivers many outstanding professionals to the vast market, both nationally and internationally.

For a long time, Design was not a topic of interest – and was not even present - in science and technology policies in Brazil, even when there were already Industrial Design/Design [2] courses in the country, such as the one in Campina Grande (LEON, 2014). Beginning under the leadership of Professor Lynaldo Cavalcanti de Albuquerque when he was the head of the National Council for Scientific and Technological Development (Conselho Nacional de Desenvolvimento Científico e Tecnológico-(CNPq)) between 1980 and 1985 (CNPQ, 2017), it was possible to insert Design as a factor for the development of technology and education in this area. As a consequence, some universities were expanded, and among them, the Federal University of Paraíba (UFPB). Furthermore, technology centers were set up in cities that already had the physical and human resources required, including in Campina Grande, Paraíba (PB), which had a UFPB campus that was already developing advanced technology projects, mainly in Electrical Engineering.

Professor Lynaldo Cavalcanti was born in Campina Grande, PB, and was a Design enthusiast and supporter because he believed in the potential of the area for development and technological innovation. Having been born in Paraíba, he had particular interest in contributing to the development of the state and the Northeast, and acted to consolidate Design in the region.

It was also with the initiative of Professor Lynaldo during his term as Dean of UFPB[3] that the Course of Industrial Design (CDI) was created in 1978 on the

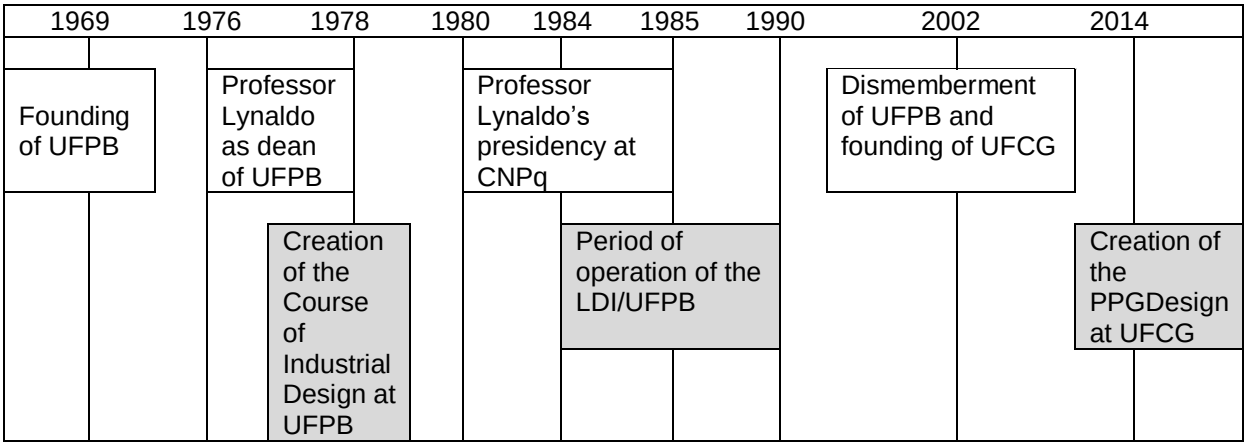
[2] Starting at this point, when mentioned throughout the article, the expressions Industrial Design and Design will identify the same area, since, by determination of the MEC, the first should be replaced by the second to identify the education and the profession in Brazil.
[3] Professor Lynaldo Cavalcanti de Albuquerque was dean of UFPB between 1976 and 1978.

campus in Campina Grande by the hiring of professors from the Southeastern Region of the country. It was one of the first Design courses created in Brazil and installed in a city in the interior. A similar fact occurred in 2014 with the creation of the Graduate Program in Design at the UFCG; although it did not occur under Prof. Lynaldo, it was always his personal aspiration. The creation of PPGDesign is further detailed later in this article.

Another factor of great impact for Design in Paraíba was the creation of the Product Development Laboratory of the UFPB (LDI / UFPB), which was integrated to the CDI in Campina Grande as part of the CNPq incentive plan for the expansion of research, education and regionalization.

Finally, in 2014 there was another event of great importance for Design in Paraíba: the creation of the Graduate Program in Design (PPGDesign / UFCG) in the same department where the CDI works. Figure 1 illustrates some important moments of this process in chronological sequence.

Figure 1 – Chronological sequence of events referring to CDI, LDI and PPGDesign.



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The following topics initially describe a brief history of the undergraduate Design course at UFPB/UFCG with a description of the characteristics of the pedagogical project in force since 2014. Subsequently, it describes some factors that resulted in the creation of the Design Graduate Program, as well as its main characteristics.

2 A BRIEF HISTORY OF THE UNDERGRADUATE COURSES OF INDUSTRIAL DESIGN/DESIGN AT UFPB/UFCG

The following report is based on books and documents from the archives of the UFCG library, and obtained from the coordination of the School of Design, and from interviews conducted between 2016 and 2017 with some graduates and professors who were there during experiences that date back beginning from the creation of the undergraduate and graduate courses[4].

The first Industrial Designing course in Paraíba was created in 1978 when the Industrial Design Course (CDI) was implemented at the then Federal University of Paraíba (UFPB), whose education, research and extension activities in several areas, mainly in Exact Sciences, began in 1969. The CDI was implanted on the campus in the city of Campina Grande, where a technological center had been installed. The project was made possible by the innovative vision of the then dean of the UFPB, Professor Lynaldo Cavalcanti de Albuquerque, who believed in Design as an instrument for innovation and development. At that time, Campina Grande was a city whose main economic activity was commercial, but with some industries installed in its expanding industrial district. Professor Lynaldo believed in the creative and enterprising spirit of the city that had a federal university with a strong investment in structure, personnel and creation of new courses, consolidating itself mainly in the area of science and technology. In that context, the creation of the CDI was an avant-garde and historic achievement for the region and the country.

And it was mainly the perspective of technological innovation that was decisive in Professor Lynaldo's decision in 1977 to invite professionals to the UFPB Campus in Campina Grande from Rio de Janeiro and São Paulo, then recognized in an incipient area in the world and even more in Brazil: Design. It was the responsibility of Professor ItiroIIda, the main reference in Ergonomics at the time, to plan the course and bring together qualified personnel for the project.

The Course of Industrial Design of the UFPB was initially implanted as an area linked to the Department of Mechanical Engineering, at the Science and Technology Center of the UFPB, and it focused mainly on Industrial Product

[4] The author of this article was a student of the fifth class of Design, having participated in activities with almost all the people mentioned in the text and who were responsible for the creation of the course. The author was directly responsible for the Pedagogical Project of the Design Course and for the creation of PPGDesign and the Master's Degree of Design of the UFCG. Therefore, this article presents both bibliographical and documentary references and the author's testimony.

Designing; it did not consider other common subareas at the time, such as Visual Communication. This characteristic lent a profile to the new course that differentiated it from the majority of similar ones in the country that in general were installed in centers of Arts and Communication. The circumscription in an environment focused on technology and the Exact Sciences provided what was believed to be a quality that would favor technological advancement and innovation for a region lacking development in the creation, production and quality of its products. In this way, professors who came from other regions and who had training and broad knowledge in the area of Arts and Design were joined by local professors of Engineering, establishing dialogues that seemed relevant in to approach issues related to the implementation of Design in the industrial environment.

Finally, on September 2, 1978, the Course of Industrial Design – CDI, from the Science and Technology Center of the UFPB, obtained an operating permit called a Bachelor's Degree in Industrial Design, through Resolution number 24/78 of the CONSEPE/UFPB, which established its curricular structure. Resolution number 194/78 of the CONSUNI/UFPB approved the authorization for operation on October 10, 1978, when the first class was selected. On July 6, 1982, the course was recognized by the MEC, through Ordinance Number 248, to train students in only one major: Product Design.

From its creation until 1978, CDI/UFPB offered 20 spaces annually, in a single entry per year. In 1999, the course began to offer 40 spaces, divided into two entries per year. As of 2009, as a consequence of joining the Program of Support for Restructuring and Expansion Plans of Federal Universities (Reuni) of the Federal Government, the course started to offer 60 spaces with two entries per year.

As a way of creating a scenario conducive to the experimentation of creativity applied to the development of industrial products, the Laboratory of Industrial Design (LDI) of the UFPB was implanted. At that time, there were few spaces exclusively dedicated to experimenting with Design in laboratories. Between 1984 and 1986, LDI/UFPB developed several courses and projects funded in part by development institutions. However, it was only active until the early 1990s. Its activities were interrupted due to lack of resources, which caused the transfer of its equipment to the Federal University of Pernambuco, definitively canceling the possibility of immediate reopening of its activities. (LEON, 2014)

In spite of the short duration, several Design personalities went through the LDI/UFPB, among them Gui Bonsiepe, who taught the Experimental Methodology course in 1984, which resulted in a publication financed by the CNPq. (BOSIEPE et al, 1984). Other professionals coordinated workshops and taught courses that contributed to the deepening of mainly methodological issues of the practice and the education of Design. Thus, LDI/UFPB played an important role in the training of the faculty of the CDI. The studies that were developed were exposed to the local community and published in books, and were a showcase to inform companies about the potential of Design and of the course, and to gather new students, considering that, until then, there were no other courses in Paraíba where people interested in visual arts and languages could develop their creative abilities focused on the solutions of practical daily necessities. The Laboratories of Industrial Design installed in Brazil and created as a policy of expansion of science and technology closed due to several factors, but mainly due to maintenance costs and the interruption of institutional investments.

The stimulation of creativity and innovative solutions has always underpinned the pedagogical principle of the CDI, exploring several connections between Design, Engineering, and industrial production. Fruits of the CDI and the LDI were celebrated in the comprehensive projects of conclusion of the course, where guests of the industrial sector of the city participated. The disciplines and teaching methodology changed and were adapted as the concept of Design and guidelines for teaching changed. From this perspective, we can list some relevant points, among many others, that indicate the mobility of the course with respect to the adequacy of its content: (1) connection of solutions of Design with demands of local companies; (2) connection with the departments of engineering and computer science of the UFPB; (3) insertion of identified everyday life problems in design projects; (4) update of the Aesthetics discipline with the return of Gustavo Bomfim from his doctoral program in 1984; (5) insertion of Semiotics with the return of Professor Wellington Medeiros from his master's degree program in 1998.

In 2002 there was an important event that caused significant changes in the course: the UFPB was dismembered, when Law number 10,419 of April 9

determined the creation of the Federal University of Campina Grande (UFCG)[5]. Since then, the UFCG has been outstanding in the region, and in 2015, it was evaluated as the second best university in the state of Paraíba and one of the seven best in the Northeast Region. (IGC, 2015)

3 CHARACTERIZATION OF THE PEDAGOGICAL PROJECT OF THE UFCG DESIGN COURSE

The Course of Design of the UFCG (CDI/UFCG) is established from the perspective of exploitation of technologies for the creation of products that can meet the most diverse human demands. To this end, since its foundation, the profile of the course has been characterized by being essentially generalist, that is, it is not aimed at training professionals that are qualified to develop products in one specific area of the Design product.

Although the Pedagogical Project of the UFCG Design Course was completed in 2010, its implementation only occurred in 2014 with the characteristics described below (PPCDESIGN/UFCG, 2010).

3.1 Basic pedagogical principles of the course

The pedagogical and philosophical principle of the CDI/UFCG is based on a systemic approach to Design. In order to characterize the course, the systemic approach is defined as a process of identification, approach, investigation, criticism, understanding and exploration of the elements of a whole that influence and are influenced by one another. This principle adopted as the philosophy of the course is applied not only to localized activities, but also to the development of projects, and also to all activities related to the other disciplines and activities of the course. Following this principle, all the disciplines have the perspective of interrelationship with the others in their contents and methodologies, and mainly, with Project disciplines. This way, the principle of interrelations between disciplines, between projects, and between product users is characterized, and is also extensive to professors and students. The various facets of Design and its interdisciplinary

[5] From this point onwards, the article mentions the UFPB as an institution that was in force until 2002, and the UFCG as one that became effective as of that year, when the dismemberment of the university occurred.

connections (functionalism, utilitarian aspect, aesthetics, ergonomics, theory, industrial production, marketing, ecology, emotion, and semantics, among others) are explored through the principle of configurational interrelationships, which are equally important and influence one another. This principle establishes the relevance of multidisciplinarity as a factor that favors a broader understanding of the student on the complexity inherent to a certain ecology of Design that must consider as equally important pragmatic and objective aspects, and those that concern the subjective dimension of human aspirations. (CARDOSO, 2016; MORIN, 2000)

In the current socioeconomic context, the search for a philosophical concept of Design that considers sustainable development and social reach and the human dimension in the user-product interaction demonstrates the vocation for which the UFCG Design course is directed, integrating the many regional and cultural peculiarities, seeking to act in an interdisciplinary manner.

Therefore, Design is understood as a differential that seeks the quality and excellence of products and services. In addition, Design aims to make viable the innovation processes related to the conception, development and production of artifacts for society through the use of technology.

Based on this assumption, the needs and opportunities of Design, as well as the guiding principle of all the activities inherent to the course, are explored according to all possible dimensions of the product and to the interactive processes with the user.

The minimum and maximum enrollment time load per semester, and the minimum and maximum time load for completing the course are: minimum hours per semester: 240 hours (16 credits); maximum time load per period: 390 hours (26 credits); minimum time load to complete the course: 3 and a half years (7 semesters); maximum time to complete the course: 5 years (11 semesters).

The UFCG Design Course defines Product Design as follows (PPCDESIGN/UFCG, 2010):

> Product Design is a practical activity, based on critical theories and procedures, whose main objective is the configuration of artifacts in the field of technological innovation, starting from a systemic approach, involving several activities and disciplines, including: cognitive and creative processes; issues of use; productive chain; market, pragmatic and emotional interaction; formal properties; and aesthetic, semantic and symbolic dimensions. It includes the creation and development of concepts that result in products generated from a connection structure encompassing fields of knowledge relevant to the activity, seeking, through

> its artifacts, to provide experiences that meet the expectations of the various user segments during the execution of the most varied tasks. In this way, experiences resulting from practical expectations as well as those related to theoretical, emotional and subjective aspects must be considered. Thus, Design must combine several factors expressed in its products that contribute to a user's full experience with the artifact, which include: psychological and emotional experience, aesthetic characterization, product semantics, social and environmental impact, ergonomics and human factors, technological innovation, efficiency, and durability. Finally, Design should explore the configuration of its products from the perspective of what can be significant for its users, from a systemic perspective.

The general objective of the course can be defined as: training professionals that are qualified to develop products in the various areas of productive systems that can be exploited in the universe of Product Design, in conformity with the diversified production profile of Paraíba and Brazil. Thus, the graduate of the UFCG Design Course is licensed to develop products for the various areas of this system.

Therefore, CDI/UFCG aims to offer to the student a systemic vision in the various stages that make up the Design process, including: concomitance with the evolution of social, cultural, economic and technological aspects; research, analysis and critique of collected information; creative processes; productive processes. The student can always exercise and develop his/her creative capacity by following methodological processes that provide a systemic perspective of all steps and stages involved in the life cycle of the product from its conception to its use.

The pedagogical principle is based on the systemic perspective of Design that is founded on the principles of process and iteration. Process is defined as: action to proceed and carry out some activity in a continuous and prolonged way; characterized as follow-up, course, trajectory, continuous sequence of facts and operations, progress, development, way of doing something; method, way, procedure, leading to practical decisions and applications[6].

Iteration is defined as: process of solving a problem through operations in which the object of each one is successively the result of the preceding one, establishing a relation of continuity and ascending evolution, enabling an evolutionary and correlated vision of the issues studied[7].

[6] Adapted from the Pedagogic Project of the Course of Design, 2010.
[7] Ditto.

These concepts characterize not only the Project disciplines, but all of the disciplines in the curriculum. Thus, the pedagogical policy of the course includes an emphasis on iterative learning procedures and exercises for the apprehension and practical use of acquired knowledge. That is, the same process-based procedure must be applied to both Project disciplines and other practical and theoretical disciplines. The following keywords characterize the UFCG Design Course: systemic vision, process and iteration. The conceptual combination 'process' and 'iteration' results in the expression 'iterative process' as a guiding concept of the CDI/UFCG.

The iterative process that underlies the course assumes a sequential correlation of the entire content of the academic structure associated with the various dimensions that determine the multidisciplinary character, considering pragmatic, subjective and symbolic aspects.

The course completion projects attest to the inherent complexity of each project developed by students from the perspective described above. It is noteworthy that, to the extent that professor training occurred, the course completion projects reached a depth beyond that required for an undergraduate. The research studies developed during the course completion projects and the entire Design process that results in products began to contemplate the latent scientific production demand in the course.

Based on this observation, on the interest of the faculty, and on the existing demand in the region, the work for the creation of the Graduate Program at the UFCG (PPGDesign/UFCG) began.

4 A BRIEF HISTORY ON THE GRADUATE PROGRAM IN DESIGN AT THE UFCG (PPGDESIGN/UFCG)

In 2014 the Graduate Program in Design (PPGDesign) at the UFCG began, with the entrance of the first Master's class in Design.

Although the process of creating the Program began in 2012, the gestation of the Master's Program dates back to more distant times. As in the Undergraduate Course in Design, initially the Master's project also sprang from the innovative vision of Professor Lynaldo Cavalcanti Albuquerque, who believed in Design research as an instrument for innovation and development.

And it was precisely for having an entrepreneurial and avant-garde vision, and for believing in Campina Grande and the UFPB, that Professor Lynaldo stimulated the creation of what might have been one of the first graduate programs in Design in the country. At the time, the only doctor with background training in a related field working in the academic, systemic and methodological study of Design was Professor Gustavo Amarante Bomfim, a Design professor at the UFPB, with a PhD in Philosophy with an emphasis on Design obtained in Germany, which was rare at the time. Professor Gustavo is recognized as having been the pioneer of studies in Design in Brazil with a philosophical and methodological approach, which contributed to a philosophy of Design. His studies on methods of product development were basic to the UFPB Design Undergraduate Course. (BOMFIM, 1995; COUTO & OLIVEIRA, 1999; COUTO at al, 2014)

According to documents obtained from the archives of the Department of Design at the UFCG in 2017, in the 1990s there were several meetings to discuss a graduate program. Some occurred internally, with records by professors Gustavo Bomfim, Ivan Assumpção and Lia Mônica Rossi; other meetings took place with the participation of professors from other institutions, such as from the Federal University of Pernambuco. There are records of the names of those participants and also of the project draft for the graduate program, containing objectives, area of concentration and lines of research[8]. However, the project was not executed, and no record of the reasons that caused the discontinuity was identified.

Records[9] indicate that still in the 1990s, both Professor Gustavo and the other colleagues did not envisage feasibility for a Master's Program in Campina Grande, probably due to the various limitations that were in force at the time for Design research, not only at the UFPB, but throughout the country.

A new project was launched in 1999, when the then Department of Industrial Design (DDI) and the Computer Science Department came together to create a Master's degree aimed for designers, eventually licensing two Masters from the faculty of the DDI. However, according to reports, this project also did not have continuity due to lack of support in the department.

[8] Documents filed at the school of Design/UFCG, consulted in July 2017.
[9] Reports collected by open interviews with professors and alumni of the course at the time referred to in the study.

Despite the failure of previous attempts, the aspiration to create a graduate program in Design at the UFPB remained, and this issue continually emerged. At one point, some professors made proposals for Specialization Courses, but they never materialized in the university. Nevertheless, with the continuous training of professors, research would need to be accommodated in its natural environment: a graduate program.

In 2003, Professor Wellington Gomes de Medeiros[10] began his doctorate in Design in England, and was able to deepen knowledge about contemporary issues and research in Design. This professor got to know programs from several countries, such as from: the University of Newcastle in England; the Eindhoven Technology in the Netherlands; the Helsinki Art and Design in Finland; the Center for Philosophy, Art and Design in Denmark; among others. Already at that time, these programs differed from other courses in Brazil regarding the study and application of the dimensions of Design much more than those focused exclusively on the functional-pragmatic character that had hitherto prevailed in the UFCG Design Department. In the programs visited, it was verified that the practical and academic research[11] impelled new understandings on Design through the study and application of human dimension and multidisciplinarity in the Design process. Given the due proportions, there seemed to be conditions to create a program with specific characteristics at the UFCG, however in tune with what was happening in those programs. Fueled by the memory of the expectation of colleagues in Brazil, the idea of creating a Master's Program in Design remained with Professor Wellington as an embryo until his return to Brazil at the end of his doctorate in 2007.

Between 2008 and 2010, Professor Wellington assumed the coordination of the undergraduate CDI, when he worked to update the Pedagogical Project of the Course of Design (PPCDESIGN/UFCG, 2010) mentioned earlier in this article. In addition to the implementation of several structural and human actions, the resulting project focused on two very relevant aspects: first, the inclusion of contemporary elements of Design, including subjective approaches such as product semantics (KRIPPENDORFF, 2006, MEDEIROS, 2007), Design and emotion (NORMAN, 2004;

[10] Professor Wellington Gomes de Medeiros was a student of the referred Design Course and had contact with the people mentioned in the article, and also participated in the activities of the LDI. Since 1992, Wellington is a professor of the Course at UFCG and currently at the PPGDesign.

[11] Neste texto, diferencia-se pesquisa prática da acadêmica segundo sua aplicação: no primeiro caso, volta-se para o projeto de produtos; enquanto no segundo caso, volta-se para a teoria e a academia.

JORDAN, 2000), iterativity, Design process, interface, human-centered Design; the second aspect refers to the dramatic reduction of the study load, which would allow professors to pursue activities other than undergraduate education. Among these activities were research and the future graduate program.

Once he completed his contribution in the coordination of the undergraduate course in 2010 with the completion of the Pedagogical Project of the Course, Professor Wellington was committed to the project for the UFCG Design Graduate Program, whose elaboration would later count on the collaboration from some of the other colleagues in the department. Internal and external meetings were initially held at the department, seeking guidance from consolidated graduate program coordinators within the UFCG. It was then confirmed that it was viable to create a multidisciplinary program. At that moment, the idea was beginning to materialize.

In 2011, during an international congress in Portugal, Professor Wellington had the opportunity to meet with the then Coordinator of Architecture, Urbanism and Design of the CAPES, responsible for the graduate programs in Design in Brazil, Dr. Ricardo Triska. During the meeting, the interest in creating a Master's Program in Design at UFCG was mentioned. At that time, there was good receptivity of the project because the small number of programs in Brazil and especially in the Northeast was mentioned. At that time, there were only two graduate programs in Design in the Northeast, which indicated potential interest on the part of the federal institutions to create such a program at the UFCG. Once the minimum elements for feasibility were established, work to create PPGDesign began in 2012.

The whole process was transparent and participatory, with important collaborations for finalizing the project. The future professors of the program contributed with their curricula and with the creation of specific disciplines. Believing in the initiative, the UFCG Postgraduate Pro-Rectory gave full support to the project, even financing the participation of Professor Wellington at national coordinators' meetings in Brasília and at an international Design seminar in the United States, which resulted in more relevant information on Design research on which to base the proposal.

Finally, in 2013, the project was ready, with a faculty composed of professors exclusively from the UFCG and from diversified areas, characterizing the

multidisciplinary aspect of the proposal. That same year, the project was submitted to CAPES and approved in October. At the beginning of 2014 the selection was made for the first class in the Design Masters' Program, whose classes began in June of that same year. As of 2015, all of the entries have happened in the month of March.

5 CHARACTERIZATION OF THE DESIGN GRADUATE PROGRAM - PPGDESIGN/UFCG

In 2017, PPGDesign/UFCG's faculty consisted of 14 professors from different areas, involving two universities: the UFCG and the Federal University of Rio Grande do Norte (UFRN) [12], so distributed: Design (7), Architecture (2) Production Engineering (2), Systems and Computer Science (1), Mechanical Engineering (1), and Education (1).

The Program has one concentration area: Product Design. This area aims to explore the diverse aspects that make up the Design process and its interfaces, including the study, scientific research, and the development of products from a systemic perspective of its various dimensions: product-based research as a means for scientific research procedures; approach to the design process according to the evolution of social, psychological, pedagogical, cultural, economic, technological and environmental aspects; study of information and communication in products; research, analysis and criticism of information collected from scientific methodology; study and unfolding of creative processes; investigation of productive processes; insertion of the product in the various markets according to social, ecological and economic parameters; theoretical-methodological discussion of design and Design education. Based on a human-centered approach to design, this area of concentration investigates the pragmatic and emotional dimensions of users' interaction with products and artifacts as objects of study in scientific research processes, considering economic, cultural, social, symbolic, ethical and environmental aspects. The particular study of products and artifacts leads to the improvement of this area of Design, contributing to the theoretical, critical and

[12] Until 2016, the PPGDesign/UFCG professors were exclusively from UFCG. Then in 2017, one of the professors transferred to UFRN. Later, another professor from that university was accredited in the program.

practical development, aiming at sustainable production and fair and responsible consumption of Design and its products[13].

PPGDesign has two lines of research: (1) Information, Communication and Culture; and (2) Ergonomics, Environment and Processes. In the first one, issues related to the theory, criticism, history and development of products and artifacts with emphasis on information and communication systems are studied, considering semantic, semiotic, aesthetic, chromatic, graphic, methodological, and visual and culture studies, and material aspects. The main objective of this line of research is to promote scientific deepening on fundamental issues related to the information and communication systems that may favor new perspectives for Design processes and the consequent improvement in the quality of products and artifacts as mediating vehicles of messages; thus enabling the exploration of strategies and systems of product development that contribute to the improvement of communication between users and products, providing better quality in the interaction between man and products.

The second line of research investigates issues related to the theory, criticism and development of products and artifacts with emphasis on technological, ergonomic, quality, biomimetics, material, environmental, social and ethical aspects, including: Design focused on the field and the semi-arid, sustainable Design, project management, interface with Architecture and Urbanism, product-user-environment relationship, urban and interior design. The main objective of this line is to contribute to the rescue and systematic application of human, ecological and environmental aspects in Design processes, including principles of user-product interaction, and theoretical-methodological discussion of Design education, enabling reflection and development of Design based on the relationship between the creation, production and consumption of products and artifacts, according to a perspective that considers technical and economic, and human and environmental issues as priority.

To obtain a Design Master's degree title, twenty-two credits are required, distributed as: eight compulsory; twelve optional; two programmed. The frequency of entrances is annual, with an average of 10 seats per entrance. The selection process takes place in three stages: project analysis, which is eliminatory; interview, which is

[13] Adapted from the PPGDesign/UFCG Project.

eliminatory; and curriculum, which is classificatory. There is also a requirement of an English language proficiency test to stay in the Program.

In 2017, after three years, PPGDesign/UFCG begins to reap the first fruits with the graduation of two classes of the Design Masters Program: 2014 and 2015. Of the alumni, we are aware that a former student was recently approved in a selection for professors at a federal university in Minas Gerais, and two others entered doctoral programs. Another former student was awarded a scholarship from the European Institute of Design. Also, a patent resulted from the dissertation of another graduate.

With the issuance of the first diplomas, the Master's Degree Program in Design and the PPGDesign/UFCG are consolidated. There is no longer any doubt about the necessity, feasibility and continuity of the Program. The repercussion of the UFCG Undergraduate Course in Design is also verified through updates of contents of the disciplines by professors who teach both undergraduate and graduate courses; by the participation of the masters as teaching trainees; and by team and participative work, bringing undergraduate and graduate professors closer together.

By 2017, students from five Northeastern states, Paraíba, Piauí, Rio Grande do Norte, Ceará and Maranhão, had entered the Design Master's Degree Program, indicating that the UFCG Design Graduate Program became part of the restricted group of programs in the area that contribute to Design research in Brazil.

6 FINAL CONSIDERATIONS

By its fortieth anniversary in 2018, the UFCG Design Course will have established a milestone in the history of higher education in Paraíba regarding the offer of courses that explore and promote creativity and innovation, and respect contemporary values such as ecological and social aspects. The Course of Design and the Graduate Program in Design are part of this success story. This article briefly presented part of the trajectory and the main actors who believed and contributed to Design education in the state, and this education has remained to this day as a regional and national reference in the quality of the professionals trained at the Federal University of Campina Grande. However, during the preparation of this article, we noted the urgent need to organize and study the remaining documents of this history, which is part of the history of Design in Brazil, so that important

information for understanding the development of this area which is relevant to the country do not get lost forever.

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