



DIGITAL CIVIC LITERACY IN OAKLAND HIGH SCHOOLS

EDDA Research Summary No. 2

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Digital media literacy is rapidly becoming a core competency needed not only for college and career, but also for informed effective citizenship. This brief examines OUSD students' experiences with digital civic literacy—the ability to use digital tools & networks for analyzing, discussing and acting on civic issues. Through surveys of graduating seniors (conducted in 2013 & 2014) paired with intensive data collection in 4 classrooms piloting new activities to support digital civic literacy, the EDDA research team found that evidence of impact of these activities on students' habits related to searching and assessing the credibility of information, demonstrating greater understanding of the importance of persistence in searching for information, and use of new strategies for assessing the reliability of information. Additionally, when students had structured supports for collaboration using social networks, they were more likely to view their peers as valuable sources of feedback. For example, in one focal school, only 8% of graduating seniors in one school strongly agreed that getting feedback online can be helpful. In a class where students did this work extensively, the number rose to 23% (with 83% agreeing). Finally, digital media allowed students to connect to a broader public outside of the school—getting comments from students across the country, connecting to elected officials and getting immediate feedback by email, seeing that the issues they face personally, are shared by others. Students reported finding these kinds opportunities to be motivating and to increase their likelihood of seeing school as meaningful and relevant. See [Student Engagement](#).

OVERVIEW

Digital media literacy is rapidly becoming a core competency needed not only for college and career, but also for informed and effective citizenship. National studies find that 46% of youth get news through social media, but 84% feel they need more support to tell if the information they find is reliable. Furthermore, the same study finds that youth are increasingly using the Internet and social media to find information, to share their perspectives, and to mobilize others for civic action. In the digital age, we see evidence that youth are leveraging digital media for the practice of participatory politics in which they investigate and engage in dialogue and feedback around civic and political issues, produce and circulate media related to civic and political issues, and mobilize others to action¹.

In light of these trends, the Educating for Democracy in the Digital Age (EDDA) project engaged a core group of teachers in Oakland Unified School District (OUSD) high schools to consider how digital media literacies might be integrated into the classroom to support students' use of digital tools for the three aspects of civic engagement that EDDA seeks to support—issue analysis, action, and reflection. (For additional information regarding EDDA's model of civic engagement, see Research Brief #1.)

The EDDA initiative pairs expert coaches with classroom teachers to develop models of curricula that meet the goals of Educating for Democracy in the Digital Age while reinforcing and enhancing the content and skills of the Common Core and their subject areas.

¹ http://ypp.dmlcentral.net/sites/default/files/publications/Participatory_Politics_Report.pdf

In order to better understand how classroom teachers can support digital civic literacy in the classroom, the EDDA research team focused on 3 central questions:

1. What are OUSD students' current experiences with digital media literacy supports in the classroom? What supports are present? What supports are needed?
2. What are key classroom practices to support digital civic literacy, and how do teachers' practices shift when seeking to support this goal?
3. What are the impacts on students?

Towards this end, the research team drew on a district wide "Senior Exit Survey" conducted in senior government classes throughout the district and a mixed method intensive study of 4 classrooms in which teachers were part of a "research" inquiry group, working closely with National Writing Project coach, Paul Oh, an expert in digital literacy practices. The task of the group was to develop curricular models that support students' ability to use digital media to find, analyze, and share information about civic issues. The EDDA research team conducted interviews, observations, and surveys in each of these classes.

OUSD Students Current Experiences with Digital Media Literacy Supports

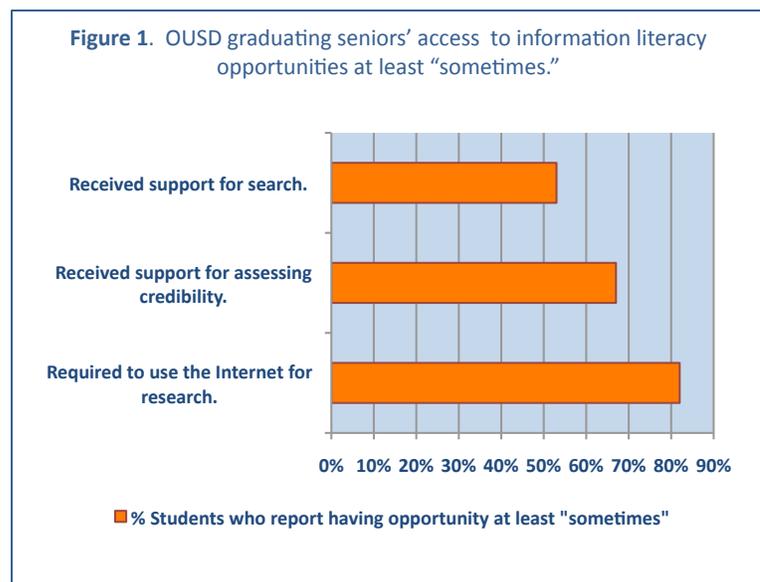
Baseline data was collected through a survey of exiting seniors during the first year of the initiative prior to significant implementation. Students were asked about their experiences with a variety of digital learning opportunities ranging from questions about their experiences with online search, collaboration, and production. Results suggest that:

❖ **Information literacy is expected, but not fully supported.**

The vast majority (82%) of graduating seniors in OUSD are expected to use the Internet to find information at some point, but that far fewer receive support for assessing the credibility of information (67%) or for searching more effectively (53%).

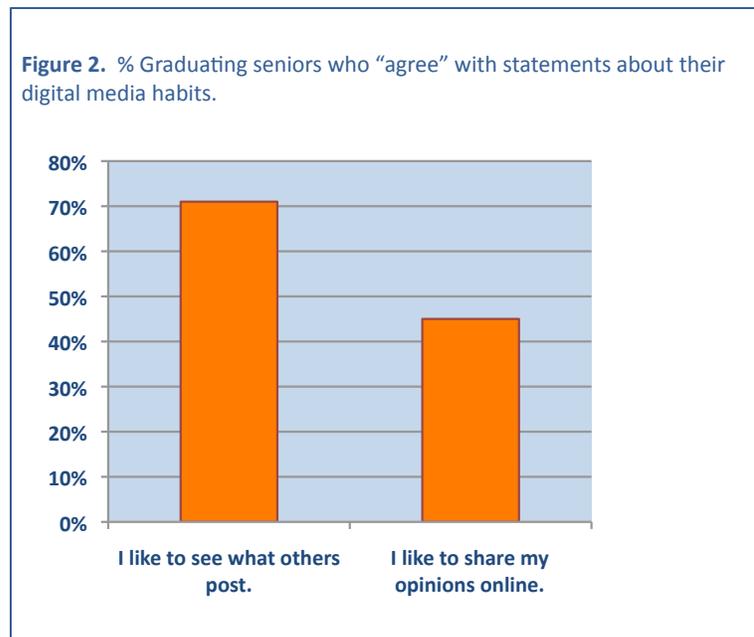
❖ **As with national samples, fewer than 1 in 5 students express high levels of confidence in their ability to find and assess the**

credibility of information they find online. Only 16-19% of graduating seniors strongly agreed that they knew how to find information they needed online or to figure out if the information they find is correct and reliable.



These findings suggest that while teens today have grown up with the Internet, they need supports to use the Internet more effectively for research and academic purposes.

- ❖ **Students are avid consumers of media, but they are far less likely to see themselves as producers of media or use the Internet to make their voices public.** In the early days of the Internet, the most obvious advantage of the technology was ease of access to information and faster communication.



Post web 2.0, we see an explosion of tools that enable youth to not just consume information, but to become producers of media to share their perspectives and reach an audience. However, research suggests that we cannot assume young people will take advantage of these opportunities.

Research suggests that there is **considerable inequity in how people use the Internet based on income**, with those who are higher income being more likely to produce information and those who are lower income more likely to use the Internet solely for consumption². Furthermore, current educational trends may serve to exacerbate this inequality. For example, 80% of students in high-poverty schools using technology to practice basic skills compared to only 36% who are given opportunities to use technology to produce media³. These trends are reversed for students in high-income schools.

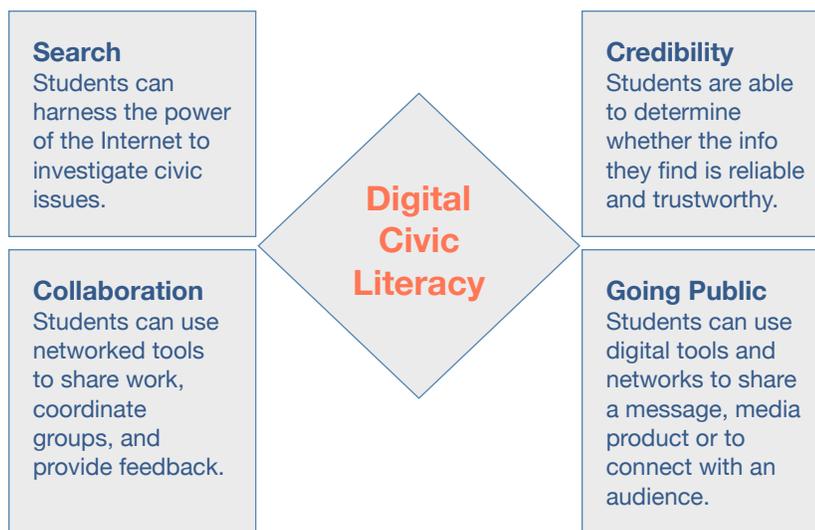
In light of these trends, it is worth noting that within OUSD, students are far more comfortable consuming than producing media. We find that while 71% of graduating seniors enjoy using the Internet to consume other’s perspectives, only 45% say they like to share their own opinions.

²Schradie, J. (2011). The digital production gap: The digital divide and web 2.0 collide. *Poetics*, 39(2), 145-168. Accessed November 29, 2012 from <http://www.sciencedirect.com/science/article/pii/S0304422X1100012X>

Gray, L., Thomas, N. & Lewis, L. (2010). Teachers' Use of Educational Technology in U.S. Public Schools: 2009. First Look. Institute of Education Sciences. <http://files.eric.ed.gov/fulltext/ED509514.pdf>

Emerging Practices and Student Impacts: Examples of Education for Digital Civic Literacy

Throughout the year-long intensive study of classrooms seeking to integrate digital civic literacies into the humanities curriculum, the research team identified four key areas of digital civic literacy where teachers a) saw a need for greater student support, b) identified shifts in their own practices needed to support students ability to analyze discuss and act on civic issues, and c) experimented with new curricular strategies.



These included search—teaching students new strategies for using the internet more effectively to explore information; credibility—learning strategies (rather than hard and fast rules) for examining the reliability of information; collaboration—using collaborative tools and social networks to share perspectives, coordinate group work and get and provide feedback; and “going public” using digital media to connect to the public outside of school. Below, each of these practices is discussed in detail with evidence of changing classroom practice and student impacts.

Search: Learning to Look Beyond the First Result

With the development of search engines (Google, Bing) and databases (EBSCO, ERIC) students have access to information that goes far beyond what their local libraries prioritize and can afford to

The Internet has such power that [my students] weren't accessing, and I really want my students to feel that power.

—EDDA teacher reflecting on the importance of learning deep search habits.

physically house. At its best, the Internet not only becomes a tool to access information but a way to explore information. Following the links embedded in articles can give students greater depth of understanding of the nature of information. However, teachers often find that students don't take advantage of these possibilities. All too often, students simply pick the first result that comes up in their search without considering whether the information there is the most appropriate, most interesting, or most credible. In a recent survey of a broad sample of teachers,

38% rated their students' "ability to use appropriate and effective search terms" as only "fair" or "poor," and more than 70% rated their students' persistence in searching for information and ability to recognize bias in online information as only "fair" or "poor"⁴.

For example, an EDDA Junior English teacher took on this challenge, and designed activities to try to spark the spirit of Internet research as inquiry and discovery in her students. She notes, reflecting on her previous experience with her students' Junior Research Project:

Last year, I barely gave them any time for Internet research. And then the one opportunity that they had was this really high-stakes project. So they all chose safe topics, and then they chose their initial sources to get on the next step. So there wasn't that time for experimentation and play, and learning how to do research, or really going down that rabbit hole we keep talking about. There was not time for that...the only project they had was really high stakes. The Internet has such power that they weren't accessing, and I really want my students to feel that power.

Over the course of the year in this classroom, students repeatedly engaged in Internet research on topics related to their curriculum. For example, after reading coming of age stories, students conducted research on the nature of youth and different societal definitions of youth. After reading a book set during the Vietnam War students investigated different aspects of the war. The activities were designed to force students to develop search terms and find new information, with a minimum of five searches in which they reported their findings and tracked their next findings.

End of year surveys were given to students in the class to compare them to graduating seniors. Findings suggest impacts on students search behavior and efficacy.

- ❖ ***Students who received search supports in the EDDA class were more likely to report persistence in search behavior compared to graduating seniors in their school.*** Students in this class were significantly more likely to report "When I search for something online, I try to get information from more than one source to make sure I get the best information," (difference statistically significant at $p < .05$).

[Previously] I'd find one thing, and I'd just stick with it even if I don't understand it. But now, ..., I'll just type it in again and see what I can get, and it's more understandable.

— Student talking about impact of project.

⁴ Purcell, K. et al (2012). How Teens Do Research in the Digital World. Pew Research Center for Internet, Science and Technology. <http://www.pewinternet.org/2012/11/01/how-teens-do-research-in-the-digital-world/>

- ❖ **Students who received search supports in the EDDA class were more likely to report a sense of efficacy for search compared to graduating seniors in their school.** Students were also more likely to agree that they are “able to enter the right words in a search engine to find what I am looking for,” (difference approaching significance at $p < .10$)

Student interviews reinforced these points.

Student: *The point of the project was to get new search terms, while we are searching the same thing over and over, just to get new words each time. Like, you look at something, and then you find something interesting, so you look that up, and it keeps kinda going on and on like an accordion.*

Interviewer: *Why do you think she had you do that?*

Student: *To make it more interesting. To get more facts about our topic and to—just like a broader understanding of something—the same thing, but in a different way, a different perspective. ... I never thought of it like that [before the project].*

Credibility: Moving from Using Rules to Strategies

One major challenge for learning about and researching issues in the digital age relates to understanding what counts as good information and what is suspect. Youth are getting media in different formats (video, infographics, text) and through different channels—both traditional channels like newspapers and books but also through social media and blogs. The advantage is that we can see information and perspectives that may not have gotten attention in the pre-Internet era, however, the standards for fact checking and credibility are much more ambiguous.

Without a serious effort to consider credibility, youth and adults alike rely on naïve strategies such as evaluating whether a site looks professional, appears to be based on research (shares statistics), or the information appears in other places, none of which guarantee that the information is valid. A common strategy within schools to combat these tendencies is to introduce rules, such as “avoid Wikipedia” or check to see if the site is a .gov or .edu. While these rules do help call attention to the idea that not all information is trustworthy, they limit what students can use and do not provide them with tools of thinking critically and evaluating sources.

Two EDDA teachers took on the challenge of deepening students’ powers of critical consumption of online material as the focus of their Year 2 EDDA projects. As illustrated in Figure 3, teachers’ approaches to demonstrating credibility varied, but shared some common features:

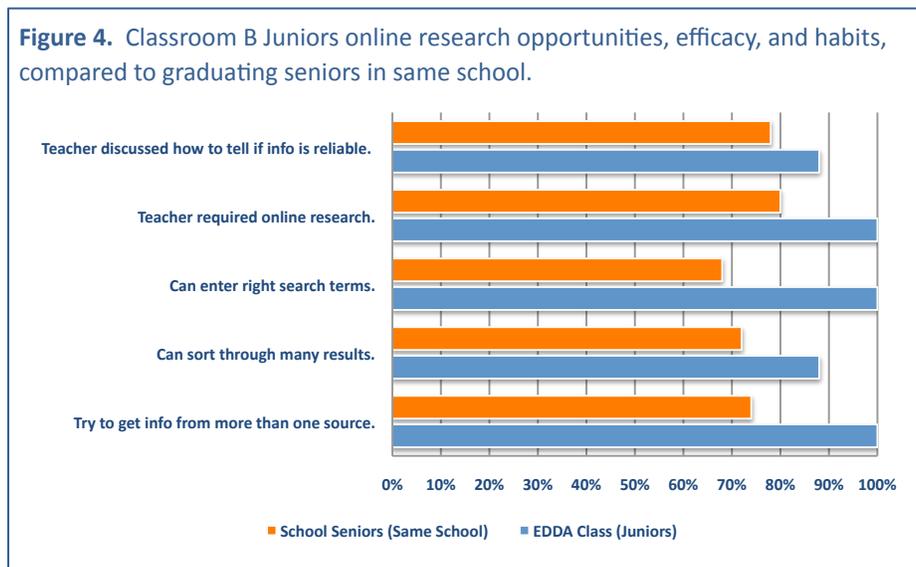
- Both classes had students evaluate information using teacher provided strategies (is there information about the author? Date? Evidence of bias?) rather than rules.
- Students were given opportunities to evaluate sources they find for themselves, but were also given opportunities to engage in analysis of common documents as a class, mixing opportunities for scaffolded support with opportunities for independent work.
- Students had multiple opportunities to practice evaluating information.
- Students used collaborative tools to share ideas and provide feedback.
- Students used their work for a purpose—to share with an outside audience.

Figure 3: Overview of classroom projects to support credible research on civic issues.

	Classroom A	Classroom B
Project Description	<p>“What is the civil rights issue of our time?” 11th grade English Language Arts students pick their topics, conduct their own research, and share their information on a semi-public, moderated social network site “Youth Voices.” Throughout the process, students were required to evaluate sources they gathered using a teacher developed “trust-o-meter” which provided standards, but not strict rules, for evaluating information. The class began by evaluating media sources as a class, and then moved into applying the strategies to their own resources.</p>	<p>Investigating water rights. An 11th grade law class researched the issue of water rights in California in preparation for their visit to the State Capitol and meetings with their representatives. Students researched the same topic and shared their sources, using credibility strategies of the CRAAP test to add their evaluative questions and comments to a collaborative document (via Google docs). Students also gathered quotes from their representatives (via website or email) and created policy briefs endorsing a position on water rights.</p>
Shifting Practice	<p>With my juniors, we really added to [the use of collaborative tools], the online research component too. So the web navigation and using search engines and evaluating source credibility, that was another major focus toward the end [of the school year]. And even in this last mini unit on poetry, it’s just becoming more of the norm. Instead of me providing all of this background information ... I write six questions ... and I say, "Run a search ... and find the answers to these questions."</p>	<p>My goal was how do you know if you have a decent source? I would say we're still in the weeds on that one. I mean, we're better than we've ever been in 15 years. I would say they definitely know how to use words like, "Is it a current document? Is it a clean document?" That there [aren't] a lot of errors in it. That was interesting to watch them figure out. And then is it an expert document? I guess I really tried to focus on those three things. Is it current and relevant? Is it at least professionally done? Is the expert reliable?....</p>
Goals for Students— Learning Persistence	<p>One thing I heard them say a lot was that research is hard. And I think that one thing that they get out of this project, and I felt this way last year, was working on something in which ... there's no clear formula. ... [T]here are scaffolds, but there's no right answer. It's messy.</p> <p>One of the biggest things was like, "Well, I'm not finding what I want to find," and constantly reiterating this message of, "Well, what are you finding and how can you use that? And what does it answer for you? And what questions does it raise for you?" And this really understanding - I think that they are all really walking away with an understanding that that's okay and that's even better. It's even better to kind of be out there without certain - be out there and to be a little uncertain and to have to figure it out, and figure out how to work with it, and figure out how to use it.</p>	<p>The one thing a lot of my students did say...is you just keep researching. And if you keep finding on different sites information that agrees with you, and then you do see in the newspaper – so you just keep being aware and trying to figure out if something gels with most of what you're hearing.</p> <p>And what I keep trying to do is tie them to the scientific method, so at least your hypothesis, your question, would be, "Well, I think this is a good document. Well, now how do I test it? How do I figure that out?" They're aware of it. ...</p>

What evidence of impact do we see in students?

- Learning Persistence:** As seen in Figure 4, in both classrooms teachers noted seeing a shift in their students understanding of research as a process requiring critical thinking and persistence and continual questioning, marking a shift in stance from applying rules to employing strategies for assessing credibility.



- Writing and Argumentation:** In Classroom A, the teacher tracked students’ growth in writing and argumentation using a district standard rubric over the course of the year. She notes, “... and it's showing up in their writing....these are by far the best - I mean, overall - this is a five-point rubric and they started the year averaging a 2 and I haven't given a score less than a 3 yet in these. And a lot of them are averaging 3.5 to 4.”
- Research Habits:** In Classroom B, students reported higher levels of access to digital civic learning opportunities, a greater degree of efficacy for digital research, and more rigorous research habits. For example, 100% of students in Classroom B reported that they “try to get information from more than one source” when doing online research, compared to only 74% of graduating seniors in their school. Furthermore, during a one-to-one “information literacy task” where students were asked to provide input on how to find and share information about one of four civic issues, students spontaneously volunteered strategies that teachers mentioned scaffolding in class.

Interviewer: Ok. So do you think I could use this information to convince somebody that this was an important problem?
Student: You could but you have to find out like if it's valid.
Interviewer: Ok. And how would you tell that?
Student: Well if there's an author you could look at his credentials. ...
– HS Junior doing “Information Literacy Task”

Collaboration: Using Digital Tools to Share Inside the Classroom

As the EDDA initiative began, OUSD simultaneously adopted Google Classroom as a platform for classroom communication and work. Availability of these tools (with the support of coaching and professional learning communities) enabled teachers to integrate online collaboration into their classes. For example, one teacher used a shared form on Google Docs to have students collaboratively comment on the credibility of shared sources using similar criteria. This strategy helped students share knowledge and generate ideas in a format that allowed everyone to “speak” simultaneously, thus allowing for greater discourse around the information and issues they were analyzing. In this case, described in the quote to the right, a teacher described taking a complicated document that outlines strategies for evaluating information and converting it to a set of five or six main questions. Students were then asked to enter in their own questions and comments about the credibility of the information they were reading into a collaborative document. Observations during this activity suggested that the large majority of students were engaged, on task, and commenting verbally (as well as online) on each others’ questions. Thus the use of collaborative tools helped students generate ideas and made the task more engaging by making it more social.

[W]hen I could actually create a template from the CRAAP document [criteria for assessing credibility], where they had to ask a question that had to do with currency, ask a question to do with accuracy, I just found it was a much more effective lesson plan.

I could step back and – you can't just keep talking about a document like this. It's too tedious and it's too difficult. But if I could break it down like I did, and then had them all competing with each other to get questions put in [a shared Google doc], it pushed me to get deeper into the CRAAP test itself and to expect more and less from the trial brief [final assignment regarding Water Rights].

– EDDA teacher reflecting on using collaborative tools to help students generate questions about the credibility of information.

In other examples, EDDA teachers used a blogging/academic social network platform (youthvoices.net) to have students share work in progress with each other and comment. Student interviews from both classes suggested that students *value seeing their classmates ideas and getting feedback on their work.*

These observations are reinforced by survey data which suggests that students in the EDDA class that engaged most fully in blogging and commenting on each others’ work were significantly more likely to believe these comments can be helpful. *For example, only 8% of graduating seniors in the school strongly agree with getting feedback online can be helpful. In the class where students did this work extensively, the number rose to 23% (with 83% agreeing).*

Students in the EDDA class reported having classroom discussions about how to respond constructively to blog posts. Students in this class mentioned things like “staying neutral” and “putting yourself in the other person’s shoes.” In contrast, students who were in classes that did not engage in blogging or collaboration tended to raise concerns that people might share misinformation or say things that are mean or out of line.

Student: [Referring to classroom blog that classmates can see]. They would comment on it, what we could do better, what we have to change and then we would go and comment on other people blogs that we like and what they could improve, what they could have them better, what they could change. ... that one really gets us motivated. It makes us do more.

Interviewer: In what way?

*Student: Like just by go and comment on people blogs and reading it. "Oh I have this topic. They have this other topic." **You really learn from other people things and they learn from yours because once you comment on their blog then they can comment on yours.** Then they read it and they tell you what you have to change or what to keep the same or what they liked about it.*

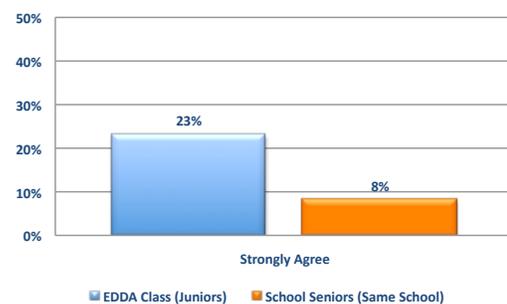
This suggests that positive experiences with online collaboration can help students develop positive attitudes toward giving and receiving feedback, but that absent these opportunities, they may be hesitant to take advantage of the collaborative potential of digital media.

Going Public: Using Digital Tools Connect Beyond the Classroom

A final area of support that emerged was that of using digital media to “go public” – to have students share information with others or to connect to those in the public sphere. Not only is sharing information and perspectives in a public forum a key component of civic engagement, it is also a chance for students to apply the knowledge they have gained through research and issue analysis. In the EDDA project, opportunities to “go public” have ranged from campaigning for propositions, presenting to schoolmates and/or a panel of classroom visitors, emailing politicians, visiting politicians, social media campaigns, and creating blog posts for an outside audience.

For teachers the motivation to provide these opportunities included the hope that students would gain motivation for and confidence in their writing through practicing for an authentic audience. Additionally, the experience that their voice matters and that people care what they think can provide a sense of civic efficacy.

Figure 5. % Students who “strongly agree” that getting feedback for information they put online can be interesting and helpful.



The opportunities to share perspectives in a public forum do not require digital media, but learning to use digital networks for this purpose can augment young people’s access to the broader public.

*I just think **the more that they put themselves out there, the more that they start to develop their own voice, the more confident they're going to feel in their voice, and that authentic audience is huge....**[O]n Youth Voices there are expectations. We do a whole - we take a few days to talk about what it means to put your stuff out there on the web and what the expectations are around an academic professional online setting. And they live up to them. –11th Grade ELA teacher reflecting on the usefulness of “going public” via blog.*

For example, emailing and receiving replies from public officials can provide students a sense that

their questions are important enough to warrant a response. Getting comments from youth in other classes, schools, or states on a blog post can make students feel that their ideas matter.

Just as teachers hoped, students found the experience of having an authentic audience to be powerful and motivating, as illustrated by the 11th grade student who found publishing online, about an issue they care about, to be a powerful motivator for writing and the student who found that people were more expressive online than when talking to each other just as school mates and friends face to face.

And one of them did communicate with directly with her assembly member and asked for a quote. And he wrote back that night with two [relevant] quotes. I think that excited them, that they could get in touch.

–11th Grade CTE teacher reflecting on students' use of technology to connect with elected officials.

*[Reflecting on experience with blogging] I didn't know that you can start a website so easily. That's what I found. And when she talked about Youth Voices, and then I seen some of my friends from [a high school across town], I'm like, "Oh, did you see them? I didn't know that." Yeah, that was cool.... And rather just walking around, seeing your friends, **I think it's better to go on the Internet because people are expressing themselves more in the Internet** because they feel like they're more safe.*

– 11th grade student.

An additional, perhaps less expected, benefit that was mentioned in student interviews was the power of seeing that issues they face are shared by others. The discovery that personal challenges may actually be public issues that can have structural causes and may be best addressed by community efforts is a critical component of young people's emerging understanding of civic and political issues. However, to make this shift, students need opportunities to connect with others who share their experiences and concerns. For example, students shared in interviews their surprise in learning that kids in places like New York faced the same issues, that they were facing in Oakland. These discoveries can serve as a foundation for developing a greater understanding of large-scale public issues. Questions as to why things are the same in two cities so far apart and why they may be different for students in Utah (also part of the Youth Voices network) can help students begin to think structurally and nationally, critical precursors for civic engagement.

So I was talking about just obesity and animal cruelty and animal brutality, and then just people commenting on mine. [It] made me feel kinda good about myself, like, my first time ever feeling like a author....[Be]cause I didn't like writing, but when I write about something I want, like I wanna learn.

*It's better to write it out on the Internet so people can read it. **It just feels like you're somebody 'cause somebody's reading it;** somebody likes it, and I got a lot of comments on it.*

– 11th grade student.

CONCLUSION

As the evidence mounts regarding the centrality of digital literacies to college, career, and community readiness, models of digital literacy for the purpose of analyzing, discussing, and acting on civic issues are sorely needed. This research brief documents emerging practices that appear to have promise for equipping students to be informed and effective civic actors. It is worth noting, however, that this is a new area and more research is needed. The EDDA project and this brief gives us a better understanding of where to focus our efforts and attention.