



Improving Social and Emotional Skills through Gameplay

SUMMARY

The mix of culture and social and emotional learning (SEL) is an important one. Today, school settings embrace both learners and educators from a diverse range of cultures, languages, and behavioral norms. Given this, researchers are exploring how cultural responsiveness, educational equity, and transformative SEL can influence how students develop SEL competencies.

What is Social and Emotional Learning?

Greeting someone new and making a good first impression are important skills that fall within the complex and multifaceted umbrella of social and emotional learning (SEL). Students are often taught specific strategies, such as making eye contact and shaking hands, to support the development of SEL. In fact, research has demonstrated that integrating SEL instruction into the academic day is critical for positive and continuous growth in both academic and social learning. Social and emotional learning includes affective skills such as relationship building, goal setting, developing self-awareness, and making responsible decisions (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Children with autism spectrum disorder (ASD) who exhibit deficits in pro-social skills, such as engaging in conversation and responding to social problem-solving skills, represent one student group in need of support with social and emotional learning (DiGennaro-Reed, Hyman, & Hirst, 2011). Two particular characteristics of children with ASD are reciprocal social-communicative deficits (responding to and returning eye contact) and social behavioral challenges (interpersonal social emotional communication) (Kanner, 1968; Tonge, Dissanayake, & Brereton, 1994). Direct eye contact is considered the most important platform for social interaction and communication (Csibra, 2006). Thus, eye contact processing has been regarded as a “model system” for studying social interaction and communication among children with ASD (Senju & Johnson, 2009).

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According to Weissberg, et al., (2015), “SEL 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 (p. 6).” Social and emotional learning are defined by the Collaborative for Academic, Social, and Emotional Learning’s (CASEL) five interrelated sets of cognitive, affective, and behavioral competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

In their meta-analysis review, Durlak, et al., (2011) identified these core competencies indicating that students engaged in SEL programs and interventions improved their social and emotional skills with an impact on the five interrelated sets of cognitive, affective, and behavioral competencies. Figure 1 presents a conceptual framework of (a) five interrelated domains; (b) short and long-term student

outcomes within school curriculums; (c) schoolwide policies for SEL implication; and (d) practices to enhance SEL with schools and families.

Over the past 20 years, SEL programs and intervention have evolved. Social and emotional learning is implemented in schools in many different ways: as a

Source: CASEL Wheel and Competencies by CASEL, 2020

Figure 1: Core SEL Competencies



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structured curriculum with lessons devoted to specific times and locations within the school day, as a schoolwide positive behavior intervention system (SW-PBIS) whereby SEL principles are embedded into the school culture, and through after-school and out-of-school assignments involving service learning and community involvement opportunities (Osher et al., 2016).

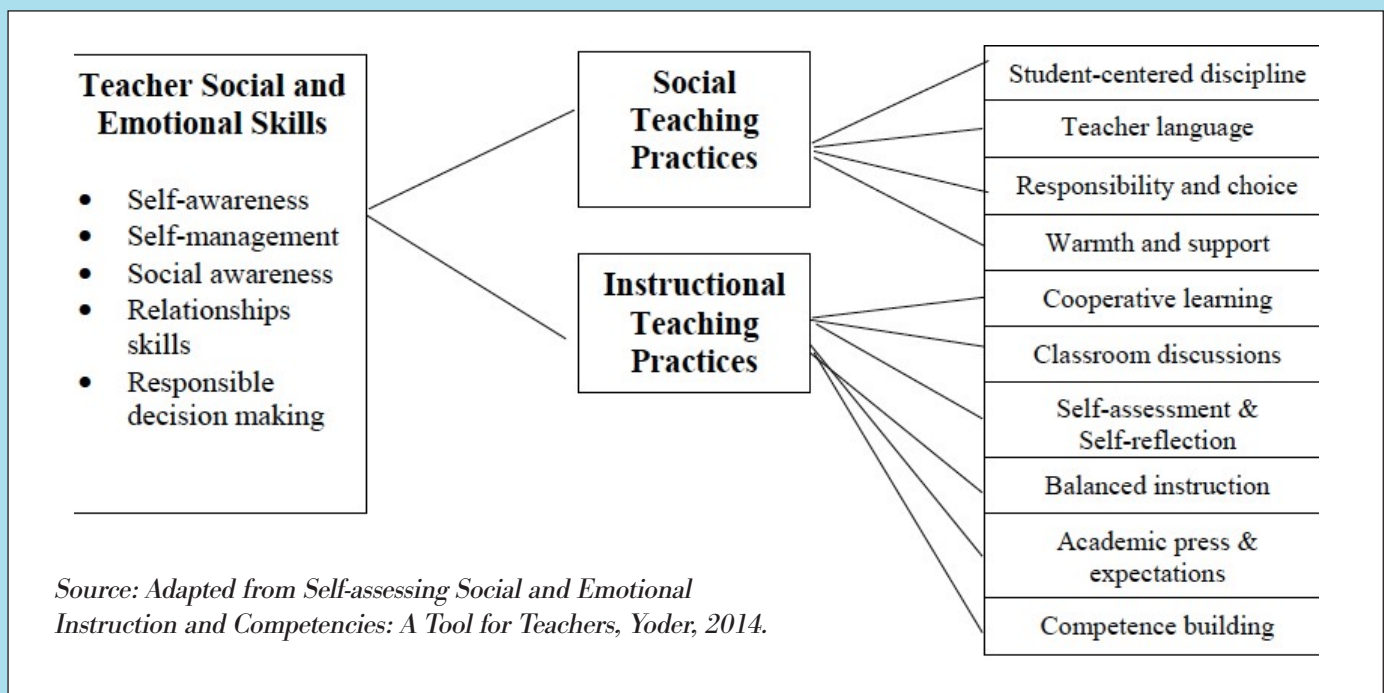
Although these skills are teachable, teaching these discrete skills has proven challenging for some practitioners working with children with ASD. Researchers have indicated specific instructional strategies for teachers to use promoting SEL. Figure 2

below displays the relationship between teacher SEL skills and the SEL teaching practices.

Social and emotional learning is the process through which children develop and manage emotions, solve interpersonal challenges, build peer relationships, and engage in responsible decision-making. As such, teachers must articulate effective strategies to promote students' development of SEL competencies. Therefore, teachers must also understand how to improve their own SEL competencies to best teach students on both social and instructional levels (Yoder, 2014).

The relationship between teacher

Figure 2: Relationship Between Teacher SEL Skills and SEL Teaching Practices



SEL skills and the SEL teaching practices affords teachers with specific instructional strategies such as:

- Reflection and self-assessment on SEL as a fundamental aspect of lesson planning
- Teacher's delivery and ability to foster student SEL through instructional practices
- Self-reflection tool allowing teachers to consider how their competencies reflect and support instructional practices of SEL
- Self-reflective feedback to use as professional development strategies or teacher evaluations

This SEL tool (see Figure 2) for teachers allows teachers to strengthen their own SEL competencies for successful SEL implementation with students. Teachers developing effective social and emotional skills help improve empathetic relationships with students and help students develop the prosocial skills for a conducive learning environment. A direct prosocial skill to develop is eye contact. We use our eyes as a means of communication. Two core indicators of autism are the lack of eye contact and social peer relationships. Practicing good eye contact is an essential skill for effective communication, but exactly how important is it and how is it defined?

Why is Direct Eye Contact Important?

Children with ASD represent one student group in need of support with social emotional learning, exhibiting deficits in pro-social skills such as engaging in conversation and responding to social problem-solving skills (DiGennaro-Reed, Hyman, & Hirst, 2011). Two particular characteristics of children with ASD are reciprocal social-communicative deficits (responding to and returning eye contact) and social behavioral challenges (interpersonal social emotional communication) (Kanner, 1968; Tonge, Dissanayake, & Brereton, 1994).

Direct eye contact is considered the most important platform for social interaction and communication (Csibra, 2006). Thus, eye contact processing has been regarded as a “model system” for studying social interaction and communication among children with ASD (Senju and Johnson, 2009). Senju and Johnson defined direct eye contact as an emotional response that triggers one's eyes to become captured by another person's eyes.

Direct eye contact with an individual, termed mutual gaze, is considered a significant component of interpersonal response (Nuske, Vivanti, & Dissanayake, 2015). “Dynamic facial cues, such as gaze direction and facial expression, are integrated with body gestures and prosody to allow humans

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Social games such as role-playing afford children with ASD the opportunity to improve their empathy and peer relationship skills.

and other higher primates to interpret the attentional focus and internal state of others during social interactions” (Graham, 2016, p. 553). Direct eye contact holds the attention of others and makes it harder for both individuals to disengage from one another (Senju, Hasegawa, & Tojo, 2005). Direct eye contact and peer social interactions are essential behaviors that allow students to respond to social cues and have social and emotional competence. Without such behaviors, students may endure unfavorable, long-term academic and behavior outcomes.

Children with ASD also exhibit a range of behaviors such as deficits in social function and communication that may interfere with education and positive interactions, including social impairments such as inadequate eye contact and deficits in socialization (i.e., responding to name, following someone’s point, interest in other children, or social smiling) (Jeffries, Crosland, & Miltenberger, 2016; Laushey & Heflin, 2000). Thus, social skills training is an essential component of intervention for children with autism. Though there exists a plethora of research on children with ASD, there is limited published research on children with ASD exhibiting inadequate eye contact and deficits in social activities.

This gap in research identifying both deficits in children results in unreliable, invalid diagnostic practices, as well as ineffective SEL practices. To close this knowledge gap, instructional programs and interventions are needed to improve deficits in social communication and behavior patterns. Eye contact and social games with peers are essential behaviors that allow students to respond to social cues and have social and emotional competence.

Benefits of Social Gaming Activities with Peers

Social games such as role-playing afford children with ASD the opportunity to improve their empathy and peer relationship skills (Dudzinska, Szymona, Pacian, & Kulik, 2015). According to Vygotsky (1962), learning is a social activity. He proposed that learning takes place through peer to peer social interactions. Consequently, practitioners can incorporate SEL strategies into the classroom to maximize the student’s ability to socially engage with peers through games, discussion, and role-play activities. Researchers have suggested playing games to improve the physical, cognitive, linguistic, emotional and social development in children with autism (Cankaya & Kuzu, 2010). Such games could include children with ASD participating in cooperative learning

activities, playing organized sport games, and conversing with their peers during lunch. The inherent benefits of playing these games may teach children with ASD to understand the mental states of others, the metacognitive process, or learning strategies needed to facilitate their social communication and social problem solving.

Behavioral role-play scenarios with peer interactions have been found to be successful interventions increasing the sociocultural competence of children and adolescents with ASD (Englund, Levy, Hyson, & Sroufe, 2000). The importance of teaching role-play skills is to have children develop skills including (a) asking for an object and responding according to the answer given, (b) appropriately getting the attention of another, (c) waiting for his turn, and (d) looking at or in the direction of another person who was speaking to him.

Seminal research by Englund et al. (2000) developed a valid observational measure of social competence in the peer group. The researchers determined an important criterion was to evaluate the appropriateness for assessing social competence of children to function effectively with peers in role-play scenarios.

Intermixing Culturally Responsive Teaching with Social and Emotional Learning

Jagers, Rivas-Drake & Borowski (2018) defined equity-based SEL as transformative SEL. They explain it as a process whereby both students and teachers build respectful relationships founded on common cultural similarities and differences and learn to examine root causes of inequity while developing collaborative solutions to social challenges. Equity-based SEL incorporates instruction based on children's lived experiences framed around SEL core competencies such as children learning key components of self-awareness, particularly of the cultural characteristics and interactions that include peers from culturally linguistically diverse backgrounds in the classroom. Diversity is defined as the traits and characteristics that make people unique while inclusion refers to the behaviors and social norms that ensure people feel welcome.

McCallops et al. (2019) suggested effective culturally responsive social and emotional competencies should incorporate valued student engagement. Student engagement refers to the degree of attention, needs and interest students show when they are learning or being taught. The framework that conceptualizes culturally responsive SEL instruction includes the pedagogy of empathy

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(self-management), self-awareness, self-regulation, relationship skills (awareness of others), and responsible decision-making (motivation). Table 1 outlines a brief description of these pedagogical components.

As practitioners, it is important to focus on culturally responsive SEL

efforts to improve student academic performance without explicitly addressing the cultural dynamics of peer interactions from diverse ethnic and linguistic backgrounds. Increasing evidence of the positive impacts of SEL programs has prompted practitioners to advocate and promote the well-being of

Table 1: Components of Culturally Responsive SEL

<p>Empathy (Self-management)</p>	<ul style="list-style-type: none"> ■ Having the ability to understand the perspective of others, including those from culturally and linguistically diverse socioeconomically diverse backgrounds. ■ Effective practice could include relationship building activities. Students can engage in questioning and listening to peer viewpoints. Therefore, culminating shared understanding on various topics.
<p>Self-awareness</p>	<ul style="list-style-type: none"> ■ A reflection of one’s own implicit bias, cultural identity, and emotional well-being. ■ Effective practice could incorporate reflective journal writing. Students can self-reflect and build their character.
<p>Social Awareness (Relationship skills)</p>	<ul style="list-style-type: none"> ■ Reflecting and gaining an appreciation of diversity and the feelings of peers. ■ Effective practice could target facial expressions of emotions through relationship building activities.
<p>Self-regulation</p>	<ul style="list-style-type: none"> ■ Allowing students to self-adjust their expression of biases and cultural diversities. ■ Effective practices would engage diverse cultural relationships among peers embracing emotion-filled self-reflections.
<p>Responsible decision-making (motivation)</p>	<ul style="list-style-type: none"> ■ Having the ability to learn, participate and interact in diverse learning settings and with peers who are culturally, linguistically diverse to make constructive choices. ■ Effective practice uses a social-behavioral learning strategy intervention (SODA: Stop-Observe-Deliberate-Act) in the classroom. This strategy includes role-play for situation options, disadvantages, advantages, and solution by providing a set of rules meant to help children attend to relevant social cues, process these cues, and select specific social skills needed to participate in a social activity.

Equity-based SEL means that every student can acquire and effectively apply knowledge, attitudes, and skills necessary to understand and manage emotions, express empathy toward others, maintain social relationships, and make responsible decisions.

children from diverse backgrounds. Equity-based SEL means that every student can acquire and effectively apply knowledge, attitudes, and skills necessary to understand and manage emotions, express empathy toward others, maintain social relationships, and make responsible decisions.

Below is a description of a structured, school-based program that fosters transformative, equity-based SEL competencies associated with the pedagogical components in Figure 3. The Sanford Harmony program has identified schools as cultural institutions. They have incorporated multiple methods to teach positive social interactions within inclusive classroom settings. Additionally, the Harmony program has developed a multi-layered approach to creating a mutually respectful community of learners from diverse backgrounds. Therefore, this program was developed to deliver equity-based SEL competencies into the classroom.

Sanford Harmony Social and Emotional Learning Program

According to Sanford Harmony, the program promotes learning communities and healthy relationships among peers of abilities, disabilities, ethnicity, race, and linguistic backgrounds. The categories of Meet Up and Buddy Up teach sociocultural collaboration among students and peers and

students and teachers. Both methods provide for practice of important social and emotional competencies, such as positive communication, collaboration, and problem-solving connected to real-world situations. These collaborative goals are accomplished throughout the program in meaningful ways including:

- Relationship-building lessons and activities that help students learn and practice SEL competencies.
- Everyday practices that provide students with ongoing, supported opportunities to interact with peers and participate in dialogue and decision-making about issues related to the classroom experience.

Utilizing these real-world situations afford students to embrace both interpersonal competencies and positive attitudes for appropriate classroom behaviors.

In addition to the SEL competencies mentioned above, the Meet Up and Buddy Up categories offer equity-based practices such as cultural integration, community-building, equity integration, and experiential learning opportunities through structured unit lessons. The Meet Up promotes inclusivity among all children in the classroom. According to the Harmony guidelines, Meet Up should occur the

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By using tools that promote and support SEL among students of diverse populations, it helps to develop peer relationships, strengthen social peer interactions, and advance interpersonal skills.

same time every day, preferably during circle time for 10-20 minutes. It is ideal to discuss ideas, ask questions, and introduce peer relationships. By connecting with peers, students develop problem-solving skills, empathy toward others and value relationships within the classroom community.

Sanford Harmony designed the Meet Up component to promote several competencies:

1. Foster a classroom environment of inclusivity; where all students feel connected.
2. Establish a student-centered class setting encompassing peer interactions.
3. Effectively communicate, problem solve, and make responsible decisions.
4. Provide opportunities for students to socially engage with each other.
5. Supports students in increasing pro-social skills such as interpersonal skills and peer relationships; which foster mutual eye contact and peer communication skills.

The Buddy Up component promotes peer interactions between diverse peers. This module cultivates diversity in students' experiences, leading to positive social peer relationships. Students are paired with different buddies each week to adopt cultural

awareness and social responsibility toward each other. This practice is recommended four to five times per week, lasting between 5 and 45 minutes.

The Harmony program designed the Buddy Up module to adopt several competencies:

1. Foster inclusivity in the classroom.
2. Provide students opportunities to communicate and interact successfully with peers from diverse backgrounds.
3. Provide opportunities for students to connect through meaningful games and activities.
4. Promote empathy including sharing, caring and understanding peers.
5. Provide opportunities for cultural awareness supporting social, emotional, and cognitive growth.

Studying the Sanford Harmony Program

The Sanford Harmony program supports culturally responsive teaching practices. By using tools that promote and support SEL among students of diverse populations, it helps to develop peer relationships, strengthen social peer interactions, and advance interpersonal skills.

This study was conducted over 20 weeks to examine the effects of a structured social skills program in increasing social and emotional skills for five adolescents with autism spectrum disorder (ASD) in a behavioral clinical setting.

Each of the participants met certain eligibility criteria which included: aged between 10 and 15 years old, had a clinical diagnosis of autism, were assessed with decreased eye contact and low social peer interactions. The purpose was to see whether a structured social skills program would be effective at improving social and emotional skills (direct eye contact?) in these students and to investigate potential supports to accommodate students with ASD in order to improve their prosocial skills, including mutual eye contact and sociocultural communication skills. The study was guided by the following two research questions:

1. To what extent does the implementation of games and activities using a structured social skills program improve the frequency of mutual eye contact for peers with ASD, in a small group setting?
2. To what extent does the implementation of games and activities using a structured social skills program improve the number of culturally relevant and verbally reciprocated responses during structured conversation for students with ASD, in a small group setting?

The Harmony program values diversity among peer relationships and improved social communication skills. Sanford Harmony incorporates multiple components to teach SEL competencies and to create an inclusive classroom environment. The Harmony components are designed as chapters and are listed below.

- **Diversity and Inclusion.** Promotes a community environment in the classroom as children learn to recognize and appreciate one another's similarities and differences.
- **Empathy and Critical Thinking.** Children develop empathy, reduce stereotyped thinking and learn critical thinking skills.
- **Communication.** Healthy and unhealthy communication patterns are explored, and children practice effective ways of engaging with others.
- **Problem Solving.** Children learn constructive approaches to resolving conflict, focusing on conflict-resolution steps that facilitate healthy relationship patterns.
- **Peer Relationships.** Children practice positive social skills and learn the qualities that are important to friendship, the consequences of bullying, and how to provide peers with support (Sanford Harmony, 2020).

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Two Units of Study

This research study examined two units, Communication and Peer Relationships, to learn more about the effectiveness of Sanford Harmony’s games and activities to increase both sociocultural strategies and eye contact responses during peer interactions for students with ASD.

While both units were examined to better understand how they may contribute to increased direct eye contact, the Communication Unit focused on experiential learning and community-building exercises to increase students’ ability to identify their own communication styles.

Within this unit, students were provided with opportunities to practice effective ways of engaging with others. Unit practices of these approaches included: morning Meet-up and Buddy up, following classroom routines, collaborative problem-solving among peers, and allows students to act out scripted plays while peers identify communication functions as they occur.

During the Communication unit, students learn positive social cues and identify negative social cues while engaged in role-play activities reading scripted plays. Positive social cues are recognized as “Communication Boosters” such as active listening with mutual eye

contact, facilitating empathy toward peers, negotiating or problem-solving, and supporting and encouraging peer interactions. Additionally, students learn to identify “Communication Bloopers” such as interrupting peers, controlling or initiating bullying behavior, ignoring peers, and withdrawing or removing oneself from group participation.

The Peer Relationships Unit incorporates the “Battle of the Bullies” game. Within this unit, students race to the finish while considering effective and ineffective ways to deal with bullying and the consequences of each. The purpose of the Peer Relationships unit is designed to:

- Provide opportunities to promote positive cultural peer interactions and relationships
- Provide opportunities and qualities important to friendships and the negative consequences associated with bullying
- Instruct students how to support and positively cooperate with their peers

The Peer Relationship game is implemented with a gameboard card, Team 1 selecting and reading the Battle Card out loud and Team 2 draws an Action Card from the same deck. Both team members must decide together whether the Action is

Figure 3: Peer Interaction



A depiction of a child-child peer interaction; children playing the game, "Telephone."

A depiction of adolescents with autism giving direct eye contact to peers

positive or negative. If the Action is positive, Team 2 moves a space forward, based on the number of the die. If the Action is negative, Team 2 moves a space backward, based on the number of the die. The game proceeds until all teams (including Team 1) have drawn an Action Card from the first deck. The team that reaches or is closest to the finish wins the game.

Both the Communication and Peer Relationship units were used to promote positive cultural and equity interactions and relationships between students and their peers. Through their participation in paired peer group activities, students learned about qualities important to friendships including cultural assets, negative consequences associated with bullying, and how to provide their peers with supportive cultural competence. In addition, students were engaged in lessons, activities, and games to understand commonalities, respect diversity among their peers and paired reciprocal eye contact.

Outcomes of the Harmony Program

Baseline data were collected until a stable trend of target behavior was observed. Baseline sessions were recorded during two-minute interval recording. This strategy recorded whether eye contact and sociocultural verbal responses occurred or did

not occur during a timed two-minute interval recording, lasting 30 minutes. Behavior technicians were instructed to facilitate the engagement of their students in child-child pairs of social play. The child-child pairs engaged in age-appropriate social games (i.e., UNO, Guess Who, and children's version of Monopoly).

Figure 4: Direct Eye Contact with Peers



Source: The Social Express, Inc. "Improving your child's social skills: Making eye contact."

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A structured culturally responsive social skills program has potential to improve direct eye contact and sociocultural skills for students with disabilities in an educational setting.

At the end of baseline, the objective of the intervention was to capture mutual eye contact simultaneously with sociocultural communicative engagements with peers. Mutual eye contact was noted when one child looked directly into his or her peer's eyes while playing games or engaged in social activities. Verification of mutual eye contact was confirmation that the children's prosocial skills were improving and maintained after the study.

Mutual direct eye contact between peers was assessed using direct observation to specifically teach naturalistic environmental training (NET). A two-minute interval recording was used to measure the frequency of direct eye contact combined with verbal responses elicited. The number of direct eye contact acts per two-minute intervals was calculated during 30-minute, 45-minute, and 60-minute sessions. The values were also used to evaluate Sanford Harmony's effectiveness for each participant.

Social engagements were measured using a combination of both direct observation and differential reinforcement of other/replacement behaviors (DRO). The number of occurrences from both measurements were combined to evaluate the frequency of social engagements. This indicated the percentage of

time each participant was socially interacting or engaged with his or her partner. This included behaviors directed toward peers, (e.g., commenting, reciprocal questions, staying on topic, and initiating conversations). The researcher implemented tasks such as directly prompting the students as to what to say or instructing them to follow the same conversation pattern their peer was initiating. The Sanford Harmony curriculum guided students in their social engagements through games and activities.

Evaluation of a Structured Culturally Responsive SEL Program

This study was conducted to examine the effects of a structured social skills program in increasing social and emotional skills for five adolescents with ASD in a behavioral clinical setting. Overall, this study provided preliminary evidence that a structured culturally responsive social skills program has potential to improve direct eye contact and sociocultural communication skills for students with disabilities in an educational setting.

Results from data and visual analysis revealed all participants significantly increased their direct eye contact and sociocultural communication skills after implementing the Sanford Harmony SEL program. In addition,

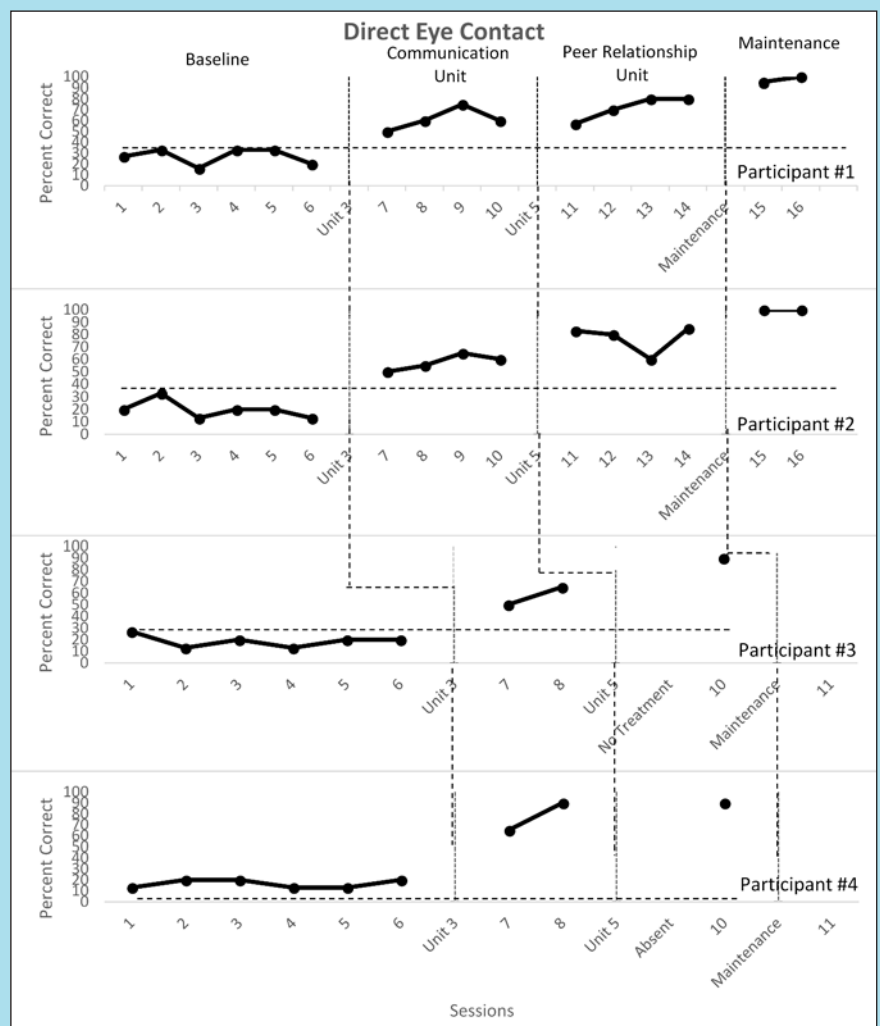
data were calculated indicating the Sanford Harmony program was a highly effective intervention increasing eye contact for students with ASD.

The structured social skills intervention increased the direct eye contact of all the participants in the study. Specifically, during the Harmony Communication Unit, four of five participants increased direct eye contact more than 50 percent over their baseline phase data. Only Participant 1 improved her direct eye contact less than 50 percent (baseline mean data = 25 percent; intervention mean data = 45 percent over baseline data) during the Communication Unit. However, she showed significant improvement during the Peer Relationships Unit (intervention mean data = 72 percent over baseline data). The other participants increased their eye contact during both the Communication Unit and the Peer Relationships Unit more than 50 percent over their baseline phase data for the observed sessions.

During the Harmony intervention, visual data analysis showed there was one participant for whom the Harmony Communication Unit was a questionable intervention to increase culturally relevant social engagements. Participant 5 was the only student whose baseline score averaged 13 percent. Several factors determined this student's lower baseline

score such as excessive absenteeism, being bullied in school, and being four years older than the other participants. After introducing the Communication and Peer Relationships Units, his averages increased significantly from baseline: for the Communication Unit (mean = 70 percent over baseline); for the Peer Relationships Unit (mean = 82 percent over baseline).

Figure 5: Performance on Direct Eye Contact



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The average percentage of social engagement for all other participants was 60 percent over the baseline phase data during the Communication Unit and 61 percent during the Peer Relationships Unit. Overall, as hypothesized and based on data and visual analysis, Sanford Harmony gameplay activities were effective in increasing culturally relevant social engagements for each participant with ASD.

During the intervention phase, Participant 1 initially experienced difficulty communicating in age-appropriate peer social engagements. She preferred talking to adults asking them rote questions such as “Is it time for snack?” Throughout the intervention, she made socially significant progress with her peer and addressed concerns related to the games such as “You won,” “Do you want to play again?” While eating with her peer, Participant 1 learned to ask, “What do you have for snack?” Participant 5 was 15 years old and the oldest in the group. While in high school, he experienced a lot of bullying. Therefore, his social interactions were deficient at the beginning of the intervention. By the end of the study, Participant 5 experienced a decreased behavior management program which allowed him more time at the behavior clinic as opposed to supervised visits at home. Thus, providing more social time to

engage in new friendships within the behavioral clinic.

Implications for SEL in the Classroom

According to CASEL (2015), SEL is implemented in schools in many different ways: as a structured curriculum with lessons devoted to specific times and locations within the school day, as a schoolwide positive behavior intervention system (SW-PBIS) whereby SEL principles are embedded into the school culture, and through after-school and out-of-school assignments involving service learning and community involvement opportunities (Osher et al., 2016).

The results of the present study highlight the potential for providing teachers and behavior analysts with existing tools to implement social and emotional learning interventions in their educational settings.

Baseline observations indicated that the behavior clinic did not have specific social and emotional learning games or activities to use in instructing students to socially interact. The Sanford Harmony program is a structured program, embedded with child-centered games and activities for both peer-to-peer groups or peer-teacher groups to facilitate social skills training, that may hold value in educational settings.

Another important implication is that the social and emotional learning can be individualized to the needs and interests of each student. The program used in this study provided the basis for (a) skills to be taught, (b) the use of consistent phrases and language by participants and therapists, (c) integrating social and emotional practices into peer relationships, and (d) making an effort to cultivate diversity through social engagements gameplay. However, professional discretion was used in modifying appropriately and making on-the-spot professional decisions during implementation. Prior to any intervention, teachers should establish individualized planning for peer-mediated activities. Therefore, teachers would benefit from considering the diverse intellectual and functional levels of students prior to intervention practices. This would increase the effectiveness of interventions.

Supporting SEL Practice in the Classroom Instructional Setting

Researchers from the Center on Great Teachers and Leaders indicated 10 instructional strategies for teachers to use that promote SEL (Dusenbury et al., 2015). These current practices include (a) student-centered-discipline, (b) teacher language, (c) responsibility and choice, (d) warmth and support, (e)

cooperative learning, (f) classroom discussions, (g) self-reflection and self-assessment, (h) balanced instruction, (i) academic press and expectations, and (j) competence building (Yoder, 2014). Figure 2 displays the relationship between teacher SEL skills and the SEL teaching practices. These approaches and practices are consistent with transformative SEL, thereby fostering how cultural responsiveness and educational equity can influence students with disabilities develop SEL competencies. Table 2 illustrates a descriptive tool to help practitioners think about how to implement these 10 instructional strategies.

Conclusion

At a time when social-emotional learning is increasingly gaining traction as a point of interest in schools, specific interventions to support even students with the most challenging behaviors is critical. The results of the present study (Wills-Jackson, 2018) support the findings of previous researchers by demonstrating that social and emotional learning can be implemented effectively with students with autism. The study extends previous literature by incorporating games and activities as intervention practices to improve mutual direct eye contact and culturally responsive social engagement

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Table 2: Teaching Social and Emotional Interactions

SEL Skill	Teaching Practice	Description	Example
Self-awareness	Student-centered discipline	Being aware of how your cultural beliefs and background affect your instructional teaching practices with your students.	Holding class discussions with your students so they can solve class problems.
	Cooperative learning groups	Understanding how student responses (positive and negative) affect your emotions and your behaviors during social teaching practices.	Providing opportunities for your students to share their work and receive feedback from peers.
Self-management	Teacher language	Modeling behaviors (e.g., form guidelines, set boundaries) to help students learn to regulate emotions during social teaching practices.	Promoting positive behaviors by praising your students when they display positive social skills (e.g., praise positive actions or steps to improve).
	Classroom discussions	Effectively using multiple strategies (e.g., breathing techniques and mindfulness) when you have a strong emotional reaction in the classroom (e.g., stress, anger) when implementing instructional practices.	Asking your students to listen to and think about their peers' opinions and whether they agree with them.
Social awareness	Responsibility & choice	Successfully supporting positive emotions and responding to negative emotions during social teaching practices.	Asking for student input when making decisions about how your classroom will operate in developmentally appropriate ways.
	Self-assessment & self-reflection	Addressing the commonalities and differences (e.g., racial, ethnic, cultural) that exist among students when you implement the instructional teaching practices.	Creating opportunities for your students to monitor and reflect on their social learning.
Relationship skills	Warmth & support	Using the social teaching practices to help form meaningful relationships with your students and cultivate their SEL skills, and being successful at building meaningful relationships	Creating structures in your classroom where your students feel included and appreciated (e.g., morning meetings, small group & whole-class share outs).
	Balanced instruction	Being comfortable helping your students resolve interpersonal conflicts that come up during instructional teaching practices, and you have experienced success with this.	Making sure that your activities are not just fun, but represent one of the best ways for your students to learn the content.
Responsible decision-making	Academic press & expectations	Being effective at considering multiple forms of evidence, such as balancing the needs and the behaviors of your entire class, while implementing the social teaching practices.	Supporting your students socially and emotionally while challenging them with new or higher levels of learning.
	Competence building	Implementing the instructional teaching practices, you balance awareness of students' emotional needs and academic needs.	Using student misconceptions to guide your instruction without singling your student out.

Source: Adapted from the *Teaching the Whole Child: Instructional Practices That Support Social and Emotional Learning in Three Teacher Evaluation Frameworks* by Yoder, 2014. Retrieved from <https://gtlcenter.org/sites/default/files/SelfAssessmentSEL.pdf>

for students with autism. Although this study was conducted in a clinical setting, the findings suggest there may be value in exploring ways to use the combination of games, activities, a structured social skills training program such as Sanford Harmony, and modification of materials to meet the social and communication needs of students with a wide range of abilities and disabilities across all educational settings.

The literature in this study highlights a number of approaches, strategies, and practices that are consistent with equity-based SEL, improving the social and emotional competencies for both children and teachers. Teaching approaches that focus on social teaching practices and those that focus on instructional teaching practices can facilitate the development of student social, emotional, and academic skills. In addition, programs such as Sanford Harmony foster culturally aligned SEL competencies that improve prosocial skills for children with autism, in particular eye contact and social engagements. While in some cultures direct eye contact can be taken as a challenge of authority, generally brief eye contact is most often considered acceptable. To empower cultural relevance, one must always be cognizant of culturally, linguistically diverse customs. This can be accomplished by asking questions, seeking answers, and acting accordingly to cultural responsiveness.

REFERENCES

- Carbone, V. J., O'Brien, L., Sweeney-Kerwin, E. J., & Albert, K. M. (2013). Teaching eye contact to children with autism: A conceptual analysis and single case study. *Education and Treatment of Children, 36*(2), 139–159.
- Cankaya, S., & Kuzu, A. (2010). Investigating the characteristics of educational computer games developed for children with autism: A project proposal. *Procedia - Social and Behavioral Sciences, 9*, 825–830. <https://doi.org/10.1016/j.sbspro.2010.12.242>.
- Collaborative for Academic, Social and Emotional Learning (2015). <https://casel.org/what-is-sel/>
- Csibra, G. (2006). Social learning and social cognition: The case for pedagogy. *Processes of Change in Brain and Cognitive Development: Attention and Performance XXI*, 249–274.
- DiCennaro-Reed, F. D., Hyman, S. R., & Hirst, J. M. (2011). Applications of technology to teach social skills to children with autism. *Research in Autism Spectrum Disorders, 5*(3), 1003–1010. <https://doi.org/10.1016/j.rasd.2011.01.022>
- Dudzinska, E., Szymona, K., Pacian, A., & Kulik, T. (2015). Selected forms of therapy for individuals with autism spectrum disorder. *Current Issues in Pharmacy and Medical Sciences, 28*(1), 21–23. <https://doi.org/10.1515/cipms-2015-0035>
- Durlak, J., Weissberg, R., Dymnicki, A., & Schellinger, K. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405–432.
- Dusenbury, L. A., Newman, J. Z., Weissberg, R. P., Goren, P., Domitrovich, C. E., & Mart, A. K. (2015). The case for preschool through high school state learning standards for SEL. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, T. P. Gullotta, J. A. Durlak (Ed), C. E. Domitrovich (Ed), ... T. P. Gullotta (Ed) (Eds.), *Handbook of Social and Emotional Learning: Research and Practice*. (pp. 532–548). New York, NY, US: Guilford Press.

Improving Social-Emotional Skills through Gameplay

- Englund, M. M., Levy, A. K., Hyson, D. M., & Sroufe, L. A. (2000). Adolescent social competence: Effectiveness in a group setting. *Child Development, 71*(4), 1049–1060.
- Graham, K. (2016). Extending the language classroom with Edmodo. *Modern English Teacher, 2*(2), 41.
- Jagers, R. J., Rivas-Drake, D. & Borowski, T. (2018). Equity and social and emotional learning: A cultural analysis. *Measuring SEL Using Data to Inspire Practice: Framework Briefs*, 1-17.
- Kanner, L. (1968). Autistic disturbances of affective contact. *International Journal of Child & Adolescent Psychiatry, 35*(4–8), 98–136.
- Kratochwill, T. R., Hitchcock, J. H., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2013). Single-case intervention research design standards. *Remedial and Special Education, 34*(1), 26–38.
- McCallops, K., Navelene Barnes, T., Berte, I., Fenniman J., Jones, I., et al., (2019). Incorporating culturally responsive pedagogy within social-emotional learning interventions in urban schools: An international systematic review. *International Journal of Educational Research, 94*(2019), 11-28. <https://doi.org/10.1016/j.ijer.2019.02.007>
- Nuske, H. J., Vivanti, G., & Dissanayake, C. (2015). No evidence of emotional dysregulation or aversion to mutual gaze in preschoolers with Autism Spectrum Disorder: An eye-tracking pupillometry study. *Journal of Autism and Developmental Disorders, 45*(11), 3433–3445. <https://doi.org/10.1007/s10803-015-2479-5>
- Osher, D., Kidron, Y., Brackett, M., Dymnicki, A., Jones, S., & Weissberg, R. (2016). Advancing the science and practice of social and emotional learning. *Review of Research in Education, 40*(1), 644–681. <https://doi.org/10.3102/0091732X16673595>
- Rollins, P. R. (2016). Words are not enough: Providing the context for social communication and interaction. *Topics in Language Disorders, 36*(3), 198-216.
- Sanford Harmony (2020). <https://sanford-programs.org/>
- Senju, A., Hasegawa, T., & Tojo, Y. (2005). Does perceived direct gaze boost detection in adults and children with and without autism? The stare-in-the-crowd effect revisited. *Visual Cognition, 12*(8), 1474–1496.
- Senju, A., & Johnson, M. H. (2009). Atypical eye contact in autism: Models, mechanisms and development. *Neuroscience and Biobehavioral Reviews, 33*(8), 1204–1214. <https://doi.org/10.1016/j.neubiorev.2009.06.001>.
- The Social Express, Inc. “*Improving your child’s social skills: Making eye contact.*” Retrieved from <http://thesocialexpress.com/tag/making-eye-contact/>
- Tonge, B. J., Dissanayake, C., & Brereton, A. V. (1994). Autism: Fifty years on from Kanner. *Journal of Pediatrics and Child Health, 30*(2), 102–107.
- Vygotsky, L. S. (1962). Thought and language. Massachusetts Institute of Technology.

Weissberg, R. P. Durlak, J. A.,
Domitrovich, C. E. & Gullotta, T. P.
(2015). Social and emotional learning:
Past, present and future. In J. A. Durlak,
C.E. Domitrovich, R. P. Weissberg and
T.P. Gullotta (Eds.), *Handbook of social
and emotional learning: Research and
practice*, 3-19. New York, NY: Guilford
Press.

Wills-Jackson, C. (2018). *Implementing
gameplay skills to increase eye contact
and communication for students with
emotional and behavioral disorder and
comorbid disabilities*. (Publication No.
5979) [Doctoral dissertation, University
of Central Florida], Showcase of Text,
Archives, Research and Scholarship
(STARS) – Faculty Scholarship and
Creative Works. Electronic Theses and
Dissertations. <http://stars.library.ucf.edu/etd/5979>

Yoder, N., & Center on Great Teachers
and Leaders at American Institutes for
Research. (2014). Self-assessing social
and emotional instruction and compe-
tencies: A tool for teachers (pp. 1-30).
Center on Great Teachers and Leaders.
Retrieved from [https://gtlcenter.org/
sites/default/files/SelfAssessmentSEL.pdf](https://gtlcenter.org/sites/default/files/SelfAssessmentSEL.pdf)