Appendix 1: Effective Implementation of Reading Intervention Programs

1. Determine the Learner Profile:

When choosing a literacy program, it is important to determine for which group the program will be used. Different programs may be used at different levels of intervention. As a teacher works to address gaps in a student's learning, they will increase the intensity of instruction for the student and monitor their progress. Increased intensity is achieved through a variety of levers including:

- Frequency/length of sessions
- Level of direct (explicit, systematic, sequential) instruction
- Smaller group size
- Progress monitoring frequency
- Targeted learning using evidence-based programming

Some effective classroom assessment measures include (this is not an exhaustive list):

- Acadience Learning: acadiencelearning.org (fee for service)
- Dibels 8: dibels.uoregon.edu (fee for service)
- EasyCBM: www.easycbm.com (fee for service)
- aimsWebPlus: https://www.pearsonclinical.ca/en/products/product-master.html/item-599 (fee for service)
- CORE Assessing Reading: Multiple Measures, Revised 2nd Edition: https://www.corelearn.com/assessing-reading-multiple-measures-2nd-edition/ (fee for service)

2. Tiered Intervention

The intensity of instruction is often scaffolded into three tiers – a response to intervention method. As a student moves up the tiers, the intensity of the instruction is increased. The "tiered" approach to prevention and intervention is a systematic approach to providing high-quality, evidence-based assessment and instruction and appropriate interventions that respond to students' individual needs. It is based on frequent monitoring of student progress and the use of assessment data, focusing on learning rate and level, to identify students who are facing challenges in learning and to plan specific assessment and instructional interventions of increasing intensity to address their needs effectively. The tiered approach can be used to address both academic and behavioural needs. The nature, intensity, and duration of interventions may be decided by teachers individually or in collaboration with a school team, always on the basis of evidence derived from monitoring student achievement (Learning for All: A Guide to Effective Assessment and Instruction for All Students, Kindergarten to Grade 12)

Tier 1: Programs are delivered in the class, the instruction is targeted to address a specific gap that has been identified through assessment. It may be based on either the general classroom work or on a specific lagging skill. It is a small group that the teacher pulls together to provide a higher intensity (more explicit, additional time, smaller group) systematic lesson on key concepts that the student/s is not grasping – and it may not be

every day. *Evidence-based strategies and practices* should be used at both the whole class level as well as at the Tier 1 level.

Tier 2

Higher intensity and may be delivered by a classroom teacher or a spec ed teacher and it is usually every day or close to every day for 20-40 minutes in general, could be more or less, just giving you a picture. In Tier 2, an *evidence-based program* of some kind systematic, sequential, cumulative, and explicit teaching approach should be followed rather than filling gaps which differs from what happens at a Tier 1 level.

Tier 3:

Delivered by a trained special education teacher with a very small group or an individual student, consistently every day and for a longer period of time each day than in Tier 2 (e.g., 60 minutes and, ideally, in addition to the regular language class), and a using a high intensity evidence based program . Schools boards are advised to use evidence-based assessment tools to identify students who will benefit from reading interventions and clearly identify the target skills for specific students and groups of students.

3. Core Literacy Instructional Approaches.

Evidence-based programs use core literacy instructional approaches. Programs that have these core literacy instructional approaches lead to greater gains in student outcomes.

- i. Direct and Targeted Instruction: In general, direct instruction is an active, reflective approach to instruction that breaks learning into smaller steps with scaffolding, leading towards students' independence and mastery (Rosenshine, 2008; Rupley, 2009). Direct instruction, compared to other approaches to instruction, has been shown to be extremely beneficial for students with exceptionalities (Marchand-Martella, Kinder & Kubina, n.d.). Though direct instruction approaches are effective for all students, they are particularly effective in increasing the rate of learning for students with specific learning disabilities (Somerville & Leach, 1988). The program must target the critical skill that a student needs to develop. Assessment should be done to understand where in their literacy development the student has lagging skills and then direct instruction should be provided that targets the specific area(s) identified.
- ii. **Segmentation:** Breaking down and targeting skills into small units, breaking it into component parts, and teaching them discretely so that they can be reconstructed as a multi-step skill.
- iii. **Developmental Sequencing:** The program must follow an evidence-based developmental sequence of how the small units build on each other.
- iv. **Instructional Sequencing:** Breaking down the task, fading prompts or cues, matching the difficulty level of the task to the students, sequencing short activities, and giving step-by-step prompts with immediate correction.
- v. **Drill-Repetition-Practice-Feedback:** Mastery criteria, distributed review and practice, repeated and massed practice, review of past sequence of instruction, daily feedback, and weekly reviews. Instruction is repeated, distributed, and cumulative.

- vi. **Control difficulty of processing demands of a task:** Task is sequenced from easy to difficult, and only necessary hints and probes are provided to the student.
- vii. **Small Group:** A tier 2 intervention is usually 5-8 students. A tier 3 intervention is usually 1-5 students
- viii. **Metacognitive Strategy:** Reminders to use strategies, the teacher verbalizes problem solving or procedures to solve, instruction makes use of think-aloud models, teacher presents benefits of strategy use or procedures.
- ix. **Attributional Retraining:** Having students acknowledge their skill and effort leading to their reading the word or text.

4. Core Literacy Skills

Core literacy skills build in a hierarchy, which means that it is critical to choose programs that have a developmental sequence that is explicitly stated (e.g. you should not teach word-reading before the student has mastered phonological and phonemic awareness). Educator understanding of the hierarchy of skills is a key to success. Ensuring that the program targets the literacy skill gap of the learner is key. The core literacy skill hierarchy is as follows:

- 1. **Phonological Awareness:** Knowing that oral language is comprised of distinct sounds. The ability to segment sentences and words into those sounds.
- 2. **Phonemic Awareness:** Knowing the sounds of the language of instruction and being able to isolate and blend those sounds and manipulate them.
- 3. **Phonics:** The knowledge of the symbols that represent the sounds within the language, and how to blend the sounds together to make words.
 - a. Letter-sound correspondences: know how to map all 44 phonemes in English to the corresponding letter and digraphs
- 4. Word Reading: The ability to read varying types of words in isolation.
 - a. Word types (i.e. VC, CVC, CVCe)
 - b. Irregular Words (i.e. the, was, are)
- 5. **Reading Fluency:** Reading connected text accurately, with sufficient speed, and use of prosody.
- 6. **Vocabulary:** Knowing a sufficient number of words to understand and participate in learning. If a student does not know 3 to 5% of the words being used in the text or in instruction, they will not understand what is being said.
 - a. Function words (e.g., first, last)
 - b. Morpho graphs (e.g., un, re, mis basically prefixes and suffixes as well as syllables, semantics, and syntax.)
 - c. Academic vocabulary (e.g., investigate, hypothesis)
- 7. **Reading Comprehension Strategies:** Strategies on how to find and record the meaning within text to ensure understanding (i.e., SQ3R [Survey, Question, Read, Record, Review] based programing).

5. Placement and Progress Monitoring

Knowing that a student is starting at the right place within a program is critical. The placement assessment needs to identify the core literacy skills that have developed or have not been developed. Results of a placement assessment need to provide information necessary for an educator to *create ability groups* and/or place students at

the correct entry point into a program. Progress monitoring is then used to ensure that the student's core literacy skills are developing as expected. If development is not on track, then lessons will need to be repeated until skills are mastered. Having a program that has built in placement and progress monitoring can be very helpful to educators to ensure programs are implemented effectively.

The reading intervention programs should include adequate monitoring of individual student progress or response to intervention by tracking the targeted core literacy skill development to insure observed growth. Progress monitoring and outcome measures should be valid and reliable (e.g. measuring word reading skills, and not book reading level assessments).

6. Literacy programs list

These are examples of literacy programs that meet the Core Literacy Skills and use the Core Literacy Strategies that are needed to support students across reading developmental level. This is not an exhaustive list.

Name of program	Grade	Tear level	Core Literacy Instructional components	Core Literacy Skills that need to be targeted	Number of lessons	Level of Training Needed
Early Intervention in reading	K-3	T1- T2	Target Instruction Segmentation Developmental Sequencing Instruction Sequencing Drill-Repetition-Practice- Feedback Control difficulty of processing demands of a task Small Group	Phonological Awareness Phonemic Awareness Phonics Word Reading Reading Fluency Vocabulary Reading Comprehension Strategies	3 grade levels, 120 lessons each grade At least 25 minutes, varies depending on elements used	Scripted program with minimal teacher training
Corrective Reading	3-12	T2 – T3	Targeted Instruction Teaches Segmentation Developmental Sequencing Instruction Sequencing Drill-Repetition-Practice- Specific Feedback Control difficulty of processing demands of a task Small Group	Phonics Word Reading Reading Fluency Vocabulary Reading Comprehension Strategies	4 levels for decoding and four for comprehension with about 60 lessons in each level.	Scripted program with minimal teacher training
Empower™	1 - 12	ТЗ	Targeted Instruction Teaches Segmentation Developmental Sequencing Instruction Sequencing Drill-Repetition-Practice- Feedback Control difficulty of processing demands of a task Small Group	Phonics Word Reading	120 lessons designed to remediate most profoundly impaired students (60 minutes lesson length)	Intensive

Name of program	Grade	Tear level	Core Literacy Instructional components	Core Literacy Skills that need to be targeted	Number of lessons	Level of Training Needed
			Metacognitive Strategy instruction Attributional Retraining			
Reading Mastery	К-	T1 – T2	Targeted Instruction Segmentation Developmental Sequencing Instruction Sequencing Drill-Repetition-Practice- Feedback Control difficulty of processing demands of a task	Phonological Awareness Phonemic Awareness Phonics Word Reading Reading Fluency Vocabulary Reading Comprehension Strategies	160 lessons 45 minutes	Scripted program with minimal teacher training
Jolly Phonics	k	T1	Targeted Instruction Segmentation Developmental Sequencing Instruction Sequencing Control difficulty of processing demands of a task	Phonological Awareness Phonemic Awareness Phonics Word Reading (tricky words)	Throughout the year	Manualized and some teacher training recommend 20- hour online training course is available)
Kindergarten Peer-Assisted learning Strategies (K- PALS)	k	T1	Targeted Instruction Segmentation Developmental Sequencing Instruction Sequencing Control difficulty of processing demands of a task	Phonemic Awareness Phonics Word Reading	88 lessons	Scripted Lessons – one day training
Peer-Assisted learning Strategies (PALS)	1-6 + 9-12	T1- T2	Targeted Instruction Developmental Sequencing Instruction Sequencing	Reading Comprehension Strategies	Used throughout the year.	Scripted Lessons – one day training