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# 6

## HOW DO WE SUPPORT THE PEER ACCEPTANCE OF CHILDREN WITH DISABILITIES?

*Paddy C. Favazza, Michaelene M. Ostrosky,  
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### Case Study

Mark is a 6-year-old who loves baseball and playing with small building blocks. He is an affectionate child who loves hugs, high fives, and fist bumps. He also enjoys dancing, rough and tumble play, and being outdoors on the playground. Recently he and his parents moved to a new city where he has just started kindergarten. Mark has a mild intellectual disability and is beginning to print the letters in his name. Mark struggles with early numeracy concepts, and his teacher, Ms. Hannon, quickly realizes that she needs to adjust her instruction to support him across many areas of development. Mark likes to play with his classmates, but he often forgets the rules of frequently played card and board games. Because of this, his typically developing peers are becoming increasingly frustrated with Mark and are not including him in some of their games. Based on her observations Ms. Hannon thinks that the other students do not know what to expect from Mark in terms of social interaction and behavior. She also realizes that Mark needs more support to learn some critical social skills. She decides to investigate a class-wide intervention to help support all of her students' social competence, including their development of friendship skills. As a result of this intervention, she hopes that her students will develop more positive attitudes of acceptance around individual differences.

### Overview

Mark's story is based on a real-life experience and one that you might have encountered as a teacher, or one that might present itself to you in the future. In this chapter, we aim to give you insights into how you can support students like

Mark, by supporting the development of students' positive attitudes and peer acceptance of those who might be different from themselves. We discuss why this is important and how you can support students' development using a class-wide program. Throughout this chapter, we focus on elementary aged students in general, and more specifically on kindergarten students, however, many of these ideas can be adapted for older students too.

## The Trend Towards Inclusive Education

Leading international professional organizations (c.f., Council for Exceptional Children's Division of Early Childhood (DEC), National Association for the Education of Young Children (NAEYC)) and health organizations like the World Health Organization (WHO) and UNICEF and have long championed the rights of persons with disabilities in general and have advocated specifically for inclusive educational practices for children with disabilities. Like NAEYC and DEC, the Convention on the Rights of Persons with Disabilities (CRPD) (United Nations, 2006), and UNESCO's Salamanca Statement (1994) have advocated that schools provide inclusive education, where young children with disabilities are increasingly educated alongside their typically developing peers. The 182 countries that have currently signed the CRPD have made a commitment to implement inclusive educational policies for students with disabilities in general education classrooms. The ratification of the CRPD signals a global response to inclusive education, emphasizing that school environments be created to maximize both academic and social development, affirming the evolution of inclusive education and its benefits to all children (Odom et al., 2011). In this chapter, we highlight how to use a Multi-Tiered Systems of Support (MTSS) framework to create a sense of belonging for all children by promoting positive attitudes and friendship skills through a class-wide intervention.

## Friendships among Students with and without Disabilities

We use the term disability to represent the range of disabilities that are covered under the Individuals with Disabilities Education Act (IDEA, 2004). This includes students with learning disabilities, intellectual disabilities, physical and health impairments, and autism, to name a few. While we frame the terminology based on a disability-related law in the United States (i.e., IDEA), we recognize that other regions of the world likely have their own disability-related laws and terminology.

Friendships can be defined as an *affective* and *reciprocal* bond between two persons (Bagwell & Bukowski, 2018). Similar to a tennis game in which players hit a ball back and forth, in a true friendship there is reciprocity as peers engage in interactions that are characterized by some back and forth sharing of materials, ideas, nonverbal communication, and the like. Friendships are important in the lives of all individuals, including children with disabilities, and schools play an

important role in friendship development, as it is one of the earliest contexts in which children make friends, outside of the home. When children enter school, they are typically presented with multiple opportunities for contact and interaction with peers from diverse backgrounds and abilities, which may lead to the formation of friendship(s).

Across time researchers have used several methods to examine friendships and the acceptance of children in class settings. These measures have included global measures like the Acceptance Scale for Kindergartners (Favazza & Odom, 1997a), interviews (Diamond, 1993; Diamond & Huang, 2005), observations (Yu et al., 2012), sociometric measures (Avramidis et al., 2017; Cillessen & Bukowski, 2018), and sociograms (Leung & Silberling, 2006). Each of these provides different types of data that help us understand levels of acceptance in a class setting, friendship patterns, or the quantity and quality of friendships. For example, if a teacher wants to examine which children in their classroom are considered friends, and how many friends each student has, they could use a sociometric measure. The teacher might ask each child: Tell me the names of three to five classmates who are your friends. And, who in your class is your best friend? Depending on the software used, the outcomes of this question may result in a sociogram (see Figure 6.1). Several free online software programs are available for conducting a class-wide sociometric measure (see for example: <https://www.sometics.com/en/sociogram>).

The sociogram in Figure 6.1 shows the social network of Ms. Hannon's kindergarten class, which is based on all nominations; it contains so-called indegrees (nominations received by others) and outdegrees (nominations of others). In this example, Mark, a student with a disability, has identified only one peer in his class as a friend (student #4). Also, Mark did not receive any friendship nominations from his classmates. Based on the notion that friendships

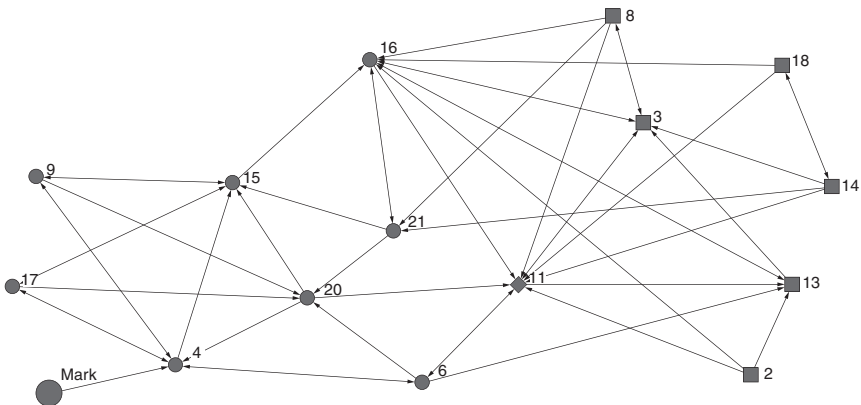


FIGURE 6.1 Sociogram Based on Reciprocal Nominations.

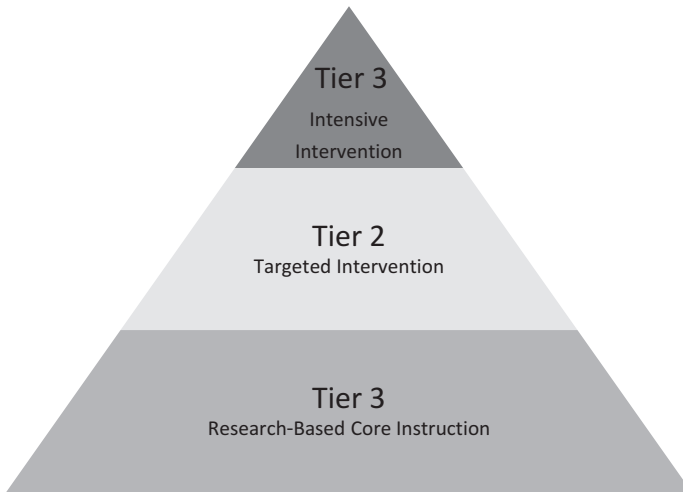
exist when there are *reciprocal* nominations, Mark does not appear to have true friends in class and may need assistance in developing friendship skills so that his peers accept him, and he can develop some relationships that are truly shared or equal friendships.

Situations such as the one experienced by children like Mark are observed in classrooms and reported in the research. Students with disabilities tend to have significantly fewer friends compared to their peers without disabilities. In fact, de Boer and Pijl (2016) found that approximately 25% of students with disabilities do not have friends in class. Moreover, similar results have been found for children across different age groups who have hearing impairments, physical disabilities, cognitive disabilities, learning disabilities, autism, and social-emotional and behavioral disorders (Avramidis, 2013; Estell et al., 2008; Koster et al., 2010; Mamas et al., 2020; Nunes et al., 2001; Odom & Diamond, 1998; Rotheram-Fuller et al., 2010).

The social inclusion difficulties experienced by some students with disabilities are worrisome, as research has shown the negative effects of rejection in class or not having friends. In the short-term, social isolation can lead to feelings of loneliness, low self-esteem, and poor learning outcomes. In the long run social isolation can lead to feelings of depression, increased school dropout rates, and other social-emotional health problems (Bukowski & Raufelder, 2018; Ladd & Kochenderfer-Ladd, 2016). To counteract negative short- and long-term consequences, it is important that teachers and families collaborate to intervene early, for interventions have proven successful in helping children develop positive attitudes toward individuals who are different from them, and in helping children develop prosocial skills.

When implementing an intervention, it is important to consider which students you are aiming to impact: all students, some students, or an individual student. Multi-tiered Systems of Support (MTSS) such as Positive Behavior Intervention and Supports (Sugai & Horner, 2009) and the Pyramid Model (Hemmeter et al., 2006) are well-known frameworks used in many PreK–grade 12 settings to support the development of social emotional and behavioral skills, and to prevent and intervene on challenging behavior. These frameworks have been adopted worldwide and include the three tiers: the first tier focuses on class-wide interventions for *all* students such as peer-acceptance interventions; the second tier includes targeted interventions and focuses on students who might need additional support in learning skills, such as how to share and how to initiate interactions with peers; and the third tier focuses on intensive team-based interventions, which may include outside professionals such as mental health or behavioral specialists (see Figure 6.2 for a diagram of the MTSS framework).

When applying a MTSS framework to address children’s social competence, and more specifically in the context of friendship formation for students with and without disabilities, we argue that a positive classroom climate is necessary in which all students hold positive attitudes towards individuals who are different from themselves, resulting in more acceptance. These attitudes should be



**FIGURE 6.2** Sample Multi-Tiered Systems of Support (MTSS) Framework.

promoted through class-wide interventions and across the daily curriculum (Tier 1). In this chapter, we illustrate Tier 1 interventions and provide an example of a program, which can be implemented in classes when aiming to promote acceptance and friendships among students. It is important to note that when some children with and without disabilities lack social skills that are needed to form friendships, targeted interventions might be useful as well. Tier 2 interventions are aimed at such students who need support with skill development, such as focusing on social skills that are needed to develop friendships. Finally, in Tier 3, teams that include the family come together to develop intensive individualized interventions that meet the needs of students for whom Tier 1 and Tier 2 strategies are not sufficient. Given page limitations and the critical importance of starting with universal or Tier 1 strategies, the remainder of this chapter focuses on Tier 1 interventions, aimed at all students, with a goal of promoting positive attitudes towards peers with disabilities. See Appendix 1 at the end for sample resources that specifically address Tiers 2 and 3.

## **Tier 1: Promoting Positive Attitudes Toward Individuals with Disabilities**

### ***Peer Attitudes***

The attitudes of typically developing children toward peers with disabilities play a foundational role in establishing social relationships. An attitude can be described as “a psychological tendency that is expressed by evaluating a particular entity with some favor or disfavor” (Eagly & Chaiken, 1993, p.1). Stated another way,

an attitude is a multi-component construct that includes ideas (*cognitive component*) charged with emotion or feelings (*affective component*), which predisposes a class of actions (*behavioral component*) in social situations (Triandis et al., 1984). This suggests that children can have positive or negative thoughts and feelings towards others, which result in behaviors toward or away from others, collectively reflecting attitudes of acceptance or rejection. Three primary sources of influence play a role in shaping attitudes toward individuals with disabilities: *indirect experiences* with or about a child with a disability (i.e., information from books, movies, casual conversations with parents, teachers, or friends), *direct experiences* with children with disabilities (i.e., engaging in fun games within inclusive playgroups), and *the child's primary social group* which typically begins with the family and gradually shifts to school-based social groups that include teachers and peers. These three sources of influence provide direction for teachers and parents who seek to create a sense of belonging for all children and thereby support positive attitudes and friendships among children with and without disabilities in inclusive classrooms.

Research has consistently shown that the attitudes of typically developing children are predominantly neutral or negative without interventions to support understanding and acceptance of peers with disabilities (Bates et al., 2015; de Boer et al., 2012; Favazza et al., 2000; McDougall et al., 2004; Nikolarazi et al., 2005; Rose et al., 2011). For example, when typically developing students have negative attitudes towards their peers with disabilities, this might negatively affect their social behavior, resulting in very limited interactions between them. Establishing a sense of belonging for all children can help support positive attitudes and friendships.

### ***Influence of Indirect Experiences***

The first step in a class-wide intervention to promote peer acceptance is to think about the indirect experiences, or subtle information, that students receive about children with disabilities (Favazza et al. 2017; Lindsay & Edwards, 2013). Indirect experiences about people with disabilities can include providing current, accurate, non-stereotypic information through classroom materials (i.e., bulletin boards and displays, books, videos), exposure to different modes of communicating (i.e., sign language, visual supports, Braille), and exposure to toys and tools (i.e., wheelchair, walker, communication board, hearing aid, service animals) (Bigler & Liben, 2006; Favazza, 1998; Ostrosky et al., 2015; Yu et al., 2016). Materials such as these can be used to start conversations about people with disabilities, especially with young children whose knowledge about this topic might be minimal or inaccurate.

### ***Influence of Direct Experiences***

A second step to promoting a positive classroom climate is to create positive social opportunities for all children, sometimes referred to as direct experiences or contact. Consistent with previous research (de Boer et al., 2012; Favazza &

Ostrosky, 2019; Pettigrew & Tropp, 2006), Freer (2021) found that carefully planned experiences between children with and without disabilities could positively contribute to peers' attitudes. This positive influence of contact can be explained using Allport's Contact Theory (1954) and the conceptualization of the attitude construct described by Triandis and colleagues (1984). Results from studies of attitudes toward children with disabilities indicate that positive peer experiences can benefit all children, promoting both accepting attitudes and social relationships (Armstrong et al., 2017; Brown & Hewstone, 2005; Favazza & Ostrosky, 2019). Positive outcomes are likely to result when students have equal status, such as working together to achieve a common goal (e.g., cooperative learning groups), and when teachers employ environmental arrangement strategies to support interactions (i.e., limiting materials so children need to take turns and share, strategically arranging how children are seated during activities) and universal design for learning (UDL) strategies to support access for all children.

### ***Influence of the Child's Primary Social Group***

The family is a young child's first social group and one that plays a key role in shaping the child's values, beliefs, and attitudes (Triandis et al., 1984). As a child ages, their world extends to school settings where teachers and peers become a part of their social group and thus, influence the child as well. Both parents and teachers have opportunities to expose children to materials reflecting persons with disabilities (i.e., books, videos, toys, tools), facilitate conversations, and arrange social opportunities and interactions with peers. In essence, parents and teachers organize and activate those direct and indirect experiences about persons with disabilities. Because of their key role in shaping caring and accepting learning communities, it is critical that school-based initiatives to promote peer acceptance and friendships include training for teachers and parents to maximize student outcomes.

### **What to Do**

Research suggests that teachers should implement evidence-based strategies to support social interactions and friendships among students. To that end, a variety of strategies to promote acceptance of children with disabilities includes awareness programs (Lloyd, 2017), storytelling (Law et al., 2016), and puppets (Dunst, 2012). In the next section, we highlight the components of a program that incorporates the three inter-related factors that influence the development of accepting attitudes and subsequent friendships with children with disabilities (indirect experiences, direct experience, child's social group) (Favazza & Ostrosky, 2019; Rademaker et al., 2020). Then we provide suggestions for evaluating classroom environments, a checklist for selecting children's books with characters who have disabilities, recommendations for guided discussion content when



reading books about children with disabilities, and suggestions for selecting materials that promote social interaction among children. These strategies are based on the research and development of the *Making Friends* program (Favazza & Ostrosky, 2019; Ostrosky et al., 2015).

## Key Components of the *Making Friends* Program

*Making Friends* (Favazza et al., 2016) is one example of an affective intervention designed to help teachers create caring inclusive learning communities. Implementing a class-wide program involving peers and parents such as this could be a first step to take when confronted with a situation such as Mark's scenario described earlier. As noted in Table 6.1, the program consists of three components (school literacy, cooperative learning groups, home literacy) that directly correspond to the three influencing factors of attitude formation. The program is appropriate for children, ages 5–7 (kindergarten to grade 2), but it also could be used as a template when designing programs for older children.

Prior to beginning an affective program like *Making Friends*, teachers should carefully and critically examine their classrooms and school to determine if items representing individuals with disabilities are needed to ensure that *all* children are reflected in their surroundings. The *Inventory of Disability Representation (IDR)* (Favazza et al., 2017) is a simple tool that can be used to self-assess representation in the classroom and school.

**TABLE 6.1** Correspondence of Attitude Influencers to the *Making Friends* Program

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*Influences on Components of Attitude Development Making Friends*

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**Indirect Experiences**

Children learn about peers with disabilities through books, videos, toys, conversations, materials, and tools (adaptive devices, communication systems such as sign language).

**Direct Experiences**

Children learn about peers with disabilities through interactions such as inclusive play/learning groups.

**Primary Social Group**

Children first learn about peers with disabilities from their family. In the family context, a child learns values, beliefs, and attitudes. As a child ages, teachers and peers become an influential part of their social group.

**School Literacy**

Provide carefully selected books, guided discussion, toys, tools, and classroom materials reflecting or used by individuals with disabilities.

**Cooperative Learning Groups (CLG)**

Provide carefully structured cooperative learning groups using materials depicting individuals with disabilities, UDL supports and environmental arrangement strategies to support interactions.

**Home Literacy**

In addition to involving teachers and peers in affective programs, include families (parents, grandparents, siblings) in home literacy activities, replicating school literacy (books and guided discussions reflecting individuals with disabilities).

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The next step after examining the school and classroom environment is to carefully select children's books and create guided discussions that can lead to greater understanding of oneself and others (Favazza et al., 2016; Price et al., 2016a, 2016b; Yu et al., 2016). Sample items to consider when selecting books are found in Figure 6.3. A sample of a guided discussion is provided in Figure 6.4. Reading selected children's books followed by guided discussions with children are strategies that could be used to convey the message that we all belong, to dispel misconceptions and stereotypes, and highlight strengths and similarities (e.g., how we are all more similar than different) (Leigers & Myers, 2015; Ostrosky et al., 2015). Additionally, selecting materials for use in cooperative learning groups or center time that support positive social interactions, as opposed to solitary or parallel play, necessitates that adults pay close attention to both the type and quantity of materials that are available to children. Some considerations when selecting materials are noted in Figure 6.5.

## Other Practical Implications

There are many things that can be done to improve practice related to peer acceptance interventions and in support of children's friendships. Given the growing diversity in schools and the prevalence of inclusive practices, school districts need to consider adopting ongoing (long-term) programs and practices that create a sense of belonging for *all* children. This type of initiative would be in direct response to the tenets of the United Nation's Convention on the Rights of Persons with Disabilities (CRPD, 2006), and UNESCO's Salamanca Statement (2016) and is particularly critical as research indicates that positive attitudes towards and acceptance of children with disabilities does not happen without intentional programming.

Additionally, more resources are needed for teacher training related to the social inclusion of children with diverse abilities, along with research related to the efficacy of these trainings. Such training would support teachers' understanding of attitude development toward children with disabilities and other human differences as well as enhance social inclusion efforts and positively impact children's social emotional development.

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— The story and illustrations respectfully depict people with disabilities while not promoting stereotypes (i.e., someone who is pitied or is always a hero).

— Characters are portrayed realistically, having similar experiences as people without disabilities.

— The story depicts characters who have various roles, balancing leadership roles and supporting roles of characters with and without disabilities

— The story uses current people first terminology, avoiding offensive terms when speaking about individuals with a disability or the disability itself.

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**FIGURE 6.3** Criteria for Selecting Children's Books That Portray Persons with Disabilities.

Source: Adapted from Nasatir & Horn (2003).

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*Can You Hear A Rainbow?*

Author: Jamee Riggio Heelan, OTR/L

Disability: Deafness/Hearing impairment

**Content of Story (select 1-2 questions if time allows; optional)**

- What was the name of the boy in the story? (Chris).
- Can you name some of the people who helped Chris hear better, and learn to communicate using sign language and lip reading? (speech therapist, audiologist, his mom and dad).
- How does Chris know when it's time for dinner? (using his nose, Chris can smell the food).
- How did the audience applaud Chris after his play performance? Can you show me? (hands raised high in the air).

**Explanation of Disability or Related Vocabulary**

- A person who is deaf is a person who has difficulty hearing the sounds around him or her.
- *Note to teacher: If a student asks about a peer with a particular disability, reply with a comment such as, "Thank you for being concerned about your friend. As friends, we don't need to ask a person if he has a certain disability (use the child's word autism, Down syndrome, etc.). We all need help with certain things, and you can be a good friend by helping all of your classmates when they need it."*

**Highlight Similarities**

- Even though Chris could not hear, he could do many things with his friends. What are some things that Chris does that you do with your friends? (play soccer, act in children's theater).
- Chris teaches his friend, who can hear, some words in sign language. What are some things you teach your friends?
- Chris's mom helps him be his best at playing soccer. How does your family help you be your best?

**Equipment Related to Story Content: hearing aids, sign language, and lip reading**

- **Hearing Aids:** A hearing aid is a tiny microphone that a deaf person can wear. The hearing aid makes sounds louder and easier to hear.
  - **Sign Language:** Some people who are deaf have difficulty talking. Instead of talking, people can communicate using sign language (speaking with their hands).
  - **Lip Reading:** Some deaf individuals watch other people's mouths as they talk in order to see the words that are spoken.
- 

**FIGURE 6.4** Sample Guided Discussion.

Source: Adapted from Favazza et al. (2016).

Also, we know that all children need to see reflections of themselves and others in their world to gain an understanding of self and others; yet we have a long history of little or no representation of children with disabilities in classroom environments (i.e., books, toys, displays, curriculum). Simply put, it

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**Use toys and materials that...**

- \_\_\_ are appropriate for children with different abilities
  - \_\_\_ depict a variety of abilities, races/ethnicities, languages, and family structures
  - \_\_\_ encourage children to seek information or assistance from one another
  - \_\_\_ promote mutual use by two or more students as opposed to solitary play
  - \_\_\_ maintain students' attention for the entire length of the activity
- 

**FIGURE 6.5** Considerations When Selecting Materials to Promote Social Interaction.

Source: Adapted from Favazza et al. (2016).

is difficult to feel like you belong in a school or classroom if there are no images of you in the environment. Moreover, it is challenging for children without disabilities to gain an understanding of and acceptance towards children with disabilities without carefully selected materials that create opportunities for guided conversations that can lead to increased understanding and send the message that we all belong here. Multiple factors appear to influence the lack of such important materials in school settings such as competing initiatives with limited funding for classrooms, limited knowledge of and access to affordable materials, and variance in values and beliefs about the importance of materials depicting children with disabilities.

Moreover, it is clear that children's values and beliefs which undergird attitudes originate within their first social group, their family. As children age, their social group expands to include the influence of teachers and peers. Therefore, it is important that efforts to support positive attitudes toward others and friendships should include all three social groups—parents, teachers, and peers. In doing so, school personnel and families can partner to build inclusive learning communities that support multiple friendship opportunities and ensure a sense of belonging for all children.

Finally, for some children, intervening with Tier 1, or universal, strategies such as a peer acceptance curriculum will not be of sufficient intensity or individualized enough to impact their social emotional development. It is then necessary for teachers to implement evidence-based strategies that are included in Tier 2. These might involve teaching children how to take turns, enter an ongoing peer interaction, or solve problems that arise between classmates. Lastly, even with Tier 1 and Tier 2 strategies in place, a small number of children may need a much more intensive social emotional intervention that begins with a functional behavior assessment and includes an individualized approach to skill promotion, the prevention of challenging behavior, and intervention. Information on Tier 2 and Tier 3 interventions can be found in Hemmeter et al. (2021) and Sugai and Horner (2009). Taken together, these implications for practice should all be considered to robustly support inclusive practices in schools. Appendix 1 at the end of this chapter includes additional resources that might be useful when focusing on Tiers 2 and 3.

## Evidence

Several studies have been undertaken to investigate the efficacy of the *Making Friends* program. Across all studies, pre-intervention results on the *Inventory of Disability Representation* revealed that children with disabilities were rarely represented in school or classroom materials. In other words, they were not reflected in the books, curricula, communication modes, toys, and tools in the settings that were investigated (Favazza et al., 2017). In addition, across several studies, the results on a global measure of acceptance attitudes, the *Acceptance Scale for Kindergartners* (now called the *Acceptance Scale for Kindergartners–Revised*) yielded somewhat similar findings (Favazza & Odom, 1996, 1997b; Favazza et al., 2000; Favazza & Ostrosky, 2019; Nikolarazi et al., 2005). Increased levels of acceptance replaced low pre-intervention levels of acceptance when the *Making Friends* program was administered as a six- and nine-week intervention. Increases in positive attitudes toward individuals with disabilities were evident in both six- and nine-week programs implemented to small groups of children and in a class-wide format. Also, results revealed that the implementation of the whole intervention (all three components) was more effective in improving attitudes than implementation of any singular component of the program. Finally, results showed that children who had little or no prior experience with peers with disabilities had the lowest levels of acceptance. Collectively, these results indicate that without an intervention in place to promote the acceptance of peers with disabilities, acceptance of children with disabilities is not automatic. However, the findings also reveal that children's attitudes are malleable and can change for the better in a relatively short amount of time. Thus, the effort spent intervening is critically important and worth the investment of time. This peer acceptance intervention has been adapted and studied in other countries, yielding similar positive and promising findings (de Boer et al., 2014).

## Future Directions

There are several directions in which research could focus to better inform the field related to the topics of peer acceptance interventions and friendship formation. Examining friendship patterns and measuring underlying attitudes is challenging and labor intensive under the best of circumstances. Not surprising, in many communities around the world where there is high prevalence of exclusion and stigma, research is lacking. Many factors contribute to this dilemma such as limited funds for research, variances in cultural responses to people with disabilities, and competing initiatives for basic educational needs in resource poor settings. The expansion of inclusive practices informed by culturally relevant research in these community settings could go a long way in advancing inclusive practices on the global level. In addition, an accelerated response to needed research-informed strategies in targeted regions of the world might be possible if funding agencies emphasized collaborative efforts in which partnerships between seasoned researchers and junior researchers are encouraged.

Also, research focused on measuring attitudes could be improved by implementing more mixed methods studies. For example, combining global measures of attitudes with behavioral observations, sociometric measures, and qualitative interview data would strengthen existing research and perhaps provide a more robust understanding of children's attitudes and friendships. By mixing methods, researchers might better understand the reasons behind children's self-reported verbal responses and behavioral responses within naturally occurring social situations. This is an area of study that could be strengthened.

Examining if attitudes toward children with disabilities are correlated with other influential variables could extend the existing research. For example, we do not know if children have more accepting attitudes towards peers with disabilities when a class, school, or community is highly diverse (heterogeneous versus homogeneous contexts). Additionally, the impact of private schools versus public schools or the impact of being in a community with strong representation, friendships, and positive attitudes toward minority populations (i.e., race, ethnicity, LGBTQ) are unknown. Finally, it is unclear if greater acceptance of children with disabilities and friendships are more prevalent in classes and schools with more resources for inclusive practices, compared to schools and classes that have access to fewer resources.

Research and practice could be improved by identifying funding sources to develop research-informed children's books depicting children with disabilities to fill the global void. Grants are needed to support researchers in working with authors and illustrators to generate culturally relevant, research-informed children's books with story lines in geographic areas that have limited materials depicting children with disabilities.

It is clear that children's values and beliefs, which undergird attitudes, originate within their first social group, their family. As children age, their social group expands to include the influence of teachers and peers. Therefore, it is important that research to support friendships and positive attitudes toward others should include all three social groups (parents, teachers, peers). In doing so, school personnel and families can partner to build inclusive learning communities that ensure a sense of belonging for all children and support the development of friendships.

## Appendix 1. Additional Resources When Focusing on Tier 2 and 3

<i>Topic</i>	<i>Resource</i>
<b>Positive Behavioral Interventions and Supports</b>	Positive Behavioral Interventions and Supports (PBIS) and Early Childhood (2 Webinars): <a href="https://challengingbehavior.cbcs.usf.edu/training/webinar/archive/2012/08-24/2012-08-24_PBIS-Preschool-to-High-School.html">https://challengingbehavior.cbcs.usf.edu/training/webinar/archive/2012/08-24/2012-08-24_PBIS-Preschool-to-High-School.html</a> ; <a href="https://www.aucd.org/itac/detail/event.cfm?event_id=7737&amp;parent=655&amp;parenttitle">https://www.aucd.org/itac/detail/event.cfm?event_id=7737&amp;parent=655&amp;parenttitle</a> PBIS Materials: <a href="https://www.pbis.org/resource-type/materials">https://www.pbis.org/resource-type/materials</a>

Topic	Resource
<b>Social Emotional Skills</b>	<p>Tier 2 Checklist: Teaching Social Emotional Teaching Strategies: <a href="https://challengingbehavior.cbcs.usf.edu/docs/Implementation_practice_social.pdf">https://challengingbehavior.cbcs.usf.edu/docs/Implementation_practice_social.pdf</a></p> <p>left on Social Emotional Foundations for Early Learning: <a href="http://csfel.vanderbilt.edu">http://csfel.vanderbilt.edu</a></p> <p>Promoting Social Emotional Competence Using Pyramid Model (Video): <a href="https://www.youtube.com/watch?v=zTl7rfclhvM">https://www.youtube.com/watch?v=zTl7rfclhvM</a></p> <p>Teaching Social Skills (Video): <a href="https://www.youtube.com/watch?v=jVqjF7BDsnw">https://www.youtube.com/watch?v=jVqjF7BDsnw</a></p> <p>Checklist of Early Childhood Practices: Supporting Social Emotional Development and Trauma Informed Care: <a href="https://challengingbehavior.cbcs.usf.edu/docs/Informed-Care-Checklist.pdf">https://challengingbehavior.cbcs.usf.edu/docs/Informed-Care-Checklist.pdf</a></p> <p>Teaching Peer Mediated Skills (English and Spanish): <a href="https://challengingbehavior.cbcs.usf.edu/docs/Peer-Mediated-Skills_SP.pdf">https://challengingbehavior.cbcs.usf.edu/docs/Peer-Mediated-Skills_SP.pdf</a></p>
<b>Conversations About Human Differences</b>	<p>Talking about Disabilities: <a href="https://lab.vanderbilt.edu/barton-lab/inclusion-diversity-and-acceptance/">https://lab.vanderbilt.edu/barton-lab/inclusion-diversity-and-acceptance/</a>;</p> <p><a href="https://products.brookespublishing.com/The-Making-Friends-Program-P884.aspx">https://products.brookespublishing.com/The-Making-Friends-Program-P884.aspx</a>;</p> <p><a href="https://files.eric.ed.gov/fulltext/ED544659.pdf">https://files.eric.ed.gov/fulltext/ED544659.pdf</a></p> <p>Talking about Race: <a href="https://challengingbehavior.cbcs.usf.edu/docs/Talking-to-children-race.pdf">https://challengingbehavior.cbcs.usf.edu/docs/Talking-to-children-race.pdf</a>;</p> <p><a href="https://www.embracerace.org/resources/16-ways-to-help-children-become-thoughtful-informed-and-brave-about-race">https://www.embracerace.org/resources/16-ways-to-help-children-become-thoughtful-informed-and-brave-about-race</a> (English and Spanish)</p>
<b>Friendships</b>	<p>You Have Got to Have Friends: <a href="https://challengingbehavior.cbcs.usf.edu/docs/Youve-got-to-have-friends_article.pdf">https://challengingbehavior.cbcs.usf.edu/docs/Youve-got-to-have-friends_article.pdf</a></p> <p>National Inclusion Project: Power in Friendship: <a href="https://www.inclusionproject.org/friendship/">https://www.inclusionproject.org/friendship/</a></p>
<b>Functional Behavioral Assessment</b>	<p>Overview of Functional Behavioral Assessment (FBA): <a href="https://iris.peabody.vanderbilt.edu/module/fba/cresource/q2/p04/">https://iris.peabody.vanderbilt.edu/module/fba/cresource/q2/p04/</a></p> <p>Individualized Interventions Checklist: <a href="https://challengingbehavior.cbcs.usf.edu/docs/Implementation_practice_interventions.pdf">https://challengingbehavior.cbcs.usf.edu/docs/Implementation_practice_interventions.pdf</a></p> <p>Conducting FBA From IRIS Center Video Collection: <a href="https://www.youtube.com/watch?v=Sxf9GPH5A-8">https://www.youtube.com/watch?v=Sxf9GPH5A-8</a></p> <p>FBA Sample Form: <a href="https://challengingbehavior.cbcs.usf.edu/docs/Ca seStudy_Brendan_funct-assess-interview.pdf">https://challengingbehavior.cbcs.usf.edu/docs/Ca seStudy_Brendan_funct-assess-interview.pdf</a></p>

## References

- Allport, G. W. (1954). *The nature of prejudice*. Perseus Publishing.
- Armstrong, M., Morris, C., Abraham, C., & Tarrant, M. (2017). Interventions utilizing contact with people with disabilities to improve children's attitudes towards disability: A systematic review and meta-analysis. *Disability and Health Journal*, 10(1), 11–22. <https://doi.org/10.1016/j.dhjo.2016.10.003>.
- Avramidis, E. (2013). Self-concept, social position and social participation of pupils with SEN in mainstream primary schools. *Research Papers in Education*, 28(4), 421–442. <http://dx.doi.org/10.1080/02671522.2012.673006>.

- Avramidis, E., Strogilos, V., Aroni, K., & Kantaraki, C. T. (2017). Using sociometric techniques to assess the social impacts of inclusion: Some methodological considerations. *Educational Research Review*, 20, 68–80. <http://dx.doi.org/10.1016/j.edurev.2016.11.004>.
- Bagwell, C. L., & Bukowski, W. M. (2018). Friendship in childhood and adolescence: Features, effects and processes. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 371–390), Guilford Press.
- Bates, H., McCafferty, A., Quayle, E., & McKenzie, K. (2015). Review: Typically developing students' views and experiences of inclusive education. *Disability and Rehabilitation*, 37(21), 1929–1939. <https://doi.org/10.3109/09638288.2014.993433>.
- Bigler, R. S., & Liben, L. S. (2006). A developmental intergroup theory of social stereotypes and prejudice. *Advances in Child Development and Behavior*, 34, 39–89. [https://doi.org/10.1016/S0065-2407\(06\)80004-80002](https://doi.org/10.1016/S0065-2407(06)80004-80002).
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 37 (pp. 255–343), Elsevier Academic Press. [https://doi.org/10.1016/S0065-2601\(05\)37005-37005](https://doi.org/10.1016/S0065-2601(05)37005-37005).
- Bukowski, W. M., & Raufelder, D. (2018). Peers and the self. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 141–156), Guilford Press.
- Cillessen, A. H. N., & Bukowski, W. M. (2018). Sociometric perspectives. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 64–83), Guilford Press.
- de Boer, A., & Pijl, S. J. (2016). The acceptance and rejection of peers with ADHD and ASD in general secondary education. *Journal of Educational Research*, 109(3), 325–332.
- de Boer, A., Pijl, S. J., & Minnaert, A. (2012). Students' attitudes towards peers with disabilities: A review of the literature. *International Journal of Disability, Development and Education*, 59(4), 379–392. <https://doi.org/10.1080/1034912X.2012.723944>.
- de Boer, A., Pijl, S. J., Minnaert, A., & Post, W. (2014). Evaluating the effectiveness of an intervention program to influence attitudes of students towards peers with disabilities. *Journal of Autism and Developmental Disorders*, 44(3), 572–583. <https://doi.org/10.1007/s10803-013-1908-6>.
- Diamond, K. (1993). Preschool children's concepts of disability in their peers. *Early Education and Development*, 4(2), 123–129.
- Diamond, K., & Huang, H. (2005). Preschoolers' ideas about disabilities. *Infants & Young Children*, 18, 37–46.
- Dunst, C. J. (2014). “Meta-analysis of the effects of puppet shows on attitudes toward and knowledge of individuals with disabilities.” *Exceptional Children*, 80(2), 136–148. doi:10.1177/001440291408000201.
- Eagly, A., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
- Estell, D. B., Jones, M. H., Pearl, R., van Acker, R., Farmer, T. W., & Rodkin, P. C. (2008). Peer groups, popularity, and social preference: Trajectories of social functioning among students with and without learning disabilities. *Journal of Learning Disabilities*, 41(1), 5–14. <http://dx.doi.org/10.1177/0022219407310993>.
- Favazza, P. C. (1998). Preparing for children with disabilities in early childhood classrooms. *Early Childhood Education Journal*, 25(4), 255–258.
- Favazza, P. C., LaRoe, J., Phillipsen, L., & Kumar, P. (2000). Representing young children with disabilities in classroom environments. *Young Exceptional Children*, 3(3), 2–8.



- Favazza, P. C., & Odom, S. L. (1997a). Use of the Acceptance Scale with kindergarten-age children. *Journal of Early Intervention*, 2(3), 232–248.
- Favazza, P. C., & Odom, S. L. (1997b). Promoting positive attitudes of kindergarten-age children toward individuals with disabilities. *Exceptional Children*, 63(3), 405–418.
- Favazza, P. C., & Ostrosky, M. M. (2019, October). Constructing early childhood environments to support the inclusion of children with disabilities. Invited keynote speakers at the Sixth International Early Childhood Congress. Kafkas University, Kars, Turkey.
- Favazza, P. C., Ostrosky, M. M., Meyer, L. E., Yu, S., & Mouzourou, C. (2017). Limited representation of individuals with disabilities in early childhood classes: Alarming or status quo? *International Journal of Inclusive Education*, 21, 650–666.
- Favazza, P. C., Ostrosky, M. M., & Mouzourou, C. (2016). *The Making Friends Program: Strategies for supporting acceptance in inclusive early childhood classrooms (K–2)*. Paul H. Brookes.
- Favazza, P. C., Phillipsen, L., & Kumar, P. (2000). Measuring and promoting acceptance of young children with disabilities. *Exceptional Children*, 66(4), 491–508.
- Freer, J. R. (2021). Students' attitudes toward disability: a systematic literature review (2012–2019). *International Journal of Inclusive Education*, 1–19. <https://doi.org/10.1080/13603116.2020.1866688>.
- Hemmeter, M. L., Ostrosky, M. M., & Fox, L. (2006). Social and emotional foundations for early learning: A conceptual model for intervention. *School Psychology Review*, 35(4), 583–601.
- Individuals with Disabilities Education Act (IDEA), 20 U.S.C. § 1400 (2004).
- Koster, M., Pijl, S. J., Nakken, H., & van Houten, E. (2010). Social participation of students with special needs in regular primary education in The Netherlands. *International Journal of Disability, Development and Education*, 57(1), 59–75. <http://dx.doi.org/10.1080/10349120903537905>.
- Ladd, G. W., & Kochenderfer-Ladd, B. (2016). Research in educational psychology: Social exclusion in school. In P. Riva & J. Eck (Eds.), *Social exclusion: Psychological approaches to understanding and reducing its impact* (pp. 109–132). Springer International Publishing.
- Law, Y., Lam, S., Law, W., & Tam, Z. Y. W. (2017). Enhancing peer acceptance of children with learning difficulties: classroom goal orientation and effects of a storytelling programme with drama techniques. *Educational Psychology*, 37(5), 537–549.
- Leigers, K. L., & Myers, C. T. (2015). Effect of duration of peer awareness education on attitudes toward students with disabilities: A systematic review. *Journal of Occupational Therapy, Schools, and Early Intervention*, 8(1), 79–96. <https://doi.org/10.1080/19411243.2015.1021067>.
- Leung, B., & Silberling, J. (2006). Using sociograms to identify social status in the classroom. *The California School Psychologist*, 11, 57–61.
- Lindsay, S., & Edwards, A. (2013). A systematic review of disability awareness interventions for children and youth. *Disability and Rehabilitation: An International Multidisciplinary Journal*, 35(8), 623–646. <https://doi.org/10.3109/09638288.2012.702850>.
- Lloyd, A., Smith, M., Dempsey, I., Fischetti, J., & Amos, K. (2017). Short- and medium-term of just like you disability awareness program: a quasi-experimental comparison of alternative forms of program delivery in New South Wales' primary schools. *Australian Journal of Education*, 61(3), 288–304. doi:10.1177/0004944117730649..
- Mamas, C., Bjorklund Jr, P., Daly, A. J., & Moukarzel, S. (2020). Friendship and support networks among students with disabilities in middle school. *International Journal of Educational Research*, 103, 1–13. <https://doi.org/10.1016/j.ijer.2020.101608>.

- McDougall, J., DeWit, D., King, G., Miller, L., & Killip, S. (2004). High school-aged youths' attitudes toward their peers with disabilities: The role of school and student interpersonal factors. *International Journal of Disability, Development and Education*, 51(3), 287–313. <https://doi.org/10.1080/1034912042000259242>.
- Nasatir, D., & Horn, E. (2003). Addressing disability as part of diversity through classroom children's literature. *Young Exceptional Children* 6(4), 2–10.
- Nikolarazi, M., Kumar, P., Favazza, P. C., Sideridis, G., Koulousiou, D., & Riall, A. (2005). A cross-cultural examination of typically developing children's attitudes toward individuals with special needs. *International Journal of Disability, Development, and Education*, 52(2), 101–119.
- Nunes, T., Pretzlik, U., & Olsson, J. (2001). Deaf children's social relationships in mainstream schools. *Deafness & Education International*, 3(3), 123–136. <http://dx.doi.org/10.1179/146431501790560972>
- Odom, S. L., Buysse, V., & Soukakou, E. (2011). Inclusion for young children with disabilities: A quarter century of research perspectives. *Journal of Early Intervention*, 33(4), 344–356.
- Odom, S. L., & Diamond, K. E. (1998). Inclusion of young children with special needs in early childhood education: The research base. *Early Childhood Research Quarterly*, 13(1), 3–25.
- Ostrosky, M. M., Mouzourou, C., Dorsey, E. A., Favazza, P. C., & Leboeuf, L. M. (2015). Pick a book, any book: Using children's books to support positive attitudes toward peers with disabilities. *Young Exceptional Children*, 18(1), 30–43. doi:10.1177/1096250613512666.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783. <https://doi.org/10.1037/0022-3514.90.5.751>.
- Price, C. L., Ostrosky, M. M., & Mouzourou, C. (2016b). Exploring representations of characters with disabilities in library books. *Early Childhood Education Journal*, 44, 563–572. <https://doi.org/10.1007/s10643-015-0740-3>.
- Price, C. L., Ostrosky, M. M., & Santos, R. M. (2016a). Reflecting on books that include characters with disabilities. *Young Children*, 30–37.
- Rademaker, F., de Boer, A., Kupers, W., & Minnaert, A. (2020). Applying the Contact Theory in inclusive education: A systematic review on the impact of contact and information on the social participation of students with disabilities. *Frontiers in Education*, 5, 1–21. <https://doi.org/10.3389/educ.2020.602414>.
- Rose, C. A., Monda-Amaya, L., & Espelage, D. L. (2011). Bullying perpetration and victimization in special education: A review of the literature. *Remedial and Special Education*, 32(2), 114–130. <https://doi.org/10.1177/0741932510361247>.
- Rotheram-Fuller, E., Kasari, C., Chamberlain, B., & Locke, J. (2010). Social involvement of children with autism spectrum disorders in elementary school classrooms. *Journal of Child Psychology and Psychiatry*, 51(11), 1227–1234. <http://dx.doi.org/10.1111/j.1469-7610.2010.02289.x>.
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-Intervention and school-wide Positive Behavior Supports: Integration of multi-tiered system approaches, *Exceptionality*, 17(4), 223–237. doi:10.1080/09362830903235375.
- Triandis H. C., Adamopoulos, J., & Brinberg, D. (1984). Perspectives and issues in the study of attitudes. In R. Jones (Ed.), *Attitudes and attitude change in special education: Theory and practice* (pp. 21–41). The Council for Exceptional Children. (ERIC Document Reproduction Service No. Ed 249 694)

- UNESCO. (1994). *Salamanca Statement*. (2016, January 26). UNESCO Salamanca Statement.
- United Nations. (2006). Convention on the Rights of Persons with Disabilities. <http://www.un.org/disabilities/default.asp?id=150>.
- World Health Organization. (2007). *International classification of functioning, disability and health children and youth version*. World Health Organization.
- Yu, S. Y., Ostrosky, M. M., Favazza, P. C., & Meyer, L. E. (2016). Where are the kids like me? Classroom materials that help create a sense of belonging. In T. Catalino, & L. E. Meyer (Eds.), *DEC recommended practices monograph No.2 environment: Promoting meaningful access, participation, and inclusion* (pp.115–126). Division for Early Childhood.
- Yu, S. Y., Ostrosky, M. M., & Fowler, S. A. (2012). Measuring young children's attitudes toward peers with disabilities: Highlights from the research. *Topics in Early Childhood Special Education*, 32(3), 132–142. <https://doi.org/10.1177/0271121412453175>.