Improving Student Outcomes Through Differentiated Core Instruction

Effective instruction utilizes a data-based decision-making system to ensure *all* students receive appropriate instruction.

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Objectives

1. Review research-based frameworks that define learning targets for developing reading proficiency. *Which skills should I target?*
2. Identify practices that maximize instruction and improve student outcomes. *How can I ensure that students are getting the instruction they need?*
3. Outline the critical components of an effective literacy block. *What should the literacy block look like?*

Reflect and Respond

1. The terms MTSS and RTI are synonymous. (True/False)
2. In an MTSS framework, all students must receive the same core instruction. (True/False)
3. Skill-based grouping is a form of tracking and is not effective for improving outcomes. (True/False)
4. If core instruction isn't working, Tier 2 and 3 should use a different program or curriculum. (True/False)

What does it mean to be proficient?

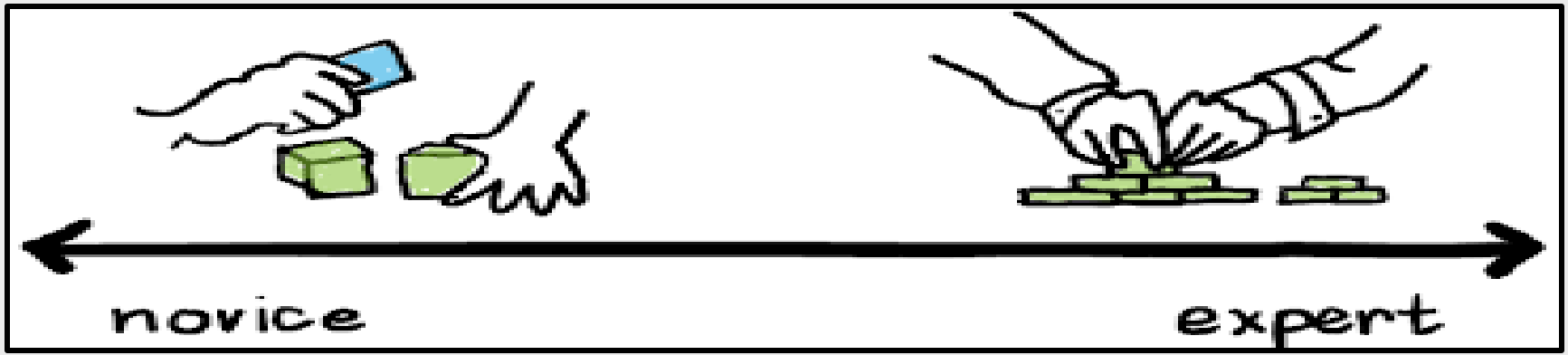
Instructional Hierarchy

Haring, Lovitt, Eaton, and Hansen, 1978

Daly et al., 1996

Proficiency Occurs Along a Continuum

1. Acquisition
2. Fluency
3. Generalization
4. Adaptation



Word Recognition Proficiency

ðə ɪndiænə steɪt tri ɪz ðə tjulɪp tri ɔlsoʊ noʊn æz ðə tjulɪp pɑplər ɔr jɛloʊ pɑplər. ɪt wəz əfɪʃəli ədɑptɪd æz ðə steɪt tri ɪn 1931. ðə tjulɪp tri wəz ʧoʊzən du tu ɪts əbʌndəns ɪn ðə steɪt, dɪstɪŋktɪv livz ðæt ɑr fiʧərd ɑn ðə steɪt sil, ænd ðə vərsɪtɪlɪti ʌv ɪts wʊd.

Language Comprehension Proficiency

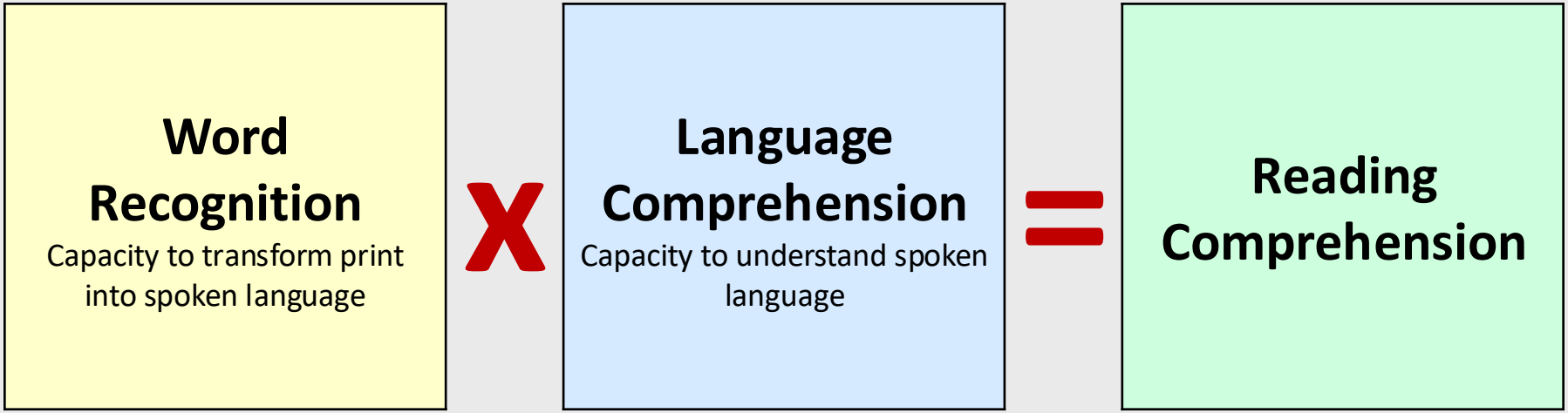
The is the Liriodendron tulipifera, also known as the tulipifera or yellow . It was adopted as the in 1931. The Liriodendron tulipifera was chosen due to its in the , leaves that are featured on the seal, and the of its wood.

Both are Equally Important

The Indiana state tree is the tulip tree (Liriodendron tulipifera), also known as the tulip poplar or yellow poplar. It was officially adopted as the state tree in 1931. The tulip tree was chosen due to its abundance in the state, distinctive leaves that are featured on the state seal, and the versatility of its wood.

The Simple View of Reading (Gough & Tunmer, 1986)

- **Word Recognition** and **Language Comprehension** are equally important
- Strength in one area cannot compensate for weakness in the other
- Instructional design should target the essential subskills in each area
- Assessment tools should isolate variables for data-based decision-making



Listening Comprehension Versus Reading Comprehension

- **Decoding is the variable that differentiates** listening comprehension from reading comprehension.
- The timing of the **increase in reading comprehension** appears to **coincide** with **mastery** of the initial **decoding skills**.

Diakidoy et al. 2005, p. 68

The two main components of reading **do not necessarily develop in tandem** and may require distinctly **different** teaching **approaches** and **resources**. Assessments that combine the two, **especially in elementary grades**, **muddy the waters** for critical instructional decision-making processes.

Oakhill, Cain, & Elbro (2015)

Applying This Framework to Written Expression

- **Transcription** and **Composition** are equally important
- Strength in one area cannot compensate for weakness in the other
- Instructional design should target the essential subskills in each area
- Assessment tools should isolate variables for data-based decision-making

Transcription

Ability to convert spoken language into print

- Handwriting
- Concepts of print (form)
- Spelling
- Conventions (capitalization, punctuation,)

X

Composition

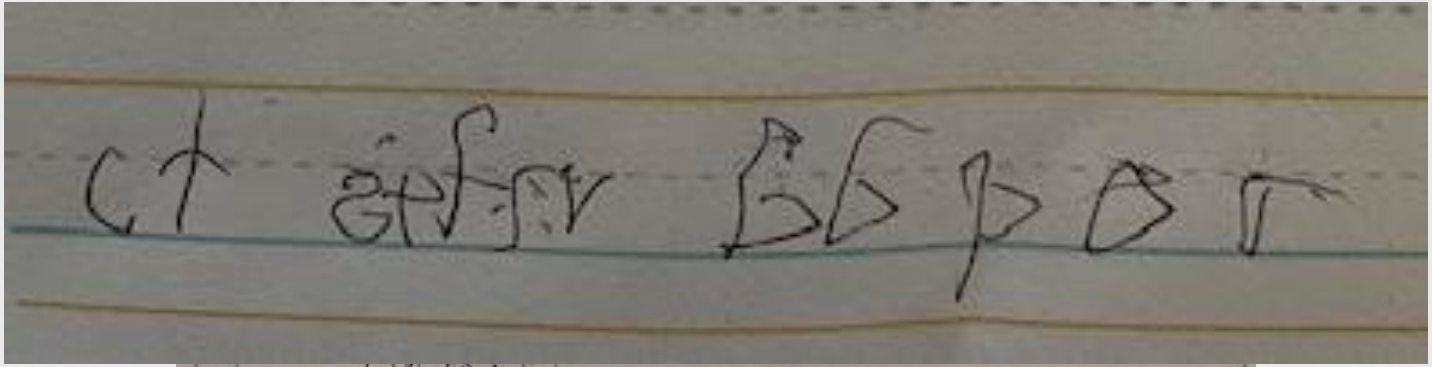
Ability to express ideas clearly and organize logically

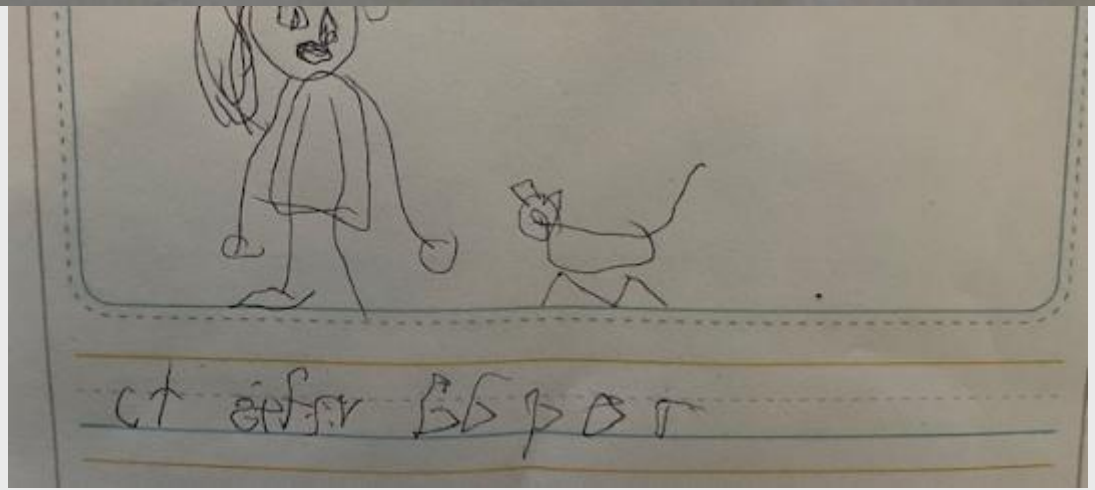
- Grammar and syntactic awareness
- Organization
- Purpose and audience
- Genre and style

=

Written Expression

Transcription Skills Are Constrained





Composition Skills Are Unconstrained

The Cat Cafe

My sister really likes cats. We can't have cats because my dad is allergic. My grandma told her that there is a place you can eat, and they have tons of cats. First, you order your food. Then, when you wait for it to get hot, you play with all the cats. Some of the cats even come over to your table when you eat and sit in your lap. My grandma said that was nasty, but I said it was fab. I hope we go back again.

In ~~the~~ 12 Angry Men, Justice is a theme shaved through out the story because ~~there~~ trying to decide whether the boy is or is not guilty. Justice can look different in many peoples eyes because justice isn't just one thing. This theme is shown on page 14 When Juror 8 says "I don't belive it's as simple as A, B, C." In this quote ~~they're~~ he is speaking about how Justice can't be decided with in Minutes. Another quote that supports this theme is on page 28/29 When Juror 9 says, "He left the verdict up to us. He gamied for support and I gave it to him. I want to hear more." In this quote Juror 9 is saying he wants to here out everyone before he makes a just desicion. Juror 6 on Page 52 also says "At first I thought guilty, then I changed.

Theme?

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The terms MTSS and RTI are synonymous.

False

Is RTI the Same as MTSS?

- Response to Intervention (RtI) **originated from special education**
- Purpose was to create a **data-driven process for identifying** students with **learning disabilities**
- Process involved **measuring student growth**, or lack of growth, in high-quality (evidence-based) interventions
- Structure followed a **gating step-by-step sequence** where students had to demonstrate a lack of progress across tiers of instruction over time before testing for a learning disability could occur

An MTSS Framework is Comprehensive

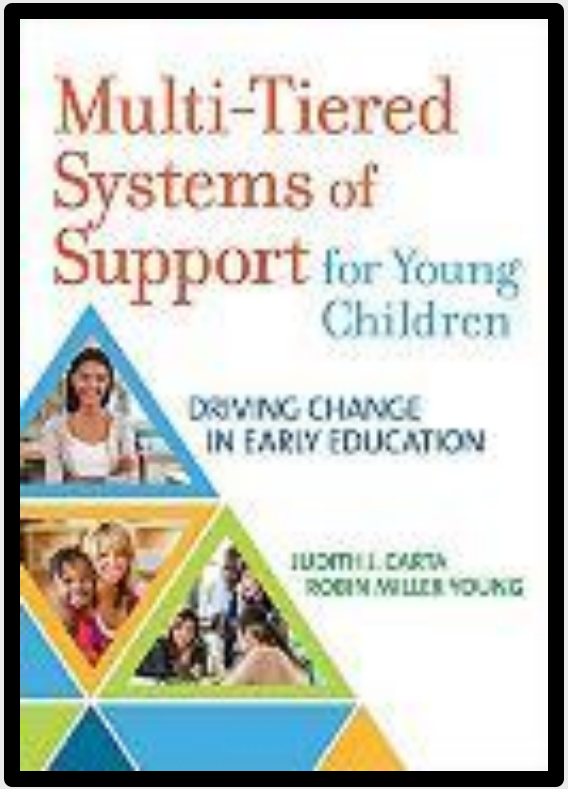
- Supports instruction for **all learners** (typical, accelerated, and those experiencing difficulty)
- Informs how to **allocate resources** (human and materials) to respond to needs
- **Guides decisions** about professional development
- **Drives schedules** for matching services to students
- **Establishes communication protocols** across service providers
- Ensures the right data is being collected for informed decision-making

"A Multi-Tiered System of Support (MTSS) is a **comprehensive framework to improve academic, behavior, and social-emotional outcomes for all students**, including students with disabilities. MTSS is an effective framework to differentiate research-informed supports matched to student needs."

Michigan MTSS Technical Assistance Center

Core Components of MTSS - (Carta, 2019)

- Evidence-based instruction and intervention practices
- Emphasis on ensuring high-quality implementation
- Universal screening & progress monitoring
- Layered continuum of supports
- Data-based problem-solving and decision-making.
- Shared leadership
- Family, school, and community partners



In an MTSS framework, all students must receive the same core instruction.

False

Free Appropriate Public Education (FAPE)

Under Federal Law [full code below], **all children** in the United States who are between the ages of 3 and 21, **including children with disabilities** who have been suspended or expelled from school, are **provided the right** to a "free **appropriate** public education".

34 CFR § https://www.ecfr.gov/current/title-34/subtitle-B/chapter-III/part-300/subpart-B/subject-group-ECFR4c69ab8d340f516/section-300.101300.101

Exposure or Access?

- For students with disabilities, this may mean they receive an Individualized Education Program (IEP) or a 504 plan that gives them **equal access to learning**. Additionally, an appropriate education must meet the standards of the educational state agency.
- According to the United States Department of Education, an appropriate education may consist of:
- Education in regular classes
- Education in regular classes with the use of related aids and service
- Special education and related services in separate classrooms

Benefits of Differentiated Core for Constrained Skills

- Ensures students receive instruction aligned with their performance level
- Maximizes learning by reducing intrinsic load
- Increases opportunities for acceleration
  - Above-level students advance to more complex skills
  - On-level students *continue to receive appropriate instruction*
  - Below-level students receive a double dose to decrease the performance gap

State Standards

The Destination

- Establishes where we are going
- Ensures common goal
- Describes minimum competencies
- Outlines instructional objectives

Curriculum *or* Curriculum Map

The Route

- Creates a path to reach the destination
- Paths vary by
  - **Order** (scope and sequence)
  - **Time** (pacing)
  - **Design** (Instructional routines)
  - **Markers** (assessments)

Implementation: Fidelity *or* Data-Based Decision-Making

The Journey

- Fidelity is following the map (no matter what)
- Data-based decision-making is
  - **Monitoring** who is on track
  - Finding out **who** was left behind **and why**
  - **Looking ahead** to potential issues
  - **Rerouting** when needed

Scientifically-Based Instruction

- **Unconstrained skills** may be taught in a **universal core** model
  - Heterogeneous groupings
  - Interventions based on front-loading content
- **Constrained skills** benefit from a **differentiated core** model
  - Homogeneous, skill-based groupings
  - Interventions based on an acceleration model (double-dosing)

Sample Primary Literacy Block

Language Comprehension & Composition Block **Heterogeneous Grouping**	• Speaking and listening skills – Knowledge-building – Vocabulary-building **Knowledge-building text sets** • Syntactic awareness – Sentence-level composition – Deconstruction of complex sentences • Supporting meaning-making

Unconstrained Skills – Language Comprehension

Characteristics	Examples
Unlimited (infinite) items	*Vocabulary, background knowledge, syntactic awareness*
Skills often codependent	*Word meaning depends on form, usage, context, etc.*
Mastery **not** easily measured	*Difficult to quantify or measure as a linear progression*
Order of instruction less structured	*Skills accumulate over time*
“Collaborative learning should occur among students with different ability levels, background knowledge, and skill sets” (Stahl, 2011, p. 55).	

Unconstrained Skills – Language Composition

Characteristics	Examples
Unlimited (infinite) items	*Ideas, Organization, Word Choice*
Skills often codependent	*Sentence Structure, Paragraph Structure*
Mastery **not** easily measured	*Difficult to measure objectively*
Order of instruction less structured	*Skills accumulate over time*
“Collaborative learning should occur among students with different ability levels, background knowledge, and skill sets” (Stahl, 2011, p. 55).	

Planning Your Comprehension Instruction

Emphasize Knowledge-Building

- Topic-focused units (2-3 weeks)
- Front-load prior knowledge
- Prioritize meaning-making over strategy-based lessons

Support Vocabulary Acquisition

- Provide direct instruction on high-utility words (Tier 2)
- Pre-teach critical vocabulary
- Provide multiple opportunities to use new vocabulary words across contexts
- Teach morphological awareness

Planning Your Comprehension Instruction and Assessments

Incorporate Dialogic Reading into Read-Alouds

- Draw attention to critical information
- Pose questions to support making sense of the text
- Clarify confusing syntax and vocabulary
- Provide question-and-answer stems to support language development

Check for Understanding

- Provide opportunities to demonstrate understanding (note-taking, completing graphic organizers, etc.)
- Isolate variables in your assessments
  - If decoding is a challenge, assess listening comprehension
  - If written expression is a challenge, accept verbal responses

Sample Primary Literacy Block

Word Recognition & Transcription Block

Homogeneous Grouping

- **Phonological and Phonemic Awareness**
- **Letter ID**
- **Letter Formation**

Phonics prerequisites

- Phonics and/or Morphology Instruction
  - phoneme-grapheme correspondences
  - syllable types and syllable division
  - roots, prefixes, suffixes
- **Decoding** words, phrases, sentences, connected text
- **Encoding** words, phrases, sentences

Constrained Skills – Word Recognition

Characteristics	Examples
Limited (finite) items	*Letter names and formation*
Mastery easily measured	*Letter Naming Fluency* *Letter Dictation Fluency*
Prerequisites for more advanced application	*Essential for decoding and encoding**

"Instruction of constrained abilities is most effective and time efficient when it is explicit, systematic, intense, short in duration, and targeted to where students are developmentally (National Early Literacy Panel [NELP], 2008; NICHD, 2000)" (Stahl, 2011, p. 54).

Constrained Skills – Transcription

Characteristics	Examples
Limited (finite) items	*Letter formation, Grammar Terms*
Mastery easily measured	*Mechanics (Capitalization, Punctuation)* *Spelling*
Prerequisites for more advanced application	*Essential for accurately capturing ideas on paper**
“Instruction of constrained abilities is most effective and time efficient when it is explicit, systematic, intense, short in duration, and targeted to where students are developmentally (National Early Literacy Panel [NELP], 2008; NICHD, 2000)” (Stahl, 2011, p. 54).	

Planning Your Word Recognition Instruction

- **Foundational Skills Support Building the Alphabetic Principle**
  - Phonemic awareness instruction is brief (5 min or less) and targets 2-3 skills
  - Instruction on letter recognition and formation teaches letter names and sounds simultaneously
- **Explicit and Systematic Phonics Instruction**
  - Structured scope and sequence
  - Daily cumulative review
  - Part-to-whole progression
  - Application in connected text
- **Structural Analysis Supports Advanced Decoding**
  - Syllable Types
  - Syllable Division
  - Morphological Awareness (suffix addition rules, common affixes, and roots)

Skill-based grouping is a form of tracking and is not effective for improving outcomes.

False

Differentiation Configuration

Class A	Class B	Title
14 on-level 6 above-level	11 below-level	6 well-below

Differentiation Configuration

- Within grade-level groupings
  - Classroom teachers share students across the grade level
  - Data-based groupings for placement
  - Additional support staff for more precise groupings
- Planning considerations
  - Common word recognition block
  - Teacher training
  - Communication protocols
  - Fluidity of groupings

If core instruction isn’t working, Tier 2 and 3 should use a different program or curriculum.

False

Differentiation Configuration

Date	9/8	9/9	9/10	9/11	9/12	9/15	9/16	9/17	9/18	9/19
Group 1	24			27	28	29	30	31	32	33
Group 2	15			18	19	20	21	22	23	24
Group 3 AM	4			8	10	11	1			18
Group 3 PM	5	6	8	9	10	12	14	15	17	19

Ahead

On Track

Behind

5 Behind

What makes an intervention effective?

Simply reducing group size does not turn instruction into intervention. Interventions are instructional intensification that results from well-designed, data-driven decisions about content and delivery.

Keep small-group instruction targeted and efficient. Every student does not get the same thing; every student gets what they need.

Characteristics of Effective Interventions

- Specialized
- Intensive
- Intentional
- Consistent
- Structured

"Simply placing students in small or more homogeneous groups is not enough. For grouping to be maximally effective, materials and **teaching must be varied** and made **appropriately challenging** to **accommodate the needs of students** at their different levels of ability."

Hattie, 2009, p. 95

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