THE CHALLENGES OF DESIGNING THE INTERACTION DESIGN OF A COLLABORATIVE ART PROJECT

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ABSTRACT

While many of us researchers dream about the opportunity to design a collaborative art project that would connect our youth with big, mainstream cultural and educational institutions, we seldom analyse the challenges of such collaborations. This paper presents the most prevailing issues that arose during the user-centred, interdisciplinary interaction design (ID) of the collaborative digital art project. The design is made in collaboration with the young participants of the Meet the Ministry project run by the Dance Company of the Opera House (DCOH) in Gothenburg, and the members of The Swedish School of Library and Information Science Social Media Studies (TSLIS) research group. Using the research through design approach to augment the outreach of the collaborative digital art project, enhance youth engagement with the contemporary dance, and learn from the young participants, we analyse the implications introduced by inter-institutional and interdisciplinary collaboration. Finally, by looking at the results of this project, we claim that interdisciplinary collaborations are extremely risky because they are unpredictable in their cost, process, and outcome. Even though literature offers advice for successful interdisciplinary cooperation there are no guarantees that the risks can be fully avoided. Still, we argue that such collaborations are necessary and need to be continuously developed as they seem to be successful tools for interdisciplinary learning and bridging social capital acquisition. If nothing else, we should at least foster the practices of learning from our younger generations who seem to be interested in partnering with us in exploring communication and collaboration in digital art projects creation.

KEYWORDS

User-centred Design, Interaction Design, Social Innovation, Social Capital, Collaborative Art, Interdisciplinary Collaboration

1. INTRODUCTION

Our national research agendas often call for cooperation and interdisciplinary research between institutions giving special importance of using scientific results and methods outside of academia. Such a diverse collaborative undertake can result in new findings in the research itself (in this case, the capacity of collaborative digital storytelling to engage users and affect their bridging social capital), as well as offer new ideas on the design and practices of doing such research (in this case, the complexity of designing the process across disciplines and institutions). This paper epitomizes this kind of cooperation, and is based on the collaborative art project made between an art institution and academics.

1.1 Background

Meet the Ministry collaborative art project hosted by the DCOH¹ was aiming to create the knowledge about the reach-out and engagement of young audience (16-19 years) with the contemporary dance process. Through exploration of contemporary dance choreography creation for Ministry of Unresolved feelings show, delivered in a series of all-physical workshops, young participants are invited to engage in all-digital storytelling in order to share their impressions about the whole process.

¹ Dance Company webpage <https://en.opera.se/om-oss/goteborgsoperans-danskompani/>

The DCOH and TSLIS² have joined a solidarity effort, to collaborate and learn from that collaboration. Eventually, thanks to this interdisciplinary cooperation, the project that was envisioned as an offline participatory collaboration became the digital too.

2. THE RESEARCH THROUGH DESIGN

Since there is no one common definition of design (Franker and Racine, 2010), in this paper, design is considered an activity for planning and executing new actions, which might include deliverables as a by-product of the process (drawings, models, plans, or events). The core idea of the Meet the Ministry project is to learn from the young participants, users that are at the same time designers of the process. In other words, the methodological process is inspired by a human-centred Scandinavian participatory approach where design researchers collaborate with the people who are being served by design as co-creators in the process (Sanders, 2008).

During a series of meetings between the DCOH and TSLIS, the goals of the project are defined, as well as the necessary steps to arrive at the best possible results. The goals read as follows. Create the process in which we can learn from the young participants, creating knowledge; leave the process open so it can be re-designed or changed according to participants' needs; find ways to communicate with young participants and hear what young participants have to say; learn from the participants' feedback and reiterate the process design; provide the tools, materials, that will support better communication; and document the process and analyse results.

Young participants were recruited based on their motivation letters. They answered the surveys coupled with personal interviews, before the project started, and after the project was over. That way they were given a chance to evaluate the project, express their feelings, and ideas about the project. We also followed their participation through the whole process as well as the observation method.

In praxis each physical workshop with participants was followed by an evaluation meeting where all parties would discuss the results of the workshop and future moves. We can say that the design process was a set of ongoing iterations, comprising continuous analysis, feedback, and the designing of the next workshops.

In the next section we present the users that designed the process.

3. THE YOUNG PARTICIPANTS

Unlike the traditional notion of the *user*, a person who is using a specific software solution or service (Downing et al., 2000), in complex interdisciplinary collaborations it is not easy to define the *end-user*. The complexity comes from the fact that a person that is to *use* is at the same time is the person that *designs* the process. However, in this paper we look at the young participants as the *end-users* and *co-designers* of the ID. But how much do we really know about young people between 16 and 19 years old?

The young participants of this project are often characterized as having high digital literacy, multitasking skills, and the ability to operate fast. They are heavy users of smartphones, going online daily, with 24% of them reporting being online constantly (Flora, 2018). After Turkle (2015) argued that due to such heavy technological usage we lose the fabric that makes us human - the ability and interest to understand each other - many publications followed arguing that smartphones have ruined the life of millennials. According to that body of research millennials are not sleeping well, when learning they lack concentration, engagement and socialization (Karakas et al., 2015). However, according to a more recent publication younger millennials, or generation Z, seems not to be ruined at all (Flora, 2018).

In such high uncertainty, not really knowing who our youngest partners are, and how they like to do things, it was quite difficult to design the interactive process that could resonate with their needs. To start with, we have looked at 17 motivation letters from which we could learn more about their motivation to join the project, and we run the survey to get to know them better. Here is what we found out.

They all live in different parts of Gothenburg, but they frequently visit the city centre. The majority of them are native Swedish language speakers, and they are mostly interested in sports, performing arts, music, and reading. They are not interested in TV at all, while only one person expressed interest in computer games.

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² The Swedish School of Library and Information Science webpage <https://www.hb.se/en/The-Swedish-School-of-Library-and-Information-Science-SSLIS/>

When asked to explain their motivation for participating to Meet the Ministry project, they use the following expressions: “inspiration”, “learning more about the dance”, “personal development through creation”, “be more in Opera House”, “meeting other people”, “leaving my personal shell”, etc. Finally, in majority they do not have any expectations to create something “beautiful”, “cool”, or maybe learn more about themselves and the others.

In order to understand up to what extent the participation in the collaborative art production project could positively affect bridging social capital, a series of questions addressed young participants’ daily activities, and perception of their role in the community before the start of the Meet the Ministry project. The questions were designed in line with Williams’ bridging social capital scale (Williams, 2006). Based on 12 answers (out of 17) one can argue that those who answered the survey are in majority outgoing persons, who like to cooperate with other people and are quite interested in what other people think or do. Furthermore, they expressed belief that the cooperation with the others brings new contacts and gives a feeling of being better connected to the outer world. It is clear that while explicitly saying they do not expect much, on an implicit level they have come to the Opera House expecting amazing experiences. This fact was an additional burden on the whole project, as well as on us who are designing according to participants’ needs.

During the workshops with their digital storytelling mentors, TSLIS researchers and Göthenburgo (local NGO), young participants developed a strategic plan for Meet the Ministry project outreach (Table 1).

The complexity of this interinstitutional and interdisciplinary collaboration is presented in the following section.

4. CLASH OF WORLDS

When a high-end professional art production institution meets the academic institution in interinstitutional and interdisciplinary collaboration supported by new media technology, the traditional cliché of lonely, poor artists is completely changed. Not only that the creative process happens in a hive of ideas and people, this kind of collaboration also shifts boundaries of power, position, and identities between the collaborative participants and the knowledge domains (Shields and Spillane, 2018). Shifting traditional discipline boundaries and hierarchical power structures opens space for new collaborative structures and new ideas, but simultaneously and unexpectedly creates a powerful clash of two worlds.

Table 1. Digital outreach strategy developed by young participants

No	Type	Content	Video	Audio	Text	Quantity	Length
1	web series	- trailer - costume - Rehearsal Director - Choreography/er - improvisation - dance workshop	x	x		5-6	2-4,5 min
2	close-up	participants story on - why/how come I am in this project? - what did I get from it? - how should we do this in the future?	x	x		each participant	2 min
3	interviews	interview with the dancers, from a different point of view	x		x		
4	unresolved feelings	unresolved feelings are gathered in mail	x	x	x		
5	spontaneous reactions	post spontaneous reactions after each workshop with #motministeriet	x	x	x		#instagram
7	webpage on Opera.se	follow up of the process	x	x	x		

4.1 Time

Interdisciplinary research and collaboration projects often require additional resources, more time, infrastructure, and more effort (Briazu, 2017). Having in mind that this collaborative effort happened as a result of bottom-up interdisciplinary and inter institutional solidarity, without any additional budget, time became one of the most valuable resources.

A very important aspect is the time of employees who are employed or strongly tied to one cultural institution. Usually in creative visual arts the time of creative workers is at the centre of analysis, and the time of, for example, curators, art managers, public relations-support, is neglected. However, their employment and tasks have many features they share with creative workers, like self-exploitation, increase in personal responsibility, blurring the borders between work and personal life (Kuleva, 2018). In such climate finding enough time to plan the process of learning through design, run it, reflect on it, and improve it, is crucial for the overall success of the project.

It is quite hard to imagine how much time is needed to design the open process for collaboration, collaborative art creation, which will successfully meet the needs of all participants and serve as an open process for knowledge creation. The design of the frameworks for creative art practice, research, and learning, requires lots of time, bravery, and creativity. In the following text some time consuming aspects are listed.

4.2 Language

To begin with, the core idea of this project is the integrative communication over different boundaries, and knowledge creation. Therefore, it has been agreed to provide as many inputs as possible during the whole process. Still, when two strong, powerful institutions join the collaborative effort, their traditional disciplinary cages actually clash (Foucault, 1977). Contrary to Borgdorff's argument (2011) that during the interdisciplinary research collaboration working methods of separate disciplines remain intact, the experiences from this project show that the walls between the disciplines are porous. During the meetings it was quite common that people from one discipline wanted to penetrate into the other disciplines in order to understand the meaning, or to contribute, by changing or re-designing the events specified by the discipline. Thus, many discussions comprised of language balancing.

The *interaction space* for the DCOH members is usually physical space of the rehearsal room or the stage, whereas for the members of TSLIS that is the digital space delivered through user interfaces. For the young participants of this project the *space* can be a place where they have their bodies, while mentally and emotionally engaged somewhere else (Turkle, 2017). If *user interface* would pop-up in the conversation introduced by TSLIS team members, then translating it to the members of the DCOH was required so everybody on-board would be sure of the topic discussed. *Expressing feelings*, which is the main topic of this specific dance choreography, for DCOH is to communicate through body movements, while for TSLIS is expression through different digital forms (text, picture, video, and audio).

It was obvious that in order to arrive to a successful solution, all participants need to create, balance, and master the language of collaboration. There is no need to emphasize that young participants, whose participation was central to this project idea, needed the language that is disciplinary frigid, or in other words, free of disciplinary burden.

4.3 Going Digital – Power and Ownership

The same goes for understanding the “let’s go digital” idea. Having in mind the ubiquitous nature of new media technology in the 21st century, all participants were and are frequent users of it. Still, the introduction the idea to augment the outreach of the Meet the Ministry project by going digital brought a lot of tensions. New technologies were always introducing changes to social and cultural reorganization, and that creates anxiety (Baym, 2015).

For TSLIS members, digital communication is a natural way of thinking and daily operating, while for members of the DCOH and other departments of the Opera House it represents completely the other domain and other set of issues. Many questions arose, from questioning the reasons for “going digital”, over constant uncertainty over GDPR rules and regulations, to digital material ownership, and evaluation. Due to the obvious perception of the amazing power that digital information has, and speed by which it is shared, the ownership

and power question came back on the main stage of this project. Albeit one of the crucial ideas of the project is to collaborate in the atmosphere of the flat power distribution, give power to participants, it was impossible to easily clear the road of traditional disciplinary approaches. While one department did everything to crush the walls wanting to escape the disciplinary, institutional cage, the other department would strongly hold traditional power blocking everything digital. The project was on hold.

Once that young participant finally got the chance to express their ideas on how they would like to communicate their impressions about the project through digital channels, they have easily come up with the digital communication strategy for outreach (Table 1). Still, two weeks before the premiere, there was only one web page with the photos and following text published online. Once the Opera House PR and communication department finally accepted publishing and advertising young participants' web series, the project immediately got another life and new energy.

4.4 Fears and Trust

Facing many conflicting situations that come with interdisciplinary collaborations (Briazu, 2017) it is not surprising that many fear such a project. Stepping into the unknown is not a comfortable professional arena. With so many unknowns in one project idea, like designing interaction for the unknown project participants, designing open ID process that can adapt to future participants' needs, create space for process design re-iteration, open new space for unknown participants' digital interaction, support collaborative art expression, etc., fear becomes an everyday companion.

For the members of TSLIS designing such ID that will eventually lead to social innovation is far from the professional comfort zone, where the ID design is designed for known users, and carefully controlled processes. On the other hand, for the Dance Company this project introduces much vulnerability, like opening the Opera House for outsiders who will transform to participants and collaborative art creators. In the situation when none of the collaborating parties had similar experience, many questions that tackle the acquisition of trust arose. Disciplinary walls are high. While scientist and researchers tend to be concrete and work with research results, statistics, explicit results, dancers work with body movements, imagination, are used to unpredictable situations and processes. Let alone that both disciplines, presented by digital immigrants (Prensky, 2000) are to meet young participants, digital natives, and learn from them.

Once the young participants understood that the whole process is adaptable to change, that their voices are heard, and can influence the project - the trust is created. As the feeling of trust rose, the fears become weaker and fewer.

5. LESSONS LEARNED

Regardless of so many challenges introduced in this cooperation, one can surely argue that all participants learned a lot. At the moment of finishing this paper the project is over, together with several evaluations between the partners in the project. Due to the open dialogue that was characteristic for evaluation sessions we have arrived to a list of lessons learned. Here we will only briefly list them.

5.1 Young Participants

Through analysis of young participants' engagement, surveys and interviews, web series production³ and finally by watching their presentation of the project at the Dance Festival 2019, we argue that for young participants this was rich and valuable experience. The great majority of young participants who answered the final survey, 7 of the 12 participants who finished the project, emphasized that the participation in the Meet the Ministry project was (1) really exciting, (2) they have learned a lot, and (3) they have made a lot of new contacts.

³ Material produced during Meet the Ministry project: <https://en.opera.se/om-oss/skapa/dans-med-skapa/mot-ministeriet/>

They express positive feelings about being able to learn more about contemporary dance, but also experiment with video production. Even though they repeat they did not have any expectations from this project, in majority they were positively surprised. The participation in the workshops in the Opera House gave them a “*wow feeling*” and influenced their feeling of being closer to the Opera House. Almost all of them would participate in a similar project in the future, and would recommend such projects to their peers.

It is important not to forget that some of the young participants felt confused and would prefer better communication and organisation. Also, out of starting out with 17 participants, only 12 finished the project. Unfortunately, in the frame of this project it was not possible to go deeper in analysis about who are those that dropped out and the reason for it.

5.2 DCOH

With this project the Opera House not only sparked a new way of thinking about how to engage with the youngest audience, but also challenged many internal, traditional concepts. Acknowledging that the project has completely hit the target from one perspective - young participants have learned a lot about the contemporary dance form, the DCOH realised that there is a lot to be learned and accepted in order to be successful in outreach to the youngest. Here we briefly present identified challenges from different perspectives, (1) dancers’, and (2) DCOH management.

(1) A majority of the dance professionals found the project frustrating and not clear enough, wishing they had a better understanding of the goals. Paired with the traditional lack of time which was also reported in this project, resulted in frustrating “*too many cooks*” and a “*reinvent the wheel*” atmosphere. Dancers report feeling good while doing workshops with the young participants but they wish the whole project was more structured and better organised. When asked if they would recommend such a project to their colleagues they were quite polarised.

(2) The management of DCOH and people who were responsible for the organisation of the project agree that the project was rich and valuable pilot, where they learned a lot about themselves and young participants. Pointing out that this project is perceived as extremely “*exclusive*” by engaging finally only 12 young people, they express ambition to continue exploring this model in the future aiming to increase the number of engaged young participants and improve the reachout. They list the following issues as the most important focus for future projects of this kind: strategic decisions on “*becoming digital*”; tighter and timely collaboration among internal departments; more time to prepare and plan; a need for better internal and external communication; improve the process and reiterate; and find ways to make a better usage of communication technology.

5.3 TSLIS

For us, researchers, this project was a very interesting way to learn too. Here again, we only briefly list the most important findings.

(1) The power of user-centred ID - When the user is also the designer of the ID we not only increase functionalities and project quality, we at the same time empower the user, the one who is to be affected by ID, by offering the opportunity to influence the design (Simonsen and Robertson, 2012; Kale, 2017). Still, we must not forget that such efforts are costly and require a lot of resources and time.

(2) Collaborative art projects seem to be successful tools for social innovation and interdisciplinary learning - On a social innovation level; collaborative art projects enable acquisition of bridging social capital. We should keep this important lesson in mind, and be more careful when we recruit participants, if, for example, we are to test such projects for social integration and empowerment. Furthermore, this project is a fine example of the power of experiential learning where project participants not only learned much about the contemporary dance, but at the same time learned new digital skills. In other words they learn 4Cs – creativity, communication, critical thinking, and collaboration, i.e. 21st century skills (Kivunja, 2015), through 5Es from real-life: experience, engagement, exploration, evaluation, and elaboration.

(3) Inter-institutional collaborations as the highways toward sustainability. Although we witness considerable focus on sustainability in science and politics, our society is continuously developing unsustainable paths. We agree with Abson and colleagues (2017) that one of the cornerstones for sustainable interventions is reconstruction of institutions, since they guide and restrict the actions. One of the most important lessons learned through this project collaboration is that interdisciplinary inter-institutional

collaboration augments social impact and learning. If we look at it from the perspective of the national governments who are traditional owners and funders of these institutions, it is easy to understand why and how inter-institutional collaboration leads to a more sustainable society.

6. CONCLUSION

We live in a world where our leading institutions claim that many of the complex problems society is currently facing demand innovative solutions that combine knowledge from different scientific disciplines (Van Rijnsoever and Hessels, 2011). However, we agree that interdisciplinary collaborations are extremely risky by being unpredictable in their outcome and the process (Kanakia, 2007). As Briazu argues (2017) even though the literature offers advice on principles for good interdisciplinary work (Nancarrow et al., 2013) there are still no guarantees that the risk and pitfalls can be fully avoided. One can only be brave and work hard hoping that benefits will outnumber the challenges.

Bearing in mind that interdisciplinary research has the potential to deepen knowledge in one's own discipline and to provide new insights and inspiration from other disciplines, we should continue developing interdisciplinary interinstitutional projects and learn from both the results and the process of creation. Most importantly, it seems that our youngest are interested in partnering up with us in exploring communication and collaboration in multidisciplinary interinstitutional settings. We should do nothing less than help them open as many doors as we can.

To conclude, we must say that there is a lot more to be done, be experienced and learn from, especially in the realm of digital storytelling as a tool for learning and bridging social capital acquisition. Therefore, this paper should be taken as a tool that will help the preparation and analysis of such complex and rich collaborations.

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