

# Liberty Elementary School

**Improvement Goal:**

All students will use problem-solving skills to think critically and apply knowledge and reason to solve problems.

**Expectation(s) for Student Learning:**

- All students will think and reason effectively.
- All students will solve problems accurately and efficiently.
- All students will communicate clearly using mathematical language and representations by demonstrating skills and knowledge.
- All students will use technology research tools to locate, evaluate, and collect information in order to process data, report results, and make decisions for solving problems.

**Target Participants:**

All students in Liberty Elementary School  
Students who are achieving below proficiency level  
Students who are achieving above proficiency level

**Interventions:**

Assessment/Differentiated Instruction for Conceptual Understanding  
Reasoning and Critical Thinking To Solve Problems  
All students will increase mathematical skills by using technology tools across the curriculum  
Students will participate in MTSS Tiers based on achievement and behavior levels.

**Evaluation:**

ISTEP  
Standards Based Report Card  
Conferring  
Checklists/Rubrics  
School City of Hobart's Balanced Assessment System Framework:  
Classroom Assessments- running records, formal scales, rubrics, checklists, quizzes, unit tests, final exams  
Quality core, rubrics, checklists  
Benchmarks Assessments-, quarterly standards based assessments, Quantile) PIVOT  
External Summative Assessments- ISTEP, , , LAS Links, PIVOT

**Timeframe for Implementation:**

2017-2021

Target Area of Improvement: Problem Solving

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ACTIONS	SCHEDULE	RESPONSIBILITIES	MONITORING	RESOURCES
<p>Intervention: Assessment/Differentiated Instruction for Conceptual Understanding</p> <ol style="list-style-type: none"> <li>1. All students will increase problems solving skills through monitoring progress on Indiana Academic Standards to determine instructional needs               <ol style="list-style-type: none"> <li>A. School City of Hobart’s Balanced Assessment System Framework</li> <li>B. Classroom Assessments (1-5 will be administered to determine instructional areas for students)</li> </ol> </li> <li>2. All students will increase mathematical skills though differentiated instruction across the mathematics curriculum that emphasizes conceptual understanding.               <ol style="list-style-type: none"> <li>A. Students will know basic math facts (These help in acquisition and speed of performing math not in understanding math). (1-5)</li> <li>B. Students will understand units of measurements and apply appropriate techniques and formulas.</li> <li>C. Students will understand and solve algebraic equations and understand patterns and relationships between numbers.</li> <li>D. Students will identify, describe and compare geometric shapes</li> <li>E. Students will construct and interpret graphs throughout the curriculum as part of data analysis, (1-5)</li> <li>F. Students will demonstrate the ability to compare and contrast different values</li> </ol> </li> <li>3. All students have the opportunity to practice and demonstrate proficiency.</li> <li>4. Students receive guided group instruction</li> <li>5. Students receive small group instruction for</li> </ol>	<p>2017-2021</p>	<p>Central Office Principals Teachers 1-5</p>	<p>School City of Hobart’s Balanced Assessment System Framework Classroom Assessments Formal Scales Journals Checklists/Rubrics Conferring Item analysis PIVOT FastMath</p>	<p>School City of Hobart’s Balanced Assessment System Framework - Classroom assessments -Manipulatives -Calculator -Software -Flash Cards -Classroom Texts -Time for data analysis, manipulatives, creating and interpreting graphs, tangrams and puzzles -Saxon Math Series -ENVISIONS -Grade 1: Math Journals, -Grade 2: Daily Word Problems (Evan Moor pub.); Read It, Draw It, Solve It, (Dale Seymour pub.) Math- Worksheets.com Grade 3: Daily Math Review (DMR) www.superteacher.com -Grade 4: <a href="http://www.multiplication.com">www.multiplication.com</a> Daily word problems www.superteacher.com -Grade 5: Daily Math Warm Ups; Drops in the Bucket Review sheets: Teacher developed units on geometry and Measurement;</p>

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proficiency				Math Manipulative Cart; workbooks -Professional Development calendar -TRC(District Web site) -Indiana Academic Standards
<b>Intervention:</b> Reasoning and Critical Thinking To Solve Problems 1. All Students will use reasoning and critical thinking to solve problems through applied mathematics across the curriculum that provides relevant, concrete and everyday problems. <ul style="list-style-type: none"> <li>A. Students will build academic vocabulary across the curriculum</li> <li>B. Students will understand and choose the correct mathematical operation to solve problems across the curriculum (Example: Similarities and Difference/Graphic Organizers – Marzano)</li> <li>C. Students will use mental math/estimation to understand when an exact answer or an estimate is sufficient.</li> <li>D. Students will develop a set of problem solving strategies across the curriculum.</li> </ul> Example: <ul style="list-style-type: none"> <li>1. READ-What is the question?</li> <li>2. REREAD – What is the necessary information?</li> <li>3. THINK               <ul style="list-style-type: none"> <li>Putting together = addition</li> <li>Taking apart=subtraction</li> <li>Do I need all the information?</li> <li>Is it a two-step problem?</li> </ul> </li> </ul>	2017-2021	Teachers 1-5	-Classroom Assessments -Rubrics -ISTEP -PIVOT	<i>Building Academic Vocabulary</i> by Robert Marzano -Manipulatives -Textbook -small groups -FastMath -PIVOT -Fraction Nation _ENVISIONS

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4. SOLVE Write the equation. 5. CHECK – Recalculate 6. LABEL & COMPARE E. Students will construct and interpret graphs with data analysis. (2-5) F. Students will construct and interpret graphs along with data analysis (1-5)				
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ACTIONS	SCHEDULE	RESPONSIBILITIES	MONITORING	RESOURCES
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<p><b>Intervention: Technology Tools</b>          All students will increase mathematical skills by using technology tools across the curriculum.</p> <ul style="list-style-type: none"> <li>A. Students will construct and interpret graphs using spreadsheets along with data analysis</li> <li>A. Students will use calculators to calculate, analyze and interpret mathematical equations. (2-5)</li> <li>B. Students will utilize web –based math programs (2-5)</li> <li>C. Students will use computer simulations to solve problems</li> </ul>		<p>Teachers 1-5          MTSS</p>	<ul style="list-style-type: none"> <li>-Classroom Assessments</li> <li>-Formal Scales</li> <li>-Teacher Observation</li> <li>-Student Presentations</li> </ul>	<ul style="list-style-type: none"> <li>-Responders</li> <li>-SmartBoards</li> <li>- Calculators</li> <li>-Computers &amp; Software</li> <li>-Internet</li> <li>-Tablets</li> <li>-iPads</li> <li>-Document Cameras</li> <li>-Google Apps</li> <li>-Khan Academy</li> <li>-ENVISIONS</li> <li>-Google Apps</li> <li>-Chrome Books</li> <li>-Challenger Learning Center</li> <li>-Professional Development Calendar</li> <li>-FasttMath</li> <li>-Fraction Nation</li> <li>-Hour of Code</li> </ul>
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ACTIONS	SCHEDULE	RESPONSIBILITIES	MONITORING	RESOURCES
Intervention:	2017-2021	-Lead: Central Office	-School City of	-School City of Hobart’s

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<p>1. Students will participate based on achievement and behavior levels</p> <p>A. A district-wide MTSS policy is implemented with guidelines</p> <p>B. Tier II will be implemented through the intervention of “Increased Academic Learning Time” within the classroom including the following:</p> <ul style="list-style-type: none"> <li>-Achievement groups-Strategy groups</li> <li>-Summer School</li> <li>-Double Blocked Subjects</li> <li>-Counseling</li> </ul> <p>C. Tier II and Tier III will be implemented through intense intervention with additional support services.</p> <ul style="list-style-type: none"> <li>-Small Group Instruction</li> <li>-Individual Instruction</li> <li>-Small Group Counseling</li> </ul>		<p>Administrators</p> <ul style="list-style-type: none"> <li>-Principals</li> <li>-Northwest Indiana Special Education Cooperative (NWISEC) Director</li> <li>-1-5 Teachers</li> <li>-Interventionists</li> </ul> <p>MTSS</p>	<p>Hobart’s Balanced Assessment System Framework</p> <p>MTSS</p>	<p>Balanced Assessment System</p> <ul style="list-style-type: none"> <li>-Professional Learning Communities</li> <li>-Common Planning Time</li> <li>-Curriculum Materials</li> <li>-TRC</li> <li>-MTSS</li> <li>-Khan Academy</li> </ul>
<p><b>Intervention: Family/Community Involvement</b></p> <p>1. students will increase problem solving skills through opportunities for family/community participation</p> <p>A. Skyward- Assignments/Grades/Discipline/Attendance</p> <p>B. Family Nights-Math Games</p> <p>C. Website – Homework Help and Tips</p> <p>D. Parent Teacher Meetings</p>	<p>2017-2021</p>	<p>-Lead: Central Office Administration</p> <ul style="list-style-type: none"> <li>-Principals</li> <li>-School Staff</li> <li>-Technology Department</li> </ul>	<p>-Parent/Teacher Conference Attendance</p> <p>-Monitoring Skyward Usage</p> <p>-Family Night Attendance</p>	<p>-Skyward Parent Information Packet</p> <p>-District Web Site</p> <p>-Khan Academy</p>
<p><b>ACTIONS</b></p>	<p><b>SCHEDULE</b></p>	<p><b>RESPONSIBILITIES</b></p>	<p><b>MONITORING</b></p>	<p><b>RESOURCES</b></p>
<p><b>Intervention: Professional Learning Communities</b></p> <p>All students will increase problem solving skills as a result of teacher participation in professional</p>	<p>2017-2021</p>	<p>-Lead: Administrators</p> <ul style="list-style-type: none"> <li>-1-5 teachers</li> </ul> <p>MTSS</p>	<p>-Teacher Professional Goals</p> <p>-Curriculum Maps</p>	<p>-School City of Hobart’s Balanced Assessment System Framework</p>

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<p>learning communities</p> <p>A. Curriculum Planning-Grade Level/Curriculum/Department Meetings</p> <ul style="list-style-type: none"> <li>-Identification of Critical Standards</li> <li>-Units of Study /Curriculum Calendar/Curriculum Mapping</li> </ul> <p>B. Assessment</p> <ul style="list-style-type: none"> <li>-Continuous data analysis will be implemented by using the School City of Hobart’s Balanced Assessment System Framework</li> <li>- MTSS</li> </ul> <p>C. Professional Development- In-House Professional Development Calendar, conferences, and Contracted Services, building-based grade level meetings</p>			<ul style="list-style-type: none"> <li>-Formal Scales</li> <li>-Enrollment in Professional Development</li> <li>-School City of Hobart’s Balanced Assessment System Framework</li> <li>MTSS</li> </ul>	<ul style="list-style-type: none"> <li>-Professional Development Calendar</li> <li>-Common Planning Time</li> <li>-Professional Learning Community Meetings</li> <li>MTSS</li> <li>_TRC(District website)</li> <li>-Interventionists</li> <li>-Contracted Services</li> <li>-Late Start Wednesdays</li> <li>-Data Meetings</li> <li>-Google Aps</li> </ul>
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