Social and Emotional Learning in Digital Spaces: A Literature Scan

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## Executive Summary

The Wisconsin Department of Public Instruction (DPI) is committed to supporting Wisconsin districts and schools in the creation of safe and supportive learning environments that enhance student academic achievement and social and emotional development. DPI has experienced an increased demand from stakeholders for information, resources, and support to address online safety and digital citizenship. Simultaneously, stakeholders have requested more support for the newly released social and emotional learning (SEL) competencies. DPI’s Content and Learning team in the Division for Academic Excellence is collaborating with the Student Services/Prevention and Wellness team in the Division for Learning Support to provide connected resources about digital and cyber safety with SEL. Specifically, DPI is interested in understanding how social and emotional competencies support students as they navigate digital learning environments, as well as the ways in which digital learning can be used to support the development of student social and emotional competencies. DPI is also interested in understanding whether and how student social and emotional competence in digital learning spaces influences school safety.

DPI requested that Midwest Comprehensive Center (MWCC) conduct a non-exhaustive literature review exploring the following questions:

* What is the relationship between SEL, school safety, and digital learning?
* Which, if any, social and emotional competencies help students make good choices as they navigate digital spaces in school and at home?
* Which, if any, social and emotional competencies promote school safety, specifically relating to cyberbullying behavior and student digital safety?
* How have other states, districts, and schools supported student social and emotional development in digital environments. What are existing best practices for understanding and responding to the influence of SEL in digital environments on school safety?

MWCC conducted the following literature review to provide DPI with a non-exhaustive research base on the connection between SEL, digital learning, and school safety. In addition, the literature review identifies tools and resources that other states, districts, and schools use to support SEL, digital learning, and school safety. Finally, we provide implications and future directions for work connecting SEL, digital learning, and school safety. In this executive summary, we provide a description of SEL in Wisconsin and the principal take-home points from the literature review.

### SEL in Wisconsin DPI

DPI has committed to integrating SEL practices into statewide standards and resources. “DPI’s vision for Wisconsin is that every child is a graduate, college and career ready; our agenda is aimed at helping all kids succeed. Explicitly promoting and teaching SEL skills in Wisconsin schools is one step on the path to student success. The ability to manage emotions, focus attention, respect self and others, make responsible choices, and engage with communities prepares students for college, career and life success. When students and adults apply these skills, we create environments that keep our kids healthy, safe, supported, and encouraged in school every day.” ([Wisconsin DPI, Social and Emotional Learning Competencies, p. 5](https://dpi.wi.gov/sites/default/files/imce/sspw/SEL-Competencies-Guide-web.pdf)).

To support this vision, DPI has developed a series of tools and resources to support SEL in schools and afterschool programs, including the following:

* [A Social and Emotional Learning webpage](https://dpi.wi.gov/sspw/mental-health/social-emotional-learning), which provides a summary of the tools and resources offered by DPI, case studies of Wisconsin schools implementing SEL, as well as links to additional resources that support SEL implementation.
* [Pre-K to Adult Social and Emotional Learning Competencies](https://dpi.wi.gov/sites/default/files/imce/sspw/SEL-Competencies-Guide-web.pdf), which includes grade-banded developmental benchmarks, in addition to a recommended process for implementing SEL schoolwide.
* [SEL Alignment Tools](https://dpi.wi.gov/sspw/mental-health/social-emotional-learning/sel-alignment-tools) webpage, which aligns multiple evidence-based SEL programs with Wisconsin SEL competencies.
* [Social and Emotional Learning Conferences and Training Opportunities](https://dpi.wi.gov/sspw/mental-health/social-emotional-learning/conference) webpage, which includes a webinar series *Moving Forward with SEL*, workshops, and an annual SEL   
  2-day summer institute.
* [Online Safety & Social and Emotional Learning webpage](https://dpi.wi.gov/internet-safety/online-safety-social-and-emotional-learning), which includes an [alignment document](https://drive.google.com/file/d/1tCVebbIxfVCNQYjhpDH8h3b7rdb2djfj/view) between Information and Technology Literacy standards and Wisconsin SEL competencies, as well as resources to support social and emotional development and safety online (example subtopics include cyberbullying, digital citizenship, digital relationships, and social media).

The current literature review adds to the tools and resources developed by DPI to support SEL integration in schools by identifying the research base behind a connected vision for SEL, digital learning, and school safety. Specifically, MWCC staff provide a deeper understanding of how the development of social and emotional competencies can enhance student experience in digital environments and improve student perceptions of school safety.

### Key Take-Home Points

The literature review revealed multiple key-take home points. The key take-home points are organized into SEL and digital environments; SEL and school safety; and connecting SEL, digital environments, and school safety. Key take-home points from the literature review include the following:

#### SEL and Digital Environments

* Students spend a significant amount of time in and out of school engaging with digital platforms and other media. The amount of time students spend on digital platforms increases throughout early school age and peaks in adolescence. Overall, the total number of hours that students spend on digital platforms, on average, is increasing.
* Students use multiple social and emotional competencies and skills that help them successfully navigate digital learning, sometimes the competences are similar to and different than in-person contexts. Example social and emotional competencies found in the literature include (a) social awareness, or the ability to process and understand a new set of social and ethical norms in a digital environment; (b) responsible decision-making skills, including the analytical and problem-solving skills that help them navigate digital social spaces and learning environments safely and productively; and (c) relationship skills, especially relating to positive and productive digital communication and collaboration.
* The structure of the digital learning environment itself can either support or undermine student development and practice of their social and emotional competencies. For example, the teacher can structure the learning environment where they are scaffolding interactions in the environment or creating a blended learning opportunity.
* There is growing interest at the state and local levels in developing and adopting digital technologies and education technology (ed-tech) to promote SEL in classrooms or afford students the opportunity to use multiple social and emotional competencies; however, limited research exists to date on the efficacy of these strategies and tools for student skill-building.
* States are increasingly adopting standards relating to social and emotional competencies and technology/digital learning. Some states include Wisconsin, Illinois, Washington, Utah, and Maine, which have adopted standards for digital literacy or legislation about digital citizenship practices in schools that begin to connect these two concepts. However, teachers need training and support on how to use technology/digital learning for social and emotional, and academic learning.

#### SEL and School Safety

* Although multiple factors exist that influence student perceptions of school safety and overall school climate, one aspect of school safety that intersects with digital environments and student social and emotional competencies includes cyberbullying.
* Although different, cyberbullying and “traditional” bullying behaviors have many shared elements and effects on both their victims and perpetrators. Social and emotional competencies and skills (e.g., self-confidence, empathy, and problem solving) can serve as protective factors for cyberbullying perpetrators, victims, and bystanders, providing a set of skills to reduce and mitigate the negative impacts of cyberbullying.
* Given the connection between student social and emotional competence and cyberbullying, program developers have developed and researched classroom-based SEL programs that directly or indirectly effect the presence of cyberbullying. In other words, developers and researchers attempt to understand the effect of SEL programs on cyberbullying with initial positive results.
* Implementing a singular program in isolation does not reduce bullying behaviors as well as taking a whole-school approach. Schools should include multiple other efforts, including targeting policies, changing school and classroom climate, levels of support, and curricular integration, in addition to programming.
* A growing number of states are adopting standards for school climate and safety that incorporate recommendations for SEL strategies related to supporting a positive school climate. Standards relating to digital safety and cyberbullying are regularly included as part of the overall standards for school climate and safety.

#### Connecting SEL, Digital Environments, and School Safety

* A limited number of existing research studies, tools, or resources comprehensively connect the concepts of SEL, school safety, and digital learning. We anticipate that this research base will expand quickly in the next decade as states and districts work to incorporate digital learning resources and craft policies to respond to the challenges specific to digital environments.
* SEL is essential for safe and productive learning and development. Similar to traditional learning environments, social and emotional competencies are important for students to successfully navigate their digital learning environments and to create safe spaces for students,
* New digital tools and learning environments require active facilitation to ensure productive and social and emotionally competent use. It is insufficient to assume that students can navigate these spaces on their own. They need support from adults to learn how to use these spaces successfully.
* Development of digital learning and curriculum tools will continue to outpace research. New tools and resources for digital learning are in constant development. Educators need to use these tools and resources wisely, using the best available research.
* New “digital” challenges are sometimes old “in-person” challenges in a new form. Many of the challenges that students face, such as bullying, forming positive relationships, and finding best available resources continue to be concerns for students, whether in person or digitally.

## Introduction

Students spend a significant amount of time using entertainment media. Entertainment media includes going online, playing videogames, watching movies or television, and listening to music. For example, Rideout (2015) found that, on average, younger school-age students (8–12 years old) spend at least 6.5 hours per day (not counting in-school hours) using entertainment media; the number of hours is even higher for teens—13–17-year-olds spend just under 9 hours per day, on average, consuming entertainment media. Students access much of this media through a digital device—95% of teens currently have access to a smartphone, and 88% have access to a home laptop or desktop computer.

In addition to home uses of technology, students spend an increasing number of in-class hours using technology or learning on digital platforms. In the 2015 Teachers Know Best survey from the Bill & Melinda Gates Foundation, teachers reported that they spend 38% of classroom time using technology as the primary modality for instruction and 34% of classroom time using technology during instruction in some other supportive way (Bill & Melinda Gates Foundation, 2015). Students are clearly spending much of their time in and out of school engaged with digital media and technological tools. If schools want to ensure that this time is spent productively and safely, especially during in-class hours, they need to understand what specific social and emotional skills can support students to navigate digital environments and tools effectively and the influence student engagement in digital learning environments has on student perceptions of school safety.

MWCC conducted the following literature review to provide DPI with a non-exhaustive research base on the connection between SEL, digital learning, and school safety. In the following literature review, we review literature on the connections between SEL and digital environments; between SEL and school safety; and connecting SEL, digital environments, and school safety. Prior to that, we discuss the methodology MWCC used, as well as introduce key terms used throughout the document.

### Methodology

SEL, digital learning, and school safety are complex topics independent of one another. MWCC staff conducted a non-exhaustive literature review of the three topics, targeting searches that integrated at least two of the topics together. Staff used available research databases, including EBSCO-hosted Academic Search Premier, Google, and Google Scholar, using the following keywords: SEL, social and emotional development, school safety, school climate, bullying, cyberbullying, technology in schools, ed-tech, digital literacy, digital citizenship, digital or online learning, and digital or online learning environments. MWCC staff also used existing research reviews conducted on SEL, school safety, and digital learning. Finally, MWCC conducted a non-exhaustive scan of other federal centers and state education agencies (SEAs) to identify key resources and tools to support the connection of SEL, digital learning, and school safety. This report synthesizes the research and resources MWCC staff reviewed.

### Key Terms

We use multiple key terms, defined as follows, throughout this literature review.

**Cyberbullying** is unwanted or aggressive behavior that involves some level of power imbalance and takes place over a digital platform where students share content (e.g., social media, text messages, or gaming). Cyberbullying occurs when students send harmful or untrue information about another student and typically results in some sort of humiliation or embarrassment (Hinduja & Patchin, 2018; Stopbullying.gov, 2018).

**Digital learning** is learning facilitated by technology, whether through a digital tool like a computer or handheld device, digital materials like an educational program or software, or digital resources available online or in schools (U.S. Department of Education, 2018). Networked or online learning is a subset of digital learning, but digital learning can also include the use of offline digital learning software, blended classroom approaches (a combination of in-class instruction and digital learning), and the use of technology tools to supplement or enhance classroom instruction (e.g., using a cell phone poll to check for understanding, using a slideshow to guide a lesson, recording or listening to audio clips on a tablet or mobile device).

**Digital learning environments** are technology-enabled spaces, platforms, programs, or contexts for learning.

**Digital literacy** refers to a set of skills required by users to productively use, interpret, and respond to digital technologies.

**School safety** is defined as schools and school-related activities where students are safe from violence, bullying/cyberbullying, harassment, and substance use (National Center on Safe Supportive Learning Environments, 2018).

**Social and emotional competencies** are the specific developmental skills, attitudes and knowledge within an SEL conceptual framework. Numerous research-based frameworks are used to define social and emotional competencies in the field. Wisconsin DPI structures its work around three primary competency domains: emotional development, self-concept, and social competence, which are composed of *multiple social and emotional skills.* These three domains align to the Collaborative for Academic, Social, and Emotional Learning (CASEL) [five core competencies](https://casel.org/core-competencies/)

**Social and emotional learning** is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (Herman, & Collins, 2017). This definition identifies SEL as a two-part process: acquisition and application (from [DPI’s *Social and Emotional Learning Competencies*](https://dpi.wi.gov/sites/default/files/imce/sspw/SEL-Competencies-Guide-web.pdf)).

**School safety** is defined as schools and school-related activities where students are safe from violence, bullying/cyberbullying, harassment, and substance use (National Center on Safe Supportive Learning Environments, 2018).

## SEL and Digital Environments

Digital environments are important for today’s K–12 classroom for multiple reasons. **First, students are spending much of their time in and out of school immersed in digital environments, including when they consume media and interact socially with peers.** As such, educators need to explicitly address the skills that students use to successfully navigate digital and technology enabled environments. Schools are still working to define what successful skill-building in digital environments looks like for students, but some elements include displaying safe online behavior (sharing and securing personal information, responding to digital threats, navigating harassment and bullying online), being able to self-regulate technology use to ensure productive learning, and demonstrating the ability to be a critical consumer of information (Office of Educational Technology, 2017). In addition, digital environments and tools can offer significant opportunities for innovation and increased equity in the classroom. States and districts are exploring topics like personalized learning, distance or virtual learning, open educational resources, blended classrooms, and online assessment to increase the effectiveness of teaching and learning for every student (Alliance for Excellent Education, 2012; Office of Educational Technology, 2017).

For states, districts, and schools focused on supporting the development of students’ social and emotional competencies, the central role of technology and digital environments in students’ classrooms and their out-of-school lives is an important consideration**. Digital environments present unique opportunities and challenges for students to develop and apply their social and emotional competencies and skills with educator support and guidance**.

In this section, we explore the social and emotional competencies students need to navigate digital learning environments, the relationship between digital literacy skills and social and emotional competencies, and existing opportunities for students to develop new or deepen existing social and emotional competencies in digital learning environments.

### Social and Emotional Competencies in Digital Learning Environments

Research suggests that student social and emotional competence broadly predicts student readiness for successful and productive digital learning across age groups and learning environments (Ayub Buzdar, Ali, & Ul Haq Tariq, 2016; Berenson, Boyles, & Weaver, 2008; Engelberg & Sjöberg, 2004). For example, digital learning can be more individually directed by students in terms of content and pacing (instead of teacher facilitated), as in technology-enabled personalized learning or competency-based learning programs. This type of digital learning environment requires students to demonstrate a higher level of certain social and emotional competencies than in a traditional classroom, including the ability to self-motivate, self-regulate, and set individual goals and plans for learning (McConne, 2018). Students who are already self-motivated, self-regulated, and can apply strategies for goal-setting and planning will be more academically successful in this type of technology-enabled learning environment than students who do not demonstrate self-regulation and goal-setting skills and strategies. The research finding on the connection between social and emotional competence and digital learning readiness supports the notion that social and emotional competencies and skills are context dependent. **In other words, students will apply social and emotional competencies differently depending on the type of digital learning environments, the learning platform used, and corresponding instructional strategies**. For example, some online collaborative platforms, like Google Docs, provide opportunities for students to collaborate on shared documents, provide one another with feedback, and monitor their progress toward a final project goal. Other students might use i-Clickers in class to provide their opinion on a specific topic, allowing them to reflect individually while still providing opportunities to actively listen and understand the differing perspective of their peers.

Although students may encounter diverse digital learning experiences, common trends in the literature exist regarding the social and emotional competencies students use that correlate with student success in digital learning environments. For example, research demonstrates that a student’s ability to self-regulate (other similar terms include self-manage or exhibit self-control) is positively associated with their ability to learn, remain engaged and motivated, and achieve academically in digital environments (Delen & Liew, 2016; Liew, Chang, Kelly, & Yalvac, 2010). **Self-regulation is important for student success in digital classroom environments for three reasons.** First, digital learning environments are often learner-centered and in student-driven classroom settings, requiring a higher level of self-motivation and student initiative. Second, digital environments present new and powerful types of distractions that can challenge students’ ability to focus and stay on task (Beland & Murphy, 2016). Finally, the design of digital learning environments can skew toward a lower level of interactivity with peers, teachers, and materials than a traditional classroom learning environment. In other words, digital learning environments present new ways of interacting with others that require different forms of social cues and lack of body language, requiring more internal or individual motivation, compared with more potentially interactive in-person classrooms that afford students to read in-person social cues and body language that influence one’s ability to self-regulate. This difference depends greatly on the type of digital platform and instructional strategy used (Delen & Liew, 2016).

Teachers can teach three types of self-regulation to support digital learning—personal, behavioral, and environmental (see Figure 1 for an overview)—all of which incorporate a variety of specific social and emotional skills (Delen & Liew, 2016). Personal regulation includes skills that help students engage with digital learning environments and stay on task. Underlying personal regulation skills include the ability to set goals for an activity or project, form and organize a plan and learning strategies for work, and monitor progress toward achieving those goals. Behavioral regulation includes skills that help students become self-directed and personally responsible for their learning in the long term. Underlying behavioral regulation skills include the ability to self-evaluate, monitor one’s behavior, and set self-consequences. Environmental regulation includes skills that help learners identify where they are struggling, and then create a plan to overcome the challenge or seek additional support. Underlying environmental regulation skills include the ability to identify resources and ask for help from teachers or peers (Delen & Liew, 2016). Because self-regulation, and the underlying social and emotional skills, are so complex, educators can actively teach and reinforce self-regulation skills to students so that they can successfully navigate independent or collaborative digital learning environments (Scott & Meeussen, 2017). Furthermore, teachers can structure the digital learning environment to incorporate a high level of interactivity (more time for collaboration, hands-on or minds-on learning activities, and teacher- or peer-facilitated elements), which research has demonstrated positively correlates with a student’s ability to practice self-regulation skills (Delen, Liew, & Willson, 2014).

Figure 1. Three Types of Self-Regulation and Underlying Social and Emotional Skills



In addition to self-regulation skills, students use multiple social and emotional skills when they engage in collaborative digital learning environments, such as social awareness and relationship skills. **Although students use these interpersonal social and emotional skills in traditional classroom settings, the ways in which students use interpersonal skills in digital learning environments can be unique**. For example, the computer-supportive collaborative learning model states that educators can use digital learning environments to support student discussion, collaboration, and exchange of ideas to achieve academic goals and knowledge generation (Sung, Yang, & Lee, 2017). Similarly, a recent meta-analysis on the effects of digital mobile computing devices on learning found that digital tools have positive impacts on collaborative learning because peers can engage in more instant interactions even when working remotely or on out-of-class projects, participate in more efficient communication exchanges, and become empowered to coordinate the learning experience with others (Sung, Yang, & Lee, 2017).

Like any tool, the specific types of collaborative learning that varied digital learning environments support can be limited, and simple use of the technologies themselves does not guarantee that users will collaborate effectively and efficiently (Berryman, 2016). **As with in-person collaboration, digital collaboration relies on students’ ability to communicate effectively, create positive relationships, and grow a sense of shared community.** Effective communication and relationship building means that students can set shared project goals and plans, listen to group member’s ideas and opinions, and problem solve productively as they progress with their work. Two common pitfalls for teachers using digital environments are (1) the assumption that students have the necessary social and emotional skills to effectively engage in such environments, and (2) the belief that social interactions and relationship building are not a key component of this work (Kreijns, Kirschner, & Jochems, 2002). **To mitigate some of these challenges, and to avoid having digital collaboration fall into negative or passive interpersonal patterns, significant teacher instruction is needed to teach the social and emotional skills necessary to effectively engage in digital learning environments**. Teachers also need to actively structure and guide the group collaboration process. This is especially true during the early phases of a collaborative project or lesson (Kwon, Liub, & Johnson, 2014).

**In addition to teacher instruction on the social and emotional skills necessary to engage in digital learning environments (e.g., self-regulation, effective communication, relationship skills, and awareness of others), the structure of the digital learning environment itself can either support or undermine student development and practice of their social and emotional skills**. For example, research has found three elements exist in digital learning environments that promote increased student engagement and social and emotional skill building: (1) provide scaffolded instruction and teacher support to build the necessary skills to engage in tasks; (2) implement blended opportunities, in which the students engage in online and face-to-face collaboration; (3) create a perceived sense of ease for students to use the digital technology in the activity (Sun, Tellervo Siklander, & Ruokamo, 2018).

### Relationship Between Digital Literacy Skills and Social and Emotional Competencies

Engagement in digital learning environments is an increasingly common pedagogical tool used by educators in all grade levels. **To respond to this growth, researchers, policymakers, and practitioners have begun to develop frameworks to better define the digital literacy skills students need to successfully engage in digital learning environments, many of which align to social and emotional competencies**. In this section, we outline the broad concept of digital literacy skills, the way DPI defines digital literacy, and the alignment between DPI digital literacy skills and SEL competencies.

*Digital literacy* is a term used in a variety of fields, including K–12 education, but the term lacks a common agreed-upon definition. Typically, digital literacy refers to a set of skills or competencies required by users to productively use, interpret, and respond to digital technologies. Eshet-Alkali and Amichai-Hamburger (2004) proposed one theoretical framework for digital literacy that includes six primary skills: photo-visual skills (reading or processing instructions from digital graphics displays), reproduction skills (using digital tools to create new materials from existing materials or information), branching or hypertextual knowledge-building skills (building understanding from nonlinear or hypertextual navigation), information skills (evaluating the validity and value of information online and in digital platforms), social and emotional skills, and real-time thinking skills (Eshet, 2012; Eshet-Alkali & Amichai-Hamburger, 2004). **Eshet and colleagues define the social and emotional skills of digital literacy as a broad set of skills relating to digital interpersonal interactions and social norms, such as the ability to understand the social norms of interactions (such as communication styles) and apply those social norms when interacting in digital environments.** This type of multilayered competency requires students to apply social awareness skills to build understanding of a new environment, process their experiences and understanding using a variety of responsible decision-making and analytic thought processes, and finally translate these experiences into different types of relationship-building and communication behavior. Other skills included in this definition of digital literacy include being able to make responsible decisions (e.g., safely share data and personal information), avoid potentially dangerous interactions with others (in the case of digital learning, this would include such things as phishing scams, harmful links or viruses, and false or harmful communication), and create new or deepening relationships and social interactions online.

Given the importance of digital literacy skills, DPI developed the [Wisconsin Standards for Information and Technology Literacy standards](https://dpi.wi.gov/sites/default/files/imce/imt/pdf/WI%20ITL%20Standards%20Final%20Adopted%20November%202017%20%281%29.pdf). DPI defines Information and Technology Literacy (ITL) as “the ability of an individual, working independently or with others, to use tools, resources, processes, and systems responsible to access and evaluate information in any medium, and to use that information to solve problems, communicate clearly, make informed decisions, and construct new knowledge, products, or systems” (DPI, 2017, p. 1). **DPI defines seven ITL content strands (empowered learner, digital citizen, knowledge constructor, innovative designer, computational thinker, creative communicator, and global collaborator), all of which relate to a variety of social and emotional competencies**. We present some examples of how the ITL standards interact with the SEL competencies in the following bullets, using language from DPI’s ITL Standards and SEL Competencies. For more examples of the connection between ITL content standards and the SEL competencies, review the [alignments document](https://drive.google.com/file/d/1tCVebbIxfVCNQYjhpDH8h3b7rdb2djfj/view) DPI created to align these two concepts.

* ***Empowered learners*** in digital spaces are learners who use digital tools to become active participants in the learning process, choose the appropriate digital tools, and transfer knowledge to engage with new tools. This requires students to use a variety of social and emotional competencies within digital spaces, such as self-management (e.g., the ability to set, manage, and reflect on goals) and relationship skills (e.g., to create networks—a community of people—for learning using digital tools and to seek and use feedback as they engage in and with digital learning tools).
* ***Digital citizen*** includes students who know their rights, responsibilities, and opportunities of engaging in a digital community and understand how to use and share intellectual property. This requires students to use a variety of social and emotional competencies within digital spaces, such as using responsible decision-making skills (e.g., to create and maintain an ethical digital personal identity and reputation); social awareness skills (e.g., to recognize factual versus made-up digital information, including the effects that may have a diverse group of people); and the relationship skills (e.g., to engage with others in a respectful manner, specifically understanding the rights and responsibilities of free speech and the influence that has on oneself and others).
* ***Creative communicators*** are students who can appropriately use multiple digital spaces to meet their goals and can present content in a manner that aligns to their audience and to their goals. This requires students to use a variety of social and emotional competencies, including relationship skills (e.g., the ability to identify and use appropriate communication modalities related to audience) and social awareness (e.g., to be socially aware of the needs of the audience and communicate clearly).

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| Other State Examples  The Illinois State Board of Education (ISBE) is the only other state education agency MWCC staff found that connected its SEL standards to education technology. In the document [*Technology to Support the Illinois Social-Emotional Learning Standards*](http://www.ilclassroomsinaction.org/uploads/2/6/0/8/26089560/selhandout2016.pdf), ISBE provides example teacher technology resources associated with each of the Illinois SEL standards. |

Students use a variety of social and emotional competencies to learn, connect, and contribute in digital environments. **Sometimes, digital environments require students to develop and use similar skills to in-person environments, but there are also social and emotional competencies that are unique to the digital environment**. For example, students should have the responsible decision-making skills necessary to recognize how to accurately use and disseminate intellectual property online and in person; however, the ways in which one uses the information might differ in-person versus digital environment. Similarly, all students develop self-awareness through creating personal identities; however, those identities may look different online versus in-person. Supporting student social and emotional development through traditional in-person programs and practices can support student use online; however, it may also be necessary to explicitly teach and support student development of social and emotional competencies that are specific to digital learning.

### Opportunities to Develop Social and Emotional Competencies in Digital Learning Environments

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| Lieberman and colleagues suggest that developers should design games to promote social and emotional development for all ages that are developmentally appropriate, use evidence to guide their development, build on the way children naturally think and learn, and are field tested with children to ensure that they are effective at skill building and fun for students (Lieberman, Fisk, & Biely, 2009). |

Student success in digital learning environments requires that students demonstrate social and emotional competencies, some of them unique to these new learning spaces. However, digital learning environments can also offer opportunities for students to learn about and develop social and emotional competencies. Game-based learning is frequently connected to social and emotional skill building. In this type of digital learning environment, students use digital games or mobile apps to learn about a topic, develop skills, or practice using skills in virtual scenarios. **A rapidly growing set of educational games and apps exists that educators and families can choose from,** ranging from games to develop social and emotional skills in young children (e.g., Breath, Think, Do, a game from Sesame Street that teaches simple emotion regulation techniques for preschool-age children), games to help school-age students navigate real-world social and emotional challenges at school (e.g., ZooU, where students encounter school scenarios and engage in virtual role-play and decision making to decide how to respond), and apps to support older middle and high school students in developing life skills and dealing with trauma (e.g., Ripple Effects, where students access training programs on a wide range of trauma-informed topics, from dealing with mental illness to creating a personalized behavior management plan).

**Most these digital games and apps were developed within the last 5 to 10 years, and the field of education research has not kept pace with this rapid development. As such, few studies exist that support the efficacy of individual games or game-based strategies to develop social and emotional skills in the classroom**. In a review of the limited research on the effect of learning games and game design on student social and emotional skills, Lieberman and colleagues (2009) found that well-designed games can promote cognitive growth and social and emotional development in fun and interactive ways. However, poorly designed games can have neutral or negative impacts on social and emotional development, including desensitization, hostility, and negative stereotypes of others.

**Research has also shown promising results in the use of digital learning environments to support social and emotional development among students with disabilities**, including students who are on the autism spectrum and students with emotional and behavioral concerns (McKnight et al., 2016; Office of Educational Technology, 2017). For example, assistive digital tools help nonverbal students develop communication skills by giving them a series of pictures on a tablet to choose from that are then translated into text messages. In one experiment with Google Glass, students with autism spectrum disorder practiced social awareness skills, interpreting facial expressions and emotional reactions from peers. In another experience, a robotics program allowed students to “code” different social and emotional interactions to practice real-world scenarios (Zalaznick, 2018).

**Even if a digital learning environment is not explicitly designed as an SEL instructional tool, digital environments and tools can promote social and emotional development through their design and function**. For example, a growing suite of digital tools are available that teachers can use to facilitate interpersonal connection, such as video and communication software like Skype. Teachers can use this type of technology to connect their classroom to classrooms in other countries, build relationships, and grow empathy. Greenhow and Li promote the use of social media in the classroom to build relationship and citizenship skills for teens. The team states that social media facilitates ease of sharing, connection, extensive peer collaboration, and real-world civic engagement (Greenhow & Li, 2013). Digital learning environments also provide an opportunity to engage in self-reflection and deeper self-directed inquiry (McConne, 2018). Although limited research has yet to test the effects of these strategies on student social and emotional development, we are beginning to understand the types of skills that students use in these digital learning environments.

Although digital environments present many opportunities for classrooms, schools should be aware of the challenges they present as well. First, although more than 95% of students have access to some type of digital device at home (a cell phone being the most common**), a significant and persistent gap exists in access to Internet and home computers that is tied to the race and socioeconomic status of families.** This is true for the quantity and quality of digital tools available in schools as well—wealthier schools are more likely to have access to 1:1 technology, Internet connectivity (e.g., broadband compared to dial-up), and high-quality digital learning products and tools. Second, the development of tools and resources appears to be outpacing research, so it is still unclear what the best strategies are to support and enhance SEL in digital learning environments. **Finally, teacher training, professional learning, and coaching on the use of digital learning environments is crucial to overall student success in these environments**. It is not enough to provide the tools and resources; teachers need to be trained and provided with ongoing coaching and feedback in how to effectively implement the tools and resources to support student learning.

## SEL and School Safety

Students’ perceptions of school safety are affected by multiple factors in the school environment, including their sense of physical safety, emotional safety, the prevalence of bullying/cyberbullying, substance abuse, and emergency readiness (National Center on Safe Supportive Learning Environments, n.d.). **Although multiple factors exist that influence student perceptions of school safety and overall school climate, this review will focus on the aspect of school safety that intersects with digital environments and student social and emotional competencies—cyberbullying**. Digital environments present a new challenge for educators tasked with creating and sustaining safe educational spaces. Experiencing negative digital interactions impact a student’s feelings of safety inside and outside of school, with real-life consequences including absenteeism from school (Cross, Lester, & Barnes, 2015), decreases in self-confidence and relationship skills (Coelho & Marchante, 2018), or even worse. Many of these negative social interactions that occur through digital environments that affect a student’s sense of safety in school can be classified as cyberbullying.

In this section, we discuss the role that social and emotional competencies play in cyberbullying, social and emotional competencies that protect against cyberbullying, recommendations for social and emotional instruction related to bullying behaviors, and systemic district- or schoolwide approaches to address cyberbullying behavior and frequency.

### Social and Emotional Competencies and Cyberbullying

Relationship-building activities in networked digital environments include time socializing with peers, communicating with family, and interacting with new contacts. As students experience more interpersonal interactions online, they are also more prone to cyberbullying. Cyberbullying is unwanted or aggressive behavior that involves some level of power imbalance and takes place over a digital platform where students share content (e.g., social media, text messages, or gaming). Cyberbullying occurs when students send harmful or untrue information about another student and typically results in some sort of humiliation or embarrassment (Stopbullying.gov, 2018). This type of behavior is very common—for adolescents, a majority of students report being victims of some type of cyberbullying or harassment behavior online at least once (Pew Research, 2018a). Across all K–12 ages and grade levels, Modecki and colleagues found that 31.5% of students have been perpetrators of cyberbullying, and 56.2% of students have been victims (Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014). **Cyberbullying is similar to traditional bullying in that there is a power imbalance, it is an act of aggression, and the behavior is repeated.** Cyberbullying is distinct because perpetrators often see themselves as anonymous, the bullying behavior can occur 24/7, and there is the potential for a much larger audience. In addition, the “reward” for engaging in cyberbullying for perpetrators is delayed (Kowalski, Schroeder, Giumetti, & Lattanner, 2014).

Multiple reasons exist about why students engage in cyberbullying behavior (Kowalski et al., 2014), one being student social and emotional competencies. **Social and emotional competencies contribute to why students enact perpetrator or bystander cyberbullying behaviors and how victims respond to cyberbullying behavior**. The ability to develop and practice social and emotional skills like perspective-taking, connecting consequences to actions, and the ability to read social cues in digital environments have implications for perpetrators, victims, and bystanders in cyberbullying interactions. Online, students are less likely to consider the victim, unable to respond to in-person social cues, and less likely or able to consider the consequences of their actions than in traditional “in-person” bullying scenarios (Runions & Bak, 2015). In addition, students’ levels of self-esteem (or confidence in oneself) relates to cyberbullying for perpetrators, bystanders, and victims. Students are more likely to be involved in cyberbullying in any role if they lack confidence in themselves and have a difficult time perspective-taking (Brewer & Kerslake, 2015; Patchin & Hinduja, 2010). In addition, research demonstrates that involvement in cyberbullying in any role over time has negative impacts on existing social and emotional competencies, including decreased self-confidence, decreased self-control, lowered social awareness, and decreased relationship skills. Victims show the greatest decrease in self-confidence and relationship skills of any cyberbullying role, especially if they are repeatedly victimized over a span of time (Coelho & Marchante, 2018).

**Certain social and emotional skills can act as protective factors against cyberbullying perpetration and victimization. Students who can self-regulate their behaviors (control impulsivity) and emotions in digital environments are less likely to perpetrate cyberbullying behavior**. For example, it is easy to post something online without immediately receiving any negative feedback; students interacting online do not have the face-to-face social cues or immediate social pressures that might encourage them to pause in person. Thus, students who are able to self-regulate this impulsive behavior are less likely to post harmful comments or send harassing messages. In addition, self-regulation in digital environments is also often tied to a higher level of self-awareness and awareness of others, meaning that less impulsive students consider the effects of their digital behaviors on others (Tzani-Pepelasi, Ioannou, Synnott, & Ashton, 2018). In addition, responsible decision-making skills are tied to lower levels of cyberbullying victimization. Several reasons exist for this connection. First, in the moment that a student experiences a cyberbullying behavior, students who can productively analyze a situation and problem-solve to overcome challenges are more successful at exiting the harmful situation and seeking support. Second, higher levels of responsible decision-making skills may mean that students engage in less risky digital behavior, like sharing too much personal information or interacting with unknown people online (Zych, Beltrán-Catalán, Ortega-Ruiz, & Lloren, 2017). Growth mindset and resilience, which are related to self-awareness, self-efficacy, and self-confidence, help students to experience challenges (like cyberbullying) and move forward without overly internalizing negative effects (Hinduja & Patchin, 2017).

### Social and Emotional Instruction to Counteract Cyberbullying

**Given the connection between student social and emotional competence and cyberbullying, program developers have developed and researched classroom-based SEL programs that directly or indirectly effect the presence of cyberbullying.** The Committee for Children, developers of the Second Step SEL program, recommends direct classroom instruction on five specific social and emotional skills to address bullying and cyberbullying behavior. These skills are (1) empathy; (2) emotion regulation; (3) social problem solving; (4) friendship building or relationship building; and (5) assertiveness (Whitson, 2015). When students engage in practices that support the development of these social and emotional skills, reductions in bullying perpetration, bystander behavior, and victimization occur (Ragozzino & O’Brien, 2009). Furthermore, some programs focused on countering cyberbullying behavior use varied instructional strategies, including scenarios and role-plays, affording students opportunities to practice their social and emotional skills in the types of situations that they may experience outside of the classroom. In the [*Digital Citizenship & Social and Emotional Learning*](https://www.commonsense.org/education/sites/default/files/tlr-blog/cse-digitalcitizenship-sel.pdf) guide for teachers, Common Sense Education (2017) includes “digital dilemmas,” or common challenges that students may face online or with technology that they must solve. They also include teacher discussion questions to guide student thinking and learning about the skills they need to handle potential digital dilemmas, in addition to extension lesson activities and resources to deepen student social and emotional competencies.

**Initial studies have shown positive effects of SEL or antibullying programs on the reduction of cyberbullying behaviors in schools**. For example, a recent clinical trial of the Second Step program for students in Grades 3–5 found that schools who engaged in the Second Step program in this study had significant reductions in bullying and cyberbullying behavior compared with control schools, in addition to improved student perceptions of school climate and school safety. Although cyberbullying is not a specific focus of the program, the program promotes empathy, perspective taking, communication skills, problem solving, and relationship skills (Espelage, Low, Van Ryzin, & Polanin, 2015), skills students need to navigate digital learning environments. Similarly, researchers at the Yale Center for Emotional Intelligence conducted multiple studies of the SEL program, RULER. The program provides direct instruction and professional development to support student and educator social and emotional competencies, including self-awareness, self-regulation, and goal-setting skills. Researchers found that schools that participated in the program had lower incidences of negative behaviors and cyberbullying, and improvements in student perceptions of school climate, student-teacher relationships, student engagement, and effective teacher instructional practice compared with schools that were not implementing the program (Nathanson, Rivers, Flynn, & Brackett, 2016). Both examples suggest that when schools implement evidence-based SEL programs that meet the needs of the intended population, student social and emotional competencies increase, perceptions of school climate improve, and bullying and cyberbullying behaviors decrease, among other positive outcomes for students. However, these are initial studies that demonstrate the effects of SEL programs on cyberbullying in specific contexts, and more research needs to be conducted to better understand the effects of SEL programs on cyberbullying for all students.

### Systemic Approaches to Counteract Cyberbullying

States and districts have adopted systematic efforts in addition to classroom approaches to respond to cyberbullying, including broad school climate efforts like the development and adoption of antibullying policies. These types of policies often include information regarding reporting cyberbullying instances and the consequences for engaging in cyberbullying behavior. Although it is difficult for adults to enforce consequences for perpetrators (as many times they are anonymous) or even to support the victim (Ragozzino & O’Brien, 2009), it is important for young people to feel that adults are aware and engaged with the problem (Hinduja & Patchin, 2017). Hinduja and Patchin (2017) found that students’ awareness of existing school and parental consequences for perpetrating cyberbullying behavior was a deterrent factor in cyberbullying behavior. However, consequences alone are not enough to significantly bring down the frequency of cyberbullying behavior.

**Research has found that implementing a singular program in isolation does not reduce bullying behaviors as well as taking a whole-school approach** (including targeting policies, changing school and classroom climate, levels of support, and curricular integration) (Hinduja & Patchin, 2017; Pearce, Cross, Monks, Waters & Folconer, 2011), although the research on whole school effects show moderate or mixed results. Based on their findings, Hinduja and Patchin (2017) propose that schools should take both a whole-school approach to reduce bullying and cyberbullying behaviors, as well as an individual approach to focus on building the competencies and skills that students need to be resilient learners (Hinduja & Patchin, 2017). Whole-school practices to reduce bullying behaviors include such strategies as creating community and family partnerships, building educator capacity to act (e.g., professional learning, coaching, and support), creating a supportive learning environment (e.g., fostering positive relationship among students and staff), and enacting policies that are proactive in supporting student development (e.g., consistent policies that provide a framework for expectations) (Pearce et al., 2011). In addition, whole-school efforts should include policies that focus on the systemic causes of cyberbullying behaviors such as a lack of focus on social and emotional development (Brackett & Rivers, 2014).

District- and school-level policies, staff training, and curricular programs to promote a positive school climate are associated with decreased incidences of bullying and cyberbullying and improve student social and emotional competencies (Osher & Berg, 2017; Patchin & Hinduja, 2012; Ragozzino & O’Brien, 2009). In schools where students report their climate as being trusting, fair, and pleasant, students also report fewer instances of perpetration and victimization of cyberbullying (Kowalski et al., 2014). Example strategies to promote a positive school climate and improve social and emotional competencies include the following: build positive relationships with young people, model inclusive behavior, promote open discussion and clear communication in the classroom, and practice emotion coaching strategies to name negative emotions and promote strategies for young people (Whitson, 2015). Furthermore, research suggests that when schools address cyberbullying behavior as a partnership between schools, students, and families, cyberbullying behavior decreases (Schneider, Smith, O’Donnell, 2013). Schools can train parents and families to recognize cyberbullying behavior or victimization, suggest communication strategies to address the issue with their children, and provide tools and resources to support student development of social and emotional competencies.

Although research demonstrates promising whole-school practices to reduce cyberbullying, many of which come from bullying prevention efforts, the rigorous research on whole-school interventions that reduce bullying and cyberbullying are limited, and those that do exist show mixed or moderate results on the overall decrease of bullying incidents (Catone et al., 2015). More research is needed to understand how bullying and cyberbullying interventions are similar and unique to one another, and the effects of those interventions on cyberbullying instances, as well as on student social and emotional competencies.

## Connecting SEL, Digital Environments, and School Safety

A strong research base that connects SEL, digital learning environments, and school safety does not exist. However, as students spend more time in digital environments, schools will need to be thoughtful about the resources and instruction they provide to support students to continue to learn and develop in digital spaces. As districts and states think about connections among these topic areas, four initial learnings have emerged from the nascent research literature that can guide this work:

1. *SEL is essential for safe and productive learning and development.* Although not a new finding, it is heartening to see that social and emotional skills are just as important for students in digital learning or networked social environments as they are in a traditional classroom. Although specific skill sets seem to be more important in certain situations than others, overall social and emotional competencies appear to be one of the most important factors in student learning and safety in digital environments. SEL for all students should continue to be a priority for schools as they adopt new methods of instruction and approach new digital challenges. In addition, understanding how students use their social and emotional competencies in varied digital learning environments should continue to be a priority for practitioners, researchers, and policymakers.
2. *New digital tools and learning environments require active facilitation to ensure productive and social and emotionally competent use.* Digital learning environments, resources, and technology tools can transform a classroom. Schools now have instant access to enormous digital libraries and networked connections with people around the world (or beyond—even the International Space Station has classroom programming!), collaboration platforms for student groups, and much more. However, each of these new resources is a tool that will require active and intentional instruction from in-person educators to ensure productive use. Classroom educators will need to think about ways that students could use (or misuse) the tools and ways that students can maximize social and emotional skill building while using the tools; have active and open discussions with students about their experiences; and provide clear guidance for classroom interactions and use. Schools and districts will need to work with classroom educators on the front lines to understand the newest challenges and opportunities in digital learning, and create appropriate and supportive policies and resources to support student learning and safety.
3. *Development of digital learning and curriculum tools will continue to outpace research*. Research moves slowly, and the speed of digital technology development is far beyond what research will be able to keep pace with. As schools and classrooms work to adapt to a rapidly changing digital world, the demand for tools and classroom resources will mean that classrooms and schools will be on the front lines of piloting new strategies and reacting to new challenges. A clear example is the number of SEL apps and games available to classroom teachers. The beginning research on SEL apps and games suggests that some of these products may be effective at building student social and emotional skills, but many will be relatively neutral or ineffective. A few may even be actively harmful or counterproductive for social and emotional development. Schools should monitor emerging research about these tools and, when possible, use tools that are evidence-based.
4. *New “digital” challenges are sometimes old “in-person” challenges in a new form*. Although digital environments provide new platforms and mechanisms for certain types of behavior, many of the fundamental challenges are already well known in schools. Cyberbullying is a new type of behavior because the environment where it happens is new, but emerging research has shown that students who are victims of this type of recurring online bullying are often also victims of ‘traditional’ in-person bullying. Perpetrators of cyberbullying are likely also to be perpetrators of in-person harassment behavior. Although schools and districts should be thoughtful about specifically addressing the particular nuances of cyberbullying behavior and victimization, they should address these behaviors as part of a systemic approach to supporting a positive school climate, promoting respectful learning environments, and fostering an appreciation and respect for difference in the school culture.

### Implications for States and Districts

Best practices at the state and district levels for addressing the interconnected elements of SEL, digital learning environments, and school safety are so new that they can be hard to find. However, some emerging practices of note include the following:

#### Digital Citizenship Standards and Policy

With digital literacy, the focus is on the skills that students need to consume and create digital content or navigate digital environments. Digital citizenship takes these concepts a step further, promoting the idea that digital environments are collective community spaces that require us all to adapt to shared ethical standards, communication and interpersonal strategies, and norms for responsible citizenship. Adopting a digital citizenship approach has significant opportunities for alignment with SEL standards and school safety or climate standards. Treating digital environments as a “place” with rules, behaviors, and responsibilities promotes active and intentional engagement on the part of the full school community, including educators and administrators, families, and students as part of the process. States including Washington, Utah, and Maine have adopted legislation for digital citizenship practices in schools (<http://www.ncsl.org/research/education/digital-literacy.aspx>). Other states, including Wisconsin, have adopted digital literacy standards that incorporate elements of a broader digital citizenship approach.

* Washington state passed a bill proposing standards for safe technology use and digital citizenship in schools in 2016. Prior to adopting legislation, Washington state convened a statewide advisory group to [provide recommendations](http://www.k12.wa.us/LegisGov/2016documents/2016-12-DigitalCitizenship-LegislativeReport.pdf?_sm_au_=iHVmJRHLrpB5JQR7) to establish a shared definition of digital citizenship. Today, Washington state’s bill on digital citizenship in schools outlines a collaborative learning process for the full school community, including educators, families, community members, and students, to engage in ongoing discussions about safe and literate technology use, digital citizenship, and media literacy.
* Utah’s bill on safe technology use and digital citizenship requires that schools set up a community council to educate and empower school educators, families, and students on safe and productive digital choices.
* The International Society for Technology in Education (ISTE) promotes the adoption of digital citizenship standards by state education departments. ISTE [provides its standards](https://www.iste.org/standards) as a guide, including specific digital literacy and citizenship standards for students, educators, education leaders, coaches, and computer science teachers. The standards emphasize both digitally literate skills as well as socially responsible and aware online behavior.
* DPI has taken critical next steps to connect SEL, digital learning environments, and school safety. Recent work has aligned DPI’s statewide SEL and digital standards by outlining key social and emotional skills related to digital literacy.

#### Digital Learning Training and Certification

As discussed in the previous section, educators need support to effectively implement SEL strategies relating to productive and safe digital learning. Similarly, students and their families need support to effectively navigate these new environments, make good decisions about digital access, and identify risky behaviors. A number of states have adopted innovative training and certification strategies to standardize the support that educators, students, and families receive related to digital learning and SEL.

* Kentucky has adopted a statewide digital citizenship definition and tied it to a “[digital driver’s license](https://otis.coe.uky.edu/DDL/launch.php)” certification course for students. The driver’s license assessment asks questions about safe and ethical digital behavior and ties their certification responses to any personal digital device that they use in the classroom. Districts can decide at which grade levels students take the certification course, but typically the course is delivered in fifth and ninth grades, with refresher courses provided in the intervening years. Student records live statewide and follow a student from district to district if they move schools. The program incorporates teacher certification and training elements as well.
* ISTE provides certification training on its digital citizenship standards for educators through a multistate provider network. The current providers include Midwest Education Technology Community (METC), Northwest Council for Computer Education (NCCE), New York State Association for Computers and Technologies in Education (NYSCATE), and Texas Computer Education Association (TCEA). The training courses are focused on specific pedagogical practices for teachers to support digital learning in their classrooms. Digital Citizenship is one of the required modules, as well as Design Thinking, Personalized Learning, and Designing for Diversity.
* Other independent organizations and programs provide micro-credential or certification training for adults interested in supporting student digital learning. Common Sense Education offers a [digital badge and training program](https://www.commonsense.org/education/recognition-educators) focused on helping students to be critical, responsible and thoughtful users and creators of technology. This course is designed for the community of adults who support students and their digital lives, including educators, parents, school staff (librarians, administrators, guidance counselors, etc.), and community partners.

#### Investment in Supportive Technology for SEL and Digital Citizenship

A need exists for innovative technology to support digital learning and social and emotional development in digital environments. The World Economic Forum (WEF) published a brief titled [*New Vision for Education: Fostering Social and Emotional Learning through Technology*](http://www3.weforum.org/docs/WEF_New_Vision_for_Education.pdf)that tackles this topic. In the WEF brief, researchers recommend that countries, ed-tech companies, and school districts adopt strategies for more effective collaboration on the development, use, and refinement of educational technology relating to SEL. In addition, the report recommends that governmental systems, including state departments of education, invest in continued innovation on the implementation of SEL in schools and classrooms. Standards and policies are not enough without significant investment in the supportive products, training, and technologies that make this type of learning and teaching possible.

Furthermore, the U.S. Department of Education in its nonregulatory guidance for the Student Support and Academic Enrichment (SSAE) Grants identify three priority areas, including well-rounded educational opportunities (including SEL), safe and healthy schools, and effective use of technology (U.S. Department of Education, 2016). This literature review demonstrates that not only are these three aspects of SSAE important individually, but also but more work is needed to connect them to create effective and efficient student supports for all students, including ways in which to fund these efforts in a coordinated fashion.

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| Selected Resources The following resources listed offer additional information on specific programs and practices. They are included for informational purposes and do not constitute a recommendation or endorsement of the programs or practices addressed.  ***2013 & 2015 CASEL Guides: Effective Social and Emotional Learning Programs*** ([http://casel.org/guide](http://casel.org/guide/))  The 2013 and 2015 CASEL *Guides* identify well-designed, evidence-based SEL programs with potential for broad dissemination to schools across the United States. Based on CASEL’s work in research and practice spanning nearly two decades, it provides a systematic framework for evaluating the quality of classroom-based SEL programs. In addition, the *Guides* share best practices for district and school teams on how to select and implement SEL programs.  ***Stop Bullying.gov*** ([www.stopbullying.gov](http://www.stopbullying.gov))  This research and resources page provided by the U.S. Department of Health and Human Services contains research and resources relating to bullying and cyberbullying. The page outlines a variety of state-level policy initiatives, provides fact sheets and infographics on the topic, and links to resource centers and organizations.  ***Common Sense.org*** (<https://www.commonsense.org/>)  Common Sense is a nonprofit organization dedicated to helping kids navigate digital spaces. The resources provided on this page are focused on practitioner-level lessons and resources, including a teacher guide that connects social and emotional skill building with digital literacy and citizenship. Common Sense’s guide focused on SEL and digital citizenship is an especially relevant resource for the topic of this literature review: <https://www.commonsense.org/education/sites/default/files/tlr-blog/cse-digitalcitizenship-sel.pdf>  ***National Center on Safe Supportive Learning Environments*** (<https://safesupportivelearning.ed.gov/>)  This USDOE center provides a national clearinghouse for resources on safe and supportive learning environments, including school culture and climate.  ***EdSurge News on Social and Emotional Learning*** (https://www.edsurge.com/search?terms=social%20emotional%20learning&index=EsEdsurgeInstantSearch&page=0&is\_v=1)  EdSurge provides articles, news, products, and guides on the integration of social and emotional learning and education technology. |

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