

Why Focus on Quality Inclusion as Part of Statewide Pyramid Model Implementation?

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The *Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children* was developed to build the capacity of programs and professionals to use evidence-based practices in promoting social competence, preventing social-emotional skill delays and problem behavior, and providing effective interventions for children with severe or persistent challenging behavior (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003). The Pyramid Model is also designed to promote the inclusion of children with disabilities within community programs. In states where there is a focus on increasing the use of high-quality inclusion practices, the implementation of the Pyramid Model offers an effective approach. This white paper provides information on the importance of inclusion and how the Pyramid Model might be used in statewide initiatives to increase the use of inclusive practices.

Relatedly, the 2015 U.S. Department of Education and U.S. Health and Human Services Joint Policy Statement on Inclusion of Children with Disabilities in Early Childhood Settings defines high-quality inclusion as “inclusion in early childhood programs refers to including children with disabilities in early childhood programs, together with their peers without disabilities; holding high expectations and intentionally promoting participation in all learning and social activities, facilitated by individualized accommodations; and using evidence-based services and supports to foster their development (cognitive, language, communication, physical, behavioral, and social-emotional), friendships with peers, and sense of belonging. This applies to all young children with disabilities, from those with the mildest disabilities to those with the most significant disabilities.”

Additionally, the importance of inclusion has been increasingly highlighted beyond early childhood special education. The National Association for the Education of Young Children’s statement on advancing equity in early childhood education (2019) addresses ability as it relates explicitly to children diagnosed with disabilities and their families, the role early childhood providers, administrators, and policymakers have in the services provided for young children diagnosed with disabilities and their families, and the inclusion of young children diagnosed with developmental delays and their families in the community. This statement encourages the extension of inclusion of children with disabilities beyond preschool special education programs and into community preschools, child-care (family and center-based), and private preschools. It also recommends that a child with disabilities receive their special education services in their established early childhood setting.

The Efficacy of Inclusion

The benefits of inclusion for children with and without disabilities, programs, and communities are well described and empirically supported in the literature. These benefits are highlighted below.

Benefits to children with disabilities:

- ▶ Children with disabilities birth to age eight who are included in early childhood educational settings with their typically developing peers have more positive outcomes than children who are not. Improved outcomes for children with disabilities have been noted in

social-emotional, behavioral, cognitive, and language development (Green, Terry & Gallagher, 2014; Holahan & Costenbader, 2000; Odom, Zercher, Li, Marquart, Sandall, & Brown, 2006; Strain & Bovey, 2011).

Benefits to typically developing children:

- ▶ Research on the benefits of inclusion for typically developing children has shown positive attitudinal outcomes. In these cases, typically developing children demonstrated helpfulness, compassion, and empathy when they were educated in quality inclusive settings (Buysse, Wesley, Bryant, & Gardner, 1999; Diamond & Huang, 2005; Odom, Buysse & Soukakou, 2011; Odom, Zercher, Li, Marquart, Sandall, & Brown, 2006; Okagaki, Diamond, Kontos, & Hestenes, 1998; Phillips and Meloy (2012).

Higher quality programming for all children:

- ▶ Research has shown that inclusive programs deliver higher-quality education for all children (both typically developing and children with disabilities). This finding is primarily attributed to the use of intensive and specialized instruction embedded into naturally occurring routines, ongoing assessment, progress monitoring systems, and increased parental partnerships in the inclusive classroom (Bricker, 1995; Daugherty, Grisham-Brown, & Hemmeter, 2001; Grisham-Brown, Schuster, Hemmeter, & Collins, 2000; Lawrence, Smith & Banerjee, 2016).

Cost-benefit analyses support inclusion over 1:1 instruction:

- ▶ Multiple studies have also found that quality inclusion is not more expensive for service delivery than segregated programs. For example, the cost of a specialized inclusive model for children with autism was estimated to be half or two-thirds the cost of a one-on-one teaching model and produced the same or greater developmental outcomes (Odom, Hanson, Lieber, Marquart, Sandall, Wolery, Horn, Schwartz, Beckman, Hikido, & Chambers, 2001; Odom, Parrish, & Hikido, 2001; Strain and Bovey, 2011).

Known Barriers

Based on a national survey distributed to administrators in early childhood education, Barton and Smith (2015) identified the following attitudinal and belief barriers to the widespread use of inclusion:

1. lack of communication/ collaboration,
2. “someone will lose” beliefs,
3. staff preparedness beliefs,
4. lack of awareness and understanding beliefs,
5. turf issues, and
6. lack of respect.

While other identified barriers centered on fiscal policies and funding, established policies between agencies or programs and personnel training, qualifications, and supervision, the most frequently identified challenges were reported as attitudinal in nature.

It is important to note that these attitudinal barriers persist despite data on the effectiveness of inclusion. If progress is to be made to expand high-quality options, these barriers need to be addressed alongside the training and coaching needs specific to classroom practices themselves.

How the Pyramid Model and High-Quality Inclusion Complement Each Other

There are at least five ways and reasons in which high-fidelity implementation of the Pyramid Model and high-quality inclusion complement one another and provide reasoning to be considered together for implementation. These are listed below.

#1 - Reduction in Challenging Behavior

When preschool classrooms maintain a quality inclusion ratio of typically developing children to children with disabilities (2:1 minimum), fewer challenging behaviors are observed (Justice, Logan, Lin, & Kaderavek, 2014; Kohler & Strain, 1999; Strain, 1981; Strain, 1983; Strain, 1984; Strain & Hoyson, 1990).

#2 - The Importance of Peer-Mediated Social Skills

Many of the peer-related social skills that are a focus for targeted intervention in the Pyramid Model rely on typically developing children to be agents of intervention. This can only

be achieved in inclusive classrooms. In fact, effects produced by peer-mediated intervention have been equal to or superior to adult-mediated interventions in the peer social skills domain when the two are directly compared (Kohler & Strain, 1990; Odom & Strain, 1984; Stanton-Chapman and Snell, 2011; Steed, Barton & Strain, 2020; Strain & Fox, 1982).

#3 - High-Quality Inclusion Supports Social-Emotional Skill Development

In a study using a fidelity tool for high-quality inclusion (The Quality Program Indicators (QPI), the efforts to increase quality inclusion practices yielded improvement in Teaching Pyramid Observation Tool (TPOT) scores and social-emotional outcomes. This demonstrates that high-quality inclusion can be supportive of building the social-emotional skills of all children (Strain, 2020).

#4 - The Pyramid Model is Supportive of All Children

The Pyramid Model practices are effective for young children with and without disabilities and those with the most significant disabilities. The Pyramid Model is designed to support all children as the practices are based on research that supports the outcomes of children at different developmental levels with varying instructional needs (Strain & Odom, 1986; Joseph, Rausch & Strain, 2016; Joseph, Strain & Goldstein, 2016).

#5 - The Pyramid Model is a Multi-Tiered Systems Approach Grounded in Implementation Science

The goal of the Pyramid Model is to help programs to implement effective practices with fidelity at scale and to sustain the system over time using the principles of implementation science. The training and coaching used for effective Pyramid Model implementation efforts can also be used to build the capacity of systems and locales to implement high-quality inclusion (Fixsen, Naoom, Blase, Friedman & Wallace, 2005).

Guidance for State Leaders Around Merging Pyramid Model and Quality Inclusion Initiatives

Leaders in many states where the Pyramid Model has been implemented have merged the implementation of the Pyramid Model with initiatives designed to strengthen the provision of high-quality inclusion in several ways:

- ▶ Cross-sector state leadership teams have been established with levels of authority and responsibility, regular meetings and workgroups to braid funding and resources, alter policies as needed to coordinate different aspects of the system (e.g., coaching networks).
- ▶ The Quality Rating Improvement System (QRIS) has been used as a tool to encourage memorandums of understanding (MOUs) between programs such as preschool special education and child care to provide itinerant services between sites and reinforce the sharing of resources and supports.
- ▶ State leaders have supported children's full participation in early childhood environments through a set of agreements that focuses on the program-wide implementation of the Pyramid Model and the expansion of a consultative (special educator) role. The overarching outcomes overlap in a team-based approach to promote high-quality inclusive opportunities for all children.
- ▶ State leaders have set up a request for applications (RFA) to Pyramid Model programs that are interested in building high-quality inclusion. Programs apply for a grant and receive resources for training, action planning, building administrative buy-in, and sustainability.
- ▶ State departments have completed research projects (using surveys, interviews, and data collection) on inclusive practices, policies, resources, and who is receiving services in inclusive settings. This information has been used to provide support to programs in implementing both the Pyramid Model and high-quality inclusion.
- ▶ States have developed materials that are used to debunk myths about inclusion, raise awareness of the benefits of inclusion, and address head-on barriers in programs that are already using the Pyramid Model.
- ▶ States have hosted professional development institutes for Pyramid Model programs that focused on high-quality inclusive practices to guide reflection on policies and procedures across sectors to encourage the adoption of systems, policies, and procedures that support both the Pyramid Model and high-quality inclusion.

NCPMI is committed to supporting the social-emotional development of every child. NCPMI understands that teachers need training and coaching to make this possible. State and local systems also need support with their infrastructure to connect Pyramid Model implementation with high-quality inclusion for children with disabilities and limit barriers that prohibit children from accessing their natural learning environments. NCPMI is here to provide support in this endeavor.

Resources/Tools Related to Inclusion

- ▶ **Indicators of High-Quality Inclusion**
<https://ectacenter.org/topics/inclusion/indicators.asp>
- ▶ **Practice Improvement Tools: Environment**
<https://ectacenter.org/decrp/topic-environment.asp>
- ▶ **Practice Improvement Tools: Interaction**
<https://ectacenter.org/decrp/topic-interaction.asp>
- ▶ **Practice Improvement Tools: Family**
<https://ectacenter.org/decrp/topic-family.asp>
- ▶ **Practice Improvement Tools: Instruction**
<https://ectacenter.org/decrp/topic-instruction.asp>
- ▶ **Practice Improvement Tools: Teaming**
<https://ectacenter.org/decrp/topic-teaming.asp>
- ▶ **Practice Improvement Tools: Assessment**
<https://ectacenter.org/decrp/topic-assessment.asp>
- ▶ **The Individualized Education Plan: Partnering for Success**
<https://eclkc.ohs.acf.hhs.gov/children-disabilities/specialquest/session-5-individualized-education-program-partnering-success>
- ▶ **CONNECT Modules: Audio and Video for Supports for Inclusion**
<https://www.connectmodules.dec-sp.ed.org/tag/peer-support/>
- ▶ **Preventing Suspensions and Expulsions in Early Childhood Settings**
<https://preventexpulsion.org/1g-provide-professional-development-and-ongoing-support-for-all-program-staff-on-culturally-responsive-practices-and-implicit-bias/>

References

- Barton, E. E. & Smith, B. J. (2015). Advancing High-Quality Preschool Inclusion: A Discussion and Recommendations for the Field. *Topics in Early Childhood Special Education, 35*, 69-78.
- Bricker, D. (1995). The challenge of inclusion. *Journal of Early Intervention, 19*, 179-194.
- Buyse, V., Wesley, P. W., Bryant, D. M., & Gardner, D. (1999). Quality of early childhood programs in inclusive and noninclusive settings. *Exceptional Children, 65*, 301-314.
- Daugherty, S., Grisham-Brown, J., & Hemmeter, M. L. (2001). The effects of embedded skill instruction on the acquisition of target and nontarget skills in preschoolers with developmental delays. *Topics in Early Childhood Special Education, 21*, 213-221.
- Diamond, K. E., & Huang, H. H. (2005). Preschoolers' ideas about disabilities. *Infants and Young Children, 18*, 37-46.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network.
- Fox, L., Dunlap, G., Hemmeter, M. L., Joseph, G. E., & Strain, P. S. (2003). The teaching pyramid: A model for supporting social competence and preventing challenging behavior in young children. *Young Children, 58*(4), 48-52.
- Green, K., Terry, N., & Gallagher, P. (2014). Progress in language and literacy skills among children with disabilities in inclusive early reading first classrooms. *Topics in Early Childhood Special Education, 33*, 249-259.
- Grisham-Brown, J., Schuster, J. W., Hemmeter, M. L., & Collins, B. C. (2000). Using an embedding strategy to teach preschoolers with significant disabilities. *Journal of Behavioral Education, 10*, 139-162.
- Holahan, A., & Costenbader, V. (2000). A comparison of developmental gains for preschool children with disabilities in inclusive and self-contained classrooms. *Topics in Early Childhood Special Education, 20*, 224-235.
- Joseph, J. D., Rausch, A., & Strain, P. S. (2018). Social competence and young children with special needs: Debunking “mythconceptions”. *Young Exceptional Children, 21*, 48-60.
- Joseph, J., Strain, P.S., Olszewski, A., & Goldstein, H. (2016). A “consumer reports” lit review of the empirical literature specific to preschool children’s peer-related social skills. In E. Barton & S.L. Odom (Eds.), *Handbook of Early Childhood Special Education*. Springer: New York.
- Justice, L. M., Logan, J. R., Lin, T. J., & Kaderavek, J. (2014). Peer effects in early childhood education testing the assumptions of special-education inclusion. *Psychological Science, 25*, 1722–1729.

- Kohler, F. W., & Strain, P. S. (1990). Peer-assisted interventions: Early promises, notable achievements, and future aspirations. *Clinical Psychology Review*, 10, 441-452.
- Kohler, F. W., & Strain, P. S. (1999). Maximizing peer-mediated resources in integrated preschool classrooms. *Topics in Early Childhood Special Education*, 19, 92-102.
- Lawrence, S., Smith, S. & Banerjee, R. (2016). *Preschool inclusion: Key findings from research and implications for policy*. Child Care and Early Education Research Connections. <https://www.researchconnections.org/childcare/resources/31744/pdf>
- National Association for the Education of Young Children. (2019). *Advancing Equity in Early Childhood Education: A Position Statement*. Retrieved from <https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/naeycadvancingequitypositionstatement.pdf>
- Odom, S. L., & Strain, P. S. (1984). Peer-mediated approaches to promoting children's social interaction: A review. *American Journal of Orthopsychiatry*, 54(4), 544-557. <https://doi.org/10.1111/j.1939-0025.1984.tb01525.x>
- 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., Hanson, M. J., Lieber, J., Marquart, J., Sandall, S., Wolery, R., Horn, E., Schwartz, I., Beckman, P., Hikido, C., & Chambers, J. (2001). The costs of preschool inclusion. *Topics in Early Childhood Special Education*, 21, 46-55.
- Odom, S. L., Parrish, T., & Hikido, C. (2001). The costs of inclusion and noninclusive special education preschool programs. *Journal of Special Education Leadership*, 14, 33-41.
- Odom, S. L., Zercher, C., Li, S., Marquart, J., Sandall, S., & Brown, W. (2006). Social acceptance and social rejection of young children with disabilities in inclusive classes. *Journal of Educational Psychology*, 98, 807-823.
- Okagaki, L., Diamond, K. E., Kontos, S. J., & Hestenes, L. (1998). Correlates of young children's interactions with classmates with disabilities. *Early Childhood Research Quarterly*, 13, 67-86.
- Phillips, D. A., & Meloy, M. (2012). High-quality school-based pre-k can boost early learning for children with special needs. *Exceptional Children*, 78, 471-490.
- Steed, E. A., Barton, E. E. & Strain, P. S. (2020). Instructional approaches that promote positive social outcomes for young children: A historical review of single-case design research. *Journal of Positive Behavior Interventions*, 0, 1-13. <https://doi.org/10.1177/1098300720916717>
- Stanton-Chapman, T. L., & Snell, M. E. (2011). Promoting turn-taking skills in preschool children with disabilities: The effects of a peer-based social communication intervention. *Early Childhood Research Quarterly*, 26, 303-319.
- Strain, P. S. (1981). Peer-mediated treatment of exceptional children's social withdrawal. *Exceptional Education Quarterly*, 1, 93-105.
- Strain, P. S. (1983). Generalization of autistic children's social behavior change: Effects of developmentally-integrated and segregated settings. *Analysis and Intervention in Developmental Disabilities*, 3, 23-24.
- Strain, P. S. (1984). Social interactions of handicapped preschoolers in developmentally-integrated and segregated settings: A study of generalization effects. In T. Field (Ed.), *Friendships between normally developing and handicapped children* (pp. 187-208). New York, NY: Academic Press.
- Strain, P. S. (2020). *Relationship between Quality Program Indicators and Teaching Pyramid Observation Tool: Differential effects of coaching on each tool*. Unpublished manuscript. University of Denver.
- Strain, P. S., & Bovey, E. H. (2011). Randomized, controlled trial of the LEAP model of early intervention for young children with Autism Spectrum Disorders. *Topics in Early Childhood Special Education*, 31, 133-154.
- Strain, P. S., & Fox, J. J. (1981). Peers as behavior change agents for withdrawn classmates. *Advances in Clinical Child Psychology* (pp. 167-198). Springer, Boston, MA.
- Strain, P. S., & Hoyson, M. (2000). The Need for Longitudinal, Intensive Social Skill Intervention: LEAP Follow-Up Outcomes for Children with Autism. *Topics in Early Childhood Special Education*, 20, 116-122.
- Strain, P. S., & Odom, S. L. (1986). Peer social initiations: Effective intervention for social skills development of exceptional children. *Exceptional Children*, 52, 543-551.
- U.S. Department of Health and Human Services & U.S. Department of Education (2015). *Policy statement on inclusion of children of disabilities in early childhood programs*. Retrieved from <https://sites.ed.gov/idea/files/joint-statement-full-text.pdf>