Integrating Language Services and the Alberta Education Curriculum

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Short Header: Integrating Language Services and Curriculum

## ABSTRACT

Both academically and socially, the school context is a very language intensive environment. These language demands are amplified for students with language impairments. "Inclusion" is a growing force driving recent educational theory and policy. If students with language deficits are not properly supported once placed in inclusive classrooms, their academic and social achievement is jeopardized. SLPs can use their expertise to help to scaffold language demands found in the classroom. And when SLPs and teachers collaborate, the result often improves the educational experience of all students, not just those who struggle with language. In an effort to support interprofessional collaboration, an "SLP curriculum" was developed for use by classroom teachers and SLPs. The tool lists specific learner outcomes found in the Science, Social Studies, Mathematics, and English Language Arts Programs of Study for Grades K-3, and identifies the vocabulary, basic concepts, and other language skills embedded in the outcomes. An "other language skills" glossary and basic concept examples are both included in the appendices. Cases studies providing practical examples of the SLP curriculum's utilization are also provided.

# LITERATURE REVIEW

### Introduction

In recent years, the education system in Alberta has experienced sweeping changes. Today's classrooms are very dynamic and language intensive environments (Paul, 2007). Children with language learning difficulties are faced with additional hurdles on the road to academic success. These modern classrooms are also challenging environments for school professionals. With educational theories and policies shifting to support inclusive education, Speech-Language Pathologists (i.e., SLPs) are faced with the task of effectively serving children with communication difficulties in mainstream school settings (Tollerfield, 2003). Teachers are also challenged, as the diversity of student needs in mainstream classrooms has increased (Alberta Education, 2009).

Interprofessional collaboration is a method utilized to help tackle these new challenges and maximize the effectiveness of inclusion (Tollerfield, 2003). While there are many benefits to collaboration, barriers also exist (McCartney, 1999). Professionals must be creative in their problem solving, working to minimize the barriers and bolster the benefits of collaboration. The development of new resources, like the "SLP curriculum" found in Appendices A, B, C, and D, can provide tools for professionals to bridge their knowledge and skills and interact on common ground. Properly utilizing resources designed to promote collaboration will increase the effectiveness with which professionals address student needs, and ultimately, benefit the educational experience of all children in the classroom.

### Language Demands in the Inclusive Classroom

Today's classrooms are replete with language. Students are required daily to read, write, listen, and speak in a variety of academic situations and tasks (Dohan & Schulz, 1999). While focus on these skills was traditionally limited to the English Language Arts curriculum, current Programs of Study acknowledge the important role language plays in students' academic growth. For example, in Alberta Education's (2005) current Social Studies curriculum document, the "Program Rationale and Philosophy" states, "Reading, listening and viewing in social studies enables students to extend their thinking and their knowledge and to increase their understanding of themselves and others" (p. 10).

In addition to academic content knowledge, students must demonstrate knowledge of classroom social communication rules to be successful in school (Paul, 2007). These language rules are often very different from the communication norms children have learned at home (Paul, 2007). For example, dinner table discussions in many western homes involve free discourse amongst family members. A child in that same family will need to learn to raise his or her hand and wait to be called on before speaking during classroom discussions. While the government produces Program of Study documents which outline the outcomes students are expected to achieve, there are also unwritten objectives students are required to master. The term "hidden curriculum" encompasses those discourse and behaviour expectations not verbalized by the classroom teacher or school administration (Paul, 2007). For example, when a teacher assigns the task of writing a story with a partner, students are expected to work

quietly, listen to and consider their partner's ideas, compromise when they disagree with their partner, limit conversation topics to the task at hand, not disturb other partner pairs, inform the teacher when they have completed the task, and so forth. Students are expected to understand and adhere to the hidden curriculum, and fortunately, most do rather quickly. There is simply not enough time in the school day for teachers to list every "do" and "don't" expectation before every activity, which leaves students with language impairment struggling to infer their classroom's unwritten and unspoken rules. So while a student's grammar and vocabulary skills may be typically developing, their academic struggles may be impacted by the social communication rules found in the school context.

Students are required to engage in higher-level language and thinking skills in the classroom. Metalinguistic skills are defined by Paul (2007) as the ability to "focus on and talk about language" (p. 444). Paul (2007) lists several metalinguistic examples, including defining words; recognizing synonyms, antonyms, and homonyms; and recognizing errors when editing. These language skills are deemed "higher-level" as they require student awareness (Paul, 2007). For example, a student with metalinguistic language deficits might be able to easily speak and write in sentences, but struggle to identify the parts of speech in their sentences. Metacognitive skills, or "the ability to reflect on and manage one's thinking processes", are also necessary for academic achievement (Paul, 2007, p. 444). Classroom instructions often involve complex, multistep directions, and students with strong metacognitive skills are better able to efficiently complete assigned tasks and activities. These same students can engage in

better monitoring of their comprehension, recognizing when they do not understand stimuli (Paul, 2007). If a student struggles to monitor their listening and reading comprehension (and correct their errors), they may be thought to demonstrate undesirable classroom behaviours. For example, a teacher might tell students, "Before you hand in your paper, put your textbook away." A child with language impairment may not think twice about first handing in his paper and then putting away his textbook, for that is the order he heard the instructions verbalized. In reality, this dissident behaviour resulted from a deficiency in the student's comprehension awareness. Although children frequently need to exercise important metacognitive and metalinguistic skills, they are often not given explicit instruction on how they can be best engaged.

For success in school, students must demonstrate conceptual development. Bracken (1998) noted that general intelligence and early academic achievement are closely related to basic concept acquisition. Basic concepts are defined as:

...a word, in its most elementary sense, that is a label for one of the basic colors, comparatives, directions, materials, positions, quantities, relationships, sequences, shapes, sizes, social or emotional states and characteristics, textures, and time. (Bracken, 1998, p. 2)

According to Bracken (1998), preschool tests often contain "double jeopardy" situations in which children need to understand particular basic concepts before they can successfully demonstrate the skill that the test item is assessing. For example, a test item that is examining a child's ability to follow directions may ask the child to, "Put the

yellow circle under the green square." These directions require the child to understand colour (i.e., "yellow" and "green"), shape (i.e., "star" and "circle"), and positional (i.e., "under") basic concepts before they can score successfully on the item. Furthermore, Bracken (1998) attests that teachers regularly assume students can comprehend their basic concept laden classroom directions (e.g., "Put the small [size] black [colour] crayons in [positional] the tub before [sequence] you open [direction/position] your glue."). Consequently, without additional support, students with basic concept deficits will struggle to function and achieve academic success in mainstream classrooms. So while conceptual development for many children often occurs implicitly, there may be some concepts requiring explicit teaching (especially for students with language impairment) (Bracken, 1998).

Paul (2007) notes that language in the school context is often decontextualized. As this language increases in abstraction, the level of difficulty also increases. For example, the question, "Can we belong to several groups at one time?" is found in the kindergarten social studies Program of Study. Students with language impairments may be able to understand that they can belong as a member of their classroom and a member of their soccer team, but they may not be able to comprehend (the more abstract concept) that they also belong to a particular ethnic or cultural group. Unfamiliar vocabulary not only exists within the curriculum objectives, but also in the directions students are given by their educators. For example, a teacher may explicitly define "Aboriginal" with a class, then instruct the same students to, "Record your answer...". A student with language impairment may also require the teacher to

explicitly describe what it means to "record". Beck, McKeown, and Kucan (2002) identify three tiers of vocabulary: 1) commonly occurring, basic words (e.g., "baby"), 2) highfrequency words used by sophisticated language users; more precise and specific words for concepts students are already able to describe (e.g., "fortunate", as opposed to "lucky"), and 3) low-frequency, academically-based, content words (e.g., "democracy"). Beck et al. (2002) underline the productivity potential of addressing and encouraging the addition of Tier Two words to students' lexicons, stressing the impact these words can have on students' verbal functioning.

SLPs are highly trained in the area of language development, assessment, and intervention. The deep understanding SLPs have of school-age language means they possess great potential in contributing to a successful inclusive education system (Dohan & Schultz, 1999). As more students with language impairments are placed in mainstream classrooms, the need for SLP services in these classrooms will continue to grow. Through interprofessional collaboration, SLPs and teachers can effectively support the complex language demands found in inclusive classrooms.

### **Collaborative Service Delivery**

When listing characteristics of an inclusive system in the document "Inclusive Education Facts", Alberta Education (2010) includes "working together to support students in schools with the supports they need...delivered collaboratively in the most logical and natural setting..." (p. 1). Flynn (2010) supports the notion that students be served in the least restrictive environment (LRE), where typically developing peers can act as speech and language models. Specific examples of classroom-based SLP services

include: "(a) gathering data on students within the classroom; (b) team teaching with the teacher; (c) suggesting alternative teaching strategies; (d) modifying curriculum materials, including tests; and (e) supplying materials to reinforce speech or language goals within the classroom" (Dohan &Schultz, 1999, p. 6).

Alberta Education (2009) defines collaboration as:

...a mutually beneficial and well-defined relationship entered into by two or more individuals or organizations to achieve common goals. The relationship includes a commitment to: a definition of mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards. (p. 14)

For professional collaboration to be successful, four key elements must be addressed (Paul, 2007). When they are not adequately addressed, collaborative efforts encounter barriers and professional frustration may develop. The first component is eliciting administrative support and ensuring that quality meeting time is available for teachers to meet with SLPs (Paul, 2007). Teachers and SLPs cannot be expected to efficiently and effectively collaborate if they are meeting at distracting and inappropriate times and locations (e.g., recess/lunch supervision). Paul (2007) attests that administrators will be enticed by the idea that at-risk students, in addition to those qualifying for services, will benefit academically from teacher-SLP collaboration. This domino effect is discussed by Flynn (2010). When SLPs strengthen their connection to teachers and the curriculum, teachers are consequently empowered to embed speech

and language skills into their everyday practice, and all students in the classroom benefit from instruction on these curriculum-relevant skills (Flynn, 2010).

The second element involves developing strong working relationships. Paul (2007) suggests SLPs begin their collaborative efforts by approaching one teacher they have had a positive relationship with in the past. By starting from a small-but-successful vantage point, SLPs can trigger the curiosity and motivation of other teachers in the school. To eliminate the "fear of the unknown" barrier, Paul (2007) recommends teachers and administrators attend inservices designed to clarify the changing role of a school-based SLP and outline the practical benefits of SLP and teacher collaboration. These strategies (i.e., start small; provide inservices) aim to eliminate many of the "functional barriers" highlighted by McCartney (1999) (e.g., each profession holding different assumptions regarding the roles of teachers and SLPs; SLPs feeling like "outsiders" when visiting a school).

The third and fourth components identified by Paul (2007) are planning effective lessons and unit/curriculum planning, respectively. These components are addressed in the "Directions for Use" and "Case Studies" sections of this document. These sections outline and provide examples of how SLPs and teachers can best integrate the SLP curriculum with collaborative service delivery. While the purpose of this tool is discussed more thoroughly in the next section of this paper, the SLP curriculum is an example of a resource that aids (and eliminates certain barriers to) interprofessional collaboration.

### PROJECT

### Purpose

Alberta Education (2009) states, "when stakeholders work together in a collaborative and purposeful way, more is accomplished for students" (p. 5). The purpose of this project is to provide a practical tool for classroom teachers and SLPs to collaborate, thus benefiting students. Teachers and SLPs each bring a multitude of skills and knowledge to the classroom environment, and in classroom-based service delivery, each profession has something to offer the other (e.g., SLPs have significant training in language assessment/intervention and teachers have extensive training in pedagogy). The SLP curriculum was designed to provide a tool for these professionals to bridge their knowledge and skills. Similar to the physics concept "synergy" (i.e., the whole is greater than the sum of individual parts), it is believed that SLPs and teachers can accomplish more when they work together, as opposed to dedicating their energy to achieving individual agendas. Acting as common ground between the professions, the SLP curriculum provides teachers and SLPs a document to help structure their collaborative efforts. The tool lists learner outcomes published by the Government of Alberta (which teachers can help SLPs understand), and identifies where "key vocabulary", "basic concepts", and "other language [skills]" are embedded in these outcomes. While the SLP curriculum was initially designed to aid collaborative, classroom-based service delivery, it indirectly provides an opportunity for teachers and SLPs to grow as professionals. This professional growth, reached through collaboration and utilization of the SLP

curriculum, would benefit the educational experience of all students in an inclusive classroom environment.

### Methods

Learner objectives for the Social Studies, English Language Arts, and Mathematics (Kindergarten through Grade 3) and Science (Grade 1 through Grade 3) Alberta Education Programs of Study were transferred into a chart with headings "Key Vocabulary", "Basic Concepts", and "Other Language". To respect the flexibility of how learner objectives are met, the charts were placed in word document format. Teachers will be able to adjust the chart (e.g., adding extra vocabulary items) to match the learning activities they engage their students in. The "Basic Concepts" identified in the SLP curriculum are from the Bracken Basic Concept Scale--Revised (1998). Appendix E lists the basic concepts identified in the SLP curriculum and provides examples of specific words related to these concepts. The "Other Language" areas identified in the SLP curriculum are defined in Appendix F, "Other Language Glossary". These particular language skills/areas were selected from Paul (2007) and after viewing "Language and the Curriculum" pilot project documents produced by Alberta Health Services (2009-2010). These "Curriculum Consultation Guides" paired language areas with curriculum topics for each grade/subject area. Some of the documents also utilized a "Highlights" section where some components were expanded on (e.g., listing specific vocabulary found in that grade/subject area) (Alberta Health Services, 2009-2010). The author also met briefly with practicing teachers and SLPs to elicit suggestions of what a practical and user-friendly SLP curriculum would include and entail. Credit goes to these professionals

for suggesting the inclusion of the "Other Language Glossary" and "Basic Concept Examples".

# **DIRECTIONS FOR USE**

The SLP curriculum is a tool designed to encourage collaboration between teachers and SLPs. The following recommendations outline how each respective profession may best implement the SLP curriculum to effectively and efficiently utilize their time.

### Teachers

The tool should be viewed as an extension of Alberta Education's Programs of Study and not as a replacement. When preparing to engage students in a lesson, it is recommended that teachers refer to the SLP curriculum and examine what underlying vocabulary, basic concepts, and other language areas are embedded in the lesson's learner objective(s). This underlying language serves as a prerequisite for students' success in achieving the learner objective(s). If a student demonstrates a deficit in one or more of these language areas, he or she will likely require additional support or scaffolding to meet the learner objective(s). One strategy a teacher may wish to incorporate is to write the embedded "key vocabulary", "basic concepts", and "other language" under the relevant learner objectives listed on their pre-existing lesson plans (see "Case Studies" for further explanation). If a teacher notices a student is struggling to meet particular learner objectives, the teacher should examine the objectives' embedded language components and evaluate whether additional support may be

required for said student. A teacher should use professional judgment when deciding whether a speech-language pathology referral/consultation is warranted. This recommendation assumes that the teacher is familiar with the role played by and areas of expertise held by school-based SLPs. Administrators and classroom staff (e.g., teachers, educational assistants) should be encouraged to attend inservices designed to increase their knowledge about SLPs and the varying models of service delivery.

The "Vocabulary" column of the SLP curriculum identifies terminology that students are required to master. Teachers could type additional vocabulary items into this column, as they are identified during the planning or teaching of lessons. Teachers may wish to incorporate a classroom "word wall" (i.e., posting applicable vocabulary items on a bulletin board) and/or have students record the items in a personal dictionary or pictionary. In addition to the identified curriculum vocabulary, educators should be cognizant of the higher level vocabulary incorporated in their activity instructions. As mentioned earlier in this paper, students may flounder academically and/or socially if they do not understand key words in their teacher's instructions (e.g., "Record your answer..."). Teachers are encouraged to support their use of abstract language with lower level vocabulary (e.g., "Please record, or write down, your answer."). In this example, "write down" is a less sophisticated way to say "record". The teacher who incorporates multiple words (similar in meaning but varying in abstraction), into his or her instructions, will indirectly help develop a student's vocabulary level.

# Speech-Language Pathologists

While an inclusive learning environment is best paired with classroom-based intervention, Paul (2007) recognizes that certain students may achieve better outcomes through traditional clinical, "pull-out" service delivery (e.g., students who need to be "prepped" for language skills; students with articulation and/or fluency goals). SLPs can utilize the SLP curriculum in pull-out service delivery to help make their therapy more meaningful and relevant to students. After assessing a student and identifying areas of need, an SLP can incorporate goals and activities that correspond with Alberta Education's Programs of Study. For example, a student receiving treatment for a lisp could be provided "s" stimuli words found in the "Key Vocabulary" column of the SLP curriculum. Paul (2007) also discusses the "pull-out/sit-in" approach, which mixes traditional and classroom-based therapy techniques. For example, a student with language goals related to "patterning" skills, could be "prepped" using children's stories the teacher would later read aloud to the class. This student would feel more confident in his or her skills and would be more likely to participate in story time and the task of filling in the teacher's blanks (e.g., while reading "The Very Hungry Caterpillar" by Eric Carle, the teacher prompts, "But...," and the students respond, "...he was still hungry!") It is recommended that when utilizing these more traditional service delivery models, SLPs still consult with and maintain open communication with the student's teacher(s) to determine the current learner objectives being taught and potential activities/stimuli to incorporate into individual therapy. Furthermore, any time it is appropriate, SLPs are encouraged to "cluster" students with similar language goals (Flynn, 2010). This small

group approach to intervention increases both social interaction and peer-modeling opportunities for students. These recommendations all share a common thread in that they aim to make therapy as meaningful as possible, thus increasing the likelihood a student's goals will generalize (i.e., progress will transfer outside of the therapy room) and gains will be maintained.

# Teachers and Speech-Language Pathologists

A classroom teacher and SLP working directly together could utilize the SLP curriculum to co-plan language-rich units, lessons, and activities. The decision of whether these activities are individual, small group, or whole class based is dependent on the teacher's and SLP's professional judgment. It is encouraged that at some point, all classroom professionals (e.g., teacher, SLP, educational assistant) take an "instructor" role to model inclusion and promote professional equity.

The following are 6 co-teaching approaches professionals may choose to implement:

- One teach, one observe, in which one teacher leads large-group instruction while the other gathers academic, behavioral, or social data on specific students or the class group;
- Station teaching, in which instruction is divided into three non-sequential parts and students, likewise divided into three groups, rotate from station to station, being taught by the teachers at two stations and working independently at the third;

- 3. Parallel teaching, in which the two teachers, each with half the class group, present the same material for the primary purpose of fostering instructional differentiation and increasing student participation;
- Alternative teaching, in which one teacher works with most students while the other works with a small group for remediation, enrichment, assessment, pre-teaching, or another purpose;
- Teaming, in which both teachers lead large-group instruction by both lecturing, representing opposing views in a debate, illustrating two ways to solve a problem, and so on; and
- One teach, one assist, in which one teacher leads instruction while the other circulates among the students offering individual assistance. (Friend et al., 2010, p. 12)

As highlighted in the "SLP recommendations", any time partner or group work is incorporated into a lesson, opportunities for peer-modeling and social interaction are created. This strategy serves to assist those students who struggle with the "hidden curriculum" (i.e., nonverbal classroom rules) (Paul, 2007). For example, a teacher can ask students, "Please open your book to page 39," and follow up with, "Now check that your partner is on page 39." Not only has the student with a language impairment heard the instructions twice, this strategy does not require the student to receive additional adult (e.g., teacher or educational assistant) support. This promotes a truly inclusive classroom culture.

Teachers and SLPs may choose to add an additional column to the SLP curriculum, listing the activities and materials they utilized to teach the specific learner outcome. This strategy would allow a collaborating team to easily trigger their memory when lesson planning the following school year.

### **CASE STUDIES**

In an effort to provide concrete examples demonstrating how the SLP curriculum could be implemented practically by SLPs and teachers, two case studies, "Ben" and "Adam", were developed. These case studies examine fictional, but plausible, students and professionals, and outline how the professionals utilized the SLP curriculum to support their collaborative efforts.

### Ben

Ben was prenatally exposed to alcohol. He received a diagnosis of Fetal Alcohol Spectrum Disorder after entering foster care as an infant. Ben was delayed in achieving many of his milestones (e.g., sitting, walking, talking) and throughout his toddler and preschooler years he received early intervention services from a multitude of professionals (e.g., Physical Therapists, Speech-Language Pathologist, etc.). Ben is now in Grade One and has been referred for SLP services by his teacher, Mrs. Brown. Mrs. Brown's main concerns are that Ben struggles to independently complete tasks assigned to the class and his reading skills are not at the same level as his peers. Ben has been

added to the caseload of Mr. Green, a school-based SLP employed by Alberta Health Services. Mr. Green visits Ben's school one day a week.

After reviewing Ben's referral form and interviewing Ben's foster parents and teacher, Mr. Green decided to complete a classroom observation (i.e., informal assessment) and assess Ben's language skills using standardized testing (i.e., formal assessment). The results of the formal assessment indicated that Ben's greatest areas of need include his sequencing, following directions, and phonological awareness skills. Further probing revealed that Ben is unfamiliar with many basic concept words related to time/sequence (e.g., "before/after"). These results were consistent with teacher report and Mr. Green's classroom observations.

The school administration provided coverage while Mrs. Brown and Mr. Green met to discuss and plan SLP support for Ben (and other students receiving SLP services). The professionals began by examining the SLP curriculum to identify specific learner objectives Ben would likely struggle to meet. For example, "Order a group of coloured objects, based on a given colour criterion" and "Say the number sequence 0 to 100 by: 1s forward between any two given numbers, 1s backward from 20 to 0, 2s forward from 0 to 20, 5s and 10s forward from 0 to 100", are Grade One science and mathematics learner objectives that both require sequencing skills. The professionals discussed the learner objectives that SLP involvement would be most beneficial for Ben's (and the other Grade One students') academic success. Mrs. Brown was able to share her long range plans and identify approximately when during the school year these objectives would be covered. A rough calendar was created, outlining which objectives would be

covered during Mr. Green's weekly interactions in the Grade One classroom. The professionals made plans to meet monthly to discuss and plan the details for these objectives. For example, it was decided that Mr. Green would be present for the mathematics objective requiring students to "Demonstrate an understanding of measurement as a process of comparing by: identifying attributes that can be compared, ordering objects, making statements of comparison, and filling, covering or matching." During their monthly meeting, the professionals decided that a "station teaching" approach would be utilized to instruct the objective. During the lesson, Mrs. Brown lead one group of students at a station, Mr. Green lead another group of students at a station specifically designed to address the sequencing skills and language within the objective (e.g., ensuring students understand "first, second, third" etc.), and a third station had an activity for students to complete independently. Students rotated through, completing hands-on and interactive activities at each station.

To address Ben's phonological awareness deficits, Mr. Green and Mrs. Brown planned for Miss Blue, a Speech-Language Pathology Assistant, to spend twice a week in the Grade One classroom, delivering a phonological awareness program to the whole class. While this is a commercially packaged program, Mr. Green used the SLP curriculum to explain that the program's components would help Mrs. Brown's students achieve several of the Grade One English Language Arts (ELA) specific learner outcomes. For example, the curriculum objective, "use knowledge of context, pictures, letters, words, sentences, predictable patterns and rhymes in a variety of oral, print and other media texts to construct and confirm meaning" would be supported by the phonological

awareness program's unit titled "Word Families and Rhyme". It was easy for Mrs. Brown to see how the program related to the ELA curriculum, as the "Other Language" column of the SLP curriculum had already identified where phonological awareness skills were embedded. This made Mrs. Brown feel comfortable having Miss Blue present the program to the class, and also made her feel more accountable if questioned by administrators (i.e., the program was covering curriculum objectives). During these phonological awareness lessons, a "one teach, one assist" approach was utilized, with Miss Blue instructing and Mrs. Green providing extra assistance to Ben and other students requiring additional support.

Mr. Green was able to provide Mrs. Brown with a list of strategies that would enable her on a daily basis to better support Ben's ability to follow directions and independently complete tasks (e.g., provide picture supports with instructions). Mr. Green was also able to help Mrs. Brown identify curriculum objectives that involve "procedure" skills (e.g., "Demonstrate that colour can sometimes be extracted from one material and applied to another."). Mr. Green helped Mrs. Brown dissect procedure/following direction skills and identify how struggling students like Ben can be assisted in strengthening these skills (e.g., start with one step instructions before two or three step instructions).

As she had been advised to do so in her undergraduate training, Mrs. Brown had always wrote the relevant learner outcomes at the top of her lesson plans. She had always found having these objectives visible before, during, and after teaching a lesson was beneficial to the planning, instruction, and assessment of the learner outcomes.

After talking with Mr. Green, Mrs. Brown decided to also include "Key Vocabulary", "Basic Concepts", and "Other Language" (as found in the SLP curriculum) at the top of her lesson plans. This also led Mrs. Brown to adapt many of her previous lesson plans to include a "language priming" portion, where areas of known student difficulty could be addressed. For example, before one particular lesson that involved sequencing, Mrs. Brown briefly collaborated with Mr. Green. Mrs. Brown planned to proactively support the children by using concrete examples to prime them for the terms "first, second, third, etc.". Mr. Green was also able to help Mrs. Brown "break down" the skill of sequencing, giving her ideas on how to sub-step the skills if students like Ben appeared to be struggling. While Mrs. Brown knew this supported Ben's ability to achieve the lesson's learner outcomes, she also noticed many of her other students' sequencing conceptual development was strengthened (compared to previous classes).

Mrs. Brown really enjoyed how the SLP curriculum aided her assessment practices. If her students didn't achieve a learner outcome in one manner, Mrs. Brown had always been open to reteaching the objective in another fashion. Once she began collaborating with Mr. Green and utilizing the SLP curriculum, Mrs. Brown was better able to examine "why" students were not achieving particular objectives, and "where" the breakdown was happening. For example, if a student was not achieving the science objective "identify colours in a variety of natural and manufactured objects", Mrs. Brown could examine the SLP curriculum and surmise that the student may need extra support with "colour" basic concepts or their "classifying" skills. Mrs. Brown, often after consultation with Mr. Green, felt more confident both addressing the prerequisite

language skills embedded in learner outcomes and more efficiently able to scaffold her students' learning (i.e., segmenting the objectives into small, achievable steps). She found herself less frequently frustrated and asking, "Why don't they get it?" When reporting student achievement to families, Mrs. Brown noticed she felt more adept at explaining why a student hadn't achieved certain learner outcomes, and what strategies she had implemented to support the child's deficits.

#### Adam

Adam was a Grade Three student in Mr. Black's class. Adam had a relatively unremarkable academic history, but did receive SLP services as a preschooler for his speech sound errors (e.g., Adam pronounced his "k" sound as "t"). Mr. Black reported concerns that Adam was beginning to fall behind his peers and he was not scoring well on assignments and unit exams.

Through formal testing, Miss Pink, a school-based SLP employed by Alberta Health Services, found that Adam's vocabulary level was below that of his peers. This finding corresponded with the frequent use of filler words (e.g., "stuff" and "thing") Miss Pink identified in Adam's writing samples. While his parents agreed for Adam to receive SLP services, they requested he not be removed from the classroom environment. Miss Pink, Mr. Black, and Adam's parents met after school one day to discuss how Adam's vocabulary level could best be supported in the classroom. By viewing the SLP curriculum, the group was able to examine vocabulary items embedded within the Grade Three learner objectives. For example, in the science objective "Adapt the design of a watercraft so it can be propelled through water", Adam would be required to

understand the meaning of the words, "adapt", "propel", "streamlined", and "resistance". Miss Pink clarified for the adults that these words may vary depending on the activity prepared by Mr. Black. She also defined and discussed how to classify the three tiers of vocabulary words. For example, "resistance" would be classified as a tier three word, as it relates to academic content, but "adapt" would be deemed a tier two word (i.e., a more specific word for "change"). The importance and effectiveness of expanding Adam's tier two lexicon (e.g., tier two words appear in a variety of contexts) was explained by Miss Pink. Plans were put in place to have Miss Pink attend the Grade Three class on a weekly basis, utilizing an "alternative teaching" approach where she would work with a small group of students requiring vocabulary enrichment, while Mr. Black led the large group in another activity. Other whole-class strategies were planned to help Adam's vocabulary (e.g., having a classroom "word wall" where new vocabulary items would be posted; students having personal dictionaries/pictionaries to review words at home).

### CONCLUSION AND FURTHER RECOMMENDATIONS

Alberta Education (2009) states "there is strong support for a single education system in which all learning environments effectively support diverse learners" (p. 4). The literature supports Alberta Education's move to inclusion, as SLPs can help students meet speech and language goals as effectively, if not more effectively, through classroom-based interventions (Flynn, 2010). But when working in the inclusive school setting, today's SLPs and teachers face many challenges. A great deal of these

challenges can be addressed through collaboration and efforts allowing professionals to more holistically support students (Tollerfield, 2003). SLPs and teachers should be open to exploring new and innovative resources designed to aid and structure their collaborative efforts. These professionals need to appreciate that initially, tools like the SLP curriculum require time to understand and utilize to their full potential. Additionally, to ensure effective collaboration, administrators must be willing to provide teachers and SLPs quality meeting time. Teachers, SLPs, and administrators should remain cognizant that the amount of time and energy invested in collaboration will likely decrease as the professionals become more comfortable working with one another and engaging with resources like the SLP curriculum. Efficient and effective collaboration is attainable, especially when professionals remain focused on their common goal of supporting students in reaching their educational potential.

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