Community Mapping 2.0: Using Technology to Raise Community Awareness

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Abstract

Community mapping can be an important tool for educators who aim to freely allow students to share their own connections and experiences. During community mapping, students identify areas within their own localities that matter to them, and engage in various literacy events centered on those places. Often, classes will study foreign lands and cultures during the course of a school year. While this is a wonderful learning opportunity, do they take the time to look deeper into their own personal neighborhoods and surroundings? This study uncovers the nuances of community mapping, as a group of third grade students work through the process together. Through their work, they were able to positively increase their local knowledge as well as gain a deeper understanding of the thoughts, ideas, and opinions of their classmates. While this case study addresses elementary school students, it is possible to perform variations of community mapping with students of all ages. For those who interested in implementing community mapping in their own classrooms, this study serves as a step-by-step guide.

Key Words: community mapping, literacy instruction, holistic learning, reading, geography

Introduction

It is rather common to find a literacy class that discusses the idea of setting at various points in a given school year. The students tend to become accustomed to finding various fictitious settings and sometimes weave them into tasks associated with a particular literacy event. However, from the perspective of an instructor, it is possible to recognize that this did not carry over as efficiently to their lives beyond the classroom. After a multitude of work with settings in the plethora of the stories that were read over the course of the year, the students in this study had a limited awareness of the actual settings in their own community. There was an apparent disconnect that became evident when the group was asked for personal connections related to settings. Answers here were often not detailed and extensive, and were sometimes about places that they had visited as opposed to their own town. As their teacher, I employed the

process of community mapping as an effort to do what Dunsmore, Ordonez-Jasis and Herrera (2013) refer to as "making the unfamiliar known" (p. 331). Community mapping encourages students to pay close attention to various aspects of the setting that surrounds them on a daily basis, "Maps help readers understand the relationship between their own world and what they are reading" (Fountas & Pinnell, 2012, p.160.) Community mapping plays upon this principle and many others to provide a high-quality learning experience.

I have the advantage of being a faculty member, as well as a resident of the community. Therefore, I knew that our area had a rich history and a fair amount of diversity within the small businesses that exist within our borders. My third graders used the process of community mapping to identify the places we wanted to explore, and they made their own personal connections to those selected places. We then engaged in a dialogue about the differences in opinion and experiences within those locations by the members of the group because "Community mapping is a process that allows the 'mapper' to develop new understandings about a specific geographical area" (Ordonez-Jasis & Jasis, 2011, p.190). We also integrated technology such as Google Maps, Power Point, and Prezi to further represent the ideas of the children in a more visual and interactive fashion. The goal of this activity was to see if community mapping could raise the general awareness of the students regarding their own setting and the various perspectives that exist within that setting.

Literature Review

Community mapping has been a pedagogically relevant activity for a great deal of time. Though it varies in form and presentation, it has proven itself to be a formidable activity for teachers to use with their students. Students use their setting, the places that they value most in this particular setting, as the center of the activity as "Community-mapping projects emerge for

various purposes at various scales, and their meanings are altered in the mapping process"
(Baker, 2006, p. 472). It is this variety that allows community mapping to be adaptable to
children of various ages and experience levels. Additionally, this mutability has enabled this
pedagogical approach to change with the times because "New forms of community mapping are
expected to emerge, employing different styles, media, technologies, content, and politics"
(Perkins, 2007, p. 136-137). These new forms and purposes are vital in the understanding that
this is not a "one size fits all" situation, but rather one that can be tailored to suit a particular
group of young learners. Moll et al. (1991) have presented the idea that each learner has unique
"funds of knowledge", and this type of activity is done with that in mind.

At its core, community mapping is a process by which students explore and identify areas
of their townships that are of great interest or importance to them because "Maps are therefore
able to capture emotional and other abstract connections experienced by the mapmaker"
(Amsden & Van Wynsberghe, 2005, p. 361). The students create a map that is a representation of
the places that they feel are vital to their community, and in doing so, share these thoughts with
those around them. This group process is important because "When created in a group setting,
the telling of stories not only reinforces the collectivity amongst those involved, but the end
product presents a snapshot of the community as the community sees it" (Amsden & Van
Wynsberghe, 2005, p. 362). In the cases where the maps became a cohesive effort among various
student work teams, the completed products often displayed locations that the students wanted to
share with their team members in this socially situated experience.

Participants and Setting

The school was located in a suburban area of New York City in Suffolk County, New
York. Overall, the district had a lower student population than many other districts in the county

and neighboring counties. The middle school and high school sports teams play in the "Small Schools Conference" as evidence of this reduced size. There were three elementary schools in this district. Students began their schooling in K-1 center before splitting off into two "intermediate" style schools, servicing students from grades two through five. The middle school included students from grade six through eight, and the high school included grades nine through twelve. The elementary school used for this project was the larger of the two "intermediate" buildings. There were roughly 550 students in the school, and about 25 children per class.

The group that participated in community mapping had seven students (all names were changed to protect their identities). Each student had been designated by the school as a "student in need of Academic Intervention Services in the area of reading and writing". It is worth stating that this label was not given (or said) to these children by anyone on the literacy education staff. These students meet with me three times per week for forty-minute sessions. I had three of the students in the prior year as well in a similar group format, although that group met four times per week. Two students were bilingual and received services as English Language Learners on a daily basis. Six of the students lived within the boundaries of the school district, and one student was bused into the school as part of a shared agreement with other district to offer educational opportunities to homeless children currently residing in shelters.

Data Collection and Methodology

This study was done as a case study, as it provided a wide range of options for data collection and recording. "Case studies may use questionnaires, archival records, or psychological testing in addition to interviewing, observing, and analyzing documents. Just as with ethnographies, case studies are methodologically eclectic" (Rossman & Rallis, 2011, p. 118). The central method of recording observations from the classroom interactions of the

students were field notes. These were recorded daily during the time that students were producing work. In addition to the notes, the students generated artifacts that were digitized. These were finalized iterations of work that they completed in handwritten format.

The teacher-as-researcher format was used because there were no other classrooms performing tasks such as these during the research period. Stenhouse (1975) noted that this "allows others to observe your work" (p. 144). This has had some historically successful results as well. "The idea of encouraging teachers to do research on their own schools or in their own classrooms is not a new one" (Hammersley, 1993, p.424). This model also allowed for consistency, as instruction in this area was only coming from a singular source, meaning that differences in lesson delivery would not impact outcomes. The author and teacher-researcher are the same for this piece. The goal was to see the impact that community mapping would have on the students in both a literacy and local geographic sense.

There was an action research piece to this project as well. "Action research is an iterative process in which research and practitioners act together in the context of an identified problem and effect positive change within a mutually acceptable framework" (Albert, Levinson, & Lingard, 2008, p.461). As students increase awareness of the setting that surrounds them, this would allow what was taught in class to be readily transferred to the larger community, which was something that was not occurring with such ease for these students prior to the project. As stated earlier, when asked to link real-life immediate settings to the ones that were appearing in our textual experiences, participation showed this to be an area of need.

Results

The community mapping project was adapted to suit the educational abilities and needs of the group members. Additionally, the group was given various choices throughout the process to allow them to feel more comfortable and to provide them with a greater level of ownership over the activity. This was not a simple idea that took hold over the course of singular class or lesson. The community maps and correlating pieces were formed over the course of a three-week period, encompassing about ten forty-minute class sessions. This pacing seemed appropriate when I considered the individual skills of these students. Students were free to read and comment on each other's work, as well as take risks as learners to bring up ideas and places that they felt were easy for them discuss with their peers.

Step One: Explaining the Basics and Generating Ideas

I knew that this would be the first attempt at any form of community mapping for all seven of the students. We began with a group talk about setting and about our community. The goal of this lesson was to begin pushing the students in a direction that would create connections between their knowledge of the literary element of setting with their own settings within our town. The students were starting bring up the names of certain, specific locations that they found to be of interest. I allowed this open conversation between them to continue.

I stopped the students and explained that over the course of the next few weeks and sessions, we would be doing a project related to their discussion. I outlined the basics of community mapping for them. The students were given a minute or two to contemplate some of the places that they heard or mentioned today before being asked to share them aloud. As the

students raised their hands to share community places that they wanted to explore, I recorded them up at the whiteboard. As time ran short, a solid list of about twenty places was created.

Our goal for the next session was to be more selective about our choices and funnel our twenty choices down to a more manageable number. We kept the places that a majority of the group knew and removed ones that fostered less interest. I noticed that some of the students were a bit disappointed that their choices had been erased from the board. In order to assuage this issue, I told each student that they would be allowed one selection of their choice under a new "Personal Recommendations" section that we would be using. I told them that we would address this "Personal Recommendations" section further next time. I took a picture of the list on the board so that it would be retained for upcoming classes.

The students were also asked to do optional further research about some of the choices that made our "final cut". Each child in the group received a blank piece of paper and was instructed to use this paper to record the list that was currently on the board. I invited them to ask a member of their household to take them to a few of these settings so that they could more easily reflect upon them in the lessons to come. Four of the students returned to school stating that they had done this type of live research. All four of the students enjoyed driving and walking around town and they felt it was a beneficial experience.

Step Two: Adding Reflections

For each of our locations, I created a reflection sheet and released them to the students. The students were encouraged to write their thoughts about the given place, yet students who felt that they did not possess ample knowledge for that area did not have to comment. For example, "Town Hall" was labeled on the top of one of these reflection sheets. Students who felt as if they

had something to say about Town Hall were free to write about this setting, the others could select to opt out of that particular sheet. I put each reflection sheet on a clipboard and sat them upright on the ledge of the whiteboard. This allowed students to work on different sheets of choice and switch with other students as they continued to work. I was rather pleased to see how the children politely communicated with each other as they sought out the clipboard that they needed. It was also nice to see that every student participated in a majority of the reflections.

The next day, students were allotted some extra time to complete any entries that they did not get a chance to complete during the previous day. After the students felt that were finished with the clipboards, I introduced the idea of the "Personal Recommendations" sheets, as well as the "My House" sheet (where they described their homes and/or neighborhood). Unlike the other sheets, these two were not optional. The "Personal Recommendations" was reserved for any setting that the students wanted to reflect upon. They would list the location, and then list their thoughts next to that particular locale. I also reminded the group that if anyone had an idea removed from the final list on the board (from the original twenty), that this was their opportunity to write about that place. There was an overwhelmingly positive reaction to these two new added sheets.

Step Three: Creating the Map

Initially, I planned on creating a physical map with the students and hanging it up somewhere in the room. The students had other ideas, and I was asked by one of the group members if we could use Google Maps. While I stopped to think about this idea, the other children in the group began raucously supporting it. I decided that we should take a vote. Google Maps won a rather resounding victory. I turned on our Smart Board and began the process. As

the computer was starting to boot up, I placed our "final cut" list on the whiteboard so that we could stay organized while we mapped out each selection.

We began by opening Google Maps on the computer and typing in our first point of interest. Once the point appeared on the map, we entered in the remainder of the list. At this point, the students wanted to experiment with the various views that Google offers. For a short period of time, there was a discussion about whether to use the "satellite view", "hybrid view", or "map view". Eventually, the group concluded that we should stay with the original map view. They said that it fit better with the idea of "community mapping". I took a screenshot of the map after all of the points were successfully plotted (Picture 1). The room resonated with a certain sense of satisfaction and accomplishment. The first part of this project was completed, and we would now move on to integrating even more technology for our mapping.
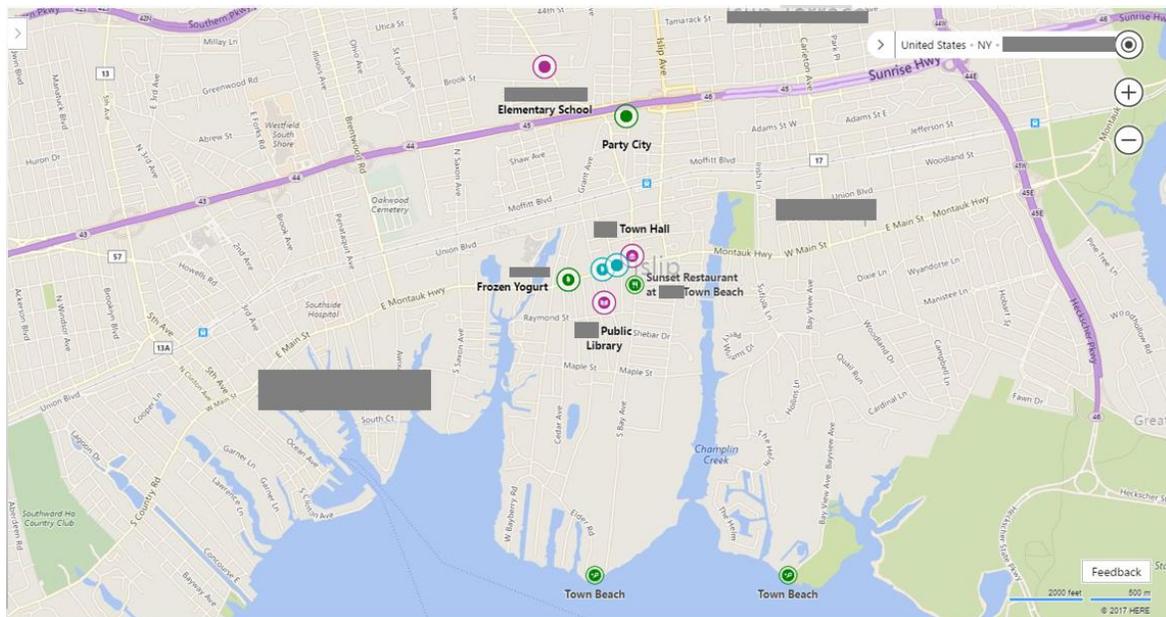

Figure 1: This is the Google Map that the students generated. They selected the display and zoom level.

Step Four: Placing Our Reflections on Power Point and Prezi

I gathered the reflections sheets before this lesson. I loaded Power Point and turned on the Smart Board. As a group, we went through a wide array of backgrounds and fonts until we found ones that could be agreed upon by the students. Next, the students were each handed a reflection sheet to type on one of the computers. As the students finished their typing, I opened the Power Point on their computer, cut and pasted the information onto a slide, and saved the file (See Figure 2). Since there were varied levels of technological expertise, I did some of the final touches to the slides such as text box positioning, bulleting, and font colors. I also added some images and created an introduction slide. This part of the project brought together every reflection from every student in our group (See Figure 3).

Though this was initially intended to be the end of the project, a student complaint led a valuable learning extension. A student noted that she enjoyed this work but wanted to have something that she could share with the members of her family. Students (of this age) in our district are not assigned email addresses, so sending the Power Point as an attachment to them would not be a possibility. I thought about this conundrum before the next lesson and decided that a Prezi presentation would be ideal for sharing because the students could simply copy the link and take it home to view.
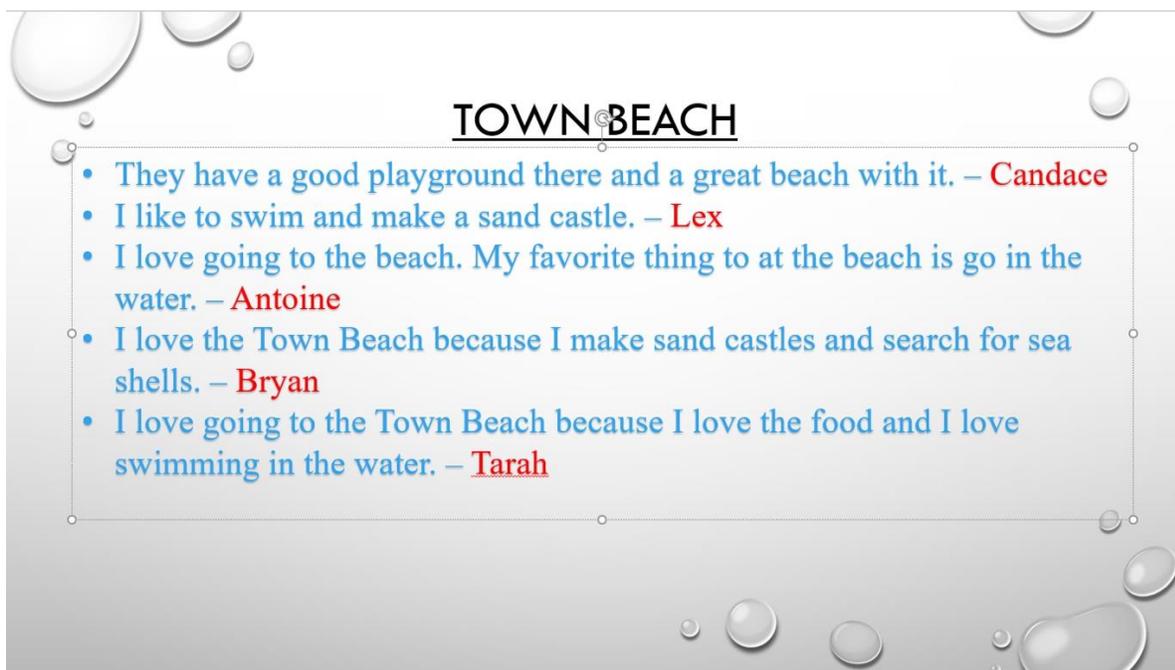
Figure 2: This was a typical slide that contains information from the clipboards about our selected locations.
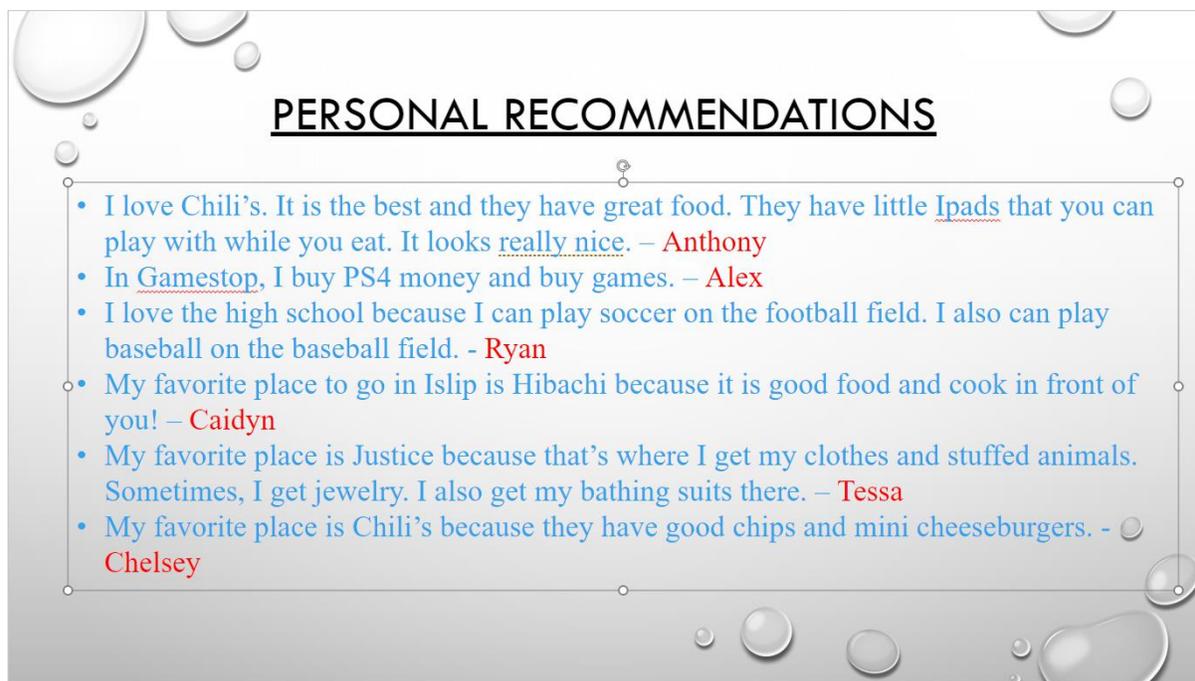
Figure 3: This was an example of the "Personal Recommendations" slide that allowed everyone to pick a place of their choice.

I had to take more control over the creation of the Prezi because many students lacked experience with this format (See Figure 4). The students viewed voluminous amounts of potential backgrounds and templates. A major benefit of utilizing Prezi is the easy and seamless integration of Power Point slides. The students eventually settled on a setup that looked like an iPad and each "tile" or "icon" was styled to look like a photo or logo of the business or place that is linked to it. These "tiles" could be clicked on, and the accompanying Power Point slide would show up. I spent a few days completing this part of the project and then shared the presentation and the access link for home with the students. They were excited to take these links home to show their families and friends.
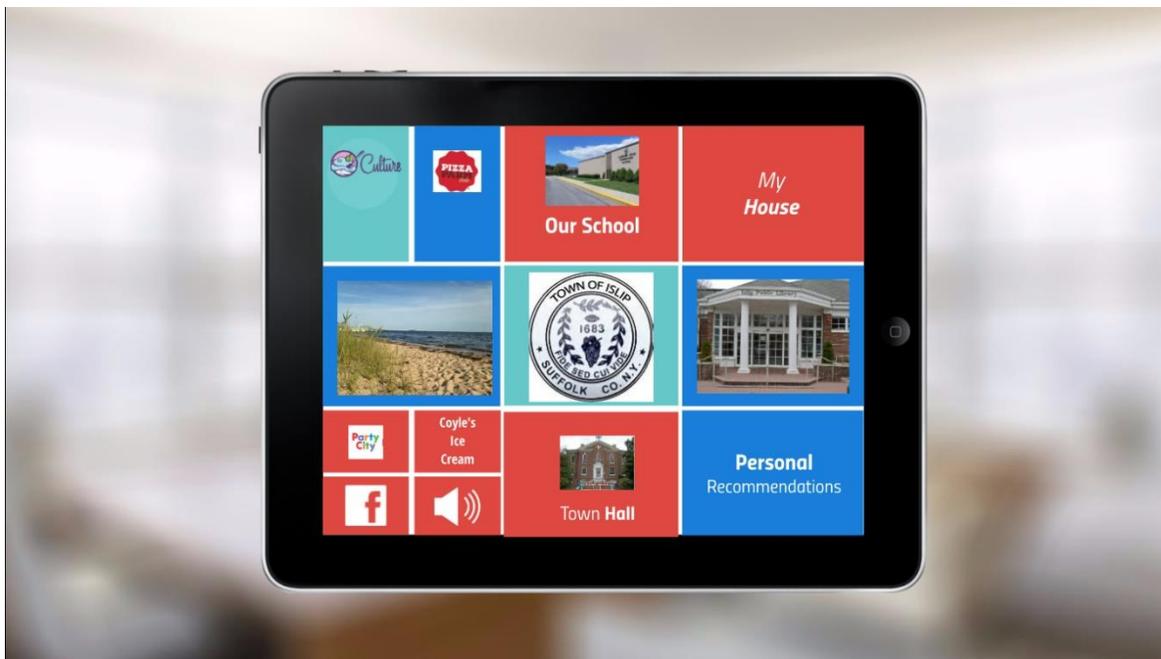
Figure 4: This is the Prezi with "tiles" that are linked to the Power Point slides. Students use a link for home viewing.

Analysis

Community mapping is a useful tool for educators for a wide variety of reasons. One of the first benefits that became noticeable was the positive discussion that successfully framed an

academic task in a socially constructed conversation. During "Step One", this was vital for the generation of ideas. Students respectfully spoke to one another, and this created a genuine sense of excitement for the lessons to come. I realized that an inclusive initial approach was important in the maintenance of this approbatory environment as "The classroom should be a place full of meaningful writing and useful reading and writing activities, where participation is possible without evaluation and collaboration is always available. No child should be excluded" (Smith, 1982, p.12). Additionally, as an instructor, I had to refrain from jumping in too soon and trying to control or direct the dialogue. This is why our first list ballooned to twenty items before being thinned out the next day. They formed their own sense of classroom community in the act of openly considering their larger community.

This entire process truly represented the ideology behind Moll et al.'s (1992) "funds of knowledge" approach. It demonstrated that each of them had unique perspectives, knowledge bases, and opinions about the different places within their community. We all learned from each other during the full spectrum of the verbal and written interactions and reflections. Some children were able to investigate with their families as they walked and drove through the town to view some of the spots that were chosen for research. One could also safely assume that these children engaged in some type of conversation with the family member who joined them in this activity and these "funds of knowledge" (Moll et al.,1992) were also tapped. Snippets from these interactions were subsequently brought into our class and used to enhance the knowledge and opinions of other students.

The digital approach that was used to display the data allowed the students to express themselves in versatile and multi-modal ways. "Moreover, since research in new literacies shows that young children and youth must be able to communicate in multiple modes, more research

into the implications of the processes and production involved in these modes is needed" (Wittingham, Huffman, Rickman, & Weidmaier, 2013, p.76). Students who were highly visual enjoyed the purity and simplicity of the Google Maps work, whereas those who are more tactile could potentially gravitate towards the live user interface of the Prezi setup. Just the mere mention of Google Maps was enough to elicit enthusiastic responses from these visual group members, and the reception of the Prezi link for the tactile students appeared to be a key event for them. These tactile children liked the personal town research piece as well. Further, preferences for a certain mode of data entry or recording ideas were also fulfilled by the choices that were offered to the students. Traditionalist group members felt a high comfort level with paper and pencil and felt positive about the "hard copy" nature that went with manually recording ideas onto various clipboards, as was shown by their ability to complete this portion of the task with relative ease. They also seemed to like the format of the teacher writing ideas from the group on the white board at the front of the room. This is contrasted equally with the inclusion of technology as a tool for arranging and displaying the finished product.

Conclusion

Community mapping opened up a myriad of learning opportunities for this group of third graders. Aside from developing a deeper base of knowledge for the area in which they live, the students were exposed to important educational items such as the use of technology, collaboration, live research, and understanding the opinions, viewpoints, and experiences of others. This supported that "Learning what others have discovered about the world and sharing one's own discoveries can be powerful motivators for learning to read, write, and speak effectively" (Conradi, McKenna, & Robinson, 2012, p.85). The students have deepened their connections with their community and one another. This experience has left an indelibly positive

mark on these students and provided them with skills and knowledge that they will be able to use and build upon for the rest of their academic lives.

From an instructional standpoint, this activity was eye-opening not only for the depth in which the students were able to go with their research and subsequent statements, but also in the breadth of ways that they were willing to display their insights. This bolstered my belief that regardless of the label placed upon them by the school, educators can still hold children to high standards. Community mapping also offered me a chance to connect with the students about their thoughts beyond school in a new and refreshing way. The experience was transformative.

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