

Developing Digital Citizens

Media Literacy Education for ALL Students



Acknowledgments

This report was prepared for the DemocracyReady NY Coalition, a statewide, nonpartisan, intergenerational group that works collectively to advance the right of all New York students to graduate from high school prepared for civic participation. Its recommendations come out of nearly two years of research, analysis, and discussion by the DemocracyReady NY media literacy committee, a diverse group of Coalition members who are educators, researchers, and media professionals, as well as by the broader membership of the Coalition. We are especially grateful to media literacy committee members Jane Hatterer, Lisa Kissinger, Brett Levy, Ioana Literat, Thea MacFawn, and Kelly Wetherbee for their important contributions. We also thank Michelle Ciulla Lipkin, National Association for Media Literacy Education; Dr. Faith Rogow; Howard Schneider, Center for News Literacy, SUNY Stony Brook; Jaclyn Siegel, Media Literacy Now; and Chris Sperry, Project Look Sharp, Ithaca College, for their helpful input.

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About the DemocracyReady NY Coalition

DemocracyReady NY is a statewide, nonpartisan, intergenerational coalition of diverse organizations and individuals committed to preparing all students for civic participation. We mobilize students, parents, educators, researchers, advocates, legal experts, youth-development specialists, policymakers, and philanthropy to work collectively toward this goal. For more information about our membership and mission, please see our website, www.democracyreadyny.org.

About the Center for Educational Equity

The Center for Educational Equity (CEE) is a policy and research center at Teachers College, Columbia University. CEE champions children's right to a meaningful opportunity to graduate from high school prepared for college, careers, and civic participation. We work to define and secure the full range of resources, supports, and services necessary to guarantee this right to all children, particularly children in poverty and children of color.

For more information about the report, contact the authors at equity atc. columbia edu.

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Executive Summary

Preparing future generations to exercise their civic responsibilities is an essential purpose of schooling in the United States. In New York, and many other states, "preparation for civic participation" underlies students' right to education in the state constitution. Under this constitutional guarantee, schools must ensure all students gain the civic knowledge, skills, experiences, and dispositions to participate effectively in the civic life of their communities, their state, and the nation.

In the digital age, the internet has become the new public square. Youth and adults consume, create, and share news through digital media; they discuss and debate political, civic, and social issues online. Today, to be democracy ready, all students must be media literate.

To fulfill the state constitutional guarantee of "preparation for civic participation," schools must equitably prepare all students to understand, critique, and create media, particularly on civic issues. Media literacy—the "ability to access, analyze, evaluate, create, and act using all forms of communication"—must be a high priority in all schools.¹

This report from the DemocracyReady NY Coalition, a nonpartisan, intergenerational statewide partnership, offers recommendations to guide school officials, policymakers, and the public in advancing and improving media literacy education. In keeping with the Coalition's equity-centered mission, the report confronts systemic issues that stand in the way. We recommend that state education officials put a five-part MLE framework in place:

1. Clear state standards for media literacy

Many key media literacy skills and competencies are already incorporated in existing state standards across the curriculum. We recommend compiling these into clear, inclusive, cross-referenced P-12 media literacy standards based on a comprehensive, current definition of media literacy.

2. Qualified personnel for teaching media literacy

The responsibility for media literacy education must be shared among educators, including classroom teachers and library media specialists. We recommend all teachers receive targeted professional development in teaching media literacy. At the same time, all schools should be staffed with a library media specialist who can provide media literacy instruction for students at each grade level, as well as training for teachers across the curriculum.

3. Suitable MLE curricula and course offerings

Media literacy can be taught through strategies applied across the curriculum and as specific content that can be taught as a stand-alone subject. We recommend a hybrid approach to ensure all students receive sufficient media literacy instruction.

¹ This definition has been advanced by the National Association for Media Literacy Education (NAMLE) among others. See https://namle.net/publications/media-literacy-definitions/

4. Up-to-date facilities, instructional materials, and technology

Certain basic educational resources are essential for teaching media literacy. Each school must have a well-equipped, up-to-date library media center, which is a requirement under existing state law. All schools should also be equipped with up-to-date learning technologies and other "instrumentalities of learning," another current legal requirement.

5. Transparent monitoring and reporting of MLE resources and results

Due to a lack of basic information about whether and how media literacy education is taking place statewide, outside of a few exemplary districts and schools, a statewide survey should be undertaken to establish a baseline from which progress can be measured. There should be transparent monitoring and reporting on both resources and results.

Media literacy is essential for everyone in today's media-saturated world. Nearly all careers now require some level of media literacy. Media literacy is also vital for effective participation in civic life. Because of the link between media literacy and civic readiness, media literacy education is particularly important in a state like New York, where the state constitution guarantees all students the right to be prepared for productive civic participation and state education officials are committed to this goal.

Implementing the Coalition's recommendations will require thoughtful planning and, in some cases, additional resources. Nevertheless, all components of the framework are essential if our schools are to be able to prepare students equitably and adequately for civic participation in an era of multimedia, online communication. Schools must be equipped and educators need to be informed, empowered, and prepared to deploy curricula and instructional practices that motivate and enable all students to develop lifelong critical reasoning skills they can use to engage responsibly, civilly, and safely in "deliberative dialogue" online. In this way, New York will live up to its obligation to prepare our young people for the difficult terrain of civic responsibility in our digital age.

Introduction

Over 90% of young people go online daily—and youth spend an average of nearly 11 hours with media per day (Breakstone et al., 2019). The widespread use of digital media for information, communication, entertainment, and commerce presents both great opportunities and great challenges. The digital age has created opportunities for more young people to engage deeply with social and political issues (Kahne & Middaugh, 2012). Yet young people and adults alike must negotiate an online landscape where it is difficult to tell fact from fiction; where it is common to be exposed to and engage with only one side of an issue; and where it is easy to be distracted by media messages that prioritize physical appearance and consumerism over civic and other concerns. The sheer speed and amount of information exchanged deters fact checking, analysis, and deliberation. And most of us—including many educators—have been caught unprepared.

Two recent studies of "civic online reasoning" in a nationally representative sample of students illustrate some of the challenges our digital era poses to educators. In 2016 and 2019, researchers at Stanford University analyzed responses of U.S. students from middle school through college to tasks involving a range of online sources. They found most students struggled to evaluate video evidence, assess website information, check article sources, and validate social media claims. Middle school students mistook online ads for news stories. More than 50% of high school students "believed a grainy video claiming to show ballot stuffing in the 2016 Democratic primaries (the video was actually shot in Russia) constituted 'strong evidence' of voter fraud in the U.S. ... The vast majority of college students thought a website on employment policy was trustworthy even though it was actually run by a public relations firm" (Breakstone et al., 2019, pp. 3-4). Only 3% of the students demonstrated mastery on all of the tasks.

Preparing future generations for their civic responsibilities in a democratic society has been historically and is even more today an essential purpose of schooling in the United States. In New York, and many other states, "preparation for civic participation" underlies all students' right under the state constitution. Under this constitutional guarantee, schools must ensure all students gain the civic knowledge, skills, experiences, and dispositions to participate effectively in the civic life of their communities, their state, and the nation.

In the digital age, the internet has become the new public square. Youth and adults consume, create, and share news through digital media; they discuss and debate political, civic, and social issues online. Today, to be democracy ready, all students must be media literate.

To fulfill the state constitutional guarantee of "preparation for civic participation," schools must equitably prepare all students to understand, critique, and create media, particularly on

civic issues. Media literacy—the "ability to access, analyze, evaluate, create, and act using all forms of communication"—must be a high priority in all schools.²

According to recent research, many young people, despite being commonly characterized as "digital natives," lack a range of relevant media literacy skills (Kahne & Bowyer, 2019). Research also shows that media literacy education that promotes accurate judgment of truth claims does improve judgments of accuracy in reading online information (Kahne & Bowyer, 2016).

Some schools and school districts, particularly well-resourced ones, encourage teachers to integrate media literacy education across the curriculum, offer media literacy electives, and provide experiential learning activities; students are supported by library media specialists and the latest technological tools. But many do not.

Media literacy education and other important civic learning opportunities are lacking in many schools in the United States. And they are not equitably available across schools; students in poverty and students of color are less likely to get those opportunities (Kahne & Middaugh, 2008). A small pilot study of New York high schools by researchers from the Center for Educational Equity (CEE) described variation across schools in students' access to resources related to media literacy. Schools serving primarily students in poverty and students of color had fewer class discussions about internet safety and civility, library media centers, and library media specialists than schools serving primarily white and affluent students. There were similar variations in access to digital media and learning technologies (Wolff & Rogers, 2019). Lack of access to media literacy learning opportunities may be one factor contributing to the civic engagement gaps between socioeconomic and racial groups (Levinson, 2012).

Defining Media Literacy

The National Association for Media Literacy Education (NAMLE) and Media Literacy Now, national advocacy organizations for media literacy education, use "media literacy" as an umbrella term that covers digital literacy, information literacy, news literacy, visual literacy, and digital citizenship. To distinguish those terms, which are sometimes used as synonyms for media literacy, Media Literacy Now (n.d.) provides these helpful definitions:

- Digital literacy—being technically fluent and able "to make informed decisions about what we do and encounter online, recognize how networked technology affects our behavior and our perceptions, and create and effectively communicate with digital media tools." (Media Smarts)
- Information literacy—knowing "how to find, evaluate, and use information effectively to solve a particular problem or make a decision." (American Library Association)

² This definition has been advanced by the National Association for Media Literacy Education (NAMLE) among others. See https://namle.net/publications/media-literacy-definitions/

- News literacy—able to "discern verified information from spin, opinion and propaganda, and produce news accurately, fairly and responsibly." (News Literacy Project)
- Visual literacy—able to "find, interpret, evaluate, use, and create images and visual media such as: photographs, videos, illustrations, drawings, maps, diagrams, and advertisements." (American Library Association)
- Digital citizenship—understanding and following the "norms of safe and responsible technology use." (CyberwiseMedia)

In short, media literacy encompasses the knowledge and skills students need to use, share, and communicate in the many media in which they are immersed.

Media Literacy, Civic Readiness, and Students' Educational Rights

Because of the link between media literacy and civic readiness, media literacy education is particularly important in states like New York where the state constitution guarantees all students the right to be prepared for productive civic participation (*Campaign for Fiscal Equity (CFE) v. State of New York*, 2003), and state education officials are committed to this goal (New York State Education Department [NYSED], 2018). All schools must be properly equipped and educators informed, empowered, and prepared to enable all students to develop lifelong critical reasoning skills to engage responsibly, civilly, and safely in "deliberative dialogue" online.

In this report, we focus on media literacy for effective civic participation. In keeping with our rights-based, educational-equity-oriented approach, we seek systemic issues and solutions. As a foundation for this work, we surveyed the national media literacy education policy landscape, reviewed research on best practices, and undertook a detailed analysis of media literacy education policy and practice in New York State. We explored examples of media literacy education taking place in pockets of activity across the state. We also focused on equity issues and examined barriers to access to quality media literacy education. We offer information and recommendations to help guide school officials, policymakers, and the public concerned with equitably preparing all students to understand, critique, and create media, particularly on civic issues.

Advancing Media Literacy Education Policy and Practice

Motivated educators can go online and find an abundance of useful curriculum materials and classroom activities, trainings for teachers, and other important media literacy education tools from a range of respected sources.³ Yet, for policymakers and school officials seeking

³ See, e.g., the collection of resources provided by Media Literacy Now (https://medialiteracynow.org/resources/); the resources database appended to Huguet et al., 2019;

policies and practices that support systemic quality and equity in media literacy education, we found little guidance and few examples of laws, regulations, or detailed policy recommendations. This report seeks to fill those gaps and guide school officials and policymakers seeking to make effective media literacy education available in every school. We analyze existing state policy and practices, and explore opportunities to improve access to essential resources for quality media literacy teaching and learning.

New York State does not currently have in place explicit media literacy standards or specific requirements that media literacy education must be part of preschool, elementary, or secondary instruction in all schools. However, references to many of the competencies associated with media literacy are woven through various statutes, regulations, and standards. These partial and scattered media literacy items can form the basis for the development of a clear, cohesive media literacy framework.

Recognizing the comprehensive and integral nature of media literacy, we propose a five-part framework to help guide education officials and policymakers to improve media literacy learning opportunities for all students (see Appendix B). It includes recommendations for

- 1. Clear state standards for media literacy education
- 2. Qualified personnel for teaching media literacy
- 3. Suitable MLE curricula and course offerings
- 4. Up-to-date facilities, instructional materials, and technology
- 5. Transparent monitoring and reporting of MLE resources and results

In each section of the framework, we describe the strengths and weaknesses of New York's current policies, make specific recommendations for strengthening education law and regulations to advance media literacy education, and discuss the rationale behind the recommendations.⁴

Framework to Ensure Media Literacy Education (MLE) for All Students

1. Clear State Standards for Media Literacy

Clear media literacy strands in state learning standards set expectations that all students must develop strong media literacy skills and that all schools need to prioritize the development of such skills. In addition, learning standards that include media literacy can guide teachers, library media specialists, and others to ensure students develop fluency and skilled practices using current media and adapt easily to new media as they evolve.

and Appendix A of this report. For examples of free media literacy lessons and materials, see, e.g., Project Look Sharp (www.projectlooksharp.org).

⁴ Our recommendations consist of the most critical actions that must be taken immediately and "follow up" actions that need to be undertaken in the near future.

New York State has adopted learning standards that include expectations that students develop the skills and competencies associated with media literacy. However, these media literacy standards are woven throughout many content areas, including English language arts (ELA), social studies, library and information skills, the arts, and technology education. As a result, many educators lack a clear understanding of the state's expectations for media literacy and its emphasis varies significantly from school to school and classroom to classroom.

Recommendation

Immediate Actions

- Many key media literacy skills and competencies are already incorporated in existing state standards across the curriculum. The New York State Education Department (NYSED) should compile these into a coherent set of P-12 media literacy education standards based on a comprehensive, current definition of media literacy that includes internet civility and safety. These standards should serve as an overview of the state's interdisciplinary approach to media literacy education and emphasize the importance of media literacy for civic readiness.
- Content-area standards should be reviewed to ensure they capture the full range of skills and competencies research indicates is necessary for media literacy.
- Updated definitions of internet safety, civility, and responsibility and digital citizenship should be developed that address ongoing technological development and changes in the digital practices of youth.

Discussion

Many states have adopted specific learning standards related to information, digital, and media literacy. They are found under different headings, for example, educational technology, information and technology literacy, digital literacy, library media, and computers and technology. A growing number of states, including Connecticut, Michigan, North Carolina, and Washington State, have adopted or adapted a set of comprehensive standards for preparing students who are technology literate and fluent that were originally developed by the International Society for Technology in Education (ISTE). The ISTE standards include media and digital standards and are designed to prepare students "to thrive in a constantly evolving technological landscape . . . , empower student voice and ensure that learning is a student-driven process" (ISTE, n.d.).

While New York has not adopted specific media literacy standards, as noted above, attention to media literacy education is embedded in the state's learning standards across the

curriculum. To illustrate, we describe the MLE-related standards we found in each content area. (Additional details can be found in Appendix C.)

English Language Arts (ELA)

In 2017, the state adopted revised standards for ELA in grades P-12 that include important elements of media literacy education (NYSED, 2017a). Central to the changes was the recognition that students need to develop "advanced literacies," which are skills and capacities that enable them to communicate "in increasingly diverse ways and with increasingly diverse audiences" (Lesaux & Galloway, 2017, p. 1), and to understand and use text for a range of purposes. "Text" refers not only to printed material but also to digital media, speech, graphics, visual art, and video (see Table C1).

Students' reading experiences should encompass both print and digital media, and students should be able to comprehend and analyze how different formats affect the presentation of ideas. As writers, students should be able to use technology to gather information and to assess each source's credibility and accuracy. Further, they should be able to use technology and digital tools to convey information and ideas clearly and accurately. Speaking and listening standards also include the ability to evaluate information presented in multiple media and to incorporate digital media into presentations. Moreover, students are expected to be able to adapt rapidly to new media as they may arise.

Social Studies

A primary goal of social studies education in New York State is to produce civic competence. The Social Studies Framework offers learning standards and content specifications for grades K-12, and recommends using inquiry as a teaching method (NYSED, 2014).⁵ Two of the social studies skills to be developed are particularly relevant for media literacy: "Gathering, Interpreting and Using Evidence," and "Comparison and Contextualization" (see Table C2). In addition, content related to media literacy is specifically covered in grades 10 and 12. To bridge the framework and classroom practices, NYSED published a toolkit containing 84 "inquiries" or topics for student-driven investigation (NYSED, 2015). The ten principles underlying the toolkit include expectations that teachers will incorporate sources found on the internet and teach students how to assess their value and reliability. In addition, students should be provided with opportunities to practice engaged citizenship, and their actions should be based on understanding and assessment of information from multiple sources and perspectives.

Separate standards for literacy development in history/social studies in grades 6-12 stipulate blended teaching approaches that include attention to, and practice with, digital media in both reading and writing (NYSED, 2017c) (see Table C3). They also expect students to

⁵ The Social Studies Framework was published in two parts, K-8 and 9-12. See https://www.engageny.org/resource/new-york-state-k-12-social-studies-framework

gather information from multiple sources, including digital media, assess its credibility and accuracy, and use technology to collaborate and to produce and publish writing.

Science and Mathematics

The P-12 science standards cross-reference the ELA standards (NYSED, n.d.c.). Students are expected to use digital tools to analyze data and to produce and publish writings; to gather and evaluate information from digital and media sources; and to use multimedia/digital media as part of scientific presentations (see Table C4). A separate set of standards for literacy development in science in grades 6-12 reinforces these expectations (NYSED, 2017c) (see Table C2). The P-12 mathematics standards expect students to be able to use mathematical tools and information sources such as websites to pose or solve problems (NYSED, 2019) (see Table C5).

Computer Science and Digital Fluency

The New York State Board of Regents has provisionally approved draft K-12 standards for computer science and digital fluency, which includes digital literacy and digital citizenship (NYSED, 2020; see Table C6). The draft standards define digital literacy as "the ability to use digital technologies to create, research, communicate, collaborate, and share information and work" (p. 10), while digital citizenship is an aspect of digital literacy that comprises "understanding and acting in safe, ethical, legal, and positive ways in online environments" (p. 10). Elementary-level standards for digital citizenship include describing "cyberbullying and actions to take if cyberbullying is witnessed or experienced" (p. 54); secondary-level standards include designing and implementing "strategies that support safety and security of digital information, personal identity, property, and physical and mental health when operating in the digital world" (p. 54).

Career and Technical Education (CTE)

CTE instruction introduces students to career opportunities and requirements and helps them obtain technical skills, apply academic skills, and develop career-related behaviors. The Career Development and Occupational Studies (CDOS) standards, adopted in 2000, serve as the framework for CTE K-12 (NYSED, 2000). Two strands within the standards, Technology and Information Management, specifically involve media literacy components (see Table C7).

Separate standards for literacy development in technical subjects in grades 6-12 stipulate blended teaching approaches that include attention to, and practice with, digital media in both reading and writing (NYSED, 2017c) (see Table C2). They also expect students to be able to gather information from multiple sources, including digital media, assess its credibility and accuracy, and use technology such as the internet to collaborate and to produce and publish writing.

The Arts

Schools are required to teach the arts at the elementary, middle, and high school levels. Media arts were added to the New York Learning Standards for the Arts when they were updated in 2017 (NYSED, 2017) (see Table C8). The purpose of the standards is to "help students grow into artistically literate citizens, who achieve well-developed creative and aesthetic capacities, as well as robust critical thinking skills, and a broad base of communication skills" (NYSED, 2017b, p. 5).

Information Literacy/Digital Citizenship

The Empire State Information Fluency Continuum (ESIFC), developed by the School Library Systems Association of New York State, though not an official state document is a useful guide that is followed by many school library media specialists and classroom teachers (Stripling, 2019). The ESIFC comprises four anchor strands, two of which are particularly relevant (see Table C9). "Multiple Literacies" includes media literacy and "Social and Civic Responsibility" includes digital citizenship. "Information-fluent learners" are expected to be able to use "multimedia literacy skills and knowledge to deconstruct and learn from texts in multiple formats." As responsible citizens, students should also "recognize the importance of accurate information to a democratic society" and "actively seek, evaluate, learn from, and use credible information" drawn from diverse points of view. Finally, as responsible *digital* citizens, they need to respect intellectual property rights, demonstrate "cybersafety," and engage in positive online behavior, which includes avoiding the spread of misinformation.

In addition, federal and New York State law requires instruction in topics that fall under the heading of internet safety and civility, often referred to as digital citizenship.⁶ The state education department website links to third-party information and materials for teaching digital citizenship and cyberbullying prevention, although some of this content is several years old.

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⁶ The federal Children's Internet Protection Act (CIPA), 47 CFR § 54.520, requires schools receiving federal funding for internet access to educate students about appropriate online behavior, including social media use, and cyberbullying awareness and response. The New York State Dignity for All Students Act (DASA) prohibits all forms of discrimination or harassment, including cyberbullying, and requires instruction in safe and responsible use of the Internet and electronic communications. New York State Education Law § 814 (Courses of Study in Internet Safety) and Education Law § 801-A (Instruction in Civility, Citizenship and Character Education) also contain provisions related to teaching online safety and civility. Under § 814, the commissioner of education is required to assist districts to develop age-appropriate curricula to provide "awareness, skills, information and support" for safe internet usage, and to develop resources for students and families about protecting children from online predators, scams and cyberbullying. Under § 801-A, instruction in "civility" and "citizenship" must include safe, responsible use of the Internet and electronic communications.

To recap, New York's learning standards set expectations that media literacy be integrated throughout the curriculum. However, these detailed standards, guidelines, and suggestions are buried within so much other material that many teachers don't know about or follow them. Bringing New York's media literacy standards together into a coherent and concise set of clear media literacy standards would help educators and school officials make this important preparation a priority.

2. Qualified Personnel for Teaching Media Literacy

The most critical resource for media literacy education within schools is qualified personnel. Schools and districts must have a sufficient number of well-prepared educators to develop media literacy in all of their students. Educators need to be media literate themselves and able to integrate media literacy skills into instruction across the curriculum.

Most educators have not received sufficient, up-to-date media literacy training through their teacher education programs, nor have they had the opportunity for professional development in this area. In addition, because of shortages, many students and teachers cannot count on access to school library media specialists, the teaching professionals trained to impart media and information skills and strategies.

Recommendation

All schools and districts must have a sufficient number of well-prepared educators to develop media literacy in all of their students, including students learning English as a new language and students with disabilities.

Immediate Actions

- All schools should be staffed with certified school library media specialists in the
 ratios proposed by the New York Library Association. Any school with over 500
 students should have a full-time school library media specialist with additional library
 personnel added for schools with 1000 students or more.
- As part of schools' library media programs, school library media specialists should be expected to teach media literacy and support classroom teachers in teaching media literacy.
 - We recommend a two-year phase in period for the new school librarian requirements. During this time, districts requesting a waiver should be required to submit a plan for complying within the two-year timeframe. Waivers should be eliminated after the two-year phase in period.

- NYSED should disseminate information about these requirements to students, parents, administrators, and teachers, and it should monitor and report to the legislature on the implementation of these requirements.
- School districts should provide all teachers, including school library media specialists, with professional development related to media literacy education standards across the curriculum. School library media specialists should receive specific training in how to work with all teachers in their schools to integrate media literacy effectively into curriculum and instruction.
 - o The website of the state education department should provide media literacy education curriculum and teaching information and materials.
 - o Professional development on media literacy education must appropriately incorporate the principles and practices recommended by NYSED's Culturally Responsive-Sustaining (CR-S) Framework (n.d.a).

Follow-up Actions

- The current framework for teacher preparation should be revised to address the need for teachers to have adequate preparation in media literacy education and require coursework in media literacy as part of teacher certification requirements.
- The state should fund pilot projects to develop and provide effective MLE-focused pre-service training and professional development opportunities.

Discussion

Teacher Preparation and Professional Development

Technology and media are in a constant state of flux, and educators must be able not only to keep up with the fast pace of developments but also to support students' media, information, and digital literacy growth. Many students arrive at school with extensive "prior knowledge" of smartphones, social media, and videogames. Teacher preparation programs and ongoing professional development must stay current if educators are to possess the skills and knowledge to keep up with students' evolving capacities and help students navigate the vast amount of information to which they are exposed around the clock.

Teacher preparation, performance evaluation, and ongoing professional development are informed by the New York State Teaching Standards; these comprise knowledge and skills considered to be essential to effective teaching and to contribute to student learning and achievement (NYSED Office of Teaching Initiatives, 2011). Three of the seven standards point to the need for teachers to possess technology and information literacy, and to develop related skills in their students (see Appendix E).

Specific preparation in media literacy education that focuses on how students can effectively utilize the internet and social media, however, is not but should be required for future classroom teachers. Currently, all certified teachers are required to complete coursework that includes study of "communication, information retrieval, and instructional technology" (8 NYCRR § 80-3.7). All teacher education programs that lead to certification are required to instruct future teachers in the uses of instructional and assistive technology—and on how to teach students to use technology to "acquire information, communicate, and enhance learning" (8 NYCRR § 52.21).

Educators should receive ongoing professional development in media literacy. Once teachers achieve professional certification, they are required to complete 100 hours of professional development every five years (NYSED Office of Teaching Initiatives, n.d.).⁷ The only specific requirement is that 15 of these hours have an English as a New Language (ENL) component, regardless of the teacher's pedagogical area of expertise. School districts are required to provide a plan for delivering professional development in using instructional technology across all grades and areas of the curriculum K-12 in order to be eligible to receive state aid for technology purchases (8 NYCRR § 100.12). However, there is no mention of professional development for media literacy in the state's current requirements for professional development.

School Library Media Specialists

There are several specialized teaching certificates related to media literacy, namely educational technology specialist (all grades), school library media specialist (all grades), and technology education (all grades); each of these involves additional specialized pre-service training beyond what is required for classroom teachers. In particular, school library media specialist preparation programs develop knowledge and skills to teach information fluency to students and to collaborate with school faculty and administration in developing multiple student literacies.⁸

These days, school libraries are important sources not only of access to books but also to the full range of online information sources and media literacy skills students need for college, career, and civic readiness.⁹ The best school libraries reach every classroom and all students

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⁷ Teachers who achieved the relevant certification pre-2016 do not have to fulfill this requirement.

⁸ See for example the Master of Library Science, School Library Media Specialist program description for Queens College, CUNY,

https://sites.google.com/a/qc.cuny.edu/gslis/programs/master-of-library-science-school-library-media-specialist

⁹ Standards for information fluency adopted by the School Library Systems Association of New York State include media literacy, digital citizenship and civic responsibility. See https://slsanys.libguides.com/ifc/home?preview=430aaf7ac0b426db97cd7891cf4d7823

(New York State Regents Advisory Council on Libraries, n.d.). School library media specialists have the potential to provide media literacy instruction to students and to serve as a valuable source of support for classroom teachers. They can work with teachers to integrate media literacy effectively into curriculum development, curriculum, and instruction (Cohen, Poitras, Mickens, & Shirali, 2019).

The New York Library Association (NYLA) recommends all students have access to a certified school library media specialist (see Table 1). Numerous studies have shown the presence of a full-time, qualified school librarian in a school results in higher student achievement regardless of school demographics (Lance & Kachel, 2018). NYSED's own school library media program evaluation rubric requires the presence of a full-time, certified library media professional in order for a school to attain a "proficient" rating (NYSED, n.d.d). Because library media specialists are the "experts in the building" when it comes to information literacy and are often called on to collaborate with classroom teachers in literacy instruction, there is great potential to draw on librarians to educate both students and fellow faculty on the ever-changing landscape of media literacy.

The Commissioner's Regulations currently require all schools to have libraries (8 NYCRR § 91.1) and all school districts to employ a certified library media specialist (8 NYCRR § 91.2). Further, they require libraries in secondary schools (grades 7-12) to be staffed with a certified library media specialist (8 NYCRR § 91.2). Elementary schools, however, are not required to employ librarians, nor are charter schools (NYSED, School Library Services, n.d.).

Table 1. Current NYS and NYLA-Proposed Librarian Staffing Requirements

| Student Population | Current NYS Librarian NYLA Proposed Librarian | | |
|---------------------------|---|---------------------------------|--|
| | Staffing Requirement | Staffing Requirement (all | |
| | (secondary schools only) | schools) | |
| 1-100 | 1 school period | 0.15 FTE | |
| 101-300 | 2 school periods | 0.3 FTE | |
| 301-500 | 0.5 school day | 0.5 FTE | |
| 501-700 | 5 school periods | 1 FTE | |
| 701-1,000 | Full day | 1 FTE librarian plus 1 library | |
| | | clerk at 1000 students | |
| 2000+ | 1 FTE librarian plus 1 FTE | 2 FTE librarians plus 2 library | |
| | assistant certified librarian | clerks | |
| For each additional 1,000 | +1 FTE assistant certified | +1 FTE librarian plus 1 library | |
| | librarian | clerk | |

Sources: 8 NYCRR § 91.2; NYLA, n.d.a

Many schools in under-funded school districts throughout the state that predominately serve students in poverty and students of color currently have no librarian or inadequate numbers of librarians, even as required by the current regulations (NYLA, n.d.b). The statewide compliance rate in regard to library staffing requirements for secondary schools in 2018-19 was only 52.7% (NYLA, n.d.b). Compliance is particularly poor for secondary schools in

New York City (13%) and in the remaining Big 5 school districts (64%) (NYLA, n.d.b).¹⁰ Infractions of these regulations are rarely enforced. In addition, with the Commissioner's approval, the existing regulatory requirements can be waived (8 NYCRR § 91.2).

If existing regulations were applied to elementary schools, only 56% of high needs schools and 21% of schools located in large cities would have been in compliance in the 2018-19 school year (NYLA, n.d.b). Without librarians, it is difficult to imagine how elementary school libraries can fulfill even the rudimentary requirements of the law, never mind providing students and teachers access to up-to-date materials for teaching media literacy in a rapidly changing media, information and technology environment.

Quality media literacy education depends on all schools having qualified personnel. Through teacher preparation and professional development, educators should acquire the knowledge and skills needed to incorporate media literacy education throughout the curriculum and at all grade levels P-12. In addition, all students and teachers should have access to a certified school library media specialist, who is a teacher specially trained to impart information skills and media literacy strategies.

3. Suitable MLE Curricula and Course Offerings

With appropriate professional development, teachers across the curriculum and at every grade level can and should integrate media literacy instruction into their lessons. Library media specialists and technology education teachers can also provide direct media literacy instruction. In addition, student participation in hands-on experiential learning activities including using, producing, and sharing content in multiple media; mentorships and internships; video/audio production; and journalism can contribute to media literacy. And, yet, it appears many students across New York receive little or no media literacy education.

This is in part because the state has no specific requirements that schools provide media literacy instruction. Instructional time devoted to developing these important 21st-century skills and competencies varies dramatically from school to school, depending on fiscal resources and priorities.

Recommendation

All schools must provide suitable media literacy education through their curricula and course offerings.

¹⁰ The Big 5 school districts other than New York City are Buffalo, Rochester, Syracuse, and Yonkers.

Immediate Actions

- Districts and schools should support P-12 teachers across the curriculum in integrating media literacy education into their teaching practice.
- In grades 7 and 8, instruction in library and information skills and technology education is required for all students. Standards and requirements for this coursework should be revised as necessary to include relevant media literacy education skills and competencies explicitly.
- New guidance or regulations for media literacy education should incorporate the principles and practices recommended by NYSED's Culturally Responsive-Sustaining (CR-S) Education Framework (n.d.a). CR-S media literacy education curriculum and teaching information and instructional materials should be provided on NYSED's website.¹¹
- Districts and schools should ensure all students have access during school time to experiential learning activities—including, but not limited to, opportunities for students to use, produce, and share content in multiple media; mentorships and internships; and student video/audio production and journalism opportunities.

Follow-up Actions

- In its current process of reconsidering state graduation requirements, the Board of Regents should consider requiring a dedicated one-semester (half-unit) course in media literacy in ninth grade that reinforces and expands on P-8 instruction—and sets students up to be successful in high school. This course should be taught and evaluated by or in collaboration with a certified school library media specialist.
- The state must ensure that after-school experiential learning activities are equitably available to all students

Discussion

The course offerings and instructional time schools must, at a minimum, deliver across grade levels in various subject areas are set down in New York education law and the commissioner's regulations. While media literacy instruction is not explicitly required, the state's current requirements do provide opportunities for schools and districts to incorporate and strengthen media literacy instruction.

¹¹ Project Look Sharp, for example, offers lessons and activities for integrating media analysis into the teaching of core New York state standards in diverse subject areas and grade levels.

For example, the state requires all students to receive English language arts (ELA) and social studies instruction each year from K-12. Each of those content areas has strong learning standards building media literacy skills and competencies that are often neglected. In addition, in grades one through six, all students must receive instruction to help them master the learning standards, including media literacy standards, in technology and the arts (8 NYCRR § 100.2). School officials, educators, and parents should ensure children get this instruction.

In grades seven and eight, all students are required to receive the equivalent of 1¾ units of study in "technology education, family and consumer sciences, trade and technical subjects, business, agriculture, and/or health sciences" taught by teachers certified in those subjects (8 NYCRR § 100.4). Students are required to receive instruction in library and information skills equivalent to one period per week, "taught by library media specialists and classroom teachers to ensure coordination and integration of library instruction with classroom instruction" (8 NYCRR § 100.4). Students are also required to receive a half unit of study in the visual arts in grades seven and eight; the visual arts can include media arts (8 NYCRR § 100.4). These requirements, in spite of their potential as forums to advance media literacy, have been widely ignored.

At the high school level, districts must offer students opportunities to meet the technology learning standards (8 NYCRR § 100.5), and to complete a three- or five-credit sequence in CTE or the arts (8 NYCRR § 100.2). A Regents diploma also requires one credit in the arts, which can be fulfilled by a course in media arts (8 NYCRR § 100.5).

We weighed the two basic approaches to media literacy education, (1) through strategies integrated across the curriculum and (2) as specific content taught as a stand-alone course or as a strand within a specific content area (see Huguet et al., 2019). Because both are valuable, we recommend a hybrid approach: All teachers should be trained to integrate media literacy education into instruction across the curriculum in grades P-12. In addition, media literacy instruction should explicitly be included in already required coursework in library and information skills and technology education in grades 7 and 8. Finally, students would benefit greatly from a stand-alone MLE course in the ninth grade that reinforces and expands on P-8 instruction and prepares students for high school success.

4. Up-to-Date Facilities, Instructional Materials, and Technology

Today's P-12 students increasingly access media online using interactive digital technology. Almost 90% of U.S. teens have smartphones (Knutson, 2018), and nearly all children aged eight and under live in a home with a mobile device (Oh, 2017). Close to 75% of teens consume social media at least daily (Knutson, 2018) while over half get their news at least several times a week from social media platforms (Common Sense Media, 2019). For educators, this means having access to up-to-date instructional materials and educational technology is essential for providing media literacy education that relates to the ways in which children and youth currently access information and connect to the broader world.

Recommendation

All schools must have suitable facilities and instructional materials, including up-to date learning technologies for media literacy education.

Immediate Actions

- All schools, elementary and secondary, must have well-equipped, up-to-date library media centers, as required by law.
- All schools must have appropriate instrumentalities of learning, including learning technologies.
- The state education department should monitor and report on implementation of these requirements and disseminate information about them to students and parents, educators, and school district administrators. 12

Follow-up Actions

- The commissioner should update regulations on required minimum library holdings per student at the various grade levels.
- NYSED should adopt its School Library Media Program Evaluation rubric (NYSED, n.d.d), currently a voluntary, self-assessment tool, to assess, monitor, and report on program quality in every school.
- All schools should be adequately staffed with educational technology specialists to provide training, technical assistance, and technical support and to maintain functional up-to-date learning technologies that meet students' needs. All districts should provide a sufficient number of educational technology specialists to support every school.

Discussion

New York State has recognized the need for schools to respond as educational requirements change. All New York schools are required to provide the suitable facilities and up-to-date "instrumentalities of learning," that is, textbooks, classroom supplies, and educational technology essential for students to meet state learning standards (100 N.Y. 2d 893, 913 (2003)). Critical for media literacy education, all schools, elementary and secondary, must have well-equipped, up-to-date library media centers (8 NYCRR § 91.1). The state has developed a voluntary self-assessment tool that can be used to evaluate whether the facilities, educational technology, and learning materials found in a school's library are sufficient to help students achieve state learning standards (NYSED, n.d.d).

¹² For resource accountability strategies for New York State, see Wolff, Rebell, and Rogers, 2016.

Nowhere in our society does the pace of change seem greater than in the area of technology. The Statewide Learning Technology Plan (NYSED, 2010) promises students will be able to access transformative learning technologies as well as learning materials in a range of electronic formats. School districts are required to submit a technology plan every three years (8 NYCRR § 100.12). Plans must identify three technology goals aligned with the state's instructional technology goals, supported by an action plan, a professional development plan, and a plan to measure progress. In addition, plans must show how districts will use technology to meet academic standards, serve students with disabilities and ENL students, and facilitate culturally responsive instruction.

To help ensure students and teachers have access to online and digital media resources, many schools employ teachers certified in technology education, as well as educational technology specialists. However, the state has no requirement that schools employ such personnel and many under-funded schools lack adequate technology specialists. Educational technology specialists could provide training, technical assistance, and technical support to classroom teachers and library media specialists and maintain functional, up-to-date learning technologies.

Many students, parents, educators, and administrators are unaware of requirements for libraries, instructional materials, and educational technology. While the state collects related data that could be used to monitor compliance (for example, whether or not a school maintains a library), these data are not published. It is conceivable that many schools in under-funded districts throughout the state, districts that serve predominately students in poverty and students of color, fail to meet basic requirements for "instrumentalities of learning," never mind staying abreast of the changing media habits of youth and the rapid pace of technological developments.

5. Transparent Monitoring and Reporting of MLE Resources and Results

Media literacy education strands run through New York's learning standards in subjects ranging from science and social studies to the arts. This means media literacy education should be happening in P-12 classrooms in every school, but, in fact, no one knows the actual state of media literacy education in New York schools. In spite of the recognition of the importance of media literacy among policymakers, educators, and parents, no information is collected that would tell how much and what kind of media literacy instruction is occurring in schools and classrooms.

Recommendation

The state education department needs to develop a baseline understanding and system for ongoing monitoring of implementation, quality, equity, and adequacy of media literacy teaching and learning.

Immediate Actions

- For a baseline understanding, NYSED should conduct a survey that requires each school district to report on MLE teaching and learning in all of its schools.
 - The survey should collect information about staffing levels; teacher training; instructional practices, time, and course offerings; experiential learning opportunities; instructional materials and technologies; school libraries, and assessment of student competencies. Survey results should be verified through an independent study of a representative sample of schools.

Follow-up Actions

- The state education department should monitor and report on these indicators on an ongoing basis, conducting an analysis of adequacy and equity, for example,
 - O Districts should report on teachers' and students' access to and use of learning technologies for MLE as part of their required technology plans.
 - O Districts should report on access to professional development (PD) for MLE as part of their required PD plans.
- Districts should establish mechanisms for MLE implementation oversight, monitoring, and reporting.
- Each school should establish a MLE committee that includes school librarians, education technology specialists, teachers, parents, and (in high schools) students to oversee MLE implementation and monitoring.
- The state education department should ensure media literacy skills and competencies are integrated into state assessments and capstone project requirements.

Discussion

Some classroom teachers, library media specialists, and nonprofit organizations carry out innovative, effective media literacy education practices. In New York, for example, Northport High School on Long Island has, since 2011, offered a news literacy class to fulfill the requirements for the mandatory Participation in Government course, using curricula developed by the Center for News Literacy at Stony Brook University (Berdick, 2016). Also in partnership with Stony Brook, middle school students at I.S. 303 in Brooklyn receive weekly news literacy lessons as a part of their English language arts classes. Ithaca College's media literacy initiative, Project Look Sharp, coaches teachers in Ithaca, NY, and provides

free K-12 media literacy curriculum materials and professional development across the curriculum in accordance with Common Core standards for educators across the country.¹³

How much media literacy education are New York students receiving on average? How effective is the instruction? How equitable is access? How well do schools meet the learning needs of different subgroups of students? How many students graduate from high school able to "access, analyze, evaluate, create, and act using all forms of communication" (NAMLE, n.d.)? The state and districts need to be able to answer these questions to develop media literate students.

As a first step, the state education department should initiate a statewide survey of school districts to determine the current state of media literacy instruction in New York State. Such a survey should determine, for example, how many schools are teaching media literacy, how many actually have library media specialists, what training teachers have, what curricula they are using, what experiential learning opportunities they provide, and whether all students have access to sufficient and appropriate instruction, as well as access to school libraries and technology. Finally, we need to know whether students are developing the competencies associated with media literacy, which could involve incorporating media literacy skills into required state tests and capstone projects. Once a baseline is established, the state needs to put a system in place to collect data that will facilitate monitoring of implementation, quality, equity, and adequacy of media literacy teaching and learning on an ongoing basis.

Conclusion

In the digital age, it has become easier to create and consume media. At the same time, it has become more difficult to ascertain who created something, why they made it, and whether it is accurate. Young people, who are getting more and more of their information and news online and through social media, are particularly vulnerable to deception. This can jeopardize the health and safety of our young people and their families, and it puts the health and safety of our democracy at risk.

Media literacy is essential for everyone in today's media-saturated world. Nearly all careers now require some level of media literacy. Media literacy is also vital for effective participation in civic life. Because of the link between media literacy and civic readiness, media literacy education is particularly important in a state like New York, where the state constitution guarantees all students the right to be prepared for productive civic participation and state education officials are committed to this goal.

The DemocracyReady NY Coalition offers in this report a framework of recommendations to help guide school officials, policymakers, and the public in advancing media literacy education in all schools throughout the state. Because we take a comprehensive approach,

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¹³ See https://www.projectlooksharp.org/?action=commoncore

our recommendations encompass five areas integral to media literacy instruction: clear state standards for media literacy; qualified personnel for teaching media literacy; suitable curricula and course offerings; up-to-date facilities, instructional materials, and technology; and transparent monitoring and reporting of media literacy resources and outcomes.

1. Clear state standards for media literacy education

Many key media literacy skills and competencies are already incorporated in existing state standards across the curriculum. We recommend compiling these into clear, inclusive, cross-referenced P-12 media literacy standards based on a comprehensive, current definition of media literacy.

2. Qualified personnel for teaching media literacy

The responsibility for media literacy education must be shared among educators, including classroom teachers and library media specialists. We recommend all teachers receive targeted professional development in teaching media literacy. At the same time, we recommend all schools be staffed with a library media specialist who can provide media literacy instruction for students at each grade level, as well as training for teachers across the curriculum.

3. Suitable MLE curricula and course offerings

Media literacy can be taught through strategies applied across the curriculum and as specific content that can be taught as a stand-alone subject. We recommend a hybrid approach to ensure all students receive sufficient media literacy instruction.

4. Up-to-date facilities, instructional materials, and technology

Certain basic educational resources are essential for teaching media literacy. Each school must have a well-equipped, up-to-date library media center, which is a requirement under existing law. All schools should also be equipped with up-to-date learning technologies and other "instrumentalities of learning," another current legal requirement.

5. Transparent monitoring and reporting of MLE resources and results

Due to a lack of basic information about whether and how media literacy education is taking place statewide, outside of a few exemplary districts and schools, we recommend a statewide survey to establish a baseline from which progress can be measured. There should be transparent monitoring and reporting on both resources and results.

Implementing these recommendations will require thoughtful planning and, in some cases, additional resources. Nevertheless, we contend that all components of the framework are essential if our schools are equitably and adequately to able to prepare students for civic participation in an era of multimedia, online communication.

Schools must be equipped and educators need to be informed, empowered, and prepared to deploy curricula and instructional practices that motivate and enable all students to develop lifelong critical reasoning skills they can use to engage responsibly, civilly, and safely in "deliberative dialogue" online. In this way, New York State will live up to its obligation to prepare our young people for the difficult terrain of civic responsibility in our digital age.

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Appendix A. Selection of Sources of MLE Information and Materials

Many organizations have produced information and materials to support media literacy education in elementary and secondary schools. While we do not endorse any of these resources, we offer this selection to provide readers a sense of what is available for educators.

- Media Literacy Now has published a scope and sequence for a comprehensive media literacy curriculum (Quartuch & Lare, 2018). It is intended for use by advocates to demonstrate to policymakers what a K-12 media literacy program might look like.
- The News Literacy Project has lesson plans, archived webinars and a digital platform called Checkology® that can be used in classrooms. Their weekly newsletter, *The Sift*, provides updates on "teachable moments" related to news literacy. See https://newslit.org
- Newseum ED has infographics for classroom use as well as lessons plans. See https://newseumed.org
- Facing History and Ourselves partnered with the News Literacy Project to create a
 unit on media literacy called "Facing Ferguson" that is appropriate for high school
 students. See https://www.facinghistory.org/resource-library?search=facing%20ferguson
- The Media and Social Change Lab (MASCLab) at Teachers College, Columbia University has developed LAMBOOZLED!, a card game for teaching media literacy. https://www.lamboozled.com/
- The American Press Institute has activities and lesson plans for all ages. See https://www.americanpressinstitute.org/youth-news-literacy/resources/news-literacy-curriculum/
- Edutopia has vetted nine short videos on news literacy. See https://www.edutopia.org/blog/film-festival-news-media-literacy
- Stanford History Education Group (SHEG) has launched a Civic Online Reasoning Platform to help students learn to reason and assess online materials. See https://cor.stanford.edu. It has also produced a Civic Online Reasoning curriculum; see https://cor.stanford.edu/curriculum/
- iCivics has created a module to empower students in news literacy skills. See https://www.icivics.org/node/2512908
- PBSKids has created an interactive, animated series for young children focusing on topics such as internet safety. https://pbskids.org/fetch/ruff/
- PBS News Hour has developed a lesson plan related to news literacy with relevant links to related issues. See https://www.pbs.org/newshour/extra/lessons-plans/lesson-plan-how-to-teach-your-students-about-fake-news/
- Facticious is an online game to test if players can detect fake news from real news. See http://factitious.augamestudio.com/#/

- The Digital Resource Center of Stony Brook University's Center for News Literacy has a full curriculum around news literacy free to educators. See https://digitalresource.center/portalone
- The Journalism Education Association has developed a series of free lesson plans for teaching news literacy in high school. http://jea.org/wp/blog/2013/07/24/lesson-plan-understanding-news-literacy/
- Crash Course Media offers a series of YouTube videos on a broad range of topics related to the media and media literacy,
 https://www.youtube.com/playlist?list=PL8dPuuaLjXtM6jSpzb5gMNsx9kdmqBfmY
- KQED Teach offers free online professional development for educators focused on teaching digital media creation and critical media use, leading to becoming a PBS Certified Media Literacy Educator. https://teach.kqed.org/courses
- ReadWriteThink offers over 250 media literacy lesson plans for elementary and secondary classrooms.
 http://www.readwritethink.org/search/?resource_type=6&type=8&learning_objective=29&sort_order=views
- BrainPop provides lesson plans for teaching digital citizenship. https://educators.brainpop.com/bp-topic/media-literacy/
- Med!aLit moments is a set of 27 media literacy activities created by the Center for Media Literacy. http://www.medialit.org/lesson-plans-and-activity-archive
- Google has partnered with iKeepSafe to create an online, interactive game for teaching fundamentals of digital citizenship and safety in grades K-8. https://beinternetawesome.withgoogle.com/en_us
- Mozilla's web literacy portal includes activities and tools for teaching how to read, write and participate on the internet. https://learning.mozilla.org/en-US/web-literacy
- UNESCO has created a handbook with sample media literacy education curricula, examples, exercises, and strategies for teachers. https://unesdoc.unesco.org/ark:/48223/pf0000149278
- Well-known teacher training programs include the Media Education Lab at the
 University of Rhode Island and Project Look Sharp at Ithaca College. In addition, the
 National Council of Teachers of English, the National Council for Social Studies, and
 the American Library Association support media literacy education programs by
 sharing best practices and evidence-based approaches through training programs and
 conference

Appendix B. Framework to Ensure Media Literacy Education for All Students

| Recommendation | Immediate Actions |
|--|---|
| 1. Clear Standards for Media Literacy | Many key media literacy skills and competencies are already incorporated in existing state standards across the curriculum The New York State Education Department (NYSED) should compile these into a clear, coherent set of P-12 media literacy education standards based on a |
| | comprehensive, current definition of media literacy that includes internet civility and safety. These standards should serve as an overview of the state's interdisciplinary approach to media literacy education and emphasize the importance of media literacy for civic readiness. |
| | • Content-area standards should be reviewed to ensure they capture the full range of skills and competencies research indicates is necessary for media literacy. |
| | Updated definitions of internet safety, civility, and responsibility and digital citizenship should be developed that address ongoing technological development and changes in the digital practices of youth. |
| | |

| | Literacy | Recommendation 2. Qualified Personnel |
|---|--|---|
| We recommend a two-year phase in period for the new school librarian requirements. During this time, districts requesting a waiver should be required to submit a plan for complying within the two-year timeframe. Waivers should be eliminated after the two-year phase in period. The state education department should disseminate information about these | their students, including students learning English as a new language and students with disabilities. • All schools should be staffed with certified school library media specialists in the ratios proposed by the New York Library Association. Any school with over 500 students should have a full-time school library media specialist with additional library personnel added for schools with 1000 students or more. • As part of schools' library media programs, school library media specialists should be expected to teach media literacy and support classroom teachers in teaching media literacy. | Immediate Actions All schools and districts must have a sufficient number of |
| | revised address the need for teachers to have adequate preparation in media literacy education and require coursework in media literacy as part of teacher certification requirements. The state should fund pilot projects to develop and provide effective MLE-focused pre-service training and professional development opportunities. | The current framework for |

| | | | Qualified Personnel, cont'd. |
|--|--|--|---|
| o Professional development on media literacy education must appropriately incorporate the principles and practices recommended by NYSED's Culturally Responsive-Sustaining (CR-S) Framework (n.d.a). | o The website of the state education department should provide media literacy education curriculum and teaching information and materials. | • School districts should provide all teachers, including library media specialists, with professional development related to media literacy education standards across the curriculum. School library media specialists should receive specific training in how to work with all teachers in their schools to integrate media literacy effectively into curriculum and instruction. | requirements to students, parents, administrators, and teachers, and it should monitor and report to the legislature on the implementation of these requirements. |
| | | | |

| Recommendation | Immediate Actions | Follow-up Actions |
|---|--|--|
| 3. Suitable MLE Curricula and Courses | All schools must provide suitable media literacy education through their curricula and course offerings. | In its current process of reconsidering state graduation requirements, the Board of Regents |
| | • Districts and schools should support P-12 teachers across the curriculum in integrating media literacy education into their teaching practice. | should consider requiring a dedicated one-semester (half-unit) course in media literacy in ninth |
| | • In grades 7 and 8, instruction in library and information skills and technology education is required for all students. Standards and requirements for this coursework should be | on P-8 instruction—and sets students up to be successful in high school. This course should be |
| | revised as necessary to include relevant media literacy education skills and competencies explicitly. | taught and evaluated by or in collaboration with a certified school library media specialist. |
| | New guidance or regulations for media literacy education should incorporate the principles and practices recommended by NYSED's Culturally Responsive- Sustaining (CR-S) Education Framework (n.d.a). CR-S media literacy education curriculum and teaching resources should | The state must ensure that after- school experiential learning activities are equitably available to all students. |
| | Districts and schools should ensure all students have access during school time to experiential learning activities including, but not limited to, opportunities for students to use, produce, and share content in multiple media; | |
| | mentorships and internships; and student video/audio production and journalism opportunities. | |

¹⁴ Project Look Sharp at Ithaca College, for example, offers lessons and activities developed in New York State for integrating media analysis into the teaching of core standards in diverse subject areas and grade levels.

| | 4. Up-to-Date Facilities, Instructional Materials, and Technology | Recommendation |
|--|---|-------------------|
| • The state education department should monitor and report on implementation of these requirements and disseminate information about them to students and parents, educators, and school district administrators. | All schools must have suitable facilities and instructional materials, including up-to date learning technologies for media literacy education. • All schools, elementary and secondary, must have well-equipped, up-to-date library media centers, as required by law. • All schools must have appropriate instrumentalities of learning, including learning technologies. | Immediate Actions |
| • | • • | Fo |
| All schools should be adequately staffed with educational technology specialists to provide training, technical assistance, and technical support and to maintain functional up-to-date learning technologies that meet students' needs. All districts should provide a sufficient number of educational technology specialists to support every school. | The commissioner should update regulations on required minimum library holdings per student at the various grade levels. NYSED should adopt its School Library Media Program Evaluation rubric (NYSED, n.d.d), currently a voluntary, self-assessment tool, to assess, monitor, and report on program quality in every school. | Follow-up Actions |

| Recommendation | Immediate Actions | Follow-up Actions |
|--|--|---|
| 5. Transparent Monitoring and Reporting of MLE Resources and Results | The state education department needs to develop a baseline understanding and system for ongoing monitoring of implementation, quality, equity, and adequacy of media literacy teaching and learning. | The state education department should monitor and report on these indicators on an ongoing basis, conducting an analysis of adequacy and equity, for example, |
| | • For a baseline understanding, the state education department should conduct a survey that requires each school district to report on MLE teaching and learning in all of its schools. | Districts should report on teachers' and students' access to and use of learning technologies for MLE as part of their required technology plans. Districts should report on access to professional development (PD) for MLE as part of their required PD plans. |
| | The survey should collect information about staffing levels; teacher training; instructional practices, time, | Districts should establish mechanisms for MLE implementation oversight, monitoring, and reporting. |
| | and course offerings; experiential learning opportunities; instructional materials and technologies; | • Each school should establish a MLE committee that includes school librarians, education technology specialists, teachers, parents, and (in high schools) students to oversee MLE |
| | school libraries, and assessment of student competencies. Results should | implementation and monitoring. The state education department should ensure |
| | independent study of a representative sample of schools. | integrated into state assessments and capstone project requirements. |

Appendix C. Media Literacy in the New York State Learning Standards

The knowledge, skills, and competencies associated with media literacy are woven through New York State learning standards covering multiple subject areas. Below is a snapshot of media literacy strands within current or draft standards for teaching English language arts (ELA) (Table C1), social studies (Table C2), literacy through subjects besides ELA (Table C3), science (Table C4), mathematics (Table C5), computer science/digital fluency (Table C6), career and technical education (Table C7), the arts (Table C8), and information literacy/digital citizenship (Table C9). In each table, we present definitions and high-level standards related to media literacy education for each of these areas of instruction; in all cases, additional details can be found in the relevant standards document. Compiling these disparate standards into a clear, coherent set of P-12 media literacy education standards would help ensure that classroom teachers incorporate media literacy instruction throughout the curriculum.

Table C1. Media Literacy in Next Generation English Language Arts Learning Standards

From the Introduction:

- "What counts as literate" in today's "knowledge-based economy and information age" is called "advanced literacies" defined as "skills and competencies that enable communication, spoken and written, in increasingly diverse ways and with increasingly diverse audiences" (pp. 2-3). Advanced literacies include the ability to use and understand text "for a variety of purposes," which prepare students for "participation in academic, civic, and professional communities" (p. 3).
- References to "text" in the standards encompass "far more than printed material" and also include "speech, graphics, visual art, digital representations, video, and other visual and audio depictions of ideas, concepts, and experiences" (p. 15).
- It is noted that the standards "include frequent references to digital media" (p. 15). "Students must achieve fluency and develop skilled practice in the use of current media, and, given the pace of technological development, they must be able to adapt quickly to new media as they develop. It is the case that what it means to be literate is evolving, and digital literacy encompasses an important area that must be addressed instructionally as a matter of equity" (p. 15).
- Literacy strands should be taught in a blended way, an essential component of which is "attention to and practice with digital media—both in reading and writing" (p. 16).

| Media Literacy in the Reading Standards Overall, students should have a range of reading experiences, balanced between literature and informational texts. Informational texts should include both print and digital sources. | Media Literacy in the Writing Standards Overall, as part of learning to write, students should learn to use "technology and digital tools for writing" to "increase learning and communication (e.g., use technology to write, draw, and explore concepts; explore keyboards)" (p. 14). | Media Literacy in the Speaking and Listening Standards |
|---|--|--|
| Anchor Standard 7 Integrate and evaluate content presented in diverse media and formats. | Anchor Standard 2 Write informative/ explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content, [including multimedia when useful to aid comprehension]. | Anchor Standard 2 Integrate and evaluate information presented in diverse media and formats (including visual, quantitative, and oral). |
| | Anchor Standard 7 Gather relevant information from multiple sources, assess the credibility and accuracy of each source, and integrate the information in writing while avoiding plagiarism. | Anchor Standard 5 Make strategic use of digital media and visual displays to express information and enhance understanding of presentations. |

Sources: NYSED, 2017a, b.

Table C2. Media Literacy in the New York K-12 Social Studies Framework

- The Framework lists six Social Studies Practices (skills) to be developed K-12. Two relate to media literacy:
 - Gathering, interpreting and using evidence
 - Comparison and contextualization
- The Framework incorporates the Inquiry Arc, which is one of the three pillars of the College, Career, and Civic Life (C3) Framework for State Standards in Social Studies, originally published by the National Council for the Social Studies in 2013. Two components of the Arc incorporate media literacy skills:
 - Evaluating sources and using evidence
 - Communicating conclusions and taking informed action
- The New York State Social Studies Resource Toolkit bridges the framework and teachers' classroom practices. It includes 84 suggested inquiries, or topics for student-driven investigation. Of the ten basic principles underlying the inquiries, principle six, "Disciplinary sources are the building blocks of inquiry," requires teachers to develop students' media and information literacy skills (NYSED, 2015, p. 2).

Sources: NYSED, 2014, 2015.

Table C3. Media Literacy in Next Generation Learning Standards for Literacy in History/Social Studies, Science and Technical Subjects, Grades 6-12

From the Introduction:

- Instructional practices should integrate content and literacy standards in a number of ways; "attention to and practice with digital media—both in reading and writing— are also essential to this blend of approaches" (p. 5).
- Students should read a balance of literature and informational text. Informational text types include both print and digital sources; examples of informational texts include texts written for the public, such as "blogs/websites, books, films, and magazine and newspaper articles" (p. 6); and websites targeted towards a disciplinary/professional audience.

| Media Literacy in the Content Area Reading Standards | Media Literacy in the Content Area Writing Standards |
|--|---|
| Anchor Standard 6 Assess how point of view or purpose shapes the content and style of a text, drawing on a wide range of global and diverse texts. | Anchor Standard 6 Gather relevant information from multiple sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. |
| Anchor Standard 7 Integrate and evaluate content presented in diverse media and formats, including across multiple texts. | |

Source: NYSED, 2017c.

Table C4. Media Literacy in New York's P-12 Science Learning Standards

| Science and Engineering Practices | | |
|--|---|--|
| Planning and carrying out investigations. | Analyzing and interpreting data. | |
| E.g., "Make observations (firsthand or from media) to collect data that can be used to make comparisons" (p. 13). | E.g., "Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions" (p. 11). | |
| Constructing explanations and designing solutions. | Obtaining, evaluating and communicating information. | |
| E.g., "Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena" (p. 9). E.g. "Evaluate the validity and reliability multiple claims that appear in scientific technical texts or media reports, verifying the data when possible" (p. 62). | | |
| Connected ELA standards, some relevant to media literacy, are listed at the bottom of each page of the science standards. | | |

Source: NYSED, n.d.c.

Table C5. Media Literacy in Next Generation Mathematics Learning Standards

Mathematical Practice

Practice Standard 5

Use appropriate tools strategically.

"Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts (p. 8)."

Source: NYSED, 2019.

Table C6. Draft New York State Computer Science and Digital Fluency Learning Standards

Definitions

Digital Literacy: a "multifaceted concept that extends beyond skills-based activities and incorporates both cognitive and technical skills. It refers to the ability to leverage computer technology to appropriately access digital information; to create, share, and modify artifacts, and to interact and collaborate with others. Digital literacy includes understanding the benefits and implications of using digital technologies to be successful in our contemporary world" (p. 47)

Digital Use: knowing how to use "a variety of digital tools ... to create, revise, and publish digital artifacts, as well as communicate and collaborate with others" (p. 47).

Digital Citizenship: "focuses on empowering learners to use online resources, applications, and spaces to improve communities, make their voice heard, and curate a positive and effective digital footprint. It encourages students to engage respectfully online with people with different beliefs and better determining the validity of online sources of information" (p. 47)

Standards for digital use include:

| Digital Literacy Standard 2 (K-2) Communicate and work with others using digital tools to build knowledge and convey ideas. | Digital Literacy Standard 2 (3-5) Communicate and collaborate using digital tools to learn with others. | Digital Literacy Standard 2 (6-8) Communicate and collaborate with others using a variety of digital tools to create and revise a collaborative product. | Digital Literacy Standard 2 (9-12) Communicate and work collaboratively with others using digital tools to support individual learning and contribute to the learning of others. |
|---|---|--|--|
| Digital Literacy Standard 4 (K-2) Use a variety of digital tools and resources to create simple digital artifacts. | Digital Literacy Standard 4 (3-5) Use a variety of digital tools and resources to create and revise multimedia digital artifacts. | Digital Literacy Standard 4a (6-8) Select and use digital tools to create, revise, and publish digital artifacts. | Digital Literacy Standard 4a (9-12) Independently select advanced digital tools and resources to create, revise, and publish complex digital artifacts or collection of artifacts. |

| Standards for digital | citizenship include: | | |
|---|--|--|--|
| Digital Literacy Standard 5 (K-2) Provide examples of online information about real people, and identify ways that people put their own information into online spaces. | Digital Literacy Standard 5 (3-5) Describe persistence of digital information and explain how actions in online spaces can have consequences in the "real world." | Digital Literacy Standard 5 (6-8) Explain the connection between the persistence of data on the Internet, personal online identity, and personal privacy. | Digital Literacy Standard 5 (9-12) Actively manage digital presence and footprint to reflect an understanding of the permanence and potential consequences of actions in online spaces. |
| Digital Literacy Standard 6 (K-2) Identify actions that promote good digital citizenship, and those that do not. | Digital Literacy Standard 6 (3-5) Identify actions in online spaces that could potentially be unsafe; describe cyberbullying and actions to take if cyberbullying is witnessed or experienced. | Digital Literacy Standard 7 (6-8) Describe safe, appropriate, positive, and responsible online behavior; identify types of cyberbullying, and identify strategies to combat cyberbullying/ harassment. | Digital Literacy Standard 5 (9-12) Design and implement strategies that support safety and security of digital information, personal identity, property, and physical and mental health when operating in the digital world. |

Source: NYSED, 2020.

Table C7. Media Literacy in Career Development and Occupational Standards (CDOS) for Career and Technical Education

Anchor Standard 3a: Universal Foundation Skills

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

| success in the workplace. | | | |
|--|--|--|--|
| <u>Sub-standards</u> | | | |
| Sub-standard 1: Basic skills | Sub-standard 2: Thinking skills | Sub-standard 5: Technology | Sub-standard 6: Managing information |
| Basic skills include the ability to read, write, listen, and speak as well as perform arithmetical and mathematical functions. Students use a combination of techniques to read or listen to complex information and analyze what they hear or read; convey information confidently and coherently in written or oral form; and analyze and solve mathematical problems requiring use of multiple computational skills. Indicators include examples of media literacy. | Thinking skills lead to problem solving, experimenting, and focused observation and allow the application of knowledge to new and unfamiliar situations. Students demonstrate the ability to organize and process information and apply skills in new ways. Indicators use examples of media literacy. | Technology is the process and product of human skill and ingenuity in designing and creating things from available resources to satisfy personal and societal needs and wants. Students apply their knowledge of technology to identify and solve problems. Indicators use examples of media literacy. | Information management focuses on the ability to access and use information obtained from other people, community resources, and computer networks. Students use technology to acquire, organize, and communicate information by entering, modifying, retrieving, and storing data. Indicators use examples of media literacy. |

Source: NYSED, 2000.

Table C8. Media Literacy in New York State Learning Standards for Media Arts

Definitions

Media arts: Applies to "all forms of time-related art works which are created by recording sound and/or visual images... [It] usually depends on a technological component to function. It includes both fine art and commercially-oriented works presented via film, television, radio, audio, video, the internet, interactive and mobile technologies, transmedia storytelling, and satellite...Media art forms are constantly evolving in response to technological innovations" (NYSED, 2017e, p. 2).

Media literacy: "A series of communication competencies, including the ability to access, analyze, evaluate, and communicate information in a variety of forms, including print and non-print messages" (NYSED, 2017e, p. 10).

Instruction in media arts incorporates anchor standards linked to four artistic processes:

| Creating | Producing | Responding | Connecting |
|---|---|---|---|
| Anchor Standard 1 Generate and conceptualize artistic ideas and work. | Anchor Standard 4 Select, analyze and interpret artistic work for presentation. | Anchor Standard 7 Perceive and analyze artistic work. | Anchor Standard 10 Relate and synthesize knowledge and personal experiences to inspire and inform artistic work. |
| Anchor Standard 2 Organize and develop artistic ideas and work. | Anchor Standard 5 Develop and refine artistic techniques and work for presentation. | Anchor Standard 8 Interpret meaning in artistic work. | Anchor Standard 11 Investigate ways that artistic work is influenced by societal, cultural, and historical context and, in turn, how artistic ideas shape cultures past, present, and future. |

| Anchor Standard 3 Refine and complete artistic work. | Anchor Standard 6 Convey meaning through the presentation of artistic work. | Anchor Standard 9 Apply criteria to evaluate artistic work. | |
|--|---|---|--|
|--|---|---|--|

Source: NYSED, 2017d, e.

Table C9. Empire State Information Fluency Continuum

Anchor Standard 2: Multiple Literacies

- "We are readers, writers and creators in multiple formats."
- Use multiple literacies to explore, learn and express ideas.

Standard 2.1

Information-fluent learners use multimedia literacy skills and knowledge to deconstruct and learn from texts in multiple formats through comprehension, analysis, interpretation, and evaluation.

Standard 2.2

Information-fluent learners present their learning and ideas by using multiple, authentic formats appropriate for the purpose and audience.

Anchor Standard 3: Social and Civic Responsibility

- "We are citizens."
- Demonstrate civic responsibility, respect for diverse perspectives, collaboration, and digital citizenship.

Standard 3.1

Information-fluent learners recognize the importance of accurate information to a democratic society and actively seek, evaluate, learn from, and use credible information from diverse community and global perspectives.

Standard 3.2

Information-fluent learners demonstrate effective collaboration in the exchange of information, in both the face-to-face and digital environment.

Standard 3.3

Information-fluent learners demonstrate digital citizenship by maintaining ethical decision making and behavior and avoiding the spread of misinformation in the exchange and use of information.

Source: Stripling, 2019.

Appendix D. New York Education Law and Regulations Relevant to Media Literacy Education

New York State education law and commissioner's regulations specify the minimum program all schools must provide their students by law. Below we list a number of these that have relevance for media literacy education.

Personnel

School Librarians

• Secondary schools (grades 7-12) are required to employ a certified media specialist (8 NYCRR § 91.2). A full-time library media specialist is only required at secondary schools enrolling more than 700 students (8 NYCRR § 91.2).

Teacher Education

• All teacher education programs leading to certification are required to teach pedagogy on the use of technology, including instructional and assistive technology, in teaching and learning—and skill in using technology and teaching students to use technology to acquire information, communicate, and enhance learning (8 NYCRR § 52.21).

Teacher Certification

- All teachers are required to complete coursework that includes study of communication, information retrieval, and instructional technology (8 NYCRR § 80-3.7).
- Specialized teaching certificates related to media literacy include educational technology specialist (all grades), library media specialist (all grades) and technology education (all grades), with additional educational requirements (8 NYCRR § 80-3.7).

Professional Development

• School districts must provide a plan for delivering professional development in using instructional technology across all grades and areas of the curriculum in order to be eligible to receive state aid for technology purchases (8 NYCRR § 100.12).

Curriculum and Course Offerings

Instructional Program

- In grades one through six, all students must receive instruction designed to help them attain learning standards in technology, which can be folded into courses in other subjects. Students are also required to receive instruction in the arts. (8 NYCRR § 100.3, 8 NYCRR § 100.4).
- In grades seven and eight, students must receive instruction in library and information skills equivalent to one period per week, taught by library media specialists and classroom teachers in coordination (8 NYCRR § 100.4).

- Between grades five and eight, students must receive one and three-fourths units of study in technology education, family and consumer sciences, trade and technical subjects, business, agriculture, and/or health sciences. The subjects of technology education, home and career skills, and any other career and technical education must be taught by persons certified to teach those subjects (8 NYCRR § 100.4).
- Students must complete ½ unit of study in visual arts in grades seven and eight (8 NYCRR § 100.4).
- At the high school level, all public school districts must offer students opportunities to meet the technology learning standards, and to complete a three- or five-credit sequence in career and technical education (8 NYCRR § 100.2).
- At the high school level, all districts must offer students the opportunity to complete a three- or five-unit sequence in the arts (8 NYCRR § 100.2)
- To earn a Regents diploma, students must meet state learning standards in technology, achieved through a course in technology education or a course that integrates technology into mathematics and/or science instruction. Students also must earn one credit in the arts, taught by a certified teacher, which can be a course in media arts (8 NYCRR § 100.5).

Facilities and Instructional Materials

School Libraries

• Each school is required to have a library containing a specified number of titles (8 NYCRR § 91.1).

Instructional Computer Technology

• Each school district must have a plan for the use of instructional computer technology equipment, in order to be eligible for aid for instructional computer hardware and technology equipment expenses (8 NYCRR § 100.12).

Appendix E. New York State Teaching Standards Related to Media Literacy Education

| Relevant Standards | | |
|---|---|---|
| Standard I Knowledge of Students and Student Learning: Teachers acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students. | Standard III Instructional Practice: Teachers implement instruction that engages and challenges all students to meet or exceed the learning standards. | Standard VI Professional Responsibilities and Collaboration: Teachers demonstrate professional responsibility and engage relevant stakeholders to maximize student growth, development, and learning. |
| Relevant Sub-standards ("E | lements") | |
| Element I.6: Teachers demonstrate knowledge and understanding of technological and information literacy and how they affect student learning. Selected Performance | Element III.5: Teachers engage students in the development of multidisciplinary skills, such as communication, collaboration, critical thinking, and use of technology. | Element VI.1: Teachers uphold professional standards of practice and policy as related to students' rights and teachers' responsibilities. |
| Indicators | | |
| Teachers use technological tools and a variety of communication strategies to engage each student. | Students utilize technologies and resources to solve real world problems. | Teachers advocate, model, and manage safe, legal, and ethical use of information and technology, including respect for intellectual property and the appropriate documentation of sources. |
| Teachers assist students to become knowledgeable and critical consumers and users of quality information. | | |

Source: NYSED, Office of Teaching Initiatives, 2011.