Specialized Instruction for Students with Disabilities
Literacy and Mathematics

This document describes the purpose for and principles of specialized literacy and mathematics instruction for students with Individual Education Plans. Intended Audience: K-12 Learning Specialists, School and District Leadership.

Student Support Services
Mission

To engage and inspire all students to innovate, achieve, and succeed in a safe and supportive environment by ensuring high quality instruction in every classroom, every day.

Vision

Adams 12 Five Star Schools Student Support Instructional Services exist so students obtain specialized instruction needed to learn skills and strategies to work independently to access universal content.

Core Beliefs

- All students share common characteristics, yet some characteristics are deeply individual. There is as much distinction between students with disabilities as there is with any other group.
- Like their peers, students with disabilities respond to high quality instruction.
- Specialized instruction for students with disabilities supplements, not supplants, universal instruction.
- The gradual release of responsibility cultivates confident and independent learners and thinkers through the intentional use of models, scaffolds, guided practice, student collaboration and independent practice.
- The analysis of comprehensive data serves as the foundation for determining students’ unique instructional programs.

Purpose of Specialized Instruction for Literacy and Mathematics

The purpose of specialized instruction in literacy and mathematics is to teach students skills and strategies to work independently to access content. Instruction includes:

- Implementing researched-based explicit instruction in literacy and/or mathematics
- Collaborating with general education teachers to plan and implement lessons and monitor progress for students with disabilities
- Identifying and implementing accommodations and modifications to assure meaningful access of general education curriculum
- Teaching strategies that increase self-determination
ASSESSMENTS TO INFORM INSTRUCTION

- Assessments are ongoing, flexible and adjusted to students' unique needs.
- Students with disabilities complete classroom assessments (with accommodations as necessary and allowed) such as TCAP/MAP/Curriculum Assessments.
- Students who perform below grade level expectations require additional assessment to guide specialized instruction including but not limited to:
  - Oral Reading Fluency on grade level passages
  - Traditional Comprehension Checks (Retell/BRI/DRA)
  - Comprehension Conversations which Reveal Understanding
  - Running Records
  - High Frequency Words
  - Phonics/Phonemic Awareness
  - Informal Number Sense screeners
  - Add+Vantage Math Recovery Assessment
  - Writing Continuums
- Progress monitoring informs the specialized instruction, measures student growth and determines the effectiveness of the intervention.

CONTINUUM OF INSTRUCTION

Least Restrictive

- Instruction in the general education classroom with consultative support from special education provider
- Collaborative teaching with general education and special education teachers inside the general education classroom (1:1 or small group in the classroom during classroom instruction)
- Collaboration between general education and special education teachers outside the general education classroom (1:1 or small group outside the classroom during classroom instruction)
- Supplemental class (specialized instruction in a small group outside the classroom which supplements classroom instruction)
- Supplanted class (specialized instruction with modified curriculum in a small group outside the classroom which replaces classroom instruction)

Most Restrictive
Specialized Curriculum & Instruction

Students who need specialized instruction in literacy and math participate in universal instruction in the general education setting. It is the responsibility of special education teams to ensure that all students are educated in the Least Restrictive Environment (LRE). For the majority of students, specialized instruction is supplemental or in addition to general education classroom instruction. However, in rare circumstances, teams may consider specialized instruction to temporarily supplant or replace classroom instruction for particular students. Teams should continually monitor students’ progress in supplanted classes and return students to general education classroom as rapidly as possible.

Literacy Instruction

“These students often have deficits in basic reading skills that require remediation, but they also need to develop expertise through extensive reading practice.”
-Scientific Learning Corporation, 2008

When planning specialized instruction, special education providers must increase the amount of time that students are engaged in self-selected reading with wide access to interesting and engaging texts. It is imperative that struggling readers spend additional time in text above and beyond the time spent by proficient readers. Exposure to print must be increased by hundreds of thousands of words each year. For each additional ten minutes a day of time spent reading books, word exposure increases by 700,000 words a year (The Scientific Learning Press, 2008). Students need more sustained, supported, independent engagement in literacy activities—reading, writing, speaking, and listening—than proficient readers to develop language and literacy skills across multiple contexts.

Elementary

Students receive literacy instruction from classroom teachers and participate in specialized instruction from special education providers.* Specialized instruction incorporates a balanced approach using:

- Word work/phonics
- Guided reading of instructional level text
- Rereading
- Practice with reading independent level text
- Comprehension conversations
- Writing about reading
*A limited number of students (approximately 10 percent of those with disabilities) may need more intensive instruction to meet their specific needs. Although these students may require a larger portion of their literacy instruction from special education providers, they still receive guided reading instruction at their instructional levels from the classroom teacher.

**Principles of Effective Specialized Instruction for Elementary Literacy**

- Specialized instruction is scheduled during classroom work time (*not during direct instruction*).
- Group sizes are based on the needs of students. *(Fountas and Pinnell recommend group sizes of 1:3 or 1:4 to maximize student growth)*
- Students are grouped by instructional needs and levels.
- Specialized instruction is scheduled for a minimum of four to five times per week and is based on student need.
- Specialized instruction includes access to and use of high quality independent and instructional leveled text.
- Frequency and duration of specialized instruction is based on progress-monitoring data and student needs.
- Analysis of weekly progress monitoring data determines effectiveness of specialized instruction, which adjusts to reflect student needs.
- Texts at students’ independent/instructional levels are sent home daily for practice.
- Responsibility for strategy application must gradually be transferred to students.

**Secondary**

*Students receive Language Arts/English instruction from classroom teachers and participate in specialized literacy instruction from special education providers during electives or other appropriate times, as determined by school teams.*

**Principles of Effective Specialized Instruction for Secondary Literacy**

- Group sizes are based on the needs of students (1:12 or lower).
- Students are grouped by instructional needs and levels.
- Independent or guided reading of student-selected instructional level text takes place at a minimum of 20 minutes per class period.
- Independent or guided writing of student-selected topics takes place at a minimum of 10 minutes per class period.
- Specialized instruction includes access to and use of high quality independent and instructional leveled text.
- Frequency and duration of specialized instruction is based on progress-monitoring data and student needs.
- Frequency, administration and analysis of progress monitoring data correspond to students’ instructional levels.
- Responsibility for strategy application is gradually transferred to students.
• Student-Centered Specialized Literacy instruction includes:
  o Explicit vocabulary instruction
  o Explicit instruction of comprehension strategies including but not limited to:
    ▪ predicting
    ▪ clarifying
    ▪ comparing and contrasting
    ▪ connecting to prior experiences
    ▪ inferencing
    ▪ questioning the text
    ▪ recognizing the author’s purpose
    ▪ seeing causal relationships
    ▪ summarizing
    ▪ visualizing
  o Opportunities for repeated readings or other strategies to increase reading fluency
  o Written components including but not limited to:
    ▪ Annotations
    ▪ Reading logs
    ▪ Reading reflections
    ▪ Written summaries
    ▪ Graphic organizers
    ▪ Analysis
    ▪ Evaluative responses

• Students requiring word recognition instruction must also learn:
  o high frequency words
  o sounds and letters
  o common syllables
  o rime patterns
  o chunking
  o prefixes, suffixes and root words

• Written Language Specialized Instruction includes daily opportunities to write on students’ choice of topics. Genre-specific products are taught by classroom teachers, and special education providers teach, reinforce and provide opportunities to practice a continuous writing process which includes:
  o Prewriting
  o Drafting
  o Revising
  o Editing
  o Publishing
**Specialized Mathematics Instruction**

Specialized math instruction focuses on building computational skills and fluency, problem solving skills and conceptual understanding through systematic, explicit and research-based instructional practices. Formative assessments, such as the Add+Vantage Math Recovery assessment, are used to develop individual targets for students and identify students’ strengths and needs. Assessment results guide lesson planning.

**Principles of Effective Math Specialized Instruction**

- Teachers use explicit instruction to model steps in the process of reaching a solution, and think aloud about the strategies used during problem solving.
- Students are given many opportunities to solve problems using the strategies taught, and receive corrective feedback from the teacher.
- Students verbalize their decisions and solutions to math problems in order to practice strategies and solidify skills which facilitates self-regulation.
- Visual representations or graphic depictions of math problems are used by teachers and students to illustrate solutions for math problems.
- Students receive, at a minimum, 20 minutes per day of additional instruction beyond the core mathematics class.
- Well-planned lessons with purposefully selected examples that cover a *range* of solutions presented in a particular *sequence*. Students may need to be taught skills first with concrete examples, then with pictorial representations and finally in an abstract (or symbolic) manner. Sequenced examples are beneficial for initial learning of new skills, and a range of examples supports transfer of new learning to new problem situations.
- Teachers expose students to multiple problem solving strategies which includes talking through problems with students and reflecting on students’ attempts to solve problems. Students may be guided in the selection of a strategy.
- Use of formative assessment data and feedback on students’ math performance to guide teachers in what to teach (learning targets), when to introduce the next skill and how to group students.
- Students are given time to work independently and in cooperative learning groups.
- Mathematics vocabulary instruction: problem solving in mathematics requires students to use and understand math language; therefore, vocabulary must be explicitly taught and directly connected to meaningful context.
Elementary Mathematics

- Group sizes are based on the needs of students (1:5 or lower)
- The majority of students receiving specialized instruction should participate in classroom instruction during Part I of the Everyday Math lessons.
- Specialized instruction incorporates developing computational skills and fluency, problem solving skills and conceptual understanding daily, with the majority (2/3) of the time spent on application of number sense in problem-solving situations.
- Special education providers may access the Everyday Math Differentiation Handbook and Readiness activities to develop lessons to supplement general education classroom objectives.

Secondary Mathematics

- Secondary students may participate in supplanted mathematics instruction for math credit temporarily if assessments indicate they are unable to receive reasonable benefits from general education instruction. These students require short-term modified curriculum in order to close the gap. Students return to the general education setting once assessment indicates they are able to receive reasonable benefit from classroom instruction.
- Group sizes are based on the needs of students (1:12 or lower)
References