



Claiming Online Space for Empowering Methods: Taking Photovoice to Scale Online

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Abstract

Photovoice is a participatory action research method that combines documentary photography, individual storytelling, and critical group discussion processes. Curated photographs and stories that constitute the data of Photovoice projects often serve as catalysts for community-driven social change. Traditionally excluded voices are amplified through the strategic dissemination of knowledge generated through Photovoice projects. Past community-based projects have tended to be small, geographically constrained, demanding on participants, and resource intensive, thus limiting the potential for use in large-scale social change efforts across diverse stakeholders. To push the boundaries of Photovoice use within the field of community psychology and other applied settings, this paper introduces an innovative online Photovoice method, discussing in detail the mechanics of developing an online platform as well as key facilitation processes necessary to design an empowering online setting. Through analysis of one project involving 120 youth across one state, we will demonstrate how the move online promotes participant engagement while retaining quality, empowering the participatory processes that are the hallmark of Photovoice projects. Future directions and implications are discussed for this novel methodology to be used within the current sociopolitical context.

As community psychologists, it is imperative that we continue to develop methods that respond to the needs of our evolving ecological landscape. Our methods ought to amplify the voices of historically silenced communities as well as facilitate social action, perspective taking, and exposure to civic discourse (Langhout, 2003). One powerful method for achieving action-oriented social justice goals is Photovoice, which combines photography, individual reflection, and critical group discussions to generate local knowledge about social issues and help communities move to action (Wang & Burris, 1997). While Photovoice has been used in diverse contexts with historically marginalized populations (i.e. people who are unhoused, women living in rural communities, people with disabilities, survivors of gender-based violence, and adolescents), widespread use has been hampered by its resource-intensive processes

and small-scale implementation (Catalani & Minkler, 2010; Wang & Burris, 1997; Streng, Rhodes, Ayala, Eng, Arceo, Phipps, 2004; Teti, Murray, Johnson, & Binson, 2012). Teti and colleagues (2012) discuss being restricted in their photovoice dissemination plans, specifically being unable to afford the costs of displaying multiple Photovoice exhibits. Wang and Burris (1997) highlight the challenges they encountered in supporting large-scale application of Photovoice within rural communities (i.e. Yunnan, China) including resources, time, and transportation. Arguably, these limitations hinder the breadth, scope, and reach in connecting diverse stakeholders and geographically isolated populations via methods of Photovoice.

There has been growing interest in the development of online platforms as an avenue for facilitating the Photovoice process

(Strack et al., 2015), diversifying community networks (Kornbluh, 2017), and disseminating information (Kia-Keating, Santacrose, & Liu, 2017; Kornbluh, Neal & Ozer, 2016). Research has been limited in documenting the mechanical considerations and facilitation techniques required to maintain an empowering participatory Photovoice process via online platforms. To extend the reach of Photovoice and address gaps in the literature, we discuss the logistics of transferring the primary activities onto an online platform. This transfer allows for broader participant engagement while retaining empowering high-quality participatory processes central to Photovoice. In this paper, we: 1) provide an overview of the traditional Photovoice process, 2) discuss key processes for facilitating empowering outcomes, 3) highlight limitations of the traditional Photovoice approach, and 4) describe our online adaptation. We evaluate our process utilizing data from a project with 120 youth residing in one state to examine the effectiveness of this transition Photovoice from in-person to online. Lastly, we discuss implementation, ethical considerations, and future research within our current sociopolitical context.

Photovoice Overview

Photovoice is a qualitative method of inquiry rooted in participatory action research (PAR) that values participants' knowledge and expertise as well as the use of data to guide future social action (Foster-Fishman, Nowell, Deacon, Nievar, & McCann, 2005; Lykes, 2003; Wang & Burris, 1997). In a review of 37 Photovoice projects, Catalani and Minkler (2010) found that Photovoice projects consist of four essential steps: First, participants are trained in photography, ethics, and safety when photographing one's community. Second, participants engage in a cyclical

process of individual research and documentation in which they record their narratives through photography and written text, often guided by a set of framing questions. Third, facilitated group discussions using strategies similar to and adapted from the SHOWed technique¹ (Shaffer, 1983) serve to provide additional insight into images and narratives. Most projects conclude with participant reflection on the images and stories shared with the intent of curating an exhibit that presents a coherent message to the broader community as a form of social action.

Photovoice projects often lead to enhanced community engagement in action and advocacy, improved understanding of community needs, and increased individual empowerment (Catalani & Minkler, 2010; Lykes, 2003). Engaging participants in critical dialogue is the backbone of the Photovoice process, yielding useful data and fostering an empowering setting for participants to self-express, partake in critical inquiry, raise critical consciousness, and collectively construct knowledge to guide action (Foster-Fishman, et al., 2005). When engaging in photovoice with adolescent urban youth, Foster-Fishman, Law, Lichty, and Aoun (2010) similarly emphasized the need for facilitators to guide participants beyond a simple description of a community problem, towards considering the root causes of an issue and developing potential solutions. Below, we focus on the processes believed to foster an empowering experience for participants, as these form the foundation of effective Photovoice projects.

Empowering Participatory Processes

The power of Photovoice is rooted in individuals' ability to document, share, and discuss their insights about their

¹ The SHOWed technique involves a series of reflective questions regarding their photographs to help guide critical dialogue: A) What do you See here? B) What's really Happening here? C) How does this relate to Our

lives? D) Why does this problem, concern or strength Exist? E) What can we Do about it? (Shaffer, 1983).

communities (Catalani & Minkler, 2010; Foster-Fishman et al., 2005). Foster-Fishman and colleagues (2005) solicited in-depth facilitator reflection and participant feedback at the completion of a Photovoice project to explore individual and collective Photovoice project outcomes as well as mechanisms underlying perceived impact on individuals and communities. This work identified indicators of Photovoice as an empowering method, including increased self-competence, emergent critical awareness, and a cultivation of resources for social action. Three aspects of the Photovoice method are instrumental in fostering these impacts: 1) empowering participants as experts on their lives and community, 2) supporting deep reflection about participants' lives, and 3) creating a safe climate for diverse perspectives.

Similarly, Catalani and Minkler's (2010) meta-review found that the majority of participants reported greater understanding of community needs among stakeholders. The authors attributed this to the ability of Photovoice to both engage difficult to reach groups and develop feelings of trust between them, including among diverse project members and the researcher. Relationships are developed by eliciting honest and open discussion. In these interactions, personal narratives are disclosed and put in conversation creating opportunities for enhanced community awareness. By documenting community strengths/challenges and engaging in critical dialogue across stakeholders, participants are able to expand critical thinking skills to analyze their environment and develop supportive relationships that promote individual and collective sense of efficacy (Catalani & Minkler, 2010; Foster-Fishman et al., 2005).

In summary, Photovoice aims to bring marginalized voices into public debate (Catalani & Minkler, 2010; Wang & Burris, 1997; Streng, Rhodes, Ayala, Eng, Arceo, Phipps, 2004) by engaging community

members who are often excluded from decision-making processes in critical documentary and dialogue-based activities (Foster-Fishman, et al., 2005; Frohman, 2005). Principles of empowerment education (Freire, 1972) are particularly evident during the facilitated critical dialogues about participants' photographs and personal narratives (Wang & Burris, 1997; Foster-Fishman, et al., 2005; Streng, et al., 2004). The Photovoice process fosters participant empowerment, generates meaningful community-based knowledge, and can serve as a catalyst for community change (Catalani & Minkler, 2010; Foster-Fishman, et al., 2005).

Photovoice Limitations

Photovoice is limited in the breadth of community engagement it fosters. Traditional approaches to Photovoice tend to involve relatively small samples, with a median project size of 13 participants (Catalani & Minkler, 2010). In a recent search, only one project was identified with more than 100 participants ($n = 122$; Wilson et al., 2007); however, participants were divided into smaller groups ($n = 6$ to 10) with no described contact across groups. We theorize that Photovoice projects remain smaller scale due to the intensive in-person resources required for the in-person small group dialogue sessions. For example, one in-person project completed by the authors involved 19 youth participants (Foster-Fishman, Law, Lichty, & Aoun, 2010). To execute each round of in-person Photovoice required coordinating selection and printing of images between meetings, transporting eight facilitators along with all relevant materials for reflecting on and selecting photos to discuss, transportation of all participants, and staff time for all eight facilitators during sessions in addition to recording and transcribing photo-narrative sharing and group discussion. Without process modifications or substantial financial investment, large-scale Photovoice projects

are infeasible in most contexts. As a consequence, fewer voices are represented in Photovoice projects, fewer participants experience the benefits of this participatory method, there is less opportunity for hearing diverse perspectives, and larger research studies may bypass this method for generating knowledge altogether, deeming it infeasible on a large scale. This restricts the potential for Photovoice to contribute to large-scale social justice organizing and critical discourse from stakeholders across geographic regions.

Why take Photovoice online?

While not specific to Photovoice, researchers have stressed the value of technology in promoting the large-scale application of youth engagement in health promotion efforts and community development (Flicker et al., 2008; Frاسquilho et al., 2008; Kornbluh, 2017; Kornbluh et al., 2016; Akom, Shah, Nakai, & Cruz, 2005). Informed by this literature and field experience, we argue that an internet-based Photovoice method offers three benefits beyond the traditional in-person approach, including the potential to 1) engage and connect a large, diverse set of participants, 2) be culturally responsive, and 3) preserve project resources.

First, adopting an online approach to Photovoice allows for the engagement of a large number of geographically dispersed participants, creating a bridge between silos and diversifying collective efforts. Studies have found similar effects utilizing online mediums to facilitate large-scale youth engagement in participatory action research across urban cities and countrywide (Akom et al., 2005; Frاسquilho et al., 2018; Kornbluh et al., 2016). Online platforms may be particularly important when engaging individuals in rural communities, with limited access to transportation, or with other mobility challenges. An online method has the potential to foster a more equitable distribution of the benefits of the Photovoice

process because people who would not normally be brought to the table can be engaged. The critical dialogue space created through online Photovoice represents a potentially powerful opportunity for generating insight into issues that may transcend local communities and deepen perspective taking through exposure to alternative viewpoints. It also may support the creation of unified action plans across counties, regions, and/or states.

Second, an online Photovoice method is more responsive to the technologically-driven communication culture of potential participants. Recent studies indicate a growing interest in activist forms of civic participation and organizing through online mediums (Kornbluh et al., 2016; Smith, 2013). A large proportion of youth and adults live their lives in a virtual world through social media sites such as Facebook, Tumblr, Snapchat, Twitter and Instagram. As of 2015, the Pew Research Center's Internet Project estimated that 92% of youth within the U.S. (aged 13-17) spend time online and 71% are using a social media platform to, among other things, post photos of themselves (Pew Research Center Teen Fact Sheet, 2015). By adapting Photovoice to an online platform, processes can more closely reflect how a population typically shares their ideas, experiences, and photographs with one another. This should enhance participant comfort with the process and decrease the extent to which the project feels like it operates outside normal life. It is possible this will promote interest in projects and more authentic participation.

Third, on a pragmatic level, taking Photovoice online reduces project costs. Many online spaces are free. Participants also upload images and engage in conversations through online written communication (e.g., online commenting functions). This saves the costs of digitizing and preserving in-person sessions (e.g., transcribing recordings, scanning photographs). In addition, by

bringing people together in a virtual space, projects will save money and time by not requiring travel to a physical location. Further, in the virtual space, a single facilitator can engage multiple Photovoice groups simultaneously whereas an in-person project would require one to two facilitators per group to generate the same output. As such, the online shift presents the potential for an expansion of Photovoice projects without an increase in project costs, thus increasing the access of this method to diverse and underserved communities.

In the remainder of this paper, we present a case example of an online Photovoice project. To examine the success of our online Photovoice process, we considered two primary questions: 1) to what extent did youth participate in the Photovoice process, and 2) to what degree did we replicate quality and empowering participatory processes of in-person Photovoice in the online environment? First, we provide the context of the case study, including an overview of our mixed methods for evaluating the implementation of Photovoice online. Second, we share our blog-based Photovoice method, discussing the mechanics and infrastructure necessary to transfer an in-person method to an online platform. Data concerning the extent to which youth were engaged (i.e. frequency in posts, comments, and online discussions) is also provided. Third, we discuss the empowering participatory processes we adopted to an online platform (i.e. valuing participants as experts, fostering deep reflection, and creating a safe and supportive environment), and provide evaluative findings from a case study to assist in assessing impact.

Context of the Current Project

The current Photovoice project emerged as part of a statewide, year-long youth leadership development and substance abuse prevention project in one state in the eastern United States. The National Youth Leadership

Initiative (NYLI) project involved a partnership between three organizations: Community Anti-drug Coalitions of America (CADCA), Community Connections, Inc. (CCI), and Michigan State University (MSU). We describe the core components of the project briefly below.

What is NYLI?

NYLI trains youth and their adult advisors to become agents of change in communities across the country. NYLI was created by CADCA, a community-based drug abuse prevention organization, to support the inclusion of youth as partners and decision-makers within anti-drug coalitions and other local organizations. Through the NYLI program, CADCA strives to increase coalitions' capacity to include youth in their work as well as youths' capacity to serve as community leaders. Following the motto "youth led, adult guided," the overarching goal of NYLI is to produce community change by increasing a community's capacity to solve its own problems and to build youth capacity for youth-led civic engagement.

Community Partners

For the current project, CADCA partnered with one state-wide organization (Community Connections, Inc.) to implement a state-wide NYLI training model intended to create a surge of youth and adults who are prepared to mobilize on a broader scale to create local and state-wide community transformations. A Photovoice component was added to the training as a method of generating knowledge about local conditions and to promote individual empowerment. Photovoice was incorporated throughout the NYLI experience to support CADCA's training. Framing questions for this project asked what youth were proud of in their community, what leadership meant to them, and what problems youth in their community faced. With participants sampled in clusters from multiple counties, Photovoice generated insights into youth experiences both within

and across communities. Our team served as evaluators/consultants throughout the project and led the Photovoice component. Collectively, our research team had completed more than 10 in-person Photovoice projects prior to undertaking this project.

Youth Participants

CADCA training was delivered through three four-day residential sessions held over the course of one year. At the first training, there were 133 youth from 25 counties across one Eastern US state. Youth ranged in age from 12-19 years (Mean = 14.95), were 60% identified as female, and were predominantly white (90%; consistent with state demographics). Local sites were responsible for recruitment, and the Institutional Review Board at Michigan State University approved all processes. Parental consent and youth assent were obtained. Over time, several counties and individual youth withdrew. In follow-up conversations, we learned that counties withdrew due to staffing challenges. Youth left the program because of commitments to other activities or moving out of the area. By the end of the project, there were 95 youth from 21 counties. During Photovoice, there were approximately 120 youth participating.

Evaluating Online Photovoice

In order to examine our key research questions, we analyzed three data sources (see Table 1). First, blog posts and comments were reviewed and tallied to assess the frequency and extent of participant engagement. Second, we conducted a rich case analysis of the two most consistently active blogs (referred to as Blog 1 and Blog 2) based on the percentage of blog members who posted during each round of Photovoice. We expected that the effects of our facilitation process would be more evident the longer the youth engaged in the Photovoice blogging process, therefore we examined patterns of

engagement and critical discourse over time. Third, at the end of the Photovoice process, six focus groups were conducted (three high participating and three low participating focus groups) to learn about the overall experience of participating in the NYLI project. Participants were asked to share what they liked and disliked about Photovoice, as well as what it was like to participate in Photovoice online (e.g., Was the blog a comfortable place for you to share your ideas?). While the focus group protocol was not designed to directly assess the three domains of valuing youth as experts, deep reflection, and safety, the open-ended opportunity to describe what they liked and disliked allowed space for youth to organically identify those elements if they were important to their experiences in positive or negative ways. Focus groups were facilitated by the lead investigator on the project (Foster-Fishman) who had not actively participated in the online Photovoice facilitation process. Discussions were audio-recorded and transcribed. Fourth, we gathered anonymous survey data on participants' perceptions of the blog climate and the impact of participating in Photovoice using 13 survey items. The survey items were administered to 86 participants present at our second in-person meeting after the completion of Photovoice activities.

Two members of the research team consensus coded the blog narratives and focus group data using analytic induction to assess our assertions that our facilitation process promoted youth identifying as experts, deepened reflection, and created safe space for diverse voices to share (additional details of these concepts are in the sections below). Prior to coding, the analysts (Lichty and Kornbluh) reviewed the Foster-Fishman et al. (2005) paper and developed shared understandings of how the concepts may manifest in practice through identifying examples of the phenomenon and negative cases. Coders then reviewed the transcripts noting each set of text related to an assertion (e.g., "Youth are valued as experts"). All codes

were compared and differences resolved via consensus. Transcripts were then re-reviewed for negative cases, including evidence that contradicted the assertion (e.g., youth explicitly not valued as experts) or the absence of

evidence for an assertion (e.g., no indication of youth valued as experts). Results are presented following our description of our facilitation strategies to clearly link the process with the outcome.

Table 1

Evaluation Question, Outcomes, and Data Sources

Question	Outcome	Data Source & Measure
To what extent did youth participate in online Photovoice?	Frequency in participation	Blog Post: # of posts # of comments # of group discussions
To what degree did we replicate quality and empowering participatory processes of in-person Photovoice in the online environment?	Participants: 1) Identify as experts 2) Reflect deeply on topics raised 3) Feel safe and supported	<p>Blog Narratives: Archival Records Analysis (Blog 1 & Blog 2): Assessed blog transcripts for direct statements and behavioral shifts to see whether youth increased in in indications of three outcomes over time. Including:</p> <ol style="list-style-type: none"> 1) Experts: Ownership over the blog process by providing additional ideas and/or taking on a facilitator role 2) Reflection: Provided expanded detail and critical analysis beyond individual level 3) Safety: Personal disclosure and openness to communicating divergent points of view <p>Post-Project Focus Groups: Analyzed transcripts for themes related to outcomes. Below are examples of how statements related to outcomes emerged:</p> <ol style="list-style-type: none"> 1) Experts: “Youth have ideas or insights” (stated directly), presenting own analysis of issues that emerged on blogs, and naming other youth as experts or people from which they could learn 2) Reflection: Described thinking differently, thinking more complexly, as well as building new understanding surrounding their communities 3) Safety: Online process promoted opportunities to share without judgement <p>Post-Project Survey Data: Likert scale items assessing perceived blog climate and perceived impact of participating on outcome domains (see Table 2 for items)</p>

Taking Photovoice to Scale Online: Mechanics (Part One)

Our online Photovoice adaptation involved developing infrastructure as well as modified facilitation and participant engagement strategies. In the section below, we introduce the mechanics behind developing an online Photovoice platform, highlighting the intentional structure of the platform, our strategy for elevating participants' online capacity and comfort, and the importance of asynchronous facilitation strategies for individual documentation as well as group-level reflection.

Blog Structure

For this Photovoice project, the process of photo sharing and critical dialogue was moved to a blog-based online space through www.wordpress.com. Wordpress allows individuals to upload photographs, videos, and written narratives. Posts are archived and can be categorized for easy searching. Each blog was password protected, requiring an invitation from our research team to gain access. To maintain the intimacy of the small group space found in typical in-person Photovoice projects while also promoting rich dialogue, no blog had fewer than six participants or more than twelve. As such, some counties with fewer participants were grouped together and assigned to single blogs, while larger counties had their own. County matching was completed by our state-level partner in order to build upon known relationships across counties. The project included 15 blogs made up of one or two counties with six to twelve people ($M=9$) per blog. We did not grant adult advisors access to the youth blogs in order to create a space where youth were free to explore ideas without the concern of local adults critiquing their thoughts.

Photovoice Process

This project consisted of four phases: training, photo-narrative sharing and group discussions, data analysis via the ReACT method (Foster-Fishman, et al., 2010), and dissemination. Youth were nested into smaller county-based groups for the Photovoice sharing process. Youth shared themes and insights across-counties via the online platform and during in-person meetings after communities completed Photovoice data collection and analysis. Participants shared their final products (e.g., Photovoice exhibits, digital stories, and websites) generated from their Photovoice data across counties at a Photovoice project exhibition. We narrow our in-depth description here to focus on the first two components which align with traditional in-person Photovoice activities and form the foundation for scaling up Photovoice online.

Training Participants. As described by Catalani and Minkler (2010), Photovoice projects begin with participant training. Training on this project occurred primarily during our first in-person NYLI residential training session. Consistent with previous in-person Photovoice projects, a photographer and consultant trained participants in photography basics (including the use of the digital cameras supplied to them). The research team trained participants in the Photovoice process using strategies similar to those employed in other projects (e.g., see Foster-Fishman, et al., 2010).

Next, participants completed a round of Photovoice using traditional, in-person Photovoice processes to respond to the framing question, "What are you most proud about in your community." Since they were at the residential training session rather than in their communities, participants took primarily symbolic photographs to document characteristics of their communities. Participants engaged in individual photo and narrative sharing, group nomination of a photo/narrative to discuss further and

facilitated group dialogue. This activity helped individuals understand the purpose, goals, and process of Photovoice.

The final and most challenging piece of our residential session involved training participants to utilize the online blog interface. For all but a few of our participants, blogging was an entirely new concept. As such, our training addressed two components: a) how to use Wordpress and b) how to do Photovoice online. In two large group sessions, research team members guided participants through an in-depth process of setting up Wordpress accounts and creating posts with their own images and words from the first framing question. After completing one post with facilitators present, participants were asked to create a “self-portrait” post on their own before leaving the residential session in order to reinforce the training. In addition, given that many participants were meeting for the first time at the residential session, as is common on Photovoice projects, we wanted to make sure their ongoing online communication felt connected to a real person. The self-portraits were intended to help individuals maintain a sense of connection to one another once we were no longer physically together. This is consistent with best practices literature for fostering participation in online discussion forums via sense of community (Rovai, 2007). On the final day of the session, we discussed the timeline for the online Photovoice activities. Participants received copies of training information and follow-up reminder emails about project activities, along with a distance learning refresher course on using Wordpress and the Photovoice process.

Individual Documentation, Reflection, and Sharing. Consistent with in-person Photovoice projects, the individual reflection and documentation of participants’ individual insights was completed by each youth independently. After taking digital photographs in response to the framing questions, participants created online posts

that included an uploaded photograph and a typed narrative explaining the meaning of the photograph. Individuals linked their posts to the framing questions using a “category” function ensuring all participant responses to the same framing question were easy to find and review. This served as the space where participants could highlight their individualized narratives; individual photographer’s voice and expertise was honored and retained as it is during traditional Photovoice projects.

Focusing the Conversation. During in-person Photovoice sessions, individual photo sharing is followed by a group process of nominating photographs/narratives for additional group discussion. This allows the group to collectively identify which stories are of greatest meaning to them and moves the group toward in-depth discussion and reflection on a select set of images, stories, and emergent themes. During in-person sessions, participants vote for photo-narratives by placing sticky dots on the photos in which they are most interested. To move this voting process online, we adopted Wordpress’ “rating” function. This function can be adapted to meet individual needs. We elected to use a “thumbs up” icon. Individuals clicked the icon for the posts they wished to discuss further. This function was activated by blog administrators for a restricted time and was removed once discussion posts were identified.

Facilitating Asynchronous Group Discussion. The Wordpress interface provided a “Reply” option for posting threaded follow-up questions and comments to original posts. Both facilitators and other blog members used this function to dialogue about the photographs and narratives. One notable advantage of taking this project online was that our project processes respected participants existing lives by encouraging them to fit Photovoice activities into their schedule rather than disrupt it. However, this resulted in a wholly asynchronous Photovoice

project. There was no time everyone would be together, or even a time when we knew a participant or group of participants would view facilitator or peer comments. As a result, each facilitator post held different weight relative to in-person facilitator comments.

In traditional facilitated group dialogue, a facilitator can ask a question, gauge the group reaction, and offer modified questions to the group. Facilitators can read the climate of a group and encourage more sharing with a nod or smile. In this asynchronous online context, we did not have that luxury. Collectively, this asynchronous approach led to several choices in our facilitation processes. These were developed based on insights from online facilitation literature (Rovai, 2007, Hew & Cheung, 2008), in consultation with Media Communication scholars (i.e., Drs. Jeffrey Grable and Casey Miles), and based on team members' experiences as both facilitators and participants in online discussions.

First, we wanted to make sure that when someone connected to the blog, they were met with information and activity that made them want to return. This meant paying close attention to the pacing of participation to determine when a facilitator question might be strategically added. We were also mindful of the tension between over-facilitation by adult facilitators and blog silence (Rovai, 2007). We saw risk for Photovoice activities to become work done for us, rather than inquiry done by them, for them. If facilitators were the most dominant presence on the blog, then we felt we had failed in that effort. Ultimately, we wanted to promote participants engaging one another in dialogue, not just responding to the facilitator.

Our facilitation occurred during two phases of the Photovoice process: a) individual post follow-up and b) group discussions. During the individual posting phase, facilitators replied to participant posts within

approximately 24 hours. This was to ensure that each youth felt heard (or read) in hopes that this would foster further engagement. Facilitators made positive statements reflecting back ideas the youth shared and asked follow-up questions when appropriate to clarify elements of the post. This is consistent with the concepts of social presence and encouragement described by Hew & Cheung (2008).

During group discussions, facilitators allowed more time for youth to reply to one another before adding questions to the discussion. We gave a brief training on critical, open-ended qualitative inquiry during our first in-person meeting. This helped participants understand the intent behind facilitator follow-up questions and gave them both the tools and permission to engage one another through open-ended questions and follow-up comments. When facilitators did post, the content validated participant comments, highlighted themes and ideas raised, and asked broad questions to further explore comments or the original post. Questions were directed to the group rather than individuals in order to promote engagement across participants. Facilitators also encouraged comments from participants who tended to be less vocal.

The second important consideration in relation to asynchronous online facilitation was regarding the content of our comments. Each comment made by a facilitator was viewable by all participants at any time; they were part of the shared "permanent" project record. The team of facilitators reviewed comments before posting to ensure that they were clear, meaningful, and engaged participants on stimulating topics linked to participant dialogue (Rovai, 2007; Tagg & Dickinson, 1995 as cited by Hew & Cheung, 2008). We also attended to facilitation processes that are relevant to any qualitative project (e.g., clarifying and contextualizing participant statements and prompting additional reflection). During individual

sharing our facilitation framework prioritized clarifying participant statements (i.e., ensuring the “what” of their statements was detailed, clear, and made sense as a stand-alone construct). Facilitators identified key ideas and determined whether enough detail was provided to summarize the post as a free-standing data point. If not, then follow-up questions on the “what” of the post were needed. During group discussion, facilitators posed open-ended root cause and consequence questions to deepen understanding.

Blog and Participant Outcomes

Our efforts to create an online platform and process that supported active youth engagement yielded 381 original Photovoice blog posts. In addition, youth made 755 comments in response to peers’ posts or facilitator prompts and participated in 58 group discussions. Overall, 94% of participants made at least one original post per round of Photovoice (i.e., per framing question), and 75% of participants shared comments in at least one group discussion per round. These participation rates are consistent with in-person projects where nearly all participants share images in response to framing questions, and the majority, but not all, participate in group discussions.

Structural Feedback from Youth. While youth successfully engaged in online dialogue, some youth described two sources of frustration during informal communications and focus groups: 1) not having access to all blog conversations and 2) steep learning curve related to the online platform. Youth expressed a desire to see other counties’ blogs from the beginning. We designed the project to prioritize local learning first (e.g., within county). Cross-county learning was to happen at the second residential session, after completing the first three rounds of Photovoice. Youth feedback suggests we should have considered additional shared

learning opportunities earlier. Youth felt limited in their ability to problem solve by only blogging with their county (or in some cases, one other county). One youth said, “...I like doing the blogs and stuff but I wish we would’ve seen more of everyone else’s posts, instead of just our county and [another county’s] ...we didn’t get to know what everyone else was thinking in their communities and stuff, to know a better view of [our state].” Likewise youth didn’t know about the problems other counties were targeting: “...I know [another] county had the same like problem as my county and we didn’t even know that they had the same problem until this week...we could like work with them and knowing that they were doing the same thing as us...would have been useful.” In response to this feedback, a Community Blog was created, but little activity occurred as youth did not have framing questions to respond to.

During focus groups, youth suggested future projects change the blogging platform to one that is more user-friendly. Participants found Wordpress difficult to use, “it was hard to navigate Wordpress at first. Like, trying to figure out how to post... I had the worst time trying to find other people’s posts” and had a difficult time finding what they needed, “you basically had to stumble upon what you had to do.” Youth suggested using more familiar platforms (i.e., Facebook) or creating a customized, simpler application.

Taking Photovoice to Scale Online: Creating an Empowering Online Setting (Part Two)

Attention to the mechanics and structure of an online blog are not enough to bring Photovoice to life online. This required a facilitation plan intended to replicate the empowering, quality participatory processes employed during in-person projects (Catalani & Minkler, 2010; Foster-Fishman et al, 2005) focused on: a) valuing participants as experts,

b) promoting deep reflection, and c) creating a safe space.

Valuing Participants as Experts

Facilitation Strategy. We sought to foster self-identification as experts by creating a non-evaluative space where youth had narrative autonomy (Foster-Fishman et al., 2005). This included reinforcing participants' role as experts throughout the research process. Participants were encouraged to think creatively and independently, that the right answer to any framing question was simply their own answer. This message was also explicitly reiterated through the NYLI training processes and through all project communications. Small group facilitators also play a critical role in the effectiveness of Photovoice (Foster-Fishman et al., 2005). Facilitators validated each youth's story during individual photo sharing, making sure to express appreciation and interest in what was shared. Facilitators asked non-directive follow-up questions with the assumption that by posing meaningful questions, the youth were best positioned to deconstruct the problems and circumstances of their lives and communities.

Blog and Participant Outcomes. As proxy indicators of youth identification as experts, we examined: 1) blog narratives over time to assess whether youth began to take ownership over the blog process by providing additional ideas and/or taking on a facilitator role, 2) focus group statements stressing youth having ideas or insights, sharing those insights directly, and also naming other youth as experts or people they could learn from, and 3) survey items measuring the extent to which youth felt valued as experts as well as positively impacted by the Photovoice process.

Blog Narratives. Over time, youth began to engage in more in-depth and extended conversations with facilitators, identifying root causes as well as potential solutions.

From the first framing question to the last, we observed a 43% increase in responses to facilitator questions on Blog 1 and a 100% increase on Blog 2. We saw similar shifts in the ownership participants took of the blog space. In the first round, no youth on Blog 1 engaged in self-facilitation while 50% of posts on Blog 2 involved some self-facilitation. By the third round, 43% of Blog 1 posts and 100% of Blog 2 posts involved self-facilitation. We observed youth make explicit statements self-identifying as experts. For example, in one post a youth stated, "Although we are young we aren't stupid, we do know about problems in our community, and how to solve or fix them."

Focus Groups. During the focus groups, we learned that many youth had never blogged or shared their personal beliefs online before. The online Photovoice project provided a platform for them to express their ideas and learn from the expertise of others. One participant explained, "I really liked being able to get my opinion out there...with other things it was, like, well this is the facts. What do you see? But here...we're really getting your voice... And to see what other people were thinking too, like, things you otherwise might not know." Thus, Photovoice provided a frame for youth to explore several ideas held by other youth and share their voice and insights. One topic strongly supported across the focus groups was the youth's ability to convey their ideas creatively through Photovoice. Many youth had never expressed themselves or thought about their community in this way before, and combining photography with their personal reflections online allowed them to share their ideas freely. One youth commented, "I really, really liked it cause, just the whole idea of it, I never really thought of any... like of expressing myself in that way before. And that's something I can take and use for anything, like not just for this." Similarly, another youth said, "We want our voices to be heard; you know we want to be standing on the streets protesting what we believe in. And

[Photovoice] was something that we could use to be able to express our opinions in that manner. Or be able to just, you know, do something tangible.”

Survey. Six survey items focused on the extent to which youth felt valued as experts. Using a 5-point response scale ranging from “strongly disagree” to “strongly agree”, participants were asked to indicate whether they agreed with statements about the blog being an encouraging, non-evaluative environment where each person’s insights were valued. For clarity, we collapsed responses into categories of agreement and disagreement. Across all six items, the vast majority (over 78% across items) of participants reported positive experiences on their blog (see Table 2). Of the youth who did not explicitly agree with positive items (i.e., feeling heard, important, appreciated) or

disagree with negative items (i.e., feeling silenced or discouraged), the majority selected the neutral “uncertain” response option. Participants also reported how the Photovoice experience impacted them using a 5-point Likert response scale. The majority of participants (82% or more) reported that the process gave them space to share their voice, helped them identify important messages, and made them feel more comfortable expressing those ideas (see Table 2). These positive endorsements of the Photovoice experience may also serve as proxies for youth’s identification as experts on their communities and lived experiences. In sum, findings across all three data sources indicated that the Photovoice project supported youth finding their voice, communicating ideas in creative ways, and recognizing and valuing their expertise as well as that of other youth.

Table 2

Blog Climate and Perceived Impact Survey Items

On my photovoice blog, I felt...	Strongly agree/ Agree (%)	Strongly disagree/ Disagree (%)	Uncertain (%)
<i>Valued as Expert</i>			
Heard	87.8	3.7	8.5
Silenced	3.7	85.4	11
Important	78	2.4	19.5
Appreciated	82.9	3.7	13.4
Discouraged	0	91.4	8.6
Encouraged	87.8	0	12.2
<i>Safe Context</i>			
Safe	93.9	1.2	4.9
Comfortable	91.5	3.7	4.9
Participating in the Photovoice blog...			
<i>Valued as Expert</i>			
Gave me a space to share my voice (my ideas)	86.8	3.7	9.8
Made me feel like I have an important message to share with my community	82.9	3.7	13.4
Made me feel more comfortable sharing my ideas about problems in my community	81.5	1.2	17.3
<i>Engaged in deeper reflection</i>			

Helped me clarify what I think about problems in my community	84.1	2.4	13.4
Made me more aware of problems in my community	76.8	6.1	17.1

*Percentage are valid percents, Youth who reported posting to their blog on only posting once for the duration of the project (n=4) were excluded as effective not having participated).

Fostering deep reflection

Facilitation Strategies. In order to develop critical consciousness, individuals must have time and space to reflect on their experiential knowledge (Freire, 1972). To foster critical consciousness, Photovoice projects must provide participants with an extended period of time to reflect on framing questions followed by facilitated dialogue that intentionally seeks deeper understanding (Foster-Fishman, et al., 2005). While no specific duration is recommended in the literature, the goal is to provide adequate time to move beyond first reactions and invite people to think deeply around framing questions. On our project, each round of Photovoice lasted four to six weeks allowing youth an extended period to reflect on framing questions. Four to six weeks was the longest amount of time possible for reflection given the number of framing questions and the time required in each other step of the Photovoice project and larger NYLI process. In typical in-person sessions, researchers are often constrained by time such that each participant may only share a limited number of photos. Online, youth could post photographs and narratives multiple times providing an opportunity to consider the topic from various perspectives and express themselves in different ways.

Minkler and Wallerstein (2003) note the importance of sharing diverse perspectives when striving to achieve empowering participatory processes. During the facilitated group dialogue process, individual narratives can be reinforced and challenged by the personal lived experiences and reflections of others. This requires that projects create safe space for exploring diverse perspectives. In the context of the online platform, youth had

an extended period to view and dialogue with peers on both their individual posts and within the facilitated group discussion, further helping them refine their own critical analyses.

Similar to in-person Photovoice projects, our open-ended facilitator guides were also intentionally designed to seek deeper understanding of ideas presented by participants. Specifically, we asked questions that followed from three guiding concepts: a) understanding conditions and root causes, b) describing and explaining targeted issue, and c) identifying consequences and impact.

Blog and Participant Outcomes. Deep reflection in Photovoice is indicated through the complexity of thought and environmental analysis of social issues during individual photo sharing and group discussion. This includes participants moving beyond individual-level explanations of social issues and identifying potential causal chains. We anticipated seeing increasing levels of complexity both within rounds of Photovoice (from individual reflections to group discussion content) and over the duration of the project. As proxy indicators of youth engaging in deep reflection we examined: 1) blog narratives over time to assess whether youth increased their detail and critical analysis over time, 2) focus group statements asserting that the online process fostered claims of different and complex thinking, as well as building new understanding of themselves and their surrounding communities, and 3) survey items measuring the extent to which youth felt Photovoice impacted their critical analysis of social issues within their communities.

Blog Narratives. In response to facilitator prompts, youth provided additional clarity on key concepts and, as a group, shifted from individual level to root cause analysis of problems focused on environmental factors. In addition, the earliest Photovoice posts were often limited to description with no corresponding analysis of the focal phenomenon. In later Photovoice rounds, post content extended to include assessments of root causes, impact, and potential solutions without facilitator prompts.

For example, a final round blog post used crayons of different colors to represent bullying. The initial post focused on the interpersonal dynamics and exclusion. As follow up discussion unfolded the conversation moved from analyzing individual intentions to considering school-based interventions and effectiveness. The ninth commenter in this thread stated,

“Bullying occurs most often in the school systems. Our school is on this huge kick to show us videos about bullying but it doesn’t faze anyone. There are students who watch the videos, walk into the hallway and right into a fight. Punishment for fighting in our school is ten days on suspension but the punishment for starting rumors, tormenting others with words or rude remarks is nothing. Cyberbullying is nothing new and I’m sure we have all experienced it. The punishment for it is nothing in [our] County. Hazing in college is welcomed to be able to fit in. There many different forms of bullying and many of us experience them daily.”

In addition, they examined problematic media portrayals, power, and the complicated histories that may fuel behavior. Another commenter in this thread stated,

“Bullying is portrayed as something funny in movies and on television shows. In real life it is not something to mess with. People have died and killed themselves due to the effects of bullying. Whether it is jealousy or the mere fact that someone gets a kick out of degrading people, bullying is neither a way to make friends nor ideals clashing, in my opinion. I think bullying is more of a system of power to those who were degraded themselves in the past. We think of bullies as these big, great people that can beat anyone down, but what exactly created this feeling of hate within these people. They were probably bullied, but not by peers, but by people closer to them like family.”

These quotes highlight the shift from more simplistic analysis of single incidents to consider environmental context as well as individual histories.

Focus Groups. During the focus groups, youth often described how reading others’ thoughts and experiences challenged them to consider alternative ways of making sense of their own context. Youth described learning from other youth, enjoying reading viewpoints that differed from their own, and learning about the variety of problems across the state. One youth explained, *“I like reading them because everybody had...different ways of saying things. And even if their pictures were similar, it’s like their voices were just so different that you could—you could get an idea of who they were and what they were a little bit like.”* Another said, *“I felt that whenever people post... like, the pictures of their community and their problems and how they plan on fixing it, in a way it can help us by seeing like if our communities have like a similar problem. Whenever they describe their solution it might help us think of an idea...”*

Youth also described the benefits of being able to go back to past posts and comments to

see what others said about an issue. Comparing the in-person Photovoice training process to online, one youth noted, "*The in-person was fun but the online was more informative...you could track what people were saying about [a topic]. Unlike the in-person one, cause if someone just says it then you kind of forget sometimes what they say, but on the blogs it has what they said...still there.*" This effort to track and revisit ideas over time is a cornerstone of deep reflection.

Survey. Three survey items related to the impact of the Photovoice project on how youth think about their communities and the problems they face, including improved clarity and awareness of problems, and general perceptual shifts in how youth conceptualize their communities. Responses, presented in Table 2, indicate that the majority of participants (77% or more) found the Photovoice process extended the ways they think about their communities' problems. As before, the majority of students who did not endorse these items selected the neutral response option. Notably, a smaller percentage reported a generalized change in how they think about their communities. This may be an artifact of many participants already identifying as leaders and change agents within their communities. Therefore, this process may not have changed how they view their community, but instead enriched their existing perceptions. Data across sources indicate that the online process created a space for co-learning to occur and bolstered deep reflection and analysis of community contexts through reading diverse blog posts.

Creating a Safe and Supportive Environment

Facilitation Strategy. The final critical element to an empowering Photovoice project involves creating a safe and supportive environment for sharing (Foster-Fishman, et al., 2005). To create this environment online, we worked with the youth at our first in-person meeting to co-

create norms for online communication. Youth disclosed difficult personal information in the blog space, we acknowledged and affirmed their stories, thanking them for sharing with the group. We also encouraged youth to support one another. We sent private off-blog communications that offered additional support and concrete community-based resources as appropriate. Finally, following feminist approaches to interviewing and space sharing, facilitators occasionally shared their own personal experiences with issues raised as a means of supporting and validating a youth's experiences with and reactions to particular community issues. We believe this vulnerability indicated our respect for and belief in the sacredness of the online space we were sharing.

Blog and Participant Outcomes. Safety was operationalized as comfort and freedom to share participants' thoughts and ideas on the Photovoice blogs. As proxy indicators of creating a safe and supportive environment, we examined: 1) blog narratives to assess the level of personal disclosure along with openness to communicating divergent points of view, 2) focus group statements asserting that the online process promoted opportunities to share without judgement, and 3) survey items measuring the extent to which youth felt comfortable participating on the blog.

Blog Narratives. The extent to which youth experienced the blog space as safe was demonstrated by their willingness to disclose deeply personal issues. For example, one youth shared about a family member who was addicted to pills and how that affected her emotionally. Other youth on the blog validated this disclosure and expressed deep sympathy for her experience. Participants also disclosed their fears regarding their future and the pressure they feel not to "*make a mistake.*" Yet another youth shared her experience behaving as a bully to other youth, the guilt about those actions, and why she thought she engaged in

them. Across blogs we saw youth also talk about the importance of respecting the sacred space of the blog by not sharing what was said—even with other members of the project outside their blog.

Another example indicating that we created a safe environment was through the expression of respectful disagreement during group discussions. To exemplify what this looked like in our project, Figure 1 presents a verbatim exchange among the youth. The original photograph and narrative were in response to the question “*What does leadership look like?*” The image is provocative; it shows a dead-end street sign at night. On first glance many of us on the team assumed the post would be negative. However, the original photographer and several of the youth articulated a message of faith, innovation, and creativity found in effective leaders. Other youth pushed back on that interpretation of the image, and also considered whether this is what they actually see occurring among leaders in their community. This case example highlights the ways in which youth felt free to present divergent opinions within their blog space (For additional insight into participants’ thoughts on leadership see Mortensen et al., 2014).

Focus Groups. Many youth within the focus groups indicated that they enjoyed the online Photovoice process because they felt that it was a safe space to share their ideas. When asked if they felt comfortable sharing their ideas on the Photovoice blog, one youth stated, “*Yeah, because nobody really knew who was talking. Well, they did but they really didn’t know. I think you were kind of like mysterious,*” followed by another youth agreeing: “*Yeah, and you guys aren’t judgmental or anything.*” This may suggest that the online platform was non-threatening, allowing more freedom to speak your mind to others. It also reflects the efforts to create a supportive, non-evaluative climate for expression.

Survey. Two survey items about the climate of the blog assessed the extent to which participants felt safe and comfortable on their blogs. Consistent with the content observed on the blogs, participants overwhelmingly (more than 90%; see Table 2) reported feeling safe and comfortable on their blogs.



Figure 1. “What Does Leadership Look Like” Example Online Photovoice Discussion

Original Post

This “Dead End” sign signifies leadership to me. Leaders must create their own path, even when it looks like there is no possible way to do so. I also took a picture of it at night to symbolize that not all leaders know where they’re going. They might have a fantastic idea, but they might not always be sure what to do with it or how to go about it. The picture stands to represent itself in a different way than most others. I didn’t want to take a picture of a person, or of something incredible because that’s not who I am. I took a simple photo and thought about how it affects me...

“Formal” Group Discussion

Facilitator: *Why is this post important? Why did this post intrigue you? What in this photo or story is important for us to talk about? Looking forward to reading your thoughts!*

Facilitator: *Why is this post important? Why did this post intrigue you? What in this photo or story is important for us to talk about? Looking forward to reading your thoughts!*

Youth 2: *...it's important the sign says dead end. It shows that a leader can make something out of nothing.*

Youth 3: *This photo makes me feel like I'm not going to go anywhere...It doesn't scream progressive happy thoughts to me, but a more bleak overtone. I feel like it's reminding me to get back to basics, and return to my roots. I don't know if it's because I hate being stuck, but this photo makes me want to run in the opposite, not exactly find a new path. However, backing up is always a good thing. All the doors and windows that you've past on your journey to your own metaphorical "Dead End Street" might have closed, but that doesn't mean you can't go back and bust them down and start over on a new path.*

Youth 1: *...to me it creates a sense of hopelessness. I like that because without hope you are forced to create something out of nothing. Nothing appears right before you and screams "I am here, put me to use." Nothing is that simple and I enjoy that about being a leader. You are forced to think in a new light and gain a new perspective. I enjoy the complications of things and the fact that I have to work for everything.*

Youth 3: *I SO agree with the statement that a sense of hopelessness causes some people to start working! (personally, I am prone to quit when all seems hopeless unless it's very important to me) I think that sometimes things ARE screaming "I am here put me to use," but that we just don't hear them...*

Other Process Feedback from Youth

A few participants did not like the way the facilitators asked questions. One youth explained, "You can say exactly what you mean and they will dissect every last word of that and flood you with comments as to what you meant by it even though you explained it." In anecdotal conversations with youth, it seemed as though some of our follow-up questions were read as critiques like an English teacher's comments in writing courses. However, several groups discussed how conversation was extended when facilitators posed questions, and that discussions would "fizzle" without facilitator engagement.

In addition, some youth indicated during focus groups that the online written structure

of our Photovoice process was challenging. One youth said, "I feel like if I'm talking to people I can get more out than trying to write my feelings down. So orally, I get my feelings out better." It is possible that for the more orally-inclined, this environment stifled their ability to communicate their insights. While the minority, these negative cases are important to attend to in designing inclusive facilitation training and processes.

Discussion

This paper describes both the mechanics and facilitation processes for adapting Photovoice to an online platform. The potential of this method was illustrated with a large group of geographically-dispersed youth ($n = 120$) engaged in a state-wide youth leadership and community assessment project. While others have described taking Photovoice online in classroom, schools, and community contexts (e.g., Kornbluh 2017, Kornbluh et al., 2016, & Strack et al. 2015), none to our knowledge have described a process that engaged participants at this scale without increasing project costs (e.g., funding, staffing, or time). We transferred core in-person Photovoice activities (Catalani & Minkler, 2010) online via small group blogs. In order to retain the quality in-person participatory processes that promote participant empowerment, we engaged in online training and facilitation practices that valued participants as experts, fostered deep reflection, and provided a safe context for sharing (Foster-Fishman et al., 2005). Informed by diverse data sources (i.e. surveys, blogs, focus groups), we contend that you can expand the Photovoice method to an online platform replicating quality participatory in-person processes (Foster-Fishman et al., 2005).

The success of this Photovoice adaption opened the door for further community engagement over time. For instance, adapting Photovoice online allowed us to engage nearly 10 times the number of participants of the median in-person project ($n = 13$, Catalani

& Minkler, 2010) with the same number of facilitators over the same period of time. With a small number of facilitators than a typical project and no transportation or transcription costs, this project supported simultaneous Photovoice-based community analysis and reflection among 120 geographically dispersed youth. In other words, the project engaged more people with less cost than if we had tried to replicate the process with the same number of people using traditional in-person methods. Given the topography of the state, available transportation resources, and school-year scheduling challenges, no exclusively in-person method of Photovoice could have supported this group of geographically- and socially-dispersed participants coming together (either within or across counties) to explore issues that mattered to them and their lives for such an extended period of time.

Participation across groups was consistent with in-person projects, with participants regularly sharing photo-narratives in response to framing questions and engaging in group discussions. Participants had the opportunity to access and revisit conversations on their own timeline, allowing for more flexible engagement and ongoing reflection. Notably, participants provided extensive positive feedback (via surveys and focus groups) consistent with what is described by participants of traditional in-person Photovoice projects. After completing Photovoice in smaller online groups, participants engaged in data analysis utilizing the ReACT method (see Foster-Fishman et al. 2010), and developed knowledge products to ignite conversation, awareness, and advocacy across groups via in-person meetings. Online engagement in Photovoice fostered local learning, and created the foundation and shared language for co-learning across counties and at a statewide level both online and during time-restricted in-person sessions.

Overall, youth explicitly named themselves as change agents, engaged in critical root cause analysis, and disclosed deeply personal insights into their lives and communities.

Recommendations and Opportunities

There are several lessons to be learned from our experiences regarding the integration of technology into this method. In the U.S., Internet access is not a right. Like many resources, access flows along privileged lines. Therefore, youth in low income, rural, and otherwise minoritized communities were less likely to have in-home internet access than other youth (LaRose et al., 2007). These youth also often had fewer technological skills (Dimaggio & Hargittai, 2001), meaning their learning curve related to the online posting process was significantly steeper. In many cases this gap in technological skill was multi-generational, thus adult advisors were not prepared to provide technological support. While all youth were able to participate, some had to work disproportionately harder to do so. This may have been unintentionally disempowering for some participants. New innovations take time to adopt (Rogers, 1962), thus, the research team had to actively encourage some participants to initially engage online, as well as help them problem solve (via skype, phone sessions) when technological support was not easily available. Future projects ought to conduct a technological readiness assessment with prospective participants and consider how they will address the digital divide (i.e. identify local resources).

Asynchronous online communication posed the most significant challenge to the online Photovoice process. Online facilitators lose the ability to use or respond to non-verbal cues observable during in-person communication. Facilitators had to quickly respond to blog posts or risk participants being met with silence; facilitators' initial

responses to posts became the equivalent of holding eye contact, nodding one's head, or smiling as someone shares in-person. To jumpstart dialogue and maintain participation, we developed questions and comments that would elicit conversation and validate youths' ideas. These strategies ensured that each participant's photo-narrative was given space to be seen and reflected on.

While there were challenges in ease of access as well as the asynchronous communication, regular responses to facilitator comments, along with corroborating focus group and survey data serve as evidence that this facilitator strategy was overall productive. However, a small number of participants reported feeling as though facilitator questions were akin to the critiques of writing teachers rather than genuine inquiry. Indeed, an adult asking "Could you say more?" may mirror comments on a high school literature essay. Facilitator question asking could be better normalized during the training phase of the project through the presentation of sample online dialogues. Participants could also help identify language that they find encouraging, and/or a project develop a rotating group moderator role to be held by participants for each framing questions. This strategy would reinforce participant ownership of the space. Such preparation and shared responsibility of group discussion process could mitigate negative feelings about follow-up questions.

Notably, participants who shared this feedback were some of our highest participators and self-selected to take leadership roles working with the MSU evaluation team. So while they may not have found the question posing to be the most enjoyable, it did not discourage participation. To further enhance conversational possibilities online, we also suggest beginning group discussions with live, synchronous online facilitation. This form of online facilitation could also be applied to

in-person ethics training, camera support, and live focus group practice sessions. Adding such an option reduces the participatory flexibility of the online method, which is one of the benefits for participants with busy lives. However, even if all participants are not present, this would put the power of jumpstarting dialogue more squarely in the hands of the participants. Absent participants could interject comments into threads, harnessing the benefits of digital capacity for tracking lines of conversation that may otherwise be lost during in-person discussion. Conversation could proceed asynchronously, or participants could decide to commit to additional joint log-in sessions at their own discretion and ability.

The success of our effort to move Photovoice online opens the door for further adaptation to expand participant engagement using the online platform. Our project structure used small group engagement, similar to traditional Photovoice projects. However, across-group sharing occurred in later phases of Photovoice data analysis and sharing and community project development based on Photovoice data, which involved a blend of in-person and online spaces. Future projects could intentionally introduce additional strategies for learning across groups, thereby deepening the diversity of voices and experience and opportunities for developing understanding across communities. We can imagine a cross-community blog opening after each round of small-group dialogue where all participants have access to the voted-on posts and group conversations. Participants could be invited to respond to other groups' discussions and bring observations from those group discussions back to their own group. Considerations for content sharing, facilitation, and participant ownership would have to be further explored.

Replication of an online Photovoice approach and further research is needed to ensure generalizability. In the context of this novel

study, there was potential selection and response bias in participants whom were already identified as potential leaders within their county participating, as well as our in-depth analysis of extremely active blogs in further unpacking processes surrounding impact. Future projects could also take advantage of the opportunity online platforms provide for innovative analysis to track dimensions of empowerment at both the individual and collective level throughout the Photovoice process. For instance, social network analysis allows for the examination of multiple-level communication networks at the actor, dyadic, and group level (Kornbluh & Neal, 2016). Textual analysis provides the opportunity to statistically test for growth in critical discourse in distinct units (i.e. nouns, verbs, adjectives, and phrases; Handler, Denny, Wallach, & OConnor, 2016). Additionally, online Photovoice projects could further contribute to the youth civic development literature by exploring the relationships between online civic engagement and offline civic activity (Lenzi et al., 2015; Smith, 2013).

As we continue to explore the potential for online platforms, it is important to be mindful of the ethical considerations associated with users re-posting or sharing personal images from the Photovoice project on their own personal platforms, and the agreed upon consensus of the group in determining which content is public versus private (see Kia-Keating et al. 2017 for a further discussion).

Conclusion

Online Photovoice processes have the potential to extend the reach of Photovoice by engaging geographically dispersed individuals. Overall, we found taking Photovoice online to be meaningful to our collaborators, participants, and our team. Photovoice data yielded useful local insights that aided the development of community action projects in conjunction with the larger NYLI training process. In the efforts, we must

be mindful of the technological burden of this project in a world where technology is not evenly distributed; however, upon addressing this issue, moving Photovoice online opens opportunities for creative participant configurations and for co-learning across counties, states, and even countries. It also seems important to consider the potential for Photovoice methods to create and disseminate new conceptualizations of existing spaces and ways for people to engage. As community psychologists, these methodological adaptations are key to actualizing our values of utilizing research to push for systemic change (Foster-Fishman, Nowell, & Yang, 2007). As prior scholars have noted, current public discourse frames the internet as a source of misinformation, hostile exchanges, and self-reinforcing echo chambers (Jones, Mitchell, Finkelhor, 2013; Keith & Martin, 2005; Lenzi et al., 2015). Online Photovoice projects have the capacity to disrupt this perception (and reality) of some online spaces as toxic. Through supportive, thoughtful question posing, we can push against the deficits framing of internet discourse while bringing together diverse stakeholders engaged in root cause community analysis and change conversations. The hope is that people will carry these new practices into other online and in-person spaces. As the use of Photovoice moves online, we encourage our colleagues to continue documenting the impact of this shift so that we may better understand the interplay of our processes and platforms for fostering individual and collective empowerment through participatory research methods.

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