

Implementing Photovoice in School-based Evaluations: Navigating Challenges and Leveraging Benefits

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Background: Talford High School has been implementing the Innovators program, an equity-focused summer bridge camp since 2021. Our team conducted evaluations of this program in 2022 and 2023, integrating photovoice as a key qualitative data collection method.

Purpose: To explore photovoice's effectiveness in K–12 school-based evaluations, we detail its implementation, practical and ethical challenges, and potential for yielding unique insights. This is achieved by providing a case with clear explanation of photovoice's process and select data.

Setting: Talford High School is a Midwestern selective-admissions, public high school.

Intervention: Photovoice is used as an evaluation strategy with students that blurs the lines between a data collection method, a medium for personal reflection, and a fun program activity.

Research Design: This article offers a reflective case narrative of the Innovators program evaluation, emphasizing our

design that included culturally responsive and values-engaged approaches. Aligning with the transformative paradigm, our evaluation prioritized equity, students' comfort, and their voice in the evaluation process and outcomes.

Data Collection and Analysis: The evaluation utilized multiple methods: observations, surveys, interviews, and photovoice. The team facilitated sessions with Talford students and teachers to learn about the school's culture and values. Post-camp reflection sessions solicited feedback regarding camp experiences, and pre- and post-camp surveys collected quantitative and qualitative data from students.

Findings: Photovoice is an important data collection method that uniquely captures the inner lives and experiences of students. However, there are several ethical and practical challenges that should be considered while implementing photovoice in school-based evaluations.

Keywords: *Photovoice; school-based evaluation; high school; qualitative method; equity; summer-bridge program*

Participant-created photography, as a visual research strategy, is grounded in Wang and Burris's (1994, 1997) seminal work (Exner-Cortens et al., 2022). Since its introduction in the early 1990s under the name *photo novella*, photovoice has become a popular method and, over its two-decade evolution, has been incorporated into wide-ranging inquiry approaches that facilitate participants' construction and sharing of knowledge through photography (Evans-Agnew & Rosemberg, 2016; Liebenberg, 2018; Stevens, 2006; Strack et al., 2022; Wang, 1999). The photovoice method is flexible: it can be used as a stand-alone method or in combination with other arts-based or qualitative methods (Abma et al., 2022; Behrendt & Machtmes, 2016) within a broad set of contexts (Strack et al., 2022) with diverse and historically marginalized populations (Wang & Burris, 1994, 1997).

Photovoice invites participants to share their experiences regarding a specific issue through images, promoting critical dialogue and leveraging the educational power of visual representation (Harkness & Stallworth, 2013; Wang, 1999). The premise is that images can convey what participants deem important, enabling them to influence policy or programs through the visuals they create. Photographs can expose realities that impact policymakers, program staff, communities, and the public (Hergenrath et al., 2009; Strack et al., 2022; Wang, 1999, 2003; Smith et al., 1997). These aspects demonstrate how the concept of empowerment is integral to photovoice, from conceptualization through implementation to consequences (Budig et al., 2018).

Framed as an engaging "grassroots method," photovoice has become increasingly used with young people to effectively involve "youth in the political and social lives of their communities" (Strack et al., 2004, p. 57), including their schools (Suprpto et al., 2020). Importantly, previous research indicates that conventional *adult-centered* qualitative methods, such as interviews, may not be the most effective for understanding youth perspectives and experiences (Hieftje et al., 2014). As an alternative, photovoice provides presumed advantages, such "as creative strategizing, narrative choice, increased participant engagement, safer disclosure, cultural adaptability, self-representation, empathy and connection, community influence, [and broad possibilities for] dissemination" (Golden, 2020, p. 968). Nonetheless, though it is portrayed as a playful, child-friendly method, researchers have cautioned that the use of photovoice with youth can be more instrumental than liberatory, and photovoice can create ethical tensions regarding voice, control, and

the reproduction of damaging stereotypes, which may ultimately further disempower young people rather than liberate them (Abma et al., 2022; Abma & Schrijver, 2020).

In program evaluation, photovoice is an emerging method given its perceived potential to genuinely involve participants, including young people, in the process of evaluation and empower them in determining programs' effects and future directions (e.g., Behrendt & Machtmes, 2016; Hunter et al., 2020; Strack et al., 2004). Photovoice's emphasis on participants' experiences, perspectives, and agency makes it a particularly appealing method for participatory forms of evaluation, which prioritize participants' self-determination and learning through the inquiry process. While visual research methods like photovoice are increasingly utilized, their meanings, applications, and efficacy in providing valuable insights into children's lived experiences remain largely unclear (Shaw, 2021). This article examines photovoice as an evaluation method, drawing insights from a multi-year evaluation of a high school summer bridge program designed to support incoming underrepresented students. We aim to contribute to the growing literature on photovoice in evaluation by investigating its use with and benefits for young participants. We describe the photovoice process in school evaluations, discuss practical and ethical considerations, and highlight its value in yielding unique insights into young people's experiences and realities (Abma et al., 2022; Teti et al., 2013; Carlson et al., 2006).

Using this evaluation case, we explore the effectiveness of photovoice in K–12 educational contexts with three main objectives. First, we describe how the photovoice method was implemented within the program evaluation, providing examples of the photovoice data collected. This section offers readers new to photovoice a clear illustration of the process and a deeper understanding of the data produced. Second, we highlight practical and ethical issues encountered while using photovoice in this school context. We explain how and why these issues arose and provide recommendations for addressing them effectively. Finally, we share unique insights gained from the photovoice data, enhancing readers' understanding of the reasons to employ photovoice as a stand-alone or supplementary method in school evaluations.

Photovoice's Definition and Theoretical Foundations

Photovoice is an innovative qualitative research method in which participants initially take photographs of community issues or other topics, then share stories related to these images, discuss the photographs in groups, and use the findings to drive change (Hergenrather & Rhodes, 2008; Wang, 2006; Wang & Burris, 1997). The key pillars of photovoice are using images to convey participant-defined priorities and leveraging visual representation to influence decision-makers for social change (Wang, 1999). Photographs and participants' written and spoken narratives comprise the range of data typically produced by the photovoice method; together, these data operate as "a powerful communication tool that allows for more richness and depth than traditional survey methods" in representing priorities across a group of participants (Keller & Mott, 2020, p. 0, referencing Wang & Burris, 1997). The data analysis process for photo-narratives and discussions are like analysis processes for other qualitative data (Hergenrather et al., 2009).

The photovoice method draws on the theoretical foundations of constructivism, critical pedagogy, feminist theory, and documentary photography (Hergenrather & Rhodes, 2008; Wang & Burris, 1994, 1997; Wang, 1999; Strack et al., 2022; Wang et al., 1996). Participants' construction of knowledge in photovoice aligns with the values of constructivism, which emphasizes the individual's active creation, interpretation, and reorganization of knowledge (Windschitl, 1999). Feminist and critical theories posit that marginalized groups are best positioned to study and understand their own issues through sharing their lived experiences with one another (Keller & Longino, 1996; Strack et al., 2004). Freirean theory, which has inspired developments in the photovoice approach, holds "that people should be active participants" in gaining a deeper "understanding [of] their community's issues" through sharing "mutual experiences" to subsequently "become agents of community change" (Strack et al., 2004, p. 50, referencing Freire, 1973). Photovoice intends to shift power from the researcher to participants, which allows the researcher, in turn, to access participants' perspectives (Nelson & Christensen, 2009). Alternatively, in documentary photography, while photographs "draw attention to social issues," the pictures "are typically taken from the photographer's outsider (etic) viewpoint and may therefore fail to capture the insider's (emic)

perspective" (Strack et al., 2004, p. 49, referencing Wang & Burris, 1994, 1997). Photovoice instead prioritizes participants' emic knowledge.

Photovoice is no stranger to educational contexts; it is well-established in educational settings, providing rich insights into students' lived experiences inside and outside the classroom (Harkness & Stallworth, 2013). It serves as a teaching tool that fosters a participatory and reflective learning environment, enhancing student self-awareness and teachers' holistic understanding of student learning (Chio & Fandt, 2007; Suprpto et al., 2020; Nelson & Christensen, 2009). As a bottom-up approach, it offers students a structured, visual method to explore, communicate, and refine their perspectives, allowing them to share their expertise and tacit knowledge as learners (Chio & Fandt, 2007; Jones, 2013; Nelson & Christensen, 2009). Although time-intensive, photovoice provides valuable evaluation information on students' expectations and experiences, informing decision-makers about necessary program changes (Hunter et al., 2020).

Operationalization, Quality, and Effectiveness of Photovoice

Photovoice implementation usually follows a structured, multi-stage process. While there are necessary variations based on objectives, participants, and context, the following steps present a generic version. First, the *target audience* is identified—the group who will receive the photovoice findings or be involved in a later-stage event for sharing findings. Next, participant photographers are recruited, and the method is introduced while obtaining informed consent. Photography topics or prompts are then provided or co-developed. Participants are given cameras and trained in image capture, and they commit time to independently taking photos and creating narratives that explain photos. Participants engage in discussions to analyze themes and reflect on the meaning of photos and narratives. Finally, a plan is made for presenting the photos and narratives to the target audience. Sometimes, participants' analysis and reflection on the photovoice findings happens at a larger event or a display for the target audience. This photovoice process is supposed to be rigorous yet flexible to meaningfully engage participants and their target audiences in evaluation efforts that are appropriate to the context (see Liebenberg, 2018; Wang 1999, 2006) and ultimately facilitate the revelation of substantive experiences that then provide a rich

evidentiary basis for advocating for concrete improvements (Strack et al., 2022).

Regarding the photovoice method's ultimate quality and effectiveness, significant variables range from the topic being investigated to the time for photography and narrative creation to the participants' degree of interest in capturing photographs and constructing narratives (Chio & Fandt, 2007). To achieve success in implementing photovoice with adolescents, Strack et al., (2004) found photovoice must be "tailored to the developmental capabilities of participants" with photovoice's "primary focus" on their individual "empowerment," achieved through "competency building" and hands-on activities (p. 56). In short, as youth gain individual skills, then more collective capacities can be nurtured; "group work, discussion, and collective action" can become a more prominent aspect of photovoice (p. 56).

Photovoice's Ethical and Practical Concerns

Photovoice projects involve complex ethical considerations to protect the rights and well-being of participants and the people who become their photographic subjects. Synthesizing previous research, Evans-Agnew and Rosemberg (2016) identify five categories of ethical concerns in photovoice: "(a) privacy; (b) safety; (c) ownership; (d) photo selection, presentation, and publications; (e) researcher influence over subject matter for participant photos; and (f) advocacy" (p.1021). Congruently, Wang and Redwood-Jones (2001) discuss negative consequences that can be experienced by photovoice participants: violations of their personal privacy in public settings, public embarrassment, and misrepresentation. Given these risks, researchers emphasize the importance of consent in photovoice projects: not only do participants need to grant consent to facilitators (as do parents or guardians, in the case of youth participants), but also participants need to gain the consent of other people who are their photographic subjects (Joanou, 2009; Wang & Redwood-Jones, 2001). To be sure, questions of consent can be complicated in photovoice and may influence the validity of the photographic data. For instance, "some participants worry that asking for permission prior to taking a picture leads to a loss of spontaneity that prevents them from capturing the intended moment or idea" (Wang and Redwood-Jones, 2001, p. 565). In these situations, prioritizing best practices for photographic consent is important, despite the potential loss of photographic candidness.

Discussion and dissemination practices in photovoice projects can also be ethically complicated. To produce useful and truthful data, group discussions in photovoice can require participants' substantial trust in researchers and their considerable vulnerability. Allen (2012) describes observing students' discomfort with the idea that their photos and perspective might affect others. When implementing photovoice with marginalized youth, focusing conversations on community problems can cause distress, and participants may struggle with having frank discussions in large, mixed-age groups (Strack et al., 2004). By disseminating photovoice data beyond participants, facilitators risk misrepresenting participants' perspectives if narratives do not accompany the photographs (Evans-Agnew & Rosemberg, 2016). Additionally, photovoice projects may raise participants' hopes without translating to meaningful policy or programmatic change, potentially leaving them feeling more disempowered or misled by the researcher (Strack et al., 2004). This risk is particularly noteworthy, given findings that photovoice research rarely leads to specific policy change (Evans-Agnew & Rosemberg, 2016). Hence, careful consideration of the unintended harms of planned discussions and dissemination activities is crucial; setting reasonable expectations with participants about consequences of photovoice is also important for mitigating these potential negative outcomes.

Researchers have offered recommendations for addressing these ethical issues in photovoice projects. First, successful, ethical photovoice implementation requires photovoice facilitators to continually reflect on the values underlying the method's use (Leibenberg, 2018). Secondly, participants' voices can be further prioritized by their direct involvement in identifying topics, selecting photos for dissemination or publication, and captioning of images (Evans-Agnew and Rosemberg, 2016). Third, the training of photovoice participants should include conversations about ethics, responsibility, and power in relation to the photo-taking to prepare participants to make thoughtful decisions about who or what they photograph and how they frame their accompanying narratives (Wang & Redwood-Jones, 2001).

In addition to ethical concerns, photovoice often involves logistical challenges related to recruitment, feasibility, project resources (e.g., budget), or time. For example, it may be difficult to recruit a diverse group of participants, in which case photovoice data may not reflect the perspectives of important segments of a community

(Wang & Redwood-Jones, 2001). Another example is the researcher's or participants' selection of only some images to be shared, introducing potential biases, yet there are often limitations in the number of images that can be effectively shared in public presentations to advocate for policy change (Wang & Redwood-Jones, 2001). Allen (2012) discusses considerations of budget and the cultural significance of particular resources: he found that digital cameras yielded greater participation than inexpensive, but less cool, disposable cameras. However, school and community programs may not be able to afford expensive cameras, and such cameras' loss or damage could influence whether photovoice research can proceed. Finally, the developmental stage of participants can present challenges in photovoice implementation, requiring more project time and personnel support (Strack et al., 2004). Young participants may need more help from facilitators throughout the photovoice process. Ultimately, anticipating and troubleshooting logistical concerns during planning and implementation can make photovoice projects more effective and better sources of credible data.

Program Context and Evaluation Participation

Talford High School is a selective-admissions public school in the Midwestern United States that has committed to new equity-focused initiatives over the past few years. The initiatives are aimed at addressing historical inequities in who is admitted to and thrives at Talford. As part of these efforts to enhance diversity, equity, and inclusion, the school's faculty responded to suggestions from students to create the Innovators program: a short

bridge program to address disparities in students' academic preparation, bolster social support for historically underrepresented students, and give incoming students a jump-start on their first year. In 2021, Talford piloted a free 4-day summer bridge camp with goals of providing active learning in math and writing, cultivating peer bonds, building student-teacher trust, and familiarizing students with school resources. In 2022, the program retained its core purposes but prioritized relationship-building activities over academic skill-building. In 2023, the program incorporated minor changes based on our team's first-year evaluation recommendations (described in the next section).

All students participating in the Innovators program in 2022 ($n = 21$) and 2023 ($n = 22$) were involved in the evaluation and photovoice process. In the first cycle of evaluation, students opted to (a) include their photovoice data for publication and (b) participate in post-camp interviews through a student assent and parent consent process. Table 1 includes further demographic and background data about the two cohorts of students. These data correspond to the program's priorities for camp recruitment and inclusion based on historic patterns of underrepresentation at the school (see Goodnight, et al., under review). The priorities include (a) having an underrepresented racial identity (Black, Latinx, and Native American), (b) coming from a low-income family background, (c) coming from a rural or distant school district, (d) having a disability, and (e) being previously homeschooled. While gender was not a priority focus for the program, the evaluation team thought it was important to additionally understand the diversity of gender identities in the Innovators camps.

Table 1. Camp Students' Identities and Background Information

Gender identity	2022	2023	Total
Male	9	9	18
Female	7	10	17
Nonbinary	2	2	4
No answer	3	1	4
Racial identity	2022	2023	Total
Asian/Asian American	5	1	6
Black/African American	4	3	7
Latinx/Hispanic American	3	5	8
Multiracial/Biracial	4	9	13
White/Caucasian	3	4	7
No answer	2	0	2
Other background	2022	2023	Total
Rural / distant districts	6	7	13
Homeschooled	1	0	1
With a disability	3	3	6
Families with low incomes	3	2	5

Evaluation Design

Our article presents a *reflective case narrative* (Hall et al., 2020) of the Innovators program evaluation to illustrate key features of and issues with photovoice. Specifically, drawing on our experiences, we describe how photovoice can be used as a method within a school-based evaluation. Our transformative concurrent mixed-methods evaluation design simultaneously collected qualitative and quantitative data to address evaluation questions (Goodnight, et al., under review).¹ Over two years of the program (2022 and 2023) and two cycles of evaluation, our evaluation questions addressed (a) the purpose of the camp, (b) the eligibility criteria and recruitment process for the camp, (c) students' experience of the camp, (d) the immediate and short-term benefits of the camp, and (e) the effectiveness of changes made to the camp. The evaluation was guided by culturally responsive (e.g., Hall et al., 2020; Hood et al., 2015) and values-engaged (e.g., Boyce, 2017; Greene et al., 2006) approaches. These approaches align with the transformative paradigm for social inquiry, which centers goals related to equity and communal self-determination and attends to values, power,

and voice in evaluation processes and findings (Mertens & Wilson, 2019). Appendix A provides more information about the conceptual framing of the evaluation.

The evaluation design relied on multiple data collection methods: observations, facilitated listening and reflection sessions, surveys, interviews, and photovoice. The evaluation team observed faculty meetings, camp planning meetings, and camp activities for all 4 days of the program. Leading up to the camp, the evaluation team facilitated listening sessions with faculty and students to learn more about Talford's school history and culture as well as the values and priorities each group brought to the Innovators program. At the end of camp, reflection sessions with camp students and parents processed how students experienced the camp; the sessions gathered feedback on the camp's benefits and areas for improvement. Over the course of two cycles of evaluation, the evaluation team administered both pre-camp and post-camp surveys to students and solely post-camp surveys to camp teachers, student mentors, and parents. All surveys had a blend of closed- and open-ended questions yielding quantitative and qualitative data, respectively. The first cycle of evaluation also included semi-

¹ In a separate article, we further describe the other components of our mixed-methods design, its conceptual framework, and our positionalities, using the reflective

case narrative approach (see Goodnight, et al., under review).

structured interviews with camp teachers, students, student mentors, and the program director. In the following sections, we describe why photovoice was an essential method within our mixed-methods design and how we implemented it.

Photovoice Process and Decisions

Photovoice was chosen as a complementary method that strengthened our evaluation team's understanding of students' experience of the Innovators program and its immediate benefits. The method also held programmatic value, blurring the lines between data collection method and program intervention: the photovoice process constituted creative activities that helped students explore the school environment and its surroundings while processing their feelings related to starting the school year at Talford, meeting each other, and getting to know their teachers. Prompts were chosen not only to share insights about the camp but also to offer teachers, parents, and students themselves insights on how students were making sense of this important transition.

As part of the photovoice activities, students were asked to take pictures and write responses to daily prompts provided by the evaluation team over 3 days of the 4-day camp. Before they began, members of the evaluation and program teams facilitated a joint session for students, explaining photovoice and providing students with photography instruction utilizing the school's digital cameras. The session introduced students to the cameras' functionality and principles of photo-taking. On the second day of camp, students were asked to explore the school and take photos reflecting the prompt, "*What excites or worries you about becoming a Talford student?*" Students were then instructed to each pick one photo that best represented their response and upload their chosen photo to a web form. Additionally, they were asked to write at least three to four sentences in a field within the form; their sentences explained what their photo meant to them and why they chose it for the prompt. On Day 3, students were asked to answer a second prompt, "*what connections are you making with other people in the Innovators program?*" Students were given the freedom to take pictures throughout the day of whatever they felt helped them answer the question; this day's process for narrative writing was different because students recorded their responses on slips of paper as they attended a full-day outdoor field trip. Students uploaded their chosen photo to the web form later, at the end of the camp day. On the final day of camp,

students responded to the prompt, "*What are you taking away from the Innovators camp?*" As for the first prompt, each student took pictures, selected a photo, and wrote a narrative in a web form.

The photovoice method entails decision-making on the logistics of photo-taking and photo-sharing, which has implications for photovoice's experience, quality, and ethics. In both cycles of evaluation, students submitted their photo and narrative each day in a form that identified them (with a name field), though they could opt to be anonymous during the culminating presentation of photos and narratives (described in the next section). At the same time, students could take photos that identified themselves or others (with verbal consent), and students were reminded, when choosing and uploading photos, that such photos could reveal who wrote their narrative, even if they opted to share the narrative anonymously during the presentation. During both years of photovoice, directions about how to complete the photovoice activities and norms for how photos were taken and shared were essential to students' participation. Photovoice norms included: (1) The photo-taker needs to ask for consent when taking photos of someone else, especially photos that would identify the person (e.g., of their face or name), and 2) everyone else should signal their consent to the photo-taker, and in a group activity, a person should step away from the group if they are not comfortable being in a group picture. Students were told that taking photos during camp activities was fine. However, they were also informed that a camp teacher may say there are times when photos cannot be taken (to preserve the intent or focus of an activity). Students were asked to minimize disruption and take one or two quick photos during activities, instead of experimenting extensively, to avoid compromising camp experiences.

Sharing or Presenting Photovoice Data

A significant choice in the photovoice method is conceptualizing and operationalizing how the photos and narratives will be shared, often publicly. Within program evaluations, sharing photovoice data can be used to foster collective learning and mutual understanding, shape program practices, and facilitate program improvement. On the final day of camp during the first evaluation (2022), students chose what day's photos and narratives to share (anonymously or named) in a slideshow presentation at the parent reception, which was held in the afternoon. In the PowerPoint slideshow, students' photos were arranged by prompt. During

the presentation to parents, teachers, and students, the photos were shown one by one as camp mentors read aloud students' accompanying narratives. The presentation served as a culminating camp event, which was followed by breakout sessions for parents in one room and students in a separate room. In the parent room, parents sat in a large circle accompanied by Talford's principal, the Innovators program director, a couple of camp teachers, and the evaluation team. Parents participated in a group discussion, facilitated by the program director, about their perspectives on the photovoice presentation and their students' overall camp experience.

Based on student feedback, the format for the photovoice presentation was adjusted in the 2nd year (2023). Rather than a live presentation, the 2023 slideshow was silent with auto-rotating slides of pictures and accompanying narratives that parents and students could view alongside other artifacts from the camp that were on display in the reception room, which was the school library. However, due to technical issues with the slideshow's projection, the photos and narratives ended up being shown while the principal and camp teachers introduced themselves to parents and discussed the camp's components with them. As in the first year, parents were invited to share their observations and impressions, but unlike in the first year, many parents did not have an opportunity to view the photos and narratives prior to engaging in the discussion. Also, there was not adequate physical space in the 2nd year's reception venue to arrange everyone in a circle, so people spoke from seats that were arranged in clumps around the room. Unlike the first year, students joined parents later in the reception (versus at the beginning); the intent was that students would jointly view and discuss camp artifacts with their parents as both enjoyed refreshments and mingled with others.

Photovoice Analysis

We followed an inductive approach to data analysis in both cycles of evaluation, moving from open coding to establishing primary-cycle codes for all qualitative data (see Tracy, 2020). Initially, we comprehensively reviewed and reread the extensive collection of photographs and their accompanying narratives. Following this, we revisited the

emerging themes identified through the coding process of the other qualitative data (e.g., interviews and observations). Our objective was to assess the convergence and divergence of the photovoice data with these established themes from the other qualitative data. We systematically identified the photovoice data that corresponded to existing themes. Additionally, we integrated emerging themes from the photovoice data (achieved through an open coding and primary coding process) into the overall data analysis matrix. This process of data analysis allowed us to identify how photovoice data aligned with other forms of data and how it provided unique insights into students' experiences and perspectives. The photovoice data provided information for answering our evaluation questions about students' experiences in and benefits from the camp. For this article, we include a stand-alone photovoice findings section, which provides select photos and narratives as illustrations of the kinds of insights photovoice data can offer.

Exemplars and Interpretations of Students' Photovoice Data

This section provides examples of student photovoice data to illustrate how students responded to the prompts. We especially focus on the first: "What excites or worries you about becoming a Talford High School student?" For the 2022 camp, students' pictures featured a clock, trophies, a musical poster, and lockers. The student's narrative explained that the clock represents their ² concerns about being late to classes and missing out on important information; it is a symbol for their anxieties around time management. A photo of trophies represented the pressure another student anticipated regarding academic competition at Talford. Another student's narrative, which accompanied a photo of a music poster, expressed their longtime desire to play the violin and their delight in having the opportunity to join the school orchestra. As further examples, two students submitted similar photos of lockers (Figures 1 and 2), but according to their accompanying narratives, the lockers represented distinct things to each. One student expressed excitement about this first chance to have a locker;

² The use of "their" is to signal a non-specific gender identity. We collected gender identity information through anonymous surveys, and we expressed to students that we would not tie gender, racial, or other background information about students to the data that

they shared. This was an important commitment, given the small size of the Innovators program and the chance that reporting data disaggregated by identities could lead to strong inferences about who provided those data, breaking students' right to confidentiality.

the locker signified belonging to the school and the opportunity to express individuality:

What my photo is for this prompt is my locker. I chose this photo because I have never used a locker before and I am super excited to decorate my locker. The reason why this makes me excited about being a [Talford] Student is that I get to use a locker to put my things away and take them out and I feel like it will make me feel like a [Talford] High student. The most exciting part about getting a locker for me is decorating the inside and outside of it with stickers of my favorite things like space, astronauts, and Miles Morales my favorite superhero.³

For another student, the locker photo was a symbol for all the changes and the intensity of the experience ahead of them, which they expressed with a mixture of emotions:

Some things that excite me about [Talford] is the friendships that I will make and the new things that I will learn from my peers and teachers. Some things that worry me is the amount of change that is happening currently and the intense learning that will come with it. The reason I took a picture of the lockers on the third floor is that this is where most of my learning and where the changes will happen. Here I will have to learn to adapt to my new school, peers and teachers.

Figures 1 and 2. Student Photos of Talford Lockers



Other narrative responses to Prompt 1 showed that students were wrestling with serious doubts that reflected the core of their sense of self-worth: “The thing that worries me the most now that I’m a [Talford] student is the possibilities that I’m not up to par compared to my classmates.”

In 2023, students expressed similar mixtures of excitement, stress, self-doubt, wonderment, and anticipation in response to the first prompt. For example, one student looked forward to making friends and using cameras for future projects and assignments (Figure 3).

Another student expressed their enthusiasm for engaging in fun activities at Talford, such as

chess (Figure 4). Sharing a photo of tools in the school’s theatre (Figure 5), one student’s narrative highlighted the tensions in how they felt about starting the academic year:

This upcoming school year is extremely nerve racking, but is just as much exciting. I am really looking forward [sic] to things relating to [Talford] performances. as much as I’d want to be up on stage, the behind the scenes is where my heart’s at. I would really like to be in stage and props design.

³ Students’ quotations are presented without editing, except for the substitutions of pseudonyms, to honor their contributions as they shared them and to allow for

readers to directly interpret their meaning. Thus, they are not edited for grammar, spelling, or style.

Figure 3. Camera That Students Received During Camp



Figure 4. Chess Board



Figure 5. Backstage of Talford's Theatre



Other students' photos and narratives highlighted concerns about performing academically (Figure 6), fitting in socially, and knowing how to seek help. Sharing a photo of textbooks, one student wrote:

I am worried about becoming a student at [Talford] because I am not sure that I can get good grades in math class. I fear that I may be able to not pass the class, and that I will have to drop out of [Talford].

Another student, sharing a blurry picture of a poster about social issues clubs at Talford, wrote:

This picture is something that worries me because I might have social issues. I might not be able to make friends and do well with those friends. I might also have trouble asking for help from teachers if I need help with an assignment.

The first prompt provided space for students to reflect on and share their feelings about starting school; the resulting data may have exposed ideas that students would have otherwise not grappled with or voiced to others.

Figure 6. Mathematics Books

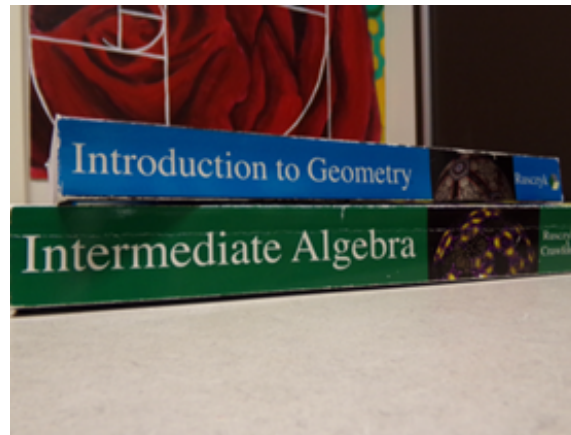


Figure 7. Students Racing Their Boats



Student responses to Prompts 2 and 3 were directly useful in answering evaluation questions about their camp experience and immediate benefits. For instance, in their responses to Prompt 2, “What connections are you making with other people in the Innovators camp?,” many students described how their photos symbolized the bonds they were forming with other students through activities and the fun they were having together. Figure 7 provides a clear example: Students were participating in a boat-building activity where they constructed watercrafts from cardboard and other items in teams and then elected a team member to captain the boat in a race

at a large swimming pool. Writing about the photo, the student who submitted it said: “It capsulates the connections I am making by building a boat that our team put together/ Building a boat as a team helped build team spirit and teamwork. It was a fun exercise.” Thus, the photovoice responses to the first prompt demonstrated photovoice’s unique affordances in revealing students’ inner lives while responses to the second and third prompts revealed photovoice’s serviceability as an alternative method for capturing evaluation data regarding program experience and benefits.

Reflections on our Photovoice Implementation

2022: Student Reactions to Photovoice

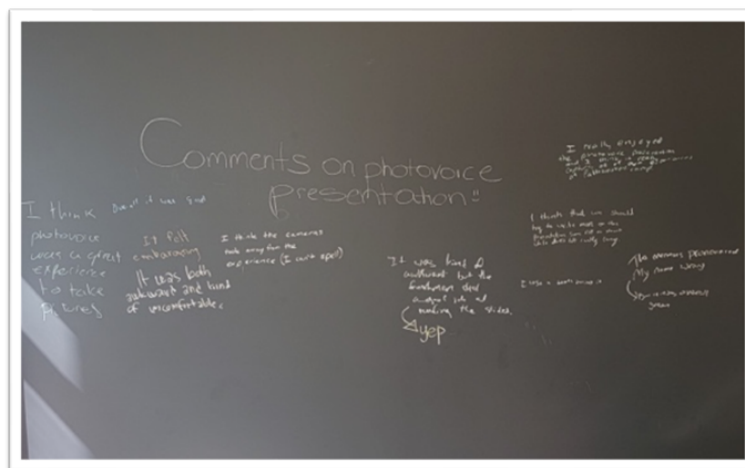
In the first cycle of evaluation, students shared feedback on the photovoice activities through surveys, interviews, and a facilitated reflection session. Overall, most students expressed that photovoice was enjoyable and constructive. A student highlighted: “That part it was good. Like, it pushes you to like, go explore the school go around and like take pictures.” In terms of suggestions for improvement, one student recommended that there should be a small gap between taking pictures and writing narratives to provide space for reflection:

I feel like we usually took pictures and like, wrote right after, right. So most of the time, I feel like there should be just a little gap. So even if it's just like, if we do [it] before lunch, have lunch then, right? Because then it gives us time to think about it. Okay, if I take the picture right away, I might not really exactly know what I'm going to put down on paper.

Also, some students proposed that the photovoice activity should be optional, rather than

mandatory. Finally, some students were in favor of the proposed idea of having discussions about the photos in small groups versus having a presentation for parents or teachers. Students reacted differently to the photovoice presentation in 2022, according to the surveys, interviews, and facilitated reflection session. While survey and interview data suggested students enjoyed the photovoice activities including the reception, students' reactions were mixed in the reflection session. Some students enjoyed having their photos and narratives shown to each other, parents, and teachers because they captured all the Innovator students' reactions throughout the camp. One student said that “it was great overall,” and another student added, “I think photovoice was a great experience to take pictures.” A few other students, however, noted on the chalkboard during the reflection session that the photovoice reception was awkward, uncomfortable, and embarrassing (Figure 8). Referring to the photovoice process, a student stated that the cameras took away from the camp experience overall. During the reflection session, suggestions were also made to improve communication and streamline the photovoice process. This included clarifying students' option for anonymous submissions, as some students did not consistently indicate their preference in the form. (Parents' and teachers' perceptions of the 2022 photovoice are summarized in Appendix B.)

Figure 8. Photovoice Responses from Students During Facilitated Reflection Session



2023: Assessing Adjustments to Photovoice

In the Summer 2023 evaluation, we made changes to the design and implementation of photovoice based on recommendations from 2022. First, students were able to opt into or out of sharing any

photos for the final slide presentation at the parent reception. Students could share photos and narratives as they wished: for all 3 days, only select days, or none. Second, the photovoice images and narratives were available for parents to see as a silent slideshow during the parent reception; they

were not performed with narratives read aloud to parents. These changes were made to address the first-year findings that indicated some students' discomfort with the public sharing of photos and narratives. The photovoice design for 2023 was intended to give students more control over what was shared with their parents and less attention in how it was shared. Yet, as a result, students did not have the same opportunity to view other students' submissions and engage in collective reflection about the data's meaning. Third, the 2023 photovoice activity worked differently on the field trip due to different scheduled activities and a lack of wi-fi for uploading photos to the web form, with repercussions for synthesizing the photos and narratives for the final slide show. The changed process resulted in a rushed effort to compile the photovoice submissions for sharing at the parent reception. This rush was managed (as best as possible) by the program director with support from the evaluation team.

Ethical Concerns Encountered

The main ethical concerns that we encountered during our implementation of photovoice were regarding privacy. Student feedback during the 2022 reflection session revealed issues with the photovoice's privacy and consent that the evaluation team did not anticipate. Students were informed about the photovoice presentation, but some were still unprepared for the experience of sharing their personal photos and narratives with peers and parents. During the photovoice process, students had the opportunity to select which photo and narrative they wanted included in the presentation; furthermore, they could opt to have their photos and narratives anonymous or with their name. However, following the reception, some students shared that they found the presentation awkward. Their feelings of embarrassment potentially undermined these students' overall feelings about photovoice activities and the camp. Certainly, these students' negative experiences with the presentation are antithetical to photovoice's empowerment goals. We, the evaluation team, previously believed that we had taken good measures to protect students' privacy and give them control: we explained the future presentation to students and offered students options for anonymity and choosing which photos and narratives they wanted presented.

Given other data from our evaluation, we interpret that the photovoice activities did generally offer students a worthwhile opportunity to reflect and express themselves in ways that they valued as

an individual experience. As they took photos alongside their new peers and wrote their narratives in a shared room, it is possible that students did imagine how they would feel in sharing these narratives and photos with one another. However, given the intimacy and honesty of their narratives that they produced, it is also possible some students did not anticipate what it would feel like to sit beside their parents and have their photovoice submissions digested by them and others' parents too. Ironically, it might be the unique or uncommon glimpse into the emotional and mental worlds of their adolescent students that prompted many parents to praise the photovoice presentation in the 2022 parent discussion (see Appendix B). Despite photovoice's ability to illuminate student realities that the parents, evaluators, and teachers found insightful, as an ethical and empowerment method, photovoice needed to proceed from students' full consent and an emphasis on their control, comfort, and benefit in sharing their experiences. The 2022 evaluation's use of photovoice ultimately failed to fulfill these values. In 2023, the evaluation team made changes to the photovoice process to address the privacy and consent concerns raised in the previous year's evaluation: the team reviewed the plans for the parent reception repeatedly with students, made photovoice submission for the final presentation completely optional and anonymous if students wished, and changed the format of the presentation to a silent slideshow that could be viewed by parents and students as one of many artifacts from the camp. The 2023 changes tempered issues with student privacy but weakened the impact of photovoice data for parents and students. (Two other ethical concerns related to our evaluator self-reflexivity—navigating bias in photovoice selection and tailoring photos for evaluator/teacher preferences—are summarized in Appendix C.)

Lessons Learned and Considerations for Future Implementation

In this evaluation, we experienced how multifaceted and complicated photovoice is as a method. While we understood its potential benefit as a creative activity that centered students' voices and gave them autonomy in how they represented their feelings about the camp, we originally underestimated some practical and ethical issues. In terms of logistics, we underestimated the complexity of figuring out how to facilitate photo taking, narrative writing, data aggregation, and photovoice display. We did not anticipate the rushed pacing and condensed period for photovoice

instruction, creation, sharing, and reflection within a 4-day program, particularly while participating students were new to teachers, each other, and us (the evaluation team). Beyond these practical challenges, we found the ethical issues around photovoice norms and parameters, particularly related to student privacy, to be even greater.

One of the primary challenges was photovoice's dual function in the Innovators program: on the one hand, photo-taking and writing exercises were program activities built into the daily camp schedule; on the other hand, they served an evaluation purpose for generating data to help us better understand how students were experiencing the program. When thinking of photovoice as a data-gathering evaluation tool, we recognize the importance of participation being voluntary. Some students' feedback affirmed the idea that photovoice activities should be optional. Yet, programmatically, the program director felt it was important for all students to participate to the best of their ability in the photovoice activity, just as students were expected to engage in other camp activities (e.g., field trips, icebreakers, team-learning experiences). Optional activities create programming and supervision challenges for already overextended camp instructors. We recognize that it is not feasible in educational settings to make every assignment or activity voluntary. In 2022, this tension between the two purposes of photovoice—programmatically activity and evaluation data collection—inadvertently contributed to students' issues with photos and narratives being shared. As previously discussed, to help mitigate student discomfort, we increased the degree to which students could opt into or out of photovoice during the 2023 camp.

Overall, we recommend using photovoice as a program reflection and data collection approach in educational evaluations while creating ample opportunities for having direct conversations with students and teachers about the design choices, ethics, and comfort of photovoice activities. Based on lessons learned from our implementation, we present considerations for the future use of photovoice in K–12 educational evaluation:

1. *Increasing Stakeholder Engagement and Control in Photovoice Decision-Making:* We suggest directly involving program stakeholders like students in as many stages of decision-making for the photovoice process as is feasible. These stages, including topic selection, prompt design, and photovoice data interpretation, can increase young people's levels of engagement in and control over photovoice activities. We recommend only including images selected by participants for photovoice presentations. In some cases, evaluators might support participants' photo selection process, but evaluators should strive to mitigate their personal biases that could sway participants' preferences for certain photographs and narratives.
2. *Facilitating Stakeholder Discussions of Photovoice Data Prior to Public Presentations:* To increase engagement, strengthen validity, and protect privacy, student group discussions of photovoice data could be offered before a parent photovoice presentation. Students could have an additional opportunity following the discussion to screen their photos and narratives for further public sharing. Integrating questions (closed-ended or open-ended) that could further assess the comfort level of students before presenting their photos and responses to a larger group (i.e., parents) would strengthen the ethics of the photovoice dissemination and likely reduce students' chances of discomfort or embarrassment. Also, additional tools like surveys or assessments could seek to gauge changes in youth empowerment to more fully grasp photovoice's impact on young participants (Strack et al., 2004). These steps align with Seitz and Orsini's (2022) recommendations for projects to maximize engagement and report ethical procedures.
3. *Reflecting on Choices within Photovoice Participation:* We recommend carefully considering the extent to which student choice can be embedded in photovoice activities. Some educators or evaluators might choose to offer photovoice as one of several activities for students to reflect on their experiences, making participation in photovoice optional. Additionally, evaluators might invite students to use multiple alternative technologies to cameras (e.g., smartphones or tablets) that can increase students' level of comfort, interest, or participation. Moreover, different forms of creative expression may be more suitable for different populations, contexts, and topics (Golden, 2020). Similarly, offering multiple options for prompts could allow students choice to respond in ways they feel most comfortable. Prompts could ask for variable levels of vulnerability; for example, one prompt could ask students how they feel about a topic, and a second prompt could ask students to simply describe something they observe.

Reflecting on Photovoice's Unique Affordances

In our evaluation of the Innovators program, we valued photovoice for how it blurred the lines between being (a) a medium for students' personal reflection, (b) a fun program activity, and (c) an evaluation method. Photovoice generated intimate student data in an engaging and non-intimidating way, which provided teachers, parents, and the evaluation team with a unique understanding of students' multifaceted reactions to the program and the school. This aligns with how photovoice amplifies and empowers diverse voices to address challenges students experience (Hergenrath & Rhodes, 2008; Keller & Mott, 2020; Strack et al., 2010), creating a more inclusive learning environment (Chio & Fandt, 2007). We chose photovoice as a method in this evaluation to ensure that students were given the opportunity for open expression regarding not only their program experience and perception of the program's benefits, but also their broader feelings about transitioning into Talford—its pressures and joys. Traditional data collection methods (e.g., surveys, observations, and interviews) do not as readily achieve such a goal. Our photovoice data revealed details about students' feelings that we did not observe in other sources of qualitative and quantitative data. Arguably, such photovoice data were the most consequential in orienting us, as evaluators, to the general perspectives of students. The photos and narratives illuminated students' realities—their social, emotional, and intellectual sensemaking—which the Innovators program sought to influence through the camp. At the same time, the interpretation and analysis of photovoice data should not be conducted in isolation from these other sources of data in a mixed-methods evaluation (see Goodnight, et al., under review). The data from all these various sources importantly contributed to reaching a sound understanding of students' experiences throughout the program.

What is the value of these photovoice data for program decision-making? A few points may be gleaned from the locker examples (Figures 1 and 2), potentially facilitating further discussions in the school as well as initiating new possibilities for students' support at the beginning of the academic year. First, having and using lockers seems to be something new for students that is a significant change. How might this hypothesis influence teachers' discussion of lockers, such as their practical use? Second, lockers appear an important symbol of students' arrival at high school, their sense of belonging at Talford, and their individual

expression of their personality or identity to their peers. Can the school maximize the specialness of lockers to these new students and further bolster lockers as a positive, community-building resource for them? Finally, and most importantly, it is significant to recognize that students are processing this moment in diverse and complex ways, as the photovoice data depict. For some students, there is a mixture of emotions accompanying this transition to Talford—excitement, worry, and anticipation. Students varied in what emotions were most pronounced.

Photovoice data may be used to prompt discussion between parents and teachers moving forward about the intensity of this period and can promote strategizing for how they can nurture students in processing these consequential feelings. These data, shared in an anonymous and supportive way, can also stimulate important conversations between students or between students and mentors. While student photovoice responses to Prompts 2 and 3 provided complementary data to surveys, interviews, and observations in addressing evaluation questions, responses to Prompt 1 were genuinely unique sources of data that offered distinct insight into students' inner worlds at this momentous, weighty time in their teenage lives. Prompt 1 data were essential to understanding the program context and the circumstances of the program's target beneficiaries.

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Appendices

Appendix A: Culturally Responsive and Values-Engaged Evaluation Approaches

Culturally responsive and values-engaged approaches state evaluation should be (a) *educative* for stakeholders; (b) *collaborative* in designing and implementing the evaluation alongside stakeholders; (c) *deliberative* in determining evaluation priorities, criteria for valuing data, and the meaning of findings through stakeholders' dialogues; (d) *responsive* to the cultural context and diverse stakeholders' perspectives, needs, and priorities; and (e) *responsible* in its commitment to addressing power issues and promoting change for greater social justice within programs and society, more broadly (see Goodnight, et al., under review). While pursuing the engagement and viewpoints of many stakeholders, these approaches emphasize the importance of inclusion and participation of the least powerful stakeholders in an evaluation and advocate for relational methods that facilitate elevating the voices of these individuals.

Appendix B: Parents' and Teachers Feedback about Photovoice

The majority of photovoice projects intend to empower participants by elevating their voices through community forums or exhibitions (Liebenberg, 2018). Thus, we thought of organizing a parent reception on the last day of the camp as a venue to share the key components of the camp, including students' photovoice pictures and narratives. This approach aligns with photovoice's potential to engage parents and guardians of adolescents in important topics shaping their lives (Strack et al., 2004).

In the first cycle of evaluation, both parents and teachers praised the photovoice process and presentation. Camp teachers who witnessed the photovoice method expressed appreciation for how it engaged students in self-expression during the camp, and teachers were interested in its possible uses to gain feedback on the school and understand students' perspectives during the academic year. During the reception and parent debrief session that followed, parents overwhelmingly expressed gratitude for the photovoice photos and narratives because they depicted what their students did over the 4 days of camp and provided insight into how students were feeling and making sense of their camp experience as well as transition into Talford. Some parents expressed surprise in what they learned through the presentation and perceived the photovoice presentation and the parent debrief as an extension of the Innovators program experience, which afforded students space to learn about their new school and reflect on themselves in relation to the school. In the second cycle of evaluation, the photovoice presentation was not a focus of the parent discussion, given technical issues with its presentation and the changed format from a collective, formal reading to an individualized, informal approach.

Appendix C: Self-Reflexivity & Ethical Concerns

During our self-reflexivity process as evaluators, we encountered several ethical concerns:

- *Navigating Bias in Photovoice Selection:* As part of the data analysis process, the evaluation team reviewed the IRB-permitted photovoice submissions (photographs and narratives) upon completing the analysis of the data from other sources (i.e., interviews and surveys). As a result, the evaluation team was faced with the decision to select the photovoice submissions that either complemented and supported the already existing data, as a form of triangulation, or those that offered new insights about students' perspectives and experiences. However, to make the evaluation report a manageable length, it was not possible to include all the photos from the photovoice activity. This underscores a dilemma in terms of which pictures to select and which pictures to discard. We, as an evaluation team, might have selected the most appropriate submissions from our point of view; however, this might have entailed discarding some other important perspectives from students' points of view. We also might have been influenced by implicit biases that guided our choices.
- *Tailoring Photos for Evaluator or Teacher Preferences:* There is a risk that students may take photographs that do not authentically represent their lived experiences and perspectives. Instead, they may deliberately capture or select images based on their perceptions of what the evaluators or teachers would find most favorable or desirable, potentially omitting important aspects of their realities and lived experiences. Their extrinsically motivated decision-making introduces bias that could undermine the integrity of the photovoice process and the resulting data. Despite making anonymous submissions, students might be concerned about potentially revealing their identity and how sharing negative feelings and perspectives could harm their relationships with future teachers. This concern ties back to the privacy issue highlighted previously. Additionally, by participating in the photovoice activities, some students might have been trying to do what they thought was socially desirable by complying with evaluators' or teachers' directions though they were privately feeling uncomfortable.