

Master of Arts in Design Admission Procedure 2019

Preparatory work – Texts to read

Text 1: Frascara, J. (2017), '*Design, and design education: How can they get together?*', Art, Design & Communication in Higher Education, 16: 1, pp. 125–31, doi: 10.1386/adch.16.1.125_1

Text 2: Schwab, K. (2019). '*John Maeda: "In reality, design is not that important"*', FastCompany.com [Web Magazine], retrieved March 19th 2019 from: <https://www.fastcompany.com/90320120/john-maeda-in-reality-design-is-not-that-important>

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Design, and design education: How can they get together?

ABSTRACT

Designers work with people and for people, and the designers' main objective is to transform people's existing situations into better ones. This is not easy: it requires both disciplinary and interdisciplinary knowledge, and a will to do things well. Focusing on people makes the social sciences become a necessary support for design, and forces design to become an accountable profession, where decisions are based on reliable criteria, and where projects respond to important needs of society. In most design programmes today a simplistic conception of creativity keeps design as an easy and self-serving activity, where students are kept busy with formal/visual and technological concerns. Unfortunately studies of people are normally missing from design education, along with language and evaluation of performance. If design is to develop its full potential as a major contributor to society's well-being, design education has to change into a rigorous, interdisciplinary and socially responsible activity.

KEYWORDS

user-centred design
social sciences
design education
research
empathy
accountability
outcomes

HOW CAN I DESCRIBE DESIGN?

Design is about people, it helps transform their existing situations into better ones (based on Simon 1981: 129). This is the most important function of design. The crafting of design products that has prevailed in design education till this day, is not the final goal of design, it is the essential medium used to realize design's most important function. To live up to this description, designers need motivation and knowledge. Motivation can be developed through

education; knowledge through instruction. Motivation makes us want to do things; knowledge gives us the tools to do them.

In every design project, designers need to learn about people's needs and wishes, feelings, expectations, possibilities and limitations, preferences and behaviours, and understand them in their contexts. This is why design has to be user-centred, where *the user* is not only the final user, but everybody involved in the full cycle of a project (I say user-centred and not human-centred because 'human' is what all of us are, but in connection with design, we are users, engaged in interaction with design creations).

User-centred design is a principle, not a method. If the design process does not involve the user, the user will not get involved with the design product. Terms do not matter that much, what matters is the substance of actions. A term like 'Participatory design' is no better than *user-centred design*; and 'co-creation' is no better than *participatory design*. *User-centred design* sets the frame. It puts the user at the centre: not the maker, the client, or the last fashionable style.

Adhesion to user-centred design implies the need to know how to learn about the user. This requires design research methods: participatory design, co-creation, interviews, focus groups, ethnographic observations, shadowing, surveys, literature review, iterative designing and evaluating... These and others are ways to get to know the users, but what is needed to begin with is *empathy* (another framing principle that involves motivation and values, not instruction).

When design is conceived as a way to tackle complex problems in society (all problems involving people are complex), it becomes necessary to resort to *evidence-based design*. This means trying to make every important decision on the basis of proven success, primarily consulting published research, case studies, and the experience of trustworthy colleagues, and normally complementing this with field research to create new and much needed information about the specifics of the issue at stake. Most design problems relate to unique situations, and require information that is not published. Contexts, contents, users and purposes rarely repeat themselves exactly from project to project. *Evidence* emerging from published research must be context-tested. In text comprehension, for instance, the question is not *whether* bullet points are better than narrative prose; the question is *when* is one strategy better than the other. The reply can only be crafted considering purposes, structure, contexts, users and situations of use.

Design is oriented to action and to the future: it intervenes in reality to change it for the better. The origin of a project is the identification of a need and the definition of the objectives to be achieved. This is why *design should be outcomes-oriented*. The outcomes are not the products created, but something that happens once the design intervention has taken place, and changes have happened *because* of the intervention. In project development, the desired outcome should shed light back onto the design process and define it. Each step should be evaluated as to whether it is aiming or not for the outcome sought after. The steps to take are to be guided by *performance specifications*. For example, if we want our design of a text to achieve high comprehension, what should it do? (I am saying 'what should it do', and not 'how should it be', because I prefer to focus on actions, not visual details, which come after the actions sought have been defined): *the text should facilitate legibility* (perceptual need), this means: (a) it should have the size required for comfortable reading at the distance determined by the reading

situation; (b) it should be composed in a font that guarantees discriminability of letters and considers the resolution power of the eye to identify details and differences between letters; *the text should facilitate comprehension*: (a) it should use a vocabulary familiar to the readers; (b) it should explain terms and acronyms that might not be familiar; (c) the information should be clearly chunked in units of meaning to facilitate comprehension... and other specifications of performance that will constitute a check-list to confirm that design decisions help achieve the final objective of high comprehensibility of a text.

There is an overarching indispensable principle to ensure that design makes sense: it should be *socially responsible*. This is an inclusive term. If design is socially responsible then it will be environmentally responsible and ethically responsible.

DESIGN FUNDAMENTALS

The fundamentals of design are purpose, planning, efficiency, accountability, order, knowledge of people as design users, as well as sensitivity to content, context and sub-cultures. Designing presupposes knowledge of production technologies, of design and research methods, of how to see and evaluate products and systems, and how to identify problems and opportunities for design interventions.

Efficiency and clarity are central to design, but also *joy* and *wit*.

All the above are the fundamentals of design, not the visual elements, despite the fact that so many design schools focus their first year exclusively on them, following the Bauhaus tradition created almost 100 years ago. They are important, but are only the physical part of design.

EDUCATING DESIGNERS FOR REALITY AND IN REALITY

Design education must consider all the above discussion, and help students develop the necessary competences, not just visual competence.

Instruction and education are different and complementary. To instruct is to train. To educate is to foster the development of independent judgement and the adoption of values. A good designer has to be both instructed and educated to become a good member of society.

The task of a teacher is to help the students learn, not to just deliver lectures. Thus, the teaching task becomes more difficult, and substantially more interesting, because it positions the problem addressed in a point of tension between *the subject of study and the student*, not between the *subject of study and the teacher*.

Ideas are important in design, but ideas don't come from magic inspiration: they are possible when knowledge of a problem exceeds common knowledge. To achieve this, design education must involve an introduction to research (*research is not open exploration*: doodling with the pencil or surfing the net in search for different design options is not research. A basic tenet of research is replicability, used to corroborate, relativize or refute findings, and open-ended explorations are not replicable). *Research* should be taught so that it assists the design process of the students at the moment of conception, during design development, and as a tool to evaluate design performance. *Evaluation* is indispensable, it allows designers to assess their assumptions and the quality of their products, and engage in continuing improvements. When design is oriented at fostering change to improve a given situation, and when the

situation is real and can be observed and evaluated before and after the design intervention, then the quality of the work can be assessed.

Quality in design is based on performance, on the degree to which objectives are met. This is sadly missing in design education in general. My best experiences as a professional come from measuring the performance of what I design. An 11.9 per cent reduction in antibiotics prescription as a consequence of a campaign that my wife (Dr Guillermina Noël) and I designed in Italy, as opposed to 7.4 per cent in the control group, confirms the quality of the approach taken (Formoso et al. 2013). The 19 per cent reduction of fatalities in traffic collisions achieved in Alberta in the early 2000s following a campaign to which I contributed is another example (Taylor 2003; McDermid 2004: 6). Increasing the ability of people to remember the content of documents, shortening the time they take to find specific items in large documents (Frascara and Ruecker 2007), reducing the number of questions people ask to find their way in a complex building, reducing errors in hospitals... are all results of high quality design work.

Successful outcomes require user studies. User studies require assessment of the situation of use, the purpose of the design, and the various contexts that surround the interaction of people with communications, objects and services. This links design with the social sciences, since *design is about people*. People are diverse: it is a challenge to reach them all in any project. Public health campaigns must bear that in mind: intellectuals and semi-illiterates, old and young, wealthy and poor, all must be reached. As much as the public is varied, strategies must also be. The paradigmatic representative of a group does not exist. Classes of people are full of variations, even among groups like students in a design class. They are all in the same institution, they often study the same type of subjects, but they are substantially diverse. Design education is excessively dedicated to formal training and a romantic notion of creativity, as if high quality solutions depended on the intuitions of the designer. Students in design must be conscious of the need to be accountable for results, and the way to form them in this is by engaging them in projects that are real, and that can be evaluated. We are otherwise forming handicapped professionals that believe the job is complete when they hand-in the designs to the client.

Sophistication in *thinking and making* are basic design requirements. These involve: ability to observe, analyse and evaluate products and situations; systematic ways of working; sensitivity for the needs and wishes of people; attention to detail; ability to collect and organize information; and ability to describe problems, projects and proposals concisely and with precision. Design also requires ability to *understand the contexts* of intervention, and to balance different demands, conceiving solutions as integrating apparently disparate requirements. Design has to avoid false dichotomies, such as 'what is more important, aesthetics or function?'. Both, without a doubt: aesthetics is a functional consideration. It is responsible for the first reaction of people in front of what they see. It is not to be the aesthetics of the designer, but that of the public to be addressed. Along with visual sophistication and sensitivity for materials, the ability to integrate many and different demands can be developed through practical projects, reflection, readings, discussions and continuing professional development.

Thinking and making are fed by observation, analysis and criticism. A way to develop these is to carry a notebook to collect thoughts, quotations, notes, sketches, observations and captioned images, all dealing with design or with related issues. Particularly taking note of design products and situations, good

and bad, and describing why either. This is continuing education at its best: *designers have to learn how to learn*. This requires being *constantly alert*, observing and evaluating. I am not referring here to sketchbooks, where artists doodle visual ideas, but to notebooks, for articulated reflections about the world around.

VISUAL AND VERBAL LANGUAGE

Exclusive concentration on 'the look of things' is long passed, but design programmes usually disregard the language of words, that actually dominate communications. In my experience, working on a wide variety of information design projects, language takes about three quarters of my time. Texts written by content experts normally disregard the lack of familiarity readers have with the content. Content experts pay exclusive attention to what they want to say, and little to what their readers need to understand and how they need to understand it. Design schools in general fall short of preparing students for language management. As an information designer I have to know the purpose of the text I am supposed to work with, so that I can assess the writing: is it meant to inform, to summarize, to analyse, to propose, to justify, to explain, to persuade, to entertain or to amuse?

TEAMWORK AND THE INTERDISCIPLINARY NATURE OF DESIGN

The act of designing always involves people beyond the designer: clients, users, experts from other disciplines, and researchers. A designer must be educated in teamwork, and in the skill to speak different disciplinary languages. Design is not art, nor solitary activity. Teamwork involves recognizing clients and users as partners in the design process. One does not work *for* them, one works *with* them. This is not normally the mindset of students when they arrive at a programme. Their image of the future is to become successful making a good living in a 'creative' profession. In design, creativity requires knowledge, deep knowledge about the whole set of problems that are embedded in most projects. Creativity has to be context-relevant: it does not emerge from 'inside the designer' but in the connection between the designer and the issue at hand, with all its implications.

PROBLEM-BASED LEARNING

Pedagogy in medicine has recently discovered the value of problem-based learning. Leading educational institutions have adopted it as a way to introduce students into the realities of human health. The organs or illnesses of a person are not separated entities. A person is an integrated system of systems and, to make things more complex, is affected by various contexts. Design education has always been organized as problem-based learning, embedded in projects. We tend to teach through projects, rather than through isolated variables, exercises or subjects. However, how extensive is the usual number of issues that come to play in a design project in school? Are many variables considered? Or is the 'problem' normally reduced to 'designing an original logo to represent an imaginary organization', or 'a book for kids aged 9–10'? What kind of kids are we talking about? What purpose does the book have? Is it to teach or to entertain? How to achieve the purpose of the book? Do users take part in the design process? Are clients real, with their personal views and requirements, their internal politics, their visual preferences, budget

constraints, and value systems? Reality is complex and designers cannot be formed in falsely simple environments. The task of the educator is not to simplify complexity, but to help addressing it.

Occasional teaching in real projects is indispensable for the students to access all levels of learning. There are three kinds of knowledge: *explicit knowledge*, that can be communicated easily in lectures and writings; *implicit knowledge*, that is not normally articulated but that can be articulated at will; and *tacit knowledge*, that can only be observed in action when working with a skillful expert. Actions are full of information that is so detailed and extensive that resists articulation and transmission through language. This is why it is so important to introduce students into the complexity and ever surprising character of reality, away from super-controlled classrooms.

Design needs theory, but it cannot be taught on the basis of only theory. Real learning has to be grounded on experience. Generalizations are essential, so that the learner can transfer knowledge from one context to another, but they cannot be too abstract, so that learners can connect new information with their existing experience and adapt it to face to new challenges.

SUMMING UP: INTEGRATING DESIGN EDUCATION WITHIN A UNIVERSITY

What does design education need to do to catch up with best practices in design? The practice of design always has to face the need to understand users, clients and project development partners. This is why in the mid-1990s I created a new programme at the University of Alberta. Working with the Department Chair, Desmond Rochfort, and the Administrator, Stan Szynkowski, we planned and implemented the Bachelor of Design with Pathways, establishing agreements with Business, Computing Sciences, Engineering, Social Sciences and Printmaking to allow design students to take up to 45 per cent of their programme in one of the selected disciplines.

Of those disciplines above, I see social sciences as an inseparable part of design. Without social sciences design is a joke. Designers work with people and for people. People are very complex and interesting, far more than forms, shapes, lines, textures, materials, volumes, colours, technologies and animations. Unfortunately studies of people are normally missing from design education. However, they are our reality, our challenge, our objective and our reason to exist.

TEACHING AN ACCOUNTABLE PRACTICE OF DESIGN

The intention to include the study of users in the curricula needs to go along with a thorough command of research and design methods, tools that allow designers to implement that intention. Interdisciplinary programmes are necessary, but not sufficient, and they require disciplinary expertise. If design is to develop its full potential as a major contributor to society's well-being, design education has to change into a rigorous, interdisciplinary, and socially responsible activity.

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John Maeda: “In reality, design is not that important”

Kathrine Schwab

The head of inclusion and computational design at WordPress parent company Automattic thinks that designers should be more like supporting actors to the leading characters at tech companies—the developers and product managers.



John Maeda speaking at DesignInTech 2019. [Photo: Hutton Supancic/Getty Images/SXSW]

What is design’s role in business? For years, designers have advocated for more decision-making power at companies, with the goal of building humanistic products that serve users instead of corporate interests or technological advancement alone. Recent studies have shown that design does have a substantial impact on a business’ bottom line, inspiring countless companies to reposition themselves as “design-led.” Consider how many large corporations have acquired independent design firms in the past few years alone.

But design luminary John Maeda proposes that the idea—one he has previously advocated for—is flawed. “I have friends at all the companies and I kept hearing about ‘design-led’ and all that and it got me excited. I was pushing for it,” he says. “Years later now, I’m in a phase where I realize that [advocacy] was really important, but in reality, design is not that important.”

Hold on. What?

Maeda, who is the head of inclusion and computational design at WordPress parent company Automattic, thinks that design should play a secondary role in tech companies rather than a leadership role. In Maeda's annual Design in Tech report, he says the design should be like a supporting actor or actress to the leading characters in a tech company—developers and product managers. When companies become design-led, he believes, designers are saying “get out of the way, I'm the boss.” The forceful “I'm the boss” mentality combines with design's tendency to become what he calls a “microworld of aesthetic high-fives”: in which designers have an invisible language about what good design looks like based on a history and experience that they tend to privilege, and this understanding that designers together at the exclusion of others. Maeda thinks these two elements end up alienating other disciplines when everyone should be working together.

“Over half the designers still want to make things beautiful and can't help it. That's a built-in competency,” Maeda says. “To a business person that seems irrelevant. To the developer, it's like, ‘I have to build that.’”

Instead, Maeda thinks that designers should focus on being good teammates rather than leaders. Worrying too much about whether design has enough influence over a product or a company distracts from the real vision: making great products that solve people's problems.

It's a controversial stance, given how much Maeda and other design industry leaders have argued for design becoming a more powerful discipline within organizations. “Designers are used to being the benchwarmer and called into spray smell on something, and they've been so hurt, they're tired of it, they want to fight back and organize,” he says. “I think in the past ... I was advocating for design in general, I had to be a symbolic leader of that. I felt responsible to do that.”

But Maeda says the last three years at Automattic have changed his perspective. “I kept meeting so many people who were telling me I'm wrong: designers in tech companies saying, ‘You don't know what you're talking about.’” These detractors pushed back on Maeda's initial desire for design leadership at all costs, and encouraged him to think about how such an approach doesn't always mesh with the day-to-day realities of in business.

Of course, the problem isn't limited to designers or design. Many disciplines suffer from "the microworld of high-fives"—including engineers and product managers. Maeda believes it's detrimental to a business on a whole because it comes at the cost of teamwork. But for designers, it is especially critical to work with developers. "We know that tech people are in charge of the world: They can approve pull requests and they push the code out and right or wrong happens," he says. "But if you can't work with developers, you're not going to make a dent in the universe." In other words, the only way to change the system is to work within it.

Ultimately, Maeda believes that when designers do get more power than their developer counterparts, they build weaker products. "I find that any company that wishes to be design-led is going to index high on experience quality. If [the company's] audience is designers, and people with high standards of quality, then fantastic. But if they do that, maybe they won't worry about the tech stack, that actually it's a brittle tech stack and maybe it works 99 times out of 100," he says. "If they're so focused on experience, maybe they're not going to be asking product questions about is this going to help us break even." Take, for instance, Jawbone, which once had a \$1.5 billion valuation. But its product Up, a wearable fitness tracker that was supposed to be the hottest gadget of 2011, was a flop. At the time, Cliff Kuang wrote about how Up had impeccable design (by well-known Silicon Valley designer Yves Behar)—but couldn't recommend the product because the software was so buggy, it was virtually useless. Ultimately, the product (and the company) failed. The lesson? Beautiful industrial design means nothing when paired with poor engineering.

Maeda isn't the only design thinker to take issue with the concept of "design-led" companies. Airbnb's head of design, Alex Schleifer, believes that design-led cultures tend to devalue other people's opinions and insights. He has built his design organization so that designers aren't given special treatment; instead, product managers are tasked entirely with representing the perspective of the user, rather than their group with the organization.

For Maeda, design taking a supporting role is not a negative thing for designers. Instead, it just gives them a chance to work with their colleagues as a team—which, he insists, will ultimately lead to better design. "Some people's reaction has been, what a

terrible thing. It's about 'design-led, design-driven, design insert-your-word,'" he says. "I say, [what about] those movies where best supporting actor or actress steals the show?"

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