Technology Tools Available for Implementing Social Skill Instruction

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Twenty-seven middle school students sit in their project-based learning groups while Mrs. Shea, their homeroom teacher, walks around checking in with each group. Despite allowing Amy to choose her group, Amy is once again sitting alone against the wall while the rest of her group enjoys a lively conversation. Mrs. Shea comes over and asks Amy if she knows the content that her group is discussing. Amy replies, "Yes." She then asks Amy if she would like to be involved in the conversation, to which Amy says she would. So, Mrs. Shea asks the group a few questions and helps Amy get involved in the conversation. After a few minutes, Amy goes back to being silent.

Amy has received social skill interventions through an individualized education program (IEP) since first grade. In recent years, the IEP team decided that pulling Amy out of the classroom to provide social skill intervention caused a more significant divide between her and her classmates. Mrs. Shea worries that Amy's well-being will continue to decline without meaningful connections to her peers. Mrs. Shea sees Amy needs assistance in social skill development, but she is at a loss as to where to begin.

A social skill is a competence that enables someone to learn, communicate, fulfill individual needs, interact with others, develop relationships, and protect oneself (Dowd & Tierney, 2005). Students' development of social skills assists in their academic achievement, ability to collaborate, and the development of their peer relationships (Ke et al., 2018). Students who are socially competent display better mental health (Koegel et al., 2014) and have a higher probability of meaningful employment (Gresham et al., 2011).

Teachers report needing to provide daily social skill instruction to their students without receiving sufficient training in teaching and generalizing social skills (Dobbins et al., 2010). For over a decade, teachers have reported spending more time managing behaviors that interfere with instruction than the time it would take to teach the skills that prevent these behaviors (Jones et al., 2004). Social competence is necessary for students to interact in educational environments and attain academic success (Merrill et al., 2017). Yet, general and special education teachers report feeling inadequate in providing social skill instruction to students (Dobbins et al., 2010).

Poorly developed social skills in adolescents with disabilities correlate to higher levels of teacher and peer rejection (Vitaro et al., 2005); increased aggression, depression, anxiety, and loneliness (Koegel et al., 2014); and decreased vocational functioning (Gresham et al., 2011). Although not all students who would benefit from social skill instruction have a disability, many students receiving special education services have difficulty with social interactions (Fallon & MacCobb, 2013). If not addressed, these social skill challenges may result in underemployment and unemployment (Tobin et al., 2014).

Students with disabilities have significantly fewer peer interactions and spend more time isolated when in general education settings than their peers (Humphrey & Symes, 2011; Locke et al., 2016). This feeling of isolation is heightened when students are pulled out of the regular classroom setting to receive intervention services (Fenty et al., 2008). However, when provided with appropriate instruction, these same students can become responsible for their social and emotional growth and development (Martinek et al., 2001).

Students with disabilities in middle school often have a strong dislike for direct social skill instruction from adults and state in-person instruction is unpleasant and pressuring (Bottema-Beutel et al., 2015). In contrast, when this direct instruction occurs through technology, students with disabilities report an increase in motivation and willingness to engage with instruction (Miller & Bugnariu, 2016). With limited time and resources, educators must develop their students' social skill competencies (Corcoran et al., 2018). The quality of teachers' implementation of social skill instruction affects student outcomes (Reyes et al., 2012; Sullivan & Sadeh, 2012). In this article, I seek to provide educators with a list of technology tools utilizing research-based intervention techniques to provide social skill instruction to middle school students.

Recommended Practices

The Institute of Educational Sciences What Works Clearinghouse identified 27 evidence-based practices (EBPs) for teaching social skills to students with disabilities (Hume & Odom, 2011). In 2021, Hume et al. updated these to 28 EBPs, from which I chose two EBPs based on their easy access within technology: social narratives and video modeling (VM). Researchers find that teachers utilize EBPs correctly when given knowledge and examples of these practices and when the techniques are easy to implement (Lane et al., 2009). This article provides teachers with available, easy-to-implement technology tools that integrate EBPs, such as VM and social narratives, within the technology.

In 2017, the Council for Exceptional Children and the Collaboration for Effective Educator Development, Accountability, and Reform Center published a set of high-leverage practices (HLPs) for K–12 special education teachers of students with disabilities. A full listing of these HLPs and an overview of their development and research base is available in *High-Leverage Practices in Special Education* by McLeskey et al. (2017). As Brownell (2021) noted, HLPs are instructional strategies and professional practices used to support students with disabilities. HLPs can be used in combination with EBPs to positively impact a student's social and emotional skills. This article presents eight HLPs (two in the social-emotional-behavioral domain [8, 9] and six in the instructional domain [14, 15, 18, 19, 20, and 21]) that lend themselves well to providing social skill instruction for students with disabilities.

Utilizing Technology to Deliver Social Skill Instruction

Technology is a crucial component in teaching students with disabilities outside the classroom to facilitate their learning and acquisition of social skills (Roberts-Yates & Silvera-Tawil, 2019). Students are often experts in using technology from a young age (Oien, 2014). In classrooms where teachers must provide instruction in social skill acquisition and development without training, technology can help deliver systematic instruction utilizing research-based methods (Miller & Bugnariu, 2016). Parents and educators of children with autism spectrum disorder report more positive outcomes from technology-delivered social skill interventions than from traditional human instruction (Miller & Bugnariu,

2016). This increased success with technology-delivered social skill instruction may be due to the decreased anxiety and increased motivation students report when learning through technology (Howard & Gutworth, 2020).

Rather than require Amy to receive services outside the classroom, Mrs. Shea can assist Amy in improving her social skills by first determining Amy's specific needs through observation, surveys, and other assessment measures. Then, Mrs. Shea can use this knowledge to guide her implementation of interventions through technology tools. Technology tools utilizing aspects of EBPs and HLPs within the technology-delivered intervention can assist Mrs. Shea in feeling more confident in implementing social skill practices.

Technology can assist Mrs. Shea by (a) decreasing distractions, which allows Amy to focus on one concrete skill at a time; (b) creating specific task-oriented environments, focusing on the social communication tasks Amy struggles to perform; (c) increasing standardization of procedures, allowing for the intervention to be implemented with fidelity; (d) reducing Mrs. Shea's anxiety and the pressure she may feel about implementing effective social skill instruction without training; (e) increasing opportunities for practice without assistance from peers; and (f) lowering the financial cost for the school and Amy's parents of providing opportunities for practicing skills outside of school (Howard & Gutworth, 2020).

Researchers report that technology has the potential to uniquely meet the academic and social needs of children and adolescents (Saltzman et al., 2017). Technology becomes even more important in social skill education when students cannot receive instruction within schools. COVID-19 made apparent the necessity of instructional and social supports delivered through technology (Saltzman et al., 2020). Although there is a need to locate effective technology-delivered social skill instruction programs, this research can be a time-consuming and daunting process. Providing a guide to teachers on where to go to obtain these tools is essential.

Matching Instruction to the Social Skill Need

The steps in developing social competence begin with determining whether the student requires instruction for a cognitive (skill) or behavioral (performance) component (Attwood, 2003). This crucial information is discovered when following the steps in ***Figure 1***. When the area of need is a skill deficit, the specific social skill has not been either taught, learned, or both (Fenty et al., 2008). For example, a student may be lacking the knowledge of what skills to use to start a conversation because either the student is lacking education in this area or prior instruction was not adequate for skill acquisition. When there is a social skill deficit, providing scaffolding and direct instruction in the skill area using multiple means of representation and engagement is best.

When the area of need is a performance deficit, on the other hand, the student understands the skill necessary to perform the task but does not apply the knowledge either in a specific environment, consistently, or fluently (Attwood, 2003). For example, the student may understand how to start a conversation when in a social skill group but cannot create a discussion with peers in the hallway. For social skill performance deficits, the teacher should ascertain the reason for the deficit. There are several reasons for performance deficits. These deficits may be due to being unsure of the requirements needed to execute the skill; lack of opportunities to practice the skill; lack of understanding of how, when, or where to engage in the skill; general performance anxiety; prior failed skill execution causing avoidance; lack of motivation; or not having the skills necessary to generalize the skill into multiple environments.

Determining whether a deficit is performance or skill based is imperative to accurately providing intervention. Teachers can accomplish this through formal assessments (i.e., Social Skills Improvement System, Devereux Student Strengths Assessment), informal assessments (i.e., observation, checklists, surveys, interviews), or both. ***Table 1*** provides a few low- and no-cost assessments to help educators determine a student's specific social skill area of need. ***Table 2*** takes the information from any chosen assessments and assists an educator in planning an intervention to best fit the identified social skill need. During these assessments, it is essential to use multiple measures to determine the individual student's social skill priorities. These assessments' primary objectives are to determine the student's crucial social skill instructional needs and the fundamental steps needed to learn these skills (i.e., preskills, competencies, abilities, resources). For example, suppose the student cannot maintain a topic of conversation. In that case, the preskills necessary may include listening to others, identifying the main idea and supporting details in a conversation, self-monitoring, and having flexible thinking. If the student does not have the required skills, the teacher and student should work together to resolve this before attempting instruction on maintaining a topic in conversation.

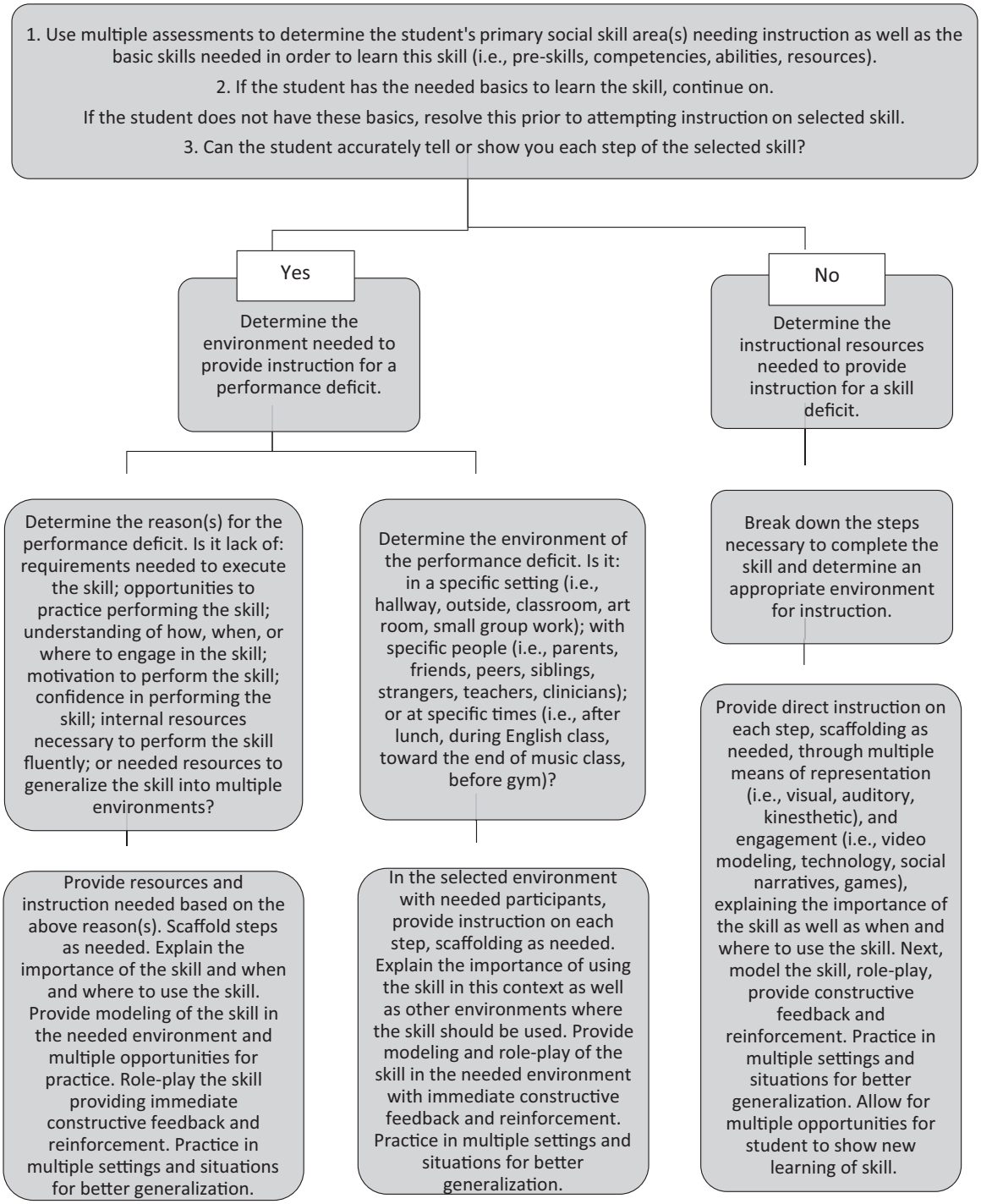
Skill Deficit

The assessments may identify multiple social skill needs. However, all stakeholders' input and assessment results (i.e., those of the student, parent, administration, teachers) should determine the priority need. Instruction should focus on the priority social skills identified. If the student can accurately tell or show each step of the selected skill, a performance deficit intervention is needed. If the student cannot tell or show each step of the selected skill, a skill deficit intervention is necessary. For skill deficits, students need direct instruction on each step through multiple means of representation (i.e., visual, auditory, tactile, kinesthetic) and engagement (i.e., VM, technology-delivered social narratives, games). The main task is broken down into scaffolded steps. For numerous social skills, correct execution is impossible without knowing all the skill steps (Gresham et al., 2010). The teacher should explain the importance of the skill and when and where to use the skill. After direct instruction on each skill step, the student needs a model of the skill and time to role-play. Throughout teaching and role-playing, the teacher provides constructive feedback and reinforcement. The skill should be practiced in a reinforcing manner (i.e., using a preferred method of instruction, such as peers or a favorite character) in multiple settings for better generalization.

Performance Deficit

If the area of need is a performance deficit, determining the reason for the deficit and environment of the deficit is needed. The

Figure 1 **A process for determining an individual student's social skill instructional need**



teacher should determine if the deficit is due to general performance anxiety or lack of (a) understanding of the requirements necessary to execute the skill; (b) opportunities to practice the skill; (c) knowledge of how, when, or where to engage in the skill; (d) motivation to perform the skill; (e) confidence in performing the skill; (f) internal resources necessary to perform the skill fluently; or (g) resources to generalize the skill into multiple environments. Once the reason for the deficit is determined, the teacher should look at the environment and consider if it happens in a specific setting (e.g., hallway, classroom, art room, small group work), with particular people (e.g., parents, friends, siblings, strangers,

Table 1 **Five Examples of Assessments for Measuring Middle School Students' Social Skills**

Instrument and link to locate the assessment	*Target age*	*Cost*	*Purpose of instrument*	*Year published (developed)*	*Type of measurement and mode*	*Subscales*	*Response options*	*Respondent: Number of items*	*Time to administer*
Autism Social Skills Profile by Scott Bellini https://www.ocali.org/up_doc/Autism_Social_Skills_Profile.pdf	Not Reported	Free	A tool to assist in identifying social skill deficits as related to three areas: social reciprocity, social participation/avoidance, and detrimental social behaviors.	2006 (2006)	Self-report Individual Paper and pencil	Social Reciprocity, Social Participation/ Avoidance, and Detrimental Social Behaviors	4-point Likert scale and brief description of behaviors	Parent: 50	5–30 minutes
Social Skills Improvement Rating Scales (SSIS) https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Behavior/Social-Skills-Improvement-System-SSIS-Rating-Scales/p/100000322.html	3–18	$30–$150	Universal screener given by a professional with a BA or BS in education, special education, or related field to assess all students' performance in social skills, problem behaviors, and academic competence. A set of rating scales assessing social behavior and providing interventions with updated norms and validity to the Social Skills Rating Scales (SSRS).	2008 (1990)	Self-report Individual Paper and pencil	Depending on age administered: Social (prosocial behaviors), Motivational, and Academic (reading and math); Communication, Engagement, Bullying, and Autism Spectrum	4-point scale for skills and problems 3-point scale for skill importance 5-point scale for academic competence	Student: 75 Parent: 79 Teacher: 83	10–25 minutes
Social Skills Questionnaire (SSQ, Spence) https://www.scaswebsite.com/index.php?p=1_57	8–18	Free	A standardized assessment of social competence measuring skills within three domains: emotional intelligence (mixed and trait), mental health and well-being, and social and emotional competence.	(1995)	Self-report Individual Paper and pencil	Conflict Resolution/ Avoidance, Warmth and Empathy, and Social Involvement	3-point Likert scale	Student: 30 Parent: 30 Teacher: 30	10–20 minutes
Strengths and Difficulties Questionnaire (SDQ; Goodman) https://www.sdqinfo.org/a0.html	3–16	Free	A screening tool addressing 5 Social and Emotional Learning domains with forms available in numerous languages for teachers and parents and a self-completion form for students ages 11–16.	(1997)	Self-report Individual Paper and pencil or online	Emotional Symptoms, Conduct Problems, Hyperactivity/ Inattention, Peer Relationship Problems, and Prosocial Behavior	3- and 4-point Likert scales	Student: 25 Parent: 25 Teacher: 25	3 minutes per student
Teenage Inventory of Social Skills (TISS) https://educationendowmentfoundation.org.uk/projects-and-evaluation/evaluating-projects/measuring-essential-skills/spectrum-database/teenage-inventory-of-social-skills/	11–18	Free	An assessment of behaviors related to adolescent peer acceptance. The questionnaire assists to identify adolescents with peer relationship difficulties and targets behaviors for intervention.	(1992)	Self-report Individual Paper and pencil	Pro-Social Behaviors and Anti-Social Behaviors	6-point Likert scale	Student: 40	10–20 minutes

classmates, teachers, clinicians), or at specific times (e.g., after lunch, during English class, toward the end of music class, before gym). Resources and instruction should be based on the above reasons. ***Figure 1*** provides a chart to help educators determine the type of skill deficit and needed social skill instruction.

Delivering Social Skill Instruction

EBPs

Social narratives. Social narratives are antecedent-based interventions involving short descriptions of social situations with relevant cues and examples of appropriate responding used to promote prosocial behaviors and reduce challenging behavior (Zimmerman & Ledford, 2017). Social narratives differ from other written social interventions because they are short in length, personalized, and typically written by an educator, the educator and the student, or the student alone (Rogers & Myles, 2001). Traditionally, an adult presents the written social narrative by reading the story to the student. Social narratives, sometimes referred to as social stories, are used with students with and without disabilities to make contextual characteristics and expected behaviors explicit to assist students in navigating social situations (Gray & Garand, 1993). Social narratives have become a popular intervention for practitioners because the intervention does not require resource-intensive training to improve high-fidelity implementation (Fees et al., 2014).

Today, technology has increased the delivery options for such narratives, making narratives available to students independent of adults. Software programs, applications, simulations, augmented reality, and virtual environments are now available to present students social narratives. This independence reduces the stigma of being pulled out of the general education classroom for instruction and decreases the amount of support needed from teachers, support staff, and paraprofessionals (Boswell et al., 2013). In fact, one meta-analysis found presenting students technology-delivered social narratives through a computer screen or a virtual reality head-mounted display was more effective than comparison programs (i.e., written social narratives presented by an adult) by almost three-fourths of a standard deviation (Howard & Gutworth, 2020).

VM. VM uses audiovisual technology (e.g., iPhone, iPad) to help teach students specific skills. Based on Bandura and McClelland's (1977) social learning theory, VM involves students learning by watching and imitating others' actions. VM allows educators to utilize students' visual strengths and removes extraneous stimuli to focus on salient and relevant information. There are four different types: (a) VM (Gilmour, 2015), where students watch videos of others; (b) video self-modeling (Bellini & McConnell, 2010), where students watch videos of themselves; (c) point-of-view modeling (Hine & Wolery, 2006), where students watch videos (recorded by themselves or others) from their perspective; and (d) video prompting (Cihak et al., 2006), which breaks down a task into clips of each step to teach students to perform specific sections of each selected skill. When using VM, the person demonstrating the target skill may be other students, adults, or animated depictions.

According to studies conducted by Bellini and Akullian (2007), VM is a useful tool in teaching social skills to students with disabilities. VM's use ranges from increasing verbal social interactions (Oh-Young et al., 2018) to improving independent living skills (Aljehany & Bennett, 2019) to facilitating student self-instruction in daily scheduling (Shepley et al., 2018) to reducing inappropriate behaviors (Sadler, 2019). Studies conducted by Plavnick et al. (2013) list VM as an effective and cost-efficient tool for teaching social skills to students with disabilities. Student- and teacher-created VM as well as online and television-produced VM are all shown to be effective for teaching prosocial behaviors to students with disabilities (Naylor et al., 2019). The technology tools to present VM recommended in ***Table 2*** are by no means exhaustive. There are additional technology resources (e.g., meTV, UCLA PEERS Clinic Role Play Videos found at https://www.semel.ucla.edu/peers/video) for all four VM levels. The technology presented in ***Table 2*** consists primarily of easily accessible VM used to improve skill- and performance-based deficits.

HLPs

HLPs are research-based best practices a teacher may implement before, during, and after instruction. These practices include (a) providing direct and explicit teaching of the social skills, (b) breaking down tasks into their respective parts and teaching each piece while incorporating the student in a meaningful way (e.g., utilizing technology, peer mentors, games, acting out practice scenarios), (c) providing instruction to students on how they learn and why it is essential (e.g., cognitive and metacognitive approaches), and (d) giving students timely and appropriate constructive feedback (e.g., reinforce success as soon as the action occurs). These HLPs help ensure teachers provide social skill instruction in many settings and situations to assist with maintenance and generalization of the newly learned skill.

Table 2 provides a few of the numerous technology tools available to teachers for social skill instruction broken down according to the primary HLP used within the technology to present instruction or provide resources. Each technology tool has listed whether it is helpful for a performance or a skill deficit and whether it utilizes social narratives or VM. The educator should be aware of the exact social skill area of concern before choosing the technology (see ***Figure 1***) to accurately target the student's area of need and appropriate instructional method. ***Figure 2*** provides screenshots of a selection of the technology tools available to assist educators in improving student social skills using HLPs and EBPs.

Mrs. Shea observes Amy in multiple settings and times of day and discovers that Amy struggles to initiate and continue conversations with peers throughout her school day. When students approach Amy, Amy will talk with the student for a short period, but Amy never approaches other students. Mrs. Shea uses the tools in ***Figure 1***, ***Table 1***, *and* ***Table 2***. *After giving the Social Skills Improvement Rating Scales to Amy, her parents, and her other teachers, Mrs. Shea meets with Amy. The surveys identified that Amy has the prerequisite social skills needed (i.e., can maintain appropriate body orientation, tone of voice, and stay on subject) and can initiate and continue conversations with teachers. However, she cannot do so with peers. Mrs. Shea uses the steps in* ***Figure 1*** *and determines that Amy*

Table 2 **Resources to Assist in Social Skill Development**

Resource Deficit type[a]	*URL*	*Age, device, and price*	*Method of use*	*EBP*
HLP8 Positive and constructive feedback and HLP9 Direct and explicit teaching of social skills				
The Social Express *Both*	https://socialexpress.com/the-social-express/	6–18 Android Apple Lite is free, full is $89.99	Provides 81 animated interactive lessons to assist in developing social skills, better understanding perspectives, and creating strong relationships. Interactive animated videos of different scenarios are presented, and the player is prompted to evaluate character emotions and determine what action the characters should do. The program offers several different types of learning methods and has both online and offline activities.	Social narratives and video modeling are available within the technology-delivered intervention.
Social Quest *Both*	https://apps.apple.com/us/app/social-quest/id556089006	5–18 Apple $24.99	Story-based social situations created by a speech-language pathologist to improve language comprehension that ask the user to identify a correct response to each social situation and allow students to earn rewards based on their social competencies.	Social narratives are available within the technology.
HLP14 Instruct on cognitive and metacognitive approaches to support autonomy and learning				
Super Better *Performance*	https://www.superbetter.com/	4 to adult Android Apple Free	Allows participants to set reasonable goals for themselves and then places everyday actions into video game objectives. Participants can use healthy actions (i.e., reaching out to a friend), complete quests, and overcome bad characters (i.e., bad habits and emotional challenges) in order to achieve their goals. The app allows for customization to fit individual goals and is self-regulated and self-paced. Teachers can recommend students utilize the app to monitor social goals, practice communication, overcome anxiety, maintain a positive attitude in class, or any other areas where they're struggling or would like to develop better skills. Students can then take this knowledge to utilize the game like features to accomplish their goals.	Social narratives are available within the technology.
Sosh *Performance*	http://www.mysosh.com/	12 to adult Apple app and book Lite is free; premium is $39.99	The program provides exercises and strategies to assist individuals with identifying strengths and weaknesses, self-reflecting, setting objectives, and creating social goals. The app focuses on developing 5 key skills: relating, relaxing, reasoning, regulating, and recognizing. The program consists of customizable features in which users can add specific images and sounds. The app also contains sensory and self-regulation strategies, perseverance skills, self-awareness strategies, a student interest log, a feelings' identifier, and a problem-solving development section. Members of the student's team can send direct feedback to students through the program.	Social narratives are available within the technology.

(Continued)

Table 2 **(Continued)**

Resource Deficit type[a]	*URL*	*Age, device, and price*	*Method of use*	*EBP*
HLP15 Scaffolding supports for students				
Classcraft *Both*	https://www.classcraft.com/	5 to adult Android Apple Basic is free; premium is $120 a year	Uses fantasy game aspects to encourage social emotional development. Assists in developing collaboration, accountability, and positive social interactions. Includes a collaborative classroom management piece, formative assessments and distance learning. The self-paced personalized learning allows teachers to start with high levels of assistance and slowly decrease supports. Program was developed with aspects to be used in kindergarten through college courses.	Social narratives are available within the technology.
Let's Be Social *Both*	https://apps.apple.com/us/app/lets-be-social-social-skills-development/id1140153485	5–14 Apple Basic is free; premium is $14.99	The program comes with 25 social skill lessons but also allows educators to create their own lessons. As students learn skills, educators can slowly reduce prompts and write customized stories responsive to current knowledge levels. Educators can include pictures of the student, classroom, family, etc., and customize program responses. The same developers made the Social Learning Platform (SLP), which includes social skills' videos, games, and additional activities.	Social narratives are available within the technology-delivered lessons.
HLP18 Encourage active student engagement				
Middle School Confidential *Both*	http://www.middleschoolconfidential.com/	8–14 Android Apple $6.99	Three digitally rendered graphic novels that instruct on bullying, positive self-image, social interactions, friendship, and critical thinking. Students can send emails to the "characters" of the story to discuss their feelings. The app mimics comic books and was written specifically for middle school students.	Social narratives are available through digitally rendered comics.
Fuse.it *Both*	https://www.getfuse.it/	4 to adult Android Apple Free	Allows students and educators to create videos for use in video modeling incorporating augmented reality. The app allows the user to become an active participant in what is seen as well as the ability to insert characters into videos and interact with them. The app has easy sharing features for students.	Social narratives and video modeling are available within the technology.
HLP19 Locate and utilize assistive and instructional technologies				
Georgia's Assistive Technology Act Program App Finder	https://gatfl.gatech.edu//favorite-search.php	All Android Apple Head-mounted display (HMD) Free	A search engine for students, parents, and teachers to identify assistive and instructional technologies for students of all ability levels. The user can search by subject, skill, keywords, price, and device type. A description and user reviews of each selected technology are provided. Technologies range from no-tech options (i.e., pencil grips) to high-tech options (i.e., Reading Pen) and include virtual and augmented reality apps as well as pieces of equipment to improve mobility, communication, and learning.	EBPs may be able to be delivered through the selected technology, but this is a tool locator and not an intervention.

(Continued)

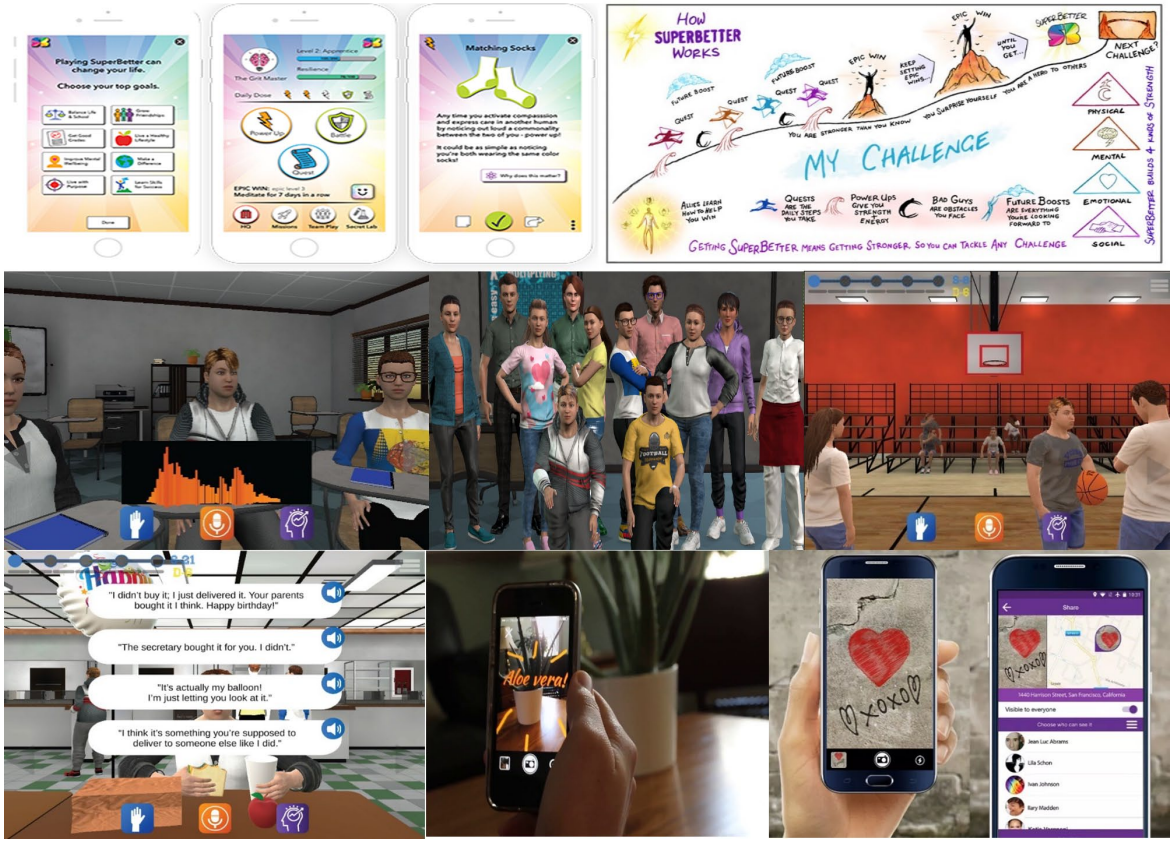
Table 2 **(Continued)**

Resource Deficit type[a]	*URL*	*Age, device, and price*	*Method of use*	*EBP*
Understood Tech Finder	https://www.understood.org/en/tools/tech-finder	All Android Apple HMD Free	A search engine for students, parents, and teachers to identify assistive technology and instructional technologies for students preK–12. The user can search by skill, subject, grade level, and device type. A description and user reviews of each selected technology are provided. Experts in the area of assistive technology provide quality and learning ratings for the devices.	EBPs may be able to be delivered through the selected technology, but this is a tool locator.
HLP20 Provide timely feedback which increases student engagement, motivation, and autonomy				
Social Adventures *Skill*	https://apps.apple.com/us/app/social-adventures/id468235375	4–10 Apple $7.99	Provides short social-skill lessons with immediate feedback on initiating conversations, maintaining conversations, advocating and compromising, regulating, interpreting nonverbal cues, personal space, and humor. The app was created by speech and language professionals.	Social narratives are available within the technology-delivered lessons.
How Would You Feel If	https://apps.apple.com/us/app/how-would-you-feel-if-fun-deck/id459752073	4–10 Android Apple $1.99	Provides 56 cards of different life situations in order to lead discussions about a student's reaction and feelings. Appropriate and inappropriate responses receive feedback. The student looks at a picture, either reads or listens to the prompt, and then gives a verbal response. A student's results can be emailed to anyone and then viewed on a graph.	EBPs are not present in the virtual game.
HLP21 Provide instruction in maintenance and generalization of skills in varying environments				
Virtual Reality Opportunities to Implement Social Skills (VOISS) *Both*	https://voissadvisor.org/	8–18 Android Apple HMD Free	Teachers, student, and parents determine social skill areas of need. Based on areas determined to be deficits, the student completes virtual reality (VR) scenarios on the selected skills through direct instruction in multiple environments within a school. Immediate constructive feedback is given. Direct instruction on over 100 social skills is provided. Each skill is taught in one scenario and measured in both that environment and a different environment within the virtual school. A VOISS advisor is available to assist educators in generalizing skills from VR into the classroom. The advisor provides methods for teachers on providing feedback to social decisions in the real classroom environment.	Social narratives and video modeling are available within the technology-delivered intervention as well as within the program website to assist with generalization.
WallaMe	http://walla.me/	6 to adult Android Apple Free	The app allows teachers, parents, and selected students to leave students hidden reminder word or picture messages in specific locations on a wall. When the student places their phone up to that specific wall, the message appears. It is a great way to remind students in different environments about things they should do and what they have learned that could be applied in this specific environment. Educators can also post on walls reinforcing notes. The message is visible only to the person with the logged-in device.	EBPs are not present in the app.

Note. HLP = high-leverage practice; EBP = evidence-based practice. HLPs are from *High-Leverage Practices in Special Education* (McLeskey et al., 2017, pp. 17–25).

[a] *Both* = aspects of the technology teach both a social performance and social skill deficit; *Skill* = aspects of the technology teach a social skill deficit; *Performance* = aspects of the technology teach a social performance deficit.

Figure 2 **Screenshot examples of the tools from *Table 2* selected to help Amy's social performance**



Note. Adapted from reference examples, audiovisual media, in the online publications, 2021 (https://www.superbetter.com/, https://voissadvisor.org, and https://www.facebook.com/wallame.official/). SuperBetter on various phone screens (top left). SuperBetter Quest Chart on their website (top right). Virtual Reality Opportunities to Implement Social Skills (VOISS) classroom with Speak button selected on an iPad (middle left). The 12 avatars the participant interacts with in the VOISS program (middle). VOISS gym with Raise Hand, Click to Speak, and Choose a Strategy buttons at the bottom through a head-mounted display (middle right). VOISS cafeteria on a Chromebook with response buttons and progress-through-the-scenario circles at the top of the screen (bottom left). Walla Me example of message revealed on iPhone when placed on plant (bottom middle). Walla Me example of drawing revealed when held to outside wall with location settings turned on through an Android phone (bottom right).

can identify the skills needed to initiate a conversation with a peer and when and where it is appropriate to carry on a conversation. Amy knows the skills but is not using these skills, even though she reports being motivated to talk with peers. Mrs. Shea discovers that the performance deficit occurs in all school settings and times of day but only with peers.

Mrs. Shea continues to ask questions, reviews the data, and sees three possible reasons for the deficit: (a) Amy has not had enough opportunities to practice performing the skill with peers in a school setting, (b) Amy lacks confidence in performing the skill, and (c) Amy struggles with independence and needs to develop the internal resources necessary to perform the skill fluently without adult assistance. With this knowledge, Mrs. Shea uses ***Table 2*** *to identify social skill instructional resources that best fit Amy's needs. She chooses three technology tools based on Amy's needs. First, she chooses Virtual Reality Opportunities to Implement Social Skills (VOISS) to allow Amy to practice initiating and continuing conversations with virtual peers in a virtual school environment. VOISS is available for free on any device at home and school and requires little to no adult assistance. Working on the skill virtually reduces the stress of using actual peers but mimics situations that could occur within a realistic middle school setting. The program also has activities Mrs. Shea can implement to assist Amy in generalizing the skill to multiple environments (HLP21).*

Next, Mrs. Shea chooses WallaMe. This augmented reality app allows Amy to use whichever device she has to gather feedback and prompting in specific settings. The app enables teachers, parents, peers, and Amy to leave hidden reminder words or picture messages in particular locations within the school. When Amy isn't sure what to bring up in conversation in those settings, she can place her device against the wall, and the invisible prompt becomes visible to her. Mrs. Shea works with Amy to type in reminder prompts throughout the school building to help Amy develop the confidence needed to initiate conversations (HLP21).

Finally, Mrs. Shea picks SuperBetter to work with Amy to develop independence by

setting reasonable goals and achieving these goals. The app's self-regulation and self-pace will allow Amy to monitor her progress toward her goals with little outside reinforcement from Mrs. Shea. If Amy gets stuck in the program, the app gives strategies for helping her problem-solve through the situation (HLP14).

Research reveals that when students with disabilities are taught social skills through direct and explicit instruction and goal setting commensurate to their needs, they implement, practice, and utilize these learned skills (Brown, 2012). Providing students direct social skill instruction and allowing them to document their social development through technology has a significant impact on a student's ability to carry social skills into various academic settings (Brown, 2012). When students with disabilities feel socially included, feelings of depression, anxiety, and embarrassment greatly diminish (Canges, 2010).

Two months later, Amy is working in groups and initiating conversations with her peers in structured and unstructured settings throughout the building. Amy leaves herself encouraging messages throughout the school using WallaMe. She tracks her own goals in SuperBetter and has completed the skill practice within VOISS for initiating conversations. Amy no longer needs the VOISS program for initiating conversations and is now using the program to work on a new social skill. Amy and Mrs. Shea have moved on to their next goal of maintaining a topic and, due to Amy's newfound independence, they both are confident she will continue to reach her goals.

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