CO-TALK? THE ROLE OF COLLABORATION PARTNERS IN DESIGN EDUCATION

Tatjana LEBLANC[1] **and Mario GAGNON**[2]
[1]School of Design, University of Montreal, Canada
[2]Alto Design, Montreal Canada

ABSTRACT

Academic institutions offer a unique environment for academics and experts from different fields to come together and explore creative ways to improve education and advance disciplinary practices. Emphasizing the collaborative aspect of such joined ventures has become exceedingly popular. The abundance of writings on this subject matter reveals its rapid proliferation.

Many disciplines, and design is no exception, have embraced this current since, which gave rise to interdisciplinary approaches and invited industrial partners into classrooms. However, some critics question the productive output in light of the increasing collaborative practices, while others have doubts about their very nature. This paper will therefore attempt to clarify the concept of collaboration and elaborate on the phenomenon and its effects on design education. Furthermore, Evan Rosen's work on *The culture of collaboration* will allow us to assess the collaborative nature of a teaching venture that the School of Design at the University of Montreal and Alto Design have put in place and tested over the past years. More specifically, the paper will describe the framework and the role of partners, explain the scope and benefits of the teaching activities, talk about students' results and challenges, and compare all these aspects to Rosen's *elements of collaboration* by which he characterizes true collaboration.

Keywords: Design education, collaboration, teaching methods.

1 INTRODUCTION

Design scholars and educators play an important role in the development of disciplinary knowledge and thus further education and professional practice. Obviously, the academic environment is a unique ecosystem where academics, students and professionals participate in exploring and creating new approaches, methods or tools. The results often contribute to the advancement of education and design practice. Academic institutions play a significant role in disseminating knowledge and shaping the next generation of professionals and researchers. Yet, as some point out, the ambitions of academic institutions are not always aligned with the expectations of the professional sector [1] that is looking for graduates with a solid skill set, which are fully operational from the onset of their career.

In addition, the increasingly competitive academic landscape tends to put an additional pressure on design schools, which feel obliged to differentiate themselves from their competition. Consequently, many try to reinvent themselves, by extending their programs, by creating multidisciplinary learning environments, or by offering hybrid degrees. Others enrich their curricula by collaborating with the industry or by forming partnerships with other institutions. The abundance of writings on this subject reflects to what design schools have embraced this current.

Nevertheless, by adding more and more content to their programs without increasing its duration, schools can easily endanger the quality of the basic design education. They risk weakening the fundamental teachings and students might graduate with a lesser proficiency level than expected. In fact, some companies complain that students lack confidence and basic skills. We observe how many try to delay their entry into the professional world by either pursuing graduate degrees or seeking out complementary majors. Obviously, this can be beneficial to the student and the academic institutions, however it does not necessarily address the needs of the professional market.

Inviting professionals into the classroom is one way of addressing the shortcomings. However, without an adequate framework, these efforts can be counter-productive. Many of our past collaborative efforts simulated - at most - a client-designer relationship without really addressing the

academic needs [2]. Although students appreciated these experiences, they only offered a glimpse of what employers might expect from them. We had to ask ourselves: Do these activities actually help improve design skills? What role could/should industrial partners play in the teaching process?

By scrutinizing our past collaborative activities, we observe that the role of the industrial partners is often limited to being a client, juror and critique. Hence, it is important to understand how to facilitate a genuine collaborative culture and improve team dynamics [2].

The large amount of literature shows that collaboration has become a major movement. Yet, every discipline tends to interpret collaboration in its own ways, which contributes to the confusion and adds an additional layer of complexity to the debate. Therefore, this paper will attempt to elucidate the concept of collaboration and what constitutes a genuine collaborative partnership. It will furthermore describe the collaboration model developed and adopted by the University of Montreal and compare its *modus operandi* with Rosen's theory on collaborative culture [3]. We will thus be able to assess the collaborative nature of the teaching model by referring to the identified theoretical elements and discuss its benefits from a design pedagogic perspective.

2   COLLABORATION IN THE SPOTLIGHT

Collaboration is a topic that everybody can relate to, since people rely on their personal experiences, which can be social, professional, religious, as well as political. So, what is it about collaboration that made it such a ubiquitous issue? What justifies its escalating attention in the recent years, to a point that some experts don't hesitate to declare this phenomenon nothing but a *trend*, *fashion*, *buzzword* or *collaboration washing* [3]? Some of them explain that many claim to collaborate without actually being collaborative [3], [4]. However, others go as far as suggesting that excessive collaboration can lead to *"collaborative overload"* and tends to discourage key contributors [5]. In fact, Cross & al.'s research suggests that collaboration has transformed corporate culture and pushed companies to embrace the trend. In The Harvard Business Review, for example, the authors explain: *"As business becomes increasingly global and cross-functional, silos are breaking down, connectivity is increasing, and teamwork is seen as a key to organizational success"* [5]. However, their research also suggests that people spend more and more time collaborating, yet only very few actually engage in "value-added collaboration" [5]. This begs the question: How do we recognize real or effective collaboration? Business perspectives mainly focus on resource management and the quantifiable outcome rather than the process, which explains, in part, the growing interest in collaboration and its affects on disciplinary practices.

2.1 The concept and its meaning(s)

The accumulation of writings on this subject matter compelled some to examine this phenomenon and to provide clarifications on the core concepts, especially considering that "activities that are undertaken in such acts may vary in intent and degrees of participation, yet be called the same thing" [4]. The Oxford English Dictionary, for example, defines *collaboration* as "united labour, co-operation". Both Latin terms, *col labore* and *co operari,* translate indeed into: 'working together', 'working jointly', or 'working with others'. According to the dictionary the term can be used in different contexts: literature, science, art, thus suggest a universal character. Despite the aforementioned, we observe discipline-specific terms emerge: co-creation, co-design, co-teaching, etc. Not only do they dilute the meaning of the original concept, they also contribute to the confusion and superficial use of the term.

For the purpose of this article, and to the benefit of a common understanding, we prefer to adopt Rosen's definition. He sees *collaboration* as: "working together to create value while sharing virtual or physical space" [3]. In his book "The culture of collaboration", Rosen explains that a genuine collaborative partnership should have certain qualities that he calls the "ten cultural elements of collaboration": *trust, sharing, goals, innovation, environment, collaborative chaos, constructive confrontation, communication, community* and *value* [3]. In fact, *innovation* and *collaborative chaos* refer to a loose, spontaneous and creative process, intended to breed a creative mindset.

Kvan agrees while stressing that "the creative aspect of working together" is what distinguishes *collaboration* from *cooperation* [4]. In his view, *cooperation* entails a less formal relationship with a less defined framework, and thus, is less risky for all parties involved, since resources and rewards remain separate, information is shared as needed and authority is retained by each organization" [4].

Considering these aspects, one must agree that many of the proclaimed "collaborations" simply do not fit the category.

2.2 The social dimension of collaboration

Logically, collaboration relies on social skills such as *tolerance, respect, sharing, and communication*, all basic skills one usually acquires during early childhood. They fundamentally define human nature, interactions and social behaviour. Rosen chose to include in addition *trust, constructive confrontation, and community* [2], [3].

From the human resource management perspective, experts go as far as isolating one's level of personal investment in collaboration. For example, Cross & al. distinguish between *informational resources* (referring to knowledge and professional skills), *social resources* (referring to one's status in a team or accessibility), and *personal resources* (one's time and energy) [5].

Nevertheless, the success of collaboration will also depend on *affinity*, *ambition, curiosity, interest*, and *believe* in an endeavour. An organizations role is crucial in providing an environment for such encounters to take place. These aspects are clearly evidence that collaborative activities are profoundly "social" in nature, no matter which context they occur in (personal, professional or educational).

3 COLLABORATION IN DESIGN EDUCATION

This section will describe a collaborative teaching approach, which has been developed and improved over the years. We will examine its collaborative nature on the basis of the criteria identified by Rosen [3] and the value of the partnership.

3.1 Collaborative teaching framework – a design project in itself

Two experts, 1) a design professor specialized in emerging design practices and, 2) a design professional and founder of a multidisciplinary design firm have joined their expertise in developing a 16-week-long design studio course for 3rd year design students. The goal was to help students to put theoretical knowledge into practice and develop a solid set of critical thinking and design skills. Both experts supervised a group of 15 students. The design firm's role was to help students to improve design skills, whereas the professor's role was committed to helping students to put their theoretical notions into practice. Paired with the theory course "semiotics and design", this studio course allowed students to focus on design development, innovation and exploring the semantic qualities of a design. They were asked to create a series of products that are meaningful and that share a common form language (identity). The following topic was imposed: *The Meal - a lost social concept or changing traditions?*
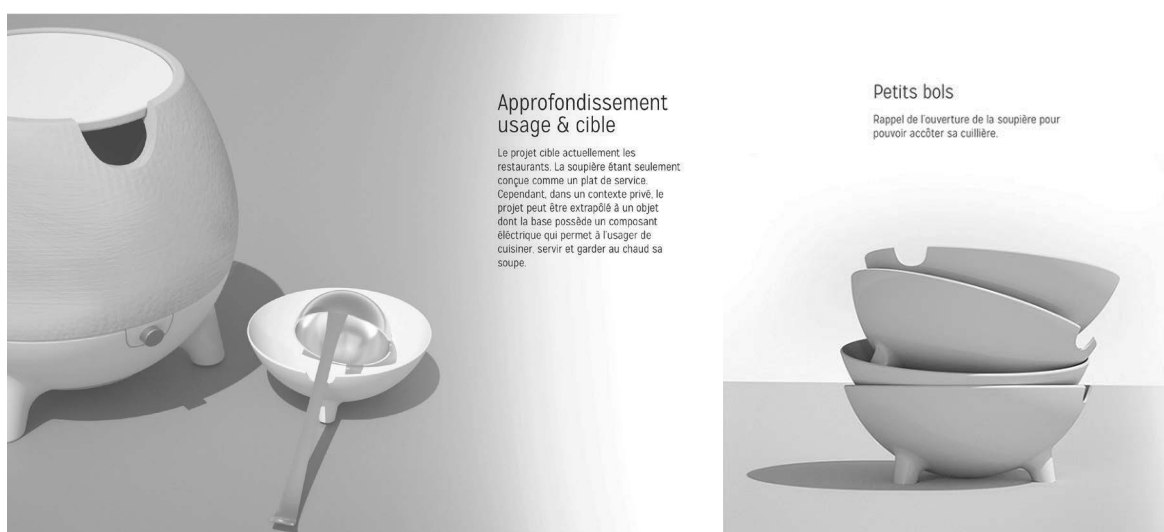

Figure 1. Tureen, reviving grandma's cuisine, P. Chevalier (2015)

In groups of five, students discussed the topic and developed mind maps in order to organize their ideas and thoughts. Later, all groups presented the results and discussed their relevance. Based on the

findings and discussions, groups agreed on three perspectives from which each could study the associated issues while examining the contextual environment in order to identify problems and needs [6]. The three angles were: 1) cultural heritage, 2) nutritional trends, 3) conventions and cultural/technological influences. Each group gathered information, studied traditions, social and cultural habits, products used, and discovered needs and design opportunities [6]. Some of the identified needs were: obesity, solitude and the importance of reviving cultural heritage and lost traditions.

After two weeks of searching, collecting data and sharing findings, students chose from the compiled body of knowledge a specific aspect they wished to pursue individually. Some of the topics students proposed were: promoting healthier snaking, revisiting grandma's cooking (Figure 1), accommodating solitary eating habits, sharing a dish, promoting local cuisine (Figure 2), etc.

The creative process that followed was comprised of the typical design activities [6] including: exploring ideas through sketches and mock-ups, assessing concepts, developing and refining their designs.

At strategic moments, students were asked to seek feedback from colleagues and both collaborating parties (academic and professional). In a logbook, students kept track of ideas, comments, critiques and progress. On a weekly basis they received comments. All were instructed to provide their opinion by pointing out the strong and weak aspects of the work, and to suggest how to improve the design. The teaching partners were constantly in touch to discuss students' progress and strategize on how to address weaknesses and boost individual performance. This occasionally led to adjustments of schedule and scope (flexibility, creative chaos), offering individual consultations, injecting theoretical notions and demonstrations on how to improve certain skills.

Figure 2. Maple syrup tasking dish set, inspired by traditional tools, M. Leclerc-McGuire (2015)

The design presented above (Figure 2) shows a line of products using a form language that suggest an *authentic* and *traditional* character. This concept is designed to promote local traditions in a restaurant setting. It will allow restaurant-goers to discover local produce, in this case maple water, maple wine, maple spread, and hot syrup that can be elegantly served on a snow bed and rolled-up on a uniquely designed, textures glass utensil. The traditional tin buckets suspended from North American maple trees inspired this design. Each ramekin has a distinct texture that will help distinguish and identify the different maple products while tasting them in a specific order.

3.2 Collaborative nature of the workshop

Affinity, trust and respect made this collaborative partnership possible. Both parties have placed their **trust** in each other's expertise and invested *informational, social and personal collaborative resources* [5] in this workshop (4th year of existence).

To create the framework, both **shared** ideas and developed a curriculum that reflects the commonly agreed upon conditions, including the theme, **goals**, deliverables, schedule, assessment procedures, etc. Students have profited from two workplaces, spending certain days at the university accompanied by their professor, and others at the design agency where they were offered input and guidance from a different professionals.

The **innovative** aspect of this course is the process, which give students access to resources that both environments had to offer including the access to professor(s), design managers, designers, engineers, model makers, as well as lab equipment, materials, libraries, etc. In this unique learning **environment** students made significant progress while developing their design skills, learning to apply theoretical knowledge to their project, and observing how it is used in a professional context. Collaborators and students had to learn to deal with divergent opinions and feedbacks [**constructive confrontation**] and learn to interpret them.

A creative process rarely follows a pre-established timetable. In addition, the group make-up also differs from one year to another. Therefore, both collaborating parties must show flexibility and adjust the process and their interventions accordingly. Spontaneity and flexibility was indeed paramount when dealing with the day-to-day challenges. Both collaborating partners were convinced that students' creativity should not be obstructed by a rigid structure (**collaborative chaos)**. Some needed more time than others to come up with innovative ideas; others needed leeway to explore new and unexpected paths.

Weekly **communication** between the collaborators helped to assess progress, coordinate schedules and adjust procedures as the project moved along. Students learned also to work as a group, communicate and share information, critique and help each other, which fostered a strong sense of belonging (**community)**.

The **value** of this learning/teaching experience was two-fold. On the one hand, students learned to master new methods and tools while improving their professional skills. Their evaluations reflected the progression they made. Furthermore, the experience boosted student's confidence and pride in their achievements and skills. On the other hand, over the 4-year period, several students saw themselves awarded a paid summer internship at the firm and/or were hired after graduation. Many others have been since successfully pursuing a professional career nationally and internationally. The last year's participants are currently in the process of completing with remarkable autonomy and confidence their thesis project. Overall, the course has a notable success rate, judging from the academic results, students' satisfaction rate, and the employer's feedback. Limited to 15 students, the course remains to date highly in demand.

3.3 Collaborative outcome

The reputation of this course and the student's satisfaction rate make it a rewarding experience for all parties involved. The firm enjoys the experimental nature of the course, which stimulates the design team and offers a glimpse of the future generation of designers. From an educational perspective, the value of the course lies in:

• Experiencing a professional and multidisciplinary environment
• Observing professional practice
• Learning to absorb theoretical notions and seeing their applicability in professional context
• Learning to master the creative process and improve design skills.

Students recognize the importance of being a team player and critique. They especially learn to value good communication skills, while sharing ideas and thoughts, dealing with divergent opinions, and more so, while constructing a design discourse that justifies their work.

3.4 Challenges

The challenges that we regularly encounter in the process are typically: a) teaching to understand and interpret multiple/ conflicting viewpoints, b) learning to address critique or defend one's choices in a professional manner, and c) having partners commit and respect the established framework. In our case, communication strategies and post-mortems - refined over the years - helped the partners to stay updated on the students' progress and adjust scope and project parameters when necessary.

4   CONCLUSION

As previously explained, many disciplines turn towards collaboration and some seem inclined to re-name the concept to better reflect their disciplinary uniqueness. For example, Friend et al. introduces *co-teaching* with the following justification: "As a partnership between professional peers with different types of expertise, **co-teaching** can be viewed as a reasonable response to the increasing difficulty of a single professional keeping up with all the knowledge and skills necessary to meet the instructional needs" [7]. If this sounds familiar to design, it is because designers argue the need for

transdisciplinary approaches in a similar manner. The collaboration trend could be indeed compared to the design-thinking phenomenon. As Brown explains: "…we have a lot of people out in the world who think of themselves as design thinkers without any of the actual skills that it takes to do design thinking effectively." [8].

Trends of this sort have always triggered polarizing debates, irritating those concerned by misrepresentation. The vulgarization of concepts can become troubling when their creators or authors are forced to abandon them once they lost their meaning. In his blog "The devolution of design thinking", Pinckert points out: "Anthropologists and their preferred method, ethnography, suffered a similar fate when they lost control of it. Suddenly everyone was/is an ethnographer." [9]. He puts it quite bluntly: "Net-net, designers have lost control of the design thinking term. Instead of wishing that everyone think "like" a designer, hire an actual designer instead!" [9].

The attempt has been made to clarify the concept of collaboration and to critically assess our own collaborative activities. Judging from our experience, education can be in sync with the needs and expectations of the today's professional market. It has been demonstrated that successful collaboration needs a framework, clearly defined scope and the implication of partners. It furthermore must rely on *affinity*, *ambition, curiosity, interest*, and *believe* in an endeavour.

We have also shown that collaboration is defined as working jointly with the goal to find creative ways of solving problems, while sharing risks and benefits. One can easily see the connection between *collaboration* and *design*. With this in mind, we like to refer to the presented teaching model simply as *design*, since we joined expertise in order to creatively solve a problem (educational in this case). This begs the question, *when we talk about design or teaching 'design' doesn't the over emphasis of co-make it a pleonasms?* We would like to argue that all the co-talk has the tendency to diminish the true sense of design as a « process », which is and always was meant to be collaborative by nature.

REFERENCES

[1]   Yang M.Y., You M., and Chen F.C. Competencies and qualifications for industrial design jobs: implications for design practice, education, and student career guidance. *Design Studies*, 2005, 26(2), 155-189.

[2]   Huet G., Spooner D., Vadean A., Leblanc T., Camarero R., Fortin C. Development of Collaborative and Social Skills through Multidisciplinary Design Projects. In: International conference on Engineering & Product Design Education, EPDE'08, New Perspectives in Design Education, Universitat Politecnica de Catalunya, Barcelona, Spain. A.Clark, M. Evatt, P.Hogarth, H.Lloveras, L. Pons (Eds.), September 2008, Volume 2, pp. 547- 552 (University Press).

[3]   Rosen E. *The culture of collaboration: Maximizing time, talent and tools to create value in the global economy*, 2007 (Red Ape Pub. San Francisco, CA).

[4]   Kvan T. Collaborative design: what is it? T. *Automation in Construction* 9 (2000) 409–415.

[5]   Cross R., Rebele R. and Grant A. Collaborative Overload. *Harvard Business Review*. January–February 2016, available at: https://hbr.org/2016/01/collaborative-overload

[6]   Leblanc, T. Problem Finding and Problem Solving: Techniques for Creative Researching. In *Design and Designing: A Critical Introduction*, Eds : S. Garner, Ch. Evans, 2012 (Oxford International Publishers Inc.)

[7]   Friend, M. P., and Cook, L. *Interactions: Collaboration skills for school professionals*, 2000 (Longman, New York)

[8]   Brown, T. Martin R. L., and Berger S. Capitalism needs design thinking. *Harvard Business review*, published December 2014. Available: https://hbr.org/2014/12/democratic-capitalism-needs-design-thinking

[9]   Pinckert E. *The Devolution of Design Thinking*, accessed on Jul 17, 2015, Available: https://www.linkedin.com/pulse/devolution-design-thinking-eric-pinckert.