When noticing and digital skills meet: How preservice teachers' perceptions of digital

source evaluations are shaped by noticing

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Abstract

As media experts have renewed their calls for improved media and information literacy curriculum in schools, researchers have investigated instructional strategies for teaching source evaluation. One such strategy is lateral reading, in which the user evaluates the veracity of information presented by following "links within a source and do supplemental searches on names, organization or topics" (University of Texas Libraries). Such a strategy not only builds learners' skill in digital source evaluation, but it develops a skeptical stance that can guide them as they engage in independent web investigation. The purpose of this research study was to investigate what preservice teachers noticed after watching a student read laterally and their perceptions of the benefits of reading laterally. Through engaging in noticing during a video of a student thinking aloud while reading laterally, preservice teachers developed an emerging understanding of lateral reading and the benefits of implementing the lateral reading strategy.

Key Words:

Lateral Reading; Source Evaluation; Digital Source Evaluation; Preservice Teachers; Teacher Education.

Introduction

According to recent research focused on adolescents' use of social media and technology, 95 percent of U.S. teens report having access to a smartphone, and 45 percent say they are online "almost constantly" (Anderson & Jiang, 2018); therefore, preparing our students for literate lives today involves building digital literacies. An important aspect of digital literacy includes helping students evaluate online information, in part because "more than half of teens (54 percent) get news at least a few times a week from social media platforms" (Common Sense Media, 2019). While teens report it is important to stay informed about current events, they are turning to emerging social media platforms, such as Snapchat, Instagram and YouTube, that function more like news aggregators rather than getting their news directly from traditional news organizations (Common Sense Media, 2019; Anderson & Jiang, 2018). This matters because the popularity of information, and not its authority or relevance, is what determines if information is widely disseminated (Wineburg, 2018).

In order to address these emerging trends and protect students from misinformation online, media experts have renewed their calls for improved media and information literacy curriculum in schools (Stanford History Education Group, 2016). If teachers are expected to teach critical media literacy, then preservice teachers must learn specific instructional media literacy approaches in their teacher education programs. It is important that preservice teacher learning include opportunities to explore pedagogical approaches that not only enhance students' medial literacy knowledge, but also their dispositions because, as Sam Wineburg says, "skepticism may be more useful than knowledge or old-fashioned research skills" (Spector, 2017). The purpose of this research study was to investigate preservice teachers' understanding of source evaluation using the lateral research strategy, which is when the user evaluates the

veracity of information presented by following "links within a source and do supplemental

searches on names, organization or topics" (University of Texas Libraries). Such a strategy not

only builds learners' skill in digital source evaluation, but it develops a skeptical stance that can

guide them as they engage in independent web investigation.

Theoretical Perspectives

Digital literacy practices are shaped by social contexts, specifically by the technologies

we access (Leu, et al., 2013; Perry, 2012). Our study was grounded in a New Literacies

perspective, which contends the Internet is "this generation's defining technology for literacy in

our global community" (Leu et al., 2013, p. 1158). From this viewpoint, readers must be able to

"effectively determine, from the internet's multiple offerings, a combination of tool(s) and

form(s) that best meet their needs" (Leu et al., 2013, p. 1159). This framework guides our

understanding of reading online information and the instructional supports needed for teaching

students to locate and evaluate information (Coiro & Dobler, 2007).

While the New Literacies theoretical framing helps us situate our study within the context

of literacy teaching and learning, we draw on Mishra and Koehler's (2006) Technological

Pedagogical Content Knowledge (TPACK) to explore how preservice teachers learn to teach

source evaluation. TPACK extends Shulman's (1986) thinking of pedagogical content

knowledge by emphasizing "the connections, interactions, affordances, and constraints between

and among content, pedagogy, and technology" (Mishra & Koehler, 2006, p. 1025). In this

sense, it is the interplay between preservice teachers' conceptual knowledge of English language

arts, their pedagogical knowledge of teaching language arts, and their knowledge of technology

and digital media. As Falloon (2020) notes, "the success of TPACK relies on the capabilities of

teachers within each domain, and their capacity for flexibility, willingness to update, and

readiness to explore how the domains interrelate to support effective technology use in a range of

different situations" (p. 2453). As English language arts teachers are often charged with teaching

media literacy, including source evaluation, this means ELA preservice teachers must have

knowledge of ways to effectively teach media literacy.

Review of Literature

Focus on media and information literacy curriculum demands is not new. The Aspen

Institute's Leadership Conference on Media Literacy called for purposeful curricular focus on

media and information literacy decades earlier (Aufderheide & Firestone, 1993). In a background

paper for the Aspen Institute, J. Francis Davis (1993) suggested that an inquiry model of media

literacy, in which teachers and students ask probing questions of a media text to foster critical

thinking, demands a teaching paradigm that is less skills-based and more student-centered. He

writes, "media literacy education is more than just a discrete topic to be added to the curriculum

of U.S. schools. It is, as well, an entire philosophy of teaching that encourages questioning and

exploration" and requires teachers to "not only teach with media, they teach about media,"

(Davis, 1993, p. 33).

In the current digital climate, this should include focused teaching about social media.

With the proliferation of social media platforms and their ability to promulgate unsubstantiated

claims and misinformation, one critical competency today's learners require is the ability to

discern quality evidence (Hicks & Turner, 2018; Stanford History Group, 2016). Studies show

that young people often have a difficult time finding reliable information online (Stanford

History Education Group, 2016). Importantly, "more than just teaching students to deconstruct

an argument, it seems we now need them to question the nature of the evidence itself," (Hicks &

Turner, 2018, p. 28). In fact, evidence-based writing and research remain central to national

learning standards by which preservice teaching preparation is aligned (National Council for

Social Studies, 2013; National Governors Association, 2010; Next Generation Science Standards

Lead States, 2013), creating a renewed focus on media and information literacy.

The Stanford History Education Group found that fact checkers (professional journalists

who verify information in order to determine its correctness) evaluate the veracity of information

in a process that is very different from traditional approaches to source evaluation. Rather than

scrutinizing the source itself, fact checkers leave "the site in question to find out what the rest of

the internet has to say," (Supiano, 2019). This "lateral reading" is one way to teach critical

thinking while evaluating sources (McGrew et al., 2017). Lateral reading refers to the tabs

across the top of a computer screen as the user opens multiple windows to "follow links within a

source and do supplemental searches on names, organization or topics," (University of Texas

Libraries). In the past, source evaluation has involved a checklist of questions about the source

itself, but such an approach often fails because it cuts the researcher "off from the most efficient

route to learning more about the site: finding out what the rest of the web has to say," (McGrew

et al., 2017, p. 7-8).

Since new digital tools require different skills, "enhancing MIL (Media and Information

Literacy) among students requires that teachers themselves become media and information

literate" through ongoing training (Wilson et al., 2011, p. 17). Improved focus on media and

information literacy in teacher education programs is an essential facet to that training (Davis,

1992; Lindstrom, Schmidt & Thompson, 2016).

One common assumption often made is that today's preservice teachers are digital

natives; therefore, they bring innate media and information literacy skills to their developing

teaching practices. However, research has demonstrated that considerable variation exists among

college-aged users' Web-use skills and experience with information seeking on the web despite

familiarity with the technology itself (Hargittai, 2010). Preservice teachers also vary in their

attitudes about whether and how to meaningfully integrate familiar technology into their teaching

practices; strong teacher educator role models remain an important influence in shifting those

attitudes (Lindstrom, Schmidt & Thompson, 2016). Modeling must go beyond simply teaching

with the technology and there remains a need to explicitly integrate media and information

literacy into teacher education curriculum (Gretter & Yadav, 2018). Specifically, there is a need

to "expand teacher education students' understanding of the sort of competencies required to

function productively, safely and ethically in diverse and increasingly digitally-mediated

environments," (Falloon, 2020).

Context and Participants

The present study took place at a mid-size university in the Midwest with a student

population of approximately 40,000 students. The Integrated Language Arts (INLA) program

prepares undergraduate teacher candidates for licensure in grades 7-12. Approximately 30

students per year are accepted into the program as a cohort. The Multimodal Literacies class

takes place during the spring of the junior year and is designed to have preservice teachers

consider how our definitions of literacy are changing from the perspectives of multimodal

literacies, New Literacies, and Multiliteracies. Additionally, the course focuses on specific

pedagogical practices that stem from these theoretical frameworks.

The preservice teachers participating in the study all self-identified as Caucasian, were in

their early 20's, and were juniors in the Integrated Language Arts program. Kristy taught the

Multimodal Literacies course. Because this research study took place during the COVID-19

Pandemic, the course started as a face-to-face course but transitioned online during March of

2020. Therefore, this research study took place online. Over a two-week period, preservice

teachers engaged in two online modules focused on lateral reading. During the first module,

preservice teachers read articles related to the importance of teaching students to critically

evaluate sources. Kristy then introduced to the term lateral reading, coined by the Stanford

History Education Group, that described a strategic evaluation of a digital source by "leaving a

site after a quick scan, opening up new browser tabs along the screen's horizontal axis to judge

the credibility of the original site," (Wineberg & McGrew, 2018, p. 4). As a follow up, the

participants read two articles describing lateral reading and the benefits of the instructional

approach (Breakstone, McGrew, Smith, Ortega, & Wineburg, 2018; Spector, 2017).

To extend the learning, preservice teachers watched a model of a local school media

specialist doing a think aloud while using the lateral reading strategy to evaluate a source.

Preservice teachers were introduced to five specific ways they could laterally read (see Figure 1)

and asked to use screencasting software to create a recording of themselves laterally reading the

article, *Former Amazon Employees and free and fair market initiatives create hotline to report*

unsafe working conditions by Riggio (2019). After reading two additional articles that offered an

additional perspective, participants were asked to reflect on any information that they didn't find

or consider when reading laterally (Grimaldi, 2019; Soper, 2019).

Figure 1: Lateral Reading Moves

Move 1: Searching the author or organization publishing a source

Move 2: Using a keyword search to independently learn about the source's topic

Move 3: Verifying quotes and information

Move 4: Locating any citations used in the source to compare

Move 5: Identifying commercial or political purposes through a search of any companies who

might advertise or sponsor content on the source's webpages or cite this source

Figure 1: Lateral Reading Moves

Following this, preservice teachers answered a questionnaire asking them to respond to the

following questions:

1. What might be some of the benefits of teaching students to use the lateral reading

   strategy?

2. What did you learn about how to teach students to analyze online sources? What was new

   to you? How might you apply this to your teaching

The following week, preservice teachers were introduced to a research study done by Kristy

and Beth at a local middle school (Walsh, et al., 2020) and high school (Walsh & Pytash, 2021).

Preservice teachers watched a screencast recording of a high school student, Drew, analyze an

online source without using any specific strategy. Kristy then shared the instructional moves

used by Drew's teacher to teach her English 12 class how to use lateral reading to effectively

evaluate sources (Walsh & Pytash, 2021). Preservice teachers once again watched Drew, the

same high school student, evaluate an online source, but this time he used lateral reading moves

to identify the source's credibility and potential bias. Following, preservice teachers completed a

questionnaire asking them to respond to the following questions:

1. What did you learn from watching Drew's initial screencast?

2. What do you notice about the difference from Drew's first screencast to his second

   screencast?

3. As a teacher, do you think this would be an effective strategy for teaching students to evaluate online sources? Why?

Methodology

For the purpose of this study, we analyzed each set of questionnaires completed by preservice teachers. Two research questions guided this study:

1. What did preservice teachers notice after watching a student read laterally?

2. What do preservice teachers see as the benefits of reading laterally?

Through a constant comparative analysis, data was read and reread to create codes and categories (Corbin & Strauss, 2008). We first independently coded, then came together to discuss and refine our codes. Once this coding was completed, we returned to each existing code, looking for balance and nuance, evaluating how the codes related to the research questions. We specifically examined our codes as "noticings" and "benefits." As we coded our observations of what participants noticed lateral reading, the initial codes included: time, complexity, author credibility, engagement. As we observed the benefits participants saw in teaching lateral reading, our initial codes included: student skepticism, connections to argumentative writing, potential for scaffolding, in-depth thinking, student autonomy and digital research instruction.

At this point, we collapsed several coding categories together by identifying their overlapping context in response to the research questions. We specifically examined their responses to the articles versus to their responses to the student's screencast. We then verified that each code could be supported by responses from multiple participants. In response to our first research question, the following codes emerged from the data: time and developed

reasoning. To answer research question two, the data was coded as skepticism, understanding

argumentation, thinking deeply and media literacy.

Results

Noticing the effects of lateral reading instruction

Because of COVID-19, preservice teachers did not have the opportunity to observe the

lateral reading in a face-to-face school setting. However, preservice teachers did watch two

screencasts created by Drew, a high school senior. Drew's first screencast took place before he

learned how to laterally read. This screencast was used as a gauge to understand Drew's

previously learned approaches when evaluating sources. After a month-long unit, which included

focused instruction on reading laterally, Drew created another screencast in which he evaluated

an online source using lateral reading. Preservice teachers watched both screencasts and then

were asked what they noticed about Drew's two screencasts. Participants noted that Drew

slowed down in his second evaluation and developed his reasoning in more complex ways.

Time. Time was a repeating theme in preservice teachers' responses, with preservice

teachers highlighting that Drew's lateral reading screencast was approximately two and a half

minutes longer than his first. Preservice teachers noted that the length of time Drew spent was

important because it indicted more interaction with the sources and a deeper analysis. For

example, Samantha noticed:

> The second screencast was a lot longer than the first, and he spent more time analyzing
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> the quotes and why they were cherry-picked. He spends more time being skeptical of the
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> source and the quotes it uses. He spends about four minutes on each of the sources that he
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> analyzes.

Similarly, Zane noticed, "the first was a short screencast that did not go very in depth in his verification process. He also did not seem very skeptical in the source but was pretty inclined to believe it. In the second screencast, he seemed much more skeptical and was jumping from source to source and getting a lot of information to get a solid idea of the original source."

Preservice teachers noticed that one reason Drew took longer to read laterally is because he was engaging with multiple sources, and as Carrie noted, he spent time "checking even little details." These "little details" included important elements of source evaluation, including citations and information not included in the author's argument. For example, Emily pointed out that "Drew considered whether the author used citations to their full extent or to only help support the claims being made. Drew realized that the author's use of citing was not 100% credible and often left out desired information." Additionally, they also recognized that Drew was considering information that wasn't present in the author's argument. Sarah explained that Drew was "not only verifying his quotes but also identifying which information was left out of the book's use of the sources."

Developed Reasoning. Preservice teachers described Drew's second screencast as more complex because of this level of engagement with the material. For example, Emily stated, "Watching Drew's second screencast, I could hardly believe that this was the same student. Drew became very engaged with the information presented because he now had direction. He went into depth about the 3 Strike Law and viewed numerous sites, including citations made by the author and his own cites." Michael agreed that Drew went into more depth, questioning what the author wrote. He explained:

> the author seems to "cherry pick" quotes to fit his initial claim, which is what led (Drew)
> to research further. He then looked up more sources and even historical facts, to see how

they compare to the author's claims. Which ultimately helps to prove that he was right, the author does do a lot of cherry picking with what information and quotes he decided to put into the initial piece. It took him a lot longer to do all of this, because he was carefully picking out what information to look into further and what certain words or situations meant historically.

Preservice teachers noted that Drew's more complex and in-depth thinking was because lateral reading gave him a guide for his thinking. Madison noted that lateral reading helped Drew "think critically about how the author forms their argument and realizes the holes in the statements being made. He seemed much more apprehensive and critical of texts and searched for outside sources to back up his reasoning for statements like 'this is or is not credible'."

Noticing benefits of lateral reading

Analyzing Drew's two screencasts led us to ask our second research question, what do preservice teachers see as the benefits of reading laterally? This research question synthesized preservice teachers' experiences and required them to consider both what they did in their own lateral reading and how they perceived the changes in the model screencast of Drew's lateral reading. In looking at preservice teachers' responses, it was evident that they saw lateral reading as a way to build healthy skepticism among readers, foster deeper thinking, develop a better understanding of both argumentative writing and web-based research and support media literacy in their students.

Skepticism. Preservice teachers continually used the term "skepticism" when discussing the questioning stance, they identified in lateral reading. Judgement of credibility is withheld during lateral reading until learners are able to independently verify a source. For the study participants, developing this mindset among their future students was seen as a key benefit.

Preservice teachers believed this skepticism was valuable both inside and outside of the classrooms, as they reported that lateral reading was a skill that prepares learners for the demands of locating accurate information in today's digitally networked world. As Emma shared, "This strategy promotes skepticism, which is something younger adults need more when looking at sources, in any context. If students just consider the face value of an article or a source, they will believe everything they read." Therefore, she concluded, lateral reading prepares her future students to identify when sources are being "deceivingly tricky."

Preservice teachers believed that lateral reading trained learners to look beyond surface indicators of credibility. For instance, Allie shared that today's young adults believe that the mere presence of quotes and statistics is an indication of authority, but lateral reading requires the learner to independently verify what is shared in any source. "It teaches them not to trust the first article they read," she said. (See Figure 2). Michael agreed, adding that lateral reading required students to dig deeper and not merely settle for "surface information" that they often find in their first search results. This prepares students to "productively digest new information." Thus, the skepticism lateral reading produced was seen as a way for the study participants to actively protect their future students from misinformation, a problem they largely attributed to the fact that young adults only search for surface indicators of source authority and credibility, leaving them vulnerable to sources that present themselves as credible by using conventions of authority but are not authoritative. (See Figure 3).

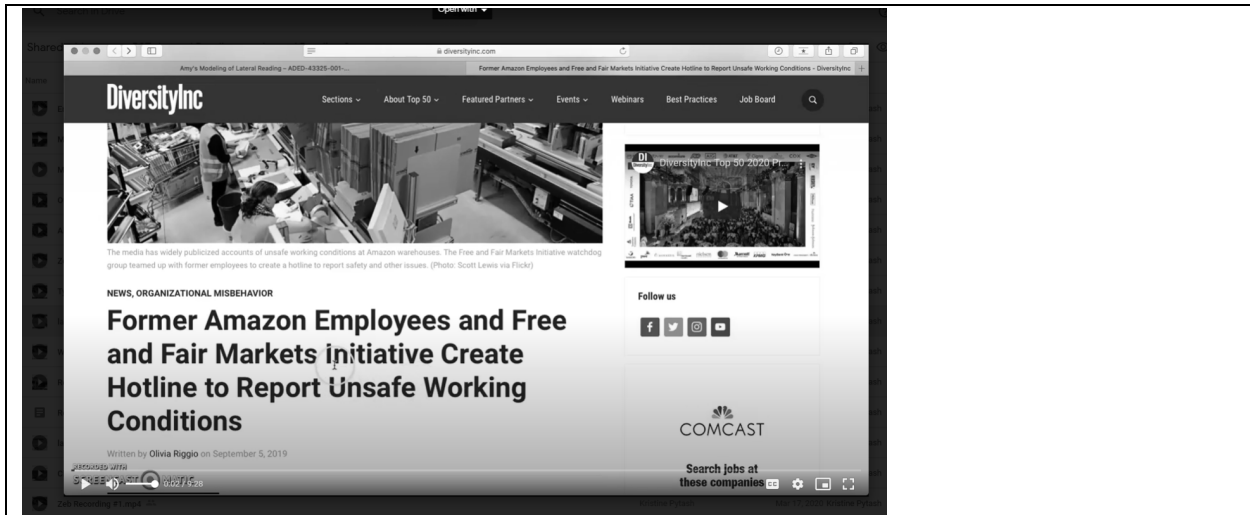Fig. 2. Screenshot of preservice teacher's screencast

Fig. 2. Screenshot of preservice teacher's screencast. The student is using a cursor to explore to point out elements of the article she is about to laterally read, including the website and author information.
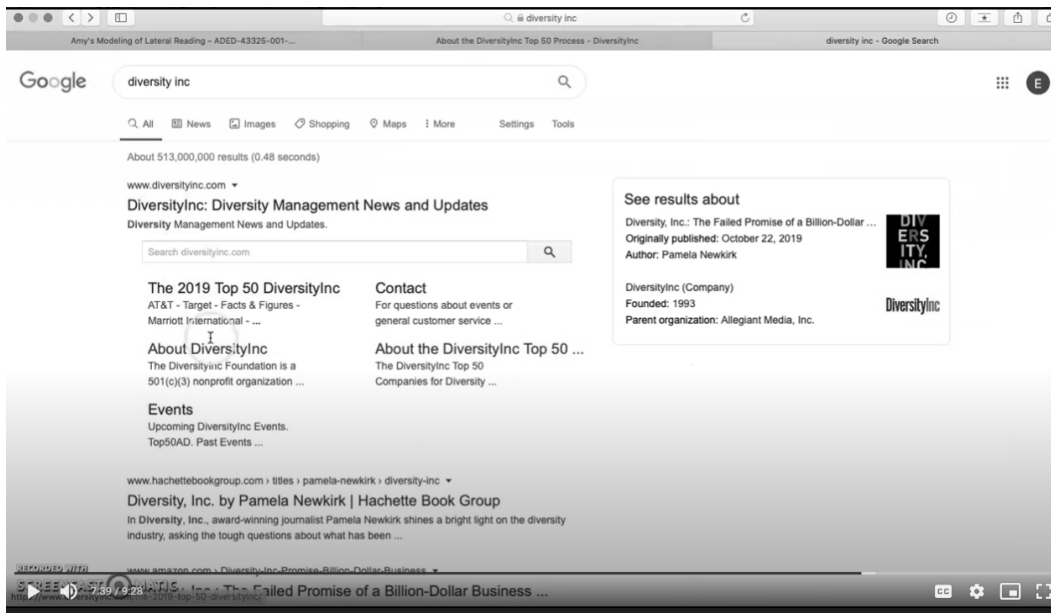
Fig. 3. Later screenshot of screencast.

Fig. 3. Later screenshot of screencast. The student has opened a new tab and is looking up the publishing organization of the website, Diversity Inc.

Understanding Argumentation. Study participants believed that lateral reading requires learners to consider the relationship between making an argument and supporting one with evidence. This was perceived as valuable not only when helping learners only evaluate others' arguments, but also when they are crafting their own.

Pointing to when Drew noted his source's use of a .gov website, Samantha commented that lateral reading requires learners to consider what makes a good source. She added that a government website is a credible place to find warrants when building an argument. However, Drew did not merely stop at the identification of the website URL but went on to consider whether the information from that website had been cherry picked or taken out of context by the source he was evaluating. Looking at whether credible information has been used effectively in an argument creates a greater awareness because, as Samantha said, "This gets students to think more about the quotes they use when writing a paper. I think this would be a great way of getting our students to think about how they select quotes when making an argument."

Owen suggested that learners could consider how their own use of sources might be laterally read by others. Therefore, student writers skilled in lateral reading would be more conscientious of the sources they use in their own arguments. This, he suggested, would create a discursive writing process in which student writers both consider the efficacy of the sources they are using in support of a thesis, and the validity of the argument they are making. "It also encourages students to not just find sources that fit their thesis but helps them to figure out what their thesis should be." As Madi concluded, "If I had this tool as a high school student, I believe my research and essay skills would have been much better."

Thinking Deeply. Heuristics offer ways teachers can make thinking visible as students engage in problem solving. Participants saw lateral reading as a useful heuristic that offers

classroom teachers the opportunity to guide students' thinking. As Kendall shared, "It allows

(learners) to narrow on specifics which help to determine quality" of information shared by

sources. The heuristic encourages students to think critically about whether that information is

being shared by a trustworthy and accurate source. Many participants used the word "deep" to

describe the type of thinking lateral reading encouraged.

Participants believe that deep thinking is supported through lateral reading because

learners are asked to slow down and consider different perspectives. Without a slowing down,

Hayley shared, "students will rush through to look for something that agrees with their argument

without giving much thought to where the information came from or how credible it is." Lateral

reading forces students to read "details and facts they might have typically skipped over,"

according to Ashley. Cassie agreed, suggesting that lateral reading offers students to expand the

background knowledge they obtain because learners consult multiple sources and "it helps them

find more information than what they would get with just one article."

Many participants expressed an understanding that lateral reading requires teachers to

commit time and space for students to engage in critical thinking about sources. While most

participants indicated a desire to teach lateral reading in their future classrooms, they also

recognized the pressure of time this might create. As Madison shared, "It teaches students to be

critical of incoming information and teaches them problem solving skills. I do wish it didn't take

that long though. It seems hard to get everything to fit into a class period."

Lateral reading and media literacy. Participants recognized the sophisticated web-

searching strategies required for effective lateral reading. Comparing the screencasts of Drew's

lateral reading before and after extensive teacher instruction, Emily noted the growth in his

ability to effectively evaluate the sources. "It is obvious that he learned how to better evaluate

the credibility of various literacies," indicating that she saw several related skills interplaying

through the process.

Participant preservice teachers noted the need to teach lateral reading in the context of a

more developed media literacy curriculum; importantly, participants talked about the need for

effective web-based searching strategies. As Kristen noted, "Media literacy should be taught to

students to 'filter' through their Google search results, so that rather than laterally reading the

first source that pops up on Google, they read the sources that are most valuable for their lateral

reading."

Again, participants saw a strong connection between the skills used in lateral reading and

preparing students to be informed digital consumers of information. They made immediate

connections to current news stories about disinformation and misinformation on the web. "It

helps (learners) maneuver this culture of fake news and misleading information to find sources

that are valid," Zane shared. Ryan agreed, suggesting that lateral reading can "give students the

ability to read past claims presented on the internet and look for real information."

Discussion and Implications

Research suggests that an integrated approach to TPACK (Technological, Pedagogical,

Content Knowledge) models, which combines courses focused on instructional technology,

methods and field experience, contributes to building a preservice teacher's TPACK constructs

(Mouza et.al, 2014). This complements Mishra and Koehler's (2006) argument that teachers with

high TPACK constructs are able to integrate their knowledge of technology, pedagogy and

content in meaningful ways in support of student learning.

Participants in this study developed an emerging understanding and appreciation for

lateral reading. This theoretical and practical understanding for lateral reading serves as an

important first step in supporting preservice teachers' integration of lateral reading in their

classroom practice. Future research could explore how preservice teachers continue to develop

their capacity for meaningful source evaluation instruction in their future classrooms. However,

because these skills are so nascent in language arts classrooms, we are aware that the modeling

within our education coursework is especially important. This study highlights that ongoing

modeling of and experiences with lateral reading and digital source evaluation within education

coursework remains important to support the TPACK of preservice teachers in ways that prepare

them to teach new source evaluation strategies appropriate to the demands of web-based research

Research has documented that video of instruction can be a powerful tool in helping

preservice teachers identify effective pedagogical strategies (Guner & Akyuz, 2020; Kleinknecht

& Groschner, 2016). Kleinknecht & Groschner (2016) note that "classroom videos can enhance

situated and problem-oriented learning and foster pre- and in-service teachers' abilities to notice

and analyze teaching and learning situations" (p. 45). While most studies are conducted to

explore preservice teachers learning while analyzing classroom videos of teaching and learning,

in this study, preservice teachers were not watching instruction, but rather watching a student

deconstruct his thinking process using the lateral reading strategy he was taught. This allowed

preservice teachers to view a representation of a students' thinking and decision making while

using the strategy. This attention to noticing provided preservice teachers with an opportunity to

interpret Drew's understanding of source evaluation, to gauge his ability to implement the

strategy, and to consider the benefits of teaching lateral reading. This noticing of Drew's

thinking is important as Guner and Akyuz (2020) contend that teachers should "use student

thinking to design their instruction..." as "teachers instruct better by attending to how their

students think and using that knowledge to improve their own teaching abilities (p. 569).

Although preservice teachers noticed what Drew did do in this second screencast, we noted that they didn't express the limitations in the moves that he made while laterally reading. While Drew was laterally reading, he tended to use one move, looking up the author or organization, repeatedly throughout his screencast. While he was still able to effectively evaluate the source, this limited the range of critical evaluation he executed. Preservice teachers did not seem to notice, or did not comment on, the types of moves Drew did even though they had learned the five associated moves with lateral reading (see figure 1). Despite this limitation, preservice teachers were able to notice what Drew was doing and were able to make sense of what they noticed, while using this information to hypothesize implications for future instruction.

A final implication in the study was the concern that participants shared about finding the time for teaching lateral reading even as they demonstrated an awareness of and appreciation for its importance. As teacher educators, we need to acknowledge that our students have absorbed extraneous discussions about stress and job intensification in the education field. Importantly, the preservice teachers in our study already demonstrated tension between their desire to do what is right for the students (teach lateral reading) and their future complicity in a system that might not allow time to build digital source evaluation skills. Even before accepting their first teaching jobs, participants demonstrated concern that they would not be able to be responsive to the needs of their future students.

Albert Bandura writes that "to be an agent is to intentionally make things happen by one's actions," (Bandura, 2001, p. 2). Teachers must explore "past, present and future-oriented factors" as they consider the role agency plays in their classroom interactions (Loretto, 2019, p. 450). That is, teachers need to find outside and inside influences that offer them the opportunity to exert greater control over their teaching practice. As teacher educators, we must be mindful of

how to support preservice teachers through that examination in ways that build capacity for

teacher agency. In this case, the students themselves identified a way-in for lateral reading even

in a tightly controlled curriculum. By discussing the ways that lateral reading allowed Drew to

better analyze and evaluate an argument, the participants discovered ways to bind this digital

literacy with the literacies that might be privileged in a traditional ELA curriculum. By asking

more targeted questions about these connections, we could have helped the participants see space

in the curriculum to teach lateral reading while also teaching evidence-based writing and

informational texts. Such a connection could help to alleviate the tension between their desire to

teach this new skill and their understanding that they are expected to meet the curricular

demands of their future schools. Knowing that our students are preparing for a teaching career at

a time when the field is stressed by multiple and shifting factors, we must cultivate a sense of

their own agency and push back against the narrative that teachers remain passive victims in a

system they cannot control.

Limitations

Because this study was forced to go online due to COVID-19 related school closures, we

did not have the opportunity for in-person discussions that might have allowed us to unpack this

experience with the preservice teachers. While the online nature of the experience offered some

affordances to the students, including allowing for more time for personal reflection and the

opportunity to replay the screencasting videos as needed, it also limited the chance for us to

shape a group reflection. However, our previous research does suggest that teaching lateral

reading is an effective strategy in face-to-face settings as well (Walsh & Pytash, 2021)

While all the participants could be identified as digital natives, we did not have any data

by which to measure their experience with digital source evaluation or lateral reading before the

study. For some, the concept of lateral reading may have been first introduced in this lesson;

others may have engaged in that process as part of their academic research or as a natural way to

prevent themselves from reading poor information online. Therefore, we cannot know how the

novelty of the experience may have influenced the participants' reflections on that experience.

Finally, this study focused only on preservice teachers preparing to teach secondary

English Language Arts. We realize this is a small and specific population of preservice teachers.

Since research skills are embedded across the curriculum, further studies should be done to see

how preservice teachers in math, science or social studies might perceive the value of teaching

lateral reading. Would such a strategy be seen as a universal scaffold for digital research, and

what connections might they see between the process of lateral reading and the literacy demands

specific to their disciplines?

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