Adapting Instructional Materials for Inclusive Settings

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Introduction & Background

Due to an increased emphasis on serving students with disabilities in inclusive, general education settings, nearly 30 times as many school-aged students with disabilities such as Autism Spectrum Disorder (ASD) were included in general education settings for at least 40% of the school day in 2010-11 than in 1995-96 (Data Accountability Center, n.d.). There are obvious potential benefits to inclusion such as increased opportunities for peer interaction, academic achievement, and an opportunity for schools to cut costs by reducing specialized services. However, evidence exists that reinforces the premise that putting a child with a disability in a general education classroom or other general education settings (e.g., preschool through high school, high-resource schools) with documented outcomes for high need students and across students with a range of disabilities (i.e., across eligibilities as well as developmental and cognitive capacities). The interdisciplinary composition of the HANDS Team allows for diverse perspectives and expertise in supporting professionals and families. In addition, the HANDS Team has proficiency in providing support and training across all levels of academic, behavioral, and functional programming thus impacting all students with disabilities as noted previously.

Even though training school personnel in inclusive settings is important for positive student outcomes, successful implementation of taught strategies requires the acquisition of practical hands-on experience. Yet, professional development is often provided in a traditional didactic format.

To support school personnel and the transfer of their knowledge to their classrooms, HANDS in Autism® Interdisciplinary Training & Resource Center has developed a training curriculum that focuses on a range of topics important for an inclusion classroom providing support not only on the major components of the school-personnel training like evidence-based practices, but also showing specific and applicable examples of use of strategies, like adapting educational materials.

Both of these examples and topics are trained as part of the HANDS in Autism® Model in targeted, interactive trainings thus serving as examples in practice for supporting school-based teams working with individuals with ASD and related disabilities.

HANDS in Autism® Model

The HANDS in Autism® Model (Fig. 2) consists of a hands-on learning process in the naturalistic education setting comprised of curriculum rooted in Applied Behavior Analysis (ABA) with a focus on data-driven decision making and evidence-based practices (EBPs). With recognition that no single intervention or strategy is equally effective with all individuals, the HANDS Model offers professionals a common core set of strategies with solid empirical support for use with individuals with disabilities. The specific curriculum content and delivery of the HANDS Model is novel in its approach with specific alignment to the following core beliefs: (1) Student-strength driven: a focus upon building strengths and successes of individuals with an emphasis on proactive planning and teaching practical skills (Iovannone, Dunlap, Huber, & Kincaid, 2003; National Research Council [NRC], 2001; (2) Collaborative: delivery across community stakeholders for consistency, coordination, and positive collaboration for students with disabilities (Baker et al., 2005; Interagency Autism Coordinating Committee, 2005; Swiezy, Stuart, & Korzekwa, 2008); (3) Data-driven: a relationship to data-driven decision making across practices as all settings to affect best outcomes through systematic planning and individualization of efforts (Iovannone et al., 2003; NRC, 2001); (4) Scientifically-based: a basis from current research in special education, psychology, and related fields with relevance to ASD and other DD with a focus on the practical and effective blending of scientifically-based strategies (Horner, Carr, Strait, Todd, & Reid, 2002; Matson, Benvidez, Compton, Paclawsky, & Baglio, 1996; National Autism Center [NAC], 2009; Olson et al., 2003); (5) Interagency: an incorporation of implementation and process research that indicate the need to appeal to varied learning styles (Pisoni, Naimo, Blase, Friedman, & Wallace, 2005) and the need for more interactive strategies to ensure usage in naturalistic settings (McClannahan, & Krantz, 1993; Joyce & Showers, 2002); (6) Practical and accessible: delivery through accessible materials, training, technology, and consultative staff in efforts to decrease barriers, increase support, and improve implementation and utilization of the strategies taught; and (7) Process-driven: an infusion with a fluid and integrated process for effectively educating all students by incorporating data-driven strategies, research-based methods, collaboration and individualized needs to develop effective programming (Iovannone et al., 2003; Kazdin, 2001; NRC, 2001). The curriculum inherent within the HANDS Model highlights core elements noted for effective educational practices with focus upon individualized supports and services, systematic instruction, comprehensive and structured learning environments, specific curriculum content, and (6) functional approach to problem behavior and family involvement (Yell, Drasgow, & Lowrey, 2005) with additional emphasis in regards to effective implementation.

Adaptation of Educational Materials

While adaptation of instructional materials is required by the Federal Law (e.g., IDEA), it is also important to ensure that students are successful. After all, “education, both directly of children, and of parents and teachers, is currently the primary form of treatment in autism” (Lund & McCorvey, 2001, p. 12). Students with developmental disabilities, such as ASD, display a range of challenges and skills across cognitive, academic, communication, and social skills among other areas of functioning that may be challenging in inclusive classrooms. Taking into account the strengths, interests, and existing skills for individual students creates the opportunity to build new knowledge and experiences. Moreover, the teacher or educational staff should approach the process and techniques systematically to ensure that the materials meet both the needs of the students and the intended instructional goals.

To approach such a process systematically, a teacher must develop an awareness and understanding of developmental disabilities and potential strategies and techniques, as well as have access to sufficient opportunities for application, coaching, and feedback. The HANDS in Autism® curriculum allows such opportunities.

The HANDS in Autism® Model is composed of modules (e.g., physical and visual structure, schedules) embedded within each of the five partitioned categories (i.e., Building the Environment, Assessing, Setting Goals, Teaching, Generalizing). The modules reflect a hierarchy of implementation with each module systematically building upon the next module within each category:

- Training progresses by successively working through the modules for school-based teams and statewide participants.
- Implementation of a module is in accordance with the HANDS in Autism® Training Process uses the technology infrastructure that is established during early collaborations with school-based teams through the use of interactive web-modules that incorporate the premises of problem-based learning and self-guided assessment.
- Following introduction of the concepts by module, concepts initially introduced through the web-modules will further trained onsite through (1) didactic, interactive materials; (2) observation, (3) modeling and live feedback, (4) coaching and structured feedback, and (5) mantaining interactive process.
- Tasks and adaptations is an important component of the HANDS in Autism® curriculum and includes systematic knowledge acquisition through the use of:
  - Interactive, web-based module-specific content
  - Introduction of the topic through problem-based learning utilizing video activities, practice scenarios to assess the needs of specific individuals, and analysis of existing materials to evaluate the potential needs of the students.
  - Support of independent study utilizing job aids, templates, and other supports to create and adapt teaching tasks with the focus on individualized student needs
  - Live and virtual coaching
  - Assessment of newly created/adapted products and whether it meets the needs through ongoing progress monitoring utilizing module-based rubrics and checklists that measure implementation fidelity.

The model has been successfully implemented in part or in whole across multiple schools in Indiana.

For more information about the program, visit our website www.HANDSinAutism.org