



Teens in a Digital Desert

Digital Media Literacy in an Arizona OST Program

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The education landscape, both in and out of school, has shifted dramatically, during the COVID-19 pandemic, to digital learning. This shift has compounded the need for digital media literacy, a wide-ranging and often-changing concept that encompasses the competence to use technical equipment, intelligently consume and process information, and create and share digital media (Heitin, 2016). Even as young people spend more hours in front of a screen than before, they are subjected to more media applications and outlets, from podcasts to videos, pictures, and infographics. These diverse media options are a rich digital landscape for youth to navigate and to which they can potentially contribute.

Open-access social media, such as YouTube and Instagram, enable free and nearly limitless content hosting and sharing. Young people use these resources to share ideas and even create school projects. Perhaps the biggest evolution of multimedia is that most adolescents now have mini production studios in their pockets. Their smartphones have microphones, cameras, and basic media editing ability, along with in-app buttons for instant content sharing. Creation and distribution of media is no longer constrained by exorbitant equipment costs or studio access. From being a one-way street of consumption of television

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or radio broadcasts, media participation has become a two-way street.

Intermixed with the media friends, family, and now teachers share with teens are advertisements, political messages, and sometimes inaccurate information. As commercial and political interests increase media bias and as “fake news” has become a consistent slogan, both adults and young people struggle to interpret media messages. Media educators and academics have argued that media production is as critical a component of digital literacy as is the deciphering of messages (Buckingham, 2003).

Programs that have risen to the call to foster digital media literacy through media production range from career pathway development and journalism training to engagement of underserved youth in community service projects. Many organizations cover all of these characteristics in ways that respect the needs of their communities and host institutions, as we learned in conversations with them when we were building our own program. Radio Rookies, for example, is an afterschool and summer program out of National Public Radio affiliate WNYC in New York City. Dayton Youth Radio, part of radio station WYSO, offers workshops in schools. RadioActive, a program of KUOW in Seattle, hires youth to serve in media production posts, as does independent YR Media in the San Francisco area. BAYCAT, also in San Francisco, offers afterschool programming.

Our program, SPOT 127 in Phoenix, Arizona, also fosters digital literacy through multimedia production. SPOT 127 facilitates semester-long courses twice a week, offers summer boot camps and continuing courses over the summer, and provides in-school workshops. This article describes how SPOT 127 helps fill the void left by most schools’ inability to teach digital media literacy by empowering participants to create their own digital media products.

Digital Media Literacy as a 21st Century Skill

Ever since digital media production emerged as a do-it-yourself creative outlet, young people have taken advantage of the easy-to-use technology to create novice productions (Kafai et al., 2019; Knobel & Lankshear, 2010). They learn to use the technology mostly outside of school, for example, by accessing instructional YouTube videos.

When young people see peers interacting digitally, and when they perceive that digital media offer more pressing content than schools do, they may

neglect academic activities—much as schools have been neglecting digital media trends. As Buckingham (2015) points out, “Outside school, children are engaging with these media, not as technology but as cultural forms” (p. 22). Using interactive digital media in education means teaching young people to grapple with these cultural forms (Buckingham, 2015).

The call to teach media literacy has grown louder as digital literacy has been recognized as a critical 21st century skill; advocates hope that this recognition will help usher media literacy into school curricula (Jenkins et al., 2009). However, legitimate barriers do remain. Many schools are not equipped to foster media literacy through media production, as they lack access to recording and editing technology and their teachers are not skilled in digital media production. Furthermore, digital literacy has to compete with established subjects that are included in high-stakes standardized testing, while media literacy is not. In fact, “the use of technological applications and representations is generally banned from testing,” so that students’ digital media knowledge and skills cannot be assessed by these tests (Dede, 2009, p. 3).

Although digital media production has been slow to find space in traditional curricula and assessments, some organizations have tried to accelerate inclusion. The education organization and advocacy research group Battelle for Kids assembled the Partnership for 21st Century Learning, a robust network of states, businesses, education leaders, and school districts, to identify 21st century skills. Recognizing “that all learners need educational experiences . . . for success in a globally and digitally interconnected world” (Battelle for Kids, 2019, p. 2), the partnership identified four skill categories:

- Key subjects and 21st century themes cover the traditional subject areas plus a focus on such modern themes as health, economics, and environmental health.
- Learning and innovation skills include collaboration, critical thinking, creativity, and similar skills.
- Life and career skills encompass, for example, social and emotional competence, adaptiveness, and leadership.
- Information, media, and technology skills include information literacy, media literacy, and communications technology literacy.

Battelle for Kids (2019) makes the case that today’s environment, “marked by access to an abundance of

information, rapid changes in technology tools, and the ability to collaborate and make individual contributions on an unprecedented scale” (p. 2), makes digital media literacy a critical asset for 21st century success.

Kellner and Share (2019) point out that media literacy is essential for “education and citizenship today” (p. xiv). They insist that critical thinking skills, coupled with flexibility and the ability to participate in new media, are necessary “to empower students and citizens to critically read media messages and produce media themselves in order to be active participants in a democratic society” (p. xiv).

Though rapid changes and exciting innovations in media technology help push creativity, the diversifying media landscape can leave behind both young people who fail to keep up with new media and schools that fail to improve their digital media instruction. Individuals and institutions need to be nimble and adaptable to new technologies, as opposed to being thoroughly trained on the technology of the day.

Program Context

When we began in 2012, SPOT 127 held critical media literacy as an ideal, but our mission emphasized training participants in media production in order to amplify their voices and engage them in community service. As the media landscape has grown more turbulent, we recognized the need to use media production as a means to foster digital media literacy.

SPOT 127 works as a public service to teach digital media production skills to high-school-age teens in communities of need across the Phoenix metropolitan area. We have grown from a modest mentorship program to a robust nonprofit operating two standalone centers that offer free, comprehensive afterschool sessions. SPOT 127 also facilitates workshops in high schools across the metro area. Our mission is to empower teens to find their voices and engage with their communities through project-based curricula offering hands-on training in digital photography, video, audio production, script writing, storytelling, and social media—skills that are vital for success in today’s information economy.

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Although technology accessibility and training constitute the content, our culture focuses on five areas of youth support:

- **Compassion.** Everyone who comes in the door is given attention, love, and support. This environment breeds creativity, as participants are not afraid to share ideas and try new things.
- **Inclusivity.** SPOT 127 welcomes all high school students, no matter their demographic characteristics. We celebrate our diversity by telling stories about communities that are often marginalized.
- **Opportunity.** At a basic level, access to technology creates opportunities. On a deeper level, the process of media creation opens opportunities to improve academic performance and explore career and educational paths. We also expose participants to new experiences such as visiting cultural spaces and learning from local professionals.
- **Quality.** SPOT 127 is a quality program, from the staff, tools, and training we offer to the media participants create. We invest the time and attention participants need to produce work that can have an impact.
- **Personal growth toward self-actualization.** Creating media is a transformative process, not only in terms of the final product, but also in terms of participants’ outlook on their own lives.

SPOT 127’s participant demographic is majority Latinx, with family incomes below 150 percent of the federal poverty level. As an alternative to risky behavior, SPOT 127 serves as a safe and productive outlet for young people who are not inclined to participate in school extracurricular activities, which are typically dominated by sports programs.

The afterschool program in our two centers provides an average of 48 contact hours each semester: two days per week, two hours per day, for an average of 12 weeks. Our staff consists of five full-time members and several part-time production assistant interns. The executive director oversees our relationship with Rio Salado College and leads our financial development and community engagements. The student success specialist supports

participants and families and oversees administrative needs. The editorial instructional manager acts as the editor-in-chief, overseeing student projects, developing curricula, and managing the two instructors. These three positions rotate between our two Phoenix metro locations. Each site has its own instructor, a media professional with an education background. The instructors have the most direct interaction with program participants and are most visible in the communities; they also recruit students from local schools.

On a typical day, participants arrive anywhere from an hour before programming begins to a few minutes late because of long commutes on multiple bus lines. Our dedicated student success specialist greets them at the door and gets them signed in. Then participants are free to talk, do homework, and grab a bagged meal provided by the local food bank. Class starts a few minutes after 4 p.m. The instructor takes 10 to 15 minutes to describe the

needs for the day, outlining a project description on a whiteboard or walking through steps of an editing program on a monitor while participants follow along on laptops or desktops. Meanwhile, our paid production assistants, who are program graduates, set up needed equipment. As soon as the instructor wraps up, participants are “on”: formulating and pitching story ideas, writing scripts, setting up production and recording, or editing, depending on where they are in the semester. The session ends at 6 p.m.; before leaving, participants update their progress in SPOTedit, our own pitch site and project tracker.

In addition to technical skills and media literacy competence, participants gain critical thinking, leadership, and 21st century skills to put them on a path to higher education and lifelong success. We do not track high school graduation or college placement data; anecdotally, we rarely see students drop out of high school, in a county where the high school graduation rate is 78 percent (Arizona Department of Education, 2019). Typically only one or two seniors out of 20 to 25 in a given year elect not to pursue higher education, compared to a statewide average of 55 percent enrollment in postsecondary education (Expect More Arizona, 2020). Six graduates, all women, have pursued multimedia production or journalism and are

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currently working for media outlets as either interns or full-time employees.

SPOT 127 occupies an interesting position compared to the local high schools that can afford to offer media and journalism classes. In school, media or journalism electives are typically available only to juniors and seniors, and they consume valuable credit time. SPOT 127 gives open access to all high school students without forcing them to choose between classes offered at their school. Across our two locations and in-school workshops, SPOT 127 has served more than 1,000 young people since 2012; we now average more than 200 participants a year.

Many participants return to SPOT 127 after their Level 1 semester to enroll in Level 2 and Level 3 courses. On pre- and post-participation surveys, participants report increases in journalism, audio, and video production skills averaging more than 3 points on a 10-point scale.

In open-ended comments, they have emphasized that SPOT 127 is a fun and safe place to be, for example:

- “I liked all the friendliness and support from each and every one working there. I learned a lot to do with editing and video. I really enjoyed all the hands-on projects we did and how each was different than the other.”
- “I made friends and found something I want to do as a profession.”
- “I absolutely loved it and benefited so much by coming to SPOT. It’s been incredible to be part of a program so welcoming and patient with us. I’m really glad I learned different things such as editing, interviewing, and photography.”
- “SPOT 127 has taught me more than just audio and video editing. It has allowed me to relax and become more social and more confident in myself.”

Unique Opportunities

According to a 2018 *New York Times* article, high school newspapers have been forced to remove pieces that were critical of the school administration or that administrators thought ran counter to local beliefs (Peiser, 2018). By contrast, SPOT 127 is a public service program offered through Rio Salado College and tethered to NPR member station KJZZ. We are unfet-

tered by school administration oversight when teaching journalistic practices and vetting participants' products. We avoid censorship by publishing all student pieces on our website and social media feeds. The highest-quality stories are featured on our homepage and sometimes on KJZZ.

Although new participants focus on production and editing skills, more advanced participants learn journalistic practices such as a newsroom-style pitch process. The ideas young media producers pitch often are reactions to national events or themes. We rarely reject story ideas; rather, we help participants frame how their big-picture themes are relevant to being a teenager today, to their communities, or to how they perceive their futures. Our editor often asks groups who are pitching ideas, "How can we bring this home?" For example, after the 2018 school shooting in Parkland, Florida, one group wanted to discuss how schools were tightening security. We steered that group to investigate gun culture in Arizona, how it affected their own high schools, and how they felt about their schools' preparedness. Another group wanted to talk about water conservation, a big topic in the desert. We helped that group frame the issue as "Do I want to grow up and maybe have a family in a place with constant water insecurity?"

We teach participants to find vetted statistics or published work to support their observations so that they become comfortable with pairing opinion and grounded material. Part of digital literacy for our young people, who tend to settle for one of the first sites that result from an initial web search, is learning to identify credible online sources. To teach information literacy competence (Heitin, 2016) early in the Level 1 course, we have participants check the credentials of websites that may be presenting biased information. Working alone or in groups, participants search on terms related to their topic of interest, open the first listed website that is not Wikipedia, and go the "about" page. On that page, they identify linked organizations or persons and then do searches on those names, in what we call a "who, then who" exercise. Participants find that such searches tend to reveal elements of bias.

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The strongest pieces often find a balance of observation and information rooted in teen perspectives on health, well-being, and community concerns. For example, in one short video, two participants mixed statistics on bullying among LGBTQ+ youth with personal reflection. Another group spoke with peers and school counselors about how to foster healthy teen relationships and researched ways to identify abuse. We plan to use these pieces to show participants how to balance personal narrative with larger views on issues affecting teens.

When we have marquee pieces, we submit them to entities that formally recognize youth media. The stories mentioned in the previous paragraph received Emmy awards from the Rocky Mountain National Academy of Television Arts and Sciences. Participant stories have also been honored with Arizona Interscholastic Press Association and Arizona State Fair awards. Although we value these awards as recognition for our

program, they are most important because they build participants' confidence and showcase their talents and competence to external audiences, such as colleges.

Currently we are working with Rio Salado College to provide concurrent enrollment. Rio Salado offers classes whose standards and objectives align, either closely or less formally, with SPOT 127 instructional objectives and the curriculum we have developed over nearly a decade. Participants have expressed interest in earning college credit for completing SPOT 127 courses, just as their peers do in AP classes. This initiative is forcing us to

do something we have never had to do before: grade participants' work. We use established rubrics to assess both work processes and final products in a way that does not disrupt the SPOT 127 experience. For now, early in this discussion, we are treating concurrent enrollment as an opt-in program. We do not impose credit requirements or assessments on young people who are intrinsically motivated to learn media production or just want to have fun.

If SPOT 127 participants choose to go to journalism school, our informal relationship with Arizona State University's Walter Cronkite School of Journal-

ism and Mass Communication supports that choice. Several program graduates are currently attending, and a few have graduated with journalism degrees. As reported in *The Atlantic*, applications and enrollment rates are up at journalism schools across the country. The rise is partially attributed to recent attacks labeling journalism as “fake news” and to students’ desires to share their own stories and help their communities (Harris, 2018). To make college more accessible to program alums, SPOT 127 has secured scholarships through generous gifts from local family foundations. Our student services specialist helps graduates apply for scholarships and follows up to see if they are fulfilling scholarship requirements.

Lessons Learned

SPOT 127 was originally envisioned as a journalism development program. Although we still aspire to that vision, we learned that we need to be flexible to accommodate the ways in which the communities we serve want to interact with media production. Some participants want to get into journalism—and several have. But others just need a fun and safe space to hang out. If we have space, we take just about every young person who is willing to commit to attending for the whole semester. When participants are not fully prepared for the work, we regularly help with remedial writing skills.

Fostering Observation, Connection, and Critical Thinking Skills

As we teach participants to be nimble in adapting to new technologies, so we have revisited the SPOT 127 curriculum to adapt to the vastly improved media technology on participants’ phones, which is starting to rival the professional-grade equipment at SPOT 127. Funding to upgrade that equipment can lag behind the need. Sometimes an immediate production need is resolved by using the mini-studios participants bring in every day. We embrace the use of phones, rather than fighting it as schools sometimes do.

However, we find that the bigger task is to train participants to use their eyes and ears. Young people attend SPOT 127 only four hours a week. A snag in shooting or production can

eat valuable time. We therefore train participants to be aware of what they can capture outside of SPOT 127 with their phones. If you see something that could be a “stock” photo for your project, shoot it. If a scene on campus could serve as “B-roll” for your project, record it. If you overhear a conversation with peers or adults on your topic, ask for a three-minute interview and prop your phone against something to stabilize the camera. A piece about fostering healthy teen relationships was greatly enhanced by the producer’s chance interview with a school counselor for a few minutes during lunch. Similar candid moments have been incorporated into pieces that were recognized within the program or won external awards.

For many participants, technical skills come more easily than people skills. Teens are often reticent to interview community members, let alone school staff. So while participants are learning editing software, they also learn soft skills. In their first projects, they interview one another so that they get comfortable with asking questions, listening, and finding the best follow-up questions. They learn to connect by email and phone, to write thoughtful questions in advance, and to ask those questions as a way to cultivate their own primary sources of information rather than leaning on popular material. Those human-to-human skills, along with storytelling ability and fundamental professional characteristics, take more time and attention to develop than the technical skills do.

Most importantly, we have learned that young people want to use technology for communication and entertainment, but they are rarely encouraged to express themselves in constructive ways that use their education and technological skills. As the media landscape becomes more varied and fast-paced, we continuously shift our programming to build critical thinking skills. Through media creation and analysis, our teens come

away with heightened awareness of the influence content-makers have on what the public perceives as authenticity and truth. They are better prepared to combat the current atmosphere of bias in media news and skepticism about science. We do not yet measure whether participants’ critical thinking skills improve, but we do see participants in higher-level courses beginning to question whether what they are seeing is

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authentic or is merely pandering to an audience to increase likes and followers.

Modeling Professional Media Production

We have seen firsthand that teenagers acquire most of their information from social media and sometimes from national news outlets. They may see local television news every now and then in passing, but traditional television and radio news, let alone print news (even online), fall behind social media. When we ask Level 1 participants to brainstorm topics for their media projects, they often focus on national stories and try to replicate the presentation and content they see in national news. They have little exposure to or knowledge of local news content and style.

SPOT 127 introduces participants to local news. As a starting point, our locations also serve as local bureaus for KJZZ reporters. Participants walk past reporters working in their offices as they enter the building. For most, this is their first exposure to news production. From the reporters' large white boards scrawled with ideas and pitches, they learn that anything can spark a story. In contrast to responding to a prompt at school, developing an open-ended news pitch must fulfill the needs of human-centered storytelling: It must explore a problem. Participants' awareness of what makes something newsworthy is fostered by the presence of a real newsroom whose sense of urgency is driven by the community's need to hear the story as soon as possible—in contrast to the artificial nature of school deadlines. This organic urgency, coupled with occasional workshops in which KJZZ reporters share story development strategies or technical tricks, develops participants' digital literacy by helping them understand what stories must be told. We tell young people that, if they want to work on a topic in the national limelight that already has thousands of voices and opinions, fine—but who is going to tell the story of their family business or of something they see going on down the street? As we repeat our “bring it home” mantra, we show our young media producers that the untold stories swirling around them are valid.

Recently, a participant who splits her school day

between a traditional high school and a nursing program at a career and technical school was struggling to come up with a story idea about anxiety. Her editor asked why she always came to SPOT 127 in scrubs. She described the stress of needing to succeed in school while simultaneously becoming workforce ready and participating in extracurricular activities. She had never considered that this common experience among teens was newsworthy, but her editor assured her that it was. Developing the piece took some back-and-forth in the pitch process and during scripting, but eventually the idea turned into a touching and timely piece about teens' struggle to balance expectations and the effect on their mental health.

Pulling Back the Curtain on the Creative Process

The high-definition aesthetics of entertainment-driven news make the genre appear slick, costly, and, in the eyes of consumers, high quality. Professional graphics give credibility to the news people consume. As SPOT 127 participants work with the same software packages that those media creators use, their hands-on experience demystifies the dazzling visual components of information design.

On their first day of learning to use Adobe Premiere Pro video editing software, participants start to use built-in title effects to animate their own content. A curious and transformative thing happens: They start noticing these effects everywhere. They easily recognize these standard text animations in professional media and soon realize that they could produce the same effects.

That small acknowledgment invites them inside the community of content creators and shows them a source of their own power to express their voice. Understanding the technical tricks professional creators use enables participants to analyze critically the style of presentation and how it affects the message. Our instructors report every semester that, when participants are introduced to title effects, they come back the next week having seen their new knowledge at work in the world. This awareness empowers them to create their original works.

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Similarly, when participants use our green screen in conjunction with special effects in the editing software, they are essentially peeking behind the curtain of the billion-dollar film industry. Often someone gasps, “Oh, my gosh, that’s it?” They are stunned to learn that putting an exciting background behind an actor is virtually a one-step process. Now, they watch the latest Marvel movie with the awareness that they themselves can produce similar effects. Their relationship to media changes profoundly as they cross the threshold from consumer to creator.

Digital Media Literacy and More

The definition of digital media literacy changes as often as do the ever-fluid media landscape and the supporting technology. Youth media centers are doing what they can, not just to keep up, but to help young people get ahead as producers of original content. SPOT 127, in serving Phoenix area youth in communities of need, continues to blend foundational skills, technical skills, and critical thinking by fostering an authentic creator space in which participants can tell their own and their communities’ stories.

Empowering young people to create original digital content and to be savvy, critical consumers of media is not enough to ensure success. SPOT 127 therefore also empowers participants to complete high school, connects them to community resources, assists them in securing internships and scholarships, and provides them with a pathway to college or career leveraged by 21st century critical media skills. We aim both to have an impact in greater Phoenix and to serve as a model to others by shaping, empowering, and emboldening the next generation of leaders as media storytellers.

References

Arizona Department of Education. (25 October 2019). *Cohort 2018 four year graduation rate data*. <https://www.azed.gov/accountability-research/data/>

Battelle for Kids. (2019). *Framework for 21st century learning*. http://static.battelleforkids.org/documents/p21/P21_Framework_Brief.pdf

Buckingham, D. (2003). *Media education: Literacy, learning, and contemporary culture*. Malden, MA: Polity.

Buckingham, D. (2015). Defining digital literacy: What do young people need to know about digital media? *Nordic Journal of Digital Literacy, 2006–2016*, 21–34. <https://www.idunn.no/file/pdf/66808577/#page=21>

Dede, C. (2009, July). *Comparing frameworks for “21st century skills.”* [http://sttechnology.pbworks.com/f/Dede_\(2010\)_Comparing%20Frameworks%20for%2021st%20Century%20Skills.pdf](http://sttechnology.pbworks.com/f/Dede_(2010)_Comparing%20Frameworks%20for%2021st%20Century%20Skills.pdf)

Expect More Arizona. (2020). *Post high school enrollment*. Expect More Arizona and Center for the Future of Arizona. https://www.expectmorearizona.org/progress/post_high_school_enrollment/?location=State::Arizona

Harris, A. (2018, August 9). Student journalism in the age of media distrust. *The Atlantic*. <https://www.theatlantic.com/education/archive/2018/08/student-journalism-in-the-age-of-media-distrust/567089/>

Heitin, L. (2016, November 8). Digital literacy: An evolving definition. *Education Week, 36*(12). <https://www.edweek.org/ew/articles/2016/11/09/what-is-digital-literacy.html>

Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., & Robison, A. (2009). *Confronting the challenges of participatory culture: Media education for the 21st century*. MIT Press.

Kafai, Y., Fields, D. A., & Searle, K. A. (2019). Understanding media literacy and DIY creativity in youth digital productions. In R. Hobbs & P. Mihailidis, (Eds.), *The international encyclopedia of media literacy*. John Wiley & Sons. <https://doi.org/10.1002/9781118978238.ieml0058>

Kellner, D., & Share, J. (2019) *The critical media literacy guide: Engaging media and transforming education*, Vol. 2. Brill Guides to Scholarship in Education.

Knobel, M., & Lankshear, C. (Eds.). (2010). *DIY media: Sharing, creating and learning with new media*. Peter Lang.

Peiser, J. (2018, July 1). Hard news. Angry administration. Teenage journalists know what it’s like. *New York Times*. <https://www.nytimes.com/2018/07/01/business/media/student-journalism-school-newspaper.html>