



## **Teen Social Media Practices and Perceptions of Peers: Implications for Youth Services Providers and Researchers**

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### **Abstract**

This paper presents the results of an empirical study examining teen social media practices, which was collaboratively developed, carried out, analyzed, and presented by a team of researchers that included seven teens. This co-designed study characterizes the social media use of thirteen teens through a survey, highlighting their complex relationships to technology and their prioritization of learning when online. Further, the results highlight that some teens' assessment of information shared through social media is socially informed, while others rely on preexisting perceptions and beliefs when deciding what to believe on social media. Through the analysis of these findings, the teen researchers who participated in the project had access to

opportunities for metacognition and literacy skills development. By connecting the co-designed study and the experiences of the teen researchers, this paper contributes an argument that teens have complex perceptions of their relationships with social media and that collaborative research with teens is achievable and valuable, with direct implications discussed for youth services providers in libraries as well as researchers.

## Introduction

Digital technology is undoubtedly playing an increasingly important role in the lives of teens, and social media is a key driver of this engagement.<sup>i</sup> Research has examined these social media experiences and technologies from a variety of perspectives. Academic performance and experience are consistently prioritized.<sup>ii</sup> Another significant thread of work focuses on youth experiences of risk and harm.<sup>iii</sup> Other research, in turn, examines parenting approaches, while youth self-regulation of technology and social media use also play a role.<sup>iv</sup> This work is all informed by understandings of the biological, cognitive, and social changes that teens experience.<sup>v</sup>

While research is engaged with understanding youth experience online, work about the lives and experiences of teens is typically conducted by adults. This raises several potential issues. The more experienced the researcher, the more distanced they are from a direct experience of current youth culture, which has implications for the development of research questions and design of studies. Further, there are inherent power dynamics when an adult engages with youth within the structure of a traditional research study that can make youth participants uncomfortable, limit rapport, and impair data collection.<sup>vi</sup>

Libraries and youth services providers recognize that direct engagement with youth is key for successful program design, collection development, and services. In *The Future of Library Services for and with Teens: A Call to Action*, the Young Adult Library Services Association (YALSA) envisions increased youth participation in the development, implementation, and evaluation of library programs and services as a priority.<sup>vii</sup> Similarly, the YALSA National Research Agenda highlights the importance of community engagement, advocating for relationship building and partnerships to develop understanding of the needs of library service communities as well as for research outcomes.<sup>viii</sup>

The work presented in this paper connects across all of these areas, and centers teens as authorities on youth experience with significant knowledge to contribute to scholarship on youth social media use. Building on this work with teens, which was conducted in a collaborative and participatory manner, we contribute in a variety of ways. We share results of a co-designed research study examining youth social media use and how it relates to learning and information assessment online. We examine how the teen researchers who co-developed our study were impacted by participation in this work, which allowed opportunities for literacy skills development and metacognition. Finally, we discuss the implications this work has for youth services providers in library settings, as well as researchers and LIS faculty who are engaged in work with youth.

## **Research Questions**

In order to connect these areas and deepen understandings of youth social media practices, this paper focuses on the following research questions:

- How do teens engage with social media and the information they encounter through it?
- How do youth describe the impacts of social media on their lives, including their learning in formal and informal settings?
- What questions and perceptions do teens have about their peers' social media use practices?

## **Literature Review**

This work is informed by research in several areas, including scholarship on youth social media use, its connection to libraries, and participatory techniques for involving teens in research broadly construed as well within library and information science (LIS) work.

### *Youth, Social Media, and Libraries*

Early work in this area focused on “social networking sites” and began by characterizing how these services operate and how teens gravitate toward these platforms because of friend relationships.<sup>ix</sup> This work points out that the persistence, searchability, replicability, and invisible audiences of these sites present difficulties for “both teens and the adults concerned for their well-being and development.”<sup>x</sup> The social elements of these technologies are key, which allow

users to view and traverse their connections, view uniquely identifiable profiles, and create and interact with user-generated content.<sup>xi</sup> The Pew Research Center’s Internet and American Life Project has a strong history of examining youth, technology use, and social media use specifically, sharing nationally representative US statistics about access and use. Going back nearly a decade, their line of work demonstrates growing levels of youth access to mobile devices and social media use, with some of the most recent work highlighting YouTube, Instagram, and Snapchat as the most popular platforms, and indicating that 95% of teens have access to a smartphone.<sup>xii</sup>

The foundational examination of youth and social networking by danah boyd is built on her in-depth ethnographic work with teens and specifically addresses the concerns of adults who worry about issues like youth privacy, bullying, addiction, and inequality.<sup>xiii</sup> She argues that “it behooves all of us to move past assumptions about today’s youth. Both adults and youth need to develop media literacy and technological skills to be active participants in our information society.”<sup>xiv</sup> These skills are developed when youth are able to engage online. Other work in the vein of critiquing myths and popular discourse about youth social media use emphasizes that youth engagement with social media is key for academic engagement, highlighting that interacting with educators and other adults via social media can be beneficial, and that youth both value their privacy online but also use social media for a variety of substantive activities like social development and pursuit of hobbies.<sup>xv</sup>

Youth engage with their interests via social media and digital technology, and this engagement has become a key element for library service and engagement with youth. In one notable example, the Chicago Public Library’s YOUmedia approach is built on the idea of “hanging out, messing around, and geeking out,” or HOMAGO. This is a concept that comes from Mizuko Ito and colleagues’ work describing their large-scale ethnographic study of youth and their technology practices.<sup>xvi</sup> This stance recognizes the value of social engagement and digital technologies, setting the stage for library services that support teens’ preferences. Similarly, other research advocates for librarians to understand and embrace youth social networking practices, arguing that using these platforms can help to broaden the reach of library programs and services, enable the library to support teens’ healthy social development, and facilitate opportunities for librarians to model safe online interactions.<sup>xvii</sup>

## *Participatory Approaches for Work with Youth*

While these studies of youth social networking and social media use may have some levels of youth input, fewer research projects involve youth in the development of the research questions or study designs focused on youth social media practices and perceptions. Various participatory traditions advocate for youth to have deeper involvement in the research on their lives. Critical youth studies scholars and researchers who use participatory action research argue that young people not only have the ability to engage in research in a collective manner, but they also have the “capacity and agency to analyze their social context.”<sup>xxviii</sup> Participatory approaches are also key in information science and computing communities. Work has engaged youth in design activities for addressing health needs and developing literacy.<sup>xix</sup> Scholarship has also engaged youth in thinking about online privacy through the design of games and stories.<sup>xx</sup>

Clearly, involving children and teens via design activities, often to inform technology development, has strong footing. However, despite calls for participatory work with youth for designing library programs and services and research studies, there is less work that engages young people in this manner. YALSA’s emphasis on including teen voices in library service and program development as well as research is a key aim of the organization’s current call to action.<sup>xxi</sup> LIS scholars have been advocating for including youth in research for a significant period. In her 1999 work advocating for more research about youth and informal interactions with information, Eliza Dresang notes the opportunities inherent in collaborating with youth. This approach yields “closer collaboration with youth themselves as partners in constructing research (rather than as objects of it)” and is an opportunity that shifts “from investigations that assume adults will study children to one in which adults and children learn from each other.”<sup>xxii</sup> In contrast to the field’s long-standing discussion of young people’s potential roles in scholarship, research has demonstrated that a small amount of the LIS literature on youth includes teen input, finding that only 2% of practice articles and 19% of research articles in a young adult services journal published during 2008 to 2010 shared teen perspectives in any way.<sup>xxiii</sup> Deeply engaging teens in the design, development, and implementation of research on youth experiences is still an open opportunity.

## *Literacy, Connected Learning, and Our Approach*

Our work operates in this area, employing co-research as an approach to engage youth in the full research process, including the development of research questions, creation of research study design, data collection, analysis, and presentation/publication of findings. By involving teens in the development of a research study, we aimed to root our questions, process, and findings in the perspectives of youth while mitigating power differentials that impact research with young people. Additionally, this study design explicitly connects co-research perspectives with information and digital literacy frameworks that emphasize the importance of developing abilities to seek, find, assess, use, create, and share information.<sup>xxiv</sup>

The ability to carry out all these literacy tasks is key for critical engagement with information, and we argue that as a corollary, the ability to critically engage with research requires opportunities to engage with the full research process, including creating and sharing it. Our approach was designed to harness the impact of elements of the Connected Learning framework, by connecting teens with peers and invested mentors, engaging them in interest-driven activities, and providing opportunities to build real-world research skills and make connections with local and university audiences.<sup>xxv</sup> This framework has had significant impact in library communities and conversations, adding credence to the relevance of our approach for library audiences.<sup>xxvi</sup> This study design has situated our work to allow us to study youth technology-use practices with depth, as well as to examine the impacts of participation on the teen researchers themselves. This allows us to carefully engage with the implications of our work for youth services providers as well as researchers, as shared below.

## **Methods**

Using this co-research structure rooted in literacy perspectives and Connected Learning as the basis for our project, we assembled a team of researchers that included both adults and teens. The adult researchers both have experience as youth services providers (the first author as a public teen services librarian and the second author as a middle school librarian). The adult researchers on this project collaborated with teen researchers from three counties in a geographically dispersed area (the great majority of which is categorized as rural) approximately a two-hour drive from the university campus. Most of these interactions occurred over three full-day events, which we call camps, held at a community college in the teens' local area. During the camps, the

teen researchers received approved ethics training and were introduced to various literatures about youth and technology use, as well as research methods. At the second camp, the teen researchers designed a survey. In between our second and third camps, the teen researchers collected data from their peers. At the third camp, the teens participated in collaborative analysis, which is discussed in more detail below. Our interactions also included an overnight trip to campus during Undergraduate Research Week, which allowed the teen researchers to interact with near-peers who were conducting original research of their own, to learn more about the campus and higher-education opportunities, and to finalize analysis and present their work to an academic audience. All procedures described in this paper were approved by our ethics review board.

### *Teen Researcher Participants*

Seven teens participated in this project as members of the research team and are included as the last seven authors on this paper, listed in alphabetical order. We connected with these individuals by recruiting through 4-H, a positive youth development and mentoring organization that operates throughout the United States, including in all of the counties in our state. These teens joined the project in fall 2016 and completed formal participation in April 2017 with presentations about our work at the adult researchers' university as well as in the teen researchers' home community. These teens included one young woman and six young men, all aged between fourteen and nineteen years old. The teen researchers had a variety of school settings, including two who were home schooled, as well as varying levels of access to technology. Less than half of the teen researchers had their own mobile phone, and one did not have internet access at home. In addition to the rural community environment that the teen researchers all experienced, several of the teens lived on farms and described having animal caretaking and other related jobs in addition to their school experiences. Teen researchers were remunerated a total value of \$80 as well having expenses covered for their overnight trip to campus (all but one attended).

### *Co-Designed Research Study Procedures*

The teen researchers brought significant knowledge of their local community to the research design process. Working together in our early camps, we centered on conducting a survey

focused on the social media practices and perceptions of the teen researchers' peers. Questions focused on assessing what social media platforms were used, how teens think social media impacts social interactions and language use, and how teens make credibility and quality assessments with regard to information shared on social media (more details on the questions are available in the next section). While the adult researchers planned for the co-designed study to operate within the area of youth technology use in order to leverage our areas of research expertise, the teen researchers selected the focus of social media use. Additionally, the teen researchers developed the great majority of the survey questions (with more details in the next section about this process and what the adult researchers contributed). The adult researchers had anticipated running the study with an online format given the geographical distance between participants. However, the teen researchers strongly argued for a paper survey option, and we decided to offer the study in both formats. Ultimately, the response rate to the paper version was higher than the online version, demonstrating how valuable teens' community knowledge can be.

The teen researchers conducted data collection from December 2016 to January 2017. No remuneration was offered for participants in the co-designed study, and no personally identifiable data was collected. While this means that we were not able to collect many specifics about individual demographics, it enabled the teen researchers to conduct data collection, which we saw as a key element of participation in the research process. By not collecting personally identifiable data, we were able to minimize any risks of participating and qualify for a waiver of informed consent, which meant that the teen researchers were not required to obtain permission from parents of participating teens. This would have been an undue burden on the teen researchers because of unequal access to technology and transportation to contact and consent parents. However, the teen researchers used a script to ensure that teen participants gave their permission to participate and understood that they could stop participating or ask questions at any time before they started the survey.

### *Survey Design*

The survey was designed collaboratively during the second camp meeting. This process started with a brainstorming session during which the teen researchers suggested questions, then a session where we refined questions together and tweaked some language by having the teens attempt to answer potential questions and identify potential areas of confusion or difficulty. The

adult researchers encouraged the teen researchers to think carefully about how to describe/define social media, and helped articulate question 15 (Have you heard about STEM or STEAM? If so, where did you hear about it and what do you know about it?), since the way the teens were recruited via 4-H was as a STEM program even though many had not had much exposure to the concept. Before data collection and with permission from the teen researchers, the adult researchers added two broad demographic questions and some specific choices for social media platforms (question 4), and refined language clarity in a few cases. Additional details about this process can also be found in our article on pedagogical considerations of co-research.<sup>xxvii</sup> Overall, the final survey questions below are very similar to those developed collaboratively with the teen researchers. We recognize that some of these questions have room to improve from a standpoint of traditional survey design, but deeply value the collaborative process and therefore remained as close as possible to the co-developed language of the survey. We further discuss this in the “Implications for Research” section later in the paper. These questions were administered on both paper (returned to the teen researcher conducting data collection in a sealed envelope to protect privacy) and via online survey platform, and participants chose how they participated.

1. What is your age?
2. What is your gender?
3. What types of technology do you use for entertainment?
4. We are interested in social media, which includes websites, apps, and platforms where you can connect with other people and post and interact with media and information. Which of the following social media platforms do you currently use?

- |  |                                       |   |
|--|---------------------------------------|---|
| <input type="checkbox"/> Instagram       | <input type="checkbox"/> Twitter      | <input type="checkbox"/> YouTube            |
| <input type="checkbox"/> Snapchat        | <input type="checkbox"/> Facebook     | <input type="checkbox"/> Facebook Messenger |
| <input type="checkbox"/> Reddit          | <input type="checkbox"/> After School | <input type="checkbox"/> Tumblr             |
| <input type="checkbox"/> DeviantArt      | <input type="checkbox"/> Pinterest    | <input type="checkbox"/> Yahoo! Answers     |
| <input type="checkbox"/> WhatsApp        | <input type="checkbox"/> Whisper      | <input type="checkbox"/> iMessenger         |
| <input type="checkbox"/> Twitch/TwitchTV | <input type="checkbox"/> Ask.fm       | <input type="checkbox"/> Wattpad            |
| <input type="checkbox"/> Burn Note       | <input type="checkbox"/> Skype        | <input type="checkbox"/> Facetime           |
| <input type="checkbox"/> Google Hangouts | <input type="checkbox"/> Google+      | <input type="checkbox"/> Other: _____       |

Other: \_\_\_\_\_  Other: \_\_\_\_\_  Other: \_\_\_\_\_

5. How often do you check social media?
6. How often do you use social media and/or entertainment when you're also interacting with people face-to-face?
7. How often do you interact with posts and/or people on social media?
8. How do you decide what information to believe on social media?
9. Has social media affected the way you communicate with others verbally or by typing/writing? If so, explain.
10. How does social media affect the types of electronic entertainment that you consume?
11. How does social media affect your personality?
12. Does social media help or hurt your education and why?
13. Are there things you do or did that you learned about on social media? Explain.
14. Have you picked up any slang words from social media? Name up to 3 and explain what they mean.
15. Have you heard about STEM or STEAM? If so, where did you hear about it and what do you know about it?

### *Participants in the Co-Designed Research Study*

Participants in our co-designed research study completed the short survey that examined their social media access, use practices, and perceptions. We were able to collect usable responses from thirteen participants, aged 14–19 years old. Five participants self-identified as female, and eight identified as male. Participants were recruited outside of school settings, and the teen researchers carried out all interactions with their peers. While we were not able to collect specific information like participant addresses, the teen researchers recruited from their local area, which included four counties with no population living in “urbanized areas” and 93% or more identified as White according to the 2010 United States Census.<sup>xxviii</sup> Individual counties had 60%, 81%, and 100% of the population living in rural areas. One county had 27% living in rural areas, but this county is large; further, the area where we recruited is more than twenty-five miles from the population center of the county, meaning that any potential participants from this area were likely also living in rural settings.

## *Analysis*

We used a collaborative approach to our data that served not only as an analysis technique but also as a learning tool. Working together in a large group over one camp session with further discussion during the trip to the university campus, we reviewed survey responses and conducted a general inductive approach for our open coding.<sup>xxix</sup> This included cleaning and assessing raw data, close reading of text, creation of categories, and continued revisions and refinement through an iterative process.<sup>xxx</sup> For this collaborative portion of the analysis, we used a combination of Microsoft Word and Excel to display and manipulate data on a projection screen with handwritten posters to engage with and analyze the data. This process was carried out in a conversational manner, with the teen researchers leading the conceptual focus and discussion, and the adult researchers asking thought-provoking questions and periodically reminding the teen researchers about time constraints and purpose. Ultimately, these conversations resulted in a formal presentation that was shared with public audiences on campus as well as in the teen researchers' community. This analysis and presentation form the basis for our "Findings" discussion below, with some additional analysis from the first author included at the end of this section. This final addition was analyzed independently by the first author, employing a similar inductive coding analysis technique after reviewing audio recordings of camp sessions and the final group presentation and generating handwritten notes and textual data in Microsoft Word.

## **Findings**

The first sections of findings of this study come from the experiences of the participants in the co-designed research study. These center on characterizing teen social media use, understanding how teens describe connections between social media and learning, and how they discuss assessing information on social media. Later discussion of findings from the first author focuses on the responses of the teen researchers to the research process.

### *Teen Social Media Use*

Our first step was to assess whether and what kinds of social media were being used by our participants. Contrary to research identifying teens as stepping away from Facebook,<sup>xxxi</sup> the teens in our co-designed study used Facebook more than any other platform, with nine out of thirteen users. YouTube and Snapchat were the next most popular platforms, with eight participants

using each. Seven participants identified Instagram as a platform they used. All participants identified as using at least one social media platform. Nine participants indicated that they checked a social media platform once a day or more.

### *Social Media and Learning*

When further exploring the ways social media was used, several themes began to emerge from our analysis process. Many participants perceived social media platforms as places for learning and engagement, for both formal and informal learning objectives. Eleven participants indicated that they experienced this learning about informal topics through interacting on social media. This included areas like “creative DIY,” “hairdos,” and engaging in “the process of running a YouTube channel.” Other participants focused on social relationships, highlighting how they learned “more about my friends and family.”

Social media was also a place where participants could develop a sense of current events: “it keeps me up to date on what is happening in the world”; or as another participant said, “a number of different things about people’s lives and things happening in the world.” Ultimately, there was a strong sense that social media provided learning opportunities: “I think it helps because you can learn some things you wouldn’t learn at school.”

Discussions of the relationship between social media and more formal education settings were more mixed, with participants sharing similar numbers of positive and negative comments. Participants described social media’s impact on education in a positive light, stating that “it helps [my education] by asking my friends for help.” Another highlighted that “it is a quick way to find definitions, answers, and rules/laws.” However, several others described social media as a potential “distraction,” and one participant expressed concern that “if you don’t know what to believe then you might believe something that isn’t true.”

### *Assessing Information on Social Media*

The above comment about belief aligns with a significant concern for the teen researchers, which centered on the ways that participants discussed engagement with information via social media. Multiple participants mentioned using relationships to determine what to believe online. Some focused on the person sharing information: “I look at who posted or shared it,” citing credibility for information from “someone I know and trust.” Others used discussion around the information

as a barometer for belief: “by what others say about it.” For these teens, belief, trust, and credibility in information accessed via social media are rooted in social relationships.

Other teens described the importance of information matching preexisting perception or beliefs. One stated, “I go with my gut,” and another shared, “I just see what I believe is true.” One of the few participants who mentioned research or traditional evaluation standards like examining the publisher when assessing information shared that she believes information “if it is properly researched and is in accordance with my beliefs.” Overall, the teen researchers found their peers’ lack of critical assessment with information shared via social media to be a significant concern.

### *Teen Researchers’ Responses: Metacognition in Action*

In addition to the contributions coming out of the co-designed research study, it is also valuable to examine how participation in the study worked for the teen researchers. Examining the practices of their peers provided the teen researchers with the opportunity to reflect on their own social media experiences. One teen researcher shared:

In a way this project has been an eye opener for me. . . . [I]t has kind of made me realize how much I’m really on social media and it’s kind of made me kind of use it less. . . . I’ve tried to alter the websites I use to go get information to more trustworthy sites that I can actually find information.

Another teen researcher explained:

So I trusted this site before but should I rethink this? I spend this much time on it, should I really spend this much time on it? . . . It can change extremely . . . how you use social [media] and . . . how much time you spend on it.

These reactions demonstrate that the teen researchers made conscious changes to their own critical literacy practices, engaging in thinking about their own credibility assessment processes and describing adjustments to how they engage online. These changes can be framed through the lens of metacognition, which “refers to the processes used to plan, monitor, and assess one’s understanding and performance. Metacognition includes a critical awareness of a) one’s thinking and learning and b) oneself as a thinker and learner.”<sup>xxxii</sup> Engaging teens in the research process can have significant impact on their critical thinking, highlighting the pedagogical value of this collaborative, participatory approach.

## Discussion

Ultimately, the structure of the co-designed research study as well as the teen researchers' responses to it combine to show that teens' perceptions about the impacts of social media—and their relationships to it—are complex and complicated. This contrasts with popular discourse that often frames teens as technologically obsessed or addicted. While many of the teen participants were highly engaged in social media use and saw it as a way to access informal learning opportunities, some discussed concerns about how social media interacted with their formal education.

Participants also described less-than-ideal approaches to assessing the information they encountered through social media. However, the fact that the teen researchers were deeply interested in how their peers decided what to believe online indicates that teens are seriously engaging with concepts like misinformation and disinformation. It is important to note that this study was conducted immediately following the 2016 United States presidential election, which prompted significant public concern with these information issues. The teen researchers demonstrated this same concern. Further, the teen researchers' interest in understanding how social media impacted their peers' education along with the participants' multifaceted descriptions of the relationships between learning and social media demonstrate that teens care about learning (both their own and that of their peers). They prioritize access to both formal and informal learning opportunities, and show concern about how technology may be influencing their experiences. Ultimately, teens demonstrate perceptions of social media that are similar to that of adults, highlighting similar values and fears. Adults including librarians, teachers, parents, and policy makers can see this as an opportunity to further engage youth in managing their technology use through the development of self-regulation techniques and strategies.

The response of the teen researchers to these findings may be the most exciting element of this study. Through interest-driven, socially embedded, and opportunity-oriented Connected Learning that gave them a full experience of the research process, the teen researchers demonstrated metacognition, strong literacy skills, and critical thinking. This shows that engaging youth in these kinds of learning opportunities can have important impacts that can mitigate some of the less critical approaches to information assessment identified in our co-designed study.

## *Implications for Libraries*

In addition to results of our co-designed research study and the demonstrated impacts of participating in the study on the teen researchers, this research also has implications for libraries/library staff and researchers and LIS faculty who are engaged in work with youth. These arise both from the co-designed study and the impacts of our co-research technique. Teens' complex relationships to technology and social media were evidenced by how participants in the co-designed study emphasized learning online but also showed incomplete assessment strategies for engaging with information. The research questions developed by the teen researchers show a deep interest in the impacts of social media and the value of learning. Given these complexities, it follows that libraries and library staff should consider values and perspectives of teens and not simply assume that they have an enthusiasm or skill for technology. While teens may benefit from discussions of risk and support for continued development of critical information literacy skills, they may also benefit from discussion of the opportunities and benefits of technology use and social media engagement. It is also important to remember that geographical location and local population density may inform youths' relationships to and access of technology and social media use, and that the experiences of local teens may not necessarily match national trends.

The co-research process described here demonstrates that teens are capable of high-level engagement with complex tasks over time. This is shown by the teen researchers' engagement in a research process carried out over nine months, even when geographically dispersed. While single programs and events may work well in library settings, there may still be room for more extended engagement with youth, especially when driven by their interests and embedded in social experiences. The YALSA Research Agenda identifies community engagement as a priority area for libraries, and the camp model described in this paper serves as an example of how libraries and researchers can engage teens in this way.<sup>xxxiii</sup> Further, our approach was designed to apply literacy frameworks to research, building opportunities for teens to access, assess, use, create, and share research. This was certainly the case as the teen researchers showed significant development in their ability to think critically about research, apply it to their own study design, develop new research findings, and share them with an audience. What this study also contributes is that deep engagement in data collection and analysis in a subject area can inform literacy skills *within that area*. In the case of our project, thinking critically about the social media practices of their peers provided opportunities for the teen researchers to adjust their

own practices and engagement. The effectiveness and impact of this approach is relevant for any person interested in developing the learning and literacy of youth. This work shows that community engagement combined with Connected Learning principles can help set the scene for effective long-term interactions that engage teens in high-level literacy practices.

### *Implications for Research*

With regard to research, this work demonstrates that community engagement with teens to structure and design research studies is achievable. Involving teens in the research process from beginning to end results in impacts on research design, interpretation, and presentation. Youth services providers in the field often make the argument that teens have knowledge and expertise to contribute to their peers, their libraries, and their communities at large. The calls to recognize the knowledge and contribution of youth are similarly applicable for research. As recommended by YALSA, this work demonstrates a model for engaging youth in participatory research “in innovative ways that exemplify connected, 21st century learning.”<sup>xxxiv</sup>

This study employed an approach that explicitly valued the learning of teens by allowing them to lead the design of research questions and survey questions. The adult researchers did encourage refinement of the study protocol through careful questions and asking teen researchers to imagine how they would respond to the survey. However, time constraints limited our ability to fully pilot the design and engage the teen researchers in a significant revision process. One option for this in the future is to formally engage teen researchers in taking their own survey or participating in the study activities they design. This could inform the learning of researchers and provide an opportunity for more extended and in-depth study design, as well as develop a picture of what their perceptions and ideas are before engaging data analysis. While we believe our current research has value and contributes to our understandings of youth social media use, we recognize that there are ways the co-designed study could have been improved, including through more refined survey questions. Future iterations of our work are responsive to the need for teen researchers to have significant time to engage in understanding the structure of research questions, and we encourage other researchers who are engaging with teens in this way to budget a significant amount of time for this process.

This study does have other limitations that we are working to address in future work. This is exploratory work that prompts future research examining the social media perceptions and

practices of youth. This work is not intended to include a representative sample or to contribute generalizable results, though we believe that the major ideas in this paper are likely transferable to other teen populations. The teen members of the research team include one young woman and six young men, mirroring existing lack of representation of women in research endeavors. Recruiting researchers from a variety of non-dominant backgrounds informed by the concept of intersectionality is an opportunity for the future work of our project and the academy at large. The levels of access to technology of some of the research team members are distinct from portraits of technology use at a national scale, which show high levels of access and use.<sup>xxxv</sup> However, we found that this generated vibrant discussion during the camps, and we believe this can contribute a unique, relevant, and underrepresented perspective to research on teen technology use. The teen researchers and their peer participants come from geographically dispersed, mostly rural areas with significant majority White populations, and as such our results are not representative or generalizable. We are currently identifying partner libraries for future iterations of these co-research camps, ensuring that we have participation from libraries with medium and larger population service sizes and from all the regions of the United States, in order to help ensure that these kinds of activities work for teens from a variety of backgrounds. Ultimately, by connecting with teens from a wide array of areas and backgrounds, we aim to present a model and supporting materials that will be publicly available and relevant to youth service providers, educators, researchers, and teens across the country.

## **Conclusion**

Through collaborative research conducted with teens, this paper makes contributions to understandings of youth social media practices as well as how teens think about and perceive the practices of their peers. This paper presents evidence that teens' assessment decisions about information online can be socially informed and rooted in existing beliefs. This research also shows the rootedness of social media in the learning experiences of teens. Further, this work highlights that teens and adults—including librarians, teachers, parents, and researchers—have similar questions and concerns about the nature of social media engagement and technology use more broadly. We present a promising approach for engaging youth in research and for community engagement that prioritizes Connected Learning and literacy skills development.

While work to refine this approach is ongoing, our first study in this area demonstrates the feasibility and impact of engaging teens in research on youth technology use.

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## Notes

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<sup>i</sup> Monica Anderson and Jingjing Jiang, *Teens, Social Media & Technology 2018*, Pew Research Center (Washington, DC: Pew Research Center, 2018), [https://www.pewinternet.org/wp-content/uploads/sites/9/2018/05/PI\\_2018.05.31\\_TeensTech\\_FINAL.pdf](https://www.pewinternet.org/wp-content/uploads/sites/9/2018/05/PI_2018.05.31_TeensTech_FINAL.pdf); Mizuko Ito et al., *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media* (Cambridge, MA: MIT Press, 2009).

<sup>ii</sup> Urs Gasser, Sandra Cortesi, Momin M. Malik, and Ashley Lee, *Youth and Digital Media: From Credibility to Information Quality*, Berkman Center Research Publication 2012-1 (Cambridge, MA: Berkman Center, 2012); Carol C. Kuhlthau, “Inside the Search Process: Information Seeking from the User’s Perspective,” *Journal of the American Society for Information Science* 42, no. 5 (1991): 361–71.

<sup>iii</sup> Sonia Livingstone, “Online Risk, Harm and Vulnerability: Reflections on the Evidence Base for Child Internet Safety Policy,” *ZER: Journal of Communication Studies* 18, no. 35 (2013): 13–28; Pamela Wisniewski, Heng Xu, Mary Beth Rosson, Daniel F. Perkins, and John M. Carroll, “Dear Diary: Teens Reflect on Their Weekly Online Risk Experiences,” *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (New York: ACM Press, 2016), 3919–30.

<sup>iv</sup> Sarita Yardi and Amy Bruckman, “Social and Technical Challenges in Parenting Teens’ Social Media Use,” *Proceedings of the 2011 CHI Conference on Human Factors in Computing Systems* (New York: ACM Press, 2011), 3237–46; Rachel M. Magee, Denise E. Agosto, and Andrea Forte, “Four Factors That Regulate Teen Technology Use in Everyday Life,” *Proceedings of the 2017 Conference on Computer Supported Cooperative Work and Social Computing* (New York: ACM Press, 2017), 511–22.

<sup>v</sup> Kaveri Subrahmanyam and David Šmahel, “Connecting Online Behavior to Adolescent Development: A Theoretical Framework,” in *Digital Youth* (New York: Springer, 2011), 27–39.

<sup>vi</sup> Amy L. Best, ed., *Representing Youth: Methodological Issues in Critical Youth Studies* (New York: NYU Press, 2007).

<sup>vii</sup> Linda W. Braun, Maureen L. Hartman, Sandra Hughes-Hassell, and Kafi Kumasi, *The Future of Library Services for and with Teens: A Call to Action* (Chicago: Young Adult Library Services Association, 2014), [http://www.ala.org/yaforum/sites/ala.org.yaforum/files/content/YALSA\\_nationalforum\\_Final\\_web\\_0.pdf](http://www.ala.org/yaforum/sites/ala.org.yaforum/files/content/YALSA_nationalforum_Final_web_0.pdf).

<sup>viii</sup> Young Adult Library Services Association, *National Research Agenda on Libraries, Learning, and Teens, 2017–2021* (Chicago: Young Adult Library Services Association), [http://www.ala.org/yalsa/sites/ala.org.yalsa/files/content/2017YALSA\\_NatlResearchAgenda\\_Print.pdf](http://www.ala.org/yalsa/sites/ala.org.yalsa/files/content/2017YALSA_NatlResearchAgenda_Print.pdf).

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- <sup>ix</sup> danah boyd, “Why Youth Heart Social Network Sites: The Role of Networked Publics in Teenage Social Life,” in *Youth, Identity, and Digital Media*, ed. David Buckingham (Cambridge, MA: MIT Press, 2007), 119–42.
- <sup>x</sup> *Ibid.*, 142.
- <sup>xi</sup> Nicole B. Ellison and danah m. boyd, “Sociality through Social Network Sites,” in *The Oxford Handbook of Internet Studies*, ed. William H. Dutton (Oxford: Oxford University Press, 2013), 1–24.
- <sup>xii</sup> Anderson and Jiang, *Teens, Social Media & Technology 2018*.
- <sup>xiii</sup> danah boyd, *It’s Complicated: The Social Lives of Networked Teens* (New Haven, CT: Yale University Press, 2014).
- <sup>xiv</sup> *Ibid.*, 198.
- <sup>xv</sup> Denise E. Agosto, Michelle Purcell, Rachel M. Magee, and Andrea Forte, “Teens, Libraries, and Social Media: Myths and Reality,” *Public Library Quarterly* 34, no. 4 (2015): 318–27.
- <sup>xvi</sup> Chicago Public Library, YOUmedia, <https://www.chipublib.org/programs-and-partnerships/youmedia/>; Ito et al., *Hanging Out, Messing Around, and Geeking Out*.
- <sup>xvii</sup> Denise E. Agosto and June Abbas, *Teens, Libraries, and Social Networking: What Librarians Need to Know* (Santa Barbara, CA: ABC-CLIO, 2011).
- <sup>xviii</sup> Julio Cammarota and Michelle Fine, eds., *Revolutionizing Education: Youth Participatory Action Research in Motion* (New York: Routledge, 2010), 4.
- <sup>xix</sup> Mega Subramaniam et al., “Bit by Bit: Using Design-Based Research to Improve the Health Literacy of Adolescents,” *JMIR Research Protocols* 4, no. 2 (2015): 62.
- <sup>xx</sup> Priya Kumar et al., “Co-Designing Online Privacy-Related Games and Stories with Children,” *Proceedings of the 2018 ACM Conference on Interaction Design and Children* (New York: ACM Press, 2018), 67–79.
- <sup>xxi</sup> Braun, Hartman, Hughes-Hassell, and Kumasi, *The Future of Library Services for and with Teens*.
- <sup>xxii</sup> Eliza T. Dresang, “More Research Needed: Informal Information-Seeking Behavior of Youth on the Internet,” *Journal of the Association for Information Science and Technology* 50, no. 12 (1999): 1123.
- <sup>xxiii</sup> Denise E. Agosto, “Envisaging Young Adult Librarianship from a Teen-Centered Perspective,” in *Transforming Young Adult Services*, ed. Anthony Bernier (Chicago: American Library Association, 2013), 33–52.
- <sup>xxiv</sup> Renee Hobbs, “Digital and Media Literacy: A Plan of Action” (Washington, DC: Aspen Institute, 2010), [https://assets.aspeninstitute.org/content/uploads/2010/11/Digital\\_and\\_Media\\_Literacy.pdf](https://assets.aspeninstitute.org/content/uploads/2010/11/Digital_and_Media_Literacy.pdf).
- <sup>xxv</sup> Mizuko Ito et al., *Connected Learning: An Agenda for Research and Design* (2013), <https://dmlhub.net/publications/connected-learning-agenda-for-research-and-design/>.

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- <sup>xxvi</sup> Braun, Hartman, Hughes-Hassell, and Kumasi, *The Future of Library Services for and with Teens*; Kelly Hoffman, Mega Subramaniam, Saba Kawas, Ligaya Scaff, and Katie Davis, *Connected Libraries: Surveying the Current Landscape and Charting a Path to the Future* (2016), <http://connectedlib.ischool.uw.edu/wp-content/uploads/2016/02/ConnectedLibraries-SurveyingtheCurrentLandscape-and-ChartingthePathtotheFuture.pdf>.
- <sup>xxvii</sup> Margaret H. Buck and Rachel M. Magee, “Teens Becoming Researchers: Pedagogical Considerations When Designing Coresearch,” *Library Trends* 65 (4): 659–83.
- <sup>xxviii</sup> United States Census Bureau, “American Fact Finder,” United States Department of Commerce, <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.
- <sup>xxix</sup> David R. Thomas, “A General Inductive Approach for Analyzing Qualitative Evaluation Data,” *American Journal of Evaluation* 27, no. 2 (2006): 237–46.
- <sup>xxx</sup> *Ibid.*, 241–42.
- <sup>xxxi</sup> Anderson and Jiang, *Teens, Social Media & Technology 2018*.
- <sup>xxxii</sup> Nancy Chick, “Metacognition,” Vanderbilt University, <https://cft.vanderbilt.edu/guides-sub-pages/metacognition/>.
- <sup>xxxiii</sup> Young Adult Library Services Association, *National Research Agenda on Libraries, Learning, & Teens, 2017–2021*.
- <sup>xxxiv</sup> Braun, Hartman, Hughes-Hassell, and Kumasi, *The Future of Library Services for and with Teens*, 27.
- <sup>xxxv</sup> Anderson and Jiang, *Teens, Social Media & Technology 2018*.