

# NEW PERSPECTIVES ON DESIGN EDUCATION IN LATIN AMERICA: A CASE STUDY FROM ICESI

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## **ABSTRACT**

This paper illustrates the current state of design in Latin America, considering the main actors of design: state, enterprises and universities/academia. For the writing of this document different surveys -made by public institutions and private universities- were analyzed, so as to better understand the context and therefore being able to evaluate and reformulate the plan of studies of industrial design at the Icesi University. This new approach responds to the concept of competency-based curricula. The results of this evaluation and the preliminary proposal enabled us to confirm some characteristics regarding the interdisciplinarity of the program, the focus on design management and also allowed us to reinforce aspects related to strategic design, design thinking and innovation. At the same time, new strategies are being developed based on the active participation of other entities within the education process. In addition to that a new academic unit has been created with the purpose of generating knowledge in design and strengthening the university/academia-private sector-state relationship. This scheme strives for use-oriented research connected to the pedagogic model, pursuing more applications and benefits for the private sector in this part of the world.

*Keywords: Interdisciplinarity, competencies, strategic design, design thinking, innovation*

## 1 INTRODUCTION

The history of design in Latin America is very short and better known for its impact on education than its modest participation in capital or commodity markets. Today hundreds of schools graduate designers every year, but very few of them are actually working in the area of design. Latin American design schools, which are approximately 40 years old, were born late. They began to emerge when the economies of our countries demanded this kind of professional for the industrial development process. It was only then when design training courses started to appear. Nowadays it seems like a new design school appears almost every month in this geographic area. With very slight differences among them, they all aim to contribute to the development of their countries.

In Latin America most of the curricula were based on European models from the 20<sup>th</sup> century. Thus, we inherited their point of view as well as their way of doing things. Very frequently we tend to adopt foreign education models instead of developing our own. Certainly design education has been evolving one decade after another, but its future seems still very uncertain and discouraging.

## 2 METHODOLOGY

These thoughts about design education in Latin America are based on analysis and comparison of surveys and recent studies that have been undertaken by public entities such as the Sectorial Table for Design supported by Colombia's SENA (National Apprenticeship Service), the Universidad Nacional, diverse academic and design networks (for instance the Latin American Academic Design Network and the Latin American Design Network) and trade associations in addition to public and private universities. The Icesi University directs its surveys to graduates from the Industrial Design program and their employers. This work has also been complemented with everyday teaching experiences resulting from a decade devoted to academic activities. In order to better understand the context of education in Latin America (what are the new perspectives for education? Whom are they going to affect?), and in particular the proposal from the Icesi University, we have to analyze the most important actors in design: the state, the private sector and the universities/academia.

## 3 RESULTS

### 3.1 The role of the state

Due to design's short history on this side of the world, the profession has not been as extensive as in Europe, neither have states developed clear public strategies, stands or policies highlighting the important role of design. South American countries, conscious about the huge impact of innovation, science and technology on development, are shaping some design-related public policies. These are great initiatives which will hopefully fructify in medium or long terms.

In 1944 Colombia became one of the first countries to establish a National Design System. However, the idea did not transcend due to political reasons and the formulation of a public policy for design is an initiative that has been put back on the table just recently. Argentina has its Metropolitan Center of Design in Buenos Aires dedicated to the export of creative products. In Brazil, one of the first countries in understanding the importance of design on national productivity, a wide array of public and private entities have encouraged large investments for incentive programs under the leadership of the Production Secretary. Today Chile's National Design Plan and Uruguay's PACC (Spanish acronym for Uruguay's Program for the Competitiveness of Clusters and Production Chains) among others are proposals directed towards the formulation of public policies as strategies for innovation.

There are very few policies promoting and supporting research, innovation or competitiveness. Environmental challenges, social conflicts and the problems of over populated cities in Latin America have not been considered from the perspective of design, nor has design been considered a possible solution for those difficulties. Usually, when preparing national development plans, policy makers completely disregard design.

### 3.2 The role of the private sector

Different situations illustrate the current circumstances: industry wants to innovate at very low cost, professionals –even after receiving strong business oriented education- only want to design beautiful objects, designers are not essential to companies, and private organizations do not invest in technology. During the last 40 years it has not been possible to effectively insert the design-professional in the industry and it is even more difficult to talk about the number of developments produced by them and actually put on the market. Very few have gotten themselves a job that matches their education/training; the majority ends up working as digital web-designers. An average of 37% of the professionals in Latin America is employed, but hardly any hold a design-related position. Available positions usually are for commercial directors, sales managers, marketing managers, consultants, analysts, supervisors, coordinators and teachers. Maybe this is why there is such a big demand of postgraduate courses with emphasis on business administration rather than on product development. Every day professionals request a more interdisciplinary education. Many designers travel to Europe looking forward to study design/interior design related issues. The opposite occurs with those professionals studying in their own countries. They prefer business administration or business management training courses.

Latin America hosts several multinational companies, which -generally speaking- import finished designs. Sometimes they slightly modify the end products using the poor technologies of our countries. However, for that purpose they regularly look for engineers, not for designers. Local companies, on the other hand, cannot afford the research and development cost of developing new products. Investment returns are usually long-term or might never happen. A low cost alternative will always be copying designs or buying Chinese products. According to the Latin American Design Network, 94% of companies have less than 10 employees and strong design requirements, but only some are willing to pay for the development of a new product. In our countries productivity depends mainly on micro, medium and small-sized enterprises, which cannot meet the expense of a designer, not even being in need of him. Many times the owner or any other employee ends up designing whatever is required by the company.

Unlike engineers, designers have little credibility within organizations. They have never been crucial for organizations and therefore are the first ones to be dismissed from their jobs when there are personnel cutbacks. Additionally, almost everybody has the wrong concept about the competencies of a designer. People generally think that designers make great sketches, know a lot about colours and dress differently. In the worst scenario, he is considered an artist due to his ability to represent his ideas graphically. Companies rather work with engineers, arguing that they dominate exact/pure

sciences and technology and are considered more trustworthy. The designer is then only responsible for the makeup/retouch of the products developed by the engineers. He does not participate in any of the important decisions for the organization. This is why our design schools have to work harder than other countries and other careers aiming to spread knowledge and sensibility about design education so as to grant their students a workplace.

*Table 1. Compared Labor Indicators 2008*

<b>Labor Indicators Designers</b>			
	Icesi	Colombia	Latin America
Independent Professionals	17.4%	50%	52%
Employed Professionals	54.2%	39%	34%
Others	28.4%	11%	14%

Under an interdisciplinary education scheme (atypical for design) as provided by Icesi University, competencies are the key element. 54.2% of our students are employed (Table 1), but from that percentage 71.8% hold positions that have literally no relation with design. This can be understood in different ways: interdisciplinary training allows graduates to perform in sundry fields and this can be valued as positive in a highly restricted system as ours, but the doubt remains – are we losing disciplinary strength? No matter if emphasis is put on entrepreneurship, leadership or administration, only 17% of the professionals create their own design businesses. This, in a country where creativity is essential for survival, means undoubtedly that something is wrong. Possibly this scheme reduces the designer’s ability to take chances. It is noteworthy, when talking about labour orientation that 30.1% of employees work in the production area and 13.6% in marketing. This can be explained by the fact that the design school is part of the Faculty of Engineering.

### **3.3 The Universities/Academia**

The Icesi University was created 30 years ago as a Business School. Its Design School was established twenty years later and its curriculum offer, innovative and peculiar at that time, was received with scepticism among designers and teachers, but constitutes today a reference for schools throughout the country. The distinctiveness of this five-year program is that more than 40% of its courses belong to academic departments different from design such as mathematics, economy, marketing, organizational management, humanities and industrial engineering. This automatically highlights its cross-disciplinarity, which results attractive for professionals from other areas. They want to take part of this program once they understand the following particular condition: that design nurtures itself from other professions/careers. Designers need to interact with others and speak other’s languages. The new profile for designers shall reflect the right balance among three types of competencies, reconciling the institution’s education project and possible future scenarios related to the profession, society and labour market.

We have bet on a “strategic designer”, who has the ability to conceive design projects, based on the identification of problems and needs and who has the capacity of recognizing niches and business opportunities. The interdisciplinary character of the program allows him to develop - along with other professionals- design solutions, as well as to establish an efficient universal dialogue with other experts and other types of knowledge. Such an individual should be able to develop design projects that offer not only material solutions, but all kind of products, experiences and strategies intending to contribute to the progress of the private sector. Behind all of this, there is the well-being of the community, the country and the person itself. From a systemic point of view sustainability is considered as a strategic component of all processes involved in a design project. Social and ethic commitment is of great importance when educating people with environmental, economic and social responsibility.

Research oriented education is still relevant, even in an environment where organizations do not invest on this item. For us research is part of student’s training, due to the fact that all design problems are intrinsically solved by research. Nonetheless, we do not include research in our bachelor programs

with the purpose of creating knowledge; we focus our research on innovation. We hope for a designer who identifies opportunities, provides innovative and sustainable solutions and strives for economic, social and productive impact. He must be able to adopt theoretical tools from other knowledge areas. This is a very important issue because innovation is connected to an existing relationship between academy and the private sector. In this regard design centres and schools play an important role. In Icesi knowledge generation and innovation management is controlled by its Comprehensive Center for Design Development (Spanish acronym: CIDD). This centre operates like an academic unit: it pushes for use-oriented research and active participation of the industry when designing projects and consultancies for to the region's private sector. This happens on three different levels: business practices with last semester students, graduation projects with those of 8<sup>th</sup> and 9<sup>th</sup> semester and regular projects with students from 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> semester.

#### 4 CONCLUSIONS

The current design education model has to be restructured, which seems an easier task than changing the reality of our industry or public policies. Taking into account the low levels of public and private investment in research and development, the plans of study must be prepared according to the policies of each country or region. Education models should not be imported, for each case there is a particular solution.

Universities in Latin America agree that innovation is key for development. Therefore there should be a closer relationship with the private sector, especially with micro and small-sized enterprises, that prevail in our economies. They need to emphasize on innovation if they want to survive in a more competitive and globalized world. States do not value/finance innovation oriented education, but still demand from every school an innovation and development strategy.

Finally, it is very important to improve and strengthen cross-disciplinary innovation for solving design problems derived from as many disciplines as possible. Interdisciplinarity will change people's perception about designers: they will no longer be viewed as lonely creative individuals. Interacting with different professionals will allow designers to better respond to the complexity of products, services and experiences of today's markets.

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