

1-2-2020

The Art of the Real: Fact Checking as Information Literacy Instruction

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Recommended Citation

Addy, J. (2020), "The art of the real: fact checking as information literacy instruction", *Reference Services Review*, Vol. 48 No. 1, pp. 19-31. <https://doi.org/10.1108/RSR-09-2019-0067>

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Journal:	<i>Reference Services Review</i>
Manuscript ID	RSR-09-2019-0067.R2
Manuscript Type:	Original Article
Keywords:	Information literacy, Library instruction, Research, Reference Services, Instructional design, Academic libraries

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3 Title: The Art of the Real: Fact Checking as Information literacy instruction
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7 Author: Jamie Addy
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10 Journal: Reference Services Review
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14 Year: 2020 Volume: 48 Issue: 1
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18 Purpose – The purpose of this paper is to discuss the how academic librarians tasked with research
19 instruction can use connections between digital, civic, and information literacy to combat polarization
20 and misinformation through lateral reading and other digital literacy skill building.
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22 Design/methodology/approach – The paper discusses a wealth of original data centered on first year
23 students and their information literacy abilities. Discussion of two data sets (one pre/post scored by
24 rubric, one mixed methods) are included in order to demonstrate the following: existing information
25 literacy skills among a sample cohort of first year students, to establish a baseline of information literacy
26 ability. A second set of data focuses on pre/Post test assessments from the pilot program for a digital
27 literacy curriculum, along with analysis of a sample of qualitative responses from participants.
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30 Findings – The paper provides insight into various issues with traditional modes of information literacy
31 instruction and suggests that a curriculum based in fact checking principles, such as lateral reading, is
32 well suited to an increasingly cynical and polarized information environment.
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34 Originality/value – This paper fulfills an identified need from the pedagogical perspective of faculty
35 librarians tasked with teaching information literacy in a polarized environment in the aftermath of
36 President Trump's election.
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39 Keywords: information literacy, civic literacy, digital literacy, polarization, libraries, lateral reading,
40 digital polarization
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42 Article Type: Research paper
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The Art of the Real: Fact Checking as Information Literacy Instruction

Introduction

The 2016 election of President Trump represented a flashpoint of polarization in the United States. While polarization within the American political spectrum and system is not a new phenomenon, the information environment has shifted drastically in a short amount of time. The creation of digital platforms and media has exploded in the last decade, with companies like Apple, Google, and Facebook leading the way in the digital information boom. Exponential growth in the technology and media sectors has also led to widespread information commodification. Information, particularly political, personal, or civic information, is constantly created and shaped for profit, influence, and power. Taken together, the powerful cocktail of exponential growth of digital information and the decline of civic engagement and trust among citizens has the potential to dramatically distort how information is presented and received.

There are very few realms left in modern life that have not been influenced by digital information and the sheer volume of information available to citizens can be overwhelming. Additionally, the immersive nature of the digital landscape means that casual or passive consumption does not inculcate citizens from the deleterious effects of digital misinformation. As Mike Caulfield (2019) writes,

“Almost any question that you want answered today, you’re going to go to the web for the answer...Even if you’re a passive consumer you’re going to absorb beliefs about medical care, climate change, public policy, the safety of vaping, immigration... You’re going to be exposed to processes of radicalization and various forms of manipulation. Bad actors -- from corporate astroturfers, to snake-oil vendors, to state actors fomenting civil unrest -- have all thrown themselves into this new environment, and developed very web-centric ways to pursue their interests. Yet too often in education we’ve assumed that some generic training in “critical thinking” or “deep reading” will help our students navigate this world.” (Warren).

Particularly among first year college students, there is a pervasive, popular narrative that our “Gen Z” students, having never known a world without the internet, are technologically adept and information literate. However, librarians can see that students have many misconceptions about digital information as well as uneven experiences navigating library resources. In order to navigate this new and ever-shifting information environment, academic librarians can adopt a skill-based instruction model that uses simple heuristics to help students determine how much to trust information found in the polarized digital landscape. These skills are not only useful academic life, but also provide a scaffold of understanding regarding the value and power of information.

Polarization, Fake News, and Civic information

Consider also how the technology-aided, rapid spread of misinformation (often for a profit motive) has also intersected with the documented, several-decades long decline of public trust in media and government. “Long running surveys show that public confidence in the government fell precipitously in the 1960s and ‘70s, recovered somewhat in the ‘80s and early 2000s, and is near historic lows today” (Rainie, Keeter & Perrin, 2019). This reinforcement of polarization and rising mistrust create

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3 an environment ripe for not only the proliferation for misinformation, but also an environment where
4 polarization becomes entrenched, and therefore harder to overcome these divisions for the larger social
5 and civic good. In the aftermath of the 2016 Presidential Election, many Americans felt more divided
6 than ever. The Pew Research Center, a nonpartisan, nonprofit, non-advocacy U.S. Policy and Political
7 think tank, has tracked political polarization among Americans through public opinion polling. Data from
8 Pew Research Polls describe a troubled and decidedly divisive environment within the United States. For
9 example, many Americans report that the “tone and nature of political debates has become more
10 negative...less respectful, less fact-based and less substantive.” A large majority believe President
11 Trump to be a major factor. “A 55% majority says [President] Trump has changed the tone and nature of
12 political debate in this country for the worse; fewer than half as many (24%) say he has changed it for
13 the better, while 20% say he has had little impact” (PRC, 6/19/19). Also noteworthy is the public
14 perception regarding Trump’s discourse. According to Pew (2019), “sizable majorities say
15 [President]Trump’s comments often or sometimes make them feel concerned (76%), confused (70%),
16 embarrassed (69%) and exhausted (67%). By contrast, fewer have positive reactions to Trump’s rhetoric,
17 though 54% say they at least sometimes feel entertained by what he says” (PRC).
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22 There is also considerable popular discourse around “fake news” in the immediate aftermath of
23 the 2016 Presidential election. For example, surveys by the Pew Research Center found that “nearly
24 seven-in-ten U.S. adults (68%) say made-up news and information greatly impacts Americans’
25 confidence in government institutions, and roughly half (54%) say it is having a major impact on our
26 confidence in each other.” Half of Americans (51%) also believe that the public’s inability to distinguish
27 between facts and opinions as a very big problem (PRC). In short, Pew Research Survey Data paints a
28 picture of deep political divisions, and low levels of trust in government and media. “In an age of
29 partisan hostility and conflict, the [President] Trump years are likely to witness the most intense partisan
30 hostility and conflict in modern American history. Given [President] Trump’s authoritarian inclinations,
31 as seen in his attacks on the legitimacy of the news media, political opponents, the courts, and the
32 electoral process itself, this is an especially worrisome development” (Abramowitz & McCoy, 2019, 151).
33 These trends have the capacity to dramatically impact how people use information to form opinions on
34 civic issues, which may ultimately impact governance, laws and policies throughout local, state and
35 federal government agencies.
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39 **Academic Libraries and Information Literacy Instruction**

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41 Libraries have a rich history in supporting informed citizenry and communities, and this role is
42 even more vital within the academy. Academic librarians tasked with information literacy instruction are
43 uniquely positioned to prepare students to be critical thinkers and erudite consumers of digital
44 information. The 2016 election shifted the information environment, and thus shifted the environment
45 within which academic librarians provide services to the campus community. In a highly divisive election
46 and polarized political environment, libraries and librarians of all types must now “adopt a more
47 engaged approach” with the communities they serve and help “citizens participate fully in our system of
48 self-government.” Another vital aspect of this engaged approach is that it focuses on shared aspirations
49 and helps citizens realize that “discourse, debate, and deliberation” are essential for function and
50 “arbitrating differences in a large multicultural society” (Kranich, 2017, 420-421). At the Ina Dillard
51 Russell Library at Georgia College, this “more engaged approach” began with an assessment to
52 determine which information literacy skills our students were bringing to college, and which of these
53 skills needed more intentional instructional design.
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3 For many years, the Association of College and Research Libraries centered low order skills in
4 the professional standards for information literacy in higher education. In 2014, these outdated
5 standards were replaced with the Framework. The ACRL Framework is organized into six frames, each
6 consisting of a concept central to information literacy, a set of knowledge practices, and a set of
7 dispositions. At the heart of the Framework are interconnected concepts and ideas about information,
8 research and scholarship. At Ina Dillard Russell Library, our information literacy program is embedded in
9 several aspects of a first year student's experience, including robust partnerships with the Center for
10 Student Success, First Year Seminars, our institutional critical thinking courses, first year composition
11 courses, and personalized research consultations across the general education/core curriculum.
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14 **Methodology of First Year Pre-Test**

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16 Beginning in 2016, the information literacy instruction librarians used third party courseware to
17 embed a series of information literacy modules and assessments as a complement for First Year Seminar
18 instruction. These materials were deployed for two years in every section of First Year Seminar (a one
19 hour credit course that all First Year students are required to complete) through online courseware. Our
20 goal was simple: to measure the existing information literacy skills of our incoming first year "digitally
21 native" Gen Z students. We then graded these scores using the AACSU Rubric information literacy to
22 determine how well our students performed. We later mapped the areas we determined as areas for
23 growth to the ACRL Framework for Higher Education. Our original goal was to use this data to inform our
24 instructional priorities, moving our program more towards authentic skill building.
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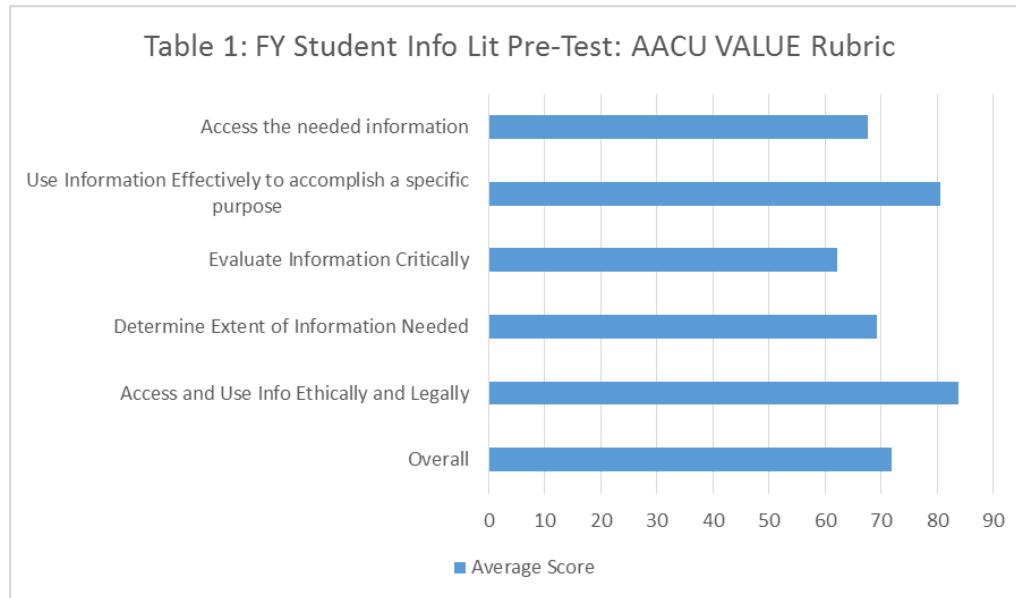
28 **Analysis of First Year Pre-Test**

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30 The Pre-Test data suggested that our first year students were arriving to campus with uneven
31 information literacy skills. The AAC&U Valid Assessment of Learning in Undergraduate Education
32 (VALUE) Rubrics are campus-based assessment tools that measure specific criteria of student learning.
33 The information literacy VALUE rubric assesses student skill in four key areas, with a fifth score to
34 measure overall student performance. These four key areas are: Using information effectively to achieve
35 a specific purpose; Critical evaluation of information; Determine the extent of information needed; and
36 Access/Use information ethically and legally. The Pre-Test was inserted into the University's online
37 learning management system as a learning activity. Advisors were encouraged to provide a participation
38 grade for the activity. Table 1 data represents a random sample of 321 students. Students who were in
39 major-specific seminars were excluded from this analysis. This sample was generated from non-
40 discipline specific seminars, i.e. students who had not yet declared a program of study.
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44 As demonstrated in Table 1, the Pre-Test scores demonstrate competency in some skills among
45 the Fall 2017 First Year student class. In a typical first year student, librarians expect scores to be at the
46 "developing" or "milestone range" of the rubric, which would include scores from 50-75%. Broadly
47 speaking, the data from the Pre-Test as mapped to the AAC&U Information Literacy VALUE rubric sheds
48 light on which information literacy skills are well-developed among this sample of first year students. For
49 example, the AAC&U Rubric data suggests that more students find it easier to "use information
50 effectively to accomplish a specific purpose" as compared to higher order skills such as evaluating
51 information in a critical context. This suggests that while the majority of first year students can use
52 information effectively, first year students struggle with applying critical thinking to the evaluation of
53 information. Students need the ability to quickly and adeptly determine if the information they are
54 engaging with is appropriate for a given purpose, but also if the information is trustworthy. This is
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especially important in our attention economy, when there are various forces at play, vying for our clicks, personal information, and engagement.

Scoring the Pre-Test with the AACSU rubric, librarians were able to discern which information literacy skills were weakest among a sample of first year students: Access the needed information, and evaluate information critically.



Once the Pre-Test scores had been analyzed to determine which skills in the information literacy domain were the weakest among incoming first year students, librarians matched these areas for skill growth to specific standards within the newly-disseminated ACRL Framework. This was a big shift for instruction and reference librarians, who previously ascribed to an “introduction to the library” instructional model for first year students, rather than a more holistic development of transferable essential skills. To that end, we focused on two frames: information has value and research as inquiry.

Information Literacy Skill Building: Weaknesses in Traditional Models

The ACRL Frame of “Information has value” was chosen to complement a learning objective found in various courses in the first year experience: Explain why information literacy matters. In an information-saturated world, it is vital that students recognize that information’s value is multidimensional, “including as a commodity, as a means of education, as a means to influence, and as a means of negotiating and understanding the world.” In an increasingly digital and complicated information landscape, students need the ability to evaluate information with confidence quickly, but also critically. Students also need to clearly recognize that they themselves are “contributors to the information marketplace rather than only consumers of it” (ACRL, 2016).

With the second ACRL Frame of “research as inquiry” our goal is to show students how the research process is iterative and “depends upon asking increasingly complex...questions whose answers in turn develop additional questions or lines of inquiry” (ACRL, 2015). This often requires students to move beyond more traditional notions of the research and knowledge creation process, and this can be

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3 particularly challenging for First Year students, who may arrive to campus with existing (but poor)
4 information literacy skills/training. For example, Library Journal's *First Year Experience Survey:*
5 *Information Literacy in Higher Education* (2017) found that librarians at community college and four year
6 colleges and universities ranked source evaluation as a top challenge for first year students. Additionally,
7 survey respondents working in four year institutions estimated that under thirty percent of first year
8 students arrive to college "prepared to do college level research/" (p.1). These gaps in skill are often
9 accompanied with a general lack of awareness of library resources and how best to identify the most
10 appropriate sources for an information need (Library Journal, 2017, p.10).

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13 Additionally, students often do not always enter college with prior experience navigating
14 libraries or approaching librarians for research assistance. This can make it difficult for librarians to
15 correct student research misconceptions and/or overconfidence with respect to their abilities to
16 successfully navigate about college level research. Many popular perceptions of incoming college
17 students' ability to analyze online information has been overestimated. This is due in large part to the
18 widespread belief in that Gen Z are digital natives with natural aptitude and fluency for technology and
19 digital media platforms. In fact, students often believe that they are information literate, although they
20 do not use that language. As one respondent to the First Year Experience Survey (2017) put it: "[First
21 Year Students]...think they know more than they do because they have been using Google most of their
22 lives. They don't understand the difference between how the searches differ. They are actually not as
23 technologically savvy as they believe they are. They also don't analyze sources." (p. 21).

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26 Emphasizing that research is meant to be an "iterative" and evolving process through the
27 "research as inquiry" Frame also reveals the weaknesses of using outdated criteria or resource
28 evaluation checklists, such as the CRAAP test, which places value on making the source fit given criteria
29 (Currency, Relevancy/Reliability, Authority, Accuracy, Purpose), rather than fully exploring a "line of
30 inquiry." While the internal features (ie presence of advertisements, author credentials, neutral
31 language) of a website do matter, the context in which they are imparting information is more
32 important. . As Mike Caulfield (2019) further explains: "The reality is checklist or no checklist, we know
33 most of these issues when we see them. Most people get intuitively that Russian state media is not the
34 best source on... Russia...The gap isn't the understanding, it's the missing context." (Warren).

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37 Checklist approaches to information literacy instruction are also problematic because that it
38 relies on evaluative criteria that is easy to fake in many online environments. As McGrew, Ortega,
39 Breakstone and Wineburg (2017) noted, "In an Internet characterized by polished web design, search-
40 engine optimization, and organizations vying to appear trustworthy, such guidelines create a false sense
41 of confidence. In fact, checklists may make students more vulnerable to scams, not less."

42 **Taking Bearings and Reading Laterally: The Stanford Study**

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45 Undergraduate students and even professors are frequently stumped by digital misinformation,
46 particularly the more subtle ways of shaping opinions such as memes, screengrabs, edited
47 videos/photos/audio, and AI-generated content. "The Internet is reshaping participatory politics,
48 changing how we learn about politics, communicate with our representatives in government, and
49 organize political protests" and thus, civic education should respond in a way that empowers students
50 with analytical and evaluative tools that will help them make sense of civic and political issues,
51 particularly in the online environment" (Wineburg & McGrew, 2018, p.9). In order to get a sense of how
52 different populations evaluate digital information, the Stanford History Education Group, led by Sam
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3 Wineburg, studied how three groups of “experts” (Stanford undergraduate students, Stanford History
4 professors, and professional fact-checkers) evaluated a series of websites for trustworthiness. According
5 to Wineburg and McGrew (2018), the study “purposefully sampled skilled Internet users as they
6 evaluated digital sources about social and political issues” that ranged from pediatricians’ views on
7 bullying, minimum wage policy, and teacher tenure. Stanford History Education Group researchers
8 wanted to understand in greater detail what exactly “experts do when judging social and political
9 information online (Wineburg & McGrew, 2018, p.9).
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12 Students and the majority of History professors tended to “dig in” to a provided resource, and
13 often applied many of the evaluative from the checklist/CRAAP test approach, like examining a site’s
14 domain, looking for an author, placement of ads, etc. “Historians and students often fell victim to easily
15 manipulated features of websites, such as official-looking logos and domain names” (Wineburg &
16 McGrew, 2018, p. 4). By comparison, professional fact-checkers used a more critical frame of mind and
17 no checklist at all. Where the students and historians went for depth in reading, which often resulted in
18 participants spending all their allotted time on a single web page and gaining no insight, professional
19 fact checkers “engaged in three practices—taking bearings, lateral reading and click restraint—that
20 allowed them to read less but learn more about the topics they investigated” (Wineburg and McGrew,
21 2018, p.4).
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25 “Taking bearings” is a concept that is familiar to instructional librarians as it is similar to using
26 “background research” to active prior knowledge of a topic or to find a facet to explore in a given
27 context. In practice, researchers who take bearings “chart a plan for moving forward. Taking bearings is
28 what sailors, aviators, and hikers do to plot their course toward a desired destination. Landing in
29 unfamiliar territory, fact checkers set out for their destination—making a judgment of credibility— only
30 after gaining a sense of where they had landed” (Wineburg & McGrew, 2018).
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33 McGrew (2018) also found that “fact checkers read laterally,” which means leaving a site after a
34 quick scan and opening up new browser tabs in order to judge the credibility of the original site. ”
35 Rather than staying on a single website to evaluate its reliability, lateral reading involved leaving a site
36 after a quick scan, opening up new browser tabs along the screen’s horizontal axis to judge the
37 credibility of the original site” (p. 37). A third skill that Stanford researchers observed from professional
38 fact checkers is click restraint. “Click restraint stands in contrast to whimsical clicking; before clicking on
39 any one result, users evaluated the list of search results to understand the digital terrain in which they
40 have landed. Only then did they initiate a search” (Wineburg & McGrew, 2018, p. 4).
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43 Compared to the other groups, fact checkers arrived at more warranted conclusions in a fraction
44 of the time, often in less than three minutes with a website, resource or other digital artifact. In other
45 words, the fact-checkers read less and learned more. “Our ‘digital natives’ may be able to flit between
46 Facebook and Twitter while simultaneously uploading a selfie to Instagram and texting a friend. But
47 when it comes to evaluating information that flows through social media channels, they are easily
48 duped” by slick web design and the repeated over-emphasis on checklist criteria (Stanford History
49 Education Group, p. 4)
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52 Teaching digital literacy skills like taking bearings, lateral reading, and click restraint places
53 information literacy instruction firmly in the present, polarized moment. As Wineburg and McGrew
54 (2018) noted, these strategies “may eliminate some of the most common errors in judging digital
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sources. Facing an onslaught of digital information, all of us need efficient strategies for separating truth from falsehood, good arguments from bad.” (Wineburg & McGrew, 2018).

The Digital Polarization Initiative

The Digital Polarization Initiative, sponsored through AASCU through the American Democracy Project, is a “national effort to build student civic, information and web literacy” through fact-checking and digital literacy skill building. This initiative is guided by the American Democracy Project Civic Fellow, Mike Caulfield and builds significantly on the research about civic and digital literacy from the Stanford History Education Group 2016 study. This project was launched on eleven college campuses in the Fall semester of 2018 as a pilot program. Prior to his work specifically with the Digital Polarization Project, Caulfield’s open access textbook “Web Literacy for Student Fact Checkers” was published in 2016 and began introducing undergraduate students to his “four moves” of fact-checking. Preliminary data from Caulfield’s work suggests that these moves can dramatically increase student ability to evaluate online credibility, reduce cynicism, and increase student use of fact checking skills. Using custom pre/post-tests, lesson plans, and a variety of multimodal, real-world examples, the curricular content of the Digital Polarization Initiative takes the concepts of information, digital and civic literacy and emphasizes essential skill building in these domains with simple “moves” that incorporate and distill how expert fact-checkers navigate digital information: Stop, Investigate the source, Find better coverage, and Trace claims, quotes, and media to the original context

Figure 1: Four Moves Infographic



Undergirding these seemingly simple heuristics is how various perspectives of information and critical inquiry interlock and reinforce each other. There is no civic reasoning or digital literacy without information literacy. As information professionals and college instructors, librarians are uniquely positioned to manifest the connections between critical thinking, civic reasoning and the rapidly changing landscape of digital information. Additionally, these skills are meant to empower students to act or make interventions when confronted with dubious civic information. “Confronted by fake news, clicktivism, and slacktivism, librarians are well-positioned to seize this teachable moment to enhance

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3 civic literacy,” with civic literacy being defined as “the knowledge and ability to make sense of their
4 world and to act as competent citizens” (Kranich, 2017, 424).
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6 **The Digital Polarization Initiative: Implementation**

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8 At Georgia College’s Russell Library, the Digital Polarization Initiative content was embedded in a
9 two sections of a three-hour credit, semester long, critical-thinking course. This critical thinking course is
10 a unique facet of our core curriculum and it is required for all first year students. Assessments were
11 phased in as Pre/Post over a series of two week lesson plans. Digital Polarization campuses had three
12 project-wide student learning outcomes.
13

- 14 1. Determine the sources of online information, and evaluate the factors that impact the credibility
15 and usefulness of those sources
- 16 2. Identify evidence cited and judge the quality, reliability and relevance of that evidence
- 17 3. Place online claims into a larger universe of reporting, research and discourse, noting claims that
18 are unsubstantiated by reliable sources, or claims that argue against a large body of previous
19 evidence or broadly accepted expert opinion.
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23 For the purposes of this paper, analysis will be focused on specifically on the implementation of the
24 Digital Polarization pedagogy into the library instructional course, taught by librarians. In the Library’s
25 course sections, the librarian instructors had a natural course emphasis on various forms of
26 misinformation, making the Digital Polarization content an engaging and well-suited unit of study. For
27 example, in one librarian-led section, Caulfield’s Web Literacy for Student Fact Checkers was used as the
28 class textbook, and Four Moves blog were used extensively for in-class activities. The interdisciplinary
29 nature of information literacy instruction means that librarian instructors are already practiced at
30 placing these skills within different subject areas.
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33 **Digital Polarization Initiative: Methodology and Procedure**

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35 In the librarian led section, students encountered Pre-Test version B, which asked them to rate
36 their levels of trust in a series of four context-lacking examples of digital information. The questions in
37 the Pre/Post assessments are open ended and use the same questions as Stanford Civic Online
38 Reasoning study, but often used different prompts, websites or images. Students were shown the
39 prompt in a Google forms survey, asked to rate their level of trust on a scale (Very High, High, Medium,
40 Low, Very Low), and provided with a space to explain their reasoning. It was stressed prior to the
41 assessment that, just like in the Stanford study, students were able to use their laptops, phones, or any
42 other tool in their research toolkit to complete the prompt. Librarians only required that no discussion
43 between students take place during the assessment.
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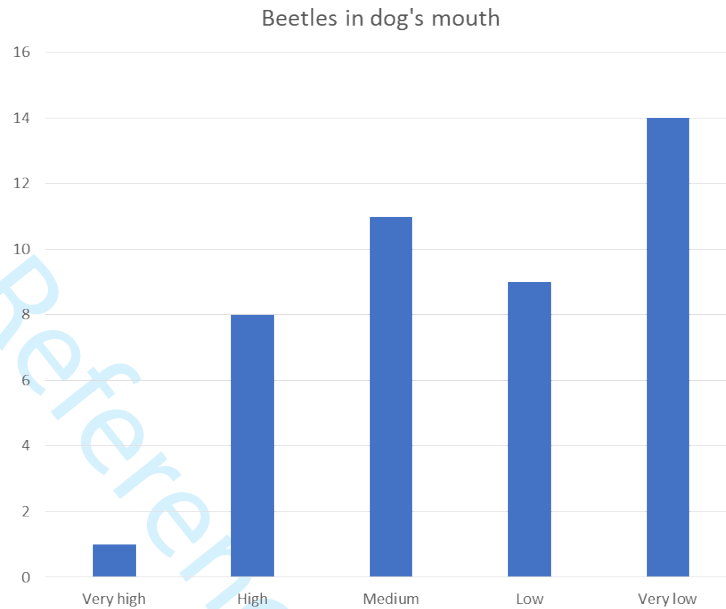
46 One question, “Beetles” asked students to rate their level of trust in the following photo prompt, then
47 provide their reasoning or process in an open text box.
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"SOMEBODY ASKED ME TO PASS THIS ALONG
Japanese Beetles can attach to the roof of your dog's mouth, and make him/her become ill. Symptoms include excessive drooling. Check your dog's mouth and remove any insects."

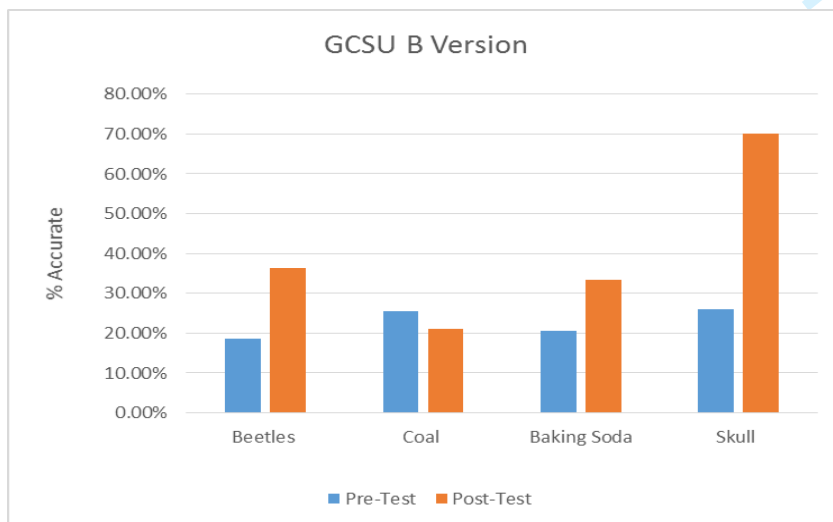
Analysis and Discussion

In the "Beetles" pre-test prompt, librarians could see students grapple with how ill prepared students were in "getting off the page" to get more context in order to successfully answer the question. For example, trust in this material should be high, since lateral reading will quickly guide students to a Snopes page and the original, true context of the photo. Any response that involved a basic investigation noted that the beetles pictured are neither ladybugs nor Japanese Beetles, but Asian Beetles. However, the qualitative responses demonstrated that students in this prompt were laser focused on several unimportant details: the fact that these were not Japanese beetles but "ladybugs," that no author was clearly defined, that the image had the characteristics of, as one student put it, a "classic chain email." Other criteria, such as awareness of using photo editing tools to doctor photographs, show developing information literacy skill, but also demonstrate an overall sense of cynicism. For example, a student who rated trust as "very low" in the Beetles prompt described their inability to trust photographs because of the proliferation of photo editing tools: "I find it hard to trust pictures due to all of the technology we have today. Unless it is a verified picture from a trusted source I am always skeptical." In all, over half of the sampled students (23 out of 42) were off the mark in the Pre-Test on this question.



The qualitative responses demonstrate that the students who rated the “beetles” prompt as more trustworthy were successful in lateral reading. One student, who rated the trustworthiness as “high” mentions how “googling it” made her less skeptical of the photo. She described her process thusly: “Just from looking at the photo I was not at all convinced as there are a lot of photos like this that circulate the internet that are not at all true. So based on the photo alone I was skeptical. But after googling it and finding that it is a real medical condition, I was a bit shocked but intrigued to learn more.” This suggests that lateral reading is much more likely to provide the correct context of this particular claim, rather than relying clues from the photograph. Qualitative responses in the Post-Test also referenced Snopes and reverse image search as specific lateral research moves.

Table 2 demonstrates that overall, accuracy increased for B Version between Pre and Post, with the exception of the “Coal” prompt.



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3 The “coal” featured a slickly designed video extolling the virtues of the coal industry, created by
4 a political lobbying group. Students were asked to rate their level in trust of the video as evidence of the
5 benefits of coal. A competent student rating was “low” or “very low” because the video was created by
6 a coal company and was essentially a commercial for the coal industry. Pre-Test qualitative responses
7 indicated that again, students were focused on surface features, like “it looks professional” and “gives
8 lots of statistics and interviewed employees.” Many students also commented the number of
9 subscribers the channel had, and what some commenters were saying about the video, which was
10 correlated with “low trust.” For example, one student respondent “The facts seemed legitimate, but the
11 YouTube channel did not have many views or followers...the more views and likes, the more reliable.”
12 Post-Test rationales included correct assessments of the video’s perceived “bias” towards the coal
13 industry. Indeed, most students in post-intervention results in the Post-Test specifically mentioned
14 “America’s Power,” the group who created and uploaded the video to YouTube, and how using lateral
15 sources like Wikipedia can help researchers determine how biased a particular video is. The slight
16 decrease in trust in Table 2 suggests that students became less trusting of the Coal video after
17 instructional intervention with the “Four Moves” of the Digital Polarization project.
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22 **Limitations of Analysis**

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24 Limitations of the analysis include poor response rate in the post-test survey, which may have
25 skewed the responses of our institutional data overall. This may have been due to several weather
26 related university closures that required professors to revise their course schedules.
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28 This data also focuses exclusively on first year students, most of who have not yet declared a discipline
29 of study or major. More research comparing the information literacy skills of older students or courses
30 within specific disciplines could yield compelling discussion.
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32 Caulfield’s analysis of the “high-fidelity implementation” of the Digital Polarization Initiative at
33 his home institution suggests that cynicism and online information literacy are correlated with each
34 other. Students rated dubious prompts less trustworthy during the pre-test, but the same was also true
35 with the trustworthy prompts. Caulfield (2018) writes that his students rated everything worthy of “low
36 or moderate trust” as a result of “trust compression” prior to Digital Polarization instruction. After
37 instruction, students “differentiate[d] by becoming less cynical” and more trusting of trustworthy
38 prompts, especially those that required students to engage in lateral reading. As Caulfield (2018)
39 explains, “Students...become more trusting because rather than relying on the surface features and
40 innate plausibility of the prompts they check what others say – Snopes, Wikipedia, Google News. If they
41 find overwhelming consensus there or...evidence on the reliability of the source, they make the call.”
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45 **Conclusion**

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47 Overall, the curriculum of Digital Polarization Initiative is one method of updating and imparting
48 information literacy skills in a way that speaks to our rapidly changing and increasingly polarized digital
49 information environment, as well as demonstrating to students the transferability of these specific skills.
50 A generation of teaching students to rely on checklist approaches to information literacy has left citizens
51 ill-equipped to navigate a universe of misinformation, made all the more sophisticated by technological
52 advancements. Combined with declining trust in media and government, digital polarization and
53 cynicism threaten our abilities as citizens to harness our collective power. As Caulfield (2018) writes,
54 “Major advances in the U.S. — from civil rights to the social safety net — have been driven by the public
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3 being confronted with the consequences of their inaction or action and having to reckon with that. But if
4 everything is worthy of low trust at best, you never need to confront the impacts of policy or politics or
5 personal action.” Therein lies the true power of President Trump’s exploitation of distrust and
6 polarization with respect to our collective civic engagement. Most, if not all, online activities operate in
7 the scarcity model of attention economy. Products and content that heighten emotions, positive and
8 negative, are prioritized, further perpetuating polarization. With a head of state as divisive as President
9 Trump, it is difficult to imagine this lucrative model losing its powerful grip on civic information.
10 Additionally, polarized responses to President Trump’s federal governance, foreign policy, as well as
11 referendums on his personal character and ethics, all have the capacity to further erode our democratic
12 values through mistrust and cynicism. Historically, information literacy instruction efforts have focused
13 on finding the most relevant or reliable resource, specific to the academic research context. However, in
14 order to mend these social and political divisions, academic librarians must be willing to occupy that
15 tension in the middle, and lean on skills that speak to our new information reality.
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19 Critically thinking about information and evaluating information are the most important and
20 essential skills for lifelong learning and civic engagement. Libraries and librarians have long been
21 champions of democratic engagement and civic literacy. The new frontier of information literacy
22 instruction should be skills that help students not only to judge credibility, but also evaluate information
23 on controversial or divisive topics in a way that helps them develop truthful assessments, and
24 responsible civic discourse.
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