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SAC Position Paper on

Speech-Language Pathology Service Delivery Models In Schools

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A position paper represents the direction SAC has taken on a particular topic or provides guidelines for particular areas of practice. These positions are time-bound, representing the thinking at a particular point in time.

Position

It is the position of Speech-Language & Audiology Canada (SAC) that speech-language pathologists (S-LPs) have an essential role in determining service delivery models for students with speech, language, communication and literacy challenges. In collaboration with partners in the school community, S-LPs use evidence-based practice to design and deliver a range of service delivery models that facilitate student participation, inclusion, social interaction and the achievement of educational goals.

Background

Speech-language pathology services in schools promote academic, social, vocational and emotional outcomes by facilitating student access, participation and inclusion in the curriculum and the broader school environment (Archibald, 2017; Ebbels, McCartney, Slonims, Dockrell, & Norbury, 2018; Meaux & Norris, 2018; Powell, 2018; Walker, 2018). Speech-language pathology service delivery models specify how resources are configured to address the needs of students with speech, language, communication and literacy challenges. They determine the specific activities or services offered, who delivers the services, where services are provided and how frequently services occur (Cirrin et al., 2010). Service delivery determinations also include how students are identified and referred, as well as which – and how many – students receive assessment and intervention services. Canadian schools employ a wide range of speech-language pathology service delivery models (Suleman et al., 2014) and S-LPs have varying degrees of influence over service delivery decisions.

Speech-language pathology assessments used in schools include norm- and criterion-referenced tests, classroom observations and interviews with parents and school educators. These assessments may be undertaken in collaboration with other educational professionals. Assessment results are used to develop recommendations for intervention, identify the need for referrals to other service providers and inform team decision-making regarding school placement and curriculum adaptations. In addition, S-LPs use dynamic assessment procedures to informally assess specific skills, monitor progress and evaluate intervention effectiveness (Cirrin et al., 2010).

School-based speech-language pathology interventions promote student success directly by improving students' skills and abilities, or indirectly through environmental and curricular adaptations or professional development of other educators. Interventions can be delivered outside and inside the classroom. Pull-out services consist of individual, small group, or large group instruction outside of the classroom. S-LPs may also consult with and coach educational staff and caregivers, who then implement suggestions and strategies. Classroom-based service delivery approaches include whole class instruction, small group work or guided learning (Suleman et al., 2014). **Communication health assistants** are employed in many school districts across Canada and are specifically trained to extend the impact of speech-language pathology services under the supervision of S-LPs.

Speech-language pathology service delivery is enhanced through collaboration among the speech-language pathology team, students, families, teachers, educational assistants, specialty service providers, school administrators and others who make up the school community. Successful collaborative partnerships achieve mutual goals through careful planning, and shared resources and responsibilities (Blaxby, Kyte, Leggett, McWhirter & Minor-Corriveau, 2014). Increasingly, S-LPs work with other educators to help children with speech, language, communication and literacy challenges access the curriculum (for a review of evidence concerning S-LP-educator collaboration see Archibald, 2017). S-LPs are well-positioned to work collaboratively because they are knowledgeable about and can relate their expertise to a variety of educational frameworks (Campbell, Selkirk, & Gaines, 2016); however, time and other resources are needed to implement collaborative services effectively (Archibald, 2017).

S-LPs increasingly work in schools that follow a Response to Intervention (RTI) framework. RTI (also known as response to instruction, or multi-tiered systems of support) is a three-tiered approach to educating students that aims to improve overall student performance and identify students who require additional

classroom support (Troia, 2005; Justice, 2006). Tier 1 involves high-quality, evidence-based instruction provided in the general classroom. Tier 2 incorporates targeted intervention for students who require additional support beyond general classroom instruction. Tier 3 consists of intensive, individualized intervention provided by highly trained service providers to students in need of specialized support (Heinemann, Bolanos & Griffin, 2017; Ebbels, McCartney, Slonims, Dockrell & Norbury, 2018;). S-LPs are often challenged with balancing contributions in Tiers 1 and 2 with their responsibility to students in Tier 3 (Ukrainetz, 2006; Ehren & Staskowski, 2011; Ebbels et al., 2018; Swaminathan & Farquharson, 2018). Furthermore, the RTI framework does not identify referral processes, students who may require speech-language pathology services or appropriate speech-language pathology service delivery methods. Although several countries have developed speech-language pathology guidelines for working within an RTI framework (e.g., American Speech-Language-Hearing Association Roles and Responsibilities of Speech-Language Pathologists in Schools Working Group, 2012; Heinemann et al., 2017; Speech Pathology Australia, 2017; Ebbels et al., 2018), guidelines have yet to be established in all Canadian provinces and territories.

Another common educational framework adopted in Canada is Universal Design for Learning (UDL). UDL involves proactively designing inclusive learning environments and providing strategies that enhance student engagement and the ability to express learning. Individualization of curricular content or process occurs when educators differentiate their instruction in response to the learning needs of particular students (Campbell et al., 2016). S-LPs provide a distinctive contribution to UDL by collaborating with teachers to adapt instruction for students with communication disorders, which can indirectly benefit typical learners as well (Campbell et al., 2016; Kennedy et. al., 2018). UDL can also support S-LPs as they strive to provide effective classroom-based services and contextualized treatments in collaborative environments (Nelson, 1989; Hadley, Simmerman, Long & Luna, 2000; Whitmire, 2002; Staskowski & Rivera, 2005; Powell, 2018); however, high quality research is needed to build an evidence base for UDL-based speech-language pathology services (Campbell et al., 2016).

S-LPs incorporate the principles of evidence-based practice (EBP) in decision-making to provide effective, high quality speech-language pathology services. In schools, EBP broadly involves interpreting the best available research evidence in combination with professional expertise and student progress data gathered from a variety of sources. Equally important, EBP involves consideration of student and family priorities and preferences, as well as the way services can be offered in the school context (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996; Justice & Fey, 2004; Gillam & Gillam, 2006; Archibald, 2017). However, factors external to these principles can result in the adoption of certain speech-language pathology service delivery models over others. For example, the size of speech-language pathology caseloads has a particularly strong influence on the selection of service delivery models, and can impact the levels collaboration with educational staff and provision of individualized student support (Schooling, 2003; Brandel & Loeb, 2011; Biancone, Farquharson, Justice, Schmitt & Logan, 2014; Swaminathan & Farquharson, 2018).

Systematic reviews support the effectiveness of a variety of speech-language pathology service delivery models in schools, with no single approach shown to be superior over others (Cirrin & Gillam, 2008; Boyle, McCartney, O'Hare, & Forbes, 2009; Cirrin et al., 2010; Archibald, 2017; Lowe, Henry, Muller, & Joffe, 2018). Given the variability inherent across school systems, classrooms, professionals and students, as well as the many ways that services can be implemented, determining a single best service delivery model may never be possible or appropriate (Siegel, 1987; Archibald, 2017).

There is, however, a substantial evidence base to guide S-LPs on the features of effective intervention approaches in schools. For example, research supports the use of collaborative, functional, curriculum-based, and inclusive intervention approaches (Ehren, 2000; Whitmire, 2002; Ukrainetz, 2015; Archibald, 2017). Research has also shown that the setting in which intervention is provided matters. A large body of research has shown that pull-out therapy produces sizeable intervention outcomes when delivered in a controlled, structured and individualized manner, but that generalization beyond the intervention

environment may require additional intentional programming. In contrast, interventions that occur in natural, inclusive communicative contexts, such as classrooms, tend to result in smaller gains but better student use and generalization (for research on the contrastive benefits of language therapy, see Fey, 1986; Ukrainetz, 2015; McCauley, Fey, & Gillam, 2017). There is little research on in-class service delivery for speech, voice and fluency difficulties, likely because the intervention procedures are often not suitable for delivery in open classroom environments (see Boone, McFarlane, von Berg, & Zraick, 2014; Bernthal, Bankson, & Flipsen, 2017; Manning & Dilollo, 2018). Thus, S-LPs must determine how best to help students achieve skill improvement and generalization in their service delivery approach.

Research has also shown that speech-language pathology interventions should be delivered in a manner and intensity sufficient to improve students' learning and achievement. For example, the nature of the skill being acquired and the stage of learning influence whether the student would benefit from intense, concentrated practice or a more distributed intervention schedule (Justice, Logan, Schmitt, & Jiang, 2016; Brosseau-Lapré & Greenwell, 2019). In addition, better outcomes result from interventions delivered by S-LPs and communication health assistants than from classroom staff who may not be able to provide treatment of sufficient quality and intensity due to other instructional demands and lack of training (McCartney, Boyle, Ellis, Bannatyne, & Turnbull, 2011).

Rationale

Speech-language pathology services vary substantially across schools in Canada. Service delivery model decisions are complex and require input from many partners in the school community. This position paper was created to promote the essential role of S-LPs in determining speech-language pathology service delivery models in schools. In doing so, SAC advocates for effective and high-quality speech-language pathology services for students of all ages with speech, language, communication and literacy challenges.

Recommendations

SAC supports the essential role of S-LPs in determining service delivery models in schools, drawing on their specific knowledge of speech-language pathology research and practice, as well as a variety of educational frameworks. S-LPs are encouraged to work collaboratively with partners in the school community to individualize, implement and evaluate the effectiveness of speech-language pathology service delivery models.

SAC recommends that SAC members and associates use the principles of EBP to guide their professional decision-making in schools. Research has shown that a range of speech-language pathology service delivery models can be effective in schools. Thus, S-LPs should draw on the large evidence base regarding effective treatment features for the various disorder areas to make service delivery decisions. This also includes research evidence specific to individual student needs, such as the nature and severity of the speech, language, communication or literacy concerns. Equally important are cultural and linguistic factors, as well as the availability of family and other community supports (Yaruss, Coleman, & Quesal, 2012; Nye et al., 2013; Justice et al., 2016).

SAC acknowledges that many factors related to the organization of speech-language pathology services in schools influence service delivery model decisions (Hoffman, Ireland, Hall-Mills, & Flynn, 2013; Brosseau-Lapré & Greenwell, 2019). These organizational factors include the educational frameworks, policies and values of the province or territory, school district and individual school, as well as each teacher's instruction style, expectations and understanding of the **scope of practice** and **role** of S-LPs in schools (Westby, 1997; Archibald, 2017). Other important considerations include speech-language pathology staffing levels, the availability of resources (such as classroom and curriculum-based materials), administrative support and space, and access to other speech-language pathology service providers in the community. S-LPs also must consider caseload and workload demands, responsibilities assigned by school administrators, time required for travel

between schools and the number of students in need of speech-language pathology services, as well as the complexity of their needs. In instances where organizational factors prevent the S-LP from providing effective services that meet the needs of students, SAC recommends that S-LPs document and inform their supervisor and/or school administration of the impact of these factors on the speech-language pathology services provided.

SAC calls on Canadian governments to support and promote effective, high-quality speech-language pathology services in schools. To ensure the needs of students with speech, language, communication and literacy challenges are met, all levels of government must increase funding for speech-language pathology services to address the impact of high caseload and workload on service delivery model decisions. Provincial and territorial governments, as well as school boards, should support and encourage school communities to develop and maintain successful collaborative partnerships necessary for the design and delivery of effective speech-language pathology services. Additionally, employers should ensure S-LPs have access to research evidence and professional development about service delivery models in schools to facilitate EBP. Finally, increased government funding is required to support research needed to inform the practice of S-LPs working in Canadian schools. Addressing these calls to action will ultimately support the provision of speech-language pathology services that enhance the academic, social, vocational and emotional outcomes of students with speech, language, communication and literacy difficulties.

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