Boardmaker® Instructional Solutions

Core First® Learning

Executive Summary:

Core First Learning is a Boardmaker Instructional Solution that is specifically developed to foster increased language capacity and literacy growth in students with language impairments. This program is intended to leverage the transactional nature of literacy and language development for all students, to provide teachers and clinicians with a methodology for implementing evidence-based instruction, and to address the communication needs of some students. The instructional premise of this program incorporates research in literacy instruction, language development, AAC research, and instructional technologies. Core First Learning aligns to the College and Career Readiness Standards. These standards mandate that ELA instruction reading integrates with writing, that vocabulary integrates with communication, and that all students have opportunities to explore the deeper meanings in texts.

Problem Statement:

The purpose of education in the United States is to prepare students to be responsible participants in our diverse society, to teach students to participate productively in learning communities, and to prepare students for life beyond school (Cole, 1990; Eisner, 2003; Johnston, 2004; Vygotsky, 1978). Effective, generative communication is a critical component upon which engaged citizenship occurs. Children diagnosed with language disorders are at the highest risk for academic failure and mental-health problems (Beitchman, 2001). While there is wide consensus that communication is critical to health and function, there has been little agreement about the most effective instructional approach for supporting this cohort of students. A common approach in creating AAC supports is to present students with a bank of words, including nouns and descriptors for specific purposes and contexts. While powerful within the contexts for which they are intended (requesting and labeling, for example), these words can pose limits to the communicative potential of students with language impairments. While many core words are not phonetic, many are. The latter group of words has the potential to contribute to a foundation in literacy development in the way that "fringe vocabulary" may not. Many of these words do not lend themselves to introducing and reinforcing phonological awareness (Beukelman, Jones, & Rowan, 1989). Likewise, students with moderate to severe disabilities, including those with language impairments, are often exposed to literacy instruction where the emphasis is on memorizing sight words and learning decontextualized skills in isolated contexts (Erickson, Hanser, Hatch, & Sanders, 2009; Katims, 2000). This kind of instruction fails to provide access to the broader range of skills and understanding that are required to develop conventional reading and writing skills (Erickson et al.,2009; Keefe & Copeland, 2011). Another important theme established by the College and Career Readiness Standards is the engagement of all students in reading, writing, and communication that is grounded in evidence from texts. This further highlights the requirement that all students develop as literate and communicative individuals (Common Core Standards, 2009). Ability grouping (or leveled instruction) which has historically been the norm in special education, has the potential to be more harmful than it is beneficial (Wheelock, 1994). With this method, the criteria teachers and clinicians tend to group learners according to subjective perceptions of an individual's ability. Students in special education are challenged in demonstrating their thinking and in managing the tools that allow them to do so. Recent evidence suggests that ability grouping informs how teachers and clinicians perceive student potential. As a result, this practice limits instructional choices and consequently diminishes academic outcomes. Achievement levels should not dictate potential for achievement.

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Clinical Best Practice:

Communication is a basic human right and every individual deserves instruction that facilitates it. While we've known it to be true that 85% of the words we use every day are derived from a relatively small bank of approximately 300 words (Thorndike, 1921), only recently have we identified the flexibility and universality of these words (Cross, Baker, Klotz & Badman, 1997). The nature of the words included in core vocabulary is such that they are flexible across contexts and powerful when used in combination with each other. Instructional strategies that place words in relatively fixed and consistent locations are considered best practice since they don't require learning and relearning the locations of words in their system as their expressive vocabulary expands. This kind of repetition and expansion is critical to success (Geist, Erickson, & Hatch, 2015). It allows individuals to respond and communicate in generative ways without navigation. In addition to frequency and flexibility, core vocabulary serves another key function, which is to bridge communication and literacy. Since the alphabet is the only symbol set that allows people to express themselves in infinite ways, literacy instruction embedded in language learning allows students to hone skills in both domains simultaneously. Core vocabulary provides a naturalized instructional context in which to study the forms and functions of these words as they inform both communication and print. Since core words are typically abstract in nature, they can be difficult to portray symbolically. This fact suggests that symbol usage is most supportive when used in a communicative context (Pufpaff, Blischak, & Lloyd, 2000), especially when combined with the understanding that attention to words (and the letters that comprise them) is a critically important behavior in the development of conventional literacy skills (Adams, 1990). This research indicates that it makes sense to deploy symbols within the context of low and high-tech communication rather than in literacy instructional contexts.

Why it Works:

Core First Learning is designed to help students develop as readers, writers, and communicators. The premise of this program includes the following evidence-based practices: 1.) that students engage in both literacy and language domains independently and with a knowledgeable other, 2.) that instruction should be cumulative, repeated, varied, and recursive, and 3.) that literacy and language learning are conceptually reinforcing to each other (Erickson & Koppenhaver 1997). Core First Learning can be deployed to support the most significantly impaired students in the least restrictive setting, including general education classrooms, self-contained settings, and individual and group educational interventions. The following evidence-based practices were included in the instructional design of this program:

- **Predictable Instruction**: This approach allows teachers to quickly understand and implement these lessons while providing real-time training in evidence-based practices. Predictable routines are also effective for students by helping them to attend to academic content rather than the tools they use to access or demonstrate their learning (Troia & Graham, 2002). It is also beneficial from an instructor's perspective in that they know what to expect. This approach saves time both in researching instruction and
  delivering it.
- **Shared Reading:** This practice comprises a significant portion of the weekly instructional routine. Shared reading exposes students to good models for reading, opportunities for concept and language expansion (that would not be possible if instruction relied only on selections that students could read independently), as well as knowledge of print, the patterns in language, and word-recognition skills (Ferreiro & Teberosky, 1982).
- **Bridging Home and School Learning Environments:** This program emphasizes the benefits of merging learning across home and school through Lesson Guides, supplemental activities, student accounts, and communication routines between the adults who support students (Kellaghan, Sloane, Alvarez, B., & Bloom, 1993).
- **Language as a Social Construct:** Core First Learning recognizes the social nature of language and the fact that parents, teachers, and clinicians provide critical models and resources for those who are language impaired (Genishi, 1998).

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- **Supported Communication:** Core First Learning (as delivered through Boardmaker Online) provides communication supports as a component of lessons. This feature is critical in improving communication skills as well as increasing opportunities for demonstrating literacy capability (Erickson & Koppenhaver, 1997).
- **Common Instructional Approach:** Core First Learning provides one curricular path for all students as a mechanism for inclusion, yet it also provides differentiated supports for activities (like writing) which research indicates are particularly burdensome for students with multiple disabilities (MacArthur, 2000). This approach allows teachers to deliver powerful curricula within our standards-minded culture, while also ensuring academic access and success for the fullest spectrum of students.
- **Building Community:** Core First Learning focuses on building a classroom community to emphasize the social and cooperative nature of learning. The program design acknowledges that learning is a social process; students learn from others (Bandura &Walters, 1963; Bodrova & Leong, 2007; Jackson, Ryndak, & Wehmeyer, 2009; Putnam & Borko, 2000; Vygotsky, 1978).

Conclusion:

Expedition Education's integrated instructional approach sets the stage for all students to understand, participate in, and impact their world. Through this program, students access knowledge about the past as a conduit for understanding the conditions in which they live. Beyond this, the program integrates these skills and understandings into a framework that is easy to execute, engaging, and grounded in evidence.

Bibliography:

Banajee, M., Dicarlo, C., & Stricklin, S. (2003). Core vocabulary determination for toddlers. Augmentative and Alternative Communication, 67-73.

Beitchman JH, Wilson B, Johnson CJ, Atkinson L, Young A, Adlaf E, Escobar M, Douglas L. Fourteen year follow-up of speech/language-impaired and control children: psychiatric outcome. Journal of the American Academy of Child and Adolescent Psychiatry 2001;40(1):75- 82.

Beukelman, D., Jones, R. & Rowan, M. (1989). Frequency of word usage by nondisabled peers in integrated preschool classrooms. Augmentative and Alternative Communication, 5, 243 – 248.

DLM Professional Development Team. (2013). The dynamic learning maps core vocabulary. Retrieved from http://www.med.unc. edu/ahs/clds/files/vocabulary-overview.

DuBay, W.H. (2004). The Principles of Readability. Retrieved from http://www.nald.ca/library/research/readab/readab.pdf.

Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. What research has to say about reading instruction, 3, 205-242.

Genishi, C. (1998). Young Children's Oral Language Development. ERIC Digest. ERIC Clearinghouse on Elementary and Early Childhood Education.

Hatch, P., Erickson, K., Dennis, A., & Cummings, M. (2012). A core issue: A core vocabulary for the Common Core. Retrieved from http://www.med.unc.edu/ahs/clds/files/conference-hand-outs/ASHA2012CoreVocabularyPost.pdf.

Kellaghan, T., Sloane, K., Alvarez, B., & Bloom, B. S. (1993). The home environment and school learning: Promoting parental involvement in the education of children. Jossey-Bass.

Lahey, M. & Bloom, L. (1977). Planning a first lexicon: Which words to teach first. Journal of Speech and Hearing Disorders, 42, 340 – 349.

McDonald, E.T. & Schultz, A.R. (1973). Communication boards for cerebral-palsied children. Journal of Speech and Hearing Disorders, 38, 73-88.

Pufpaff, L.A., Blischak, D. M., & Lloyd, L.L. (2000). Effects of modified orthography on the identification of printed words. American Journal on Mental Retardation, 105(1), 14-24.

National Governors Association. (2010). Common core state standards.

Thorndike, E.L. (1921). The teacher's word book. New York City: Teachers College, Columbia University. Retrieved from http://archive.org/stream/teacherswordbook00thoruoft#page/n5/mode/2up.

Wheelock, A. (1994). Alternatives to tracking and ability grouping. R&L Education.

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