Prevention, Intervention, and Alignment: A Comprehensive Design for Literacy Improvement

Linda Dorn, UALR Center for Literacy

Description of Session

The Comprehensive Intervention Model is a systemic design for diagnosing reading difficulties, selecting the best intervention to meet student needs, and aligning instruction across classroom and supplemental settings to promote the accelerated learning of low-performing students. I will share results from studies on CIM, and discuss the implications for using a comprehensive approach to promote grade level reading proficiency and sustainable long-term gains.

Topics for Discussion

- Prevention and Intervention
- Congruency and Alignment
- Systemic and Coordinated Design
- Comprehensive Intervention Model as a Systems Design
- Supporting Research
- Implications for Schools

Key Principles of the CIM

- A comprehensive and well-coordinated design for matching interventions to the strengths and needs of struggling readers
- Uses a portfolio of interventions that are grounded in socio-cognitive theories of learning
- Includes degrees of intensity (size, duration, expertise) delivered within a predictable framework of research-based practices
- Enhances teacher expertise through training and ongoing professional development
- Uses a partnership approach between universities and schools
- Is not aligned with any particular assessment system or commercial program

Why Does Early Reading Matter?

- If children do not become proficient readers by the end of third grade, it is difficult for them to catch up with their peers.
- The 2001 reauthorization of the Elementary and Secondary Education Act established the need for reading proficiency by the end of third grade.
- High school graduation rate is linked to third grade reading proficiency.
- The negative consequences of poor reading at the end of third grade are far-reaching, impacting one’s social, economic, and educational status in today’s world.
Closing the Reading Gap

- Intervention is designed to move the struggling reader into the normal range of reading performance within a short amount of time.
- To accomplish this, the intervention must be grounded in two learning theories:
  - Acceleration
  - Scaffolding

Aiming for 3rd Grade Proficiency

- Provide intensive intervention in 1st grade which can lead to a significant narrowing of the reading gap.
- Summer loss may impact 2nd grade reading at beginning of year.
- Provide short-term targeted intervention to 2nd graders who have fallen behind in reading and monitor their progress on grade level materials.
- By end of 2nd grade, reading gap should be closed.
- Monitor student progress throughout 3rd grade to ensure students remain on track for reading proficiency by the end the year.

Core Principles

- Acceleration occurs when the reader is able to progress at a rate that is faster than his grade level peers, thus enabling him to catch up rapidly.
- Scaffolding refers to the degree of instructional assistance the teacher provides the reader to enable him to accomplish a task that would otherwise be too difficult.

Five Criteria for Interventions

1. Interventions must incorporate evidence-based practices and scaffolding techniques that promote accelerated learning.
2. Interventions must emphasize reading for meaning at all grade levels.
3. Interventions must include explicit instruction for linking reading and writing.
4. Interventions must focus on integration and transfer.
5. Interventions must include a plan for progress monitoring and maintenance.

Five Problems That Contribute to the Literacy Gap

To promote acceleration, teachers must be experts at making moment-to-moment decisions while providing highly tailored scaffolding to keep the learner at his cutting edge – thus, pushing the boundaries of his learning to increasingly higher levels of competency.
1) The Special Education Problem

- Number of children identified as LD in special education has increased dramatically since 1975.
- 80-90% of children identified as LD are impaired in reading.
- Many children in special education may be instructional casualties because they did not get adequate instruction prior to identification.

Clay’s Theory of Learning Disability

- Learning disabled and low-achieving readers are indistinguishable groups.
- Inappropriate reading instruction might lead children to practice inappropriate processing behaviors, which become very resistant to intervention.
- These confused readers are 'learning to be learning disabled with increasing severity as long as the inappropriate responding continues'.

2) The Poverty Problem

- Poverty is the single biggest predictor for a child’s failure in school.
- Poor children may know only one or two letters when entering kindergarten while middle-class children will know all 26.
- A study showed that vocabulary of first-graders from high-income families was double that of those from low-income homes.
- The average middle-class child has been exposed to as many as 1,700 hours of one-on-one reading while the average low-income child has been exposed to 25 hours.

3) The Curriculum Problem

- Too often, the expectation is that low-performing students need a different curriculum than average and high-performing students.
- Therefore, they receive fewer opportunities to engage in challenging materials that build their background knowledge and motivation to learn.
- And, as a result, they may never catch up with their grade-level peers.

4) The Silo Problem

- Schools are set up for teachers to work alone in their classrooms.
- Too many supplemental programs are based on remediation models and may not align with classroom instruction.
- Curriculum may be delivered in isolated components.

5) The Data Problem

- Using data in simplistic ways (single measure) that can ignore complex issues in learning.
- Engaging in ‘random acts of improvement’ in contrast to systematic and focused plans for improvement.
- Treating symptoms (outcomes) instead of addressing the root cause.
SOLUTION 1
Provide high quality differentiated core instruction as the first line of defense against illiteracy.

Evidence-Based Practices

<table>
<thead>
<tr>
<th>Teaching Practice</th>
<th>Lower Scores</th>
<th>Higher Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of Materials</td>
<td>Primarily basal readers</td>
<td>Primarily trade books</td>
</tr>
<tr>
<td>Instructional Approaches</td>
<td>Structured sub-skills</td>
<td>Integrative language</td>
</tr>
<tr>
<td>Reading &amp; Writing Relationships</td>
<td>Little/no emphasis</td>
<td>Heavy emphasis</td>
</tr>
<tr>
<td>Literature-Based Reading</td>
<td>Little/no Emphasis</td>
<td>Heavy emphasis</td>
</tr>
<tr>
<td>Writing About Reading</td>
<td>Less than weekly</td>
<td>Almost early day</td>
</tr>
<tr>
<td>Using Reading Kits to Teach Reading</td>
<td>At least once a week</td>
<td>Never or rarely</td>
</tr>
</tbody>
</table>

Source: 1992 NAEP Trial State Assessment

Teaching Across the Curriculum

Language Studies – Differentiated Framework (30-40 minutes)
- Whole Group Interactive Read Aloud (Listening Comprehension; Background Knowledge)
- Units of Study (Genre, Text, Content)
- Text Structure; Story Grammar, Language Functions; Vocabulary Development

Reading Workshop – Differentiated Framework (90 minutes)
- Whole Group Mini-Lesson
- Small Group Instruction: Guided Reading, Assisted Writing, Literature Discussion
- Teacher Conferences (individual)
- Independent and Collaborative Work
- Whole Group Debriefing

Writing Workshop – Differentiated Framework (40 minutes)
- Whole Group Writing Mini-Lesson
- Teacher Conferences (Small Group or Individual)
- Whole Group Debriefing

Content Workshop – Differentiated Framework (45 minutes)
- Whole Group Content Lesson
- Collaborative Research Projects
- Whole Group Debriefing
SOLUTION 2
Implement comprehensive layered interventions to meet the unique needs of struggling readers.

Premises for Early Intervention
- Intervene as early as possible before confusions become habituated and unthinking reactions
- Provide short-term services that focus on helping young readers develop strategies for efficient problem solving in continuous texts
- Make data-driven decisions about the intensity of interventions, duration, and if follow-up support is needed.

Portfolio of Interventions
- Reading Recovery (Grade 1)
- Assisted Writing Intervention
- Interactive Writing Intervention (Grades K-1)
- Writing Aloud Intervention (Grades 2-6)
- Writing Process Intervention (Grades 1-6, push-in during writing workshop)
- Guided Reading Plus Intervention (Grades 1-5)
- Comprehension Focus Group Intervention (Grades 2-8)
- Literary Studies
- Content Studies
- Targeted Interventions (Grades K-6)
- Oral Language
- Vocabulary and/or Word Study

Characteristics of CIM Interventions
- Predictable framework delivered in 30 minutes phases
- Evidence-based practices that reflect a high quality classroom
- Acceleration versus remediation
- Reading and writing connections
- Metacognition and strategy development
- Explicit teaching, clear modeling, guided practice
- Authentic texts to promote motivation and sustained attention
- Built-in assessment (dynamic) with progress monitoring intervals for checking on growth in relation to average students

Diagnostic Decision-Making Design for Ensuring Reading Success by End of Third Grade
A Flowchart for Identifying Students At-Risk of Reading Failure and Providing Interventions to Meet Individual Needs
Benefits of Congruent Programs

- Aligned instruction creates a scaffold that enables struggling readers to transfer their knowledge, skills, and strategies across multiple contexts. This structure provides students with opportunities for consistent, repetitive practice that leads to automaticity and deeper understandings of content.

Consequences of Incongruent Programs

Poor readers become even more confused, haphazard, frustrated, and dependent when programs are not aligned. These feelings can lead to learned helplessness.

Incongruent programs may a root cause of student failure.
SOLUTION 4
Provide opportunities for teachers to collaborate on ways to help struggling learners.

Teacher Collaboration
Schoolwide collaborative professional learning is a critical factor in distinguishing high-performing, high-poverty schools from high-poverty, lower-performing schools.

Teachers Working Together
RtI Collaboration Meeting with First Grade Teacher, ELL Teacher, Intervention Teacher, and Literacy Coach.

SOLUTION 5
Analyze and Utilize Data for Continuous Improvement

Types of Data in Planning for and Sustaining Systemic Improvement
- Demographic
- Attendance
- Drop-out/graduation rates
- Perceptions (teachers, students, parents)
- Student Achievement (multiple assessments)
- Retentions
- Referrals to Special Education
- School Climate/Instructional Practices

Use Formative Data to Monitor Student Responsiveness to Intervention
20 YEARS OF DEVELOPMENT AND RESEARCH

Research has been used to continually improve the CIM design.

UALR Research on CIM
- Dorn, 1992
- Dorn, 1993
- Paige, 1997
- Harrison, 2002
- James, 2005
- Rahi, 2005
- Dorn, 2007
- Jamison, 2008
- Wyatt, 2008
- Behrend & Perry, 2012
- Doore & Dorn, 2013

Key Findings From Studies
- Reading Recovery and small group interventions are complimentary interventions for promoting third grade reading proficiency.
- Low performing Kindergarten children who received assisted writing intervention performed at average levels by the end of the year.
- Non-discontinued RR children who received small group intervention in second grade achieved reading proficiency by the end of the school year.
- A significant number of special education students who participated in CIM scored at proficiency on state reading assessments.

A Large Scale Study of CIM
James, K. (2005). The Complimentary Effects of Comprehensive Intervention Model on Literacy Gains of First Grade Readers

Sample
- 14,121 first grade students
- 6 states:
  - Arkansas
  - Alaska
  - Missouri
  - Tennessee
  - Oklahoma
  - Louisiana
- Students taught by Reading Recovery teachers

Purpose of the Study
- To examine the effectiveness of a comprehensive intervention model for meeting the needs of first grade struggling readers
- Reading Recovery
- Small Group Intervention
Findings

- Students served in “Reading Recovery only” had a mean gain of 16.33 text levels.
- Students served in “Small Group only” had a mean gain of 16.24 text levels.

Findings

- Of the 6421 students served in small group, 70% made accelerated progress, while 30% required Reading Recovery.
- The RR students who received small group intervention required fewer RR lessons to reach grade level proficiency.

Conclusions

- Both Reading Recovery and Small Group students made significant gains in literacy achievement.
- A Comprehensive Intervention Model enables teachers to meet the needs of diverse learners.

Another Study of the CIM

Harrison, L. (2002). A Study of the Complimentary Effects of RR and SG Interventions

Sample and Groups

- 30 RR teachers in 22 schools
  - Previously trained in CIM
- 307 first grade struggling readers
- Four groups of low performing students
  - RR only
  - SG only
  - RR/SG
  - SC/RR

Findings

- Of the 80 students who received RR only, 79% were reading at grade level by the end of the intervention with a mean TRL of 15 (TLG gain 12.5)
- Of the 117 students who received SG only, 62% were reading at grade level by the end of the intervention with a mean TRL of 19.
- Of the 65 students who had SG prior to RR, 60% discontinued from RR with a mean TRL 16.
- Of the 42 students who received RR prior to RR, 38% discontinued from RR with a mean TRL 13 (at end of RR) then 18 (at end of SG).
As an RTI process, the Comprehensive Intervention Model meets the needs of all students, including Non-Discontinued RR students who participate in SG following RR.

**Implications for Schools**

- Reading Recovery works.
- Small Group intervention works.
- A comprehensive intervention model works even better:
  - Meets needs of diverse learners over grades
  - Serves more children at risk of reading failure
  - Includes varying degrees of intensity and duration
  - Aligns with classroom instruction
  - Provides targeted support in greatest areas of need

**2012-2013 National Study on the CIM**

- University of Arkansas at Little Rock
- University of Maine
- National Louis University
- University of Kentucky
- University of Northern Iowa
- Georgia State University

**Participants**

- 47 CIM teachers in 24 Schools from 9 states (AR, IL, IO, KY, ME, MO, TN, WA, WI)
- 326 CIM K-2 students
- 400 random sample of K-2 non-CIM students

**Assessments**

- Both CIM and RS children were assessed pre and post with the Slosson Oral Reading Test and the Keystone Assessment Books.
- Assessments were completed in two testing windows
  - January 21 – February 11
  - May 6 – June 7 (to allow for differences in end of year school calendars)
- Weekly data were entered into the CIMME system as part of RtI process.
A CLOSER LOOK AT THE GUIDED READING PLUS INTERVENTION

Perry, S. & Behrend, J. 2012. Writing About Reading for Accelerating Reading Gains
Sample

- 5 Reading Recovery teachers
- Previously trained in GRP
- Proven record of success with struggling readers
- 39 1st grade students
- Selected based on OS scores and writing samples
- Identified as the next group of students who may qualify for Reading Recovery

Procedures

- Trained CIM teachers attended 3-day summer institute, met monthly for clinical training, and received one site visit from CIM TL.
- Teachers provided intervention for 30 minutes daily from September to December.
- The SG students participated in 2 weeks of Interactive Writing Intervention, GRP during the remaining term.

Findings from GRP Intervention

- Of the total number of 37 students
  - 27 reached grade-level reading level by December
  - 7 were placed in RR in January and 6 successfully discontinued at end of year
  - 3 were placed in SE for specific learning disability

TRL Gains Over Intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Pre TLR</th>
<th>Mid TRL</th>
<th>End TRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR</td>
<td>7</td>
<td>1.4</td>
<td>6</td>
<td>17.9</td>
</tr>
<tr>
<td>GRP</td>
<td>27</td>
<td>2.0</td>
<td>10</td>
<td>18.7</td>
</tr>
<tr>
<td>SE Referred</td>
<td>3</td>
<td>0.7</td>
<td>4</td>
<td>3.7</td>
</tr>
</tbody>
</table>

WV Gains Over Intervention

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Pre WV</th>
<th>End TRL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR</td>
<td>7</td>
<td>9</td>
<td>55.8</td>
</tr>
<tr>
<td>GRP</td>
<td>27</td>
<td>12</td>
<td>55.7</td>
</tr>
<tr>
<td>SE Referred</td>
<td>3</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>