



# EdReady

MONTANA



MONTANA DIGITAL ACADEMY

EdReady is a tool...



What do I want my students to be ready for?

# EdReady Montana is not....

## A stand alone online course.



- It is a free, online, customized math readiness and individualized learning path curriculum based upon school need
- Offered/managed/supported state-wide by MTDA
- Facilitated locally by K12 school or college/university personnel



*Educators moving  
education forward*

A national K-20 cooperative project  
to impact college & career readiness



The NROC Project (NROC) is a **community-guided, non-profit project** focused on new models of digital content development, distribution, and use.

NROC is **funded by** The William and Flora Hewlett Foundation, the Bill & Melinda Gates Foundation, and most importantly by **NROC members across the country.**

We are education leaders who believe in **open and equal access** to education and the **power of media to personalize learning.**





# Use Cases for EdReady Montana

- ▶ High Schools and Middle Schools, Alternative Education Programs
- ▶ Montana University System UM, MSU, Colleges (4 and 2 Year) and Private and Tribal Colleges
- ▶ Adult Learning Centers (Workforce Development)
- ▶ Military, Incarcerated, Adult Basic Ed. and more

# EdReady Montana Is...

- ▶ Aimed at math (and later English 2015) readiness.
- ▶ Uses NROC's Dev Math as a base: (19 Units/59 Topics)

Arithmetic Modules	Beginning Algebra Modules	Intermediate Algebra Modules	Geometry and Trigonometry
<p><b>Unit 1: Whole Numbers</b></p> <p>Introduction to Whole Numbers</p> <ul style="list-style-type: none"> <li>Place Value and Names for Whole Numbers</li> <li>Rounding Whole Numbers</li> <li>Comparing Whole Numbers</li> </ul> <p><b>Adding and Subtracting Whole Numbers</b></p> <ul style="list-style-type: none"> <li>Adding Whole Numbers and Applications</li> <li>Subtracting Whole Numbers and Applications</li> <li>Estimation</li> </ul> <p><b>Multiplying and Dividing Whole Numbers</b></p> <ul style="list-style-type: none"> <li>Multiplying Whole Numbers and Applications</li> <li>Dividing Whole Numbers and Applications</li> </ul> <p><b>Properties of Whole Numbers</b></p> <ul style="list-style-type: none"> <li>Properties and Laws of Whole Numbers</li> </ul>	<p><b>Unit 9: Real Numbers</b></p> <p>Introduction to Real Numbers</p> <ul style="list-style-type: none"> <li>Variables and Expressions</li> <li>Integers</li> <li>Rational Real Numbers</li> </ul> <p><b>Operations with Real Numbers</b></p> <ul style="list-style-type: none"> <li>Adding Integers</li> <li>Adding Real Numbers</li> <li>Subtracting Real Numbers</li> <li>Multiplying and Dividing Real Numbers</li> </ul> <p><b>Properties of Real Numbers</b></p> <ul style="list-style-type: none"> <li>Associative, Commutative, and Distributive Properties</li> </ul> <p><b>Simplifying Expressions</b></p> <ul style="list-style-type: none"> <li>Order of Operations</li> </ul> <p><b>Unit 10: Solving Equations and Inequalities</b></p> <ul style="list-style-type: none"> <li>Solving Equations</li> <li>Solving One-Step Equations Using</li> </ul>	<p><b>Unit 15: Rational Expressions</b></p> <p>Operations with Rational Expressions</p> <ul style="list-style-type: none"> <li>Introduction to Rational Expressions</li> <li>Multiplying and Dividing Rational Expressions</li> <li>Adding and Subtracting Rational Expressions</li> <li>Complex Rational Expressions</li> </ul> <p><b>Rational Equations</b></p> <ul style="list-style-type: none"> <li>Solving Rational Equations and Applications</li> </ul> <p><b>Formulas and Variation</b></p> <ul style="list-style-type: none"> <li>Rational Formulas and Variation</li> </ul> <p><b>Unit 16: Radical Expressions and Quadratic Equations</b></p> <ul style="list-style-type: none"> <li>Introduction to Roots and Rational Exponents</li> <li>Roots</li> </ul>	<p><b>Unit 7: Geometry</b></p> <p>Basic Geometry</p> <ul style="list-style-type: none"> <li>Figures in the Plane</li> <li>Properties of Triangles</li> <li>The Pythagorean Theorem</li> </ul> <p><b>Perimeter, Area, and Volume</b></p> <ul style="list-style-type: none"> <li>Quadrilaterals</li> <li>Perimeter and Area</li> <li>Circles</li> <li>Volume of Geometric Solids</li> </ul> <p><b>Unit 8: Concepts in Statistics and Probability</b></p> <ul style="list-style-type: none"> <li>Statistical Concepts</li> <li>Graphs and Data</li> <li>Other Topics</li> <li>Measurement</li> <li>Measurement</li> </ul>



# EdReady Montana is....

- **Customized Higher Ed and K12 Assessments**
- **Personalized student learning paths**
- **Reporting/tracking for Montana Higher Ed Institutions and Secondary Schools**

Secondary School Assessments
7th Grade Readiness
8th Grade Readiness
Algebra Readiness
Geometry Readiness
Pre-Algebra Readiness
Trigonometry Readiness

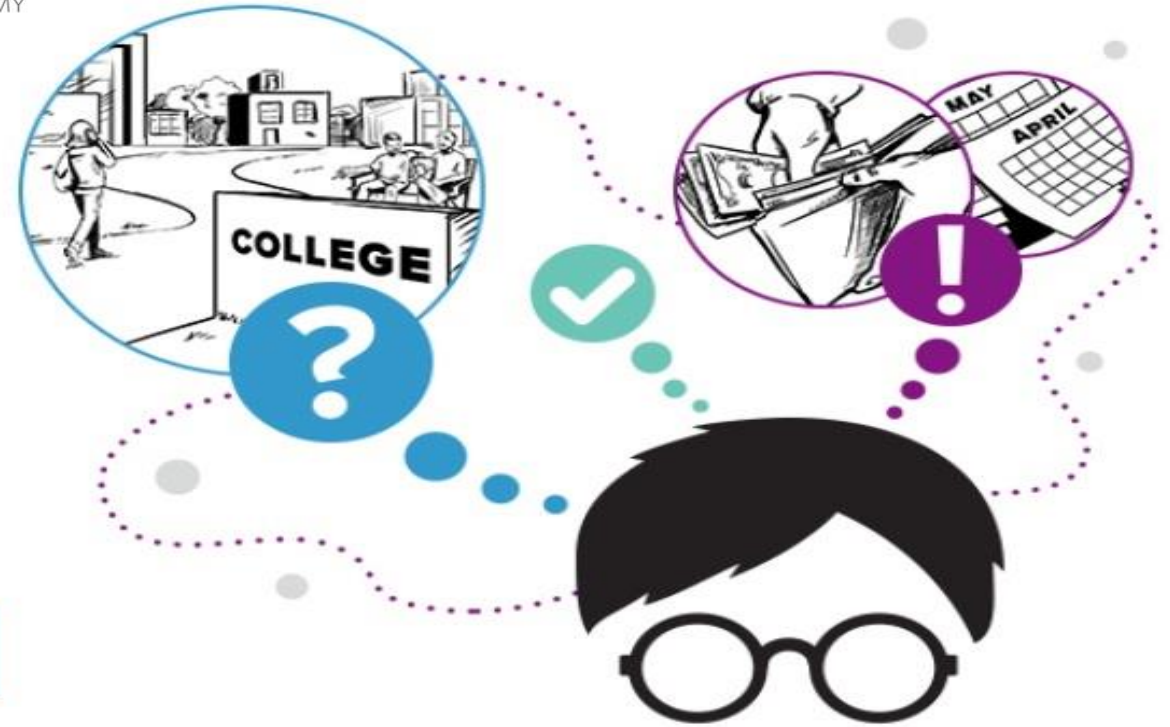
Placement Test Assessments
Accuplacer® - Arithmetic
Accuplacer Math Preparation
SAT® Math Preparation
COMPASS® Math Preparation
Accuplacer® - Elementary Algebra
ACT® Math Preparation
GED® Prep K-8
College Math Readiness
Accuplacer® - College Level Math
GED® Prep 9-12



# Get ready for college and career

EdReady lets you test yourself in math and English, then helps you with a customized study plan. If you're thinking about what's next for college and career, be smart and know your options.

[Get Started](#)



## Who should use EdReady?

### College-bound Students

Don't let college placement exams hold you back. EdReady can help you avoid spending extra time and money in remedial college classes.

[Create an Account](#)

### Unsure about college?

Use EdReady to assess your skills in English and math, and see which schools you can attend to improve your chances for a job.

[Create an Account](#)

### Already in college?

Your school may have a custom EdReady site to help you catch up in math and English. Use EdReady for personalized study help.

[Search for my school](#)



## College Math Readiness

Save and close 

Progress: 

### Complete this assessment to gain an understanding of your math readiness.

Answer the questions as best you can, without study aids (calculators are ok), in order to get the most accurate picture of your current understanding.


The time to completion will vary. Expect to take about an hour.

If you need to leave before your assessment is complete, your work will automatically be saved until your next visit to EdReady.

[Start assessment now](#)



## Unit: Whole Numbers

Total Progress: 

Evaluate  $\frac{(z^2)^4}{5z^5}$  when  $z = 5$  and simplify.

Write the answer as a positive integer, without any exponents.

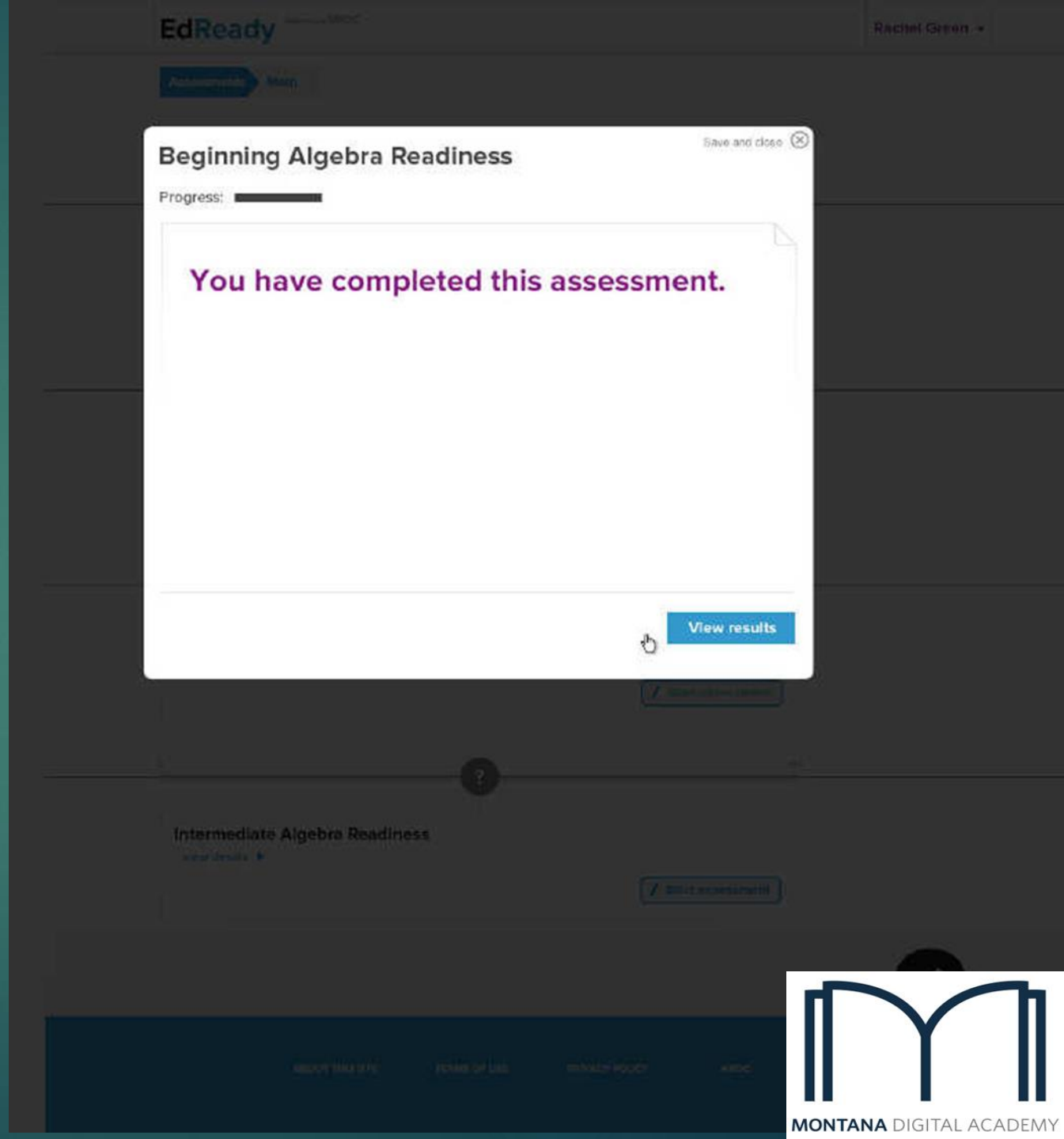
Enter your answer in the box above.

I don't know

Submit



# Student Completes Assessment







### Create a study plan to improve your math readiness.

Schools you want to be ready for: ⓘ

	Target Scores
<input type="radio"/> The University of Montana	90
<input type="radio"/> Montana State University - Bozeman	75
<input checked="" type="radio"/> Montana Tech of the University of Montana	60

Estimated study time:

**30**  
HOURS

*Edit school selections to change study time.*

**Build a study plan**

[Study without choosing schools](#)

[Choose other schools](#)

### You are ready for these schools with no further study.

Schools you are ready for:

	Enrollment & Info
<input checked="" type="checkbox"/> Helena College of Technology	ⓘ
<input checked="" type="checkbox"/> Highlands College or Montana Tech	ⓘ

Estimated study time:

**0**  
HOURS

[Find more options](#)

# Instructional Design Dev Math Topic of Study

EdReady Powered by NROC

Rachel Green ▾

[Click here](#) to return to EdReady when you're done studying

## Adding and Subtracting Decimals

HELP

Topic Home → Warm Up → Presentation → Worked Examples → Practice → Review

You can start by clicking on **Warm Up** to see if you are prepared to take this topic. When you are ready, work through the **Presentation**, **Worked Examples**, **Topic Text** and **Practice** problems. Then, take the **Review** to test your understanding of this topic.

**Warm Up**

**Presentation**

**Worked Examples**

**Practice**

**Review**

Upon completion of this topic, you will be able to:

- Add two or more decimals.
- Subtract two or more decimals, with and without regrouping.
- Solve application problems that require decimal addition or subtraction.

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Monterey Institute for Technology and Education 2011

# Pilot Outcomes

- ▶ **43 students voluntarily opened an EdReady account completed the program:**
  - **70% increased by 1 ALEKS point**
  - **27% increased by 2 ALEKS points**
  - **3% increased by 3 ALEKS points**
  
- ▶ **86% of students who completed EdReady increased their ALEKS score by at least 1 point ... AND qualified to enroll in a higher math course at UM**



# Saving Time and Money!

- ▶ 43 students skipped 49 courses
- ▶ Total of 151 credits were “skipped”
- ▶ ...adding up to estimated \$31,000 tuition/fees!




# Results After Enrollment?

- ▶ 37 of the pilot participants enrolled in a mathematics course in the Fall 2014 term
- ▶ 91% successfully completed their course
- ▶ Average mathematics grade for these students: B-
- ▶ UM Freshman overall average mathematics grade: C+



# Detailed Personalized Study Plan

Assessments 7th Grade Readiness\_demo Study Plan



**Whole Numbers**  
Recommended study time: 6 hours  
NOT READY

Study unit ?

Mastered topics: 0 of 12

Topics you need to study in this unit

**Place Value and Names for Whole Numbers**  
Recommended study time: 30 minutes:  
NEEDS REVIEW

Check your Knowledge View Resources

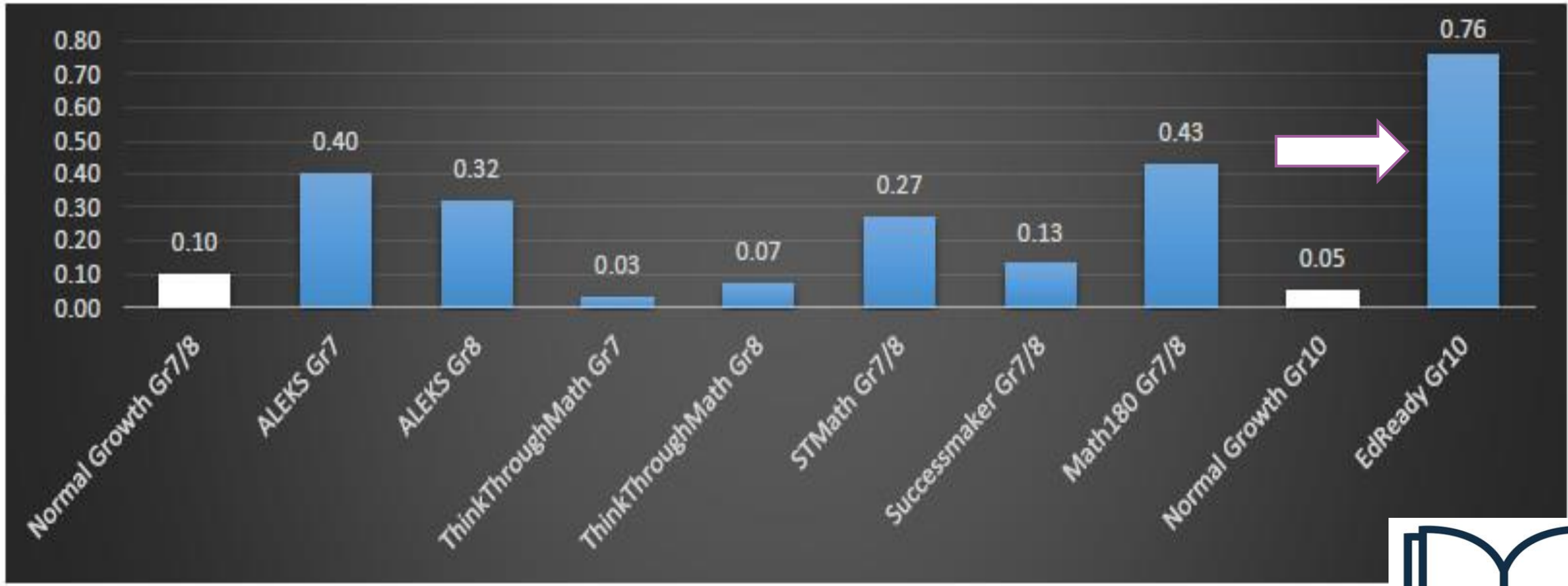
**Rounding Whole Numbers**  
Recommended study time: 30 minutes:  
NOT READY

Check your Knowledge View Resources



# Utah State University STEM Action Center Pilot Results

Figure 2 Effect Size of Gain in Mathematics Performance Compared to Natural Growth for 3 months of pilot



# Washington Foundation Gift to Implement EdReady Montana

*Three year field test and rollout funding -*

- **\$800,000/year for a 3 year total of \$2,400,000**
- **All students in 7-12 and higher education eligible to establish EdReady account and utilize the program**
- **Substantial Gates Foundation Funding invested in the development of the NROC EdReady Project**

# Rollout Plan for Montana Higher Ed., Schools and Students

## *Spring and Summer 2014*

- ▶ Outreach to the 2 year Colleges and Universities
- ▶ Field tests in several high schools

## *Fall 2014*

- ▶ Large scale rollout to both higher education and secondary schools