

LITERACY ASSESSMENTS OVERVIEW

DYNAMIC DECODING MEASURES (DDM)



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OVERVIEW

- Part of a broader assessment battery: CUBED-3 (Peterson, B.D. and Spencer, T.D., 2023)

- DDM assesses decoding and decoding related skills:**
 - Phonemic awareness** (oral blending and segmenting)
 - Phoneme manipulation** (deletion, addition and substitution)
 - Sound/letter recognition** (sounds and letter names)
 - Irregular word reading** (word identification)
 - Nonsense word reading** (word identification)

Note:

- **Word level spelling** is not assessed in this tool. There are other tools available that do this with benchmarking capacity, including the MOTIF.

- **Text level decoding fluency** is not assessed in this tool. There are other tools available that do this with benchmarking capacity, including the Narrative-Language Measures-Reading (NLM-R), part of the CUBED-3 assessment suite.

- Kindy – Year 8**
- Free**

- Materials for both **benchmarking and progress tracking**
 - Benchmarking: Determining where a student sits in relation to a large sample of other students*
 - Progress monitoring: Used for tracking progress – can be administered regularly*
- Benchmarked based on **months of schooling** - validity & reliability data available.

- | | | | |
|--------------|--|----------|--------------------------------|
| Uses: | ✓ Tier 1 | ✓ Tier 2 | ✓ Tier 3 |
| | ✓ Screening for difficulties | | ✓ Goal setting |
| | ✓ Benchmarking/identifying students falling behind | | ✓ Broad planning |
| | ✓ Severity rating | | ✓ Pre-post progress monitoring |
| | ✓ Longitudinal data collection (across years) | | ✓ Frequent progress monitoring |

- Can be administered by **teachers and trained EAs**

- Approx. 5-10 min administration time** + approx. **5mins scoring time** (once practised at tool use)
- Administer individually. Score with student there.
- Internet based scoring, analysis & progress tracking available** at a cost through CUBED Insight.

DDM
Dynamic Decoding Measures

DECODING INVENTORY <small>NEW</small>	ORTHOGRAPHIC MAPPING
<ul style="list-style-type: none">Closed SyllablesVowel-Consonant-EBasic AffixesAdvanced AffixesVowel TeamsVowel-R-ControlledComplex VowelsAdvanced Word FormsMultisyllabic Words in Context	<ul style="list-style-type: none">Irregular WordsLetter SoundsLetter Names
PHONEMIC AWARENESS	PHONEME MANIPULATION <small>NEW</small>
<ul style="list-style-type: none">Phoneme SegmentationPhoneme BlendingFirst SoundsContinuous Phoneme Blending	<ul style="list-style-type: none">Phoneme DeletionPhoneme AdditionEpisode Substitution

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IMPORTANT NOTES

- **Discontinue and skip 'rules':** To increase the efficiency of test administration the assessment manual has discontinued and skip 'rules' which:
 - Suggest stopping part way through test sections if students do poorly (do not achieve the benchmark score);
 - Suggest skipping sections if students do well in others (e.g. skip first sound segmenting if students reach benchmark phoneme segmentation and phoneme manipulation).
 - Read the testing instructions carefully, however you **may choose to ignore these 'rules' to gather further data** e.g. according to the manual students should only do the letter sounds section of the orthographic mapping subtest if they do poorly on the irregular words section, however this data is useful to know even if students do well on irregular words.
- **US grades used in the assessment:**
 - WA **Kindy** = US Pre-school
 - WA **Pre Primary** = US Kindergarten
 - WA **Years 1-8** = US Grade 1-8
- **Timepoints to administer testing for benchmarking:**
 - Benchmark tests are categorised by **timepoints** which link to the **beginning, middle and end** of the school year. Make sure to use the correct assessment that corresponds to the time of year students are tested:

Suggested WA benchmarking periods:

- **Beginning of Year (BOY)** = Term 1 Week 1 – Term 2 Week 5
- **Middle of Year (MOY)** = Term 2 Week 6 – Term 3 Week 10
- **End of Year (EOY)** = Term 4 Week 1 – Week 10

Term	Week									
	1	2	3	4	5	6	7	8	9	10
1	BOY (from T1 W1)									
2						MOY (from T2 W6)				
3										
4	EOY (from T4 W1)									

*The CUBED-3 recommends the following timepoints for benchmark testing:

- **Beginning of Year (BOY)** = Term 1 Week 1 – Week 9
- **Middle of Year (MOY)** = Term 3 Week 1 – Week 7
- **End of Year (EOY)** = Term 4 Week 4 - Week 10

If your school chooses to follow the suggested WA benchmarking periods above, it is worth acknowledging that this may influence the accuracy of the data compared with the comparison group from the CUBED-3.

- For a **comprehensive guide of which grade and assessments to administer at different points of each year group, please see page 5.**
- To see for **which skills benchmarking data is available for various year groups, please see page 4.**

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- **NEMLDC data spreadsheets** for entering and analysing DDM data will be available shortly. These spreadsheets colour code and graph data, and can be used to track student data across time.
- **Assessment administration and scoring training videos** available at:
<https://www.languagedynamicsgroup.com/cubed/cubed-tutorials/>

ACCESSING THE ASSESSMENT

- Part of a broader CUBED-3 assessment. Free download from
<https://www.languagedynamicsgroup.com/cubed/>
- Access CUBED-Insight (web based scoring, data analysis & reporting) from
<https://www.languagedynamicsgroup.com/products/cubed/cubed-insight/>
Schools should investigate the CUBED-Insight and consider its use in the context of your school.

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ADMINISTRATION OVERVIEW

BENCHMARKING

- Benchmark scores are available for multiple subtests, however it is **not necessary to complete all the assessments with every student**. Refer to the flowcharts on page 8 for more information.
- **Only administer relevant subtests and sections** - All subtests are on the benchmarking assessment forms (phonemic awareness, orthographic mapping & decoding), however you do not have to administer everything. E.g. you may choose to only administer the 'CVC words' section of the decoding subtest and not administer the rest of the test.
- The **same stimulus items** are used across year groups (different items are used in different terms/timepoints though). What differs per year group is what the benchmark score interpretations are for each (the 'at benchmark' scores can be found at the bottom of the assessment forms, with all other interpretations – high risk, moderate risk, advanced etc. being found in the manual).
- **Benchmark scores are available for:**

Subtest	Skill ↓	WA year group →	Kindy	PP	Year 1	Year 2	Year 3+
Phonemic Awareness ~Testing materials available but no benchmark scores. *Only complete for tier 2/3 students who are not meeting benchmark.	Segmenting sounds		~	✓	✓	✓	-
	Blending sounds		-	✓ (MOY & EOY only)	✓	-	-
	Identifying first sounds		✓ (EOY only)	✓*	✓*	-	-
	Continuous blending		✓* (EOY only)	✓*	✓*	-	-
Phonemic Manipulation	Phoneme deletion		-	-	✓ (MOY & EOY only)	✓	-
	Phoneme addition		-	-	✓ (MOY & EOY only)	✓	-
	Phoneme substitution		-	-	✓ (MOY & EOY only)	✓	-
Orthographic Mapping *Only complete for tier 2/3 students who are not meeting benchmark.	Reading 'irregular' words		-	✓	✓	✓	-
	Letter sounds		✓ (EOY only)	✓	✓*	-	-
	Letter names		✓ (EOY only)	✓*	-	-	-
Decoding	Reading CVC words		-	✓ (MOY & EOY only)	✓	✓	✓
	Reading silent-e words		-	-	✓ (MOY & EOY only)	✓	✓
	Reading basic affixes		-	-	✓ (MOY & EOY only)	✓	✓
	Reading advanced affixes		-	-	✓ (EOY only)	✓	✓
	Reading vowel teams		-	-	✓ (MOY & EOY only)	✓	✓
	Reading R-controlled vowels		-	-	✓ (MOY & EOY only)	✓	✓
	Reading complex vowels		-	-	-	✓	✓
	Reading advanced word forms		-	-	-	✓ (MOY & EOY only)	✓

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PROGRESS MONITORING

- **Only administer the relevant subtests** - Individual skills are on **separate testing forms**.
- The **same stimulus items** are used across year groups and terms/timepoints.
- Progress can be tracked through **changes in raw scores**.
- The progress monitoring assessments **can be used with any year group** if discontinue rules are not being followed (when to discontinue is based on age specific benchmark scores).
 - If following the discontinue rules, administer the age relevant progress monitoring assessment. Year groups are noted on the front cover of the progress monitoring assessment form packs and are the same as the ages for which benchmark scores are available for.

WHICH ASSESSMENT TO ADMINISTER

WA Recommendations for benchmarks:

Student's WA Year Group at Assessment	WA Term of Assessment	Weeks	Updated Benchmark Assessments to Administer	Progress Monitoring Assessments to Administer
Kindy	Term 1 Week 1 to Term 2 Week 5		None – focus on developing students' oral language and phonological awareness skills. Pre-School, BOY assessment can be used however no benchmark is available.	Any progress monitoring assessment*
	Term 2 Week 6 to Term 3 Week 10		None – focus on developing students' oral language and phonological awareness skills. Pre-School, MOY assessment can be used however no benchmark is available.	
	Term 4 Week 1 - 10		Pre-School, EOY benchmark assessment	
Pre-primary	Term 1 Week 1 to Term 2 Week 5		Kindergarten, BOY benchmark assessment	Any progress monitoring assessment*
	Term 2 Week 6 to Term 3 Week 10		Kindergarten, MOY benchmark assessment	
	Term 4 Week 1 - 10		Kindergarten, EOY benchmark assessment	
Year 1+	Term 1 Week 1 to Term 2 Week 5		Grade Level (1-8), BOY benchmark assessment	Any progress monitoring assessment*
	Term 2 Week 6 to Term 3 Week 10		Grade Level (1-8), MOY benchmark assessment	
	Term 4 Week 1 - 10		Grade Level (1-8), EOY benchmark assessment	

If your school chooses to follow the suggested WA benchmarking periods above, it is worth acknowledging that this may influence the accuracy of the data compared with the comparison group from the CUBED-3. See page 2 for more information.

* **If not following the skip rules in the test manual.** If following skip rules, administer the age relevant progress monitoring assessment. Year groups are noted on the front cover of the progress monitoring assessment form packs and are the same as the ages for which benchmark scores are available for.

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WHAT TO DO WHEN BENCHMARK INTERPRETATIONS ARE NOT AVAILABLE

Pre-primary to year 3 students: if benchmark interpretations are not available, students should have **mastered those skills** by that age (i.e. phonemic awareness by year 2 & orthographic mapping by year 3).

Kindergarten students:

- The current CUBED-3 manual does not provide benchmark data for AU Kindergarten beginning of year (BOY) and middle of year (MOY). This is consistent with the notion that Kindergarten students should be taught pre-literacy skills in the first half of the schooling year because it is not a set of skills that develop naturally, thus it is expected that students come to school with none of these skills.

Benchmarking older students on earlier skills:

If older students need a 'benchmark interpretation' for skills that the assessment does not provide benchmarks for in their age range, their performance can be compared to the data of younger students to:

- **Identify if the student is at risk or not:**
 - Compare the student's data to the oldest available benchmark data (for Phonemic Awareness: Year 1 EOY data; & for Orthographic Mapping: Year 2 EOY data).
 - If the student does not score an interpretation of 'at benchmark' or 'higher', they do not have the minimum skills for their age, and therefore are at risk.
- **Get an 'age equivalent' performance.**
 - Look at page 128-129 of the CUBED-3 manual.
 - Find the year group for which the student's score on the given subtest is light green (benchmark). If the student's score cannot be found in the light green boxes, repeat the same process with the yellow (moderate risk) boxes.
 - This is the student's performance 'age equivalent' i.e. the student is performing at the level of a x risk level of an x year group student.

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OTHER NOTES

Benchmarks based on percentiles

- The CUBED-3 has used the 40th percentile as benchmark expectation. This means that the assessment may over-identify children who are at risk, however this is needed to ensure that children don't fall through the cracks.
- The CUBED-3 has used risk cut points of 16th to 39th percentile as moderate risk and 15th percentile and below as high risk.
- The term "risk" refers to how far below the benchmark expectation a student's performance falls.

Decoding subtests: Blends being credited as '1 correct sound'

- In the decoding subtests (both benchmarking and progress monitoring), if student blends 2 adjacent consonants together when decoding the word (e.g. slip), this is scored as '1 correct sound'.
- This is not an error, nor is it implying that adjacent consonants are in fact a single sound.
- This has been done for consistency of scoring across the test, and because of the skill being assessed in this subtest – decoding ability.
 - A proficient decoder is able to decode all the sounds in a given word, without having to sound out each one individually.
 - An early step towards this proficiency is blending adjacent consonants together (instead of sounding out each one individually), hence why students are awarded full points ('1 sound correct') for doing so in the decoding subtest.
 - To probe the students' underlying phonological awareness, administer the Phonemic Awareness subtest;
 - To probe students' underlying sound/letter mapping, administer the Orthographic Mapping subtest.

USEFUL PAGES IN THE CUBED-3 RESOURCES FOR THE DDM

CUBED-3 MANUAL

- 20: CUBED-3 Benchmark Administration Decision Flow Chart
- **13 & 16: Overview of DDM**

- 25-26: CUBED-3 Administration and Scoring overview
- **89-125: Detailed DDM administration guidelines**

- 126: Interpreting the CUBED
- **128-129: Benchmarking scores**

- 130-139: Risk recommendations flowchart

STUDENT STIMULUS MATERIALS: BENCHMARKING

- 2-4: Orthographic Mapping stimuli
- 5-8: Decoding Inventory stimuli

STUDENT STIMULUS MATERIALS: PROGRESS MONITORING

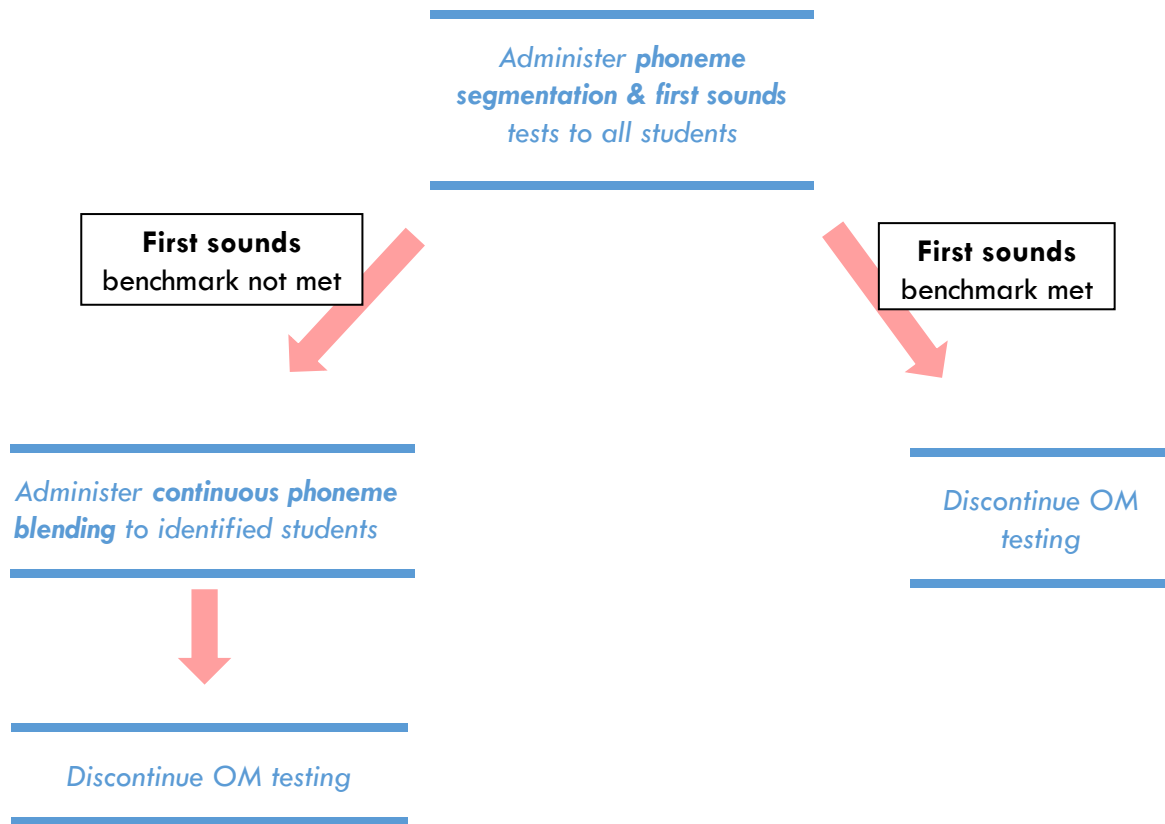
- 2-4: Orthographic Mapping stimuli
- 5-8: Decoding Inventory stimuli

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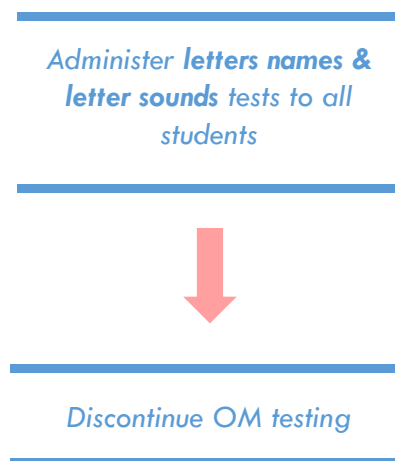
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ASSESSMENT FLOWCHARTS

WA Kindergarten Phonemic Awareness Flowchart:



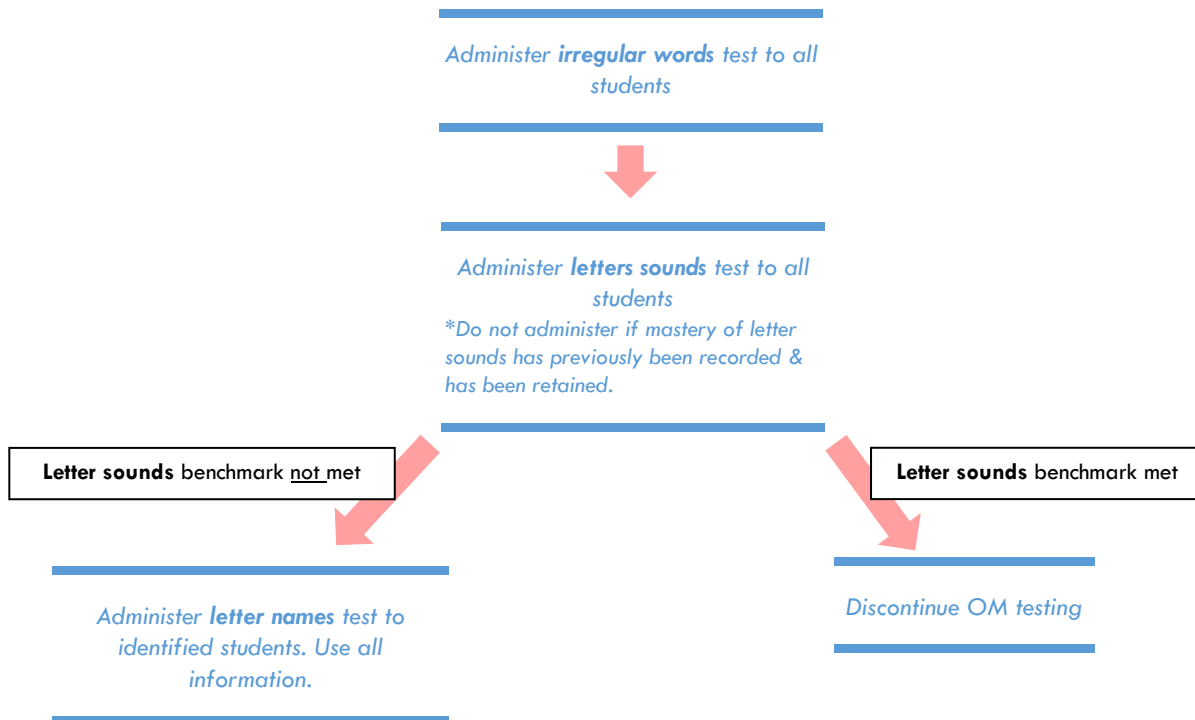
WA Kindergarten Orthographic Mapping Flowchart:



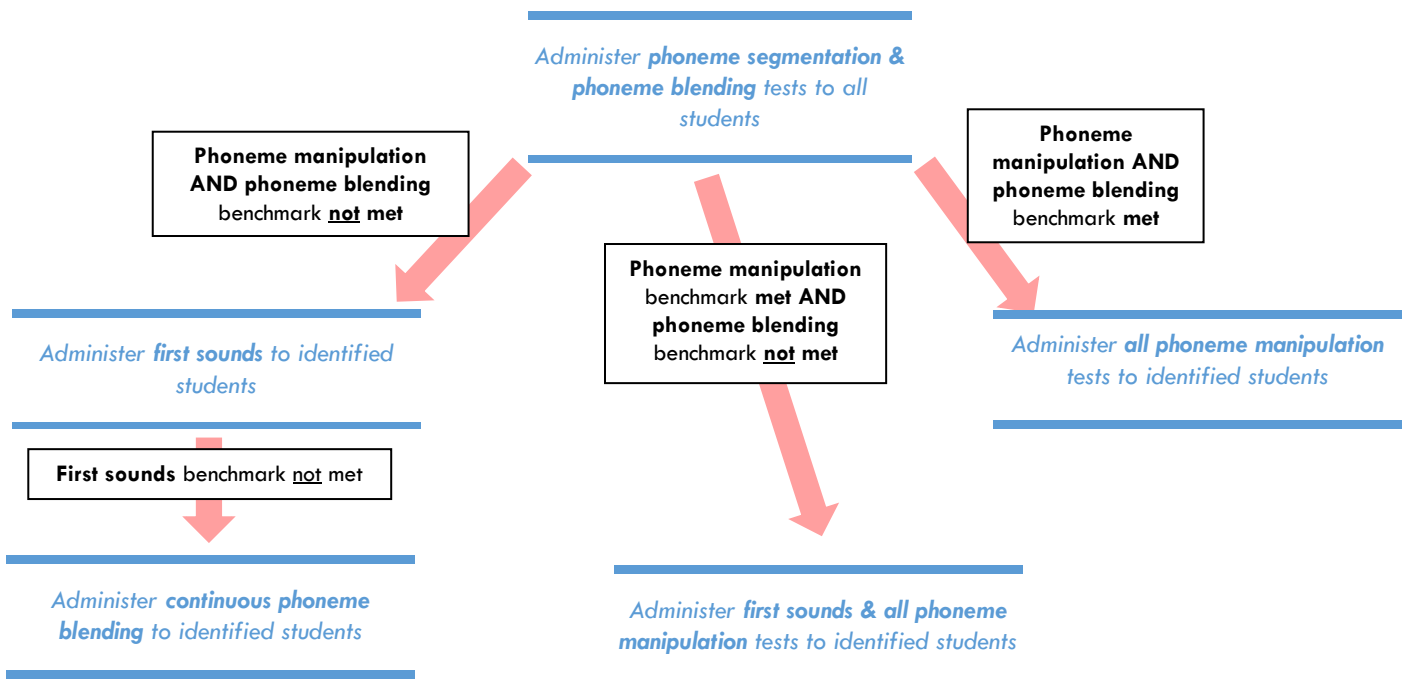
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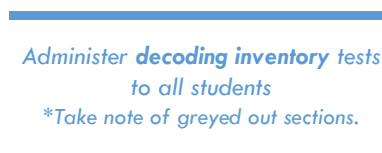
WA Pre-Primary Orthographic Mapping (OM) Flowchart:



WA Pre-Primary Phonemic Awareness (PA) & Phonemic Manipulation (PM) Flowchart:



WA Pre-Primary Decoding Inventory (DI) Flowchart:



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WA Year 1-3+ Decoding Inventory (DI) Flowchart:

Administer **decoding inventory** tests to all students

WA Year 1-3+ Orthographic Mapping (OM) Flowchart:

Administer **irregular words** test to all students

*Previous letter sounds testing results required for next steps.

Has **not mastered** letters sounds in previous tests

Administer **letters sounds** test to identified students

Discontinue OM testing

Letter sounds benchmark **not** met

Letter sounds benchmark met

Administer **letters names** test to identified students

Discontinue OM testing

WA Year 1-3+ Phonemic Awareness (PA) & Phonemic Manipulation (PM) Flowchart:

Administer **phoneme segmentation & phoneme blending** tests to all students

Phoneme manipulation **AND** phoneme blending benchmark **not** met

Phoneme manipulation **AND** phoneme blending benchmark met

Administer **first sounds** to identified students

Phoneme manipulation benchmark met **AND** phoneme blending benchmark **not** met

Administer **all phoneme manipulation** tests to identified students

First sounds benchmark not met

Administer **continuous phoneme blending** to identified students

Administer **first sounds & all phoneme manipulation** tests to identified students