**CHAPTER** 

4

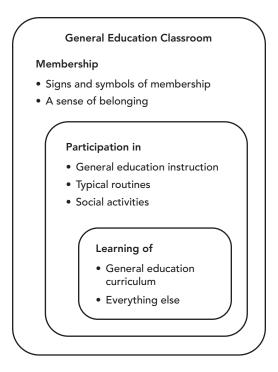
# Membership, Participation, and Learning

This chapter describes and provides numerous examples of three of the core best practices and ultimate outcomes of the BA Model—membership, participation, and learning. First, we provide an overview of how membership and participation provide the context for enhancing learning. We then describe the importance of, strategies for enhancing, and indicators for membership, participation, and learning.

In our experience, many educators begin their planning for instruction by asking questions about how to modify the curriculum content and materials based on unwarranted lack of confidence in student abilities. These perceptions of student abilities are inaccurate, in part, because of insufficient AAC supports. In doing so, there is a risk of the trap presented in Jay's story in Chapter 1. "How do I modify a lesson on computing addition problems for a student functioning at the 2-year-old level?" or "How do I modify a fourth-grade novel to make sense for a student with low-functioning autism?" These questions lead a teacher to create a version of the curriculum that is different from the one taught to students without disabilities and then to design ways to teach it that also may be different from the instructional plan for students without disabilities.

It is understandable that educators want to prioritize their attention to support student learning. In the instructional planning process, however, prioritizing the content to be learned over the context and the instructional processes through which it will be taught may mislead educators to make changes in educational programming that are not aligned with their vision of inclusive education. For example, follow this teacher's line of thinking: "This book would have to be significantly modified to work for him. The book will be so different from that of his classmates that we will have to pull him aside to provide individualized instruction. Being in the general education classroom appears unnecessary with so much pull-aside instruction. I could teach him this modified book better

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**Figure 4.1.** Conceptual framework for embedding learning of general education curriculum in the context of membership and participation within the general education classroom for students with intellectual and/or other developmental disabilities.

if he came to my resource room and I pulled in the other two students in the building who are functioning at his level."

Figure 4.1 depicts the BA approach to learning in the context of membership and participation. It is apparent in this figure that learning is situated in general education classroom membership and participation is situated in general education instruction. In this model, intensive support planning for students' learning must ensure that membership and participation are in place in order to maximize the social opportunities in the general education classroom and the academic instruction offered there.

# **MEMBERSHIP**

Educators and psychologists have reported that students' presence in the class-room as members of the learning community—a member of both social and academic activities—is a requirement for optimal student learning.

In his award-winning film, *Including Samuel*, filmmaker Dan Habib (2007) tells the story of his 8-year-old son Samuel's full inclusion in a second-grade general education classroom in his neighborhood school. Habib recalls the angst that

he and his wife Betsy felt when they first learned of the severity of Samuel's disabilities. After a long day of therapy and doctor's appointments when Samuel was a toddler, they would compare notes about how he was doing with various motor skills and development. Over time, they realized that their focus on Samuel's disabilities—fixing his body and making him conform to a standard of normality—was not only inhibiting their relationship with Samuel but also was frustrating Samuel. As their journey with Samuel continued, Dan and Betsy met and heard the stories of parents of older children with disabilities, as well as adults with disabilities. They realized that accepting Samuel just as he was and fully including him in all aspects of family, school, and community life would be more likely to result in Samuel having a good life than a narrow focus on what Samuel could not do. "More than anything, his mother and I want Samuel to have a deep sense of belonging" (Habib, 2007).

Kunc (1992) asked us to consider how the basic premises of Maslow's (1970) hierarchy of needs leading to self-actualization have been distorted for people with disabilities. Maslow posited that individuals do not seek the satisfaction of a need at one level until the previous level of need is met. In Maslow's original hierarchy, physiological needs—food, water, shelter, and warmth—form the base of a five-level pyramid. The second level of Maslow's pyramid is safety, and the third level is love and belonging. Maslow stressed that only when we are "anchored in community do we develop self-esteem, the need to assure ourselves of our own worth as individuals" (Kunc, 1992, p. 28). The fourth level represents elements of self-esteem—achievement, mastery, recognition, and respect. And the fifth, or highest level, is self-actualization, characterized by the pursuit of inner talent, creativity, and fulfillment.

When applied to people with disabilities, the order of the third and fourth levels is often switched. That is, people with disabilities are required to demonstrate skill and accomplishment as a prerequisite to belonging. For example, students with disabilities are often required to be able to perform certain academic skills *before* they are included in a general education classroom, even though this requirement violates both the spirit and the letter of special education law (Kluth, Villa, & Thousand, 2001/2002). Or, they are required to demonstrate a certain level of cognitive development before being exposed to general education curricula. Adults with disabilities are told that they must pass vocational evaluations showing that they have mastered particular skills before they can move from a sheltered workshop to a typical work setting.

Researchers have investigated the meaning and interpretation of membership on students with disabilities. Schnorr (1990) found that part-time inclusion had a significant effect on the membership and belonging of a student named Peter. Schnorr used participant observation and in-depth interviews over a 7-month period to study a first-grade class in which Peter, who had a moderate intellectual disability, participated on a part-time basis. Peter spent most of his school day in a self-contained classroom. He joined a first-grade class for a period each morning as well as for classes such as music, art, library, and physical education. Using inductive and ongoing data analysis techniques, Schnorr's observations and interviews revealed three themes that characterized classroom membership: where students belong, what they do, and with whom they play. With respect to Peter's membership in the class, several conclusions were drawn. First, "part-time is different, not just less. Peter's experience differed in kind as well as amount. He did

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not share in the first grade experience as defined by the students" (Schnorr, 1990, p. 238). A second conclusion was that Peter was not viewed by the other students as a member of the class because he engaged in different activities inside the classroom, often with different materials and instructional methods. A third element that seemed to define Peter as an outsider rather than a member of this classroom was that other students only nominated classmates as friends if they were members of the same class. Peter's membership in the self-contained classroom and his visitor status in the first-grade classroom almost guaranteed that he would not be considered among the pool of potential friends by his classmates (Tashie, Shapiro-Barnard, & Rossetti, 2006).

Williams and Downing (1998) found that middle school students' perceptions of membership incorporated feeling welcomed, wanted, and respected by classmates and teachers; being familiar with classmates and having friends who understand them; feeling as if they belong to a group and/or class as a whole; having fun; and feeling comfortable.

Strully and Strully (1985) described how their daughter Shawntell was one of the first students with IDD to be included in a general education classroom in her neighborhood school. They focused on Shawntell's membership within the classroom and school because they believed that belonging and friendships were essential to Shawntell's quality of life while she was in school and when she became an adult. Many years later, after Shawntell had grown to adulthood, Strully mused:

Now that I am getting older, I sometimes awaken in the middle of the night worrying about what will happen to Shawntell when her mother and I are no longer around to advocate for her. It is at these times when I am sure that it will be more important for Shawntell to have real friends who care about her and want to spend time with her than it will be for her to be able to tie her shoes, or set the table, or make a sandwich. When we have been faced with important decisions about Shawntell's education or adult life, returning to that basic human need for belonging has helped us make decisions that we think will most likely lead to Shawntell's happiness and quality of life. (2006)

Membership in the general education class represents students having access to valued social roles and the symbols of belonging, such as having a desk, being given class jobs, going on field trips, and having one's name called during attendance. In addition, through the lens of presumed competence, the symbols of the student's membership, sense of belonging, and social roles within the classroom would reflect a vision of equity and reciprocity with classmates who do not have disabilities. Working toward this vision would include exploring ways to enhance a student's communication system until he or she has an effective and efficient means through which to communicate socially about the same topics and in a way that is commensurate with same-age peers.

# **Enhancing Membership to Enhance Learning**

During the orientation to the BA Model and in ongoing professional development provided to school teams (including administrators and parents), journal articles,

book chapters, videos, and guest presentations from other parents or adults with disabilities are shared to emphasize the importance of membership in general education.

Although a student does not need to be included in general education all day, every day in order for a team to begin using the Model, we suggest that students be included in a general education classroom for at least two core academic subjects (i.e., math, language arts, social studies, science). The team then uses the BA Model to focus on improving instruction and supports (including AAC) to the student during these two periods of the day, prior to expanding the student's inclusion within other classroom lessons and activities. We want to make it clear that we are not advocating for students to be "included part time," but rather suggesting that focusing on two core academic periods a day can provide a place for the team to begin the process of learning to use the BA Model.

McSheehan, Sonnenmeier, Jorgensen, and Turner (2006) investigated perceptions of five students' IEP team members regarding the effect of the first phase of the BA Model (the CASTS, a baseline assessment) on several variables, including students' classroom membership within the general education classroom. Prior to teams' engagement in the CASTS process, we asked them to estimate the student's level of membership (and participation) in the general education classroom at 0%-20%, 20%-40%, 40%-60%, 60%-80%, or 80%-100%. Across the five students, average team ratings were 0%-20% for two students, 20%-40% for two other students, and 40%-60% for the fifth student. Six months following the CASTS assessment, the amount of time spent in the general education classroom increased for all of the students. Ratings for one student increased from 0%-20% to 20%-40%, and ratings for the remaining four students increased to 60%-80%. A follow-up inquiry at 9 months revealed that all five students were in the general education classroom for 80% or more of the day. These findings show how using the BA Model can increase the amount of time a student spends within the general education classroom, and thus increase the likelihood that he or she will be perceived by others as a member of that classroom. This is a necessary, though not sufficient, step in fostering the student's learning within the general education classroom.

Membership indicators can be used by teams to plan action steps if certain indicators are absent or partially present (see Table 4.1). Outcome measures of membership are also used to monitor the effect of using the BA Model (see Chapter 7 for a description and sample of the Student and Team Outcomes Survey). A couple of examples that illustrate changes made by teams to improve a student's membership within the classroom are presented next.

Previously, Julie's desk had been placed at the back of class, not alongside other students who sat in groups of four. Her desk was moved up to be alongside her classmates, and the paraprofessional's materials were stored on a table at the back of the classroom.

Jamie consistently arrived 15 minutes late for homeroom, missing calendar time, during which important reading and math skills were learned. It was determined that the cause of his tardiness were special education transportation schedules and his need to do sensory-motor activities to help organize him and increase attention prior to going to classes. Jamie started riding the regular school bus, and his sensory motor activities were integrated into a whole-class warm-up activity done just prior to sitting down for the calendar activity.

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**Table 4.1.** Sample indicators of student membership in the general education classroom

The student attends the school he or she would attend if he or she did not have a disability.

The student is a member of an age-appropriate general education class.

The student's name is on all class lists, lists of groups put on the board, job lists, and

Related services are delivered primarily through consultation in the classroom.

The student receives the same materials as students without disabilities, with supports (i.e., accommodations, adaptations) provided as necessary.

The student passes classes with other students, arriving and leaving at the same time.

The student has a locker/cubby alongside students without disabilities.

The student rides the same school bus as his or her peers without disabilities.

From McSheehan, M., Sonnenmeier, R.M., & Jorgensen, C.M. (2009). Membership, participation, and learning in the general education classroom for students with autism spectrum disorders who use AAC. In D.R. Beukelman & J. Reichle (Series Eds.) & P. Mirenda & T. Iacono (Vol. Eds.), Augmentative and alternative communication series: Autism spectrum disorders and AAC (p. 418). Baltimore: Paul H. Brookes Publishing Co; adapted by permission.

Jimmy's educational team felt that he needed to learn vocational skills in order to prepare him for the world of work after high school. Instead of delivering the attendance sheets during first period when other students were engaged in core academics, Jimmy's team agreed to enroll him in a biology class where all students took turns being responsible for organizing the lab equipment storage cabinet and keeping a terrarium clean.

## **PARTICIPATION**

Research, practice guidelines, and disability policy have identified engagement and participation as positively correlated to educational achievement and to quality-of-life outcomes of children and adults with disabilities (Brophy & Good, 1986; Greenwood, 1991; Hemmingsson & Jonsson, 2005; National Joint Committee on the Communication Needs of Persons with Severe Disabilities, 2002; World Health Organization, 2001). Although students with IDD may exhibit characteristics that seem to inhibit their full engagement and participation in classroom activities (e.g., movement, sensory, communication, learning, and behavior difficulties), research has shown that engagement can be positively influenced by 1) the choice of instructional method; 2) the characteristics of the learning environment; 3) the interactions between the student and his or her teachers, other support providers, and peers; 4) accommodations and supports for dealing with sensory stimuli; and 5) interventions that help the student manage his or her emotional and behavioral needs.

The choice of the learning environment itself—whether students are placed in self-contained or general education classrooms—can also influence engagement and participation. Hunt, Farron-Davis, Beckstead, Curtis, and Goetz (1994) studied the effects of placing students with severe disabilities in general education

versus special education classes. They found that in addition to higher overall quality of their IEPs, students with disabilities who were full-time members of general education classes were significantly more actively engaged and initiated more to others than students in special education classes.

Helmstetter, Curry, Brennan, and Sampson-Saul (1998) studied nine students with severe disabilities who spent part of their day in both general and special education classrooms. In comparison to special education classrooms, general education classrooms provided more instruction, utilized more whole-class instruction, provided a comparable amount of one-to-one instruction, addressed academic content more, and utilized peers without disabilities more and special education staff less. Also in comparison with special education classrooms, however, students in general education classrooms were less actively engaged and more passively engaged in instruction, engaged in a comparable amount of time during independent work, and were less actively engaged and more passively engaged with teachers and paraprofessionals. These results emphasize the importance of providing adequate supports for meaningful engagement to realize students' full potential for learning in a general education classroom.

Goodman and Williams (2007) reviewed a variety of academic interventions for students with autism spectrum disorders in inclusive classrooms and found that several interventions increased students' academic engagement, including auditory focus cues (including songs), visual aids (e.g., visual schedules, highlighting important text, note-taking templates), concrete and hands-on models (e.g., base-10 blocks, tactile alphabet letters, models of molecules, minicalendars), clear expectations for responses to questions, offering choices, and incorporating movement activities.

Peer support interventions have also been found to contribute to higher levels of active engagement for students with and without disabilities (Shukla, Kennedy, & Cushing, 1999), increased social interactions (Kennedy, Cushing, & Itkonen, 1997), decreased levels of problem behavior (McDonnell, Mathot-Buckner, Thorson, & Fister, 2001), improved academic performance (Dugan et al., 1995), and the acquisition of functional skills (Werts, Caldwell, & Wolery, 1996). Moreover, the effectiveness of peer support interventions has been documented across grade levels (i.e., elementary, middle, and high school) and disability categories (e.g., intellectual disabilities, autism, multiple disabilities).

Although there is a need for continued research on the interventions and supports that make the most positive effect on both engagement and learning for any particular student, the BA Model is based on the notion that higher levels of meaningful participation will benefit all students with disabilities. In addition, the BA Model's emphasis on participation reflects the current state of the field in which AAC supports and services are not routinely provided to all students with IDD who need these supports and services. Given this, the validity of measures of student abilities are questionable. Thus, planning for participation must include a focus on AAC supports prior to judgments about student performance.

Participation in the general education class represents students' active engagement in the social and academic life of the classroom. Given the focus of this book, we emphasize participation in general education instructional routines. Through the lens of presumed competence, participation in general education instruction would reflect a vision of the student with IDD engaging in the same variety and frequency of instructional routines (e.g., large-group lecture, small-group cooperative activities, labs, seat work) in the same academic areas as

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students without disabilities. Working toward this vision would include exploring ways to enhance a student's communication system until he or she had an effective and efficient means through which to communicate academically (speaking, reading, writing, listening) about the same topics and in a way that was commensurate with same-age peers.

# **Enhancing Participation to Enhance Learning**

During the orientation to the BA Model and in ongoing professional development provided to school teams (including administrators and parents), journal articles, book chapters, videos, and guest presentations from other educators, parents, or adults with disabilities are shared to emphasize the importance of participation in general education academic instruction.

As mentioned previously, although a student does not need to participate in general education academics all day, every day in order for a team to begin using the Model to enhance participation, we suggest that students are included in a general education classroom for at least two core academic subjects (i.e., math, language arts, social studies, science). The team then uses the BA Model to focus on improving instruction and supports (including AAC) to the student during these two periods of the day, prior to expanding the student's academic participation within other classroom lessons and activities.

Classroom instruction occurs through a variety of arrangements, such as writing on a black- or whiteboard; one-to-one instruction by an adult; partnering with a classmate in a learning activity; small-group teacher-directed instruction; student-managed cooperative learning groups; large-group lecture; large-group discussions; and a variety of individual learning activities such as seat work, library research, lab experiments, and so forth. Similar to tracking percentage time in class as a membership indicator, educators can also track the occurrence and distribution of engagement in instructional routines. The goal should be to move toward students' involvement in the same routines, in the same proportion, at the same times as classmates without disabilities, acknowledging, of course, individualization of supports.

The BA Model promotes instructional planning based on the notion that all students can participate and learn the general education curriculum when they are presumed competent, valued as true classroom members, and supported to fully participate. Consistent with this belief, the BA Model encourages teams to ask, "What supports are needed for this student to engage in the same lesson as his or her classmates?" As described at the beginning of this chapter, this question is crafted to move teams away from questions that presume high confidence in past measures of the student's present level of performance. To answer this question, a five-step planning process is used. Specific examples of implementing this planning process based on the work of BA teams are presented in Chapter 8.

The five-step framework for instructional planning for full participation is presented next.

- 1. Identify the subject and skill being taught (e.g., math: computation; reading: fluency).
- 2. Identify what classmates do to show that they are engaged in the instruction (e.g., listen to teacher, turn pages of a book, answer questions, fill in a worksheet).

- 3. Identify how the target student can demonstrate those same or similar behaviors through the same or alternate means of communicating or demonstrating engagement (e.g., depress switch to turn page of a book, select messages on SGD to answer questions, select messages on SGD and peer scribes answer onto worksheet).
- 4. Identify what supports the target student needs in order to participate and what supports would help elicit or teach the behaviors in Step 3 (e.g., switch connected to computer to read electronic book, modeling by peers using switches or SGD).
- 5. Identify what planning must be done by team members to ensure that the supports are available and delivered at the time they are needed (e.g., download electronic book and connect switch to computer, program the SGD with necessary messages or vocabulary).

Through the lens of participation (contrasted with the lens of learning), the first goal is for students to be engaged with the instruction delivered by the general education classroom teacher alongside and with their classmates. Even though they may not yet be demonstrating learning of the same curriculum content as their classmates, the target student is engaged in the learning process that is similar to their classmates.

Participation indicators can be used by teams to plan action steps if certain indicators are absent or partially present (see Table 4.2). Outcome measures of student participation within the general education classroom activities and routines are also used to monitor the effect of using the BA Model (see Chapter 7 for

# **Table 4.2.** Sample indicators of student participation in general education classroom routines, activities, and lessons

The student participates in classroom and school routines (e.g., Pledge of Allegiance, lunch count, jobs, errands, eating lunch) in typical locations.

The student participates in school plays, field trips, and community service activities.

The student passes classes with other students, arriving and leaving at the same time.

The student participates in classroom instruction in similar routines as students without disabilities. For example, the student participates in whole-class discussions, at the board, in small groups, and when called on by the teacher.

The student has a way to communicate the same academic messages that are expected of other students in the instructional routines.

- Whole-class discussions: brainstorming, calling out answers, taking notes, engaging in social side talk
- At the board: writing answers, drawing figures
- In small groups: commenting to classmates, sharing information, taking notes, socializing
- When called on by the teacher: sharing information

The student completes assignments and other work products (with adaptations and modifications) as students without disabilities do.

A high school student engages in outside-of-school, age-appropriate, and inclusive environments (e.g., service learning) similar to classmates without disabilities.

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a description and sample of the Student and Team Outcomes Survey). Examples that illustrate changes teams made to increase a student's participation in classroom instruction are presented next.

Tyler's teacher had not called on him to provide answers when checking class homework because he was not given homework. To remedy this, the teacher began assigning a few homework problems for Tyler. He completed the homework with his parents and practiced giving the answer when requested. In class, the teacher now calls on him to share an answer.

Theresa had been pulled out of class for sensory-motor activities to help organize her body. Sometimes she was pulled from group read-aloud activities because it was difficult to assist her to sit with the group on the floor during reading. To address this, the occupational therapist (OT) conducted an observation of how Theresa was supported to participate in the reading group. She generated a list of sensory-motor accommodations (e.g., bean bag chair, weighted blanket, fidget tools) and then provided occupational therapy services in class to model how to provide these accommodations to facilitate Theresa's participation in the reading group.

### **LEARNING**

Researchers have called for instruction in academics to be an educational priority if students are to achieve desired outcomes and make progress (Browder, Wakeman, Spooner, Ahlgrim-Delzell, & Algozzine, 2006; Erickson & Koppenhaver, 1995). As discussed in both Chapters 1 and 2 of this book, there is research supporting the idea that students with IDD can learn academic content. Comprehensive reviews of the literature related to reading (Browder et al., 2006), mathematics (Browder, Spooner, Ahlgrim-Delzell, Wakeman, & Harris, 2008), and science (Courtade, Spooner, & Browder, 2007) provide additional examples of students with IDD acquiring academic skills. These syntheses, along with other qualitative studies and anecdotal reports, suggest that learning general education academics is not only relevant but also a priority for this population (see, for example, Erickson, Koppenhaver, Yoder, & Nance, 1997).

In addition, many researchers are beginning to rethink the notion that students with IDD may progress through the curriculum in a way that is quite different from students without disabilities. Mirenda noted

Research supports that learners with and without disabilities may be more similar than previously thought. Most—if not all—students with autism can benefit from literacy instruction that incorporates the use of multiple instructional strategies that are carefully matched to the stages or phases of development through which all readers pass on their way from emergent reading to skilled reading. (2003, p. 275)

# Learning as a Result of Membership and Participation

Promoting full membership and pursuing the five-step instructional planning process for a student's participation in the general education classroom described previously sets the stage for a student's demonstration of both anticipated

and unanticipated learning. In a survey of 38 educators who had been using the BA Model for 6 months to promote membership and participation for five students (McSheehan et al., 2006), 56 examples of previously unexpected learning were reported in the areas of reading, writing, and math. Jay (the student from Chapter 1) had never been exposed to grade-level novels. Beginning in fifth grade, books were rewritten for him from a fifth-grade reading level to a second-grade reading level, while preserving the essential content. The text was enhanced with symbols and drawings of events from the book. Initially, these supports were put into place to foster Jay's participation with age-appropriate materials on the same topics as his classmates. Toward the end of the school year, however, after repeated engagement with the adapted novels, Jay began vocalizing as he independently turned pages in his books and tracked text with his index finger. He varied his intonation and began to pause on words and at the ends of sentences—similar to his classmates reading aloud. In addition, he participated in quizzes, tests, and an end-of-year review of all of the novels by selecting from multiple-choice formats programmed into his SGD. By selecting some of the right answers, Jay demonstrated that he had not only participated in the various instructional routines, but he also had learned some of the academic content expected of his classmates—which previously had not been expected of him.

Students with disabilities placed in a general education classroom for the majority of their day score higher on standardized measures of reading and math than students in other placements (Wagner et al., 2003). Large-scale, statewide assessment or standardized measures of achievement can provide an IEP team with academic learning outcome information about their student's educational program. Classroom-based measures of learning, however, are the most frequent and user-friendly measures for ongoing assessment and instructional improvement. These measures include grades on homework, quizzes, chapter tests, or projects. Such measures for students with IDD are essential to documenting and evaluating the efficacy of supports (see Chapter 7). In order to have this rich information at hand, teams must ensure that opportunities for students to complete relevant graded products are provided. Tracking these opportunities and monitoring for the number of products available for review will help IEP teams take advantage of this form of ongoing, authentic assessment. Tracking these opportunities and monitoring for the number of products relative to classmates may also be a helpful indicator of progress.

When using curriculum-based measures and other similar or standardized measures, it can be helpful to poll the IEP team for the collective impression regarding student achievement relative to grade-level expectations or general achievement standards. We have found wide discrepancies in team member perceptions of student proficiencies in academic content areas using an approach adapted from Ketterlin-Geller, Alonzo, Braun-Monegan, and Tindal (2007). Team members were asked to rate the student's performance relative to grade-level expectations on a scale from 1 (very low proficiency) to 5 (very high proficiency). The discrepancies provided an opportunity for the team to dialogue about what they consider evidence of learning and then to provide their individual rationales for why they perceive a student's present level of performance (proficiency) to be different from that of their teammates' perceptions.

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### CONCLUSION

This chapter described and provided a rationale for why membership, participation, and learning, anchored in the first best practice of presuming competence, are important best practices of the BA Model. In addition to the priorities chosen to enhance students' learning of general education curriculum content, teams must maintain a vigilant focus on membership and participation. Chapter 5 discusses the fifth core BA Best Practice—collaborative teaming.

### REFERENCES

- Brophy, J.E., & Good, T.L. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 328–375). New York: Macmillan.
- Browder, D.M., Spooner, F., Ahlgrim-Delzell, L., Wakeman, S.Y., & Harris, A. (2008). A meta-analysis on teaching mathematics to students with significant cognitive disabilities. *Exceptional Children*, 74, 407–432.
- Browder, D.M., Wakeman, S.Y., Spooner, F., Ahlgrim-Delzell, L., & Algozzine, B. (2006). Research on reading for individuals with significant cognitive disabilities. *Exceptional Children*, 27(4), 392–408.
- Courtade, G., Spooner, F., & Browder, D.M. (2007). A review of studies with students with significant cognitive disabilities that link to science standards. *Research and Practice in Severe Disabilities*, 32, 43–49.
- Dugan, E., Kamps, D., Leonard, B., Watkins, N., Rheinberger, A., & Stackhaus, J. (1995). Effects of cooperative learning groups during social studies for students with autism and fourth-grade peers. *Journal of Applied Behavior Analysis*, 28, 175–188.
- Erickson, K., & Koppenhaver, D. (1995). Developing a literacy program for children with severe disabilities. *Reading Teacher*, 48(8), 676–684.
- Erickson, K., Koppenhaver, D., Yoder, D., & Nance, J. (1997). Integrated communication and literacy instruction for a child with multiple disabilities. *Focus on Autism and Other Developmental Disabilities*, *12*(3), 142–150.
- Goodman, G., & Williams, C. (2007, July/August). Interventions for increasing the academic engagement of students with autism spectrum disorders in inclusive classrooms. *Teaching Exceptional Children*, 53–61.
- Greenwood, C.R. (1991). Longitudinal analysis of time engagement, and achievement in at-risk versus no-risk students. *Exceptional Children*, *57*, 521–534.
- Habib, D. (Producer). (2007). Including Samuel [DVD]. Concord, NH: Author.
- Helmstetter, E., Curry, C.A., Brennan, M., & Sampson-Saul, M. (1998). Comparison of general and special education classrooms of students with severe disabilities. *Education and Training in Mental Retardation and Developmental Disabilities*, 33(3), 216–227.
- Hemmingsson, H., & Jonsson, H. (2005). An occupational perspective on the concept of participation in the International Classification of Functioning, Disability and Health: Some critical remarks. *American Journal of Occupational Therapy*, *59*, 569–576.
- Hunt, P., Farron-Davis, F., Beckstead, S., Curtis, D., & Goetz, L. (1994). Evaluating the effects of placement of students with severe disabilities in general education versus special classes. *Journal of The Association for Persons with Severe Handicaps*, 19(3), 200–214.
- Kennedy, C.H., Cushing, L.S., & Itkonen, T. (1997). General education participation improves the social contacts and friendship networks of students with severe disabilities. *Journal of Behavioral Education*, 7, 167–189.
- Ketterlin-Geller, L.R., Alonzo, J., Braun-Monegan, J., & Tindal, G. (2007). Recommendations for accommodations: Implications of (in) consistency. *Remedial and Special Education* 28(4), 194–206.

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- Kluth, P., Villa, R., & Thousand, J. (December 2001/January 2002). "Our school doesn't offer inclusion" and other legal blunders. *Educational Leadership*, 59(4), 24–27.
- Kunc, N. (1992). The need to belong: Rediscovering Maslow's hierarchy of needs. In R. Villa, J. Thousand, W. Stainback, & S. Stainback (Eds.), *Restructuring for caring and effective education: An administrative guide to creating heterogeneous schools* (pp. 25–40). Baltimore: Paul H. Brookes Publishing Co.
- Maslow, A. (1970). Motivation and personality. New York: Harper & Row.
- McDonnell, J., Mathot-Buckner, C., Thorson, N., & Fister, S. (2001). Supporting the inclusion of students with moderate and severe disabilities in junior high school general education classes: The effects of classwide peer tutoring, multi-element curriculum, and accommodations. *Education and Treatment of Children*, 24, 141–160.
- McSheehan, M., Sonnenmeier, R.M., & Jorgensen, C.M. (2009). Membership, participation, and learning in the general education classroom for students with autism spectrum disorders who use AAC. In D.R. Beukelman & J. Reichle (Series Eds.) & P. Mirenda & T. Iacono (Vol. Eds.), *Augmentative and alternative communication series: Autism spectrum disorders and AAC* (pp. 413–442). Baltimore: Paul H. Brookes Publishing Co.
- McSheehan, M., Sonnenmeier, R.M., Jorgensen, C.M., & Turner, K. (2006). Beyond communication access: Promoting learning of the general education curriculum by students with significant disabilities. *Topics in Language Disorders*, 26(3), 266–290.
- Mirenda, P. (2003). "He's not really a reader...": Perspectives on supporting literacy development in individuals with autism. *Topics in Language Disorders*, 23(4), 271–282.
- National Joint Committee on the Communication Needs of Persons with Severe Disabilities (2002). Access to communication services and supports: Concerns regarding the application of restrictive "eligibility" policies (Technical report). *Communication Disorders Quarterly*, 23, 145–153.
- Schnorr, R. (1990). "Peter? He comes and goes...": First graders' perspectives on a parttime mainstream student. *Journal of The Association for Persons with Severe Handicaps*, 15(4), 231–240.
- Shukla, S., Kennedy, C.H., & Cushing, L.S. (1999). Intermediate school students with severe disabilities: Supporting their social participation in general education classrooms. *Journal of Positive Behavior Interventions*, *1*, 130–140.
- Strully, J. (2006, October). *Friendship and our children*. Symposium conducted at the New Hampshire Family and Consumer Leadership Series, Hampton Beach.
- Strully, J., & Strully, C. (1985). Friendship and our children. *Journal of The Association for Persons with Severe Handicaps*, 10(4), 224–237.
- Tashie, C., Shapiro-Barnard, S., & Rossetti, Z. (2006). Seeing the charade: What we need to do and undo to make friendships happen. Nottingham, United Kingdom: Inclusive Solutions.
- Wagner, M., Marder, C., Blackorby, J., Cameto, R., Newman, L., Levine, P., et al. (2003). *The achievements of youth with disabilities during secondary school. A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International. Available at http://www.nlts2.org/reports/2003\_11/nlts2\_report\_2003\_11\_complete.pdf
- Werts, M.G., Caldwell, N.K., & Wolery, M. (1996). Peer modeling of response chains: Observational learning by students with disabilities. *Journal of Applied Behavior Analysis*, 29, 53–66.
- Williams, L.J., & Downing, J.E. (1998). Membership and belonging in inclusive class-rooms: What do middle school students have to say? *Journal of The Association for Persons with Severe Handicaps*, 23(2), 98–110.
- World Health Organization. (2001). *The international classification of functioning, disability, and health*. Geneva, Switzerland: Author.

