NESTED EXPERIENCE: TEACHING OTHERS TO ENGAGE OTHERS

HILLARY CAREY
Yahoo INC.
hcarey@yahoo-inc.com

ABSTRACT

There is a nested complexity to many participatory design challenges that can be overlooked in the initial stages. When we are teaching or training others to be participatory designers, we create a layered experience, which if we are not aware, can cause tensions for those people in the middle. It is the learners—who are both participants and guides for other participants— that must negotiate a dual experience. And we, as their facilitators, will be better prepared if we plan for it. This paper will describe a recent experience in which this tension became clear because we did not recognize the nested nature of the experience until we were immersed in it. I believe it is useful to imagine how to plan ahead for the nestedness of these experiences to achieve better results in the future.

In the beginning of 2009, I, along with two other design professionals, specialize in teaching design processes to clients and were tasked with "training four new hires in user-centred design methods" (the client's words) while completing an intense participatory project on a hospital floor, both learning and designing together.

INTRODUCTION

Hospitals, and other traditionally rigid industries, are beginning to explore the benefits of applying design thinking and user centered innovation to problems within their walls (Christensen, 2009, Brown, 2009). I tackled one such project while employed by a design and innovation firm for which there is a longstanding collaborative relationship with an American healthcare system. Together they have established a user-centered design and innovation group within the hospital setting, tasked with improving patient care on the hospital floor. This internal innovation group has earned several successes on their own over the past four years and so in 2008 was awarded an opportunity to expand their team to include four new people, through a large grant interested in measuring the effect of user-centered design in healthcare. As part of the grant, the healthcare group would hire four people with the potential to be user-centered designers—some with design training, others with hospital and healthcare training—to be trained alongside us as design professionals, as we completed a measured

Figure 2: In the beginning the emphasis rested on our experience teaching skills to the new designers

and tested design project on the hospital ward.

In retrospect there are many topics of discussion that stem from such a project brief alone: the difficulty of learning while executing on a real project, the complexity of learning at once how to stretch creative problem-solving muscles, respect and honor participants in a participatory design process, and learn the strict and rigid behaviors of working on a hospital floor, among others topics. Because this is intended to be a short paper, I am most interested in exploring only the experience of teaching a participatory process in a participatory manner: the nested experiences. I will have to leave the critique of the project brief for another discussion.

PLANNING THE PROJECT

The health care client, and their supporting grant, specified two simultaneous goals: teach a participatory innovation process to the four new hires and deliver innovative, successful solu-

tions. The process of participatory innovation that we were instructing was a combination of user centred design (Kelly, 2005) and participatory design processes that the client's innovation team had developed while working alongside hospital staff. Participatory innovation was also the method used for delivering the design solution portion of the grant, in that as the facilitators of the project we would need to teach our processes and skills *while* engaging the new hires in identifying, designing and prototyping solutions in the hospital.

Three designers, with experience in teaching and facilitating user-centered design, came together in early Spring of 2009 to begin preparing for this design project. The healthcare client had conducted interviews and selected four new hires. Our project would begin when they finished their new hire orientation. The grant dictated that the project would last for two years from start of design training to finalizing the measurements of success. These metrics, simply put, were to be measurable improvements in patient health outcomes as a result of the designs from the project. The grant also described to us that our primary means for improving patient outcomes would be with the nursing staff: their tools, environment, processes and behaviors.

We had the benefit of the client team to guide the experience of working in hospital settings. They would conduct training for all of us to learn protocol for patient and staff privacy, primers on how nursing staffs are structured and how shifts are run, and to serve as check ins for any specific questions about what we would observe on the hospital floor. Aside from that, once the corporate orientation was completed, our team from the design firm was in charge of the learning experience and project structure for the new designers.

We crafted a sketch of a timeline for the project that mirrors most design projects in our firm, with the addition of an extended time in the beginning for training the new designers and an extended time after prototyping to introduce concepts into practice in several hospital wards.

THE NESTED PROCESS UNFOLDING

Prioritized in our minds, and evident

Week	Objectives
1	Introduction to design thinking and user-centered design
2	Introduction to hospital UCD techniques (client-led)
3&4	First observations on the hospital floor, looking for the big opportunities, new designers rely on instructors for guidance
5&6	Synthesis
7	Stakeholder meeting: Sharing insights, making choices
8	Final opportunity areas chosen
9	Learning sessions: Observations and interviews
10-12	Observations in several hospital settings
13	Learning sessions: Synthesis
14	Synthesis of findings
15	Learning sessions: Making sense and Frameworks
16	Making sense
17	Preparing to share findings
18	Preparing for a Deep Dive workshop
19	Deep Dive to share findings and engage hospital staff
20	Making sense of what we learned from the hospitals
21	Learning sessions: Prototyping
22-25	Prototype building & sharing with nurses in context
26	Assessment of prototypes, choosing final solutions
27	Building working prototypes
28-31	Changing nurse processes to incorporate prototypes and gather feedback
32&33	Preparing training materials for nurses
34&35	Training sessions for nurses
36 & beyond	Incorporating new practices into existing workflows (client-lead)

Table 1: The project timeline followed this approximate schedule.

in this schedule, was the learning experiences for the new designers. We considered the flow of a design project and how to teach techniques ahead of time, as well as in the moment. We built pre-

Figure 1: The affinities of the ten core team members involved.

sentations and workbooks to support discussions around observation skills and creative problem solving. We designed workshop experiences so that our new designers could learn in an active, hands-on manner.

This worked well for the first weeks. The energy and excitement of learning something new brought everyone together. The new designers practiced diligently, asked questions, read books and articles in their free time and maintained focus. Perhaps too much focus. While the goal of designing something to improve patient care was projected as the purpose of the project, it was fuzzy and vague for many months while we performed the groundwork of the grant. We did not know what we would build in the end, but we knew the steps to get there. So it was easier for us all to focus on the steps and trust that the solutions would come.

OVER-EMPHASIS ON REFLECTION

The learning experience was a significant portion of the project, and the reason that my design firm had been brought in to help. Therefore we all took it seriously. The client wanted to be sure that the value that our design firm brought was clear, tangible and recorded. They requested that the new designers capture their learnings in various journals and presentations, because they wanted to be able to transfer that learning to other new hires in the future. That added a sense of importance to the learning, and in turn, the learners. They asked more questions about process. They became more reflective. They captured their experiences carefully.

INTIMIDATION IN THE HOSPITAL

When we began the observations on the hospital floor it was a chance for

the new designers to try out their new skills. And it was also the beginning of building relationships with the nurses and other staff on the hospital wards we would be working with. Our client team stressed the value of building strong relationships so that we could engage the willing staff in the creative parts of the process. But hospital floors are intimidating places. It is stressful to interfere with the important work of healthcare, and to be seen as outsiders and novices. It was natural to rely on the experience and advice of the experienced client team. But it may have prevented each of us from constructing our own understanding and knowledge of how to engage our participants.

As a result, the new designers remained in the mode of "learner" while interacting with nurses, rather than "participatory facilitator." We made charts to track the people we spoke with, and the processes we observed. It allowed us to be sure that we were seeing everything we could. Yet artifacts that list and measure can build a wall between the observer and the subject.

REDIRECTING

It was then that our design firm team began to grow concerned. We sensed a tension within each new team member, a pressure to capture everything without absorbing it. We called a "Time Out" and literally moved out of the hospital for a day, leaving behind our charts and notes. We borrowed a room at the hotel and sat everyone down. We facilitated a discussion of what people were seeing in the hospital—without looking at their notes. This forced our learners to reflect, not on the skills they were learning, but on their observations of others. It was an invigorating day. They finished with a sense of confidence they had not had for weeks.

Figure 3: It was important for the new designers to focus on engaging the nurses, rather than on their experience with the facilitators

However, this reflection session was alarming to us as facilitators. We could see how the focus on process had affected the new designers' ability to facilitate participatory experiences on the floor. The goal of our observation phases was not to conduct strict ethnographic research limited to observation only. The healthcare clients had instructed us from the beginning that this experience is about learning from the nurses by building relationships and moving alongside them, and that solutions would fail if they did not come from the perspective of the nurses.

We finished our observations with some efforts toward a new attitude of engaging with and learning from the nurses. But it was when we left the hospital setting to conduct our synthesis and "making sense" sessions that we had a chance to really reset our thinking and habits with the nursing staff.

We needed to guide the new designers in the "service mentality" that comes with consulting and developing ideas alongside the nurses. There is a humbleness that one needs in order to engage participants in a dialogue about their goals and needs (Clark, 2007). It was subtle with our new designers, but the participants may sense whether you are working with them for their benefit or your own. "Learners" may err toward treating participants as subjects in an experiment, probing and prodding in order to learn. But strong participatory researchers empower participants with choices and treat them with sincere respect.

FOCUS ON THE END

A first step toward this new approach was to focus more on the end result. As I described earlier in the paper, the solution we were working toward was vague, and therefore easy to ignore. We brought that more clearly into focus by describing the steps of implementation. The client team was able to illustrate past examples of successful designs and how they had become a part of the hospital's processes. It is an extensive process of working with staff at all levels within the hospital and carefully engaging and designing alongside the end users. This served to emphasize the importance of being a responsible and respectful participatory researcher in the experience of the

nurses' daily work.

PARTICIPATORY PROTOTYPING

With a renewed understanding of the attitude of engaging users in participatory processes that place users in a role of contributor and stakeholder, the designer learners began the steps of developing and testing prototypes. Focused on the truth that the nurses are participating in designing something that will soon become a process that they need to follow as a requirement of their job, our new designers saw themselves as the people identifying solutions that were dependant on, and shaped by the end users. The nurses must have a chance to influence and have their voices heard. Therefore the new designers were first facilitating experience, then designing products—experiences within a work environment that needed to engage the nursing staff in a way that enabled them to think critically about what they can change and sustain in their daily work. A few practical habits helped us to be more "participatory" in the prototyping phase:

- Put making connections first. Before focusing on your ideas, focus on the participants. Taking time to develop relationships without working on specific ideas is worthwhile time spent. On some hospital floors we developed great relationships with influential nurses. They would act as our cheerleaders and networkers. They helped us learn more and they feel ownership over the ideas because they have been involved in them. On other floors where we did not have those relationship yet, and it showed. The nurses would look at the ideas as "yours, not mine" and could not be enthusiastic about trying them out.

- Support ideation with their stories. When building ideas with participants, it can be a lot to ask for them to invent ideas on the spot. When this happens, describe your goal, and ask for stories and examples of moments when that goal seemed possible, and times when it didn't. Look for the characteristics that are important to them, and imagine solutions.

- Always have a "cover sheet." A cover sheet would describe the goal or objective of the prototype. Start every interaction by describing the problem you are trying to solve, not the

solution being presented. Gather feedback from the staff about the problem first, to understand their perspective and to share your own. Once you have had a dialogue about the purpose you can begin to show a proposed solution and accommodate their perspective in the moment.

• Many of the tools for engaging participants are simply good researcher skills. But the context of prototyping is so different from the initial observation phase that the team can easily forget to apply what they know about asking open-ended questions and listening. A refresher was helpful to remind the new designers of interviewing and listening skills.

CONCLUSION

Partway through a two year project of helping a hospital to build it's own innovation design team, we gained a clearer perspective. A participatory design project has many experiences nested within it. Too much of our energy, and the weight of the work, was put into "transforming" the four new hire team members. This was a significant learning experience for them, and our goal was for them to feel inspired and in-control of what they were learning; constructing the experience themselves. Unfortunately, the result of that was that their experience became remarkably self-centered. While it is a helpful state of mind for people who are learning, it is in tension with the need for designers in a participatory process to put their participants first.

More crucial to the project than recording the learning that was happening was developing the skills to facilitate participatory experiences with nurses to find solutions to better care for patients. The fundamental belief of the client has always been that solutions are developed by, with, and for the end-user, in our case: the nurses. This is the very opposite of the reflective learner— one must believe that the answers lie in someone else. In retrospect, we did not move into that mode of thinking soon enough, making it difficult for the team to give up their own needs for the needs of the nurses. A few key learnings will help us design better participatory learning experiences in the future:

• Each of these nested experiences should have it's own ground-rules and structure. Identifying each of the layers in the beginning of the project, and begin with the central experience of the participant. Constructing all other experiences upon that could lead to a smoother experience for all people involved. We might have asked ourselves, "What will it take to make sure the nurses are engaged?" and then built the project timeline and the learning experiences around that.

• Make a distinct break between student-focused time and researcher-in-the-field time. After all, to the participants, we all were in the same position of outsider and disruptor. Once we enter the field, we are all facilitators of the participant's experience, and their experience takes priority.

• Be wary of habits that give too much weight to the learning experience. Instructing too often might take focus away from the end goal. In order for learners to become good facilitators they need time to find their own way toward the goal.

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