

**Response to Intervention
Handbook
K-6**

Bloomfield Public Schools

**Office of Instruction and Testing
2011-2012**

Response to Intervention Handbook

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Revised February 2012

Purpose

Response to Intervention (RTI) is a three-tiered intervention process focused on identifying and assisting struggling students in an effort to make them successful in the classroom. This process is based on the following principles:

- Teach all children effectively
- Intervene early
- Use a multi-tier model of service delivery
- Adopt a problem-solving methodology

Based on these principles, the RTI model calls for implementation of the following practices:

District-wide Screening

Why? Screening all children in a school helps identify students who may need extra help.

Progress Monitoring

Why? Monitoring the child's progress examine what changes, if any, need to be made in the instruction.

Tiered Instruction

Why? Tiered models of service delivery are used to efficiently differentiate instruction for all students.

High-Quality, Research-Based Instruction and Interventions

Why? This ensures that the materials and instruction methods are known to work well.

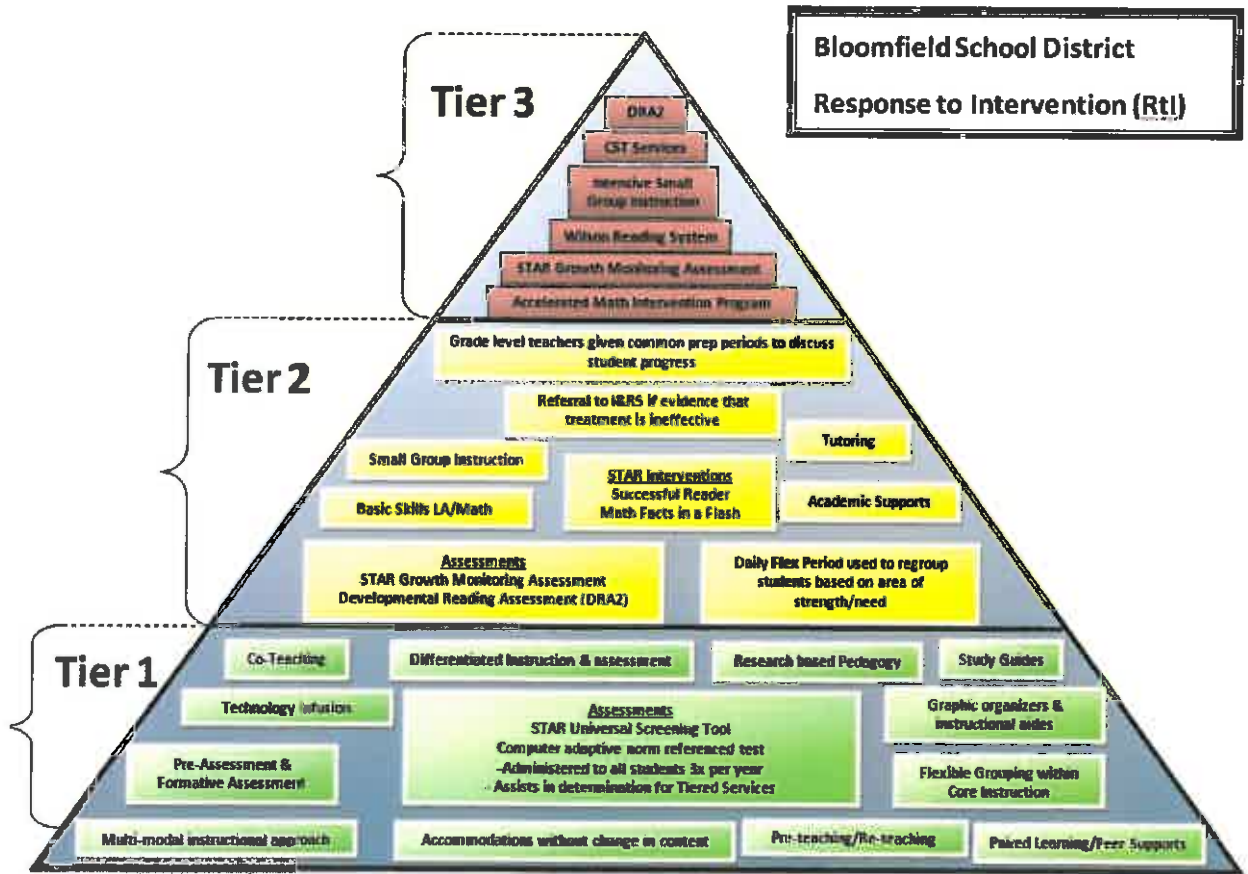
Collaboration Among School Staff Members

Why? It allows for an array of input from various perspectives and backgrounds to provide a more well-rounded approach to assisting a struggling student.

Fidelity of Implementation

Why? This is to make sure that instruction or materials are being used in the way they are supposed to be used, because that is when they are most effective.

The Tiers of RtI



District Implementation Model

Bloomfield Public Schools' Response to Intervention (RTI) -through a collaborative decision making process was put in place to provide for the individual needs of our diverse learners. Additionally the practice of using high-quality research -based instruction and interventions through the use of Renaissance Learning products and best practices was established.

For the 2011-2012 school year, this initiative will be implemented as defined below:

District-wide Screening

- Response to Intervention (RtI) begins with the analysis of our universal screening (STAR) results. Through this assessment we identify all students as falling under one of four categories, which are color coded in the STAR reports as follows: At/Above Grade Level (green), On Watch (blue), Needing Intervention (yellow), Needing Urgent Intervention (red).
- Students who score in Intervention or Urgent Intervention levels of the STAR Enterprise screeners will automatically be placed in Tier 2 and Tier 3 interventions, respectively, during Flex.
- Students who score AT/ABOVE grade level or on Watch will be engaged in leveled activities during Flex

Progress Monitoring

This will inform teachers on the effectiveness of our interventions for those students identified as needing Tier 2 or Tier 3 supports. Monitoring will vary based on the intervention and grade level. Teachers will monitor progress on the week of their 6th session and review progress twice per marking period.

Tiered Instruction & High-Quality, Research-Based Instruction and Interventions

Tier 1: Universal Interventions, such as Accelerated Reader (AR). Also, see pages 11-20 of this handbook for additional interventions.

Tier 2: Targeted small group interventions, such as Accelerated Math for Interventions (AMI).

Tier 3: Same as Tier 2, but more intensive and in smaller groups.

Collaboration Among School Staff Members

Intervention Teams for students placed in Tiers 2 and 3 will discuss appropriate interventions, analyze results, evaluate progress and adjust Intervention Plans as needed. This process will include the I&RS team at intervals.

Fidelity of Implementation

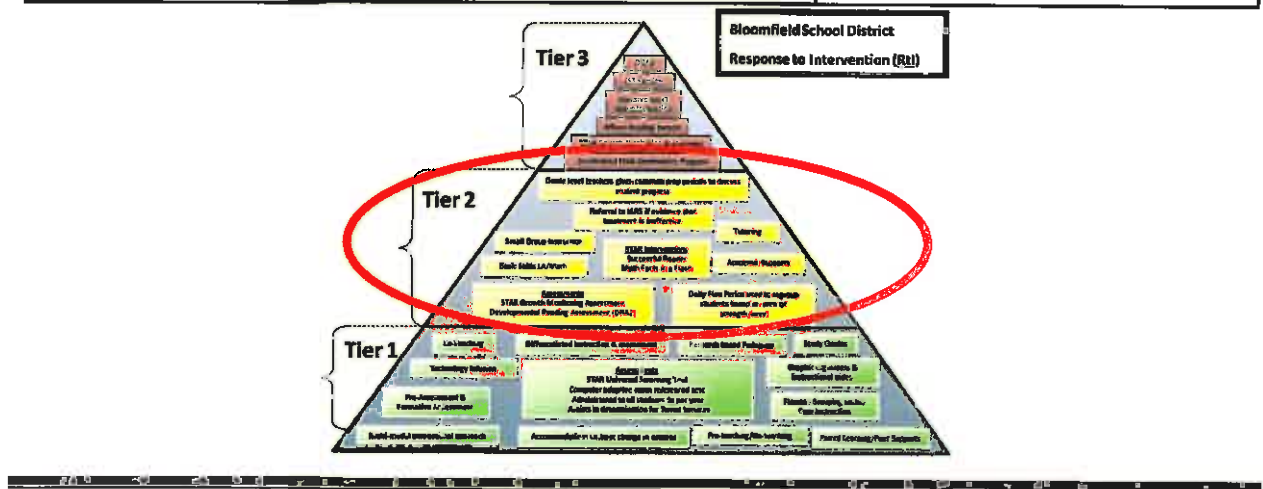
The use of STAR to monitor implementation and progress, and the coordination of Intervention Plans with all staff involved.

Tier 2 Assistance Procedures:

Targeted Small-Group Interventions

- Student scores in the Intervention (yellow) ranges of scores on the STAR screening.
- An Intervention Specialists Team meeting will be held to dialogue and determine interventions that are supplemental to the regular classroom instruction
- Intervention strategies discussed will be implemented
- An Intervention Specialists Team follow-up meeting will be held to review results and determine next steps. If student is successful, issue is solved; if not successful, refer to Tier 3.

Focus	For students identified with marked difficulties, and who have not responded to Tier 1 efforts
Program	Programs, strategies, and procedures designed and employed to supplement, enhance, and support Tier 1
Grouping	Homogeneous small group instruction (1:9 maximum)
Time	38 mins. per session; 2 X per 6-day cycle in small group in addition to the pre-allotted core instructional time
Assessment *	Progress monitoring progress on the week of their 6 th session (every 3 weeks) to ensure adequate progress and learning
Interventionist	Personnel determined by the school (e.g., an intervention specialist, a classroom teacher, a specialized teacher)
Setting	Appropriate setting designated by the school; may be within or outside of the classroom.

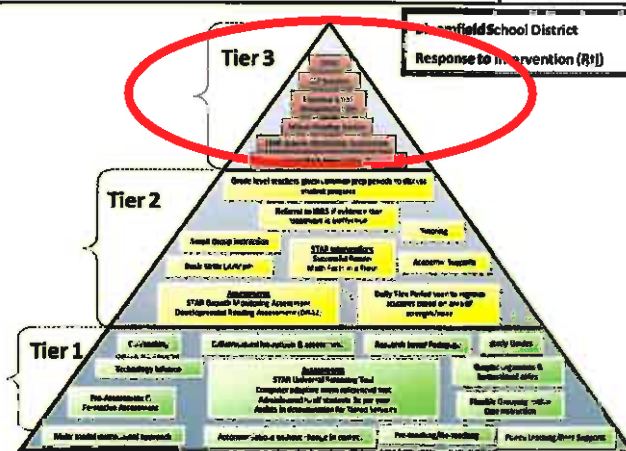


Tier 3 Assistance Procedures:

Intensive-Sustained Individual Interventions

- An Intervention Specialists Team meeting will be held to dialogue interventions that are intensive and individualized, this should include I&RS team as well.
- Intervention strategies discussed will be implemented
- A Team follow-up meeting will be held to review results and determine next steps. If student is successful, issue is solved; if not successful; refer to Section 504, Special Education, or other district options.

Focus	For students identified with marked difficulties, and who have not responded to Tier I or Tier II efforts
Program	Sustained, intensive scientifically based interventions
Grouping	Homogeneous small group instruction (1:6 maximum)
Time	38 mins. per day; 3X per 6-day cycle in small group in addition to the pre-allotted core instructional time
Assessment *	Progress monitoring progress on the week of their 6 th session (every 2 weeks) to ensure adequate progress and learning
*Note: Progress monitoring must be staggered. No Flex period should be entirely for testing, in order to maximize instructional time.	
Interventionist	Personnel determined by the school (e.g., an intervention specialist, a classroom teacher, a specialized teacher)
Setting	Appropriate setting designated by the school; may be within or outside of the classroom.



Response to Intervention (RtI) Assessments

CLARIFICATION on use of ACCOMMODATIONS

For students with IEPs or 504 Plans

District-Wide Screening Assessment (STAR):

- ❖ **Who:** **ALL STUDENTS** except students participating in the Alternative Proficiency Assessment (APA).
- ❖ **When:** **3 times per year** within specific designated weeks.
- ❖ **District Procedures:** Screening Assessments conducted with **NO ACCOMMODATIONS** for any students.
 - **Notes:** *IEP/504 accommodations do not apply for the screening...no extra time, no separate setting (unless done for all), no calculators, no test questions read, no math manipulatives, no prompting*
- ❖ **Rationale:** after speaking with the STAR psychometric analyst, the sample group used to norm the **SCREENING** assessment was established with **NO ACCOMMODATIONS**, therefore, all student norm referenced data (percentile, grade level equivalency, etc.) will have integrity if we do the same. Establishing performance as compared to the norm-referenced group will enable staff to determine areas of weakness. How we intervene with these areas of weakness may be in the form of *either* building the skill from the ground up *or* granting students with disabilities an accommodation to account for their weakness through the IEP process or 504 plan.
- ❖ **Effects:** Students that typically get accommodations on state and local assessments may have scores that place them in lower than expected percentile groupings as compared to the norm sampling. This information may conflict with how they are actually functioning in class, on classroom assessments and on standardized assessments (NJ ASK). Teachers, parents and administrators must be aware that a student in this situation (low percentile but average/high performance in class or other assessments) may not need additional interventions because the accommodations **are working** as evidenced by other data samples (NJ ASK scores, District Benchmark assessments, chapter tests, etc.)

Progress Monitoring Assessment (STAR)

- ❖ **Who:** **Students** identified for **Tier 2 or Tier 3** intervention.
- ❖ **When:** **Every 2 weeks** for **Tier 3 students** following initial date of intervention.
Every 3 weeks for **Tier 2 students** following initial date of intervention.
- ❖ **District Procedures:** These assessments should be done **WITH accommodations.**
 - **Note:** **NO CALCULATORS** shall be used for **ANY STAR ASSESSMENT.**
 - Accommodations will be provided by the Special Services team on scheduled sessions with available staff in one or both assessments. Common accommodations may be:
 - Extended time
 - Test questions answers entered by teacher
 - Use of math manipulatives
 - Separate location
 - Small group setting
 - Read Aloud accommodations for STAR Math may be provided when necessary. Special Education teachers will provide a list of qualifying students.
- ❖ **Rationale:** The sample group used to establish norms for the Growth Monitoring is a different sampling group than used for the STAR Screening. The Growth Monitoring norms have been established with a small percentage of students that took the assessment with accommodations in other districts. Further, all Progress Monitoring Reports are measurements against the individual's past performance and do not reference the norm percentiles within the reports showing progress (or lack thereof).
- ❖ **Effects:** Allowing accommodations on the Growth Monitoring *may* show a 'spike' in score as compared to the STAR Screening Assessment. This would indicate that the accommodations are working to appropriately "level the playing field" for the student's disability.
- ❖ **Notes:** **IMPORTANT** - *when using the Progress Monitoring Report, begin monitoring progress with the first assessment that was given WITH ACCOMMODATIONS. Progress Monitoring Assessments can only be compared to subsequent Progress Monitoring Assessment scores for growth (apples to apples comparison).*

STAR Math Enterprise: Read Aloud Accommodation and Extended Time

The Issue

Renaissance Learning has received requests about reading STAR Math Enterprise aloud and providing extended time when administering STAR Math Enterprise. School district personnel want to know whether these practices are permissible and if there is evidence of impact on validity.

General Conclusion

The general recommendation for STAR Math Enterprise is to allow read aloud and extended time for students who need it, based on professional judgment. We make this recommendation based on the fact that there is no evidence indicating that this practice invalidates the STAR Math Enterprise scores.

Guidelines for providing reading support and extended time in STAR Math Enterprise

1. Examiners may read to any students who need help in decoding STAR Math test questions.
2. While examiners may read a word aloud, they may not define or explain that word.
3. Students may not use calculators.
4. Examiners should always make a note on the student's and the school records that read aloud and/or extended time were provided.

Is it ok to help students with specific words in STAR Math Enterprise, even without an IEP?

Yes, and examiner may read a specific word aloud, but may not define it. For example, the examiner could say, "triangle," but could not point to a triangle within a STAR Math Enterprise item or say "that's a shape with three sides."

Does extending testing time impact STAR Math Enterprise scores?

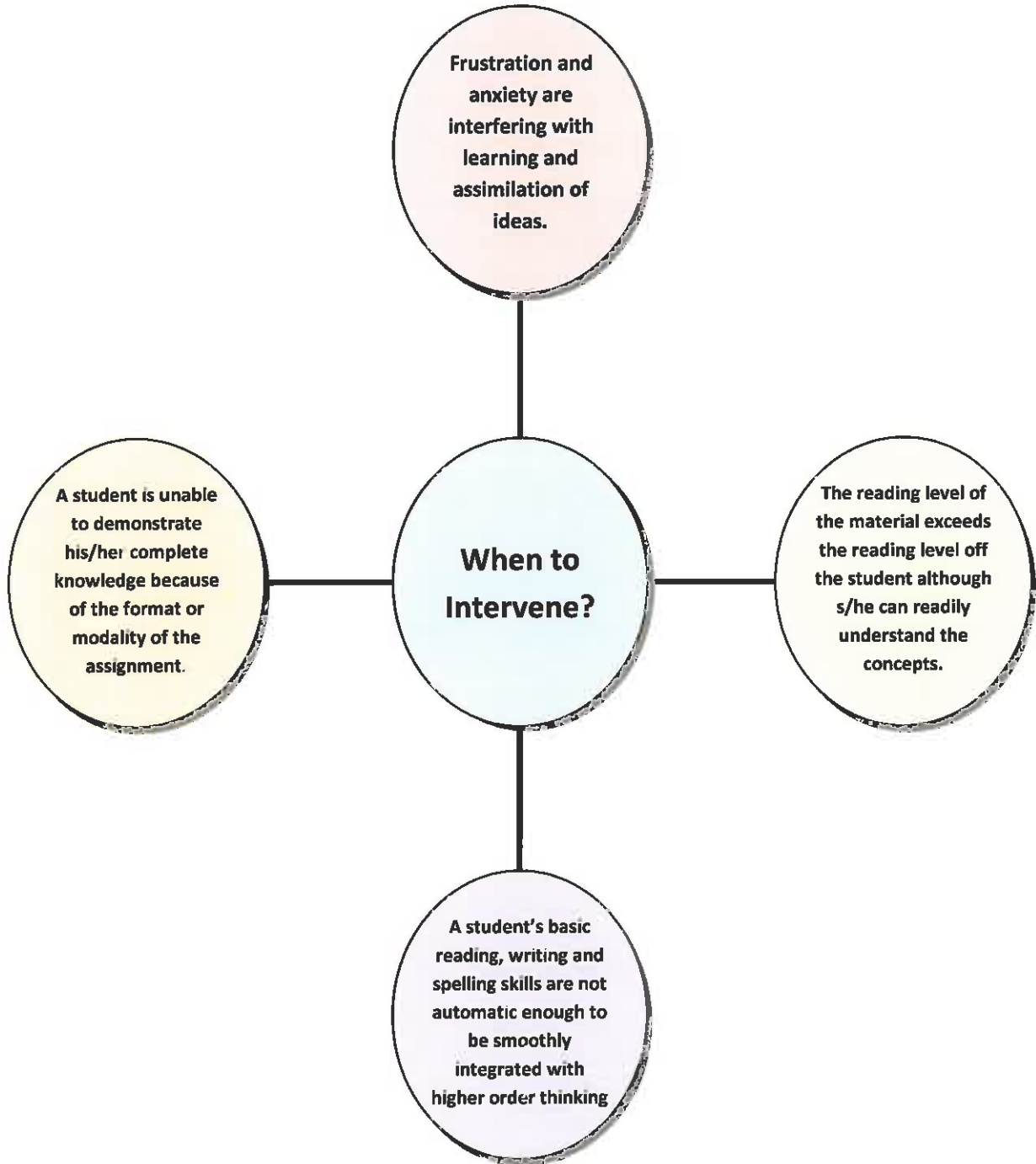
No, extended time does not invalidate the results. The psychometric foundation of the STAR Enterprise tests is Item Response Theory, which assumes that a student's performance on a test question is solely a function of what the student knows and can do and the question's calibrated difficulty- not how fast they can do it. Therefore, it's assumed a student has ample time to answer every question.

Does read aloud impact STAR Math Enterprise scores?

There is no evidence that read aloud has an adverse effect on the technical adequacy of STAR Math Enterprise or other assessments. At the same time, reading a test aloud technically constitutes a non-standard administration. We advise users that strictly speaking, the norms may not apply.

The scaled scores are interpretable the same way, whether or not the test was read aloud. The norm-referenced scores are less clearly unaffected.

When to Intervene?



**Bloomfield Public Schools
STANDARD READING PROTOCOL K-6**

GRADE	TIER I: PRIMARY Time	PROGRAM OPTIONS	TIER II: STRATEGIC Time & Group Size	PROGRAM OPTIONS	TIER III: INTENSIVE Time and Group Size	PROGRAM OPTIONS
K	60 minutes daily	Treasures Foundations	Add 2 sessions per rotation of 38 minutes each Large group, typically in the classroom	*Foundations Double Dose *STAR Early Literacy Lessons *Triumphs	- Add 3 sessions per rotation of 38 minutes each	*Foundations Double Dose *STAR Early Literacy Lessons *Triumphs
1	90 minutes daily	Treasures Foundations	Add 2 sessions per rotation of 38 minutes each Small group ~ 9 or less students	*Foundations Double Dose *AR *STAR Early Literacy Lessons *Triumphs	Increase to 3 sessions per rotation of 38 minutes each Smaller group – 6 or less students	*Foundations Double Dose *AR *STAR Early Literacy Lessons *Triumphs
2	90 minutes daily	Treasures Foundations AR	Add 2 sessions per rotation of 38 minutes each Small group – 9 or less students	*Foundations Double Dose *AR *STAR Early Literacy Lessons *Triumphs	Increase to 3 sessions per rotation of 38 minutes each Smaller group – 6 or less students	*AR *STAR Early Literacy Lessons *Triumphs
3	90 minutes daily	Treasures Foundations AR	Add 2 sessions per rotation of 38 minutes each Small group – 9 or less students	*AR *STAR Early Literacy Lessons *Triumphs	Increase to 3 sessions per rotation of 38 minutes each Smaller group – 6 or less students	*AR *STAR Early Literacy Lessons *Triumphs

Bloomfield Public Schools
STANDARD READING PROTOCOL K-6

GRADE	TIER I: PRIMARY Time	PROGRAM OPTIONS	TIER II: STRATEGIC Time & Group Size	PROGRAM OPTIONS	TIER III: INTENSIVE Time and Group Size	PROGRAM OPTIONS
4	90 minutes daily	Treasures Fundations AR	Add 2 sessions per rotation of 38 minutes each Small group – 9 or less students	*AR *STAR Early Literacy Lessons *Triumphs	Increase to 3 sessions per rotation of 38 minutes each Smaller group – 6 or less students	*AR *STAR Early Literacy Lessons *Triumphs
5	90 minutes daily	Treasures Fundations AR	Add 2 sessions per rotation of 38 minutes each Small group – 9 or less students	*AR *STAR Early Literacy Lessons *Triumphs	Increase to 3 sessions per rotation of 38 minutes each Smaller group – 6 or less students	*AR *STAR Early Literacy Lessons *Triumphs
6	90 minutes daily	Treasures Fundations AR	Add 2 sessions per rotation of 38 minutes each Small group – 9 or less students	*AR *STAR Early Literacy Lessons *Triumphs	Increase to 3 sessions per rotation of 38 minutes each Smaller group – 6 or less students	*AR *STAR Early Literacy Lessons *Triumphs

Bloomfield Public Schools
STANDARD MATH PROTOCOL K-6

Grade Level(s)	Universal Screening Tool	Core Program	Second Tier Interventions	Third Tier Interventions
1-2	<p>Grade 1: Progress Reports</p> <p>Grade 2: Progress Reports AND TerraNova</p>	<p>Adopted Curriculum: Agreed upon minutes of instruction per day.</p>	<p>Core plus: AMI – Two Sessions per cycle, 38 minutes each session</p>	<p>Core plus: AMI – Three Sessions per cycle, 38 minutes each session</p>
3-5	<p>Grade 3: Progress Reports AND TerraNova</p> <p>Grade 4-6: Progress Reports AND NJ ASK</p>			
<i>Who does this work?</i>	Available Grade Level Teachers	Classroom Teachers	Intervention Specialists	Intervention Specialists

Possible Tier 1 Interventions

Environment

- Preferential Seating
 - To minimize auditory distractions
 - To minimize visual distractions
 - To maximize auditory input for hearing difficulties
 - To maximize visual input for vision difficulties
 - To maintain focus and academic participation
 - To minimize off-task behavior
 - To address learning style needs
- Alter Physical Arrangement
 - Lighting
 - Temperature
 - Seating Arrangements
 - Muffle/baffle noisy equipment
- Define Space
 - Teach positive rules for personal space
- Allow for different groupings
- Provide a properly fitting desk

Pacing

- Extend time requirements
 - Oral response
 - Written response
 - Daily activities/assignments
 - Tests
- Allow breaks
- Vary activities
 - Intersperse written/oral
 - Intersperse passive/active
 - Intersperse listening! discussing
- Provide timelines (checklists, calendars)
- Assign tasks in workable 'chunks' or segments
- Provide repetition of key concepts
- Provide drill and practice
- Provide test/re-teach/retest

Materials

- Supplementary materials (texts, worksheets, tests)
 - Lower readability
 - ESL materials
 - Large print
 - More 'white space'
 - Highlighted
 - Color coded
 - Audio-tapes
- Manipulatives
- Study aids
- Study guides
- Typed teacher materials
- Peer reader

It is estimated that approximately 60% of all students learn best visually, or with a multisensory approach.

Highlighted Texts and Materials: Visual Aids

- Use markers to highlight important material in texts or handouts. This will help make the most important information clear to the student.
- Highlight key words or main ideas.
- Highlight graphs, maps, charts, boldface type, terms, important names, dates, places, vocabulary, and picture captions [Color code (red for names; green for dates; etc.)]
- Use markers to highlight overhead transparencies.
- Use colored chalk to differentiate activities
- Teach highlighting techniques. Provide exercise which allow students to work together in highlighting important information
- Write directions on handouts, overhead, or chalkboard and leave them for future reference.

- Use charts, posters, flashcards, sentence strips, and other visual aids to increase interest and meaning.
- Have students watch television shows or video tapes which reinforce important concepts.
- Have students make visual models of maps, charts, graphs and other items using play dough, clay, or other media.

Assignments

- Provide study sheet
- Provide skeleton outline that includes main ideas (student completes supporting details while listening in class or reading assignment)
- Extra time for completing assignments. Allow student to type assignment
- Reduce paper and pencil tasks
- Avoid penalizing for spelling errors
- Avoid penalizing for penmanship
- Allow student to sub-vocalize while reading
- Exemption from reading aloud in front of peers
- Lower difficulty level
- Task analysis of assignments
- List steps in process or activity so students know exactly what he is to do
- Emphasis on major points
- Opportunity to respond orally or dictate answers (to teacher, peer, tape recorder)
- Special projects in lieu of assignments

Shortened Assignments

Shortened assignments provide necessary practice while allowing the student to complete work in a reasonable time period without undue pressure and frustration.

Identify terminology, concepts, and skills that are most important and require that these items be completed first.

Reduce the number of items to be done at one time. Shorter assignments made more frequently provide the same amount of practice.

Cut a long worksheet (or test) into smaller segments and give the student one segment at a time. When one strip is completed, hand out the next.

Study-Sheets/Guides

- Provide students with review outlines to help them focus on the important elements of information which is to be learned.
 - List steps in math process or lab activity so the student knows exactly what to do.
 - Have student write his own study questions after lectures, discussions, and reading assignments.
- Teach students to recognize signal words in lectures and written material to guide studying. Examples: "most of all," "a key feature," "a major event," "above all," "remember that"

Instruction

- Shorten auditory/verbal instruction
- Provide visual aids (pictures, flash cards, maps, charts, photos, etc.)
- Provide auditory aids (cues, tapes, etc.)
- Provide an opportunity for student to write the instructions
- Provide an opportunity for student to verbalize the steps needed to complete task
- Provide adequate 'wait time' (extra time for oral response)
- Allow extra time for written response
- Provide modified reading level assignments
- Simplify vocabulary
- Use manipulatives
- Emphasize critical information
- Allow peer tutoring/paired working arrangements
- Allow oral exams, open book exams, open note exams, exams of reduced length

Note-taking Assistance

Provide skeleton outline (advance organizer) that includes main ideas.

Provide a copy of teacher or "reliable note-taker" notes.

Allow time at the end of class for students to compare notes with classmates.

Highlight important sections of class notes (at overhead or board)

Pre-Teach Content Vocabulary

- Students need to learn:
 - Terms that are unique to content area
 - Specialized meanings of common words
 - Unique symbols and abbreviations
 - Word connotations
- Decide which words to teach:
 - List key concepts
 - Pick out the most crucial terms
 - Find out which words are known
 - Teach words that will lead to the learning of additional words
- Teach meaning
- Avoid unrelated exercises
- Teach strategies for learning new words
- Use new words repeatedly in conversation
- Teach ways to figure out new words
 - Context clues
 - Phonic analysis
 - Structural analysis Combination
 - Authority

Tests

- Preview language of test questions
 - Vocabulary
 - Context
 - Syntax
- Short answer rather than essay
- Mark key questions you want answered and have the student go back and answer the others if time permits
- Word banks or a list of correctly spelled responses for the test
- Typed tests
 - Larger print
 - More white space
- Don't penalize for spelling/grammar (unless it is a spelling or grammar test!)
- Allow extended time
- Substitute an assignment for a test

Test Adaptations

- Change the format
 - Short answer instead of essay.
 - Multiple choice instead of short answer
 - Matching instead of fill-in-the-blank
 - Fill-in-the-blank: put blank at the end of the sentence Use synonyms or shorter sentences for low readers
- Look at the visual design
 - Primary type
 - Spacing
 - Bold lines to divide sections
 - Place multiple choice alternatives vertically
- Divide long matching
 - Ten or fewer consecutive matching
 - Type the definition on the left side of the page and the term or 'match' on the right side
- Provide visual cues
 - Word banks for fill-in-the-blank questions and for labeling items
 - Use mnemonics for difficult total retrieval questions
- Add Variety
 - Use more than one mode of questioning

Visual Learners

Visual learners need to see, watch, and observe. Their eyes are the keys to learning

Strategies

- Color coding
- Visual pattern of word (word families)
- Visual structure of word (configuration or shape of the word)
- Graphics, pictures, and written key words to support auditory information
- Gestures and cues to support auditory information
- Charts
- Clusters
- Webs
- Outlines
- Story maps
- Diagrams
- Flash cards
- Maps
- Films
- Models
- Model skill/task for the student
- Puzzles
- Sentence strips for sequencing information Matching activities
- Seat student where they can see the speaker's mouth
- Use the sight word approach, experience stories, and whole word configurations to teach reading
- Teach the student visualize acronyms such as:
 - H Huron
 - O Ontario
 - M Michigan
 - E Erie
 - S Superior
- Repeat oral instructions as follows:
 - In steps
 - With visual clues
 - Ask the student to repeat them
 - Touch the student
 - Encourage the student to keep an assignment log

Auditory Learners

Auditory learners benefit from hearing information.

Strategies

- Verbal instruction
- Self or oral reading
- Lecture
- Discussion
- Brainstorming
- Oral reports
- Creative dramatics
- Phonics
- Poetry
- Self-talk
- Verbalize the steps needed
- Books on tape
- Listening centers
- Partner activities
- Oral activities prior to independent work
- Sub-vocalization while reading to self
- Teach the student to talk through task
- Provide auditory and rhyming cues
- Use jingles, catchy stories, mnemonic devices, cheers, or songs to aid the student in mastery and/or retention of skills
- Use oral tests occasionally and require oral responses
- Encourage student to use a ruler, marker, or card to complete his paper and pencil tasks
- Allow the student to use a ruler when drawing lines for matching activities

Tactile/Kinesthetic Learners

These learners learn by doing, touching, and direct involvement.

Strategies

- Hands-on activities
- Project
- Manipulatives
- Laboratory experiences
- Performance/acting out experiences
- Crafts
- Drawing
- Construction
- Computers/technology
- Tap/clap syllables
- Number lines
- Allow the student to trace over projected images on the wall or board

- Give instructions first, then pass out materials
- Touch the student or hold his hand while talking to him
- Color code handouts and materials
- Let the student make materials for you, run errands, pass out papers
- When possible, allow the student to move around the room as part of the learning experience
- Cut a long worksheet into smaller segments and give the student one segment at a time
- Have the student chart his own progress: the number of books read, the number of completed assignments, his daily grades, etc.
- Keep the work period short and gradually lengthen. Vary daily activities to offset long periods of sitting because these students learn best when active.

Sequential Thinkers

Also referred to as left-brained, left-hemisphere dominant, inductive, or analytic learners, sequential thinkers learn step by step, parts to whole.

The left hemisphere is thought to control the functions of:

- Language (reading, writing, speaking)
- mathematical thinking
- sequential thinking
- reasoning
 - literal thinking
 - analysis
 - logical thinking

Strategies

- Present material step by step, gradually approaching the overall concept or skill.
- Lead up to the big question with a series of smaller ones.
- Break the task into parts.
- "IE- Have the student verbalize what is to be learned.
- Emphasize verbal cues, directions, and memory strategies.
- Teach and rehearse the steps required to do a problem or complete a task. Continue to refer back to the details or steps already mentioned or mastered.

Simultaneous Thinkers

Also referred to as right-brained, right-hemisphere dominant, deductive, or global learners, simultaneous thinkers obtain meaning from a broad concept and then focus on details.

The right hemisphere is thought to control the functions of:

- simultaneous processing
- pattern thinking
- imagination (creativity)
- spatial tasks

- emotions
 - intuition
 - sense of color
 - metaphorical thinking (difference between what is said and what is meant)
 - musical abilities

Strategies

- Present the overall concept or question before asking the student to solve the problem. Continue to refer back to the task, question, or desired outcome.
- Help the student visualize what is to be learned.
- Emphasize visual cues, directions, and memory strategies.
- Offer a sense of the whole be appealing to the student's visual/spatial orientation.
- The simultaneous learner may react to a picture as a whole, but may miss details. Help the student notice the parts that contribute to the total visual image.

Concrete Sequential Learners

These learners are organized, factual, practical, task-oriented, predictable, orderly, thoroughly, and detailed.

Strategies

- Exact directions
- Routines
- Clear expectations
- Hands-on activities
- Solving real problems

Abstract Sequential Learners

These learners are logical, scholarly, analytical, rational, theoretical, academic, and argumentative

Strategies

- Independent activities
- Debate
- Lectures
- In-depth discussions
- Research papers

Abstract Random Learners

These learners are imaginative, thematic, colorful, flexible, empathetic, emotional, interpretive, and very sensitive.

Strategies

- Cooperative activities
- Fantasy
- Movies, music

Concrete Random Learners

These learners are daring, divergent, original, independent, curious, intuitive, and investigative.

Strategies

- Trial and error
- Challenges ("impossible" tasks)
- Simulations

Multiple Intelligences

Linguistic Intelligence

The capacity to use words effectively, whether orally or in writing.

Strategies to teach this strength:

- Lectures
- Discussions
- Word games
- Storytelling
- Choral reading
- Journal writing
- Books
- Tape recorders
- Typewriters
- Read about it
- Write about it
- Talk about it Listen to it

Logical-Mathematical Intelligence

The capacity to use numbers effectively and to reason well.

Strategies to teach to this strength:

- Brain teasers
- Problem solving
- Science experiments
- Mental calculation
- Number games
- Critical thinking
- Calculators
- Math manipulatives
- Science equipment
- Quantify it
- Think critically about it
- Conceptualize it

Spatial Intelligence

The ability to perceive the visual-spatial world accurately and to perform transformations upon those perceptions.

Strategies to teach to this strength:

- Visual presentations
- Art activities
- Imagination games
- Mind-mapping
- Metaphor
- Visualization
- Graphs
- Maps
- Video
- LEGO sets
- Art materials
- Optical illusions
- Cameras
- See it
- Draw it
- Visualize it
- Color it

Bodily-Kinesthetic Intelligence

Expertise in using one's whole body to express ideas and feelings and facility in using one's hands to produce or transform things.

Strategies to teach to this strength:

- Hands-on learning
- Drama
- Dance
- Sports that teach
- Tactile activities
- Relaxation exercises
- Building tools
- Clay
- Sports equipment
- Manipulatives
- Act it *out*
- Touch it
- Get a "gut feeling" of it

Musical Intelligence

The capacity to perceive, discriminate, transform, and express musical forms.

Strategies to teach to this strength:

- Rapping
- Songs that teach
- Tape recorder
- Tape collection
- Musical instruments
- Sing it
- Rap it
- Listen to it

Interpersonal Intelligence

The ability to perceive and make distinctions in the moods, intentions, motivations, and feelings of other people.

Strategies to teach to this strength:

- Cooperative learning
- Peer tutoring
- Community involvement
- Props for role plays
- Social gatherings
- Simulations
- Board games
- Party supplies
- Teach it
- Collaborate on it
- Interact with respect to it

Intrapersonal Intelligence

Self-knowledge and the ability to act adaptively on the basis of that knowledge.

Strategies to teach to this strength:

- Individualized instruction
- Independent study
- Options in course of study
- Self-checking materials
- Journals
- Connect it to personal life
- Make choices with regard to it

RESOURCES

If a student has difficulty Then try this!	
<i>Becoming Interested ...</i>	<ul style="list-style-type: none"> • tell stories which relate to people's lives • establish relevancy and a purpose for learning by relating to previous experience • provide concrete experiences, i.e. a field trip and then teach lesson • read aloud a story or article to grow interest • seat student near the teacher (proximity control) • shape approximations of desired behavior by providing direct reinforcement such as 1:1 conversation or immediate feedback of correct answers. • make a positive, personal comment every time student shows any evidence of interest (sits in seat, has a book) • Provide designed work that addresses the student's need for choice, affirmation, affiliation, variety, and authenticity.
<i>Getting Started ...</i>	<ul style="list-style-type: none"> • give cue to begin work • give work in smaller amounts ("chunks") • provide immediate feedback • sequence work • provide time suggestions (egg timer helps) • check on progress • peer tutor • provide materials • introduce assignment carefully so student knows what tasks will be expected • provide a checklist for each step of the task • check on progress often in first few minutes of the task
<i>Paying attention to the spoken word ...</i>	<ul style="list-style-type: none"> • give explanations in small, distinct steps • provide written backup to oral directions • have student repeat directions • use buddies, tape recorder • shorten the listening time • alternate spoken with written tasks • look directly at student • place hand on student's shoulder
<i>Following directions ...</i>	<ul style="list-style-type: none"> • use fewer words • provide examples • repeat • have student repeat • provide checklist • use auditory and visual directions
<i>Keeping Track of materials...</i>	<ul style="list-style-type: none"> • use a notebook • use large envelope for each subject • keep extra supplies on hand • provide assignment sheets to parents, coaches, club sponsors, special teachers write assignment on board • give rewards for bringing supplies

If a student has difficulty Then try this!	
<i>Paying attention to printed word...</i>	<ul style="list-style-type: none"> • highlight • underline • number • keep desk clear of extraneous materials • face desk to wall or use a carrel • use overhead projector
<i>Reading textbooks...</i>	<ul style="list-style-type: none"> • use lower level or adapted text (if available) • use books on tape • shorten amount of required reading • have students read aloud in small groups • allow extra time for reading • omit some/all reading requirements • put main ideas on index cards • administer oral tests • use a buddy or allow group work • pre-teach vocabulary • give take-home tests • use larger print
<i>Completing tasks on time...</i>	<ul style="list-style-type: none"> • reduce amount to be accomplished • allow more time • write schedules, timelines, calendars • provide checklists • provide closure at points along the way ("chunking")
<i>Staying on task...</i>	<ul style="list-style-type: none"> • reduce distractions (all senses) • increase reinforcements • provide checklist • give time out/specified 'make up' time • use a timer to set short periods of work
<i>Expressing him/herself verbally...</i>	<ul style="list-style-type: none"> • ask questions requiring short answers • provide prompts/cues • give rules for class discussion • allow taped (audio/video) reports • accept alternate forms of information • written report, bulletin board, art work, exhibit, chart/graph, photos
<i>Remembering...</i>	<ul style="list-style-type: none"> • provide a checklist • provide cues • have students make notes to self • teach memory skills • teach use of acronyms and mnemonics
<i>Seeing relationship...</i>	<ul style="list-style-type: none"> • directly point out relationships • draw arrows on worksheets or test to show that the ideas are related • class discussion • teach directly, relations of: function, category, opposition, sequence

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	<ul style="list-style-type: none"> • provide headings or a partially filled in chart for an example
<i>Learning by listening...</i>	<ul style="list-style-type: none"> • provide visuals (maps, photos, flash cards) • have student close his eyes and visualize info • spell by visualizing the whole word • teach the use of acronyms • give explanations in small, distinct steps • remove extra words • provide study guide (note taking assistance)
<i>Working in groups...</i>	<ul style="list-style-type: none"> • provide a partner • assign responsibility or position of leadership • provide structure by defining the roles within the group, the tasks to be performed
<i>Working independently...</i>	<ul style="list-style-type: none"> • assign task at the student's academic level • help student see an end to the task • give precise directions • reinforce often • provide variety of work within assignment
<i>Understanding what is read...</i>	<ul style="list-style-type: none"> • reduce reading level • become more concrete • reduce number of new ideas • provide experiences for a frame of reference • provide study guide (guided reading) • provide organizational help • provide alternate media (i.e., books on tape)
<i>Writing legibly...</i>	<ul style="list-style-type: none"> • use formats low on writing (multiple choice, fill in the blank, matching, programmed) • use graph paper • allow use of tape recorder • save papers for 2 weeks and have student read what he wrote • teach handwriting/penmanship
<i>Understanding cause/effect or anticipating consequences...</i>	<ul style="list-style-type: none"> • use concrete examples • use real life situations • use brainstorming, role playing, simulation
<i>Expressing him/herself in writing...</i>	<ul style="list-style-type: none"> • accept alternate forms of reporting oral reports, taped reports, maps, photo essay, panel discussion • have student dictate work to someone else • have student prepare only notes or outline • shorten amount/length required
<i>Drawing conclusions and making inferences...</i>	<ul style="list-style-type: none"> • teach thinking skills • draw a parallel to a situation that the student might have experienced in problem solving

Tier 2 - Math Facts in a Flash

Facing the Facts at 60 Seconds: Maximizing Results with MathFacts in a Flash

MathFacts in a Flash is the nation's most effective software for helping students to reach math facts fluency. Renaissance Learning has previously reported that students meeting research-based benchmarks showed extraordinary gains on general math assessments.

That fluency achievement has now been validated by research that shows that students who are able to complete a MathFacts in a Flash test in 60 seconds or less, have the greatest increase in their normal curve equivalent on STAR Math tests.

MathFacts best practices for grades 2–12.

Step 1: Students begin each math class by working on MathFacts in a Flash for 10 to 15 minutes. This can be done on a computer or NEO mobile e-learning device.

Step 2: Students take a MathFacts in a Flash level test, with the goal of mastering the level in less than 100 seconds. Once they have done so, they will get a message that states: "You can test at a new time goal of _____, or move on to the next level of _____." Because your overall goal is to maximize results using MathFacts in a Flash, students should continue to challenge the new time goal until they master the level at or below 60 seconds. Once they do, they will only receive the message pertaining to moving on to the next level. (Note: If students choose not to challenge the time goal, but move up to the next level, they will be unable to go back using the NEO. Instead, they will be required to switch to a standard computer to complete additional math facts practice on previously mastered levels. Renaissance Learning will add this capability on the NEO soon.)

Step 3: Students use their MathFacts in a Flash All-Level Mastery Tracker to log level mastery and best time, once they have achieved level mastery at or below 60 seconds.

Step 4: During math facts in-class practice time, teachers complete their Status of the Class by viewing the information on their students' All-Level Trackers.

Step 5: You can also monitor your students' levels mastered and best times by viewing the Student Record Reports bi-weekly. (Watch for a new Educator Certification Report that will be available soon to assist teachers in monitoring student success.)

Step 6: Encourage students to practice levels outside of the classroom setting in order to spend more time testing in the classroom, which results in faster fluency of math fact levels.

Accelerated Reader

All students using AR on a regular basis must have a Log that they update as they read independently. Teachers will then check the logs to monitor progress and can follow up with individual students as needed if there are any discrepancies.

STRATEGIES FOR QUIZ FAILURES

If students fail a quiz after completing the reading assignment, teachers may want to employ strategies to ensure that the student is able to improve in subsequent quizzes. Here are some suggested strategies:

- ✓ Have students try a shorter book. Check the log to confirm the amount of time the students took to read the book.
- ✓ Provide students with index cards and instruct students to summarize the book at the end of each chapter or every certain number of pages as appropriate, and allow the use of the summary cards during quizzes.
- ✓ Ask questions to student about the book periodically to ensure comprehension of reading material is occurring.
- ✓ Check for the level of interest each student has for the book chosen. It may change after the first few pages.
- ✓ Ask students to select a book in the lower end of their ZPD.

Resources Available Online

Intervention Central

<http://www.interventioncentral.org/academic-interventions>

Response to Intervention Action Network

<http://www.rtinetwork.org/>

National Center on Response to Intervention

<http://www.rti4success.org/>

Project-Based Learning

<http://www.learningreviews.com/Project-Based-Learning.html>

http://www.ct4me.net/math_projects.htm

Other Resources

<http://bridgesmathart.org/>

<http://www.knowitall.org/nasa/index.html>

<http://realworldmath.org/Real World Math/RealWorldMath.org.html>

<http://www.thefutureschannel.com/index.php>

<http://www.rainforestalliance.org/curriculum>