Abstract
Youth are leading the way in the Neighbourhood Action Strategy planning process in the Rolston neighborhood in Hamilton Ontario, Canada through Photovoice — a participatory action research strategy. Youth voice had been missing in other neighbourhood plans across the strategy, so Rolston became a pilot for including their perspective at the outset of the planning process. The photographs and narratives from the youth participants cultivated rich discussion and were effective tools to promote dialogue with decision makers. Findings have been shared with the school community and city councillors and as a result, some concerns have already been addressed.

Introduction
Photovoice is a participatory action research strategy that can be used to give voice to groups and help bring about change in their communities (Wang, 2006). Photos, as visual tools for communication, deepen the opportunities for data collection while broadening participation due to a decreased reliance on the written and spoken word. Photographs can be used as a method to engage citizens to shape how they would like to see their community (Wang, 2006).

Findholt, Michael, and Davis (2010) used Photovoice to engage rural youth in childhood obesity prevention and found it an effective method to reach community members and policy makers to advocate for environmental change. It also provided an opportunity to facilitate youth leadership development. Goodhart et al., (2006) implemented Photovoice methodology with university students to identify health and social injustice issues on campus. Students felt empowered through the process by meeting with policy makers and making recommendations for change.

In the city of Hamilton, Photovoice has been used as a method to engage youth as part of the Neighbourhood Action Strategy (NAS), which “is focused on helping neighbourhoods become great places to live, work, play and learn” (City of Hamilton, 2014). The key elements of the NAS are: enhancing community development work; developing resident-led neighbourhood action plans; increasing investments in neighbourhoods; and building new partnerships to support healthy neighbourhoods (City of Hamilton, 2014).

This project was unique in that previously youth participation in the NAS was missing. Photovoice was used to merge neighbourhood planning and health promotion together to engage a diverse group of elementary school students in the Rolston neighbourhood. A Public Health Nurse (PHN) and Community Developer (CD) facilitated the project with the assistance of a group of level three nursing students and two staff members at a local senior elementary school. This Photovoice project was an opportunity to engage and empower youth by seeking their ideas and validating their expertise by sharing their ideas with local stakeholders and decision makers, all of which helped facilitate change at the neighbourhood level.

Background
Hamilton is a geographically segregated city with an east/west tract of neighbourhoods in the lower city running along the lakeside industrial belt, with dwindling activity, but vestigial brownfields, along with a parallel tract of suburban neighbourhoods running south of the Niagara Escarpment above. Rolston is a neighbourhood located in the West Hamilton Mountain, and is the only neighbourhood located on the escarpment that is included in the NAS. Local Hamiltonians refer to the escarpment colloquially as “the Mountain.” Rolston neighbourhood is surrounded by three major roads and is adjacent to an expressway. Census data indicates that 35% of Rolston residents, and 49% of children under six in the area, live in poverty (SPRC, 2012). Additionally, 25% of residents identify as a visible minority in Rolston, compared to 14% in the City of Hamilton (SPRC, 2012).

The Photovoice project was an opportunity to engage youth in this community by having them discuss what they believe a healthy community looks like, what features in their neighbourhood fit or do not fit this vision, and to facilitate change at the neighbourhood level. By sharing their ideas with local stakeholders and decision makers, the youth were able to facilitate change and contribute to neighbourhood planning. The project was also a chance for multi-sector collaboration between two city departments (Public Health Services and Emergency and Community Services), a non-profit charitable organization (Social Planning and Research Council of Hamilton) and a post-secondary institution (McMaster University School of Nursing). Collaboration across sectors for the purposes of improving population health and reducing health inequities is a well-established approach, recognizing that health is impacted outside the health sector and health policies (WHO, Jan. 2014).

Method

Project Design & Process

Photovoice, the community based participatory research method that Wang and her colleagues developed in the 1990’s, has been used in a variety of settings to address many public health and social justice issues (Catalani and Minkler, 2010). According to Wang (2006) the goals of a Photovoice project are 1) to enable people to record and reflect on strengths and concerns; 2) to promote critical group discussion; and 3) to influence change makers. She suggests following nine steps to reach these goals. Wang’s process was used as a framework for this project. Her method is as follows:

1. Select and recruit a target audience of policy makers or community leaders.
2. Recruit a group of Photovoice participants.
3. Introduce the Photovoice methodology to participants, and facilitate group discussion about cameras, power and ethics.
4. Obtain informed consent.
5. Pose initial themes for taking pictures.
6. Distribute cameras to participants and review how to use the camera.
7. Provide time for participants to take pictures.
8. Meet to discuss photographs and identify themes.
9. Plan with participants a format to share photographs and stories with policy makers or community leaders.

Although Wang presents this as a seemingly linear process, the reality is that it can be somewhat fluid. To ensure a youth voice in the NAS planning process, twelve Photovoice participants were selected from grades six to eight (aged 11 to 14 at a senior elementary school located in the
Rolston neighbourhood. Participants were purposively selected and invited by their school principal, after consultation with the Community Developer. A general call for volunteers was not made. The goal was to form a group of participants that was reflective of the larger community, so consideration was put towards representation based on diversity of gender, culture, leadership and social skills, immigration experience, language of origin and faith community, but there were no particular inclusion or exclusion criteria.

The overall management of the project was completed by the Community Developer and Public Health Nurse, while the Photovoice session facilitation was completed by older youth, four third year nursing students from the McMaster University School of Nursing. The CD and PHN met with the nursing students prior to the first session to provide a one-day training and preparation session, which included a walkabout in Rolston neighbourhood so that the nursing students could familiarize themselves with the location and features. During that session, the nursing students were provided with an agenda template prepared by the CD and PHN. Although most activities and the general flow of the project are predetermined by that agenda template, the nursing students were able to select and design ice breaker activities to match their skills and comfort levels, and to prepare an introductory slideshow explaining the Photovoice process. The CD and PHN continued to mentor the nursing students throughout the project, and supported them to adjust the agenda as necessary.

Prior to the first session with participants, informed consent was obtained by parents/guardians for their child’s participation in the project. Included in this consent was use of the photos, art and narratives created by the participants. Participants themselves were also asked if their photos, art, narratives and ideas could be used by the CD and PHN to engage adult residents in the community, the City of Hamilton and other stakeholders to change and improve the neighbourhood. The school facilitated the consent process.

In the first session facilitators provided an overview of the project and explained the individual activities that would be completed over the three half days that the group would be together. Each day began with an opening ice breaker. Facilitators were encouraged to select an activity that helped encourage development of group cohesion while also introducing the facilitators to the participants. The youth came from different classroom groups and grade levels, so it was also important to introduce the participants to one another. Informed consent was also a feature of each of these discussions.

Throughout the sessions participants worked in small groups for activities and then in the large group for discussion. Youth were encouraged to self-select groups of three or four participants, and small groups were then joined by a facilitator. These same small groups remained unchanged for each of the activities. In the small groups the youth completed a mapping activity, identifying key features in their neighbourhood that they believed to be assets, such as key transportation routes, green spaces, services, homes, persons and institutions. They also identified concerns like places where they believed crime occurred, areas that they felt unsafe walking through or exploring, under-utilized and poorly maintained properties, and concerns with infrastructure like roads and sidewalks in need of repairs.

Following the mapping exercise, the small groups reported their discussions back to the larger group. Facilitators encouraged deeper discussion on themes and features that came up across
several groups. The PHN and CD also assisted in identifying community organizations and institutions that had responsibility for areas of concern. For example, participants mentioned concerns about unsafe intersections, which the CD linked back to responsible departments at the City of Hamilton. After the discussion, participants went back to their small groups and each created a vision for their neighbourhood. This vision was used to assist the process of prioritizing ideas for change following the photo taking and theme identification.

The photo taking exercise occurred during the second session. Cameras were distributed, along with spreadsheets to be used to log brief photo descriptions and narratives explaining how the contents of the image fit, or did not fit, their vision for a healthy community. Participants were shown how to use the digital cameras.

Facilitators led a discussion with participants on personal safety while in the community. Participants were reminded about the privacy of community members and property owners. When taking pictures they were asked to ensure that no people were in the picture and, if including people was unavoidable, they were advised to ensure that faces were not shown and the person was otherwise unrecognizable. Pictures were later screened to ensure photos were excluded if there were privacy concerns. They were also advised how to manage community members that did not want to be photographed, or someone who approached the group to ask them to not take a photo or delete photos already taken. It was important to help model these conversations for participants before they went out into the community, and to accompany them throughout the process to provide support when needed. Participants went into the community and each followed a unique route led by one or two adults, a nursing student and either the CD, PHN or a teacher from the school. When they returned from the walk, they logged each photo with a narrative.

The intrinsic value of lived experience is important to the information collected through this process, but facilitators also made use of this knowledge to adjust the delivery and design of the project. The route design was informed by the neighbourhood profile data and physical features in the community noted by facilitators. Routes were adjusted to include areas or features that raised questions or intense dialogue among participants during the mapping exercise. Additionally, two or more groups were sent to areas with a high degree of interest to participants to offer greater opportunity for discussion.

Between the second and third session, the PHN, CD and nursing students met to discuss the results of the mapping, visioning and photo taking exercises. Each exercise resulted in multiple ideas for changes and improvements to the Rolston neighbourhood. Ideas were added to a master list. Photos were organized into themes and a brief report back slideshow was created.

At the beginning of the third session the slideshow was shown to the students and they discussed the themes and ultimately agreed that these themes reflected their experiences and perspectives. They were asked to consider the visions for a healthy Rolston community that they had developed, and to use these visions as a lens through which to reconsider and select ideas for change from the master list. A weighted voting system was used. Each participant was given five votes that they could distribute across 1-5 project ideas. After each participant cast their votes, the five ideas that received the most cumulative votes were selected as the most important areas...
for change. They quickly rallied to create a presentation for their school that same day, and performed a 15 minute slideshow for their fellow students, teachers and staff.

Results
The twelve participants took 118 photos. There were several themes of assets and needs documented and identified from the community mapping exercise, photo taking activity and group discussions. These included:

- Pride of Place, which captured vandalism, graffiti, litter, maintenance and parks and recreation;
- Community Safety;
- Accessibility; and
- Building Relationships.

Pride of Place:
Vandalism and Graffiti were identified as needs in the community. The youth participants noted that "[i]t ruins properties" and "[i]t makes us feel unsafe. People may not want to buy houses in this community."

Litter and Maintenance were also identified as needs in the neighbourhood. The participants pointed out the overflowing garbage at a housing complex in the neighbourhood. "Trash is everywhere and all over the bins."

This Photovoice project was completed during the winter months during a prolonged period of deep cold and heavy snow. Participants took pictures of concrete stairs beside their school that were not maintained in winter weather. "They need to be cleared properly from snow and ice." Participants noted that this lack of maintenance may impact accessibility.

Parks and Recreation were identified as assets in the neighbourhood. A "[p]layground is an asset because it is a place for the community to come together and play, [and provides] more opportunity to be outside participating in physical activity instead of being inside playing video games." The participants appreciated the large parks in the neighbourhood. "Most parks are small, the field is big and we can play football." They did recognize infrastructure needs in the parks. "There should be benches in here for people to sit and enjoy it."

Community Safety:
Community Safety was identified as a need in the neighbourhood, particularly as it relates to traffic safety. "No all way stop and this has caused many accidents" and "[t]hree accidents in a year. People are driving too fast."

Accessibility:
Accessibility was identified as both an asset and a need in the neighbourhood. For example, a set of metal stairs from the bottom to the top of the ridge on the secondary school grounds was seen as both an asset and a need. "[The stairs are] [w]ell cleared of snow." "[The stairs are] [a]ccessible but not for people with wheelchairs, strollers or bikes." The paths throughout the neighbourhood were seen as important for connectivity. "This path is an asset because it is a way to access other places."
Building Relationships:
Building Relationships in the neighbourhood was identified as a need, particularly across generations. "Sometimes elderly people complain about [the local] high school students going there to eat their lunch."

The students identified action items based on their findings and prioritized them to share with decision makers. The action items in order of priority are:

- Clean up the graffiti (many locations)
- More public garbage cans in the community (trails, parks, public spaces)
- Fix cracks in the roads
- Improve relationships between young people and older people in community centres
- Improve traffic management in front of the schools before and after school

Sharing the Findings
Findings from the project were shared with the student body at a school assembly. Participants chose the photographs and narratives they wanted to share with their peers and school staff, and the process, findings, and recommendations were included. Additionally, the participants made a delegation to the General Issues Committee of the Hamilton City Council. Council members were inspired and influenced to address some of the concerns identified by the youth. For example, the potholes on the road leading to their school were repaired and the garbage overflow identified at a housing complex has become a priority for the councillor and the housing management. One of the adjacent elementary schools is working with Hamilton Public Health Services on a school travel plan, which may also impact traffic management around all three schools in the area.

The participants data, including the art completed during the vision exercise as well as a number of their photos, has since been presented at an art show in the Hamilton arts district during the Supercrawl festival. The slide show presentation has also been shared with the Rolston Community Planning Team. Information was made available at the Supercrawl event, inviting visitors to learn more about the community and the various ways in which they could support the change suggested by the youth.

Barriers and Limitations & Strengths and Opportunities

Barriers and Limitations
Weather: When the group faced serious inclement weather causing delays within the session, the structured environment meant that the facilitators needed to rush other activities to make up for lost time. Inclement weather (i.e., snow and extreme cold) also meant rescheduling a missed session, and it limited participation of persons with mobility issues. The principal had put off their departure until the temperature rose to at least -15C, and this was still too uncomfortable to stop and make notes, and the groups simply wanted to complete their routes as quickly as possible. Rather than taking notes as they walked, they reviewed the photos upon their return to the school and recorded their observations. This additional step meant that a large group discussion about their experiences and observations had to be shortened.

Timing: Timing was both a problem of circumstance and design. The duration of a complete Photovoice project, as designed by the PHN and CD is three, half day sessions. This loads the theme identification onto the planning meetings between the CD, PHN and nursing students,
rather than with the youth participants. It is designed this way because coding data and identifying themes is time consuming for adults, and would take even greater time given the age and developmental stage of the participants. Potential value in the data is lost because of the way this is managed. Three additional project days were required with the participants to prepare for the final presentation to City Council. This prolonged the project, leaving less time at the end of the nursing field placement to assist with the final presentation. What became a barrier and limitation to the participants, however, was a leadership and learning opportunity for the nursing student facilitators. They were required to think quickly to help readjust the project activities. During delays they needed to facilitate meaningful discussion to keep participants engaged, and increase the pace of other activities to match time constrictions.

Overall, the project offered an excellent learning and mentorship opportunity for the nursing students. They were able to experience the supportive mentorship of the PHN and CD, which provides a unique interdisciplinary approach and, in turn, they were able to lead and mentor the youth participants in the Photovoice project.

Strengths and Opportunities:
Youth Leadership Development: The project became a leadership and citizenship opportunity for both the nursing student facilitators and the Photovoice participants. The participants collected and shared a great deal of information about their neighbourhood while working with a group of adults who validated the expertise of their lived experience. The adult facilitators, the PHN and CD, committed to moving the ideas further into the hands of people who could make necessary improvements and changes. There are opportunities for engagement and leadership by connecting a Photovoice project with local planning teams, or other adult community groups. Partnering adult resident facilitators with youth resident participants can nurture relationships and further validate the knowledge and perspective of each to the other.

School Support: School staff was an unexpected support to this project. The PHN and CD had previously worked with a number of school and community groups on other Photovoice projects, and found that on site school staff support varied. In this instance the principal was very excited to support this project because of the potential links to curriculum and community-based learning, as well as leadership and citizenship engagement for his students. The Education Assistant and teacher were both eager and well positioned to help deepen discussions amongst students by making links to curriculum. This was unplanned, and at the time, it raised more questions about potential applications rather than deep opportunities for learning. This connection needs to be further explored in future projects.

City Council Support: Most significantly, the group took their findings and presented them to Hamilton City Council and City of Hamilton senior staff at the General Issues Committee. The participants and staff from the school rode the city bus from their school to City Hall to present as a delegation. Councillors asked questions and offered support by, again, validating the observations and expertise of the youth. Presenting at City Hall was an opportunity for the youth participants to further develop advocacy skills. The process also helped to build trust between the youth and adult facilitators, the PHN, CD, teacher and Education Assistant.

Recommendations
There are several recommendations resulting from this Photovoice project.
1.) Utilize Photovoice as a youth engagement tool. This process allows participants to obtain hands-on experience identifying issues important to them and gives value to youth voice in the context of the wider community.

2.) Investigate opportunities to link findings to curriculum in school-based Photovoice projects. A teacher champion could help facilitate this process.

3.) Use Photovoice to develop leadership skills for both participants and facilitators. It is a leadership opportunity for participants to engage in the process of gathering information to help champion community change. They also learn hard transferable skills engaging with the facilitators, presenting their findings back to their community, and sharing their results with stakeholders like City Council. Youth facilitators build and demonstrate leadership skills implementing a Photovoice project under the mentorship of the PHN and CD. Including youth at the table for the development phase of future projects as well as gathering their feedback after projects are completed are additional steps that can be included to engage youth in a meaningful way.

4.) Make the Photovoice toolkit more accessible to the community so that more groups can take advantage of running a Photovoice project independent of CD and PHN support.

5.) Arrange to leave cameras with participants for self-directed photo taking.

6.) Encourage participants to take one key project idea to decision makers.

7.) Develop a feedback tool to be completed by Photovoice participants, to provide ongoing evaluation of the project.

8.) Develop a feedback tool to be completed by the Photovoice nursing student facilitators, to provide ongoing evaluation of the project.

9.) Invite nursing student facilitators to contribute to the ongoing changes and improvements to the Photovoice toolkit.

Conclusions

Wang’s nine step process for Photovoice provided a valuable framework for this project with a group of senior elementary school students. One of the major outcomes of the Photovoice project was a rich array of photos and narratives specific to the Rolston neighbourhood in Hamilton, Ontario, Canada. This has been a successful method to engage youth in the neighbourhood planning process and to identify solutions to develop a healthier community. These youth participants were the first to engage in the neighbourhood planning process in Rolston; in other neighbourhoods, the early engagement and adopters were typically adults. This project not only served as an opportunity for youth participants to have their opinions heard but also allowed the older youth facilitators to develop and demonstrate leadership and civic engagement skills. Collectively this project provided an opportunity for the youth involved to take an active role in bringing about changes in their neighbourhood based on their vision for a healthier community.

Strengthening community engagement is a key area of health promotion according to the Ottawa Charter for Health Promotion. Engaging youth in this work can help further the agenda of healthy communities by ensuring a youth voice at the table. Through Photovoice, issues can be identified, solutions put forward and prioritized, and these ideas can then be shared with decision makers for implementation. “At the heart of this process is the empowerment of communities - their ownership and control of their own endeavours and destinies” (WHO, 2014, p. 2).
Biographies:

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Sharon received her BPHE from the University of Toronto, and her BNSc from Queen’s University. She has been working for Hamilton Public Health Services for over 25 years in a variety of areas.

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Laura received her BA from Dalhousie University in Sociology and Women’s Studies, and her BSW and MSW from McMaster University. She brought a background working for Immigration Canada and two Children’s Aid Societies to her current work as a Community Developer with the Neighbourhood Action Strategy (NAS).
References


