

## *Teachers' perceptions of media literacy competence during an online professional development*

Matthew Korona

George Mason University, USA



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### Corresponding Author:

Matthew Korona  
mkorona@masonlive.gmu.edu

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### ABSTRACT

Although scholars and practitioners have suggested teachers integrate media literacy into content instruction to equip students with the skills needed to participate online, media literacy may be a new or underutilized concept for teachers. As teachers must acquire the necessary skills to educate students about media literacy, online professional development is an efficient method for teacher learning focusing on concepts often overlooked by school divisions such as media literacy. This case study examined the change in six high school teachers' perceptions of their competence related to the instructional integration of media literacy while participating in an online professional development course. Findings indicated a perceived increase with the following: media literacy connections to content curriculum, media literacy language, use of the open web, and media evaluation. Recommendations include specific refinements to the online professional development course, implementing differentiated media literacy learning experiences, technology coaching, and leveraging media literacy for social justice.

**Keywords:** *online professional development, media literacy education, teacher competence.*



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## INTRODUCTION

With students facing a barrage of trustworthy, misleading, and deceptive information through increased access to Internet-enabled devices (Anderson & Jiang, 2019), they must differentiate between trustworthy and untrustworthy content such as “propaganda, disinformation, clickbait, hoaxes and satire, pseudoscience, sponsored content, and partisanship” (Hobbs, 2017, p. 28). However, it has been well-documented that students of all ages struggle to determine the veracity of the information they consume online (LaGarde & Hudgins, 2018; Wineburg et al., 2016). Deceptive and misleading online information can change behavior (Bastick, 2021), influence civic decisions (Hobbs, 2020), and perpetuate stereotypes while giving power to certain voices and oppressing others (Funk et al., 2016). Thus, teachers across content areas have a responsibility to provide relevant functional and critical literacy learning opportunities designed to equip students with the skills, strategies, and dispositions for consuming and producing media to participate in a democratic society.

Scholars and practitioners have pointed to media literacy education as a potential solution to combat online misinformation and disinformation (Huguet et al., 2019). Hobbs (2021) explained that media literacy is a practice of lifelong learning equipping people of all ages with the ability to access, analyze and evaluate, create, reflect, and act using all forms of communication to make meaning within a media-saturated society. However, integrating media literacy into content instruction is an often underutilized and potentially new instructional approach for many teachers. Teachers must feel competent with media literacy concepts and pedagogy to deliver media literacy education, and those who engage in media literacy professional development are more likely to feel they possess the confidence to effectively do so (McNelly & Harvey, 2021). Competence is defined as “having sufficient knowledge, judgement, skill, or strength” (Merriam-Webster, n.d.) to perform a specific task. Thus, the purpose of this study was to examine the change in high school teachers’ perceived competence with the instructional integration of media literacy while participating in a media literacy online professional development opportunity.

As teachers face daunting curricular demands that often do not include media literacy (Korona, 2020),

providing teachers with convenient and applicable professional learning about media literacy is necessary. With the increased access to digital tools for both students and teachers as a result of the COVID-19 pandemic (Bushweller, 2020), online professional development is an increasingly accepted option to deliver professional learning. Ranieri et al. (2017) suggested online professional development about media literacy education provides teachers with access to relevant instructional resources as well as opportunities to collaborate with colleagues and experts in different geographical areas. Thus, media literacy professional development is one step toward equipping teachers with the necessary skills, strategies, dispositions, pedagogy, and competence to integrate media literacy into their content instruction.

## CONCEPTUAL FRAMEWORK

This study was informed by existing research and frameworks related to online professional development for teachers and media literacy. Table 1 describes the concepts informing the professional development design.

### Online professional development for teachers

Throughout the study, teachers engaged in a media literacy online professional development opportunity consisting of synchronous meetings and asynchronous learning modules. Online professional development consists of learning activities for the intellectual and/or pedagogical growth of practicing teachers offered through the Internet (Fishman, 2016). In this study, synchronous sessions allowed the learners to express themselves, construct meaning by engaging with classmates through collaborative activities, and maintain a supportive environment conducive to learning (Singh et al., 2022).

Likewise, asynchronous sessions were completed at the participants’ discretion within a given time window to promote peer interaction, flexibility with time and location, and opportunities to reflect about the professional development content (Bates et al., 2016; Elliott, 2017). Additionally, synchronous and asynchronous formats promoted differentiated learning opportunities (Bates et al., 2016) for teachers to construct meaning at the intersection of media literacy, content curricula, and pedagogy.

Table 1. *Concepts informing the professional development design*

Aspect of the professional development	Informing concept	Influence on the design
Professional development content	Media Literacy (Hobbs, 2021)	After providing a broad overview of media literacy, the learning goal of each module incorporated accessing, analyzing and evaluating, creating, reflecting, and/or acting related to media messages.
	The Refined Framework of New Media Literacy (Lin et al., 2013)	The Refined Framework of New Media Literacy provided depth to each media literacy strategy. It also informed the content of each learning module and included technical skills to consume and produce media, understanding, evaluating, synthesizing, analyzing, creating, producing, participating, and distributing media messages.
Quality of professional development	Elliott’s (2017) six qualities of effective professional development	Qualities include interactivity, collaboration, interest-driven and differentiated, ongoing, providing resources, and embedded within instruction. These qualities were considered when designing the instructional approach of the professional development.

Teachers benefit from professional development about innovative pedagogy (Richards & Skolits, 2009) and value professional development related to their content area (Parsons et al., 2019). However, Elliott (2017) asserted that effective online professional development requires six qualities including interactivity, collaboration, interest-driven and differentiated, ongoing, providing resources, and embedded within instruction for it to be effective. Similarly, embedded coaching opportunities support teachers when implementing concepts from professional development into their instruction (Darling-Hammond et al., 2009). Thus, elements of quality instructional designs and the needs of the learners must be considered to create impactful media literacy online professional development opportunities for teachers.

Although this study addresses a gap in the literature related to media literacy and online professional development, Ranieri et al. (2017) examined an online professional learning opportunity related to media literacy. Their study focused on the e-Media Education Lab (e-MEL) project, an opportunity for practicing teachers in Belgium, Finland, France, England, Italy, and Portugal to learn digital and media literacy skills as well as evaluate media resources for classroom implementation. Results indicated that teachers appreciated the news media and digital citizenship resources as well as media analysis activities. Thus, teachers indicated they found connections between their content curriculum and media literacy after participating in an online professional development.

### Media Literacy

The content of the online professional development was informed by relevant, selected literature and frameworks related to media literacy. As media is a vehicle for disseminating symbolic content and is a constantly evolving concept encompassing television, film, digital games, radio, social media, and other web environments (Hobbs, 2021), media literacy aims to empower consumers to think critically about the media they encounter and produce. For example, consumers must consider embedded biases within Internet search results (Hobbs, 2020), differentiate between advertising, propaganda, and informative messages (Hobbs, 2020), be aware of organizations collecting online data for financial or political gain (Zuboff, 2019), and recognize misleading content produced by artificial intelligence (Chiang et al., 2022). Thus, media literacy outlines the cognitive tools and instructional approaches for engaging with media messages across forms, formats, structures, and interfaces.

As teachers approach media literacy through their specific content area lens (Korona & Hutchison, 2023), embedding media literacy concepts across academic disciplines creates links with the core content curricula (Comber & Grant, 2018), promotes the application of media literacy across multiple contexts (Huguet, 2019), and can account for the specific knowledge, tools, and discourses of each academic discipline (Castek & Manderino, 2017). Additionally, Dezuanni (2015) asserted that integrating media analysis and production into curricula requires teachers to promote appropriate

new media technologies. To further expand upon traditional media literacy and elucidate the online professional development's content, the researcher supplemented traditional media literacy skills with new media literacy concepts within the professional development design.

New media literacy expands upon the foundational elements of traditional media literacy by outlining the skills and strategies Internet users apply when engaging with online information. Specifically, the Refined Framework of New Media Literacy (Lin et al., 2013) displayed specific functional and critical approaches to consume and prosume (i.e., consuming media for the purpose of producing a media message as well as the production and publication process) online information. Thus, to design the online learning modules, the researcher aligned elements of the Refined Framework of New Media Literacy with the traditional media literacy approaches to create learning opportunities bridging the application of media literacy concepts, content curricula, and pedagogy.

### Research question

The purpose of this study was to examine the change in high school teachers' perceived competence with the instructional integration of media literacy while participating in a media literacy online professional development opportunity. The following question guided the study: How do teachers' perceptions of their competence with the instructional integration of media literacy change when they participate in online professional development designing for media literacy in content instruction?

## METHOD

This study used a qualitative case study design (Yin, 2018), which examines phenomena within a bounded system in real-world context (Merriam, 1998). Additionally, Baxter and Jack (2008) asserted case study is effective for answering "how" and "why" questions while accounting for the context of the study within defined boundaries and without manipulating the behavior of the participants. Thus, the case was bound by the online professional development to examine the change in participants' media literacy competence. Furthermore, as the unit of analysis can be an individual participant or collective in case study research (Yin, 2018), each individual teacher represented a unit of analysis. To account for internal validity, the researcher

employed member checking and triangulation (Merriam & Tisdell, 2016). More information about the setting, selection of participants, data collection, and data analysis is outlined subsequently.

### Setting

This study occurred within a Mid-Atlantic suburban school district between September 2021 and January 2022. Throughout the online professional development, teachers met synchronously using a virtual meeting application on four occasions for two hours each. Additionally, teachers met virtually in design teams grouped by content area on two occasions for 45 minutes each using the same virtual meeting application. Asynchronous assignments were posted using the district adopted learning management system throughout the duration of the professional development.

*Media literacy across the content areas online professional development.* The online professional development consisted of 9 modules. One module was assigned per week. Teachers applied media literacy strategies to online information and designed their own media literacy lessons.

Module 1 provided an overview of the professional development (i.e., reviewing the syllabus, expectations, and procedures), introduced the concept of media literacy (Hobbs, 2021), and presented strategies for accessing and consuming media. During the synchronous meeting, teachers reflected about their experiences with media outside of school. Then, they engaged with the definition of media literacy, history of media literacy education, and implications for increased media access for students. They created a concept map surrounding the questions "What is media literacy? Why is it important?" The second half of module one focused on accessing and consuming media. Teachers searched the Internet for two websites, two images, and two videos that represent the specific knowledge, language, and tools valued by their specific discipline. Asynchronous activities included readings and one discussion board entry to bridge the professional development content and their instruction. Teachers implemented an accessing/consuming lesson or strategy into their instruction and recorded their experiences.

Module 2 focused on analyzing, evaluating, and synthesizing media messages. During the synchronous meeting, teachers reflected about their experiences with online misinformation or disinformation. Then, the instructor provided strategies related to analyzing and

evaluating online information including asking critical questions when analyzing media experiences (Rogow & Scheibe, 2023), reading laterally (Wineburg & McGrew, 2019), and reverse image search. Teachers collaboratively engaged with activities and gamified experiences about determining the veracity of online information. Then, teachers engaged in whole-group discussion about relevant pedagogy for teaching evaluating online information including mentor texts, modeling strategies, think-alouds, and scaffolding through classroom instruction (Pilgrim et al., 2017). Teachers created an infographic by synthesizing the information they collected in the accessing and consuming assignment in module one. Like module one, asynchronous activities included readings and one discussion board entry to bridge professional development content and their instruction. Additionally, teachers implemented an analyzing/evaluating/synthesizing lesson and recorded their experiences.

Module 3 focused on digital skills for production, distribution, creation, and participation. Teachers completed this module asynchronously by engaging with readings and videos related to creativity and media production, types of media and its evolution, and teaching digital citizenship. They completed one discussion board prompt that bridges the readings and videos with their practice. Then, they brainstormed their upcoming media composition assignment through reflective questions related to audience, purpose, effective communication, voice/tone, point of view, media selection, and place in the content curriculum.

Module 4 focused on creating a media composition. This module was also completed asynchronously. Teachers engaged with one reading focusing on the affordances of media formats. Then, they browsed examples of videos/screencasts, podcasts, and websites as well as the how-to documents associated with each posted to the learning management system. Afterward, teachers reviewed their brainstorm from the previous module. Before creating their media composition, teachers considered how audiences might respond to their media composition. Additionally, the instructor was available for optional instructional coaching and/or consulting. Teachers created their media composition, uploaded the completed media composition to the learning management system, implemented their media composition into their content instruction, and completed a media literacy reflection journal entry.

Module 5 focused on how content area impacts media literacy education. During the synchronous meeting, teachers reflected about their successes and

barriers as well as how they would change their approach related to implementing media literacy lessons and strategies into their content instruction. Then, teachers engaged in whole group discussion about how they can leverage media literacy concepts for social change. In small groups, teachers engaged in a curriculum walk to look for links between their curricula and media literacy. After completing the curriculum walk, teachers completed the following statement “I used to think... Now, I think...” Asynchronous activities included one reading related to critical media literacy. Teachers implemented a media literacy lesson or strategy into their content instruction on a topic of their choice and recorded their experiences.

Modules 6 and 7 focused on designing media literacy instruction. Teachers were placed into design teams by content area. Each design team met with the researcher independently to design their media literacy planning resources. Prior to the meetings, each teacher viewed examples of media literacy curricula that were uploaded to the learning management system. Then, they each completed an independent brainstorm prior to meeting. Afterward, each design team met synchronously to design their media literacy lesson. After the meeting concluded, each teacher completed one discussion board entry.

Module 8 focused on implementing media literacy lessons into classroom instruction. This module was completely asynchronous. Teachers finalized and implemented their media literacy lesson during this module. Also, the researcher observed each teacher’s media literacy lesson for one class period, wrote field notes about the observation, and offered feedback to the teachers.

Module 9 focused on final reflections and next steps. During the synchronous session, teachers reflected about ways to continue integrating media literacy into their instruction. Teachers engaged in whole-class discussion about their reactions to implementing their media literacy lesson as well as offered feedback to classmates about their media literacy lessons. The professional development closed with a discussion about promoting sustainable instructional change.

## **Participants**

Participants were selected using purposive sampling. Selection criteria included number of total years of teaching experience, content area, student level taught, grade level taught, years of experience in content area, perceived mastery of content knowledge, and perceived

competence with digital tools for media production and consumption. Teachers who had a perceived high mastery of their content area and digital tools for media production and consumption were selected to participate. Six teachers participated in the study and completed all professional development tasks. Table 2 displays participant pseudonyms and demographics data.

Table 2. *Participant pseudonyms and demographics*

Pseudonym	Content area	Gender	Years of teaching experience	Design team
Jayne	English	F	25 years	ELA Design Team
Josephine	Science	F	9 years	Science Design Team
Kaye	Science	F	4 years	Science Design Team
Penelope	Science	F	5 years	Science Design Team
Aaron	Social Science	M	5 years	Social Science Design Team
Molly	Social Science	F	16 years	Social Science Design Team

### Procedures and data collection

Data collected included semi-structured pre-professional development interview transcripts, reflection journals, discussion boards, media compositions, verbal protocols, field notes, and semi-structured post-professional development interview transcripts. All teachers participated in one semi-structured interview before the professional development began and another after it concluded. The interviews focused on teachers' instructional practice related to media literacy and their perceived competence with the instructional integration of media literacy. Interviews were recorded using a virtual meeting application and lasted 30 to 45 minutes. All video recordings were transcribed.

Teachers were required to implement media literacy lessons throughout the online professional development. When they incorporated media literacy into their instruction, they submitted an entry into a media literacy reflection journal. The journal was a running document that was shared with the researcher through an online drive. Teachers described the media literacy portion of the lesson, explain whether they felt it was successful, reflect about how they might change their lesson in the future, discuss any challenges they experienced,

describe the barriers they encountered, and explain what they learned.

Teachers were assigned asynchronous discussion board prompts through a learning management system. Prompts focused on bridging the course content with instructional practice. Discussion boards were collected by copying the text from the learning management system and pasting it into a word processing document.

During module 4, teachers applied the content from the online professional development to create a video, graphic, or audio recording. The purpose of the media composition was to internalize the professional development content by creating an implementable media resource for their instruction. Teachers' media compositions were collected through the learning management system.

During modules 6 and 7 of the professional development, teachers engaged in the think-aloud portion of the study in their design teams. Teachers discussed how they can align media literacy with their content curricula and design an implementable lesson. Think-aloud sessions were recorded through a virtual meeting system and later transcribed. The researcher observed each teacher's lesson for one class period, wrote field notes, and offered feedback to the teachers. Table 3 outlines the timeline of data collection throughout the study.

Table 3. *Data collected during the online professional development (PD)*

Before the PD	During the PD	After the PD
<ul style="list-style-type: none"> <li>• Semi-Structured Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Reflection Journals</li> <li>• Discussion Board Responses</li> <li>• Media Compositions</li> <li>• Verbal Protocols</li> <li>• Field Notes</li> </ul>	<ul style="list-style-type: none"> <li>• Semi-Structured Interviews</li> </ul>

### Data analysis

Data were coded inductively (Saldana, 2015) to honor the teachers' voice and perspectives. Additionally, data were analyzed through a simple time-series analysis technique (Yin, 2018) to examine the teachers' change in media literacy competence. Data were collected and analyzed over seven intervals throughout the professional development to examine the common trends across all teachers. At the first and final intervals, the researcher analyzed the interview

transcripts. During intervals two through six, the researcher analyzed discussion board responses, reflection journals, think-aloud protocols, field notes, and planning resources. Initial codes included Barriers, Tools, Context, Media Literacy Strategies, Instructional Approach, Attitude, Competence, Frequency, and Support.

At each interval, the researcher analyzed the data by writing memos, reflections, and summaries in the margins of the written data. From the written notes, the researcher inductively coded the qualitative data to identify initial codes that emerged. After organizing the initial codes by similarities, expanded codes were formed. These expanded codes were then organized by similarity to one another to form a final set of codes. The final codes were again organized by similarity to form preliminary themes. This procedure was repeated for each interval. Then, preliminary themes from each interval were compared across intervals to form final themes indicating the teachers' change in the perception of their media literacy integration competence. Additionally, participants were given access to their case report and asked to confirm its content. None of the participants requested that the information in their case report be modified. Table 4 displays the data analysis across all intervals.

## FINDINGS

Themes emerging from the qualitative data analysis are presented subsequently.

### **RQ: How do teachers' perceptions of their competence with the instructional integration of media literacy change when they participate in online professional development designing for media literacy in content instruction**

Two themes emerged including a.) increased competence for implementing media literacy concepts and b.) no change or fear of implementing media literacy concepts.

*Theme 1: Increased competence for implementing media literacy.* All six teachers indicated increased competence with implementing certain media literacy concepts. As the online professional development progressed, all six teachers indicated increased competence with finding media literacy connections to their content curriculum, communicating with their students about media literacy, allowing students to use the open web for instructional tasks with greater

frequency, and emphasizing media analysis and evaluation. Before the professional development began, teachers suggested they related accessing, analyzing, and evaluating to research skills, and four teachers discussed reaching out to their school-based librarians to support them with teaching accessing, analyzing, and evaluating to students. Similarly, teachers approached creating and publishing with a focus on digital tools. All six teachers described the digital tools they used for students to complete digital products to demonstrate their learning. One teacher indicated she reached out to her school-based technology coach for advice about implementing media creation into her instruction.

Additionally, at the conclusion of the online professional development, all six teachers discussed their increased competence with using specific media literacy vocabulary in their instruction. They indicated they became more articulate about media literacy concepts and possessed greater confidence in assisting students with applying media literacy concepts to content instruction. Further, they suggested they interacted with students about media literacy processes specific to the content area more frequently. Aaron explained that the course increased his competence with articulating media literacy concepts which enhanced his instruction. He said,

I've gotten to the point because I understand all these new details about how to be more analytical and specific and concrete about. It's definitely gotten where I'm able to give more direct instruction and give specific directions you know. Go here. Use this. Make sure you justify. I can be more direct and straight to the point. Go find information about Galileo. Go to Wikipedia and Google. Very deep and detailed, and having very specific things I'm looking for. I think it's just definitely gotten much more specific in terms of I can tell the kids exactly what I'm looking for.

Molly echoed Aaron by explaining that her competence with implementing media literacy language into her instruction changed because she is now teaching media literacy directly. Aside from Aaron and Molly, the other four teachers indicated the course increased their awareness of media literacy concepts and how they related to the content instruction, which in turn made them more articulate when communicating with students through whole-group direct instruction or individually about topics related to media literacy.

Teachers' perceived their competence with integrating the open web into instruction increased. Before the professional development, four of the six teachers expressed discomfort with allowing students to access online information through Internet searches.

Table 4. *Data analysis across intervals*

<b>Intervals</b>	<b>Professional development modules/topics</b>	<b>Data</b>	<b>Themes</b>
Interval 1	Pre-professional development	Pre-professional development interviews	Not competent with publishing media due to school/community barriers Seeking assistance from school-based technology coach and librarian increased competence Not competent with media creation but some allowed students to demonstrate learning with media Refused to allow students to use open web
Interval 2	Module 1 – Introduction to media literacy and accessing online information	Discussion boards and reflection journals	Increased competence with leveraging Wikipedia for instruction Increased focus on building background knowledge using media Increased focus on explicit accessing and evaluating media strategies Media literacy as a strategy and a focal point of lessons
Interval 3	Module 2 – Analyzing, evaluating, and synthesizing online information	Discussion boards and reflection journals	Integrating and applying systematic approaches for evaluating information in texts related to content areas through constructivist instructional practices
Interval 4	Modules 3 and 4 – Media creation	Media compositions, discussion boards, and reflection journals	Previous experience with media creation led to greater competence Refused to publish to outside audiences Discussed evaluation strategies less frequently as the professional development progressed
Interval 5	Modules 5, 6, and 7 – Designing media literacy education across content areas	Think-aloud protocol	Greater competence with structuring searches using open web Focus on lateral reading Continued building content area background knowledge using media Limited opportunities for students to create media
Interval 6	Modules 8 and 9 – Implementing media literacy education across content areas	Observation field notes	Increased use of open web for students to build background knowledge Media literacy as a continuum of deeper thinking Greater competence with modeling media literacy strategies including offering choice to students for format of expression
Interval 7	Post-professional development	Post-professional development interviews	Greater articulation about media literacy concepts Belief that media literacy offers autonomy and authentic learning opportunities Greater emphasis on explicit strategy instruction related to evaluating online information Not comfortable with publishing information but acknowledges benefits Somewhat competent with creating media Increased use of open web but provides resources when necessary
Final analysis		Analysis of preliminary themes through a recursive process across intervals	Increased competence for implementing media literacy concepts No change or fear of implementing media literacy concepts



However, as the course progressed, teachers implemented new accessing and evaluating strategies within content instruction using the open web. For example, Jayne implemented a lesson where students found quotes or poems that related to their lives. Likewise, the science teachers implemented lessons on accessing content where students applied search operators to find content area-specific information on the open web. Molly implemented a lesson on accessing content where students performed Internet searches to find information about Latin America, and Aaron assigned vocabulary related to media literacy for students to define by searching the Internet. As the course progressed, teachers demonstrated their competence with providing opportunities for structured Internet searches and increasingly allowed students to build background knowledge using the open web. After the conclusion of the professional development, all six teachers suggested they have increased the use of the open web in their instruction but still sometimes provide online resources to their students when necessary. Likewise, four of the six teachers suggested they see increased value in implementing opportunities for students to access online information within content instruction. Specifically, Jayne, who strongly opposed allowing students to use the open web before the online professional development, explained that she felt empowered to allow students to use the open web at the conclusion of the online professional development.

Furthermore, at first, teachers indicated they were somewhat competent with implementing media analysis, evaluation, and reflection. As the online professional development progressed, teachers suggested they had increased competence with implementing systematic approaches to evaluating online texts into their instruction. For example, three of the six teachers modeled lateral reading to their students and gave students opportunities for hands-on practice with lateral reading. Two teachers had discussions with their classes relating to critical questions when evaluating online information. One teacher did not implement an evaluating online information lesson during the online professional development. Additionally, all six teachers expressed surprise that they could use Wikipedia as a reliable source to begin research. Teachers indicated increased competence with leveraging the affordances of Wikipedia for instructional purposes. After the online professional development concluded, teachers emphasized checking the credibility of online information, acknowledged the

affordances of Wikipedia, and implemented evaluation strategies into their instruction.

*Theme 2: No change or fear of implementing media literacy concepts.* Before the online professional development began, five of the six teachers indicated they had little or no competence with integrating media creation into their instruction. Kaye suggested that she has above average competence in integrating media creation into her instruction. She explained that she integrated more media creation during the previous year of emergency distance learning and that experience increased her competence with integrating media creation. All of the six teachers suggested when they implement media creation, they do for students to demonstrate their knowledge. Additionally, five of the six teachers indicated they were not competent with integrating media publishing into their instruction. While Jayne discussed creating a literary magazine for the school audience, she indicated that she was hesitant to implement lessons for students to publish to an audience outside of the school community. Furthermore, she explained that school censorship was a concern. The five teachers who indicated they were not competent with implementing publishing into their instruction explained they did not know their boundaries to do so. Furthermore, they feared reprimand from their school district and community pushback. They indicated they lacked experience with incorporating publishing and lack confidence to do so.

As the professional development progressed, teachers who had previous experience creating personal or instructional media were more competent with incorporating media creation into their instruction compared to others who lacked this experience. Throughout the professional development, teachers were somewhat competent with incorporating media creation into their instruction. However, they typically implemented digital tools that were familiar to them. For example, before the professional development began, Jayne discussed how she used specific digital tools for students to record video responses. In her final media literacy lesson, she incorporated familiar digital tools within a similar instructional approach. Furthermore, opportunities for students to create media were limited. Three of the six teachers indicated that time is a barrier preventing them from implementing larger multi-day media creation activities, such as video production. For five of the six teachers, media creation was limited to students synthesizing online information by creating infographics. One of the six teachers incorporated video production as an optional extension activity. Likewise,

teachers were competent with bridging real-world, disciplinary problems with media literacy; however, they were not willing to incorporate media publishing to an outside audience. Throughout the online professional development, they expressed interest and reflected about how to do so. However, the professional development only presented publishing from a theoretical standpoint and did not require teachers to design instruction that incorporated an element of publishing. Two of the six teachers incorporated a simulated element of publishing as their students were required to write emails to their school district nutrition officials. However, the emails were not actually sent.

After the online professional development concluded, all six of the teachers indicated they were somewhat competent with implementing media creation into their instruction. While five of the six teachers expressed interest in implementing video production for students to demonstrate their learning, they suggested they were hesitant to do so due to a lack of functional knowledge of digital tools. Likewise, two of the six teachers pointed to time as a barrier and they do not typically have class time to devote to media creation. Additionally, teachers indicated they are not comfortable with incorporating online publishing into their instruction due to time constraints, fear of offending their school district, lack of societal knowledge, and Internet safety concerns. However, they expressed interest in incorporating an element of publishing into their instruction in the future. Likewise, five of the six teachers suggested they have a greater awareness of the benefits of implementing publishing online. Penelope indicated she did not see the value in implementing publishing online. Thus, teachers' perceived competence with integrating media creation and publishing into their instruction did not change throughout the professional development.

## DISCUSSION

The purpose of this study was to examine the change in high school teachers' perceived competence with the instructional integration of media literacy while participating in a media literacy online professional development. This study gives valuable insight to the influence of a specific media literacy online professional development design, the perception of teacher competence with media literacy pedagogy, and potential barriers they face when integrating media literacy into their instruction. Teachers' perceptions of their competence with integrating media literacy concepts

into their instruction changed with finding connections to their content curriculum, acquiring media literacy language and vocabulary, implementing the open web, and integrating media evaluation into instruction. However, their perceptions of their competence did not change with implementing media creation and publishing. Findings may suggest aspects of the online professional development that may need to be refined to equip teachers with relevant media creation and publishing skills.

At the conclusion of the online professional development, all six teachers felt their competence with using specific media literacy language and vocabulary within their instruction increased. During the first four modules, teachers were enculturated into the discipline of media literacy by being exposed to knowledge and discourses often reflected by journalists, fact-checkers, and other media-related professions. Teachers may have acquired relevant language and vocabulary by communicating and collaborating within media literacy as a disciplinary culture. This finding may represent a divide between media literacy as a discipline and media literacy as a cognitive tool and may further inform the value for school-districts to promote both media literacy instructional integration and media literacy stand-alone courses for teachers and students.

All of the teachers had little or no change in their perceived competence with integrating media creation into their instruction. Since scholars have recommended instructional coaching as an effective practice for implementing new skills and strategies (Darling-Hammond et al., 2009; Parsons et al., 2019), optional opportunities for instructional coaching were embedded into the online professional development. For example, the instructor offered weekly online open office hours and welcomed appointments to further discuss the application of media literacy concepts. However, none of the teachers took advantage of these additional instructional supports. Likewise, the two media creation modules were offered during asynchronous weeks. Within the creation modules, the instructor provided numerous resources and instructions for selected digital tools and stressed the importance of reaching out to the instructor for further coaching related to instructional technology if needed. However, teachers used familiar tools to create basic videos and graphics to enhance instruction rather than taking advantage of the additional resources or coaching opportunities offered through the online professional development. This finding may reinforce the importance of instructional coaching and promote required instructional technology coaching

embedded within online professional development related to media literacy. Additionally, teachers may not have had time to learn new technology independently as they were returning to the building for a full school year for the first time since emergency distance learning.

In addition to their perceived competence with integrating media literacy into content instruction, teachers may have indicated potential barriers for media literacy implementation. For example, teachers expressed fear of implementing the open web for students to access as well as publish online information. Without integrating the open web for instructional purposes, students miss opportunities for media literacy experiences bridging in-school and out-of-school literacies that can be leveraged for social change. However, teachers perceived their competence with implementing the open web into their instruction increased at the end of the professional development. Thus, future professional development outlining the affordances of the open web for structured Internet searches and modeling safe Internet practices could benefit teachers. Likewise, allowing students to search the Internet for information is the first step in empowering students to critically evaluate the online information they consume. Thus, it is recommended that teachers receive pedagogy that empowers students to effectively search the open web for information.

Additionally, teachers were fearful of implementing publishing due to potential reprimand from the school division. Publishing media gives teachers and students an outlet to voice their views and advocate for social change. As topics related to social change are sometimes controversial within school divisions, it is not surprising that teachers were hesitant to distribute student opinions to a broad audience. This finding echoes the need for teachers to find connections within their curriculum to empower students to create and publish media to advocate for social issues within the local community and broader society.

Time is another barrier expressed by teachers. Creating videos and other multimedia are often multi-day projects. Two of the six teachers indicated they are willing to use a great amount of class time for media creation projects. Relatedly, three of the six teachers suggested they privilege their curriculum content learning goals over explicit teaching of media literacy concepts. Thus, future online professional development related to media literacy might consider improving teachers' competence with overcoming barriers such as fear of implementing the Internet and creating time to implement media literacy into their instruction.

As teachers engaged with hands-on media literacy modules, it is possible they built relevant background knowledge to transcend their instructional and personal media literacy practices. If teachers are not equipped with necessary background knowledge of a given concept including media literacy, they may unknowingly pass erroneous or inadequate information, skills, or strategies to students (Ball & McDiarmid, 1989; Korona & Hathaway, 2021). As all six of the teachers indicated they have acquired specific media literacy language and discourses, it is possible that teachers build background knowledge by gaining increased awareness through the first four modules of the online professional development. However, further examination connecting awareness to action within the context of media literacy as well as connecting personal awareness to content knowledge may be warranted.

## CONCLUSION

This study addresses a gap in literature related to high school teachers' perceptions of impactful media literacy online professional development. However, it is limited in that it does not examine actual change in teacher competence. Future research should investigate actual change in teacher competence related to media literacy through longitudinal, experimental, or quasi-experimental studies. Additionally, this study does not explore media literacy competence of math teachers. Future research should further examine the role of media literacy in math instruction. Despite this study's limitations, teachers' perceptions of the change in their competence with the instructional integration of media literacy offers valuable insight to the field for media literacy education and impactful professional learning opportunities by considering teachers' voices about relevant media literacy professional learning experiences.

In addition to building background knowledge, teaching strategies, and improving skills related to media literacy, future professional development should empower teachers to leverage media literacy to advocate for social justice. Likewise, professional development focusing on an integrated approach to media literacy should consider allowing teachers to analyze their content curricula to identify underlying structures of power, privilege, and oppression. It is recommended that future media literacy professional development embed practical learning opportunities leveraging media literacy to empower teachers and students to become change agents for an improved society.

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