Final Charrette Reflection

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Introduction

The purpose of the document is to overview the possible adaptation of the HCDE Charette Protocols for use in a middle school setting. The suggestions are based off the data gathered by performing the charrettes during the course of the Outreach DRG, and various discussions on how to best adapt the charrettes.

Reflection

Below are a series of reflections on each part of the process, detailing strengths, weaknesses, and changes from the initial charette.

Logistics

Performing the HCDE Charette requires a number of materials. To prepare for a workshop, facilitators should bring supplies such as large Paper Easel Pads, enough for one per student group, as well as a number of pencils and markers, enough to have at least one per student in the workshop. Our adjusted protocol, outlined in detail below, also requires additional materials. A series of cards containing the name of multiple professions should be created. A series of cards containing traits and characteristics should be created. A hat or container of some sort should be procured in order to facilitate randomized drawings of profession and characteristics. It may be possible to arrange with specific teachers to have these materials on hand, but the presence of the materials should not be assumed, and should be readily provided by the facilitators. Additionally, pre-printed sheets for our chosen domain, or domains, should be created, in order to provide a physical reminder and guide to the students. One more component would be planning materials for teachers. We found in our initial runthrough that the teachers could work effectively in keeping their students on track, but found that without an understanding of the material, the teachers would send conflicting messages. Thus, providing the teachers with prep materials should enable them to be on the same page and make the activity smoother.

Domain Choice

The domain of the smart vehicle still serves our purpose for developing a workshop around. It is an interesting concept will multiple avenues to explore, and a variety of solutions that all are encompassed by 'smart car'. The primary change will be that students will not have developed their persona through simply their own imagination, but through a random draw or profession and personality cards. Thus, they have a more focused and less confusing path to explore how

their target user would benefit from a smart vehicle. Additional Domains are also possible, and it may be interesting to have multiple projects for different groups. However, the simplicity of a single domain, and the variety of answers that can come out of it, make a single domain likely the best choice.

Timing of Steps

During the Charrettes, we found that certain components took much longer than expected, and some were very confusing to the students. Keeping that in mind, the possible plan going forward has a significantly revised persona and needs portion, allowing for time saving, and to keep the inclusion of the Interaction Flow, which would otherwise be cut for time. Below is an example of the changed timings:

Introduction: 1 minute (1)
Team Intro: 1 minute (2)
Context: 3 minutes (5)
Charrette Intro: 4 minutes (9)
Problem: 2 minutes (11)
Generate User: 3 minutes (14)
Generate Needs: 3 minutes (17)
Scenario: 10 minutes (27)
Interaction Flow: 10 minutes (37)
Presentation Prep: 3 minutes (40)
Presentations: 7 minutes (47)
Reflection/Wrap Up: 3 minutes (50)

Brainstorming and Personas

In regards to brainstorming and assigning personas to students, it was decided that it would be best for middle school students if we assigned them users to work with, which differs from our revised protocol. We had the idea to allow groups to draw attributes from a hat in order to "build" and create their user, which would give their person a name, a personality, and any other relevant attributes that would assist them. This way, we could not only save on time for brainstorming, but each group would have a well rounded user to work with throughout the entire charrette process. This would hopefully prevent any delays and also make sure they wouldn't get stuck at any future step because of a possibly poorly chosen user. In addition, we would also change how the needs and activities are chosen for the user.

Needs/Activities

Rather than allowing users to brainstorm their own needs, as we did in our revised protocol, we also think it would be best to give each group a problem to work with (either the same one or a different one for each group). This way, the middle school students are guided through the first

few initial steps so they can focus more on the more important and fundamental steps of the process (interaction flow and screenflow).

Affinity Diagramming

As a result of simplifying the persona process, we have also completely eliminated affinity diagramming as there aren't multiple users and needs that need to be grouped and then chosen from. For the interaction flow, we decided to keep it in the same form as the initial protocol and still include it in our charrette process, now that we have extra time saved from the personas. This step would allow each group to plan out exactly how they could solve their problem by writing down and following a series of steps so they can imagine how their user would interact with their creation.

Screenflow

While conducting the charette it was noted that students took longer than anticipated to create the storyboard. We decided to skip over the screen flow, as we gained an understanding that middle schoolers would find this concept a little to grasp, is they did not have any prior experience with creating logic diagrams. We also learned that students were able to communicate concepts to a degree that was satisfactory enough to present to the rest of the class.

Sketching

We discovered that students had reasonable sketching skills, and were able to illustrate their ideas well enough for others to understand. The volunteers helped out with by reminding the students of what the problem statement was, and helping them develop their ideas. Students enjoyed the process of sketching and storyboarding, and reported this as their most favorite part of the charrette, in the survey we asked them to fill out.

One change we had to make was to adapt the example scenario on the slide to something easier to relate to for the students. One of the moderators created a storyboard to order a pizza. Since this was an activity students were familiar with, or had seen others doing often, they were able to understand what the idea of a storyboard was. In addition, we noted that since illustrations in the example scenario were very artistic and detailed, students aspired to create similar illustrations of their own. We had to reinforce the idea that it was not the quality of the illustrations that mattered, but rather the completeness of the idea. We also learned that the stick figures created by one of the moderators, was a better example on how to create a storyboard in this case.

Presentations

Students were asked to present as a group for about a minute. They had to walk through their respective sections of the storyboard they created and explain their idea to the rest of the groups. The students fared well in this part, and were not shy to present.

Facilitator Role

There were three main facilitators during this charette. Two of the facilitators were actively involved in explaining what needed to be done, while the third helped in class management and clarifying any questions students had. The facilitation style was a mix of fun and task oriented. Students responded well to the facilitators, and did not seem inhibited to ask questions or complete the task at hand. We learned that, more time could be allocated to getting to know the students and introducing themselves. If we did this, then students would be more actively engaged in the task since they opened up. Having a conversational style, and being cheerful is important, we learned. The students would like to know of us as their friends there to help them out, rather than being forced to do something they do not enjoy. Also, helping students speak out is important.

We also had one volunteer per group helping the students, keeping them focused and handling the group. This was helpful as they seemed to know the students better and knew what their individual personalities were like.

Conclusion

The charette received positive feedback, on the whole, with students leaving with an understanding of the creative process and looking forward to subsequent workshops. Further workshops that intend to immerse the students over a longer period of time will create further curiosity about the process and engagement with it. We feel that a charette is more informative than an information session.