

# Goal Details

**Harmon Elementary School**

St. Clair Shores, Michigan, United States

Prepared for the Michigan Department of Education

Goal Development Status: Approved

Goal Progress Status: Open

# Goal Details

## Contents

Goal: Math	3
1.1. Objective: Increase Math Achievement	3
1.1.1. Strategy: Drill/Practice	4
1.1.1.1. Activity: Mad Minutes	5
1.1.1.2. Activity: Integration of Technology and Low tech Tools	6
1.1.1.3. Activity: Mathematics Vocabulary Development	6
1.1.2. Strategy: Differentiated Instruction	7
1.1.2.1. Activity: Math games	8
1.1.2.2. Activity: Math Explorations	8
1.1.3. Strategy: On-Going Cumulative Review	9
1.1.3.1. Activity: Identify Skills	10
1.1.3.2. Activity: Review Vocabulary	10
1.1.3.3. Activity: Math Boxes and Math message	11
1.1.4. Strategy: Uniform Assessment	11
1.1.4.1. Activity: Assessment Team	13
1.1.4.2. Activity: NWEA	13

# Goal: Math

**Content Area :** Math

**Goal Source :** Continuous Improvement

**Development Status :** Approved

**Student Goal Statement :** All students will be proficient in math.

**Gap Statement :** Based on the review of our MEAP summary reports, only 80% of our fourth grade students were proficient as compared to the 100% proficient.

**Cause for Gap :** Based on the MEAP summary data, 79% of our students without disabilities are proficient as compared to 100% of our students with disabilities (students with disabilities=3).

Based on our MEAP demographic data, 78% of our male students were proficient as compared to 82% of our female students who were proficient.

Based on our MEAP demographic data, 58% of our economically disadvantaged students were proficient as compared to 94% of our non economically disadvantaged students who were proficient.

**Multiple measures/sources of data you used to identify this gap in student achievement :** MEAP is administered annually

Common end of unit assessments, Everyday Math Program

Parent survey

**What are the criteria for success and what data or multiple measures of assessment will be used to monitor progress and success of this goal?** We will close the gap in achievement. Students without disabilities will make a 2% increase in achievement on the MEAP.

Male students will make a 2% increase in achievement on the MEAP.

Economically disadvantaged students will make a 12% increase in achievement on the MEAP.

Progress will be monitored through end of the unit goals from our Everyday Math program.

**Contact Name :** Amy Gaglio

## List of Objectives:

ID	Objective
12439	We will close the gap in achievement. Students without disabilities will make a 2% increase in achievement on the MEAP. Male students will make a 2% increase in achievement on the MEAP. Economically disadvantaged students will make a 12% increase in achievement on the MEAP. Progress will be monitored through end of the unit goals from our Everyday Math program.

## 1.1. Objective: Increase Math Achievement

**Measurable Objective Statement to Support Goal :** We will close the gap in achievement. Students without disabilities will make a 2% increase in achievement on the MEAP.

Male students will make a 2% increase in achievement on the MEAP.

Economically disadvantaged students will make a 12% increase in achievement on the MEAP.

Progress will be monitored through end of the unit goals from our Everyday Math program.

**List of Strategies:**

ID	Strategy
12439	Teachers will design a drill/practice instructional program linked to the GLCE's.
12439	Teachers will implement a differentiated mathematics instructional plan using Everyday Math curriculum during a daily 60 minute math period (linked to the district math curriculum maps, pacing guides when available). Teachers will focus on secure goals in each math unit while incorporating vocabulary, embedded practice, and constructed response. Teachers will use data, including MEAP item analysis, NWEA, and unit assessments to guide and differentiate instruction in order to address students' learning styles and to close identified achievement gaps.
12439	Teachers will incorporate on-going, cumulative review of critical skills at the beginning of every lesson: Monday - Money and Measurement Tuesday - Time and Temperature Wednesday - Word Problems Thursday - geometry Friday - Fractions, Decimals, and Percents
12439	Teachers will use NWEA and an end of unit assessment based on secure goals and basic fact assessments, vocabulary, and constructed response.

**1.1.1. Strategy: Drill/Practice**

**Strategy Statement:** Teachers will design a drill/practice instructional program linked to the GLCE's.

**Selected Target Areas**

SAR 3.11 Ensures that all students and staff members have regular and ready access to instructional technology and a comprehensive materials collection that supports the curricular and instructional program
SAR 3.7 Provides for articulation and alignment between and among all levels of schools
SAR 4.6 Uses comparison and trend data of student performance from comparable schools in evaluating its effectiveness
SAR 7.6 Evaluates and documents the effectiveness and impact of its continuous process of improvement

**Other Required Information for Strategy**

***What research did you review to support the use of this strategy and action plan?***

Educators and cognitive scientists agree that the ability to recall basic math facts fluently is necessary for students to attain higher-order math skills. Grover Whitehurst, the Director of the Institute for Educational Sciences (IES), noted this research during the launch of the federal Math Summit in 2003: "Cognitive psychologists have discovered that humans have fixed limits on the attention and memory that can be used to solve problems. One way around these limits is to have certain components of a task become so routine

and over-learned that they become automatic." Whitehurst, 2003)

As mentioned in K-2 Games/Drill and Practice, researchers have found more value in using mathematics computer programs that focus on learning discipline-specific concepts such as fractions, geometry, or place value. (www.cited.org)

Schmoker, Mike. (1999). Results, The Key Concepts of Continuous School Improvement, Association for Supervision and Development.

**List of Activities:**

Activity	Begin Date	End Date	Staff Responsible
Teachers will develop a common mad minute format which includes a chart that shows student performance. Student progress will be graphed. Mad minutes will be administered two times per week in grades 1-5.	09/13/2010	06/08/2012	Principal Building leadership Team Staff
Teachers will use technology to support grade level drill and practice skills. Resources include, but not limited to, netbooks with the following: *Tux math *Everyday Mathematics Website *Mathematics websites approved by district, such as Funbrain *Everyday Mathematics flash cards (fact triangles) Math via technology will be scheduled twice per month per class.	09/13/2010	06/10/2012	Principal Building leadership Team Staff Media specialist
Teachers will reference grade level unit vocabulary list as identified in Everyday Mathematics curriculum. Vocabulary instruction can be reinforced by displaying as math word wall, picture clues, songs, motions, signs, bulletin boards, and flash cards. Vocabulary assessments will be addressed through the end of the unit Everyday Math Test.	09/13/2010	06/08/2012	Principal Building leadership Team Staff

---

**1.1.1.1. Activity: Mad Minutes**

**Activity Description:** Teachers will develop a common mad minute format which includes a chart that shows student performance. Student progress will be graphed. Mad minutes will be administered two times per week in grades 1-5.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal Building leadership Team Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meeting	No Funds Required	0.00	0.00
Mad Minute books	No Funds Required	0.00	0.00

**1.1.1.2. Activity: Integration of Technology and Low tech Tools**

**Activity Description:** Teachers will use technology to support grade level drill and practice skills. Resources include, but not limited to, netbooks with the following:

- \*Tux math
- \*Everyday Mathematics Website
- \*Mathematics websites approved by district, such as Funbrain
- \*Everyday Mathematics flash cards (fact triangles)

Math via technology will be scheduled twice per month per class.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal  
Building leadership Team  
Staff  
Media specialist

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/10/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff meetings	No Funds Required	0.00	0.00
Grade level meetings	No Funds Required	0.00	0.00

**1.1.1.3. Activity: Mathematics Vocabulary Development**

**Activity Description:** Teachers will reference grade level unit vocabulary list as identified in Everyday Mathematics curriculum. Vocabulary instruction can be reinforced by displaying as math word wall, picture clues, songs, motions, signs, bulletin boards, and flash cards. Vocabulary assessments will be addressed through the end of the unit Everyday Math Test.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal  
 Building leadership Team  
 Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meetings	No Funds Required	0.00	0.00
Grade level meetings	No Funds Required	0.00	0.00

**1.1.2. Strategy: Differentiated Instruction**

**Strategy Statement:** Teachers will implement a differentiated mathematics instructional plan using Everyday Math curriculum during a daily 60 minute math period (linked to the district math curriculum maps, pacing guides when available). Teachers will focus on secure goals in each math unit while incorporating vocabulary, embedded practice, and constructed response. Teachers will use data, including MEAP item analysis, NWEA, and unit assessments to guide and differentiate instruction in order to address students' learning styles and to close identified achievement gaps.

**Selected Target Areas**

SAR 3.11 Coordinates and ensures ready access to instructional technology, information and media services, and materials needed for effective instruction
SAR 3.7 Provides for articulation and alignment between and among all levels of schools
SAR 3.8 Supports the implementation of interventions to help students meet expectations for student learning
SAR 4.3 Uses student assessment data for making decisions for continuous improvement of teaching and learning processes
SAR 4.6 Uses comparison and trend data of student performance from comparable schools in evaluating its effectiveness
SAR 7.6 Evaluates and documents the effectiveness and impact of its continuous process of improvement

**Other Required Information for Strategy**

*What research did you review to support the use of this strategy and action plan?*

Differentiated instruction allows all students to access the same classroom curriculum by providing entry points, learning tasks, and outcomes that are tailored to students' needs (Hall, Strangman, & Meyer, 2003).

<http://www.caroltomlinson.com/Articles/BOOKS.pdf>

<http://www.caroltomlinson.com/Articles/ARTICLES.pdf>

**List of Activities:**

Activity	Begin Date	End Date	Staff Responsible
Teacher will use Everyday Math games as determined by the unit lessons.	09/13/2010	06/08/2012	Principal Building leadership team Staff
Teachers will complete math explorations when related to gaps identified in the goal statement. Grade level teachers will identify appropriate explorations.	09/13/2010	06/08/2012	Principal Building leadership team Staff

**1.1.2.1. Activity: Math games**

**Activity Description:** Teacher will use Everyday Math games as determined by the unit lessons.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal Building leadership team Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meetings	No Funds Required	0.00	0.00

**1.1.2.2. Activity: Math Explorations**

**Activity Description:** Teachers will complete math explorations when related to gaps identified in the goal statement. Grade level teachers will identify appropriate explorations.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal Building leadership team

Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meetings	No Funds Required	0.00	0.00

**1.1.3. Strategy: On-Going Cumulative Review**

**Strategy Statement:** Teachers will incorporate on-going, cumulative review of critical skills at the beginning of every lesson:

- Monday - Money and Measurement
- Tuesday - Time and Temperature
- Wednesday - Word Problems
- Thursday - geometry
- Friday - Fractions, Decimals, and Percents

**Selected Target Areas**

SAR 3.4 Designs and uses instructional strategies, innovations, and activities that are research-based and reflective of best practice
SAR 3.6 Allocates and protects instructional time to support student learning
SAR 3.8 Implements interventions to help students meet expectations for student learning
SAR 4.5 Uses comparison and trend data from comparable school systems to evaluate student performance and system effectiveness

**Other Required Information for Strategy**

*What research did you review to support the use of this strategy and action plan?*

Ensure that instructional materials include cumulative review in each session.- supported by research from the Pennsylvania Department of Education

Schmoker, Mike. (1999). Results, the Key Concepts of Continuous School Improvement, Association for Supervision and Development

[http://www.sraonline.com/research/category.php?div\\_id=2&sub\\_area\\_id=4&search=sub&prod\\_id=14&Prod\\_](http://www.sraonline.com/research/category.php?div_id=2&sub_area_id=4&search=sub&prod_id=14&Prod_)

[http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti\\_math\\_pg\\_042109.pdf](http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti_math_pg_042109.pdf)

**List of Activities:**

Activity	Begin Date	End Date	Staff Responsible
Grade level teachers will identify gaps in skills and incorporate into daily review areas.	09/13/2010	06/08/2012	Principal Building leadership team Staff K-12 Math Curriculum Committee
Teachers will review the vocabulary terminology used on standardized tests and terms needed for understanding math concepts.	09/13/2010	06/08/2012	Principal Building leadership team Staff
Teachers will plan and implement math boxes and math messages as outlined in the Everyday Math Curriculum.	09/13/2010	06/08/2012	Principal Building leadership team Staff

**1.1.3.1. Activity: Identify Skills**

**Activity Description:** Grade level teachers will identify gaps in skills and incorporate into daily review areas.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal Building leadership team Staff K-12 Math Curriculum Committee

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Grade Level Meetings	No Funds Required	0.00	0.00

**1.1.3.2. Activity: Review Vocabulary**

**Activity Description:** Teachers will review the vocabulary terminology used on standardized tests and terms needed for understanding math concepts.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal  
 Building leadership team  
 Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meetings	No Funds Required	0.00	0.00

**1.1.3.3. Activity: Math Boxes and Math message**

**Activity Description:** Teachers will plan and implement math boxes and math messages as outlined in the Everyday Math Curriculum.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal  
 Building leadership team  
 Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meetings	No Funds Required	0.00	0.00

**1.1.4. Strategy: Uniform Assessment**

**Strategy Statement:** Teachers will use NWEA and an end of unit assessment based on secure goals and basic fact assessments, vocabulary, and constructed response.

**Selected Target Areas**

SAR 3.3 Gathers, analyzes, and uses data and research in making curricular and instructional choices
SAR 3.7 Provides for articulation and alignment between and among all levels of schools
SAR 3.7 Maintains articulation among and between all levels of schooling to monitor student performance and ensure readiness for future schooling or employment
SAR 4.1 Establishes performance measures for student learning that yield information that is reliable, valid, and bias free
SAR 4.2 Develops and implements a comprehensive assessment system for assessing progress toward meeting the expectations for student learning
SAR 4.3 Uses student assessment data for making decisions for continuous improvement of teaching and learning processes
SAR 4.4 Provides a system of communication which uses a variety of methods to report student performance and system effectiveness to all stakeholders

**Other Required Information for Strategy**

*What research did you review to support the use of this strategy and action plan?*

Schmoker, Mike. (1999). Results, the Key Concepts of Continuous School Improvement, Association for Supervision and Development

So, what d'ya expect? Pursuing Reasonable Individual Student Growth Targets to Improve Accountability Systems

Carl Hauser

Northwest Evaluation Association

<http://www.nwea.org/sites/www.nwea.org/files/Pursuing%20Reasonable%20Individual%20Student%20Growth%20Targets%20to%20Improve%20Accountability%20Systems.pdf>

NWEA research:

NWEA research is supported by:

Ryan, J., & Brockmann, F. (2009). A practitioner's introduction to equating with primers on classical test theory and item response theory. CCSSO: Washington, DC.

Cronin, J., Kingsbury, G.G., Dahlin, M., & Bowe, B. (2007, April). Alternate methodologies for estimating state standards on a widely used computer adaptive test. Paper presented at the American Educational Research Association, Chicago, IL.

Schmoker, Mike. (1999). Results, the Key Concepts of Continuous School Improvement, Association for Supervision and Development.

**List of Activities:**

Activity	Begin Date	End Date	Staff Responsible
Team of teachers from each grade level will meet and develop assessments which includes template and rubric which can be linked to Data Director.	09/13/2010	06/08/2012	Principal Building leadership team Staff
NWEA will be administered three times a year. Teachers will be provided with individualized and classroom profiles to	09/13/2010	06/08/2012	Principal Building leadership team

guide instruction. All teachers will be trained in the application of NWEA.			Staff
---	--	--	-------

**1.1.4.1. Activity: Assessment Team**

**Activity Description:** Team of teachers from each grade level will meet and develop assessments which includes template and rubric which can be linked to Data Director.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal  
Building leadership team  
Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meetings	No Funds Required	0.00	0.00
Substitutes	General Funds	500.00	0.00

**1.1.4.2. Activity: NWEA**

**Activity Description:** NWEA will be administered three times a year. Teachers will be provided with individualized and classroom profiles to guide instruction. All teachers will be trained in the application of NWEA.

**Activity Type:** Revised

**Planned staff responsible for implementing activity:** Principal  
Building leadership team  
Staff

**Actual staff responsible for implementing activity:**

**Planned Timeline:** Begin Date - 09/13/2010, End Date - 06/08/2012

**Actual Timeline:** Begin Date - N/A, End Date - N/A

**Fiscal Resources Needed for Activity:**

Resource	Funding Source	Planned Amount	Actual Amount
Staff Meetings	No Funds Required	0.00	0.00