To build a school takes vision and the know-how. To make this vision a reality, architects draft a blueprint and design a plan of action. In the hands of the builders, this plan is then molded with precision and expertise until the final project is realized.

Like a school, it takes time, design planning, collaboration and resources to build democratic citizenship in the built environment. Just as architects design and help to guide a project, we, as teachers, facilitate and provide opportunities for our students. As the builders in our classrooms, students use these opportunities to have a voice in their learning and to bring about change.
Our desire to create this vision in our own classrooms led to our research. We wanted to find out if Kindergarten students were interested in caring for their schools, and if they were capable of making a difference in the place where they learn and play. Out of this, our research question became: If Kindergarten students are given a voice and the opportunity to participate in their school's built environment, will this lead them to take an active role in shaping their school surroundings?

Our research study developed from our passion for built environment education, which involves fostering democratic citizenship. The "built environment" can be defined as the buildings and surrounding areas that are shaped and controlled by human beings. Democratic citizenship "… focuses on democracy as a moral way of life (Henderson, 1999). Teaching for democratic citizenship emphasizes inquiry, choice, action (Kincheloe, 1999) as teachers and students pose questions; make meaning of curriculum, school, and society; and confront social problems" (Minnes Brandes & Kelly, 2004, 1). These two concepts became the framework for our research.

Like a building, our research needed a solid foundation. Our study was built upon the principles set out in the Primary Program (2000). We strongly believe in a child's right to explore and actively participate in his or her learning. When children are immersed in a rich learning environment that promotes their involvement in the decision-making process, they learn the necessary skills and attitudes needed to become responsible, contributing members of society. This belief is supported by the Primary Program (2000):

As children interact with the people, places, and things in their immediate community and beyond, they extend their horizons and develop the attitudes, skills and knowledge they need to become effective citizens (185).

The ideals of the Primary Program are linked to the United Nations Convention on the Rights of the Child, which regards children "not as incomplete and inarticulate beings who adults must shape with appropriate early intervention programmes, but as consumers of services in their own right, who can be consulted about how they are treated" (Penn, 1999, 3). This statement solidified the connection between theory and practice within our study. The UN's idea of "creating supportive research environments where children have space and time to reflect on and discuss issues with each other and with adults" (3) was at the heart of our inquiry.

As the architects of our study, we need to draft a blueprint for our research. We were first introduced to the concept of built environment education by Dr. Eileen Adams, an expert and a scholar in the field. After reading her book, Shaping Places: Built Environment Design Education, we were intrigued by her projects that focused on giving students the experiences needed to have an active role in shaping their school environment:

Direct experience of the built environment is a powerful stimulus for learning. It enables pupils to reflect on how our surroundings have been shaped and managed and raises issues about what it might be like in the future (Adams, 2006, 11).

This initial exposure to built environment education captivated our interest, and made us want to learn more.

Naturally, we first looked to Canadian studies pertaining to young children and the fostering of democratic citizenship in their schools and communities. The only study we
found that related to our area of interest was the research done by Scott McIssac (2004) entitled "Free Run Children." Although thought provoking, this study focused primarily on the differences, both socially and economically, that existed between these schools. Contrary to McIssac, we wanted to create an open forum where Kindergarten students from two different schools could share, discuss, collaborate, and work together towards one common goal—making their schools better.

Next we turned our attention to those studies conducted outside of Canada. At the forefront of the research conducted in this field, the projects undertaken in the UK by Adams (2006) were directly aligned with the anticipated goals of our inquiry. For example, the "Town Centre" project (Fox Hill Primary School) focused on enabling "...pupils to appraise their environment and propose improvements" (28). Reading Adams’ work led to the discovery of additional studies related to our own research.

Another noteworthy study conducted in the UK was "The Big Idea" (2006). The aim was to involve children and young people in developing a centre for children's charities, and, as a result, this committee now functions as a training ground for both adult and children's groups interested in implementing change in their communities. The findings of this study stressed the importance for our research:

> Only by being involved and feeling that they can affect what happens will young people feel a sense of ownership and responsibility in using the public realm (CABE 2004). Participating in such projects can give children and young people the self-confidence to speak up and make their voices heard in other areas of public and civic life (Monaghan, 8).

From the United States, the study, "Our Town" (2004), had a significant impact on the way we approached our inquiry. This research involved young children designing and building a park in their own community, which, to this day, they are directly involved in caring for. The results of this study represented the ideal form we hoped our inquiry would take: "...the students were treated as responsible people whose opinions were valued and whose imaginative responses to a self-discovered and defined community problem were nurtured and supported" (Gallager, 260).

Out of these studies, some questions emerged. Would our students be interested in learning about the built environment? Would additional knowledge about the subject area increase student voice and participation? Once students knew that their ideas were respected and valued, would they be more likely to take ownership and responsibility for bringing about change? From these questions, some themes came to light, and formed the frame of our inquiry—brick by brick.

As we began to finalize the blueprint for our inquiry, the materials and tools necessary to complete the project became clear. The plan for construction called for the methodical layering of bricks needed to build democratic citizenship in the built environment. The first brick was knowledge. We believed that knowledge was an important tool needed to empower students in finding their voice.

For our building to take shape, the second set of bricks were formed by opportunities for participation. We understood that students needed to be provided with a variety of opportunities to allow them to use their newfound knowledge to explore the development of voice. Osborne (1999) stresses the critical role that participation plays in the development of democratic citizenship:

http://ccfi.educ.ubc.ca/publication/insights/v14n01/articles/mcdaniel/index.html
Democracy depends on the commitment and participation of its citizens. Like a muscle, if it is not exercised, it withers away. It requires that citizens be well informed, thoughtful, tolerant and interested in public affairs (21).

Through participation, the voice of children can be realized.

For our structure to become stronger, voice was essential as the next brick. We valued the journey our students would take in finding their voice. We hoped that through these discoveries, the voices of our students would no longer be silenced. Our hope was supported by the findings of the "Housing Development" project (Temple Mill Primary School), which "…offered an opportunity for young people to participate in the process of developing a live site and to voice the views of children—one group that is usually absent" (Adams, 2006, 37). The power of voice is strengthened when children collaborate with their peers and adults. A successful example of this comes from "The Big Idea" (2006): "The result of this collaboration is a vibrant, colourful, joyful, uplifting scheme which speaks directly to the children and young people without being in any way 'childish' or patronizing" (Monaghan, 29). The power of one's own voice is not fully recognized until it is put into action.

A building is not complete until the final brick is laid, just as a voice cannot be truly heard until it is actively used. Children need to use their knowledge and newfound voice to speak to those who have authority, thereby empowering them to make a difference in the world around them. When children's voices are given power, "they can be effective advocates for change….They can often change their own lives, as well as help to bring about a change in the attitudes adults have about them, if given the chance to do so" (Gallager, 2004, 261). Not until this vision is realized, will children fully understand what it means to live in a democratic society.

Our final blueprint was now ready to be placed in the hands of the builders, our students.

Context

Two Kindergarten classes were used in this study—one half-day Kindergarten class and one full-day Kindergarten class. The half-day Kindergarten class was from Cherry Lane Elementary School, located on the west side of Vancouver. At the time of the study, the school had an enrollment of approximately 300 students. The class consisted of 19 five- and six-year-old students: 14 boys and five girls. Of the 19 children, five had ESL (English as a Second Language) designations.

The full-day Kindergarten class was from Peach Tree Elementary School, situated on the east side of Vancouver, which had an inner city designation. It had approximately 500 students. The class consisted of 16 five- and six-year-olds: ten boys and six girls. Of the 16 children, 13 had ESL designations.

Methodology

To meet the needs of all of our students, we chose to use three methods of data collection: student surveys, student and teacher field notes, and audiotaped student conferences. We used two surveys—one at the beginning of our study and one at the end. The intended purpose of the first student survey was to determine what prior knowledge the students had about their school's built environment, and to assess their attitudes and feelings about
caring for their school. The second survey was intended to show any knowledge gained, and whether or not there had been a change in their attitudes and feelings.

Through the use of field notes, students were given the opportunity to use drawing and/or writing to express their ideas during their observations of their school's built environment. In addition to their field notes, students participated in audiotaped conferences, in which they described or elaborated upon their ideas. Our own field notes included daily observations, transcripts of audiotaped student conferences, records of class discussions, and personal reflections.

Findings

Over the period of our seven-week study, we collected data separately at each school site. We then analyzed our data, chunking it into five main themes—knowledge, participation, voice, exploration, and peer modeling. It became clear that these themes had a profound impact on one another. We discovered that there were other factors, such as language, that would also play a major role in our study. Next, we compared the findings from our two schools, and we were surprised at the number of similarities that existed. The following details the findings from our research.

Language

Although multilingualism did not play an important role in the research done by Dr. Adams (2002 & 2006), it did play a critical role in our research and it significantly affected our findings. Despite their differing language abilities, students from both schools developed skills in the areas of oral language (listening and speaking), critical thinking, and written language (drawings and words). We were surprised to discover that language was the only outstanding difference that existed between the two schools.

Cherry Lane School

Among the Kindergarten class from Cherry Lane School, which consisted primarily of students whose first language was English, there was a wide range of language abilities. There were those who had strong verbal skills, and those who struggled. Some could communicate in full sentences, while others were limited to single words. This applied to both ESL and non-ESL students (See Figure 1).

<table>
<thead>
<tr>
<th>Labeling</th>
<th>English Speaking Students</th>
<th>ESL Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Brick, rock and cement.” (CL14)</td>
<td>“Flower” (CL12)</td>
<td></td>
</tr>
</tbody>
</table>

| Phrases | “that climbing thing in the gym” (CL13) | “because it can eat something” (CL15) |

| Full Sentences | “I want to change the table in the office from nothing on it so with a flower pot with a flower in it.” (CL5) | “I like flower. I like tree. I like poster.” (CL12) |

Figure 1 – Cherry Lane School Language Examples

There were some students who chose to express their ideas through drawing and writing, yet struggled to express their ideas orally. All students in this class expanded their vocabulary and gained confidence in their ability to share ideas with their peers. Many found that the use of the five senses helped to hone their observations, and, in turn, gave them a vehicle through which they could communicate their experiences in the built environment.
The oral language of all students flourished as they became better listeners and speakers. Through much practice in class discussions, student conferences and buddy presentations, students developed their public speaking skills—learning how to project their voice, speak clearly, and communicate their ideas to others. Support from their peers seemed to be one of the most important factors in reluctant students gaining confidence and sharing their ideas with others (See Figure 2). Through this experience, highly vocal students also learned the importance of not only respecting their peers’ ideas, but also being an active listener. Due to a variety of experiences that promoted speaking and listening, all students saw a significant improvement in their oral language development.

<table>
<thead>
<tr>
<th>ESL Student</th>
<th>End of study</th>
<th>English Speaking Student</th>
<th>End of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>“flower” (CL12)</td>
<td>“Me and my buddy were walking. Me and my buddy reading a book. Me and my buddy cleaning up. Me and my buddy went to the staffroom.” (CL12)</td>
<td>“This is in the office. It’s the mirror. And this is the sink in the office.” (CL17)</td>
<td>“I really want to change the fire bell and how I change the fire bell that was have a bell and I would change the fire bell by taking some batteries out so that it would only make a little bit of noise.” (CL17)</td>
</tr>
<tr>
<td>“This is a bell and this is a slide.” (CL20)</td>
<td>“I want to change the library so it would have lots of toys and moneys and books.” (CL20)</td>
<td>“slides” (CL16)</td>
<td>“The bench… if we want to sit down when you’re tired like you’re running too much and you’re tired you can sit down.” (CL16)</td>
</tr>
</tbody>
</table>

Figure 2 – Cherry Lane School Oral Language Progression

Peach Tree School

At Peach Tree School, the Kindergarten class primarily had students who were ESL learners. The English language development levels in the class ranged from reception to expanding. At the beginning of the study, the students lacked the basic vocabulary needed to understand the built environment. Additional lessons had to be created to give the students the opportunity to learn and understand the concepts being taught.

Throughout the study, there was a heavy reliance on visual cues. The students had the opportunity to use photographs and drawings to aid them in identifying and learning basic vocabulary. Some students were not able to engage in the oral activities until they felt comfortable pointing to a picture and then repeating the word. After the students learned some of the basic vocabulary, they were then able to label their ideas orally as a class.

At the reception level, some students were able to label their pictures with single words. Other students, at the beginning level, felt more comfortable with repetitive oral language patterns. They were able to use simple phrases in describing their ideas. With familiar word order and vocabulary, the students at the developing level could use simple sentences to describe their thoughts. Finally, at the expanding level, the students were able to use a wider range of vocabulary to express themselves better in complete sentences (See Figure 3).
By the end of the study, the students were able to say what they liked, didn't like, and wanted to change. However, it was a challenge for them to explain their reasons for their ideas.

**Critical Thinking**

Critical thinking was an important area of development for our students. Motivated by curiosity and exploration, students began not only to ask more questions about the built environment, but they also began to question others' ideas and thoughts. As students were given multiple opportunities, their ability to support their thoughts became more evident and specific. Our study, like that of Adams (2006), "extended the pupils' thinking and obliged them to look again, perhaps in a different way, at a place with which they were familiar and which they took for granted. It developed skills of analysis and judgment, requiring the use of both visual and verbal language" (28). As a result, students' contributions to class discussions became increasingly frequent and detailed. In the beginning of our study, students often needed teacher prompting to explain their reasoning, but, by the mid-point, many students were independently elaborating upon their ideas (See Figure 4).

<table>
<thead>
<tr>
<th>Cherry Lane School</th>
<th>Peach Tree School</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;I want to change the gravel field to take lots of dirt and make it very soft and grind it up to a ice rink. That playground to make the wood chips soft like put them in a machine and make them into big chips. On the playground that we play I like to see the bottoms into water and they have little boats and docks.&quot; (CL1)</td>
<td>&quot;I want to change the swings. You could make the swings go lower and have the children to get far away and every time a person an adult could be standing there so when kids get too close to it they could tell to go further. I want to change the garden near the after school care. You could pull the weeds everyday. I really want to change the park. You could add some things.&quot; (PT10)</td>
</tr>
</tbody>
</table>

**Figure 4 – Critical Thinking Comparison**

The students had the knowledge, the experience of exploration as well as the opportunity to give voice. We discovered that as our students were given freedom and choice in their explorations, their critical thinking skills thrived.

**Voice**

During our research, students expressed their ideas orally, as well as through drawing and
photography. Through numerous opportunities of exploration and participation in hands-on activities, our students both discovered and developed many types of voice. In both schools, when students were provided with these different modes, they felt empowered to have a voice and participate in shaping their school's built environment.

Talking about their school and investigating the built environment was an excellent avenue into facilitating student voice. As our students became more versed in the language of the built environment, they experimented with and gained more confidence in expressing themselves orally. Through this experience, our students voiced their opinions on what they liked, disliked and wanted to change about their school (See Figure 5).

<table>
<thead>
<tr>
<th>Cherry Lane School</th>
<th>Peach Tree School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Like</strong></td>
<td><strong>Like</strong></td>
</tr>
<tr>
<td>&quot;I like the office because it helps people and stuff.&quot; (CL17)</td>
<td>&quot;I like the garbage. I like the light. I like the door.&quot; (PT17)</td>
</tr>
<tr>
<td><strong>Dislike</strong></td>
<td><strong>Dislike</strong></td>
</tr>
<tr>
<td>&quot;(Truck noise) because when a boy or girl is working you might get disturbed.&quot; (CL16)</td>
<td>&quot;The school because it is yucky. The garbage and mud.&quot; (PTS)</td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td><strong>Change</strong></td>
</tr>
<tr>
<td>&quot;I really want to change the slide. Replace the old one and put a new one. You go down it and jump on a trampoline and splash in a pool.&quot; (CL19)</td>
<td>&quot;I would like to change the doors. By painting them.&quot; (PT15)</td>
</tr>
</tbody>
</table>

**Figure 5 – Oral Voice**

Another expression of voice was the written word. Some of our students chose to voice their ideas through writing. Their writing ranged from single words to complete sentences. Some students demonstrated strength in this type of voice, but not necessarily in other modes of voice.

Drawing was also used by students as a means of recording their observations in their field notes. Drawing proved to be an appropriate alternative for children who were ESL learners or who were not yet comfortable expressing themselves orally. Drawing was used to help all students connect with their environment on a variety of levels.

Students had the opportunity to use disposable cameras and take photographs of the built environment (See Figure 62). These photographs expressed the students' impressions of their schools through their own personal lens. Students were given the freedom to examine the built environment through photography without any influence or intervention by adults: "The pictures themselves show a child's perspective which is raw and without bias—'pure in a sense'" (Partridge Field Notes, 2007, 42). The students took ownership, and impressed us with their ability to use the camera lens as a tool for voice. As with drawing, we found that photography gave our students another way to express their voice.
"A place is a space claimed by feelings" (Adams, 2000, 28). This sentiment resonated in the voices of our students as they created a photomontage that portrayed both the inside and outside spaces. Students chose their favourite pictures and displayed them in a way that defined what the built environment meant to them. They then added texture rubbings, additional photos and words to complete their vision. Their finished products conveyed a deeper connection to their surroundings.

No matter what form of voice students chose, all had numerous opportunities to express their ideas. As our study progressed, students realized their strengths and used them to become advocates for change. The classrooms, hallways and playgrounds were filled with the hopes and desires children had for their school—each with the expectation that their ideas would be heard.

**Change of Roles**

Another significant discovery was in the change of roles that was experienced by both us and our students. Our findings were validated by those of Adams (2006): "Children had to
tell, explain, justify choices and persuade others to share ideas. From time to time, they changed roles, so that different people took the lead to direct the activity" (28). These changes centered on the responsibility or job that is done at school.

In the beginning, our students' role was that of "student." Then, as they gained knowledge, their role became that of "participant," where they were actively involved in investigating their school. With increased knowledge and participation, their role became that of "leader," "teacher" and "ambassador." Students began to monitor their peers to ensure that they were on task, in turn, becoming the "teacher": "We're not playing. We're taking field notes" (CL10). Another example of this evolution of change occurred when we turned our investigation towards the outdoor areas of the school. It was now the students who were the teachers. It was our students who were teaching us about the positive and negative attributes of the play areas, and what needed to be changed.

The second change that occurred was in how both us and our students thought about others. Initially, our students were only able to think about how things affected them personally and were not aware of how others were affected. As they became more familiar with the subject area, they tended to think as a group, about how things affected them as a whole.

By the end, our students began to place the responsibility for change onto their peers and adults: "I don't like calendar. The classroom is boring for me because you don't change. I like it when you change decorations. You don't" (PT10). For us, as teachers, we began the process by being the sole provider of knowledge, and later evolving into a facilitator who supported the students as they took charge of their learning:

As soon as (PT10) expressed her feelings, she opened up a Pandora's box. Her voice became the stage for other students to stand up and express their thoughts about the change that needed to be done at school (McDaniel Field Notes, 2007, 42).

This transformation now allowed for the possibility of change.

Exploration as a Motivating Factor

We found that exploration was an important motivating factor that led to increased participation. Adams (2006) agrees with this statement, believing that "...the experience of moving away from the desk and dispensing with the worksheet is a liberating one" (90). Students were given the opportunity to investigate unknown areas of the school. Fire bells, fire extinguishers, danger signs, ladders, attics, and bell towers were the highest points of interest (See Figure 7). Students were intrigued by these areas because they posed safety concerns and/or were prohibited.
The freedom of exploration led to excitement, a heightened level of curiosity, numerous questions, and a new avenue for voice. This notion meshes well with the ideas expressed by Lensmire (1998): "Voice as participation...encourage(s) the active exploration by students of their worlds, rather than passive submission in the face of teacher control and knowledge" (271).

### Challenges

#### Attendance and Participation

Absences had an impact on student participation. We noticed a direct correlation between those students who were frequently absent and the amount of times they participated in oral discussions and student conferences. Along with numerous absences, we found that student tardiness posed a challenge to student learning as they often missed the crucial beginnings of lessons. Since our study was limited to our own classrooms, individual student attendance was more apparent.

This issue was not a concern in the other studies we looked at, which were larger in scope and were conducted by outside researchers. Our concerns resulted in more questions. Did these absences affect their overall learning and hinder their ability to participate? What was the determining factor in their drop in participation—missed lessons or decrease in
confidence? Were they able to gain and build upon their knowledge once they returned to school?

We wonder if the current legislation that makes Kindergarten optional has a direct correlation to the high frequency of absences that occurred unrelated to illness. The British Columbia School Act (2007) gives parents the ability to opt out of this first year of school: "(1) Subject to subsections (2) and (3), a person who is resident in British Columbia must (a) enroll in an education program...on the first school day of a school year if, on or before December 31 of that school year, the person will have reached the age of 5 years....(2) A parent of a child referred to in subsection (1) (a) may defer the enrollment of his or her child until the first school day of the next school year." (BC Ministry of Education, C-17 & C-18)

We believe that Kindergarten is a critical year for a child's development and that this option decreases the value of early childhood education and mutes the voices of young children.

Research with Kindergarten Students

Another significant challenge during our research was our subjects. As experienced Kindergarten teachers, we are well versed in the multi-faceted levels of development Kindergarten students have throughout their first year in school. Knowing this, we were surprised at how challenging it was to conduct research with five and six year old children. The 'built environment' is an abstract concept, and even introducing it to our students proved to be challenging. Through our observations and reflections, we decided to simplify and breakdown the big ideas to allow for greater student understanding. Once we did this, our students responded enthusiastically, becoming more relaxed and willing to participate.

Children at this stage of development have a very limited attention span. This proved to be challenging when it came to class activities and student conferences. Focusing on and waiting for instructions, listening to their peers and the ability to follow directions were all impeded. Their limited attention also affected their ability to complete their field notes in the given amount of time. As well, audiotaping proved to be more difficult than expected. Our students had great difficulties waiting for their conference time, and were easily distracted by the noise level that existed in the classroom while the teacher was occupied. As a result of these challenges, student voice and participation were affected.

Our dual role as practitioner and researcher was hindered by both the developmental level of our students and the existing time constraints. As Kindergarten teachers, we found it challenging to know how much assistance we could give our students without influencing them. As researchers, we felt the pressure to push through and complete the tasks of our study. Yet, as practitioners, we knew that due to the learning requirements of our students, we would have to modify our schedules in order to allow for the time needed to make the learning more meaningful. At times, when we attempted to follow the schedule, our students often responded with challenging behaviours, voicing their need for a break from the research. As we progressed through our study, we learned what worked best for our students, and the role of practitioner/researcher became one.

Because of our own experiences, we can now share some ideas about how best to carry out research with Kindergarten students. First, the development of a young child's voice requires exposure to varied opportunities, creativity, and patience. In order for this voice to flourish, it is essential for adults to listen and value what is being said. Second, ample time and flexibility is needed. Spending extra time on building a foundation will result in a
strong knowledge base. Finally, the limited attention span of young children needs to be recognized, and modifications to the curriculum and the time given to the study must be taken into consideration. These proposed recommendations for Kindergarten will allow for greater student success, which may foster further the development of the student's voice and lead to increased participation.

Student Surveys

We chose student surveys as a tool for assessing students' prior knowledge about their school, to measure their knowledge gained and their willingness to make their school a better place. However, contrary to our original plan, we were not able to look at the surveys until the end of our study. As a result, the surveys had no real purpose, and did not assist us in answering our research question.

Completing the survey itself posed a challenge for our students. All experienced difficulties in completing them. Some students coloured in more than one response per statement. Students also had problems following along as we completed the surveys. In addition, some students had difficulties understanding the meaning of the statements and what they implied.

Both schools had inconsistent samples as a result of absences. We wondered if the surveys were a purposeful measurement of student learning and voice. Rather than recommendations, we have questions that should be taken into account when considering using surveys with Kindergarten students:

§ Is this type of data collection appropriate and useful for Kindergarten students?
§ What data is needed?
§ Is a survey the best tool to obtain this information?

Assent Letters

Are Kindergarten students able to fully comprehend what it means to give assent?

This question was one we both struggled with throughout the study. Students had great difficulties understanding what it meant to give assent. The entire process, including signing their name and printing the date on two copies, proved to be extremely challenging and frustrating. Many had to redo their assent forms when they made mistakes. An additional challenge was the requirement that another person administer the assent forms to our students to prevent coercion. Having to complete an unfamiliar activity with someone other than their classroom teacher proved to be too much for some. ESL learners, in particular, found this process a daunting one because of their limited comprehension of the English language. Even after much discussion about what it meant to give assent, the majority of our students still were confused about what was being asked of them. The process of giving assent resulted in confusion—where our students were unaware of the voice they had been given, and the power it had. As advocates for Kindergarten, and now researchers, we strongly oppose the current assent process and how it is conducted with young children. We feel this process could be made more democratic if children were given greater freedom to explore what it means to give assent.

Celebrations
Opportunities for Participation

We adopted the vision of the United Nations Convention on the Rights of the Child, which seeks "participation rights giving children proper information in order to enable them to make decisions about and contribute to the circumstances of their everyday life" (June 1999). Throughout our study, students were given numerous opportunities to participate (i.e., oral language, art, exploration, critical thinking, etc.). This proved to be of a great benefit to all. Providing a variety of choices for participation met our students' learning needs, and resulted in an increased level of participation. This only further promoted the development of voice. Now the question remains: "Is children's participation a way to create a more democratic world? Or is it a way to simply create better places for children?" (Francis & Lorenzo, 2002, 166-167).

Expertise and Leadership

As our students gained knowledge and participated in their school's built environment, they became experts of their school. With this newfound expertise, they gained confidence and found voice. Soon our students began to think beyond themselves, and, as a result, became models for one another. This peer modeling led to the transformation from individual students to one group working together towards change. This common goal led to the creation of a community of leaders.

With this need for change, our students used presentations as a vehicle to inform others. Through presentations to our Kindergarten buddies, big buddies, administrators and other staff members, our students were excited to have the opportunity to share their knowledge and experiences in a meaningful way. Students presented their "Top Ten" lists of what they most liked and most wanted to change about their school (See Figure 8). As they participated in each presentation, our students learned how best to communicate their ideas to others. With the development of these new skills, students learned how to effectively speak, listen, and inquire.
<table>
<thead>
<tr>
<th>Top Ten Likes – Cherry Lane School</th>
<th>Top Ten Likes – Peach Tree School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The attic – “We like the attic because it is interesting.” (CL8)</td>
<td>1. Big playground – “It so fun.” (PT9)</td>
</tr>
<tr>
<td>2. The bell tower – “We like the bell tower because it is so small.” (CL2)</td>
<td>2. Little playground – “It is so quiet.” (PT3)</td>
</tr>
<tr>
<td>3. The boiler room – “We like the boiler room because it has a coffee smell.” (CL5)</td>
<td>3. Garbage cans – “It is stinky.” (PT5)</td>
</tr>
<tr>
<td>4. The grass field – “We like the grass field because it is big.” (CL14)</td>
<td>4. Swings – “It is so fun.” (PT14)</td>
</tr>
<tr>
<td>5. The playground – “We like the playground because it’s fun to play in and it’s quite small.” (CL7)</td>
<td>5. Parking lot – “There are lots of cars there.” (PT1)</td>
</tr>
<tr>
<td>6. The gym – “We like the gym because we use it for gym class.” (CL10)</td>
<td>6. The slide – “It is so fun.” (PT6)</td>
</tr>
<tr>
<td>7. The stage – “We like the stage because it is fun.” (CL19)</td>
<td>7. The sign – “It is so shiny.” (PT9)</td>
</tr>
<tr>
<td>8. The murals – “We like the murals because they look cool.” (CL6)</td>
<td>8. The fire extinguisher and pop machine – “The fire extinguisher helps put out fire and the pop machine is so sweet.” (PT11)</td>
</tr>
<tr>
<td>9. The undercover area – “We like the undercover area because you can play at recess if it’s too rainy to go to the playground.” (CL3)</td>
<td>9. The office – “You go there to get help and ice and band-aid. Because Sally works there.” (PT17)</td>
</tr>
<tr>
<td>10. The benches – “We like the benches because we can sit on them.” (CL1)</td>
<td>10. Fire bell – “It is so loud.” (PT7)</td>
</tr>
</tbody>
</table>

Figure 8A – School Lists
Through these presentations, our students became ambassadors for their schools.

**Buddies**

This study provided opportunities for our students to not only learn more about where they live and go to school, but also to share and gain knowledge from students from another part of the city. Students were able to experience a built environment other than their own through field trips to their buddies’ school. They participated in activities that facilitated friendship building and collaboration through the investigation of their schools. Through this experience, students took ownership and valued the role of school ambassador. The buddy experience allowed our students to practice their leadership skills and to learn from their peers. One of the most significant benefits for our students was the opportunity to learn how to respect the ideas, feelings and opinions of others.

From observing and listening to each other, students improved their skills, knowledge and confidence in themselves. This led to increased participation and the development of voice. As a result, we were not only impressed with their responsible and respectful behaviour towards each other and the environment, but also how well versed they had become in the language of the built environment.

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**Figure 8B – School Lists**

<table>
<thead>
<tr>
<th>Top Ten Changes – Cherry Lane School</th>
<th>Top Ten Changes – Peach Tree School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The attic – “We want to change the attic by putting a little play area and some toys.” (CL14)</td>
<td>1. Big playground – “Because the bridge is so slippery.” (PT19)</td>
</tr>
<tr>
<td>2. The garbage – “We want to change the garbage not to make it so smelly.” (CL2)</td>
<td>2. Garbage – “Because it is stinky. You could wash it.” (PT10)</td>
</tr>
<tr>
<td>3. Gym washrooms – “We want to change the gym washrooms for making the doors so people can’t lock themselves in.” (CL7)</td>
<td>3. The very tall bars – “It is too high and you could fall down.” (PT12)</td>
</tr>
<tr>
<td>4. The bell tower – “We want to change the bell tower to a restaurant and toys to play with...by making it funner inside.” (CL8)</td>
<td>4. The needles – “It is dangerous and adult pick it up.” (PT4)</td>
</tr>
<tr>
<td>5. The boiler room smell – “We want to change the boiler room smell by putting a good smell in there.” (CL5)</td>
<td>5. The slicing bars – “You fall down. Need to put rubber on so you won’t slip.” (PT3)</td>
</tr>
<tr>
<td>6. The wood chips – “We want to change the wood chips so it doesn’t give you splinters.” (CL9)</td>
<td>6. The small playground – “So boring.” (PT6)</td>
</tr>
<tr>
<td>7. Primary playground – “We want to change the primary playground to make more space for play tag on that space.” (CL20)</td>
<td>7. Wood chips – “It is hurting you.” (PT10)</td>
</tr>
<tr>
<td>8. Chain-link fence – “We want to change the chain-link fence so it’s not that hard.” (CL6)</td>
<td>8. Stairs – “It is not safe. You could slip and fall and hurt you head.” (PT11)</td>
</tr>
<tr>
<td>9. Picnic benches – “We want to change the picnic bench so it’s not so hard when you hang your head on it. It’s made of foam.” (CL10)</td>
<td>9. Chairs – “Because it not nice.” (PT17)</td>
</tr>
<tr>
<td>10. Paw prints – “We want to change the paw prints to make people footprint.” (CL17)</td>
<td>10. Ladders and danger signs – “Because the ladders are too high and you could fall down and get hurt.” (PT4)</td>
</tr>
</tbody>
</table>
Conclusions

Though the project has ended, the building will continue. The foundation has been laid, the frame has been formed, and many bricks put in place. The builders, by the end of the project, had the necessary tools and materials required to complete the construction. However, the scope of the project did not permit the placement of the remaining bricks. Even when these bricks are finally installed, the builders' work will be far from over.

Like a building that is incomplete, our journey into fostering democratic citizenship in the built environment is unfinished. We began our inquiry wanting to answer our research question: If Kindergarten students are given a voice and the opportunity to participate in their school's built environment, will this lead them to take an active role in shaping their school surroundings? We found that knowledge is a prerequisite to developing voice, and without knowledge voice is hindered. Our findings showed that varied and multiple opportunities for participation are essential in the development of voice. We learned that students need to be exposed to different types of voice, to be granted the time to explore, and be given the freedom to discover their own unique voice in the process. Over the course of our inquiry, we witnessed students acquire knowledge, experiment with their voice, and communicate their ideas to others. Regrettably, this is where our research stopped. We had hoped that our students would put their ideas for change into action. Unfortunately, the time allotted for our research was insufficient. Bringing about change is a lengthy process, which demands that time is devoted to building knowledge and discovering a voice before any plan of action can occur. Therefore, reflecting back over our seven-week study has left us with many questions still to be answered:

§ Did the students feel that they had an equal partnership in the decision making process?
§ Will our students go on to take further steps in making their school a better place as they progress beyond Kindergarten?
§ Did our students leave lasting footprints of change in the school's built environment?

References


**About the Authors**

Colleen McDaniel and Erin Partridge currently teach Kindergarten in the Vancouver School District. During their Master of Education Program at the University of British Columbia, Dr. Eileen Adams introduced them to the world of the built environment. Their love of Kindergarten and their strong belief in the rights of young children combined with this newfound passion for the built environment invoked a lifelong, collaborative, learning partnership. Through the eyes of children, their journey of exploration will continue.