Using Standards-based Instruction to Teach Language to Children who Use AAC

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Abstract

Federal legislation has increasingly mandated that students with disabilities have access to the general education curriculum. The general education curriculum should be the primary content and context of the education and therapeutic intervention for students who use AAC. Special educators, including speech and language pathologists, need to encapsulate the essence of Common Core Content Standards and the general education curriculum to address the content and language needs of AAC users (Soto, 2009). The interconnection of curriculum content and language demands for the AAC user can be accomplished using readily available research based tools and strategies (Soto, 2009). A five step process was created to help SLPs incorporate the general education curriculum into intervention to address language goals of AAC users: 1) assessment; 2) identifying grade level content standards from Common Core or state standards; 3) identifying the "essence" of the standard as it relates to language; 4) generating IEP goals; and 5) teaching language skills across curricular activities. Examples of this process will address a general education standard and the language and curricular content goals for beginning communicators, context-dependent communicators and for students

communicating independently. Collaboration between the SLP and educators by means of these steps supports student success across all curricular areas.

Enabling students with disabilities to have access to the general education curriculum, including the same curricular activities, same instructional materials and same progress monitoring activities as their typical peers has become a core requirement of federal legislation. An important requirement of the *access to the general education curriculum* mandate is that special educators and related service providers align assessment and instructional practices with content standards (Soto, 2009). Aligning assessment and instructional practices to content standards presents challenges to special education professionals in general, and speech language pathologists (SLPs) in particular, who may not be familiar with general education curriculum nor strategies to make curriculum accessible to students with a wide range of ability levels and exceptional needs including those who rely on AAC for participation. The purpose of this article is to offer suggestions and report on strategies successfully used by special education professionals serving students with AAC needs, specifically focusing on Language Arts curriculum, while other authors focus on Math and Science curriculum (Boruta & Bidstrup, 2012).

Unlike traditionally planned instruction, standard-based instruction is developed through a *backwards planning* process that begins with a) identifying the standard and the learning outcomes for the students; b) determining appropriate methods of assessment of progress toward the standard; and c) developing instructional plans with appropriate curriculum adaptations. In the first step, it is essential to identify clearly the desired results for that lesson, unit, and academic year. This requires knowing the standards for the subject area, the student's grade level, and, most importantly, where the student is functioning regarding the skills required to achieve the standard. This helps in the setting of goals that address the gaps in the student's performance as it relates to the content standard. It is also necessary to think about the assessment procedures that will be used to determine whether the student has met the goals. Significant adaptations will be required to ensure that students who use AAC participate in the planned learning experiences to the best of their abilities. Collaboration between general educators, families, special educators and speech language pathologists will be paramount to the successful implementation of this process (Zangari, 2012; Kramlich, 2012).

Role of the Speech-Language Pathologist

The role of the SLP is critical in supporting the child's access to the general curriculum. Most classroom activities require a wide range of communication and language skills, (e.g., participation in conversations, answering questions, requesting clarification) as well as understanding the teacher's explanations, descriptions and instructions, in both spoken and written modalities. The SLP and teacher need to collaborate regarding the language demands of the curriculum; that is, the language and communication skills that are required to participate in the planned instructional activities. Providing standards-based intervention requires the SLP to consider the ongoing classroom activities and target the language skills linked to academic

participation. The general curriculum and regular classroom activities become the context for delivery of intervention (Ehren, 2000; Whitmire, 2000). In standards-based intervention, the intervention targets and the intervention strategies are embedded in general education activities. In order for this to happen, the SLP needs to have a working knowledge of educational standards, as well as an understanding of the scope and sequence of the communication and language skills that are required to meet them, because those will frame the intervention targets (Merrit & Culatta, 1998; Nelson, 1998; Ukrainetz, 2006). Standards-based intervention engages the students in meaningful, relevant, results-oriented activities leading to language development and academic participation.

The increasing pressure within special education to use grade-level achievement standards as intervention objectives may push some SLPs to engage in task assistance rather than therapeutic intervention (Ukrainetz, 2006). While task assistance allows a student to participate in specific classroom activities, it is important that SLPs target underlying skills required for a student to become a more independent learner. Ukrainetz (2006) urges SLPs not to lose their therapeutic focus, but rather to target those language skills that can be remediated fairly quickly, will have a significant effect in the student's participation in classroom activities, can be used across different activities, and will prevent additional long term problems.

Developing Standards-based Intervention Goals

As per May 2012, all but five States in the Union have adopted the Common Core Standards (2010). The Common Core Standards is a set of Math and English Language Arts standards developed by the Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center) that seek to make curriculum expectations more uniform across the country. A common core of educational standards implies that *all* students, regardless of disability, are educated with an agreed upon scope and sequence of content and skills. Of specific relevance to this article are the English Language Arts (ELA) standards. The Common Core ELA standards present a sequence of content and skills in the following areas: reading, writing, listening and speaking, language and media, and technology. Each standard begins broadly and is broken into more specific parts or benchmarks. Standards build upon themselves with each grade level.

Developing standards-based intervention goals with the current emphasis on achievement in academic subjects requires the SLP and the educational team to engage in a process by which they compare the demands of the general education activities with the abilities and the needs of the student (Soto, 2009). The steps proposed are slightly modified from the process developed by Hunt, McDonnell and Crockett (2012) and include the following:
1. identifying the AAC goal areas for individual students through person-centered assessment and planning;
2. identifying grade-level content standards from the Common Core or state standards;
3. identifying the "essence" of each standard as it relates to language development and each of the four areas of communicative competence in AAC (Light, 1989),
4. generating the IEP goals and objectives to address performance outcomes; and

5. teaching those skills within and across curricular activities that are meaningful to the student and relevant to his abilities and needs.

Step 1: Conduct an Assessment. Interdisciplinary assessment is critical to knowing where to begin in addressing the language and academic needs of students who are learning to use AAC. Because students who use AAC generally enter school with a substantially smaller lexicon than their typically developing peers, underdeveloped grammatical structures, and a communication repertoire that depends on the skills of the communication partners to be effectively used, it is imperative to know what they understand and are able to express. A variety of assessment approaches are needed to provide an accurate description of the student's receptive and expressive language skills, including observation, language sampling, parents' reports, and direct assessment using standardized or modified language assessment tools. By using a combination of a developmental framework (e.g., Brown Stages of Language Development) and the four areas of AAC competence as guidance, it is possible to identify and target key communication and language milestones across the different domains of language and the different areas of communicative competence.

Step 2: Identify grade-level content standards from the Common Core or state standards. SLPs must consider the grade-level content standards in the major domain areas for academic subjects (e.g., ELA, Math and Science). Their task is to identify the communication and language skills that are a priority because they are key to accessing the content in each of the domains (Hunt et al., 2012) and supporting the student's ability to develop communicative competence.

Step 3: Identify the "essence" of each standard as it relates to language development and each of the four areas of communicative competence in AAC: social, operational, linguistic, and strategic competences (Light, 1989). Through a collaborative process, the SLP must identify performance outcomes linked to those priority skills. On-going assessment and review is essential to document student progress and adjust intervention (Kovach, 2009).

Step 4: Generate the IEP goals and objectives to address performance outcomes. For example, a second grade Common Core Standard for ELA is to "use precise language and domain-specific vocabulary to inform about or explain the topic." This standard is dense and substantial. There are many specific performance skills that can be addressed within this standard. One goal that can be derived from this standard is: "The student will provide definitions of grade level, academic vocabulary words using frequently spoken (i.e., core) vocabulary words readily available on his/her Speech Generating Device (SGD), in 4 out 5 trials over 5 trial days, as measured by an adapted grade level test." It is important to remember the student's language level as the goal is being addressed. For example, if the student is moving from Brown Stage II (i.e., two-word utterances) to Stage III (i.e., beginning sentence construction), the expectations for the student would not be to develop grammatically correct sentences, but rather to utilize core words that demonstrate understanding of the targeted academic vocabulary word. So if the academic vocabulary word is *hatch*, it can be simplified into core vocabulary corresponding to student's syntactic and morphological language level such as *from egg* if working on Stage II,

come from egg if on Stage III and *break out from egg* if on Stage IV. This strategy has been referred to as Descriptive Talking (Van Tatenhove, 2009).

Instead of focusing on the programming and teaching of fringe academic vocabulary (e.g., *hatch*) found in general education activities, teaching core vocabulary to describe those terms increases the child's opportunities for practice and promotes consistent use of frequent words across activities and contexts (Baker, 2007). Teaching core vocabulary and strategies to paraphrase a target word that may not be readily available on the student's communication device helps develop metalinguistic skills, which are critical to becoming an effective independent communicator.

Step 5: Teach identified skills within and across curricular activities. After an appropriate IEP goal has been established, SLPs need to contextualize the goal within the general education curriculum and relevant materials need to be organized. Through the collaborative efforts of the educational team, develop curricular adaptations and instructional materials and implement them through consistent and systematic instruction. When all parties involved use the same materials and consistently follow intervention procedures, students are able to concentrate on the content and repeatedly practice the expected language skills. Developing a consistent approach to intervention creates multiple opportunities to address content in a time effective manner, which provides a scaffold for the student and reduces the demands of learning a new task each session. Collaboration between special and general education teachers and SLPs is key in determining the approach used during intervention to address the goals (Zangari, 2012). The developed framework can be used in multiple settings, (i.e., intervention sessions, AAC resource rooms, and general education classrooms), and curriculum contexts. Thus the SLP service delivery model can be flexible as needed.

Family involvement (Kramlich, 2012) throughout this process is key to helping students generalize their skills. Incorporating intervention goals and strategies into homework is just one way to help families increase their child's communication opportunities.

In order to contextualize the developed language goal, SLPs need to understand and determine the focus of the curriculum unit as a whole. This is an ongoing fluid process that changes throughout the school year. The SLP needs to be aware of the teacher's or district's pacing guide of the curriculum to maintain the timeliness of content. Individual lessons do not necessarily need to be adapted, but key points and concepts from curriculum units or weekly unit chapters do need to be addressed. SLPs can glean the main concepts and academic vocabulary, as well as individual lesson information, from teachers' manuals. Collaboration with the general education teacher and school principals can help SLPs obtain a copy of the teacher's manual. Maintaining focus on the goal while determining content for intervention is imperative. Teacher manuals can be exhaustive in depth and breadth of information.

Supplemental materials, such as English Language Development Workbooks or Interactive texts, often contain summaries and simplified vocabulary definitions that can be helpful when sharpening focus on main concepts and language skills. Other helpful resources could be

children's first dictionaries, glossaries, and teacher manuals in student textbooks. Over time and through consistent practice, formulating simplified definitions using core vocabulary becomes second nature.

Once curriculum is obtained and language goals are developed, planning for implementation begins. Kent-Walsh and Binger (2009) developed the AAC Intervention Planning Form to organize curriculum adaptations for students with various communication profiles (p. 150). The AAC Intervention Planning Form addresses targeted skills, curriculum context, targeted activity, assistive technologies needed, vocabulary selection and organization, intervention techniques, and potential tools for tracking student progress. Additionally, specific vocabulary can be identified for the student to use to participate in the classroom.

Collaboration between the teacher and SLP using their individual expertise can aide in planning for both intervention and push-in activities. With continual use both will find it an easy tool for planning lessons, developing intervention plans, and maintaining the timeliness of curriculum content units.

As SLPs develop intervention plans, it is important to remember that students who are learning to use AAC arrive to school not only with smaller lexicons, but also with less world knowledge and experiences, which limits their overall background knowledge on which academic learning is based. Therefore it is also important to use strategies to increase their background knowledge. Some examples of curricular supports that can be used towards this end include photographs and/or video that provide background knowledge supporting the content area, artifacts, and storybooks. General education teachers are an excellent source of these types of curricular supports.

One approach which has been found to be effective and easily understandable by parents, general education teachers, support staff, and students includes the use of a basic table that includes three columns and one row per academic vocabulary word. The first column identifies an academic vocabulary word. The second column is a clear photo or symbol representation of that word. The third column is the simplified definition corresponding to the student's language level and available core vocabulary on his or her SGD. This simplified definition serves as a visual support of how the student would say the definition using his or her SGD.

AAC intervention in the schools in generally provided by SLPs by pre-teaching the language skills during therapeutic intervention sessions, and/or push-in services in the classroom setting. When working with the student during therapy time, vocabulary should not be taught in isolation. Tying vocabulary words to the greater context of the classroom and lesson is imperative. Push-in services offer students supported opportunities to participate in classroom activities while developing their language skills.

When planning for intervention, it is important to remember that students need to go through the instructional process, from systematic instruction, through guided practice to independent practice before being assessed. Students who use AAC may need a longer instructional time

due to physical challenges and underdeveloped background knowledge. Regardless of the service delivery model used, the amount of teaching time should be greater than the amount of assessment.

Conclusion

Aligning intervention goals and practices to content standards is possible only through a collaborative process between educators and speech language pathologists. This article presented strategies and processes that have proven helpful to the main authors who are classroom teachers serving students with AAC needs. Given the "access to the general curriculum" mandate, it is imperative that research efforts are conducted toward evaluating the efficacy of different approaches and strategies used to support the academic achievement and language development of students who use AAC, including those described in this article.

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