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Ricardo López-León y Gabriela Gómez Valdez. Entendiendo la empatía en la educación del diseño

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Understanding empathy in design education

Ricardo López-León
Universidad Autónoma de Aguascalientes (México)
ricardolopezleon@gmail.com

Gabriela Gómez Valdez
Universidad Autónoma de Aguascalientes (México)
ggomez@correo.uaa.mx

RESUMEN.
Este documento presenta los resultados de la primera etapa de nuestra investigación, cuyo objetivo fue explorar el rol de una evaluación empática en la educación del Diseño y su relación con el desarrollo de ciertas habilidades profesionales y la ejecución de proyectos con enfoque social. Se entrevistaron, desde una perspectiva cualitativa, estudiantes de Diseño a punto de graduarse, para explorar experiencias empáticas tanto en el salón de clase como en proyectos reales. Así pudimos observar que la empatía tiene mayor oportunidad de desarrollo en ambientes empáticos; en otras palabras, aquellos que recibieron un seguimiento y una evaluación empática de sus docentes, se encontraron más frecuentemente motivados y abiertos a emprender proyectos sociales en donde una evaluación empática del entorno era necesaria como punto de partida. También presentaremos algunas perspectivas que contribuyen a comprender mejor el concepto de empatía, ya sea como una habilidad innata, como un proceso continuo o como una práctica multifacética para interacciones sociales. Esperamos mostrar a través de esta investigación que la formación de diseñadores empáticos es fundamental para el cambio social.

PALABRAS CLAVE.
Empatía, Motivación, Educación del Diseño, Innovación Social.

ABSTRACT.
This paper presents the preliminary results of our research. The goal was to explore the role of empathy in design education and its importance in developing socially driven design projects that can evolve into social innovation. We used a qualitative interviewing approach with undergraduate design students in their fourth year to explore empathic experiences in both, their classroom, and their real-world design assignments. We could then observe that empathy has a better chance to be developed in an empathic environment. In other words, those students whose teachers had an empathic approach were often motivated and open to become empathetic with socially-driven design projects. In this document, we also present different perspectives to understand the concept of empathy, as an innate ability, as an ongoing process, and as a multiphase practice for social interactions, just to mention a few. With our research, we expect to show that developing empathic designers is fundamental for the design practice and eventually, for social innovation.

KEY WORDS.
Empathy, Motivation, Design Education, Social Innovation

1. Introduction.
1.1 Looking for empathy in design education.
Empathy is fundamental for design practice since it represents the work of a person – the designer – focused on the needs of another person – the user -, empathy represents a way to connect with others which is something, as we will explain further ahead, that should be obligatory. What caught our attention was the increasingly disinterest of students in getting involved in design projects with a social-benefit since, supposedly, empathy is a fundamental and common aspect of their design process. Internet gives us access to many examples of people and designers using design as a driving force for social innovation, yet, there are very few students in our field interested in that kind of projects. That is exactly the reason why we undertook this research, to understand the concept of empathy and its impact in design education.

Our first finding was that empathy is not a very obvious concept as it seems, but rather a complex one, which had to be studied thoroughly if it were to be put into practice. The second finding, was that empathy is an important and essential concept in design education overall given that design-studio projects are developed through feedback and mentoring between teacher and student. Third and last finding was that students needs an empathic environment to learn to be empathic, therefore, if their education does not include an empathic approach, it is very unlikely they will be empathic with others, minimizing their sensitivity towards social needs.

This document presents preliminary results of a research seeking to know if design students had empathic experiences throughout their undergraduate academic program. Based on a qualitative methodology, we conducted in-depth interviews to students that were currently in their last year of the undergraduate programs of graphic design and industrial design. The guide for the in-depth interview, included questions about their experience in the last year's design-studio where students develop one single project for several months by being mentored and receiving feedback from a group of teachers. The objectives of this course tend to be projects with a social benefit. In order to understand the importance of empathy in design education, we will begin discussing different authors' point of view and then present the results of the research giving voice to the students detailing what they had expressed during the interviews.

2. Research methods and participants.
To understand how this research was conducted, we have organized the information in three sections which depart from general perspectives to finally reflect upon particular findings. In the first section, there are discussed several perspectives of the design disciplines that have emerged in the past decades that emphasize the need to develop a sensibility in design professionals to understand the point of view and feelings of others, and so, the importance of empathy for the design practice. Next, the second section shows a detailed review of empathy as a concept, discussing perspectives from several authors, to show that it is a complex concept that could be of value for design disciplines, and their

teaching practices. Finally, on the third section, there is explained with more detail the topics that were discussed with students through interviews, mostly to understand the role of the teacher in their formative experience. It is important to emphasize that this research has been design from a qualitative perspective. This means that the findings are based upon the expression of feelings, thoughts, memories, ideals, and perceptions of the participants in a specific context. In this case, the participants are graphic and industrial design students coursing their last academic year, talking about previous experiences throughout the four years of the study program in the design-studio, a course that usually works on project-based activities with more than one teacher to provide feedback.

2.1 Linking empathy and design for social innovation.
As time goes by, design practice has become more complex. Nowadays, there are trends recognizing the possibilities of design as an incentive for change, but the designer must have the ability to include different points of view in the design process, to have more significant results. There are various proposals, such as human centered design (Buchanan, 2004; IDEO, 2011; Steen, 2011; Hanington, 2010) or participatory design (Bjögvinsson, Ehn, & Hillgren, 2004; Simonsen & Hertzum, 2012) also called co-design, where it is fundamental to include stakeholders' needs. Therefore, educators and researchers from different parts of the world recognize the need to develop a skillset to make use of these perspectives in a design process with very interesting results (Manzini, 2011; Drew, 2011; Segiesmund, 2013; Mendoza & Matyók, 2013; Emmanouil, 2015). These proposals report the importance of getting students to face situations and learn different ways to perceive the world and include those learning experiences in their design process, in other words, empathy needs to become a part of the process in design professional practice.

The design and consulting firm IDEO, has published results of projects where design is clearly a tool for change and social innovation, not to mention the toolkit they provide so new projects could be launched. At the same time, other firms have stated that such change can also take place by designing products that provide a positive user-experience which empower people and contribute to a healthful environment (McDonagh & Thomas, 2010). For that reason, it is imperative that designers develop a skillset early in their career so as to establish an empathic relationship with those to whom they design and the context in which their designs will be introduced and used.

For Tim Brown, IDEO's CEO, some people are born with an "empathy-gene" (Florida, 2012), idea shared by other authors, will be discussed ahead. Perhaps, this idea becomes clearer reviewing the work of designers around the world, which besides their professional practice, they collaborate socially through design strategies. For instance, there are designers decided to redesign homeless people's signs so that they could receive more support from society (Craven, 2015; Hope & Nakayama, 2014); or other cases that explore the concept of apathy as a lack of empathy and suggests twelve steps to fight it and prove, among other things, that some residents of New York are more empathic with lost dogs than with people (Walsh, 2015). There are many examples like these where it is evident all the opportunities available for design to become a tool for change and cause social impact, if designers develop a skillset based on empathy.

We decided to explore the concept of empathy within our educational universe and analyze whether the design-studio favored empathy in design students. In other words, we wanted to understand where and how a designer could learn to be empathic. At the same time, we asked ourselves if we were providing students with a suitable environment for developing empathy. We picked the design-studio from the 4th year of Industrial and Graphic Design careers since, in this course, students work on design projects with a social benefit in the community of Aguascalientes, Mexico. To learn if students were aware of others and if their educational environment was suitable for developing empathy, we conducted in-depth interviews with them, knowing that teacher-student relationships should also be empathic so that students could learn from it. So, we decided to focus the research on learning whether students have had empathic experiences with their teachers throughout their four years of studies. In this article, we will present research results that show the importance and the challenge of teaching design while trying to develop an empathic environment.

2.2 Understanding the concept of Empathy: reflections from nursing and teaching practice.

This section reviews different perspectives around the concept of empathy. We were able to identify two main disciplines that have focused in understanding the importance of empathy in their professions: nursing and teaching. All the internships that are related to Medicine and taking care of people or patients have reflected upon the importance of empathy because personnel such as nurses, for example, have the most contact with patients. Also, there is research about the concept of empathy in teacher training. In other words, the importance of training empathic teachers is well known to promote significant learning. Thanks to these findings in both disciplines we could observe that both aspects are important for design (McDonagh & Thomas, 2010; McDonagh, Thomas, & Strickfaden, 2012; Findeli, 2001): on one hand, professional designers must be capable of being empathic, being able to connect and understand the needs of those for whom they design whether it is in a commercial, political or social context; on the other hand, design teachers should be empathic with students so that they can learn to be empathic, teachers should provide and maintain an environment where this skillset may be developed.

Researcher, Theresa Wiseman (2007), affiliated to the *Florence Nightingale School of Nursing and Midwifery*, in Kings College London, has made a great contribution to the concept of empathy. In her research, she studied empathy by observing and interviewing nurses and patients and reviewed the concept through several authors. In her paper, she insists that empathy is a "multidimensional, multiphased construct" (Wiseman, 2007, p. 62), and this is why it has been harder to define it. This multidimensional perspective could discard other proposals, such as Stojiljkovic, Dijigic, & Slatkovic (2012), that reduce empathy in a dichotomist way: effective and cognitive empathy, in this section it should become clear why it is nurturing to think of the concept of empathy in a complex manner.

Starting with a basic definition, empathy is consistently linked to emotion, and to the perception of emotions: "to experiencing emotions that match another person's emotions, to knowing what the person is thinking or feeling" (Davis, 1980; cited by Stojiljkovic, Dijigic, & Slatkovic, 2012, p. 961). Empathy is also defined as "to be preoccupied by the thoughts and feelings of other people, putting yourself in their place, trying to think like them" (Stojiljkovic,

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Dijigic, & Slatkovic, 2012, p. 961). Openness and receptivity are also two concepts that are taken as fundamentals of empathy: "to be open to someone's feelings and feel with someone, to share a feeling and understanding" (Noddings, 1986; cited by Cooper, 2004, p. 13). However, these basic definitions are hardly ever linked to practice (Wiseman, 2007), and because of that, it is difficult to identify the ongoing process that practitioners or in this case, designers, would need to perform in order to develop empathy in their professional performance.

Let us now intertwine the complexity of the concept of empathy concept, in order to show its importance for design disciplines, we have to understand empathy both as a process, and at the same time, as a skillset to be developed, instead of thinking of it solely as an attitude or as a single action. Empathy has been dissected in four components (Morse, Bartoff, Anderson, O'Brien, & Solberg, 1997) that run inside a person that could determine how they act:

- *The moral component* is the first one and it is presented as an innate ability, or empathic disposition. It is also discussed by other authors that empathy is both, an innate disposition and an ability that can be developed.
- *The emotive component* refers to an ability. It means to subjectively perceive another person's feelings. The emotive component suggests that a person needs first, the moral component, that is, one needs an empathic disposition to then subjectively perceive other's feelings.
- *The cognitive component* is referred as an intellectual ability, so one can understand another's perspective. Disposition, perception, and now comprehension are building this complex concept.
- Finally, *the behavioral component* is seen as another ability to communicate empathic understanding and concern.

Therefore, empathy is presented as a skillset containing disposition, perception, comprehension and communication (Morse, Bartoff, Anderson, O'Brien, & Solberg, 1997; cited by Wiseman, 2007). No doubt this way of understanding empathy presents a fertile ground for developing tools that aid to promote empathy in the classroom, and so, to have pathways to graduate design professionals with a skillset that allows them to focus on the other's needs.

Empathy conceptualized as a process is provided by Barrett- Lennard (1962) who describes three phases of an empathy cycle. Phase one focuses on listening, reasoning, and understanding. Phase two is conveying understanding of the patient's experience, and phase three refers to the patient's awareness of the helper's communication. In other words, the cycle of empathy is not complete until the user responds to the designer's efforts. Research on teacher's practice also helps to understand the outer layers of empathy complexity. Through observing and interviewing teachers, Cooper, (2004) was able to identify three key types of empathy in teaching-learning relations. Before we present those types, we also deem it is important to present empathy as the author defines it:

> "Empathy is a quality shown by individuals that enables them to accept others for who they are, to feel and perceive situations from their perspective and to take a constructive and long-term attitude towards the advancement of their situation by looking for solutions to meet their needs". (Cooper, 2004, p.14).

Besides all the components that we have previously explained, this definition also presents an outer layer that we consider important in design education: the long-term and constructive action taken to meet the user's wellbeing, in other words, empathy as a process. This layer, present in teaching, could also be present in nursing because a nurse builds a relationship with the patient through different empathic moments, as the research shows. Hence, this interactional layer proposed in teaching should become a basic practice in both, teaching design and practicing design. It is worth bringing up, feedback, a daily practice in design education. A design student working on a project (i.e. conceptualization, drawing sketches and/or prototypes, etc.) needs to make the most of the feedback from classmates and teachers, so an empathic teacher will be more helpful. For Adams and McNab (2012) in the U.K., assessing students in humanities and arts can be much better if feedback is provided constantly. According to them, feedback should be clear and meaningful; it is not about increasing the number of sessions to provide feedback, the importance of this time is that it is focused on the student. Smith (2013), highlights the importance of feedback during student's assessment processes. Through in-depth interviews, the author learned that students were very confused during their last year of college and did not understand the objective of receiving feedback and what was being evaluated. Assessment and feedback seemed to be linked, and if students did not understand their teacher's suggestions on how to improve their work, they much less understood the assessment process, also, those students dissatisfied with their grades leaned towards discrediting all suggestions and notes received during feedback (Wotjas, 1998; cited by Smith, 2013). This emphasizes the importance of empathy during feedback sessions, to understand the point of view of the students' work.

Cooper (2004) proposes three key types of empathy: fundamental empathy, functional empathy and profound empathy. "*Fundamental empathy* consists of the basic characteristics and means of communication needed to initiate empathic relationships" (Cooper, 2004, p. 16). These characteristics concur with the innate ability aforementioned. The author expresses that, if guided correctly, with time, fundamental empathy can be developed becoming *profound empathy* which consists in "rich understanding of others in their social, historical and relational contexts" (Cooper, 2004, p. 16). Nonetheless, the author does not propose any strategies to accomplish it. The final type, *functional empathy*, is referred as an empathic tool. In other words, there are techniques that teachers use to connect (although not as profoundly) to students like talking about topics of their interest: sports, music, film, etc. this type of empathy, hardly involves the four components presented previously and it could be a merely tool of rhetoric. However, Cooper (2004) explains that there are constrains or obstacles that frame empathic teaching, such as large groups of students, long classes, teaching teams and so on, but empathy used as a tool could collaborate to face those obstacles and establish empathic relationships. So, in the author's proposal we can

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see empathy as a skillset, because fundamental empathy can become profound empathy, and at the same time as a process to establish deep relationships, and finally as a tool that a teacher can use whenever needed.

One of the most important aspects that called our attention in Cooper's (2004) work was that he talks about the consequences of not establishing deep relationships with students. According to him, "the degree of empathy shown by the teacher affects the degree of empathy shown by the student" (Cooper, 2004, p.13). This direct interaction became also visible in our interviews: students with little or no empathic experiences with their teachers showed aversion or very little motivation to get involved in design projects with a social impact, in other words, inability to connect with other's needs. We will resume this topic later.

Finally, we would like to discuss empathy according to Wiseman (2007). The author proposes four forms of empathy: as an incident, as way of knowing, as a process, and as a way of being. She suggests that one person can switch from one to another constantly, even if one is more or less complex than the other. The more knowledge the person has of their surroundings and the people they relate with, the easier it will be to "slip into empathic mode" (Wiseman, 2007, p. 64). So, this knowledge comes from interacting constantly with said environment and people in it.

Incidental empathy, or empathy as an incident, refers to isolated interactions where empathic relations are engaged. Then, as a way of knowing, it refers to empathy as a tool, performed to explore the person's feelings, beliefs, and so on. As a process, it refers to a complex practice where there are several interactions and with each one, the relationship becomes deeper as well as the empathy degree. Finally, as a way of being, it refers to the full development of a person that is empathic with every interaction. Considering empathy as a skillset, means that empathy involves several abilities that a student can develop to perform professionally; empathy as a process refers to the way that the student puts into practice this skillset in order to connect and understand the needs of others. If a student manages to develop empathy as a way of being as Wiseman (2007) has pointed out, as a professional designer he could be fully empathic with users, clients, colleagues, teachers, and with every social interaction, professional or not. This is why empathy needs to be considered for undergraduate programs, so that universities can be able to develop professional designers that could become social innovators.

2.3 Exploring empathic experiences in design students.

In order to get a close look at design students' experiences, we decided to undertake a qualitative study that would allow us to identify where empathy is being nourished or obstructed. In-depth interviews were conducted with design students (Taylor & Bogdan, 1992), the objective was to learn if fourth-year students had empathic experiences in the classroom and during the development of their projects. The interview focused mainly in the role that teachers played and if they built empathic relationships with students. We analyzed if design projects assigned throughout the four-year study program promoted empathy with social actors, for instance with their users, providers, businessmen, consultants, etc. Some students in their last semesters of graphic and industrial design careers were interviewed in 2013. Since we teach in both undergraduate programs, we had closer engagement to the

chosen students, which were short listed considering their class performance so that the research had diversity of opinions and perspectives, so students with excellent grades and others with irregular notes were both interviewed. The goal was not only to identify those empathic moments in their education, but also to know how they experienced them.

The interview's structure was developed around four main topics which will be explained in detail at the same time that the findings are presented further ahead in this document. In every instance, the point was to let students speak up and tell us about their experience coursing the undergraduate program. Another topic during the interview was a specific course in the fourth year; the course is called "Integral Workshop", because students integrate all the knowledge and skills learnt through four years of study. The main activity of the design-studio is to carry out final projects that have a social focus. During this design studio, graphic design students work only on one project per semester, and industrial design students work on one project for two semesters. The project-based education of both programs is very stressful for the students, increasing the level of exigency in the final project. This is why students that were currently taking this course were considered for the present research. The results are presented below, organized by each interview topic.

3. Results: the need for empathic development.

During the first phase of the interview, students were asked to give their general opinion on the whole undergraduate program, but inevitably and obviously, their answers also centered on who they considered their best and worst teachers. Listed below there are what the students considered the best qualities of a good teacher.

For students, a good teacher:
- Is close to the student: 'those who are friendly, with whom you make a connection [..] those teachers who show you they are just like you, just another designer'
- Is respectful, nice and ethical: 'the best teachers are those who help you grow professionally, but mainly as a person'.
- Is a promoter of a student's potential: 'teachers who will always believe in the student'; 'I will remember more those teachers who encouraged and motivated me all the time'
- Is committed to teaching and student's learning: 'for example, the teacher that sends you an IM to know how you are doing with your project'
- Is willing to give you feedback on your projects and assignments.
- Is open to critique, reflection and questioning from students.
- Is demanding, professional, competent: a teacher's professional attitude motivates a professional attitude in students because they are following a role model.

By contrast, for them a bad teacher:
- Is offensive, hurtful, disrespectful: 'if the teacher likes you, you pass, otherwise, you flunk'.
- Is intimidating: 'sometimes, I am afraid of asking because the teacher is going to think that I am stupid'.
- Is dictatorial, he thinks she is right just because he or she is the teacher.
- Is indifferent: 'a little bit of encouragement is always good'; 'I feel that neither my work nor strengths are important'.

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- Lacks commitment to their profession, mediocre': 'they don't encourage you to participate, they don't motivate you, therefore you come to class weary'; 'they are not trained to be teachers'.

From this first stage of the interview, we can highlight the evident link between empathy and motivation. When teachers were less empathic or indifferent, imposing or intimidating, students did not want to participate in class or any activity. Whereas, when teachers were open, respectful and close to students, students remember being motivated to be better students and people. So, teachers contributing to student's negative experiences could be because they lack empathy and therefore they cannot perceive student's feelings (Morse, Bartoff, Anderson, O'Brien, & Solberg, 1997). We hope that empathy is not only innate but that it can also be developed, so that these teachers can receive a proper training and bad experiences may be cut down. The second stage of the interview outlines the student's experience in the Integral Workshop course and how they felt about their final project's topic. The main challenges they had to face during class were:

- Going out and collecting information using different research tools: surveys, interviews, videos; Some students are shy which makes these activities difficult so they were reluctant to do it, it is hard for some people to start a conversation with someone they don't know, or they feel that they don't know how to introduce themselves: some students with excellent designing skills have limited or no social skills: 'we aren't used to knocking on doors'; 'it is really difficult for me to approach people and say, 'hi! Do you want to be part of my project?' '
- Team members agreeing on something; they don't know how to deal with disagreements; accomplish an equitable and balanced work among team members.
- Doing autonomous work, making their own decisions with very little intervention from teachers; that is, starting a project from scratch.
- Dissatisfaction, frustration and stress because of all the pressure from mentors to choose a project with social impact; the freedom promised at the beginning of the project is non-existent: 'it is so difficult to please teachers'.

The second stage shows that many students have a basic level of empathy as a professional skill, it was difficult to identify any signs of development of functional empathy (Cooper, 2004), which is as aforementioned as the tool that helps in social interactions. In other words, since it has not been developed, it is difficult to approach to people, connect with them and get to know their needs (basic practice in design) hence, they show frustration and lack of interest in social projects because there will be a constant contact with members of a community.

However, we could see that some of them became more sensitive thanks to the topic of their project. There were a couple of cases where, even after an initial rejection to the topic, at the end, students connected with the objective and with the people involved, and it was thanks to being so close to the phenomenon or to getting more comfortable with the topic. Two examples worth mentioning: a group of graphic design students running a campaign to prevent underage alcohol use, empathized with the topic so much that they even reduced their intake of alcohol and influenced positively their close friends. There was another case, an industrial design student was very fond of automotive design but was being pressured

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into picking up a social issue with which he did not identify, finally he came up with a way to use both areas by designing a type of transportation for people with limited mobility, he even invited his grand-mother to be part of the project, which added an emotional value.

In the third stage of the interview, we asked students to talk about their best and worst moments during class where these projects were developed; the moments when students felt more comfortable were:

- When sessions were led and the teacher is a guide.
- When there was group feedback, that is, when classmates contributed with their ideas; it is always good to have prejudice-free opinions.

As far as the negative moments, students expressed feeling uncomfortable when:

- There is lack of affinity with a teacher and feedback is given in a hostile and unpleasant environment or classes are monotonous, lazy and not dynamic.
- There is favoritism towards certain students, and irregular ones are pointed at, not to mention the notable difference in the criteria used to evaluate each student: 'this causes a lot of stress and resentment'; 'hated, I felt hated'.
- The teacher showed little interest in the student's project'.
- It was not clear what was expected from students.

In this part of the interview, we can highlight willingness as part of empathy, teachers must be open to perceive and understand their student's moods. Without this ingredient a class becomes monotonous and the first element missing is student's motivation.

Last, students were asked to talk about what they learned in this course, and what they think they could have missed if they hadn't taken it. Some of their answers were:

- It changes the superficial point of view of design for a more integral and social concept: 'it changes the selfish side of the design into a more inclusive one, you start thinking about others'.
- You lose the fear of getting close to sponsors and/or external consultants: 'you learn more from the people you visit, like sponsors and experts in the subject'.
- You learn how to talk to people to get information; the contact with clients, and end-user: 'you are in contact with people, you learn how to talk to them, learn their behavior and what they want'.
- You value learning from the investigation, the development of a complete project and the importance of an integral approach: 'you learn about everything, you go deep into it'.
- You value the maturity you gain from starting a project from scratch and independently.

In the last part of the interview we can highlight that the project developed during the Integral Workshop course actually helps developing empathy. Because of space issues, we will not go more into detail about how it was addressed in the design-studio nor the specific characteristics of the project, but we can emphasize that from a teaching point of view, it is possible to develop empathic designers, sensible and capable of taking on socially innovative projects, and if this is conducted on an empathic environment nourished by teachers, the development of empathy will be clearer and more effective; this is why it is important to resume this reflection in order to highlight the role of empathy in the teaching

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practice and that it is not only a responsibility of a single course of a curricula, but should be considered as part of the design discipline and its teaching.

4. Conclusion.

Empathic and non-empathic experiences have a direct impact on student's motivation. A student receiving instructions and mentoring from an empathic teacher feels motivated and becomes engaged in more challenging activities and even considering social aspects in them. Conversely, those who were not close to their teachers and did not feel understood, expressed very little motivation, low performance and were reluctant to take on social projects. This is a very important point because none-motivated students, not only have a very low performance but they also end up dropping out of school or get expelled.

Although while reviewing the concepts of empathy, some coincide with the perspective of empathy as an innate skill - or empathy gene - our interviews showed two things: first, that it is a skillset that needs to be developed, otherwise it stays in lethargy, in our case, students were already in their last years of the career and we could clearly see that it was not until almost graduating when they started to exercise this skillset; and second, developing empathy should be an ongoing process as aforementioned, reason why it is so important to identify the teacher's role in this process and their responsibility in developing the skillset in the soon to be design professionals.

It is worth identifying the rest of the actors playing a role in this process. As Cooper (2004), noted, curricula management is also responsible for promoting or constraining environments and paths for empathy development; this unveils the need to change design curricula opening room for contents and strategies that allow teachers and students not only to develop their curiosity to take on projects with a high social impact, but also gain values and abilities needed for new challenges. Besides knowledge and technical abilities in the discipline, the student must understand and become sensitive with every distinctive feature of the context in which the design is to be inserted and develop unique empathy with all those involved in the project, so as to design "products that provide a positive user-experience so as to empower people and contribute to a healthy environment" as mentioned by McDonagh & Thomas (2010, p. 458). A designer who is committed with social innovation has developed empathy to the top level and has made it part of his/her life, more simply, a social innovation designer is empathic as a way of being.

5. References.

- Adams, J. & McNab, N. (2012). Understanding Arts and Humanities Students Experiences of Assessment and feedback. *Arts and Humanities in Higher Education, 12* (1), 36-52.
- Barret- Lennard, G. (1962). Dimensions of therapist response as causal factors in therapeutic change. *Psychological Monographs: General and Applied, 76* (43), 1- 36.
- Bjögvinsson, E., Ehn, P. & Hillgren, P. (2004). Design Things and Design Thinking: Contemporary Participatory Design Challenges. *Design Issues,* 28 (3), 111-116.
- Buchanan, R. (2004). Human-centered Design: Changing Perspectives on Design Education in the East and West. *Design Issues,* 20 (1), 30-39.

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- Cooper, B. (2004). Empathy, Interaction and Caring: Teachers' Roles in a Constrained Environment. *Pastoral Care in Education,* 22 (3), 7- 26.
- Craven, J. (2015). Design student revamps cardboard signs to help Chicago's homeless stand out. *The Chicago Tribune,*(online). Retrieved from: http://www.chicagotribune.com/news/local/breaking/ct-homeless-signs-typography-met-20150705-story.html
- Davis, M. (1980).A multidimensional approach to individual differences in empathy(online). Retrieved from: http://www.uv.es/~friasnav/Davis_1980.pdf
- Drew, L. (2011). Using Design Thinking and Co-creation to Re-imagine curriculum, in Bohemia, E. & Borja de Mozota, B., [Eds]. *Researching Design Education*. Cumulus Association/DRS: Paris, pp. 201-210.
- Emmanouil, M. (2015). Human-Centered Design Projects and Co-Design in/outside the Turkish Classroom: Responses and Challenges. *International Journal of Art and Design Education,* 34 (3), 358-368.
- Findeli, A. (2001) Rethinking Design Education for the 21st Century: Theoretical, Methodological, and Ethical Discussion. *Design Issues,*17(1), 5-17.
- Florida, R. (2012). Your Start-Up Life: Design Your Thinking. *The Huffington Post*, (Online). Retrieved from: http://www.huffingtonpost.com/rana-florida/your-startup-life-design-_b_1742074.html (accessed 12 September 2013).
- Hanington, B. (2010).Relevant and Rigorous: Human-Centered Research and Design Education. *Design Issues,* 26 (3), 18-26.
- Hope, C. & Nakayama, K. (2014).Signs for the homeless (online). Retrieved from: http://homelesssigns.tumblr.com/
- IDEO (2011). *Human Centered Design.* Canada: IDEO.
- Manzini, E. (2011). Design Schools as Agents of (sustainable) Change: A Design Labs Network for an Open Design Program (online). Retrieved from: http://sigeneration.ca/documents/Designschoolsasagentsofsustainablechange.pdf
- McDonagh, D., Thomas, J. & Strickfaden, M. (2012). Empathic education in design: Strategies for healthcare practitioners? *Australasian Medical Journal,*5 (5), 292-300.
- McDonagh, D. & Thomas, J. (2010).Rethinking Design Thinking: Empathy Supporting Innovation.*Australasian Medical Journal*, 3 (8), 458-464.
- Mendoza, H.R. & Matyók, T. (2013). Designing Student Citizenship. Internationalized Education in Transformative Disciplines. *International Journal of Art and Design Education,* 32 (3), 300-308.
- Morse, J., Bartoff, J., Anderson, G., O'Brien, B. & Solberg, S. (1992). Beyond empathy: expressions of caring. *Journal of Advanced Nursing, 17* (7), 809–821.
- Noddings, N. (1986). *Caring – A Feminine Approach to Ethics and Moral Education.* Berkeley and Los Angeles: University of California Press.
- Segiesmund, R. (2013). Art Education and Democratic Citizenry. *International Journal of Art and Design Education,*32 (3), 300-308.

- Smith, K. (2013). Assessment as barrier in Developing Design Expertise: Interior Design Student perceptions of Meaning and Sources of Grades. *International Journal of Art and Design Education,*32 (2), 203- 214.
- Stojiljkovic, S., Dijigic, G. & Slatkovic, B. (2012). Empathy as Teacher Roles. *Procedia - Social and Behavioral Sciences, 69,* 960- 966.
- Steen, M. (2011). Human-Centered Design as a Fragile Encounter, *Design Issues, 28* (1), 72-20.
- Simonsen, J. & Hertzum, M. (2012). Sustained Participatory Design: Extending the Iterative Approach. *Design Issues,* Massachussets Institute of Technology, *23* (2), 10- 21.
- Taylor, S.L. & Bogdan, R. (1992).*Introducción a los métodos cualitativos de investigación.* Barcelona: Paidós.
- Walsh, J. (2015). *12 Kinds of Kindness (online).* Retrieved from: at:http://12kindsofkindness.com/
- Wiseman, T. (2007). Toward a Holistic Conceptualization of Empathy for Nursing Practice. *Advances in Nursing Science, 30* (3), E61-E72.
- Wotjas, O. (1998). Feedback? No, just give us answers. *Times Higher Education Supplement,* (online). Retrieved from: https://www.timeshighereducation.com/news/feedback-no-just-give-us-the-answers/109162.article