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Preparing Pre-Service Teachers to Teach Media Literacy: A Response to “Fake News”

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ABSTRACT

The call for integrating media literacy into public education is not new. However, with the rise of “fake news” and sensationalism along with technology’s ever-growing role in society, media literacy offers teachers and students a set of skills to analyze, critique, and respond to the information that appears before them in the digital texts they read, the television shows they watch, and their social media feeds. As multiple case studies have identified ways teachers are already blending media literacy into their instruction, this case study used a lesson plan assignment coupled with a survey to analyze how pre-service teachers enrolled in an instructional technology class approached media literacy. We found that the pre-service teachers tended to use constructivist teaching methods that required students, not the teacher, to interpret the media messages. In addition, the pre-service teachers used questions as a strategy to facilitate that interpretation, though at times the questions included the pre-service teachers’ own viewpoints, values, and perspectives. We conclude with ways teacher educators can develop their pre-service teachers’ ability to bring media literacy skills into their content-area instruction.

Keywords: media literacy, pre-service teachers, fake news, teacher education, literacy

The call to teach media literacy in schools is decades old. In 1992, Cortés wrote a passionate article for the journal of *Education and Urban Society* where he explained that individuals are learning from “the omnipresent bombardment of information and ideas emanating from the mass media” (p. 87). He then charged teachers to empower students by developing their abilities to evaluate mass media messages and use their determinations to make informed decisions. As the field of media literacy continued to emerge in the 1990s, Hobbs (1998) explained that at its heart, media literacy is a “pedagogy of inquiry” (p. 27) that requires individuals to ask critical questions about the media messages they receive. In this study, we build

on Hobbs' (1998) notion that media literacy is rooted in the asking of poignant questions regarding the media messages being transmitted into society, and we define media literacy as the ability to pose critical questions at those messages with the dual purpose of understanding the entities' goal(s) for transmitting them and their potential impact on individuals, society, and the environment. At the time of Cortés' charge and Hobbs' article, the internet was still in its infancy and the first smartphones would not be released for almost another 10 years. Their writings then function as a harbinger for what was to come in the near future.

Technology's impact on our day-to-day lives is unprecedented. Technological advancements have provided relative instant access to almost limitless information, allowed for humans to connect with one another in new ways, and increased productivity in most all lines of work. Even with these benefits, technology has come at a cost. Issues with access to the internet and technology, the spreading of "fake" news and misinformation, the automation of work, and new forms of bullying online among other concerns are all significant drawbacks. Nevertheless, as technology continues to evolve and new accomplishments are achieved, schools have responded by purchasing tablets, computers, software programs, and hardware. The result is that a growing number of schools and districts provide their students a device they can use while at school, and teachers are often integrating those technologies into their lessons, when available. This integration combines face-to-face interaction with a digital or online component, and the lessons routinely involve exploring websites, communicating digitally, and collaborating to complete a task (Smyth, Houghton, Cooney, & Casey, 2012).

As teachers integrate technology into their lessons, Hobbs and Jensen (2009) warn that a "passion for the latest technologies and tools outstrips school administrators' interest in the development of curriculum content or teachers' or students' knowledge and skills" (p. 5). In other words, teachers might be using technology for technology's sake in their lessons, and not necessarily for student learning. To further support teachers in using technology meaningfully with their students, Hobbs and Jensen (2009) explain that "A world full of ever-changing technologies means that new media literacies must include the skills, knowledge, ethical frameworks, and self-confidence to deploy those tools towards our own ends" (p. 5). In this regard, they argue that research, best practices, and student learning should ground the way technology is used in schools. Moreover, as technology and media messages have become a ubiquitous part of society, Hobbs and Jensen (2009) see media literacy as a way to bridge technology with critical inquiry by teaching students how to deconstruct and respond to the messages they receive on a daily basis across the content areas. As researchers have conducted multiple case studies that investigated how media literacy skills can be integrated into the curriculum to support student learning with positive results (Cheung & Xu, 2016; Draper et al., 2015; Redmond, 2015), focusing on pre-service teachers' understanding of how they plan to address media literacy in their future classroom can inform teacher educators regarding how they can better prepare them for that work. As such, this study focused on how pre-service teachers in an educator preparation program responded when they were tasked with developing a media

literacy lesson they could implement in their student-teaching placement. Specifically, this study asked:

1. Is there a trend between the National Association of Media Literacy's Core Principles selected by the pre-service teachers for use in their lessons?
2. How much importance do pre-service teachers place on the different skills needed to be fluent in media literacy?
3. What types of texts did the pre-service teachers select to teach as media messages?
4. What commonalities do pre-service teachers media lesson plans share?

In the following sections, we will first summarize previously conducted case studies that integrated media literacy into the curriculum before sharing the guiding principles for media literacy we adopted as our theoretical framework. Next, we will present our methodology and findings. We will then conclude with implications for the field of media literacy education.

LITERATURE REVIEW

We first examine the case study literature and then review our theoretical framework. Multiple case studies have investigated how media literacy has been integrated into content area classroom instruction. The commonality shared by these case studies is that the curriculum was revised so that it featured media literacy as a primary element. For example, in Cheung and Xu's (2016) case study, they researched how a team of stakeholders – teachers and professors – worked to integrate media literacy into the Chinese national curriculum. With a mindset that it is the “responsibility of educators to make use of media literacy education to prevent the further exploitation of children by the media” (Cheung & Xu, 2016, p. 134), the stakeholders designed lessons and developed materials that engaged students and developed both their academic and media literacy abilities. They found that the media literacy lessons in this study developed not only the students' ability to use information technology, but also addressed morality, mathematics, and problem-solving skills. As Hobbs and Jensen (2009) pointed out, media literacy is a topic that can be taught across the content areas and grade levels, and the way in which the stakeholders in this study accomplished that aim is significant, as it informs how educators in other contexts can approach the integration of media literacy across the curriculum.

Next, the case study by Draper et al. (2015) utilized media literacy as part of an after-school intervention program to increase at-risk youth's awareness of advertising techniques. Specifically, the advertisements were developed to entice individuals to smoke and drink alcohol, and the participants included ten White male and five female middle school students. In the study, a pre/intervention/post research design was used, where the researchers first administered a survey that gauged the participants' ability to deconstruct advertisements and understand their intent. Next, the participants took part in a 10-lesson curriculum that “used highly interactive activities, handouts, notebooks, and posters to teach critical response to media messages and media deconstruction skills as participants assumed the role

of media ‘detectives’ looking for clues” (Draper et al., 2015, p. 18). After the final lesson, the post-survey was administered. In comparing the survey data, the researchers found that the media literacy curriculum did improve the participants’ critical thinking and decision-making skills in response to advertisements featuring alcohol and tobacco, which further evidences that a well-constructed curriculum can improve students’ media literacy skills.

In a third study, Redmond (2015) focused on a media literacy workshop class that was integrated into a middle school’s seventh grade curriculum, and she collected data via observations and interviews of the three teachers who served as her study’s participants. The workshop was designed so students initially took part in 10 media literacy analysis lessons that each focused on an aspect of media literacy, such as advertising techniques, laws, and product placement. Next, 15 follow-up media production lessons were taught where students completed collaborative projects with their peers, and an example of these projects included producing original commercials for common objects, such as office supplies, clothing, and toiletries, that used an advertising technique they studied. The more unique aspect of Redmond’s work is that she focused on the teachers’ moves, strategies, and approaches, which resulted in her identification of three themes. First, the teachers did not limit their use of media to one piece of content or example in a lesson; rather, they used a range of both print and non-print texts, so students could view advertisements in multiple contexts. Second, the teachers purposefully selected materials that were part of the students’ popular culture because they saw it as a “developmentally and culturally responsive teaching and learning strategy... [and] connecting the curriculum to the world of adolescent learners was an indispensable prerequisite for learning” (Redmond, 2015, p. 15). By selecting authentic examples from popular culture, the teachers explained that it resulted in increased levels of student motivation and engagement. Finally, in addition to Redmond identifying the teachers as leaders in their school, she also observed their deep commitment to developing students’ media literacy skills. Redmond concluded due to the range of texts and skills that can be integrated into a media literacy lesson, media literacy is a skill set that can be taught across the content areas.

Based on this review, we adopted Redmond’s (2015) perspective in that the ability to teach media literacy spans across the content areas, and we wished to study that crosscutting appeal in pre-service teachers. We also realized from Cheung and Xu’s work, media literacy allows for not only the teaching of media literacy, but also academic content. In a similar vein, as this study was conducted in an instructional technology class, it allowed for us to develop both the pre-service teachers’ abilities to use technology as well as preparing them to utilize media literacy into their future instruction.

Theoretical Framework

As researchers, teacher educators, and engaged citizens, we support the notion that nothing is truly apolitical (Kincheloe, 2004; Kincheloe & Tobin, 2009; Steinberg & Cannella, 2012). The media messages that deluge our smartphones, tablets, and laptops; appear on television commercials, movie previews, and news

reports; and are plastered on billboards, park benches, and public transportation vehicles are not objective, neutral, or void of intentions. Rather, these messages were developed for specific purposes and populations. Whether they are to sell a product, influence an opinion, or provide information, there are specific reasons that the messages were crafted to appear the way they do. With media literacy representing a form of inquiry (Hobbs, 1998), the Core Principles of Media Literacy were developed by the National Association for Media Literacy Education (NAMLE) (2018) “to help individuals of all ages develop the habits of inquiry and skills of expression that they need to be critical thinkers, effective communicators and active citizens in today’s world” (para. 2). By design, the Core Principles are statements that are intended to serve as the foundation for media literacy education, and they are:

1. Media Literacy Education requires active inquiry and critical thinking about the messages we receive and create.
2. Media Literacy Education expands the concept of literacy to include all forms of media (i.e., reading and writing).
3. Media Literacy Education builds and reinforces skills for learners of all ages. Like print literacy, those skills necessitate integrated, interactive, and repeated practice.
4. Media Literacy Education develops informed, reflective, and engaged participants essential for a democratic society.
5. Media Literacy Education recognizes that media are a part of culture and function as agents of socialization.
6. Media Literacy Education affirms that people use their individual skills, beliefs and experiences to construct their own meanings from media messages. (NAMLE, 2007)

The strength of these Core Principles is that they are broad, so they can be embedded into a variety of content-area lessons. Unlike academic standards, the Core Principles are statements without specific content-area or grade-level connections. For that reason, they can be integrated within a variety of lessons and help build the bridge between technology and literacy that Hobbs and Jensen (2009) described. In this study, we adopted the Core Principles to serve as our theoretical framework because they emphasize that media messages are crafted texts developed with a certain end in mind and require critical inquiry to unpack their intended meaning. At a time when the very media sources that report news have become so politicized that television ratings and political loyalty trump credibility and truthiness, teachers can use these Core Principles as a framework for developing their students’ media literacy skills. In this study, these Core Principles guided how we collected and analyzed our data.

METHODOLOGY

This research project is a descriptive case study (Baxter & Jack, 2008; Merriam, 2009) because it uses detailed examples to portray how pre-service teachers (PSTs) understand and plan to address media literacy within their content-area instruction. As this study’s researchers, we see ourselves not only along the

participant observer continuum (Labaree, 2002) – in that we served as our participants’ course instructors in addition to being researchers – but also as the “problem solvers” Tashakkori and Teddlie (2010, p. 273) described in their editorial. Specifically, we are concerned that the newly minted teachers who are now entering the field of education are not prepared to address, analyze, and respond to the media messages their students receive on a daily basis. In an era that may well be remembered for “fake news” postings, independent political action committees, and net neutrality, the public has become increasingly aware of how policies shaped by special interest groups impact the media content that takes form on social media feeds, in advertisements, and through popular culture (Hamilton, 2011; Sekol, 2017). Together, these various crafted communications comprise the “media messages” that saturate society, and the problem then arises: How can we, as teacher educators, use our time with PSTs to prepare them for addressing media literacy through a content-area lens in their future classroom? With this study addressing multiple research questions, we see the findings to those questions as representing a first step to responding to the larger challenge of preparing PSTs to address media literacy in their content-area instruction.

Context. This study took place in Moyer Pacific University’s (MPU) (pseudonym) College of Education, which is an urban university situated in the United States’ Pacific Northwest (PNW) region. MPU is nationally recognized for being an innovative university, and it has a student population of 28,000 (23,000 undergraduate and 5,000 graduate students). With a mission to serve its local community, MPU provides an education rooted in social justice, equity, and inclusivity.

MPU’s College of Education offers programs for initial teacher licensure and continuing education in the fields of elementary, secondary, bilingual, and special education, and it also houses a graduate counseling program. Like MPU as a whole, the College’s faculty are committed to integrating equitable and inclusive teaching practices into their instruction, and the College was one of the first in the PNW to be accredited by the Council for the Accreditation of Educator Preparation. Because this study is focusing on media literacy, we bound it to PSTs enrolled in the College’s secondary teacher education program (STEP).

Founded in 1989, STEP offers initial teacher preparation for multiple subject areas – Art, English language arts (ELA), Math, Music, Physical Education (PE), Science, Social Studies, and World Languages – and is one of the largest teacher education programs in the PNW. STEP offers both a one-year and two-year track. Aligned to MPU’s mission, STEP focuses on developing educators to serve diverse students in an equitable manner by employing culturally responsive and sustaining instructional practices (Paris, 2012; Paris & Alim, 2014) that includes the purposeful selection of materials; “courageous conversations” about race, gender, and beliefs; and non-westernized perspectives into lessons.

To complete the program, the PSTs must pass the National Evaluation Series test for their content area, earn a 3.0 grade point average in their coursework, satisfy a yearlong student-teaching internship, and achieve passing scores on the state-required edTPA assessment. Upon program completion, the graduates earn a

master’s degree in education and a preliminary teaching license. Over the past five years, this program has annually graduated 60-80 PSTs.

This study was situated specifically in the STEP’s instructional technology class. As that course is aligned to the International Society for Technology in Education’s (ISTE) (2017) standards for educators, we saw its Citizen’s second substandard that read “Establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency” as an opportunity to explore media literacy in a digital context.

Participants. This study’s participants consisted of PSTs who were enrolled in STEP during the 2017-2018 academic year. At the time of this study, the participants were in their fall quarter and were taking six classes that focused on classroom management, literacy, content-area teaching methods, instructional technology, inquiry-based practices, and reflection. In all, there were 68 participants and Table 1 shows the number of participants by content area.

Table 1
Preservice Teacher Participants by Subject Area

Art	ELA	Health - PE	Math	Music	Science	Social Studies	World Languages
4	19	3	6	8	13	8	7

All of the study’s participants held a bachelor’s degree in their respective field, and they were spending an average of 14 hours per a week in a school-based placement.

We, the researchers of this study, see ourselves as participants and wish to briefly describe ourselves. We are both teacher educators working in secondary teacher education programs, and each have worked as a classroom teacher in our respective disciplines; Todd as a high school English teacher in Florida and Kristal as a high school social studies teacher in Florida. We both share a commitment to developing students’ disciplinary literacy skills in secondary classrooms and see technology as being a powerful tool for achieving that aim (Cherner & Curry, 2017; Curry & Cherner, 2016).

Data Collection and Analysis. Three types of data were collected for this study that extended from an assignment in STEP’s instructional technology class, a required course in STEP. (The complete assignment description and rubric are located in Appendix A.) The first two data collected were the media literacy lesson plan and commentary, and the third data were a survey regarding the participants’ own technological and digital abilities. (The complete survey is located in Appendix B.) Because all the participants were required to complete the instructional technology course, the assignment description was written to be open ended, so it did not cater to one certain content area.

In addition, the assignment did not stipulate that the lesson plan had to embed technology usage within it, only that it addressed one of NAMLE’s Core Principles of Media Literacy (NAMLE, 2017) and an academic standard of their

choosing. The commentary was designed to model the type of writing that the participants would have to complete as part of their upcoming edTPA. In it, the participants were asked to explain how their lesson addressed the Core Principle and academic standard. Though the participants were not required to teach the lesson, they were guided to contextualize it as one they may teach in their current school-based placement. In all, we were able to gather 68 sets of lesson plans and commentaries for our first level of data analysis.

To begin, we used an open-coding technique (Corbin & Strauss, 1990) to analyze the lesson plans and commentaries. Specifically, we collected the lesson plans and commentaries by having the participants upload them as word processing documents into a Google Form. After all the documents were uploaded, two copies were made, and we each then coded all the lesson plans and commentaries. We began by identifying in vivo codes and sociologically constructed codes. In this work, we understood in vivo codes to be single words and short phrases used by the participants in the documents that provided meaning related to media literacy (McCann & Clark, 2004), and we operationalized sociologically constructed codes to be the tags we assigned to the words and phrases we identified (Bailey & Davis, 2010). As we worked through the data, we used a spreadsheet to record the media principles and types of text used in the lessons.

After completing this initial coding stage, we shared our work with each other as a way to debrief. While sharing, we together articulated the emerging themes we saw in the data. As we identified those themes, we diagrammed how the data coded from the documents supported the themes. It was important to our work that we were able to substantiate our findings to evidence the themes we identified from the lesson plans and commentaries.

The third data collected was a multi-item survey that replicated the one used by Simons, Meeus, and T'Sas (2017). In their work, they explained that “if teachers are to provide their learners with effective media education they should: a) be sufficiently media literate themselves, and b) have the required competencies to promote media literacy among learners” (p. 110). Though they were not the first researchers to attempt to develop an instrument to gauge the abilities of PSTs and teachers as related to media literacy (Arke & Primack, 2009; Hargittaai, 2009; Hobbs & Frost, 2003) Simons, Meeus & T'Sas (2017) were purposeful in aligning their survey to previously conducted research related to media literacy and validated it with both teachers and PSTs.

In addition, their survey targets three aspects of media literacy that include:

1. Teachers being competent in media literacy skills and emerging technologies;
2. Teachers being able to implement media literacy-based lessons in their classroom; and,
3. Teachers utilizing media literacy in a subject-specific context or broadening it to an interdisciplinary approach.

Because Simons, Meeus & T'Sas (2017) included both teachers and PSTs in their survey along with their three-pronged approach, we saw their survey as being

appropriate for our study because it required our participants to reflect on their own media literacy competences. In addition, because the participants were creating a media literacy lesson as previously described, this survey included a focus on using media literacy competencies as part of classroom instruction.

Credibility Checks. Similar to most other qualitative studies, we purposefully built in member checking to increase our studies credibility to avoid “traps” or oversights while interpreting its data (Carlson, 2010). When designing this study, we identified three types of data to be collected – the lesson plans, commentaries, and survey data – which allowed us to analyze the different data sets against each other, so “the interpretations and conclusions drawn from them are likely to be trustworthy” (Carlson, 2010, p. 1104). In our meaning making process, we continually returned to the data sources to verify and support the themes we identified in the data. In this way, we were able to use the three types of data to substantiate our findings.

Next, member checking was important to our work (Curtin & Fossey, 2007). Given that our participants were busy with coursework and their student-teaching responsibilities, we had limited opportunities to present them the findings we identified and then refine them. Therefore, once we had a first draft of this article, we shared it with participants for feedback, and they were asked to insert comments, questions, or opinions they had about it. We then refined the manuscript and followed up with the participants to help ensure that our findings accurately represented their thinking. As the act of qualitative coding requires researchers to filter the data against their own beliefs, biases, and personhoods, this member checking process was essential to build credibility and accurately represent our participants’ thinking.

As a third method for building credibility, we sought to thoroughly and deeply describe the context and our data analysis procedures used in this study (Anfara, Brown, & Mangione, 2002). By being as transparent as possible while adhering to the terms of our institutional review board’s study approval, we saw it as an opportunity to share our thinking and meaning making process with our readers. Our intent was to build trustworthiness in our work by being open about the context of the study and how we went about interpreting the data.

FINDINGS

To frame our findings, we first used the six core principles of media literacy (NAMLE, 2018) by first having participants choose a “focus” principle to anchor their lesson plan and then we developed a survey in relation to those principles that participants completed. We then opened coded the lesson plans to identify patterns and themes within the lesson. In this section, we first present a research question and then how the data we collected and analyzed responds to it. Implications based on these findings will be shared in the next section.

Question #1: Is there a trend between the Core Principles selected by the pre-service teachers? The first question we addressed was if there was a preference for a particular Core Principle by content area. In the assignment, the participants were instructed to choose a Core Principle they wished to teach and plan a lesson

based on that principle, and Table 2 shows the frequency of the Core Principles selected by content area.

Table 2
Participants' Use of Core Principles in Lesson Plan by Content Area

Art	ELA	Health PE	Math	Music	Science	Social Studies	World Language	Percentage by Discipline
<i>Principle #1 - Media Literacy Education requires active inquiry and critical thinking about the messages we receive and create.</i>								
1	10		4	3	2	4	1	37.3%
<i>Principle #2 - Media Literacy Education expands the concept of literacy to include all forms of media (i.e., reading and writing).</i>								
	1			1	2		4	11.9%
<i>Principle #3 - Media Literacy Education builds and reinforces skills for learners of all ages. Like print literacy, those skills necessitate integrated, interactive, and repeated practice.</i>								
		2	1	1				5.9%
<i>Principle #4 - Media Literacy Education develops informed, reflective and engaged participants essential for a democratic society.</i>								
1	4				4	2	1	17.9%
<i>Principle #5 - Media Literacy Education recognizes that media are a part of culture and function as agents of socialization.</i>								
1	3	1		2	1	1	1	14.9%
<i>Principle #6 - Media Literacy Education affirms that people use their individual skills, beliefs and experiences to construct their own meanings from media messages.</i>								
	1		1	1	4	1		11.9%

Looking across the data, the first Core Principle “requires active inquiry and critical thinking about the messages we receive and create” (NAMLE, 2018, para. #2) was the most popular Principle selected, with 37.3% of participants choosing it. Next, the fourth Principle that “develops informed, reflective and engaged participants essential for a democratic society” (NAMLE, 2018, para. #5) was the second most popular and 17.9% of the participants selected it. Following, the fifth Principle that “recognizes that media are a part of culture and function as agents of socialization” (NAMLE, 2018, para. 6) was the third most popular with 14.9% of participants picking it. The remaining three principles - two, six, and three - were the least popular, with only 29.7% of participants selecting them.

When looking across the three most popular Principles that were selected by over 70% of the participants, the commonality they share is the emphasis on critically analyzing the messages that are part of the culture. For instance, the first Principle focuses on the analysis of messages received and created by individuals in a culture, and that relates to the fourth Principle due to the emphasis on engaged

citizenry through thoughtful reflection focused on the meaning of a media message. Both of these principles then reinforce the notion that media is not only part of a culture, but it is a tool for the socialization of individuals who live in that culture. As this study's participants were enrolled in an EPP steeped in social justice, equity, and culturally sustaining pedagogy, it is logical that the Principles aligned to those focus areas were most commonly selected. Conversely, the less popular principles are thematically connected in that they reinforce selected tenets of digital literacy. For example, the first and second Principles both point to expanding the traditional, paper-based form of text - both the consumption and production - to an electronic medium; whereas, the sixth principle speaks to Roesnblatt's (1989) theory of Transactional Reading because readers are filtering the text they are engaging against their own personal beliefs and experiences to make meaning.

Question #2: How much importance do pre-service teachers place on the different skills needed to be fluent in media literacy? Though media literacy can be a complex term to define, the goal for this survey extends the work of Simons, Meeus, and T'Sas (2017) to query participants about skills related to media literacy. Specifically, we were interested in how confident the participants were at the time of this survey in their own media literacy skills and their ability to teach those skills to their future students. The survey was created so participants would rate themselves using a Likert scale that ranged from not confident to very confident. Due to the terms of our institutional review board, we were not able to identify the skills in relation to the participants' specific content area; however, we were able to report the data on a holistic level, and Table 3 shows our results.

Table 3
Percentage of Confidence in Media Literacy Competencies among Preservice Teachers

Prompt	Not Confident	Emerging Confidence	Somewhat Confident	Confident and very confident
Evaluation of news articles based on an understanding of media production and distribution (e.g. the sources used in an article, the tendency to appeal to target audiences)	0	0	14.8	85.2
Ability to find appropriate sources of information using a variety of media devices (e.g. search for information)	0	0	14.8	85.1
Conscious use of literacy strategies to interpret media messages (e.g. analyzing the language found in various media, analyzing the structure of a text/article/film/video)	0	3.7	14.8	81.5
Evaluation of media content taking into account various criteria (e.g.	0	0	16.7	80.4

accuracy of information, comparison of information, appreciation of aesthetic aspects)

Ability to communicate and present information using media (e.g. structure and adapt a presentation, publish media content through blogs, directories, YouTube)	0	3.7	20.4	75.9
Creation of media content (e.g. write a blog, create a photo or video document, write an article)	0	5.6	20.4	74.1
Interpretation of the effects of media on behavior (e.g. influence on purchasing behavior, influence on political beliefs)	0	5.6	22.2	72.2
Awareness of anti-social media behavior (e.g. copyright violations, illegal downloads, dangerous media behavior, sharing of misinformation or questionable information)	0	13	20.4	66.6
Ability to consciously choose between different media devices, based on their function (e.g. choosing to use a PC vs. a tablet vs. a smartphone)	1.9	1.9	29.6	66.3
Ability to use media devices in a technical sense (e.g. computers, projectors, tablets, smartphones, interactive whiteboards)	1.9	3.7	29.6	64.8
Participation in the public debate through media (e.g. participate in debates via social media, join social media groups that represent specific interests)	0	5.6	40.7	53.7
Interpretation of media content delivered on various web platforms based on knowledge of how media content is tailored to the target audience (e.g. personalized through cookies and algorithms)	3.7	13	31.5	51.8

To support our analysis, we combined the “Confident” and “Very Confident” columns together and then grouped them in bands of 10 percentage points, as connected to the “Confident and very confident” column. As the participant rated themselves highly in most categories, this tactic allowed us to make more nuanced analyses.

The participants identified their ability to evaluate media messages as their biggest strength. This evaluation extends from the interpretation of a message's content that includes the language used to convey it, the truthiness of the message itself, and its reliability. This evaluation also extends into the selection of online messages. As all messages have a slant, it is necessary to consider not only the source from where the message originated, but also the methods for which they were distributed and for whom they were targeted. Being able to evaluate these criteria when transacting with a media message is a part of the meaning making process.

Next, the participants identified being able to teach their future students how to create media messages as a strength. This finding is significant because students no longer mostly compose traditional essays and articles in secondary settings. Rather, they are creating infographics, vlogs, and multimedia presentations, which all include aspects of media literacy that paper-based documents do not contain (Buckingham, 2013; Hung, 2011). Participants were also keen about how media literacy has the potential to impact an individual's behavior and beliefs about a topic. These elements are interconnected in that the participants feel confident in teaching how to develop media messages and being able to influence a person's behavior due to the media messages themselves.

In the next two bands, the participants' confidence levels began to wane. The participants identified feeling less confident in differentiating when and why they should use specific devices. For example, being cognizant that many websites are still not optimized for mobile devices and the impact a non-optimized website may have on an individual's experience is significant, as that individual may not be able to access all the content on a website if she is using a smartphone. Moreover, websites may use specific software to play videos, which could limit mobile devices from accessing videos, with Flash Player being a prominent example. In the survey, the participants identified a lack of confidence in relationship to these more technical issues. The participants also identified that they do not have a deep understanding of what content can and cannot legally be used when creating their media message. Understanding copyright laws, royalty agreements, and the proliferation of misinformation are topics where the candidates expressed feeling less confident.

Finally, the participants rated themselves lowest on engaging in public debate through social media and understanding the technical attributes for how media messages target specific populations. These two areas represent very different aspects of media literacy. First, engaging in political discussions on social media platforms can be challenging because of the strong political opinions held by many individual users. Whereas the participants saw themselves as being able to teach how to create media messages, the act of engaging other individuals in a debate about a political topic is something that they did not feel confident teaching. Next, the participants were not at all confident in their understanding of the technical components for targeting messages to specific groups. For instance, a detailed understanding of how cookies are used to track websites individuals have visited and products they have viewed was not an area of confidence for these participants, nor was their understanding of the algorithms used by search engines

when reporting results. As the participants identified not having a deep understanding of the software used by websites and its impact on the way content is used across platforms from the previous band, it is logical that understanding these more sophisticated technical components – cookies and algorithms – is also not an area of strength.

Question #3: What types of text were selected to teach as media messages?

When analyzing the lesson plans, we were interested in the types of “media messages” the participants selected to use because we saw those messages as distinct texts. As the participants were enrolled in an instructional technology course and were studying how technology can be used to promote student learning, all the participants chose a type of digital text (though that was not a requirement of the assignment). In this context, *digital text* refers to the text being accessed on a device’s screen, not in a paper-based form. Because they were digital texts, they often incorporated multimodal attributes – verbal language, symbolic shapes, and audiovisual effects – in addition to traditional typed language (Janks, Dixon, Ferreira, Granville, & Newfield, 2014). As a result, one researcher first identified the main text type used in the lesson during the initial coding of the lesson plans and the second researcher confirmed it during her coding, and Table 4 shows those results.

Table 4
Text Types Selected by Participants

Text Structure	Art	ELA	Health - PE	Math	Music	Science	Social Studies	World Language	Total by Text Type
Articles		8		4	1	2	2	1	18
Advertisements	2	4	1	1	1		2	2	13
Websites		1				8	2	2	13
Video Clips		2	1			3			6
Music - Lyrics					5				5
Historical/ Cultural Documents							1	1	2
Social Media		1						1	2
Table/Graph				1		1			2
Artwork	1								1
Images		1							1
iOS Application			1						1
Literature		1							1
Propaganda							1		1

Articles comprised the biggest text type, and the availability of online articles accessed via digital newspapers were the most popular. As current event articles often embody media messages and have interdisciplinary connections (van Dijk, 1991), it is logical they were the most common text used because current events can be used in all disciplines. Generally speaking, the participants used the current event articles for pointing out a particular bias, perspective, or microaggression written into the article's text instead of the totality of the article's meaning. For example, one participant selected a line written into a news article as an example of a microaggression against women when the article was in fact positioned to support equal pay for women. In this way, the participant focused on a specific detail opposed to the article's main argument. Outside of using current event articles across content areas, the participants preparing to be ELA teachers were the group who most used articles.

The ELA participant group used the article text type most frequently, and they most commonly used it to develop their students' ability to critique literary works. They positioned the articles – pulled from sources such as Sparknotes and eNotes – to demonstrate how a piece of literature can be interpreted as a cultural artifact. For instance, the future ELA teachers would annotate the article to analyze the author's word choice and how it positioned the piece of literature as a critique of a topic. One example comes from eNotes analysis of Guy de Maupassant's *The Necklace*. The author of the article states Maupassant's own beliefs about women without providing any context, evidence, or sources for the statement. Though the author's statement may or may not be true, the participant used that unfounded section of the article as a place for teaching her students to "question the text" and then used additional sources to verify statements. In this example, the participant was teaching her students to identify statements that are unsupported and question them, which relates to the way the science PSTs used websites.

As websites were tied with advertisements as being the second most popular text type, they were used in a similar way as articles. Whereas the articles included all the information in one space, the article itself, the websites housed the information across their multiple webpages that comprised the website. In the participants' lessons that used websites, they often required students to view multiple webpages contained within one website for a particular purpose. For example, the participants preparing to be science teachers selected websites more than any other discipline, and they frequently used them for students to explore local issues. In the PNW, the handling of the wilderness is a frequent topic of debate. As a result, several participants prepared lessons that analyzed the impact of deforestation on the wolf population, and they required students to view a variety of websites to determine if each one supported responsible logging practices. Similar to how the ELA participants analyzed language to question an author, the science PSTs designed lessons for students to closely scrutinize the language, images, and audiovisual elements within a website to identify its position on the topic.

Next, advertisements differed from the use of articles and websites in that they took the form of commercials, sales announcements, or marketing materials and had the intention to sell a product or service. In lessons where participants used

advertisements, they most frequently based it on identifying a specific persuasive technique related to ethos, pathos, and logos. No one discipline used advertisements at significantly higher rates than another discipline, and the participants who did use advertisements did not look into online contests, sweepstakes, or giveaways as advertising techniques. Instead, they all stayed bound to digitized versions of more traditional promotional techniques, such as featuring a store's sale, vouchers to refinance loans, and efforts to recruit participants for an event.

YouTube videos were the fourth most popular text type, and they too were not selected at significantly higher rates by one discipline as compared to other disciplines. Though some advertisements could be from YouTube, they were not included in this category because they were trying to sell a product. The YouTube video clips that were included demonstrated a process and the remainder of the lesson students applied the information gleaned from the video to complete a task. One example is that students first viewed a YouTube video about energy transfer. Next, they were shown a series of videos about Perpetual Motion Machines and Free Energy Generators and how to critique the possibility of these machines and generators based on the law of conservation of energy.

At this point, the text types become more discipline specific. For example, the participants preparing to be music teachers all selected a piece of music for their lesson. (The one exception is the music participant who selected an advertisement as his text type and geared his lesson around the way music was used in the advertisement.) The historical/cultural text types were both digital representations of primary sources used to authentically represent the culture being studied. The math and science participants were the only ones who selected the table/graph text type in order to present quantitative data about a specific topic under study, and the remaining participants each chose a text type that was uniquely specific to their discipline (e.g., the art participant who selected a piece of artwork and the ELA participant who selected a piece of literature.) In all, it is clear that a variety of text types were selected, and many of the text types have connections to a specific content area.

Question #4: What commonalities do the lesson plans share? In response to this question, we open coded all the participants' lesson plans and then looked across those codes to identify themes. At this point, we analyzed themes and identified patterns within the lesson plans. However, due to the variety of potential themes and patterns we were identifying, we agreed that to substantiate a "commonality" in this context, it had to be identifiable in at least 80% of the lesson plans. With that aspect substantiated, it allowed us to operationalize two overarching themes: lesson plan design and use of questions.

First, most of the lesson plans developed by the participants followed a constructivist instructional model, in that they featured a media message listed in Table 4 and planned for students to analyze or make meaning of it in some way. For instance, one participant planned for students to view different advertisements and then complete an analysis of them in small groups. Another participant presented students with an article about overdraft fees charged by banks and had students respond to it via a think-pair-share activity. A third participant embedded articles for students to engage within a webquest. As students progressed through

the webquest, they kept an annotated bibliography of the articles before creating an infographic to express their stance on the issue. Of the lessons that did not position students to interpret a media message, a guided approach was most often used. In it, the teacher would model how to analyze the media message and slowly relinquished the authority to interpret the message to students.

The lesson plans did vary in the way they organized the activities. Some lessons opened with a schema activation activity, such as journaling about a topic. Other lessons began with a mini-lesson that featured the teacher providing information about an aspect of media literacy, which was commonly aligned to one of NAMLE's Core Principles. None of the lessons, however, were strictly teacher-centered with the teacher lecturing for long periods of time or the teacher being the individual doing the bulk of the interpretation. In this regard, the lessons were much more constructivist in nature in that students were transacting with the media messages to bring meaning to them in the context of the content-area lesson (Leu, Kinzer, Coiro, & Cammack, 2004). Yet, even with the teacher positioning students to be the meaning makers for the media messages they were working to interpret, the use of questions still allowed the participants to include their voice, values, and ideologies into the lessons.

As we coded the lessons, we quickly realized questions were the way the participants were able to express their viewpoints in the lesson. Though many of the questions were opened ended and used the words "how" and "what" to begin the questions, the principles or concepts that those questions addressed were often embedded with the participants' own implicit values, and a participant's lesson related to social media exemplify this phenomenon. In that lesson, the participant designed it around body images, and she provided her students with Instagram profiles of models who are highly "followed" individuals on that platform. In the lesson, the participant placed her students in small groups to analyze the profiles, and the example profiles included a white, female motorcyclist who had 29,800 followers; an African-American, full-bodied feminist who had 46,300 followers; and a slender, female model who accentuates Western standards for beauty and had 551,000 followers. After analyzing the profiles, the student groups were asked to respond to the following questions:

- How has social media affected your own life/perception?
- How can we remain body positive (after viewing the social media profiles)?

The first question is reflective in nature, with students being asked to consider how social media has influenced how they see themselves. Implicit in this question are that students are users of social media and allow it to impact their self-perception. The second question is also assumptive in that it positions students to be "positive" about body images. Whereas we as the researchers are ourselves supportive of this stance, the point is that the question has an implicit component in it that assumes students are or wish to be body positive and want to remain that way.

In another lesson, the teacher was concerned with how the media represents gender. To illustrate this point, the participant selected a variety of images that each

portrayed an individual with masculine or feminine characteristics. Some of the images represented a cis male wearing pinks and blues as part of his wardrobe, a cis female wearing overalls and carrying a hammer, and a non-binary person wearing a skirt with a sports coat. To support student interaction, the participant planned to facilitate a classroom conversation by asking:

- What is the difference between the misrepresentations (of the genders)?
- What is the impact on the males and females (in the images)?
- What is a real representation?

In the lesson, the participant was purposeful in selecting provocative images that she hoped would promote student interest. However, the participant used the questions as vehicles for expressing her own beliefs about gender. The participant was the individual who felt that the images portrayed the “misrepresentation” and did not affirm any “real representation” of the individuals’ genders captured in the images, not necessarily the students. Furthermore, the first question implies that there is a misrepresentation embedded within the image. Whether there is or is not a misrepresentation is questionable, as the lesson did not include any specific evidence from the persons being pictured that they were misrepresented. In this way, the participant was again leading her students to a specific outcome (e.g., that there was in fact misrepresentation happening, though evidence of misrepresentation was not included in the lesson.) Furthermore, the third question uses the word “real” to connote that the images presented something false or hollow, not something that is authentic or true. Again, there is no evidence that the images are false, and it is the participant using that question to lead her students to see it as a misrepresentation of the individual.

Conversely, other participants used the Center for Media Literacy’s (2005) “Five Key Questions of Media Literacy” to guide student thinking. Those questions are:

1. Who created this message?
2. What creative techniques are used to attract my attention?
3. How might different people understand this message differently than me?
4. What values, lifestyles and points of view are represented in, or omitted from, this message?
5. Why is this message being sent?

These questions are also open-ended and are designed for students to consider that media messages are constructed texts used for a specific purpose. As these questions can be applied across the content areas, the participants who are becoming teachers of all content areas were able to integrate them into their lessons. For instance, a participant planning to be a future ELA teacher used this question to guide student thinking about banned books. In that lesson, students read a school board’s decision for banning Kurt Vonnegut’s classic novel *Slaughterhouse Five* and then read Vonnegut’s letter he penned in response to that decision. After each reading – the initial decision and then the letter – the lesson asked students to

analyze the texts using these questions. Another participant who was a math PST used these questions as part of a statistics lesson.

In the math participant's statistic lesson, he first reviewed different types of data using the Australian Bureau of Statistics (2009) webpage. He then reviewed the "Five Key Questions of Media Literacy" as part of a mini-lesson that he planned to lead. The lesson then culminated in students selecting an article from a curated list provided by the participant. Students were instructed to read the article, identify the type of data being used in it, and then apply the "Five Key Questions of Media Literacy" to analyze the media message being put forward by the article using a graphic organizer. Students would share their thoughts in the next class period.

In all, it was clear that the participants' lessons were constructivist in nature, as the students were frequently the ones who were supposed to make meaning from the media messages. Very seldom did the lessons feature anyone but the students interpreting the media messages. Yet, at times, the questions themselves included the participants' own values, perceptions, and ideologies about the topic in an implicit manner.

IMPLICATIONS

There are multiple ways teacher educators can use this study's findings to improve their methods for preparing PSTs to address media literacy as part of their instruction. First, teacher educators can purposefully integrate the NAMLE's guiding principles for media literacy into their instruction. In this study, the participants were free to frame their lesson based on any of NAMLE's media literacy principles, and the first principle was selected at much higher rates than the other principles. Though further analysis regarding why the participants chose the first principle at such higher rates compared to the other principles is still needed, it is clear that an aspect of the first principle compared to the other principles was more appealing to the participants. For this reason, we suggest teacher educators take the time to deconstruct the principles by analyzing their keywords and operationalizing the meaning embedded within their keywords, similar to methods used by teacher educators when unpacking academic standards (Brown, 2007; Drost & Levine, 2015). By providing specific instruction with accompanying activities, it will build the PSTs' comfort levels across the different principles, which may help them better conceptualize the principles for curriculum development.

Second, teacher educators could consider using the PSTs' knowledge for evaluating media messages based on their source, appeal, aesthetics, accuracy, location online, language, structure, accuracy of information, and design. Furthermore, Table 4 shows that the PSTs in this study had a propensity for already selecting texts that were specific for their content area. Therefore, teacher educators have the opportunity to teach their PSTs advanced media literacy skills. Similar to how content-area literacy focuses on learning subject-specific information and disciplinary literacy engages that information at an expert level, with the intent of producing new knowledge on the topic (Shanahan & Shanahan, 2008), teacher educators can do the same with media literacy. With the participants already having

identified that they are comfortable evaluating media messages and selecting media messages text that are connected to their subject area, teacher educators can incorporate the analysis of media messages into content-area methods courses. For example, in a lesson on ratios, teacher educators can use a media message with a distorted visual element that appears either larger or smaller for a specific reason. Next, as a class, they could first apply the principles of ratios to mathematically analyze the distortion and then use the five media literacy questions (Center for Media Literacy, 2005) to unpack why the distortion was placed in the message and the overall effect it was intended to have. In this example, the media message is content specific and by applying the media literacy questions, students will be generating new knowledge related to the message.

Though the participants indicated feeling competent in using different devices to access media messages and being able to identify antisocial behavior online, they indicated having less confidence regarding actively participating in public debates on social media websites and how their online actions are tracked to personalize the content that appears on their screen. Furthermore, ISTE's substandard 2d (2018) under the Digital Citizen strand reads, "Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online" (para. 2). Based on this study's data, the participants were not prepared to teach that component to their future students. As such, we recommend that PSTs are explicitly taught about online privacy and tracking tactics used by websites to monitor their visitors and collect data from them. One idea for embedding this topic into an instructional technology course is to begin with a mini-lesson about what cookies are, what type of information they collect, and which websites use them. Next, teacher educators can have their PSTs log onto the websites they frequently visit and read those websites' privacy statements to identify the types of data they are consenting to being collected when visiting them. For example, the popular online retailer Amazon's (2018) privacy statement explains the following:

You might supply us with such information as your name, address, and phone numbers; credit card information; people to whom purchases have been shipped, including addresses and phone number; people (with addresses and phone numbers) listed in 1-Click settings; e-mail addresses of your friends and other people; content of reviews and e-mails to us; personal description and photograph in Your Profile; and financial information, including Social Security and driver's license numbers. (para. 14)

The PSTs could then log the website and type of information it records on a graphic organizer. In addition, teacher educators could further this assignment by seeing if they could find which entities the website may share the information it collects on its visitors with and for what reason. Returning to the previous example, PSTs may find on Amazon's (2018) sharing of customer information policy that states:

Information about our customers is an important part of our business, and we are not in the business of selling it to others. We share customer information only as described below and with subsidiaries Amazon.com, Inc. controls that either are subject to this Privacy Notice or follow practices at least as protective as those described in this Privacy Notice. (para. 5)

Teacher educators can then lead a discussion about not only their PSTs' opinions of the policies but also if they will change their online behavior because of them. Furthermore, as teacher educators direct their PSTs to websites for other purposes – such as Khan Academy (2018) for supplementary instructional videos, Newsela (2018) for accessing differentiated reading materials, or EdPuzzle (2018) for assessment purposes – they can pause the lesson and review the website's policies for collecting and sharing data on its users. This move would be purposeful as to develop their PSTs' habits of mind, or natural practices, to engage in these activities so they are informed when providing personal information to websites.

The topic for how or even if teacher educators should prepare their PSTs to engage in political debates over social media is challenging. In a poll conducted by the Pew Research Center (2018), 20% of respondents said they “have changed their views on a political or social issue based on something they saw on social media” (para. 1). In addition, according to Statista (2016), 74% of respondents saw social media as providing a vehicle for bringing new voices to political discussions. As such, there is a great deal of importance for teaching about active participation in debates regarding political topics, and this study's participants also identified that area as being an area for improvement. Due to multiple factors influencing if and how a person engages in an online discussion, we recommend using the media literacy questions (Center for Media Literacy, 2005) to analyze the messages in the discussion and decide if it is a safe discussion to engage. By using these questions, individuals should be able to ascertain the tenor, feel, and theme of the discussion. After identifying those elements, individuals can use their discretion whether they feel safe or not to share their thinking and if and when they get replies, they can again decide if they feel safe or not in continuing to participate in the discussion. With teacher educators repeatedly using the media literacy questions for a variety of purposes, it further cements their use as a transferrable “habit of mind” in that the teacher candidates are using those questions in a variety of contexts. As they transition from pre-service to in-service, the teachers will ideally continue using these habits of mind as the professionals in the classroom.

With constructivism and inquiry-based instruction continuing to gain popularity in the United States' EPPs and in public schools (Pedaste et al., 2015; Richardson, 1997), the use of questioning strategies has perhaps never been as important as it is and will continue to be. As Kincheloe and Tobin (2009) remind us, nothing is truly objective or apolitical. In this study, the participants' use of questions demonstrated that there were implications for using them as mechanisms for leading students to a certain outcome or point of view.

With analyzing media messages being a politically charged action, teacher educators must be mindful about teaching questions that could be perceived as leading students to a specific perspective, mindset, or opinion about a topic. Though

a question may start with “how” or “what” as a strategy for making it open ended, the contents of the question can still influence the answer. In this study, the participant who planned for her students to analyze the social media profiles did use open-ended questions; however, those questions were posed in such a way that informed student thinking. On the other hand, the participants who used the Center for Media Literacy’s (2005) “Five Key Questions of Media Literacy” tended to focus student thinking on a specific aspect of a media message without informing the responses to those questions.

Our recommendation is not to limit the use of teachers’ questions to only the Five Key Questions of Media Literacy; rather, we see those questions as being models that teacher educators can share with their PSTs. Next, PSTs can analyze those questions before comparing them to ones that may be considered leading and others that may not be considered leading. At the end of the activity, teacher educators can share a media message with their PSTs and then implement a think-pair-share activity, where they will first draft non-leading questions in response to the media message and discuss them in groups. The groups can then build consensus around questions that they identified as being non-leading and finally share them with the whole class.

Limitations of the Study

Though care was taken to minimize this study’s limitations, readers still need to consider how multiple elements may have influenced the findings. First, this study was situated in an urban university located in a major city in the PNW. As politics, beliefs, and media literacy are interconnected (Buckingham, 2013), readers need to be aware that the participants were part of a progressive education preparation program (EPP) and were taught a curriculum steeped in equitable practices. Furthermore, the participants were not asked to identify their political affiliations or beliefs. The EPP’s political context may have impacted the findings and is a limitation.

Next, the draft of the manuscript was open to all participants. However, only a limited number of participants chose to be part of the member checking process. Given that the participants were tending to multiple responsibilities – coursework, internship, personal commitments – their involvement, or lack thereof, is a limitation.

Finally, this study’s sample size can be seen as a limitation (Crouch & McKenzie, 2006). Ideally, this study would have included participants from a wide swath of EPPs, but that was not possible due to the lack of institutional funding and support for this work. As a result, we position this research as a descriptive case study bound to one group of participants (Baxter & Jack, 2008; Gerring, 2004; Merriam, 2009) who are completing their teacher EPP to become secondary teachers. Readers would be wise to generalize this study’s finding with caution, if wanting to apply them to their own context.

RECOMMENDATIONS FOR FUTURE RESEARCH

Based on this study, there are multiple opportunities to continue this line of inquiry. First, researchers would be wise to further analyze the types of questions that PSTs and in-service teachers use when developing their students' media literacy skills. Based on this study, it was clear that some participants included leading questions into their lessons, and it would be interesting to see if that trend was specific to the context of this study or extended to other EPPs and in public classroom settings. Second, it would be useful to replicate this study in a conservative context and compare those results against those of this study. Because this study's context was set in a liberal context and media literacy has political connotations, there is the potential that PSTs in a conservative context may design their lessons and use questions in a very different manner. By comparing the findings from the two studies, it may provide implications for teaching media literacy in varying contexts.

Third, as we are experiencing a transition from "digital immigrants" to "digital natives" joining the teaching force, replicating the survey component of this study would be useful. Specifically, it would be interesting to analyze if the PSTs who identified as "digital natives" as compared to those who identify as "digital immigrants" have a deeper understanding of cookies and how websites are optimized to be used across platforms. Finally, with media literacy having connections to politics, researchers would be wise to design and conduct qualitative studies to better understand PSTs' reluctance for engaging in political discussions online. Based on those studies, researchers could then recommend strategies for developing those abilities in PSTs and further investigate those methods' impact in an instructional setting.

CONCLUSION

Looking forward, we predict that media literacy will continue to gain traction and attention in educational settings. As prior research has already found that the integration of media literacy into the curriculum benefits students (Cheung & Xu, 2016; Draper et al., 2015; Redmond, 2015), this study specifically investigated both the skills PSTs self-identified regarding their own media literacy along with their ideas for integrating media literacy into their content-area instruction. Based on our findings, the PSTs were more confident in analyzing and communicating using the different technologies than engaging in political discussions online. Furthermore, the PSTs utilized NAMLE's guiding principles for media literacy to inform their lessons, though the way they posed questions were at times leading or contained embedded viewpoints based on the wording of the questions.

With the current technology initiatives taking place in public schools during an era of "fake news" and sensationalism, the intentional development of students' media literacy is a viable response. This set of skills will not only help succeed in post-secondary educational settings and then as professionals, but they will also support them as active, engaged citizens. To facilitate the integration of media literacy skills into the curriculum, PSTs need to be explicitly taught what media

literacy is, why it is important students are equipped with these skills upon completing their compulsory education, and how to blend those skills into their instruction. This study demonstrated the potential for that to happen within EPPs, and we conclude by calling on our fellow teacher educators to continue advocating for media literacy through their teaching, scholarship, and service to the field.

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APPENDIX A MEDIA LITERACY ASSIGNMENT

Media literacy is commonly thought of as “the ability to access, analyze, evaluate, create, and act using all forms of communication... [and it] is interdisciplinary by nature. Media literacy represents a necessary, inevitable, and realistic response to the complex, ever-changing electronic environment and communication cornucopia that surround us” (National Association of Media Literacy Education, 2017).

For this assignment, Candidates will craft a lesson that addresses a content-area standard and a Core Principle of Media Literacy Education. Candidates will be required to use the STEP-approved edTPA Lesson Plan Template.

Lesson Plan Essentials: The lesson plan used to teach the lesson is well crafted			
Exemplary (10 pts.)	Proficient (9.5 pts.)	Emerging (7 pts.)	Needs Improvement (3 pts.)
<p>The lesson plan includes the following:</p> <ul style="list-style-type: none"> • A clear objective • A central focus • Detailed instructional procedures • A clear beginning • A clear middle • A clear conclusion • Transitions between the lesson’s activities • An assessment of student learning • A list of all materials used during the lesson 	<p>The lesson plan includes all but one of the following:</p> <ul style="list-style-type: none"> • A clear objective • A central focus • Detailed instructional procedures • A clear beginning • A clear middle • A clear conclusion • Transitions between the lesson’s activities • An assessment of student learning • A list of all materials used during the lesson 	<p>The lesson plan includes all but two of the following:</p> <ul style="list-style-type: none"> • A clear objective • A central focus • Detailed instructional procedures • A clear beginning • A clear middle • A clear conclusion • Transitions between the lesson’s activities • An assessment of student learning • A list of all materials used during the lesson 	<p>The lesson plan is missing three or more of the following:</p> <ul style="list-style-type: none"> • A clear objective • A central focus • Detailed instructional procedures • A clear beginning • A clear middle • A clear conclusion • Transitions between the lesson’s activities • An assessment of student learning • A list of all materials used during the lesson
Disciplinary Media Literacy Connection: Commentary explains the connection between the lesson, content-area standard , & core principle .			
Exemplary (15 pts.)	Proficient (14.5 pts.)	Emerging (10 pts.)	Needs Improvement (5 pts.)
<p>In 200-500 words, a detailed analysis that explains how students engage the standard & principle is provided.</p>	<p>In 200-500 words, a general analysis that explains how students engage the standard & principle is provided.</p>	<p>In 200-500 words, a general analysis that explains how the standard & principle are part of this lesson, though discussion that explicitly comments how students engage them is omitted.</p>	<p>In 200-500 words, a disjointed analysis that attempts to explain how the standard & principle are part of this lesson, though discussion that explicitly comments how students engage them is omitted.</p>
Grade: __ / 25	Feedback:		

APPENDIX B

QUESTIONNAIRE ITEMS

Personal Competencies/Behaviors in the Field of Media Literacy

Prompt Stem: Please indicate how competent you are in each activity and how often you engage it.

1. Use of media devices in a technical sense (e.g. computer, projector, tablets, smartphone, interactive whiteboard).
I feel competent in this area:
Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
This is an activity in which I engage:
More than once per day, Once per day, Once per week, Less than once per week
2. Consciously choosing between different media devices, based on their function (e.g. computer, smartphone or tablet, navigate through hyperlinks).
I feel competent in this area:
Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
This is an activity in which I engage:
More than once per day, Once per day, Once per week, Less than once per week
3. Purposeful use of different sources of information and media devices (e.g. search for information using social network sites, the internet).
I feel competent in this area:
Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
This is an activity in which I engage:
More than once per day, Once per day, Once per week, Less than once per week
4. Conscious use of literacy strategies to interpret media messages (e.g. analyzing the language found in various media, analyzing the structure of a text/article/film/video/...).
I feel competent in this area:
Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
This is an activity in which I engage:
More than once per day, Once per day, Once per week, Less than once per week
5. Evaluation of news articles based on an understanding of media production and distribution (e.g. the sources used in an article, the filtering of news, the intersection between politics, media and democracy).
I feel competent in this area:
Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
This is an activity in which I engage:
More than once per day, Once per day, Once per week, Less than once per week
6. Interpretation of media content delivered to me based on knowledge of how media content is tailored to the target audience (e.g. selection possibilities, personalized on line offer through cookies, newspapers/television channels/websites and their target audience).
I feel competent in this area:
Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
This is an activity in which I engage:
More than once per day, Once per day, Once per week, Less than once per week
7. Evaluation of media content taking into account various criteria (e.g. accuracy of information, comparison of information, appreciation of aesthetic aspects).
I feel competent in this area:
Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
This is an activity in which I engage:
More than once per day, Once per day, Once per week, Less than once per week
8. Interpretation of the effects of media on my own behavior (e.g. influence on purchasing behavior, undesired effects such as hate or addiction).
I feel competent in this area:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

This is an activity in which I engage:

More than once per day, Once per day, Once per week, Less than once per week

9. Awareness when I engage in anti-social media behavior (e.g. copyright violations, illegal downloads, dangerous media behavior, sharing of misinformation or questionable information).

I feel competent in this area:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

This is an activity in which I engage:

More than once per day, Once per day, Once per week, Less than once per week

10. Creation of media content (e.g. write an article, create a photo or video document, set up a blog).

I feel competent in this area:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

This is an activity in which I engage:

More than once per day, Once per day, Once per week, Less than once per week

11. Communication and presentation contents using media (e.g. structure and adapt a presentation, publish media content through an appropriate channel such as blogs, directories, YouTube)

I feel competent in this area:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

This is an activity in which I engage:

More than once per day, Once per day, Once per week, Less than once per week

12. Participation in the public debate through media (e.g. show commitment using (social) media, contact organizations by email, reader reactions or social media).

I feel competent in this area:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

This is an activity in which I engage:

More than once per day, Once per day, Once per week, Less than once per week

Pedagogical-Didactical Competencies in the Field of Media Literacy

Prompt Stem: I can develop the following competencies in learners:

1. Use of media devices in a technical sense (e.g. computer, projector, tablets, smartphone, interactive whiteboard).

I feel competent teaching this skill to students:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

I believe this is an important skill to teach students:

Strongly agree, Agree, Disagree, Strongly disagree

2. Consciously choosing between different media devices, based on their function (e.g. computer, smartphone or tablet, navigate through hyperlinks).

I feel competent teaching this skill to students:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

I believe this is an important skill to teach students:

Strongly agree, Agree, Disagree, Strongly disagree

3. Purposeful use of different sources of information and media devices (e.g. search for information using social network sites, the internet).

I feel competent teaching this skill to students:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

I believe this is an important skill to teach students:

Strongly agree, Agree, Disagree, Strongly disagree

4. Conscious use of literacy strategies to interpret media messages (e.g. analyzing the language found in various media, analyzing the structure of a text/article/film/video/...).

I feel competent teaching this skill to students:

Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident

I believe this is an important skill to teach students:

Strongly agree, Agree, Disagree, Strongly disagree

5. Evaluation of news articles based on an understanding of media production and distribution (e.g. the sources used in an article, the filtering of news, the intersection between politics, media and democracy).
I feel competent teaching this skill to students:
 Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
I believe this is an important skill to teach students:
 Strongly agree, Agree, Disagree, Strongly disagree

6. Interpretation of media content delivered to me based on knowledge of how media content is tailored to the target audience (e.g. selection possibilities, personalized on line offer through cookies, newspapers/television channels/websites and their target audience).
I feel competent teaching this skill to students:
 Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
I believe this is an important skill to teach students:
 Strongly agree, Agree, Disagree, Strongly disagree

7. Evaluate media content taking into account various criteria (e.g. accuracy of information, comparison of information, appreciation of aesthetic aspects).
I feel competent teaching this skill to students:
 Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
I believe this is an important skill to teach students:
 Strongly agree, Agree, Disagree, Strongly disagree

8. Interpretation of the effects of media on my own behavior (e.g. influence on purchasing behavior, undesired effects such as hate or addiction).
I feel competent teaching this skill to students:
 Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
I believe this is an important skill to teach students:
 Strongly agree, Agree, Disagree, Strongly disagree

9. Awareness when I engage in anti-social media behavior (e.g. copyright violations, illegal downloads, dangerous media behavior, sharing of misinformation or questionable information).
I feel competent teaching this skill to students:
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I believe this is an important skill to teach students:
 Strongly agree, Agree, Disagree, Strongly disagree

10. Creation of media content (e.g. write an article, create a photo or video document, set up a blog).
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I believe this is an important skill to teach students:
 Strongly agree, Agree, Disagree, Strongly disagree

11. Communication and presentation contents using media (e.g. structure and adapt a presentation, publish media content through an appropriate channel such as blogs, directories, YouTube)
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 Strongly agree, Agree, Disagree, Strongly disagree

12. Participation in the public debate through media (e.g. show commitment using (social) media, contact organizations by email, reader reactions or social media).
I feel competent teaching this skill to students:
 Very Confident, Confident, Somewhat Confident, Emerging Confidence, Not Confident
I believe this is an important skill to teach students:
 Strongly agree, Agree, Disagree, Strongly disagree

Survey adapted from: M. Simons, W. Meeus & J. T'Sas. (2017). Measuring Media Literacy for Media Education: Development of a Questionnaire for Teachers' Competencies. *Journal of Media Literacy Education* 9(1), 99 – 115.