

PLANNING FOR KIDS

Educating and Engaging Elementary School Students in Urban Planning and Urban Design



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A comprehensive project submitted in partial satisfaction of the requirements for the degree Master of Urban and Regional Planning.

UCLA Luskin School of Public Affairs

Spring 2019

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Disclaimer

This report was prepared in partial fulfillment of the requirements for the Master of Urban and Regional Planning degree in the Department of Urban Planning at the University of California, Los Angeles. It was prepared at the direction of the Department and of the Rosewood STEM Magnet of Urban Planning and Urban Design as a planning client. The views expressed herein are those of the authors and not necessarily those of the Department, the UCLA Luskin School of Public Affairs, UCLA as a whole, or the client.

Acknowledgments

Thank you to my faculty advisor, Karen Umemoto, PhD, and my client, Christine Neil, magnet coordinator at the Rosewood STEM Magnet of Urban Planning and Urban Design, for all of their help and encouragement throughout the capstone process. This report could not have been made without their involvement and I truly appreciate their support. Thank you also to the Lewis Center for Regional Policy Studies for their generous financial support, to Taner Osman for facilitating the client project class, and to James Rojas, John Martoni, Shirl Buss, Victoria Derr, and Kathleen Vu for contributing their time and knowledge to this research. Lastly, thank you to my cohort at Luskin for the support and encouragement throughout our time at UCLA, lab life and beyond.



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Executive Summary

Urban planning as a topic of discussion is often left to adults who appear to have more agency in changing the world around them than their younger counterparts. Still, movements to include youth participation in the planning process have increased over time and programs exist that are helping children gain both the knowledge and skills to advocate for the world that they want to see in the future. One such program is that of the Rosewood STEM Magnet of Urban Planning and Urban Design (Rosewood), an elementary school within the Los Angeles Unified School District (LAUSD) system that is located at 503 North Croft Avenue in the City of Los Angeles.

In taking steps towards incorporating a comprehensive urban planning education in the school curriculum, Rosewood provides a unique environment for children ages 5 to 10 to learn more about the processes that occur to shape their built environment. While there are several examples in literature of programs geared towards younger youth, these programs are usually stand-alone and conclude after a few months or weeks. Rosewood provides students opportunities to build on their past knowledge and immerse themselves in urban planning themes as they pass through each grade level.

While urban planning is a key component of the school, many of the teachers who are building their curricula do not have direct experience in urban planning.

Through this research, I answer the following research questions: **What are the challenges to teaching urban planning themes at Rosewood? How can urban planning topics be effectively integrated into the elementary school curriculum?**

In order to explore these questions further, I relied largely on two phases of interviews: Phase I, speaking primarily with the teachers at Rosewood, and Phase II, speaking with teachers and planning professionals who have led activities engaging youth in urban planning in the past.

The purpose of Phase I was to understand the current goals, strengths, and challenges of the urban planning program at Rosewood. As part of this Phase, I led a one-hour focus group with 6 teachers from Rosewood, each representing a different grade level. During this focus group, the teachers elaborated on their personal understanding of urban planning and the current challenges they are experiencing in facilitating an urban planning-focused curriculum.

Ultimately, the research in this phase found five main challenges affecting the teachers at Rosewood:

1. **Vocabulary** - How do you talk to children about urban planning? How do you create a common vocabulary set for teachers and students?
2. **Social Justice** - How do you introduce or talk about topical issues such as gentrification and climate change? How do you integrate ethics into discussion about planning?
3. **Connectivity** - How do you connect urban planning themes to topics that are not explicitly related to urban planning? How do you work within the confines of the California state standards?
4. **Resources** - What kind of media is available to help younger kids be introduced to topics in planning? What other resources, both in terms of information and accessible supplies, are there for educators and parents?
5. **Curriculum** - How do you develop a curriculum in which the knowledge of urban planning builds among each grade level and feels more unified from Kindergarten to 5th grade.

Recognizing the challenges that teachers faced answered the first of my research questions and influenced the direction of Phase II. The purpose of Phase II was to understand the methods that professionals, practitioners, and teachers have used to engage children and older youth through urban planning themes. For Phase II, I had five semi-structured interviews, one in-person and four over the phone. For each interview, I explained the purpose of my research and my findings from Phase I that detailed the challenges discussed in the focus group. I asked interviewees about their experiences working with youth and planning which transitioned into an overall discussion of whether there were elements that could be replicated in the elementary school classroom environment at Rosewood.

In Phase II, I also analyzed the approaches used by PLACE IT!, the Metropolis curriculum, Y-PLAN, and the Intro to Urban Planning course taught at the East Los Angeles Renaissance Academy (ELARA) to learn about the different ways that youth are educated and engaged in planning. Four findings based on common themes arose from this analysis: Ground urban planning in student's lived experiences; allow flexible integration of urban planning; have caution and confidence in big issue topics; and collaboration is key.

While the Phase I findings helped to frame the challenges that the teachers at Rosewood are facing in trying to incorporate urban planning into their curriculum, the Phase II findings provided a diversity of structures and experiences from which common themes were drawn. Ultimately, these findings helped to cultivate the following recommendations to support the urban planning program at Rosewood:

- 1. Develop a Resource Toolkit** - Currently, there is not a comprehensive source for information that can be used to support educators who want to introduce children to urban planning. A resource toolkit that includes a vocabulary set, a list of organizations with experience connecting children with planning, and a catalog of media resources such as child-friendly books, films, and television shows with planning themes would help to make it easier on teachers who currently have to find a way to integrate urban planning into the curriculum on their own.
- 2. Invest in Teacher Education and Collaboration** - Time during the professional development sessions should be dedicated for collaboration to build a curriculum that makes sense across grade levels so that each teacher understands what is being learned in other grades and how the larger curriculum builds upon itself. Collaborating and building relationships with external organizations can also help to support the program at Rosewood. Rosewood should reach out to external organizations to continue to provide teacher trainings in different methodologies, such as PLACE IT! and Y-PLAN.
- 3. Explore Teaching Pedagogies that Engage Students** - When building the curriculum, explore pedagogies that can engage children in the topics that they are learning. Based on the findings, a pedagogy that first grounds the curriculum in a student's lived experiences would help to develop a child's understanding of space and connect their experiences to understand why learning about space can be important. Sharing personal experiences and understanding the experiences of others also helps build foundations of social justice by encouraging feelings of empathy. In addition, pedagogies that are largely project-based and allow students to be hands-on can support visual and spatial thinking at a young age.

Urban planning affects the lives of everyone, including children. When you begin to build an early understanding of urban planning at a young age, children can take the skills that they learned to better advocate for how they

envision the cities and neighborhoods of the future. Rosewood is pioneering in its goal to incorporate urban planning throughout the elementary school level. Still, initial roadblocks in vocabulary, social justice, connectivity, resources, and curriculum are currently causing some difficulty for the teachers in fully realizing an urban planning program.

By looking at existing projects and courses such as Y-PLAN, Metropolis, PLACE IT!, and ELARA's Introduction to Urban Planning class, we find that the approaches generally advocate grounding urban planning in student's lived experiences, allow flexible integration of urban planning, have caution and confidence in big issue topics, and understand that collaboration and cooperation are key.

While the initial intention of this research was to support the program at Rosewood, it is my hope that any teacher, educator, or parent can pick up the resulting toolkit that comes from this project and use it to introduce their students or children to the field of urban planning. By taking the steps to educate and engage kids in planning at a young age, we don't just develop urban planners of the future. We develop the urban planners of today.

Introduction

Urban planning as a topic of discussion is often left to adults who appear to have more agency in changing the world around them than their younger counterparts. Still, movements to include youth participation in the planning process have increased over time and programs exist that are helping children gain both the knowledge and skills to advocate for the world that they want to see in the future. One such program is that of the Rosewood STEM Magnet of Urban Planning and Urban Design (Rosewood), an elementary school within the Los Angeles Unified School District (LAUSD) system that is located at 503 North Croft Avenue in the City of Los Angeles. Rosewood officially became a STEM magnet during the 2018-2019 school year, with teachers voting to implement an urban planning focus to differentiate themselves from other magnet schools in the area. The purpose of this paper is to understand the goals, strengths, and challenges of teaching urban planning to an elementary school-aged audience and provide recommendations about how the teachers at Rosewood, and any other educator hoping to introduce urban planning concepts into their classroom, can be more effective in integrating planning into the curriculum.



In the current 2018-2019 school year, there are 13 full-time teachers and 285 students at Rosewood. As a desegregation feeder school, at least 60% of the student body must be students of color. 45% of students are Hispanic, 24%

are white, 20% are black, 10% are Asian, and 1% are of mixed race. A minimum of 5% of students must be from the residential area, though a majority come from neighborhoods throughout Los Angeles. Students are admitted through a lottery, with a computerized system making sure that demographic goals are achieved. Upon graduating, most students continue to another magnet or private school, though Bancroft Middle School is the default residential school in the area.

In 2017, the teachers voted to convert Rosewood into a STEM magnet school. One of the immediate repercussions of this decision was the removal of the 6th grade class, with the school now only serving students from kindergarten to 5th grade today. As a STEM magnet, teachers had a choice of what kind of focus they would like to see. Though robotics and arts were included in the discussion, urban planning was chosen for its uniqueness, community-oriented focus, and support from parents in the urban planning field. Students participate in project-based learning that incorporates urban planning topics into California state standards. By engaging in project-based learning, students “are pulled through the curriculum by a meaningful question to explore, an engaging real-world problem to solve, or a challenge to design or create something.”¹

In taking steps towards incorporating a comprehensive urban planning education in the school curriculum, Rosewood provides a unique environment for children ages 5 to 10 to learn more about the processes that occur to shape their built environment. While there are several examples in literature of programs geared towards younger youth, these programs are usually stand-alone and conclude after a few months or weeks. Rosewood provides students opportunities to build on their past knowledge and immerse themselves in urban planning themes as they pass through each grade level.

While urban planning is a key component of the school, many of the teachers who are building their curricula do not have direct experience in urban planning. The current literature about the integration of children into the urban planning field is limited in scope, mostly focused on participatory processes led primarily by researchers outside of the classroom. While this type of community work is useful, there is not as much done to explore urban planning as a driver of school-wide curricula. The literature has primarily discussed programs throughout North America and Europe, as well as some examples in South America and the Middle East, though it does not appear that there are studies set in the City of Los Angeles. In addition, many studies

that are focused on youth participation in urban planning observe older youth, such as those in middle school and high school, rather than elementary-school aged children.

The research being done for this study contributes to the discussion by examining the engagement of elementary school-aged children in a school environment that is also influenced and shaped by the Los Angeles context. While portions of this study may be specific to Rosewood, my intention is for the recommendations to be broad enough to support educators throughout the city and beyond.

Through this research, I answer the following research questions: **What are the challenges to teaching urban planning themes at Rosewood? How can urban planning topics be effectively integrated into the elementary school curriculum?**

I explored responses to these questions by engaging in two phases of data collection. The first phase involved conducting a focus group with six teachers at Rosewood who are in their first year of fully implementing their curricula. The purpose of these interviews was to understand how the teachers define and perceive urban planning, how they implement urban planning into their lesson plans, and what challenges the teachers have experienced in transitioning into an urban planning STEM magnet. The challenges discussed in this first phase helped to guide the questions in the phase that followed.

The second phase involved individual interviews with professional planners and practitioners who regularly work with children through community planning. In addition, this phase involved an interview with a 9th grade teacher at the East Los Angeles Renaissance Academy (ELARA) at the Esteban Torres High School. Through these interviews, I learned about various methods that have been used to connect urban planning topics with youth engagement in different capacities. These interviews also helped to inform recommendations that address some of the challenges that the teachers at Rosewood face.

Concurrently, I conducted a literature review and a survey of urban planning-related media that could be used to support an urban planning curriculum. The data collected through this process ultimately resulted in the creation of a Planning for Kids toolkit that can be distributed to the teachers at Rosewood and any other educators or parent who would like to introduce urban planning topics to their kids.

This project draws on urban planning themes of participatory planning and the children's right to the city. It explores the ways that we can include children in the process of shaping the world and finds that there are several best practices that can be utilized to support an urban planning curriculum at Rosewood. Dedicated programs like those at Rosewood may give children the tools to advocate for world that they would like to see when they grow up.

Following this introduction, I conduct a literature review of written articles and essays relevant to my research topic. Afterwards, I elaborate on my data and methods and share analysis of my findings. Finally, I end with recommendations and concluding thoughts.

Literature Review

Extensive literature has been written on the relationship between children and the city. This includes the notion of the children's right to the city which expands on the right to the city concept developed by Henri Lefebvre by explicitly considering the spatial needs of children in government policies and legislation (Whitzman, Worthington, Mizrachi, 1978). Yet as city entities and other organizations continue to investigate how cities can be better designed for children (ARUP, 2017), a concurrent movement is occurring that explores how children can be included as active participants in the planning process as well. One of the largest international efforts to incorporate children in local planning and design is UNESCO's Growing Up in Cities Project, which "encourage[d] the participation of young people in research and evaluation processes as well as in actions to improve the communities in which they live" (Driskell, 2002). The broader history of the evolution of children's participation in city planning and design has been discussed by Francis and Lorenzo (2002).

Several researchers have already explored the importance of gathering the knowledge that children accumulate through their day-to-day lives to better understand how they see their world. Case studies in which children describe and share their thoughts and feelings on parks (Loukaitou-Sideris and Stieglitz, 2002), their homes (Buss, 1995), and their neighborhoods (Buss, 1995; Berglund and Nordin, 2007; Loebach and Gilliland, 2010) show that children's own perceptions of their environments can be valuable tools in understanding how to shape spaces to be more child-friendly. Children and adults see and experience space differently (Haikkola, Pacilli, Horelli, and Prezza, 2007). When adults plan for spaces for children without engaging children thoroughly in the process, locations such as underutilized playgrounds (Thomson and Philo, 2004) and children's gardens (Wake, 2007) begin to appear which don't adequately address the wants and needs of the children for whom these spaces were built.

Keeping in mind the benefits of including children in conversations about their neighborhood and the pitfalls of not consulting with children in developing environments specifically built for their use, different researchers have explored how planning processes have been taught to children through school or community programs to better develop skills in communication (Kaplan, 1994) and critical thought and imagination (Tsevreni, 2014). In writing his manual for participation, Driskell (2002) also lists benefits such

as developing a network that includes community role models, developing a sense of civic responsibility, strengthening self-esteem and identity, and looking at and understanding the local community in different ways. Beyond just teaching about urban planning through neighborhood exploration, case studies reveal that several school programs around the world have been actively engaging children in participatory planning projects that both teach children transferable and applicable skills and involve children in projects that are actually developed and shape the world around them.

A wide range of tactics can be observed in the different studies conducted by researchers. Lessard and Torres (2007) explore the use of UNESCO's Growing Up in Cities program, while Sutton and Kemp (2002) investigate the use of intergenerational design charrettes for planners to work with children in the process of placemaking. Place-based education is also used by schools investigated by Tsevreni and Panayotatos (2011) to develop the idea of children's participation and citizenship. Such programs actively engage children in different stages of the planning process that result in actual development of design proposals for community outdoor spaces (Lessard and Torres, 2007), public art installations (Sutton and Kemp, 2002), plans for a children's park (Davidovitch-Marton, 2007), and a cable car that better serves local needs (Rudd, Malone, Bartlett, 2017).

Some research has also been invested in looking at the role of government entities in including children in the planning process. In addition to the case studies utilizing UNESCO's Growing Up in Cities Program (Lessard and Torres, 2007), there is literature that investigates children's involvement (or lack of involvement) in the Design of Spatial Structure Plan developed by the municipality of Staden in Flanders, Belgium (Lauwers and Vanderstede, 2005), Finnish and Italian legislation and policies (Haikkola and Rissotto, 2007), the children's participatory budget council in Barra Mansa, Brazil (Barceló, 2005), and the Child Friendly City initiatives in Victoria, Australia (Whitzman, Worthington, and Mizrachi, 1978).

Most of the research that has been done on participatory urban planning programs that are designed for children appear to be regionally located in North America and Europe, though there are also examples that exist in South America and the Middle East. Case studies are available for projects in Athens, Greece (Tsevreni and Panayotatos, 2011; Tsevreni, 2014); La Paz, Bolivia (Rudd, Malone, and Bartlett, 2017); Montreal, Canada and Guadalajara, Mexico (Lessard and Torres, 2007); New York City (Kaplan, 1994); Petah Tikvah, Israel

(Davidovitch-Marton, 2007); and Seattle, Washington (Sutton and Kemp, 2002). Further studies in the relationship between children, urban planning, and utilization of space have been conducted in Bogota, Colombia (Ayerbe and Baez, 2007); Livingston, Scotland (Thomson and Philo, 2004); London, Canada (Loebach and Gilliland, 2010); and Stockholm, Sweden (Berglund and Nordin, 2007).

Most of the literature also focuses on children who are either on the latter end of elementary school education (4th or 5th grade) or outside of the elementary school system (6th grade onward). Participant age ranges in the studies include 7 to 9 (Loebach and Gilliland, 2010); 7 to 14 (Loukaitou-Sideris and Stieglitz, 2002); 9 to 11 (Buss, 1995; Sutton and Kemp, 2002); 9 to 12 (Tsevrini, 2014); 9 to 14 (Lessard and Torres, 2007); 10 to 12 (Berglund and Nordin, 2007; Davidovitch-Marton, 2007); and 12 only (Haikkola, Pacilli, Horelli, Prezza, 2007). Other studies that do not give a specific age range focus on 4th and 5th graders (Tsevreni and Panayotatos, 2011) and 6th graders (Kaplan, 1994).

Gaps in the Literature

There does not appear to be extensive research on the teaching or engagement of children in the City of Los Angeles. Loukaitou-Sideris and Stieglitz (2002) address children's perceptions of space and their patterns of use in Los Angeles parks, but the engagement of children is limited to interviews in which the children are mostly there to describe. Buss (1995) explored where children in Los Angeles feel safe using a more participatory project in which children took photos of their neighborhoods and created journals that made commentary on the space around them, though this again was mostly a descriptive activity. It appears that more research needs to be completed within Los Angeles to understand the scope of urban planning education and engagement of children living in the city.

There also does not appear to be adequate information about how younger students, particularly between kindergarten and 3rd grade, are educated and engaged in planning. As Rosewood is a K-5 school, it includes a subset of children that have not been fully explored in planning literature compared to their older peers.

Filling the Gap

As discussed, there is a breadth of information regarding the general topic of children and the city, though research is scarce on children's participation in Los Angeles and the education and participation of younger children in general. The research being conducted in this capstone project will help add to the conversation about urban planning education and engagement happening around the world by providing more insight into a program occurring within in the City of Los Angeles including students in the K-5 grade levels, typically between the ages of 5 and 10.

In addition, Rosewood appears to be a unique case of an elementary school that is trying to incorporate a stacked process in which students are engaged in an urban planning curriculum that builds upon the lessons from the previous grade levels. As most of the programs discussed in the literature are often short-term with a generally small group of youth participants, Rosewood is looking to engage nearly 300 students. Children who start at Rosewood in kindergarten and stay at the school through the end of 5th grade will graduate with six years of education in urban planning and design.

While the findings and recommendations that arise from this project may be specific to Rosewood or the Los Angeles context, it is my hope that educators, planners, and parents from around the world can draw general lessons from the research to shape the way that we think about how to include children in planning.



Data and Methods

Several research questions must be addressed in order to provide adequate recommendations to support the teachers and staff at Rosewood: What are the current challenges to teaching urban planning themes at Rosewood and how can urban planning topics be effectively integrated into the elementary school curriculum?

In order to explore these questions further, I relied largely on two phases of interviews: Phase I, speaking primarily with the teachers at Rosewood, and Phase II, speaking with teachers and planning professionals who have led activities engaging youth in urban planning in the past. Because my research questions are qualitative rather than quantitative, interviews provided a way to better understand the current issues in teaching urban planning to elementary school students as well as learn from those with more professional expertise about how younger kids can be engaged in planning.

Phase I - Focus Group with Elementary School Teachers at Rosewood

The purpose of Phase I was to understand the current goals, strengths, and challenges of the urban planning program at Rosewood. These interviews were conducted to largely answer the first of my research questions: What are the current challenges to teaching urban planning themes at Rosewood? Because this project aims to provide recommendations to Rosewood, it was necessary to speak to the teachers at the school first, as they would be able to provide a firsthand account of their feelings and perceptions of working with an urban planning curriculum. The responses to these interviews were meant to help guide the questions that would be asked in Phase II.

To begin my research, I spoke to Christine Neil, magnet coordinator at Rosewood, to understand the events that led to Rosewood making the choice to convert into an urban planning magnet. This meeting was primarily informational and was used to gather the data on the student demographics at Rosewood, the number of teachers at Rosewood, and the history of Rosewood's conversion into an urban planning magnet. This information was useful in providing a background understanding of the current status of the school and the decisions involved in selecting an urban planning focus.

Though I had originally intended on doing individual interviews with the teachers at Rosewood to get more personalized perspectives, the LAUSD Teachers' Strike that occurred between January 14 and January 22, 2019 delayed my initial timeline and caused me to begin Phase I much later than expected. Instead, the magnet coordinator offered to give me time during the teachers' professional development sessions to lead a group interview with six teachers, one from each grade level from kindergarten to 5th. I decided to change my plan in favor of the focus group, both in the interest of time and so that the teachers and I could engage in a thorough discussion with one another to share thoughts about the urban planning program at Rosewood.

The focus group was held at the Rosewood school library and lasted one hour. To prepare for the group interview, I developed an internal semi-structured agenda with key questions that I wanted answered. I also wanted to allow flexibility for discussion and follow-up questions based on the direction of the group interview. I set up a total of seven chairs in a circle for the teachers and myself and taped large poster boards on a chalkboard to use for writing key information.

I gave a brief introduction to myself, my interest in connecting the gap between planning and children's education, and the purpose of my research. The teachers then introduced themselves one by one and shared what they hoped to take away from our meeting. Though the conversation stretched to cover a multitude of topics, the following questions were asked to drive the dialogue:

- **What is your understanding of urban planning?** - The purpose of this question was to get a sense of what the teachers felt they understood about urban planning, as most did not have a direct planning-related background. Each teacher was given a notepad to write a response to this question. I wanted to first have the teachers reflect and respond individually so that their answers would not be influenced by the answers of the other teachers. Once the teachers finished writing their responses, they each took turns sharing what they had written.
- **What do you think are the goals of having an urban planning program at Rosewood? What kind of knowledge, attitude, and skills do you want to see the kids have by participating in this program?** - The purpose of this question was to understand what the teachers want their students to take away from the program. Responses to this question were written on a poster board as they were called out.

- **What are the current strengths and challenges of teaching urban planning topics? What kind of support would you want to address the challenges?** - The purpose of this question was to reflect upon and discuss the first few months of the implementation of the urban planning curriculum at Rosewood. Responses to this question would largely help direct Phase II by highlighting what kind of support was needed. Responses to this question were written on a poster board as they were called out.

To end the focus group, I gave the teachers my contact information so that they could ask any questions or give additional feedback that they were not able to discuss during the session. Only one teacher sent a follow-up e-mail in which they described an activity idea in which students receive certain data sets and use that information to design a city that addresses community needs.

Phase II – Interviews with Professionals, Practitioners, and ELARA Teachers

The purpose of Phase II was to understand the methods that professionals, practitioners, and teachers have used to engage children and older youth through urban planning themes. Through understanding these methods, recommendations could be made that address some of the specific challenges that the Rosewood teachers had discussed. These interviews were conducted to largely answer the second research question: How can urban planning topics be effectively integrated into the elementary school curriculum? By engaging the experiences of others, including those who are not elementary school teachers, I felt it was possible to find suggestions that could be integrated into the elementary school system.

For Phase II, I had five semi-structured interviews, one in-person and four over the phone. For each interview, I explained the purpose of my research and my findings from Phase I that detailed the challenges discussed in the focus group. I asked interviewees about their experiences working with youth and planning which transitioned into an overall discussion of whether there were elements that could be replicated in the elementary school classroom environment at Rosewood.

The five interviews were conducted with:

1. **James Rojas**, a community planner and founder of PLACE IT!, a design and participation-based urban planning practice
2. **John Martoni**, a fourth grade teacher and creator of the Metropolis curriculum that was featured on the American Planning Association (APA) website
3. **Shirl Buss**, creative director of Y-Plan Elementary at the Center for Cities + Schools at University of California, Berkeley
4. **Kathleen Vu**, high school teacher at ELARA who teaches the Intro to Urban Planning course for 9th graders
5. **Victoria Derr**, assistant professor of environmental studies at California State University Monterey Bay and co-author of Placemaking with Children and Youth: Participatory Practices for Planning Sustainable Communities

Before Phase II began, I initially sought to contact James Rojas, John Martoni, and a high school teacher from ELARA to discuss their experience. I selected James Rojas because I had participated in a workshop that Rojas had led at UCLA and was interested in how his practice, PLACE IT!, engaged youth through participatory workshops. I felt Rojas' experience as a community planner would provide a unique perspective to the study. I contacted John Martoni because I had found his Metropolis curriculum on the APA website while researching various resources to connect children with planning. Metropolis was unique in that it was originally developed for the elementary school demographic and I felt that it would be helpful to hear from another elementary school teacher who had years of experience integrating urban planning themes into the classroom. Lastly, I wanted to speak to a teacher from ELARA as the school also advertises itself as an urban planning-oriented program in the Los Angeles area, albeit at the high school level. Though the teachers taught an older youth demographic, I felt that there were opportunities to translate some of their techniques to address the challenges at Rosewood. I e-mailed several teachers through contacts found on the ELARA website and was able to get a response from Kathleen Vu, one of the teachers of the initial Introduction to Urban Planning class taught to all 9th graders.

Through these initial conversations, Martoni connected me with Shirl Buss and Rojas connected me with Victoria Derr. Both Buss and Derr were working at the university level to engage children with urban planning and I felt like they could provide yet another perspective that differed from those of Rojas, Martoni, and Vu. Based on these conversations, I identified what I perceived as common themes, agreements, and disagreements that developed into my Phase II findings.

Findings and Analysis

The findings from this research can be broken up into two overall types: Phase I Findings and Phase II Findings. Phase I Findings detail the major themes in how the teachers at Rosewood appear to understand urban planning and the challenges that they associate with teaching it. Phase II Findings include a brief summary of different methods used in teaching urban planning to youth and both common and unique themes discussed by those interviewed.

Phase I Findings - Understanding Urban Planning at Rosewood

What is Urban Planning?

At the beginning of the focus group conducted at Rosewood, I asked the teachers about how they understand and perceive the field of urban planning. Because urban planning has the ability to cover and address many different disciplines, I wanted to see to what extent of topics the teachers feel fall within the subject matter and what topics may be excluded. The teachers were asked to write their responses on a notepad and share their answer with the rest of the group. The transcribed responses can be found in the appendix.

After putting the teachers' responses into a word cloud, the most common words used in their descriptions were found: space, transportation, community, and people.

Analyzing these responses, three key themes seemed to emerge from the way urban planning was described:

1. Urban planning as a collaboration with the community intending to build a system of support among different people
2. Urban planning as a consideration of how space is organized in relation to what kind of infrastructure, land use, and systems make up a city
3. Urban planning as a way to create livable cities that addresses wants and needs Challenges and Concerns of Teaching Urban Planning

In the focus group, teachers were also asked to share what challenges they faced in introducing urban planning into their curricula. From this discussion, five main themes arose:

1. **Vocabulary** - How do you talk to children about urban planning? How do you create a common vocabulary set for teachers and students?
2. **Social Justice** - How do you introduce or talk about topical issues such as gentrification and climate change? How do you integrate ethics into discussion about planning?
3. **Connectivity** - How do you connect urban planning themes to topics that are not explicitly related to urban planning? How do you work within the confines of the California state standards?
4. **Resources** - What kind of media is available to help younger kids be introduced to topics in planning? What other resources, both in terms of information and accessible supplies, are there for educators and parents?
5. **Curriculum** - How do you develop a curriculum in which the knowledge of urban planning builds among each grade level and feels more unified from Kindergarten to 5th grade.





"I think that it is important to create a curriculum through the grades that builds the vocabulary and develops the understanding of what exactly urban planning is, because when [another teacher] mentions a public walkway... do the kids in our classes even know that that's the term for a sidewalk or that there's different terms for a sidewalk? Is a public walkway a sidewalk or does it encompass other types of walking areas? So I think that vocabulary is very important..."

Because most of the teachers at Rosewood do not have a background in urban planning, they described the challenges of trying to find the right vocabulary set to accurately explain and talk about urban planning issues with their students. As one teacher mentioned, even the description of a sidewalk as a public walkway may be confusing to students. The teachers agreed that a common vocabulary set would be helpful in standardizing the language that teachers use and that students learn.



"The idea of gentrification, does that fall in urban planning? That is something that I would want to discuss... the idea of affordable housing, especially because that's a big issue here in LA and I'm sure some of our students have dealt with that personally, not knowing that that's what it's called...but yeah, having those ethical discussions I think is important, because housing usually affects everyone but especially communities of color and low income communities and it is happening here every day"

In regard to social justice, teachers wondered how to include discussions about ethics in their classroom at an appropriate level that younger children can understand. One teacher noted that students may be dealing directly with issues such as gentrification and affordable housing and introducing such discussions can give students the words to better understand, describe, and talk about their situations.



"One thing that I've had difficulty with is connecting urban planning to science standards other than engineering standards. For my standards, I don't see how they connect to animal habitats...I don't see how to connect that to urban planning. I could loosely do it, but I don't see it really authentically falling under that."

Rosewood is subject to California's Common Core State Standards and Next Generation Science Standards. Teachers acknowledge that while they would like to be able to have the freedom to teach urban planning in more creative ways, they also need to make sure that they are preparing their students to meet the standards set by the state. Sometimes, there are specific standards, such as animal habitats, that teachers feel it is difficult to connect to an urban planning topic. In addition, the teachers acknowledge that while Rosewood will have a focus on urban planning, not all students will go into an urban planning career. It appears that there is some concern as to how to connect an urban planning education to fields and interests outside of urban planning.



"Books are a great start, but right now it's still... googling, searching, digging deep to find something that's topical for kids."

Teachers expressed that a lack of resources, both in terms of information and accessible supplies, was a challenge in educating their students about urban planning. While the school library has shelves with books that appear to have a connection to cities and planning, teachers often find themselves still doing the research to find media that they can incorporate into their lesson plans. In addition, the teachers discussed access to materials and funding for school projects. One teacher noted using the program Trash for Teachers in the past to pay for "clean junk" that provided enough materials for several years of projects.



"I think the idea of all of us sitting down and having this timeline all in front of us and saying this is where we end, here at Rosewood -- how far do we go and where does it start so that it each leads to the next? I think that's gonna be probably our best thing to do together as a group. Because again, I don't know what a 5th grader should be doing, I don't know what a 4th grader should be doing."

The teachers discussed the idea of backwards planning to build their curriculum. Backwards planning involves looking at the ideal knowledge and skills that students should have at a certain point in time and planning backwards to build those skills beforehand. For instance, a kindergarten teacher may plan her curriculum to prepare students based on feedback from the 5th grade teacher. The elementary school teachers at Rosewood believe that they could benefit from learning from educators at higher grade levels.

Phase II Findings - Learning from Experience

Diverse Methods in Engaging Youth

Through my interviews, I learned about four specific methods that are being used to educate and engage youth in planning: Metropolis, PLACE IT!, Y-PLAN, and the ELARA Introduction to Urban Planning curriculum.

Metropolis: A Green City of Your Own!

John Martoni is a 4th grade teacher working for an elementary school in Hayward, CA who has an undergraduate and graduate degree in urban planning. In 2010, Martoni published *Metropolis: A Green City of Your Own!*, an urban planning-based curriculum for elementary school students that was featured on the American Planning Association website.² Martoni originally taught this curriculum as part of an elective program for 3rd to 5th graders, but now incorporates an updated form of the curriculum in his classroom each year.³

Metropolis is largely based on Kevin Lynch's Image of the City. Students learn to build a city through activities that develop understandings of edges, districts, public spaces, landmarks, and transportation systems. Martoni currently uses Metropolis to guide the third trimester of his class, with the previous two trimesters helping to build skills that will ultimately be utilized by the end of the school year. Together, the three trimesters are part of the larger "California: Past, Present, and Future" curriculum. The first trimester of Martoni's class is focused on scale, in which the main project is for students to pick an item and then produce half-size and double-size replicas. The second trimester connects to the state standards of teaching California history in which students learn how to estimate dimensions of historic structures, make replicas, and also learn to do opinion writing about what they learn.

John Martoni's California: Past, Present, & Future		
Trimester	Curriculum	Description
1st Trimester: All About Me Unit Project	Object Project	Students apply math skills to build scale replicas of everyday objects that represent their personalities
2nd Trimester: California History Unit Project	Architects in Action!	This unit introduces students to scale, architecture, and engineering while studying California historical sites.
3rd Trimester: California Today Unit Project	Metropolis: A Green & MultiCultural City of Your Own!	Metropolis exposes children to design thinking and gives them the opportunity to actively participate in solving current problems in their communities.

For Martoni, though urban planning is a hovering theme in his class, Tuesdays are reserved as project days. This allows Martoni to set aside specific time each week for the students to have a more hands-on lesson. Martoni acknowledges that it is harder to have more hands-on days because of state tests and the typical plan of study for students, but thinks that one day a week can be justified. Martoni also keeps "idea bins", essentially plastic tubs with books and other resources, in his classroom to help kids find ideas and inspiration for their projects.

In addition to project days, Martoni provides a vocabulary list to students each week that often relates to urban planning. In thinking about his vocabulary sets, Martoni considers words that his students will likely use in their assignments. Examples that he noted could be "diversity", "park", "square", or "playground". Martoni also looks at state standards and sees opportunities to address both the standards and terms relevant for planning. For instance, Martoni uses words such as "subway" and "transportation" to teach children about prefixes (ex: sub- meaning under or below and trans- meaning across). Other urban planning terms are taught when Martoni covers synonyms and antonyms (ex: public vs private).

Martoni suggested that if you simply ask children to solve a problem in the community, they wouldn't know where to start. Rather, he employs a method of posing questions to students to get them focused on a particular issue. He has had community-oriented projects in his class in which kids study a specific situation, such as a closed-up entrance to their school or an underused park, and propose solutions. When the kids have a direct connection to the issues that they are planning for, they feel more confident in advocating for the changes that they want to see.

PLACE IT!

James Rojas is an urban planner, community activist, and artist who has worked with children and adults in various communities across the United States. About ten years ago, he developed PLACE IT!, a “design-and participation-based urban planning practice that uses model-building workshops and on-site interactive models to help engage the public in the planning and design process.”⁴

In speaking with Rojas, he noted that in educating kids about urban planning, the intent is not to make future urban planners but to help them “understand the city in a visual-spatial way that they can find intuitive.” Rojas mentioned that kids seem to have an epiphany once they begin to work out how to comprehend their neighborhood through different means.

For Rojas, his approach to his workshops lies in humanizing planning. Rather than portraying planning as a field of systems and infrastructure, Rojas first begins with a human experience that uses visual, spatial, and emotional cues from the human body and surrounding landscape. Thus, workshops are “people-based, not map-based”. Story-building is another important aspect of the PLACE IT! methodology because attachment to places helps participants understand why planning matters. As Rojas notes, “participants realize they’re the experts of their environment.”

Rojas uses the act of play to help children brainstorm new ideas and experiment. In particular, he uses objects so that participants can visually and spatially “transform ideas and emotions into physical opportunities”. The objects that Rojas uses for his workshops are often simple items that can be found around the house or at the dollar store, such as Easter egg shells, bottle caps, and hair curlers. The children are then able to share the places they have constructed and learn empathy through the stories that they connect with their place. Children also have the opportunity to build a community together to incorporate a diverse set of ideas. Through these workshops, Rojas sees youth develop critical thinking, problem solving, confidence, trust, social bonds, and listening skills.

Y-PLAN

Y-PLAN is “an award-winning educational strategy that empowers young people to tackle real-world problems in their communities through project-based civic learning experiences.”⁵ Housed within the Center for Cities + Schools at the University of California, Berkeley, Y-PLAN has a focus on social justice and equity and has engaged high school students since the early 2000s. Since then, Y-PLAN has expanded to include elementary school programs as well.

The elementary roadmap includes five main steps and is described below:

Y-PLAN Elementary Roadmap	
Start Up	Students initially receive a challenge and a project question that they will work to address during the span of the program. This challenge can come from a city’s planning department, a non-profit organization, or another selected individual or group. Students begin to learn about the topic, observe, and reflect.
Critical Thinking	The students then proceed to gather data to inform their solutions. This phase encourages students to go outside of the classroom to critically analyze the built environment.
Creativity	Afterwards, students use their data to design solutions that address the initial challenge.
Communication	Once the students develop their proposals further, they work to develop their communication skills by sharing their work with their peers and the public.
Community Contribution	Lastly, the students engage in a reflection process to look back upon the work that they have done through their participation in the Y-PLAN program.

ELARA's Introduction to Urban Planning Class

Introduction to Urban Planning developed as a newly re-envisioned geography class that is taught to all 9th grade students at ELARA. Only in its second year of instruction, the class was developed to further elaborate on the urban planning-themed programming at ELARA, which is primarily only addressed in the geography and journalism courses. The class is modeled slightly after Martoni's Metropolis curriculum, but also connects to Charles Montgomery's Happy City: Transforming Our Lives Through Urban Design. It is through this book that the class defines urban planning as how "urban planners work to make cities, healthy, happy, and enjoyable places to live."

The current curriculum for the class covers four units, which can be described as follows:

ELARA's Introduction to Urban Planning	
Unit 1 - Intro to Social Studies and Geography	Students focus on the city and look at understanding basic maps.
Unit 2 - History of East LA and Boyle Heights	Students learn more about the history of East LA and Boyle Heights, including student walkouts and the development of the East LA Interchange.
Unit 3 - Intro to Urban Planning	Students read chapters from the book Happy Cities and build their vocabulary using words from Martoni's Metropolis curriculum.
Unit 4 - Special Topics	The longest unit, students focus on specific issues that urban planners would investigate, such as gentrification, affordable housing, rent control, food deserts, and homelessness. Students then work in groups to create a poster educating others on their issues and sharing proposed solutions. Students also write a letter to one of their city representatives about an issue that they care about.

Analyzing Approaches

Ground Urban Planning in Students' Lived Experiences

One common theme between the approaches discussed is the importance of connecting to the lives and experiences of children first before going straight into urban planning topics. At ELARA, this involves exploring the history of the local neighborhood and learning about the history that connect what they are learning to what they are experiencing. Vu says that this unit is meant to "ground [the students] in history first before talking about urban planning" and "evoke pride" by introducing student-led movements. Rojas approaches PLACE IT! similarly and structures his workshops to first focus on reflection and story-building: "You have the kids understand their values, what they like, what they don't like. You want them to tell their own story first. That is the first step in understanding place."

Rojas also saw the sharing of experiences as a way to provide the initial steps in moving towards equity and social justice. "At the grammar school level, kids understand social justice through sharing and empathy." Buss had a similar perspective. "At the elementary level, the kids aren't as aware as high school students about social justice, but there is a greater sense of equality and an openness to diversity."

Allow Flexible Integration of Urban Planning

For Martoni, while the overall theme of his curriculum relates to urban planning, he prioritizes Tuesdays as his project days with the kids and uses the rest of the week to supplement their learning. "It's hard to incorporate planning all the time because of the plan of study and state tests, but one day for hands-on work feels justified." Even at ELARA, while the Introduction to Urban Planning course exists, urban planning is currently not integrated into all subjects. Students are exposed to planning and planning concepts while not having the subject integrated into every lesson of their education.

Have Caution and Confidence in Big Issue Topics

When asked about incorporating social justice into the discussion with younger children, Rojas cautioned that it may incite fear in kids if not handled in a way that carefully considers their level of understanding of such topics. "You need to rethink and rephrase ideas first and build their own frame of reference. Instead of speaking directly about climate change, ask how do you take care of the environment." In Buss' experience with Y-Plan, she also initially had concerns that some topics could cause children to feel scared but found that the children who participated were able to work with the topics given to them. She brought up the example of a project that introduced sea level rise and found that the kids were able to understand the issue and be innovative to address the challenges.

Collaboration and Cooperation is Key

All four of the approaches that were evaluated illuminated the importance of developing a network of partnerships. At ELARA, the school has worked with the organization Public Matters as well as students from USC Price to support junior and senior curriculum. Y-PLAN builds a diverse community network to engage youth from the beginning of their project until the end and promotes thoughtful dialogue between the students and their clients. This is evident in how students are able to present their ideas to the community and how some student projects have been able to be fully realized. In talking to Martoni, he mentioned how he draws on the different groups that he has met and worked with, such as Y-PLAN and the Architecture and Design Resource Network, to help supplement his curriculum and share ideas. Rojas similarly connects with community organizations to provide the tools for both youth and adults to be able to describe their experiences and envision change.

Similarly to Rosewood, Vu noted the challenges when there is not structured cooperation between teachers at the school. There is not a space at ELARA where all the teachers can work together to understand urban planning and connect the themes throughout the different subjects, so discussion of urban planning is only limited to a few classes.

Recommendations

The Phase I findings helped to frame the challenges that the teachers at Rosewood are facing in trying to incorporate urban planning into their curriculum. The Phase II findings provided a diversity of structures and experiences from which common themes were drawn. Ultimately, these findings helped to cultivate the following recommendations to support the urban planning program at Rosewood:

Develop a Resource Toolkit

Currently, there is not a comprehensive source for information that can be used to support educators who want to introduce children to urban planning. Vu and Martoni noted that, like the teachers at Rosewood, they have to find the information to use in their curriculum themselves. A resource toolkit that includes a vocabulary set, a list of organizations with experience connecting children with planning, and a catalog of media resources such as child-friendly books, films, and television shows with planning themes would help to make it easier on teachers who currently have to find a way to integrate urban planning into the curriculum on their own. This recommendation would help address the challenges of vocabulary and resources at Rosewood.

Invest in Teacher Education and Collaboration

As noted, collaboration is important, both among the teachers at the school and between the school and other organizations with similar goals and priorities. Time during the professional development sessions should be dedicated for collaboration to build a curriculum that makes sense across grade levels so that each teacher understands what is being learned in other grades and how the larger curriculum builds upon itself. As teachers collaborate, they are able to also actively learn from each other.

Collaborating and building relationships with external organizations can also help to support the program at Rosewood. At the time of writing, Rosewood has already engaged with James Rojas to provide teacher training in the PLACE IT! methodology. Rosewood should continue to invest in

teacher education by using professional development sessions to invite other professionals, such as those involved with Y-PLAN or Metropolis, so that the teachers can continue to expand their knowledge and skills. Developing partnerships with outside groups and organizations can also engage the youth on a level that supplements the work of teachers and exposes the youth to planning in the field. This recommendation would help address the challenges of curriculum, resources, and connectivity at Rosewood.

Explore Teaching Pedagogies that Engage Students

When building the curriculum, explore pedagogies that can engage children in the topics that they are learning. Based on the findings, a pedagogy that first grounds the curriculum in a student's lived experiences would help to first develop a child's understanding of space and connect their experiences to understand why learning about space can be important. Connecting urban planning to identity first provides an initial link for students to see themselves in the projects that they are undertaking. Sharing personal experiences and understanding the experiences of others also helps build foundations of social justice by encouraging feelings of empathy.

In addition, pedagogies that are largely project-based and allow students to be hands-on can support visual and spatial thinking at a young age. Y-PLAN, Metropolis, PLACE IT!, and ELARA's Introduction to Urban Planning class all utilize project-based learning that builds skills like communication, collaboration, creativity, and critical thinking. This recommendation would help address the challenges of social justice and curriculum at Rosewood.

Conclusions

Urban planning affects the lives of everyone, including children. When you begin to build an early understanding of urban planning at a young age, children can take the skills that they learned to better advocate for how they envision the cities and neighborhoods of the future.

Rosewood is pioneering in its goal to incorporate urban planning throughout the elementary school level. Still, initial roadblocks in vocabulary, social justice, connectivity, resources, and curriculum are currently causing some difficulty for the teachers in fully realizing an urban planning program. By looking at existing projects and courses such as Y-PLAN, Metropolis, PLACE IT!, and ELARA's Introduction to Urban Planning class, we find that the approaches generally advocate grounding urban planning in student's lived experiences, allow flexible integration of urban planning, have caution and confidence in big issue topics, and understand that collaboration and cooperation are key.

This research is limited in that there does not appear to be a comparable elementary school program that aims to fully integrate urban planning at all grade levels, though the approaches that were examined can still provide insight to support Rosewood's model.

While the initial intention of this research was to support the program at Rosewood, it is my hope that any teacher, educator, or parent can pick up the resulting toolkit that comes from this project and use it to introduce their students or children to the field of urban planning. By taking the steps to educate and engage kids in planning at a young age, we don't just develop urban planners of the future. We develop the urban planners of today.



Endnotes

¹ "Why Rosewood?" Rosewood STEM Magnet. <https://www.rosewoodelementary.org/apps/pages/index.jsp?uREC_ID=229408&type=d&pREC_ID=521339> (Accessed December 12, 2018)

² "Teaching Young People About Planning" American Planning Association. <<https://www.planning.org/educators/>> (Accessed March 20, 2019)

³ Martoni now teaches a version called "Metropolis: A Green & Multicultural City of Your Own!"

⁴ "PLACE IT! - ABOUT" PLACE IT!. <<http://www.placeit.org/about.html>> (Accessed February 20, 2019)

⁵ "Y-PLAN ELEMENTARY | Y-PLAN" Center for Cities + Schools, University of California, Berkeley. <<https://y-plan.berkeley.edu/partnerships/y-plan-elementary>> (Accessed February 20, 2019)

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Appendix

Written Responses from Rosewood teachers answering the question, "What is Urban Planning?"

"Urban planning to me is all about the wayfinding, the community, and the connection. And then also, inside the umbrella has all about the sustainability, which is the energy, the transportation, and the water use and need to be self-contained...and also electricity. Urban design is how to put all this together into a city or community that people are able to commute and connect."

"City life - understanding that things are very close in proximity, close buildings, close homes, lots of people (populated), businesses, community building, job opportunities, variety of transportation, skyscrapers,"

"Urban planning is the process that unites many members of the community to build and design a living environment which is functional as well as beautiful. Urban planning takes into account all the resources both manmade and natural to create an ideal happy living space."

"Urban planning is the design of an urban space that considers the needs of the people living there which does include transportation, businesses, housing/architectural design, entertainment resources, sanitation, modern conveniences, green space, and a system of support, like a network"

"Urban planning is designing and redesigning spaces within a city, thinking about all that would use the space, how they would use the space, and what resources are required."

"Urban planners are in charge of thinking about what do the people need in that space, thinking about where the buildings are gonna go, transportation, and like where parts are gonna go, and then homes versus businesses."