

Bridging the Algebra Gap

How NROC & EdReady Montana Are Powering High School Math Success

The NROC Project and Montana Digital Academy



William Engfer

Facilitator

The NROC Project / EdReady



Ryan Schrenk

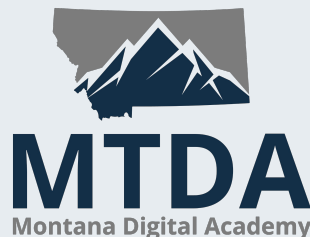
EdReady Montana and EdReady Classroom
Program Director

Montana Digital Academy



Jason Leonard

EdReady Montana Operations Manager
Montana Digital Academy



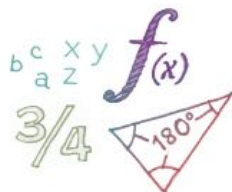
HOUSEKEEPING

- Use the Q&A area to submit questions as they arise, and our team members will be actively managing questions in the Q&A and Chat boxes.
- This webinar will be archived at [NROC.org](https://www.nroc.org), and you'll receive a follow-up email with a link to the recording and slides.
- Do you need help with Zoom? Email [community@NROC.org](mailto:community@nroc.org).

WELCOME POLL

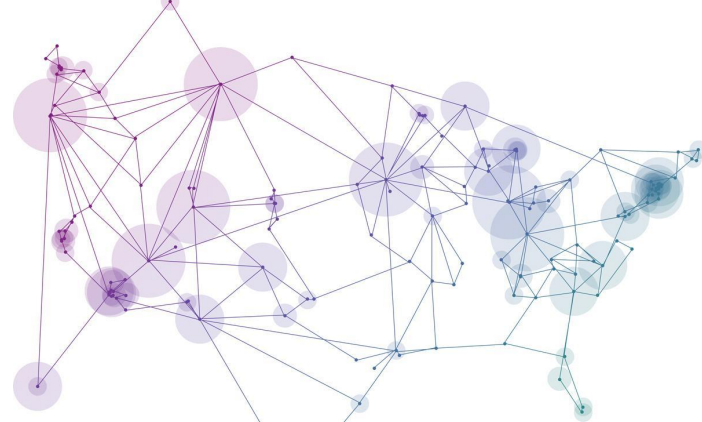
- We'd like to know who's joining us today! Please put your name, title and current role in the chat.

THE NROC PROJECT



Developmental Math
AN OPEN PROGRAM

EdReady®
Powered by NROC

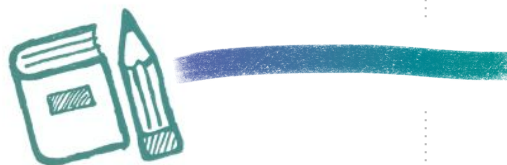


2003



Algebra 1

AN OPEN COURSE



Developmental English

AN INTEGRATED PROGRAM



NROC
founded

OER creation
and distribution

Adaptive learning
development

Diversification and
refinement

Scaling for equity
and impact



EdReady Supports:

- Just-in-time learning and accelerated learning
- Grade-to-grade transitions
- Dual Enrollment / early college / P-TECH programs
- High school completion
- College and career readiness
- Low-stakes, formative assessment for placement
- Co-requisite education
- HSE / GED, CASAS, ACT / SAT, TABE or NRS preparation
- Teacher preparation
- Corrections Education
- Adult Education

THE STUDENT EXPERIENCE

Mastery Status of Learning Objectives (Unit and Topic Level)



○ **Untested:** this material was not covered by the diagnostic



● **Not Ready:** student has mastered less than 50% of included learning objectives



Needs Review: student has mastered 50-99% of included learning objectives



Doing Well: student has mastered 100% of *tested* learning objectives... but not everything has been tested yet



● **Mastered:** student has mastered 100% of included learning objectives



Prepare for the ACT or SAT

Choose the study path below that best meets your needs.

0

36

52

100

ACT Math Prep

updated 01/16/2020 12:59



Show Details



Use Shapes



Not Assessed



Not Ready



Needs Review



Doing Well



Mastered

Units you should study:

Topic Status:

Whole Numbers	Mastered	Mastered	Mastered	Mastered	Mastered	Needs Review	Mastered	Mastered
Fractions and Mixed Numbers	Needs Review	Mastered	Needs Review	Not Ready	Not Assessed	Mastered	Needs Review	
Decimals	Mastered	Not Assessed	Not Ready					
Ratios, Rates, and Proportions	Needs Review							
Percents	Needs Review							
Measurement	Not Ready	Not Assessed	Not Assessed	Not Ready				
Concepts in Statistics	Not Assessed	Not Assessed	Not Ready	Not Assessed	Not Ready			
Solving Equations and Inequalities	Mastered	Mastered	Needs Review	Mastered	Needs Review	Needs Review	Mastered	Mastered
Exponents and Polynomials	Not Assessed	Not Assessed	Not Assessed	Not Assessed	Not Assessed	Not Ready	Not Ready	Not Ready



MTDA

Montana Digital Academy

Core Program

High School Original
Credit

FlexCAP

Middle School
Courses

Individualized
Pathway Course (IPC)

EdReady*

Pathway to Algebra

Algebra
Companion

English Support

ACT & MAST Prep

Pathway to College

*No Cost to MT Schools

Digital Learning Clearinghouse

Digital Content and
Platforms

MTDA Learning
Modules

Vendor Learning
Modules

Frontier Learning Lab

AI Help Desk

AI and VR use in the
classroom

Professional Learning
Workshops

Pop-up Labs

Over 25,000

EdReady Enrollments Per Year

Over 6,600

K-12 Students used EdReady to Prep for Algebra 1 last year

4,000 - 6,000

Unique users a month



Over 22,000

EdReady Math Enrollments

Over 3,800

English Enrollments

179

Unique Schools

EdReady use in 2024/2025



What is EdReady?

Proficiency-Based Education Platform

...providing a flexible toolset for mathematics and foundational writing

Supports Students During Transitions

...including maturation through levels of education when preparation matters

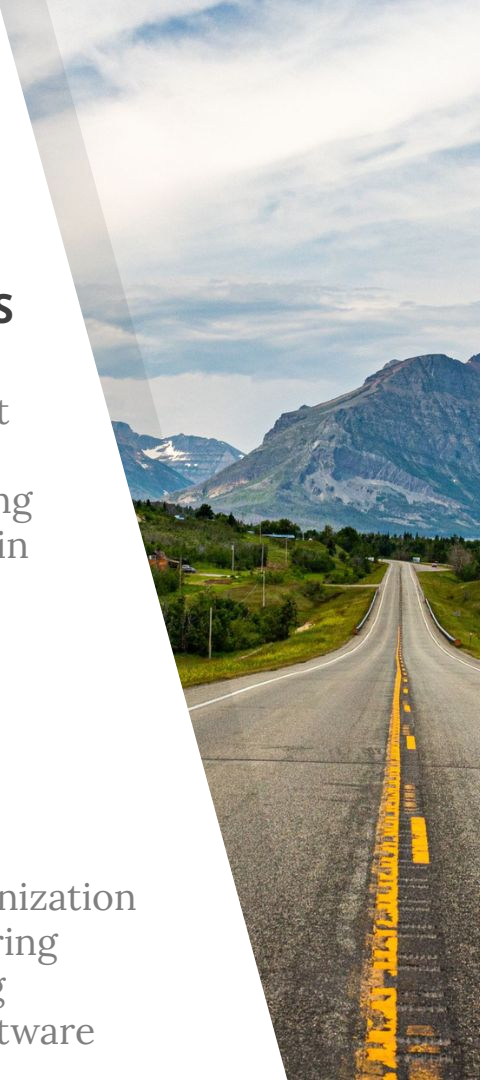


Assessment PLUS Content

...including a robust assessment engine PLUS award-winning content to help fill in gaps

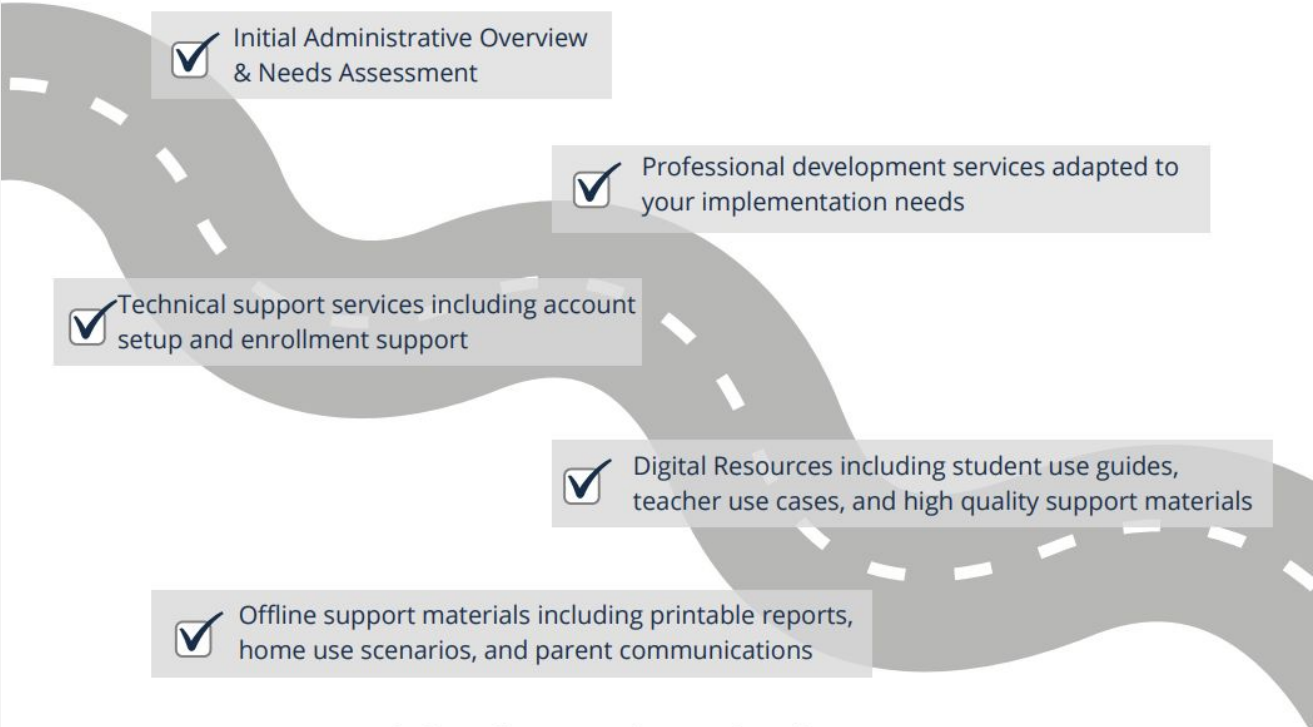
Offered by the NROC Project

...a non-profit organization centered on delivering responsive learning curriculum and software



How Does EdReady Work?





✓ Initial Administrative Overview
& Needs Assessment

✓ Professional development services adapted to
your implementation needs

✓ Technical support services including account
setup and enrollment support

✓ Digital Resources including student use guides,
teacher use cases, and high quality support materials

✓ Offline support materials including printable reports,
home use scenarios, and parent communications

Training | Hosted Service | Support

EdReady - Use Cases

Math or English

Ways to implement:

(Usually 30 minutes of class time a week or less)

Teacher/Student/Parent Driven -

- Up Front Diagnostic Screening/Placement
- Skills Assessment Throughout Year
- Teacher led examples/group instruction
- Classroom As Filler/Out of Classroom Usage
- Classroom Setting On Multiple Occasions or Weekly/Set Days
- Test Prep setting/Classroom/Study Hall/Lunch, etc.

OR

Student/Parent Driven - Out of Classroom Usage



Essential questions...

What do students want to be *ready* for?

What can districts provide to support students to be better prepared for success?



EdReady Supports Transitions



MIDDLE SCHOOL



HIGH SCHOOL



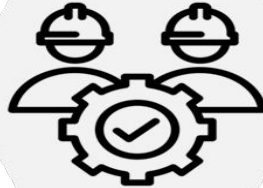
HIGH SCHOOL



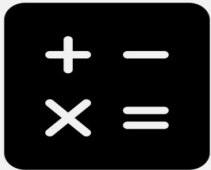
COLLEGE



HIGH SCHOOL



WORK FORCE



PRE-ALGEBRA



ALGEBRA



"REGULAR" MATH



ADVANCED/HONORS MATH



The EdReady Pathway



SET GOAL

Conduct needs assessment to help schools pick goals that fit their needs best



DIAGNOSTIC

Students take a robust assessment to get a "readiness" score



PERSONALIZED LEARNING PATH

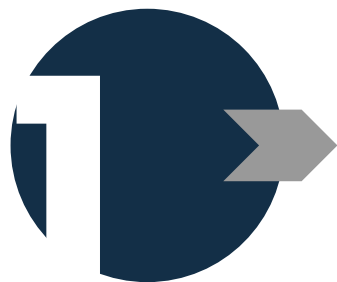
Media-rich, award winning mathematics or reading, writing, grammar resources



INCREMENTAL PROGRESS

Students take incremental assessments until the goal is reached

The EdReady Pathway



**NEEDS
ASSESSMEN
T
+
SET GOALS**

Intermediate, Middle School, & High School Goals

- 5th Grade Readiness
- 6th Grade Readiness
- 7th Grade Readiness
- 8th Grade Readiness
- Pre-Algebra Readiness
- Algebra 1 Readiness
- Algebra 1 Supplement*
- Algebra 2 Readiness
- Geometry Readiness
- Pre-Calculus Readiness
- Calculus Readiness
- College Readiness

**Full year of Algebra 1 specific resources*

Co-Curricular Goals

- Physics Readiness
- Chemistry Readiness

Adult Education

- TABE E/M/D/A Readiness
- Pre-HiSET
- HiSET Prep 2020

EdReady English

- College English
- ACT English Prep
- HiSET English
- TABE D-A English
- Writing Readiness
- Reading Readiness
- Grammar Readiness

Placement & Skills Inventory

- College Placement
- Middle to High School Placement
- Beginning/End of Year Assessment
- Identify Student Learning Gaps

Test Prep Goals

- ACT
- SAT
- Accuplacer
- MPLEX
- Maplesoft
- GRE
- Praxis



The EdReady Pathway



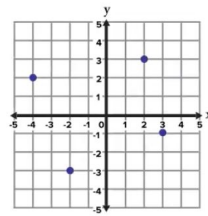
COMPASS Math Preparation

Whole Numbers

Progress: 

The graph represents a function.
Which ordered pair can be plotted together
with these four points, so that the resulting
graph still represents a function?

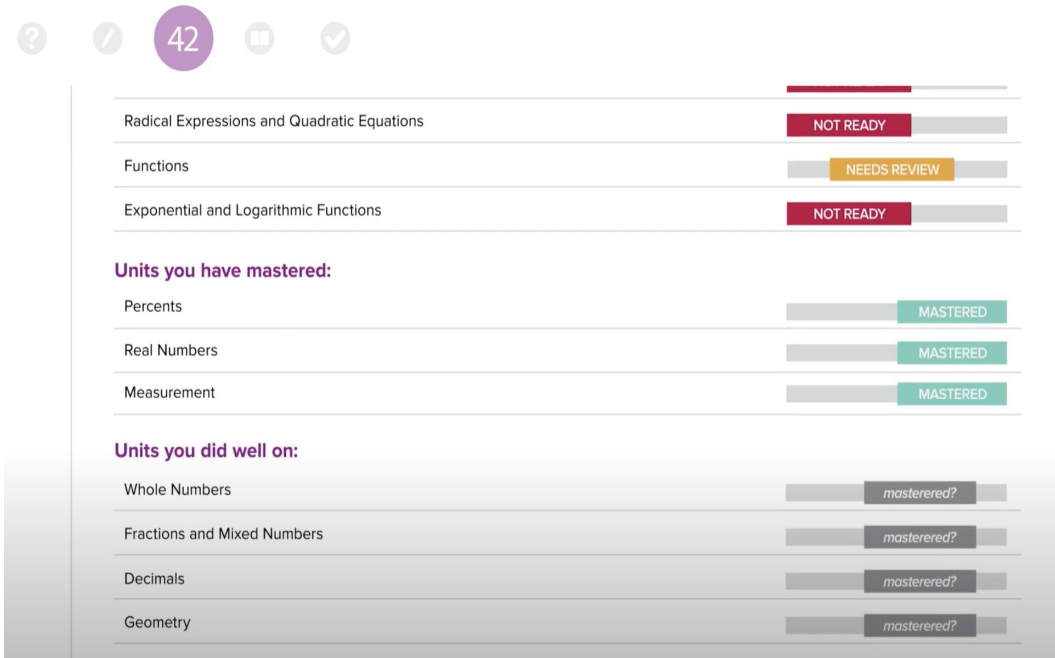
- ☐ $(-5, 2)$
- ☐ $(-2, 5)$
- ☐ $(2, -1)$
- ☐ $(2, -5)$



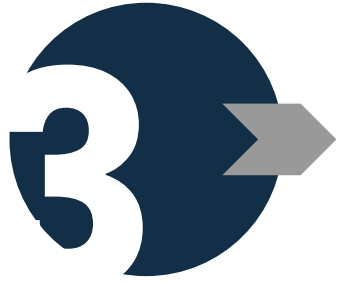
The EdReady Pathway



DIAGNOSTIC SETS
LEARNING PATH



The EdReady Pathway



PERSONALIZED LEARNING PATH

Navigation icons: ? / 42 [Pause] ✓

Navigation arrows: < >

Tools: 1 2 3 4 5 6



To simplify a fraction, divide both the numerator and denominator by the same number

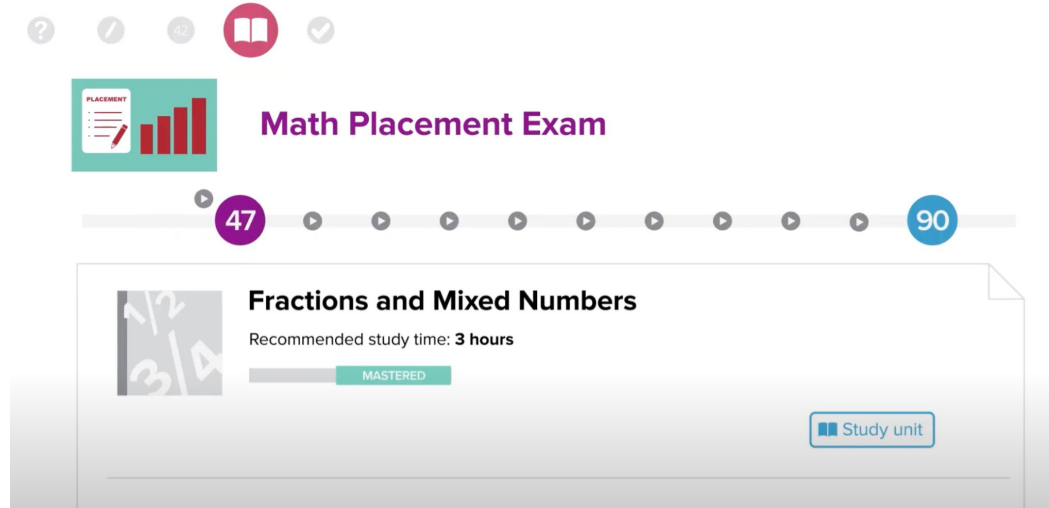
24: 1, 3, 6, 12, 24

$$\begin{array}{r} 2 \quad 4 \quad 8 \\ \underline{24} \\ 32 \end{array}$$

32: 1, 2, 4, 8, 16, 32



The EdReady Pathway



The EdReady Pathway



Math Placement Exam



Congratulations!

You have completed your study plan and reached your target score of **90**.



Pathway to Algebra

Initial EdReady Score Upon Completion of Diagnostic	
ER Initial Diagnostic Score	Grade Level
<43	below 6th Grade
43 - 51	6th Grade Ready
52 - 64	7th Grade Ready
65 - 72	8th Grade Ready
73+	Algebra 1 Ready

[Progress Monitoring when you need it!](#)



Pathway to Algebra

Initial Level to "Work to" Level	Current ER Score
below 6 to 6 grade ready	53
work up to 7 grade ready	67
work up to 8 grade ready	84
work up to Alg 1 ready	100

With EdReady, you get the technology And the Team!

1. Needs assessment
 2. Starting successfully
 3. Usage support
 4. Reports training
 5. Beginning and end of the year support
- ALL at no cost to schools!

EdReady
CLASSROOM



EdReady Montana & EdReady Classroom Team



Ryan Schrenk
Program Director

ryan@mtda.org



Jason Leonard
Operations Manager

jason.leonard@mtda.org



Virg Hale
Ambassador

virg@mtda.org



Jacquie Teasdale
Ambassador

jacquie.teasdale@mtda.org



MTDA
EdReady Montana

EdReady
CLASSROOM



**Results Have
Data :)**



Pathway to Alg - Rural CO School

2024-2025

1. 8th Graders
2. Approximately 30 Minutes a week in ER
3. “You get out of it what you put into it”
4. Not Graded/principal delivered extra practice time
5. Next year will add extra credit for mastered topics and expand to more students



Pathway to Alg_rural CO School

10 students 2024-2025 - NWEA MAP Scores

Student	Fall Score	Spring Score	Growth
student 1	251	271	20
student 2	240	254	14
student 3	261	277	16
student 4	242	267	25
student 5	231	252	21
student 6	242	262	20
student 7	247	263	16
student 8	244	259	15
student 9	241	248	7
student 10	250	267	17
	Average Increase		17.1



Pathway to Alg_rural CO School

2024-2025 - NWEA MAP Scores

2 students chose not to use EdReady

Student	Fall Score	Spring Score	Growth
student 11	239	243	4
student 12	236	238	2
	Average Increase		3



**Results Have
Data :)**



Pathway to Algebra - Mid Size School

11 Math Foundations Students

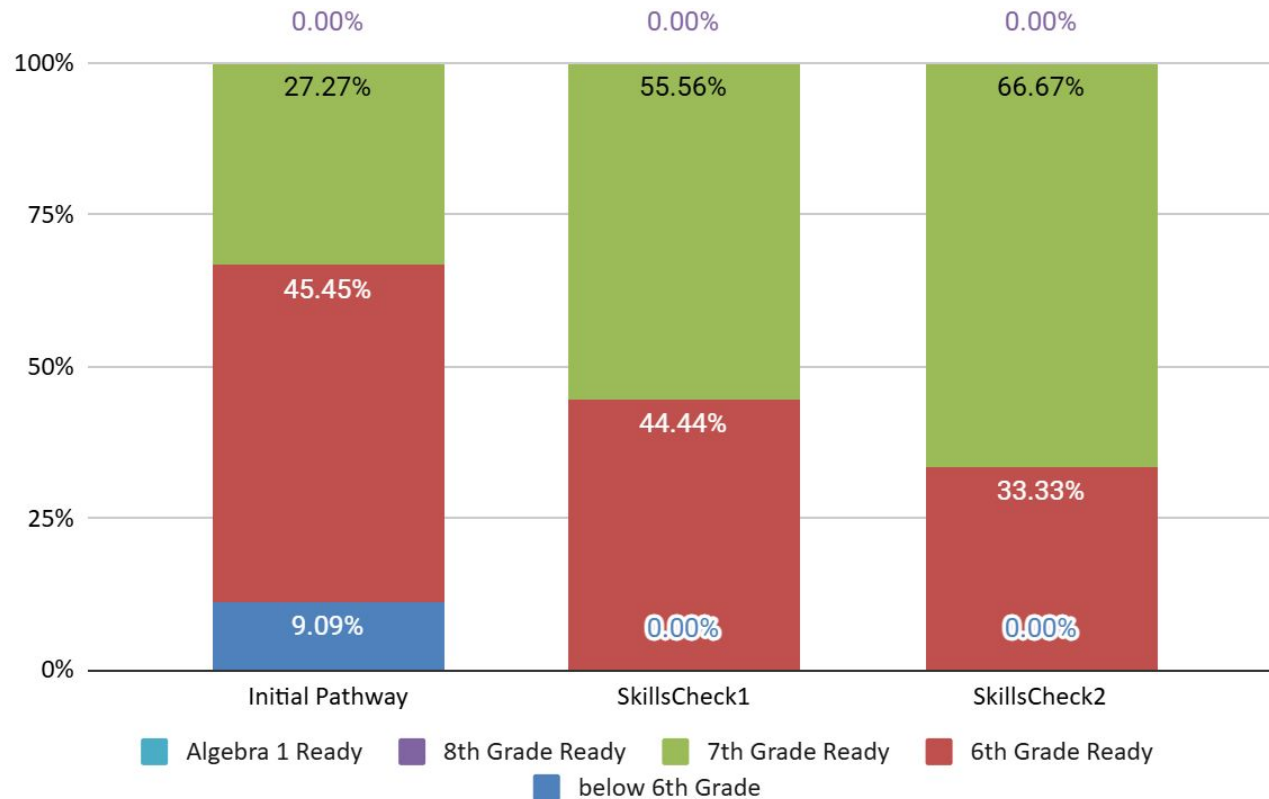
2024-2025

Use case- Spring of 2025

1. Students who didn't pass 1st semester of pre-algebra were put into Math Foundations
2. Combination of direct instruction and EdReady
3. Students assessed 3 times using EdReady
4. **Results led to 30% of the students to go directly into the Alg I class**
5. Through proficiency based grading earned a full credit for the class they were failing



Pathway to Algebra - 11 Math Foundations Students 2024-2025



**Results Have
Data :)**



8th Grade - 69 students (Pathway to Algebra)

Early Fall

10% Below 6th Grade
51% 6th Grade Ready
36% 7th Grade Ready
3% 8th Grade Ready
0% Algebra 1 Ready

Mid Year Check

3% Below 6th Grade
12% 6th Grade Ready
55% 7th Grade Ready
31% 8th Grade Ready
0% Algebra 1 Ready

End of Year Check

1% Below 6th Grade
3% 6th Grade Ready
49% 7th Grade Ready
44% 8th Grade Ready
3% Algebra 1 Ready



8th Grade - 69 students

Overall Avg Study Time

6:17:44

Study Time Increased Score

6:22:46

Study Time Decreased Score

3:29:44

14% - Up 0 Levels - 10 Students
55% - Up 1 Level - 38 Students
26% - Up 2 Levels - 18 Students
1% - Up 3 Levels - 1 Student



8th Grade - 69 students

Mid Year Check

90% Increased Score
9% Decreased Score

Mid Year Check

67% Increased Level
3% Decreased Level

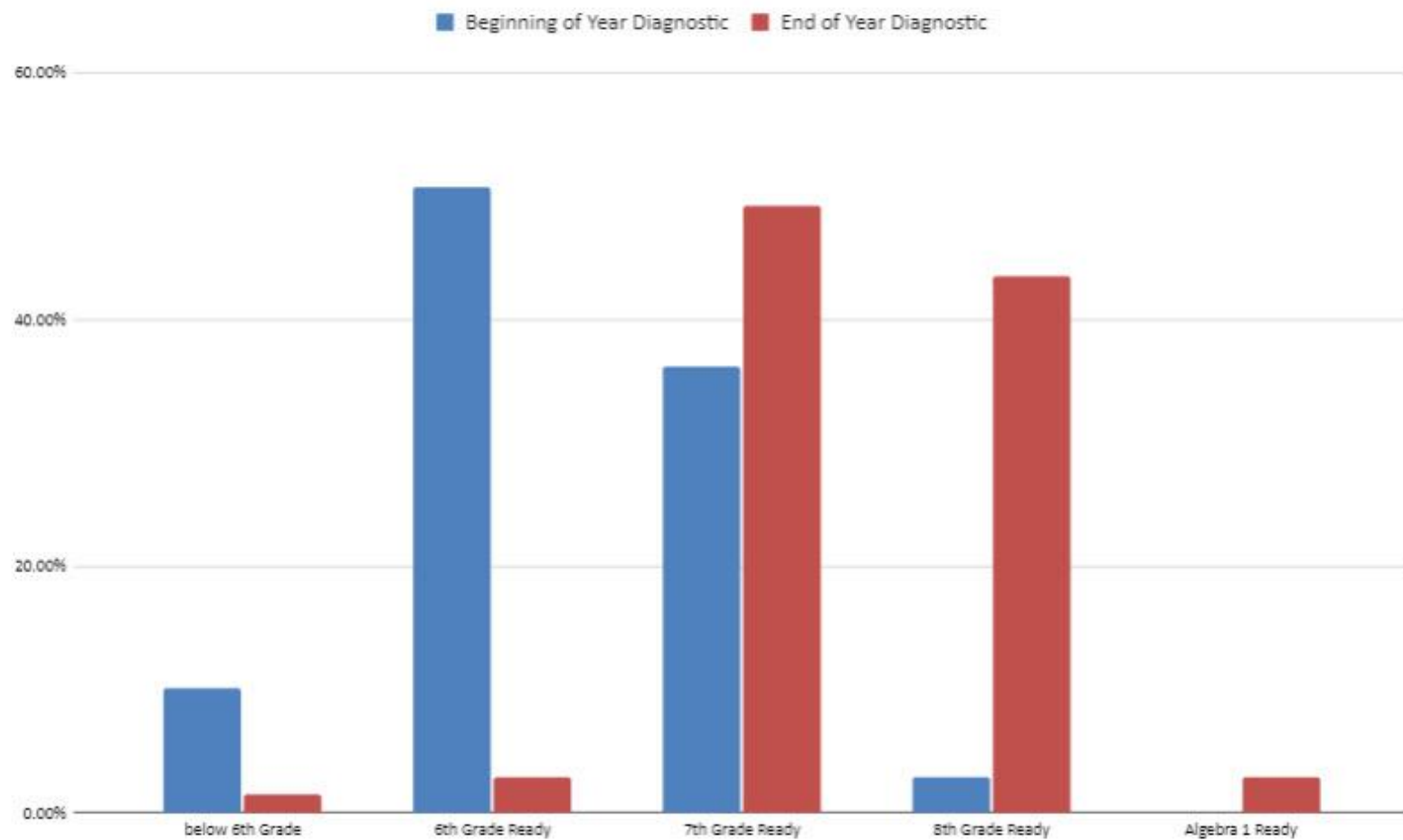
End of Year Check

97% Increased Score
3% Decreased Score

End of Year Check

83% Increased Level
0% Decreased Level





**Results Have
Data :)**



Pathway to College _ Rural MT School

2024-2025

Use Case 24/25 School Year:

1. Reports used to find gaps
2. Goal used weekly in class to improve skills
3. Emphasis on work shown more than score improvement
4. No out of class time
5. Over the shoulder help



Pathway to College _ Class B School

25 students 2024-2025

Early Fall

16%	Level 100
36%	Level 150
20%	Level 250
28%	Level 300
0%	Level 400

Spring Check

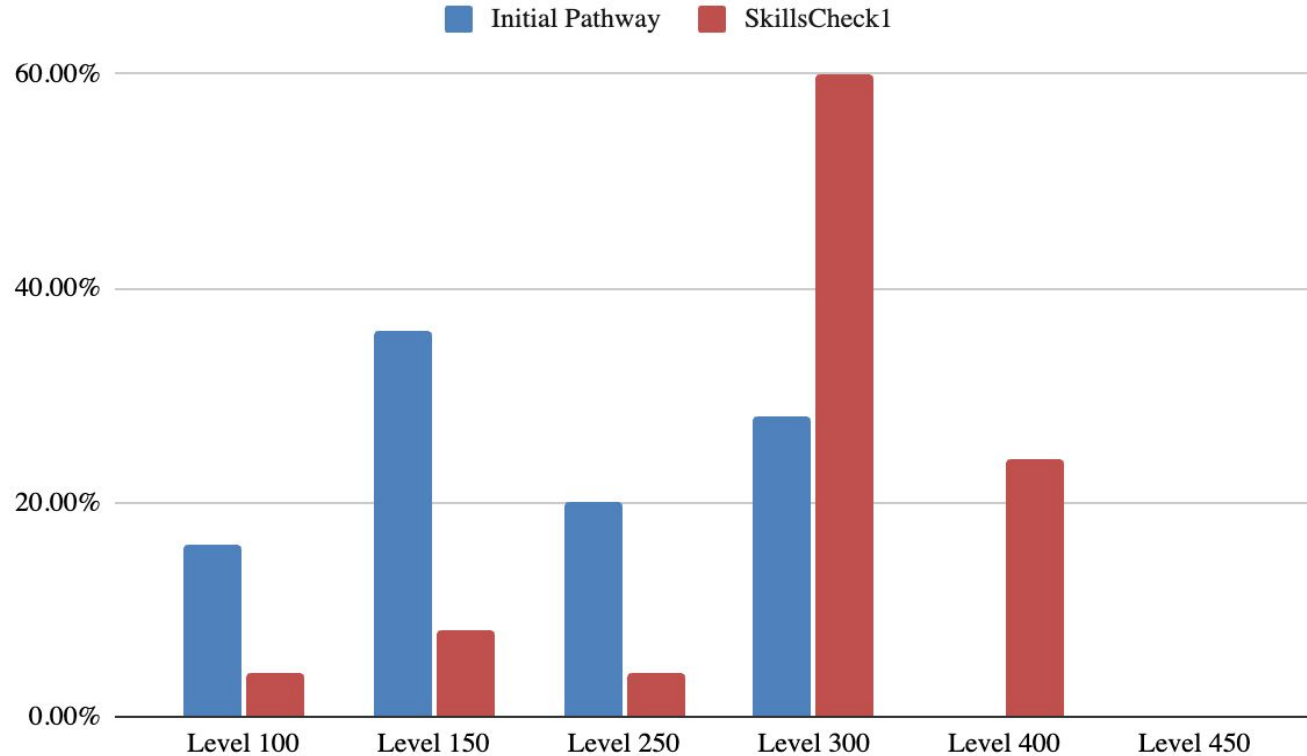
4%	Level 100
8%	Level 150
4%	Level 250
60%	Level 300
24%	Level 400

[Pathway to College Score Interpretation Explanation](#)



Pathway to College _ Class B School

25 students 2024-2025



**Results Have
Data :)**



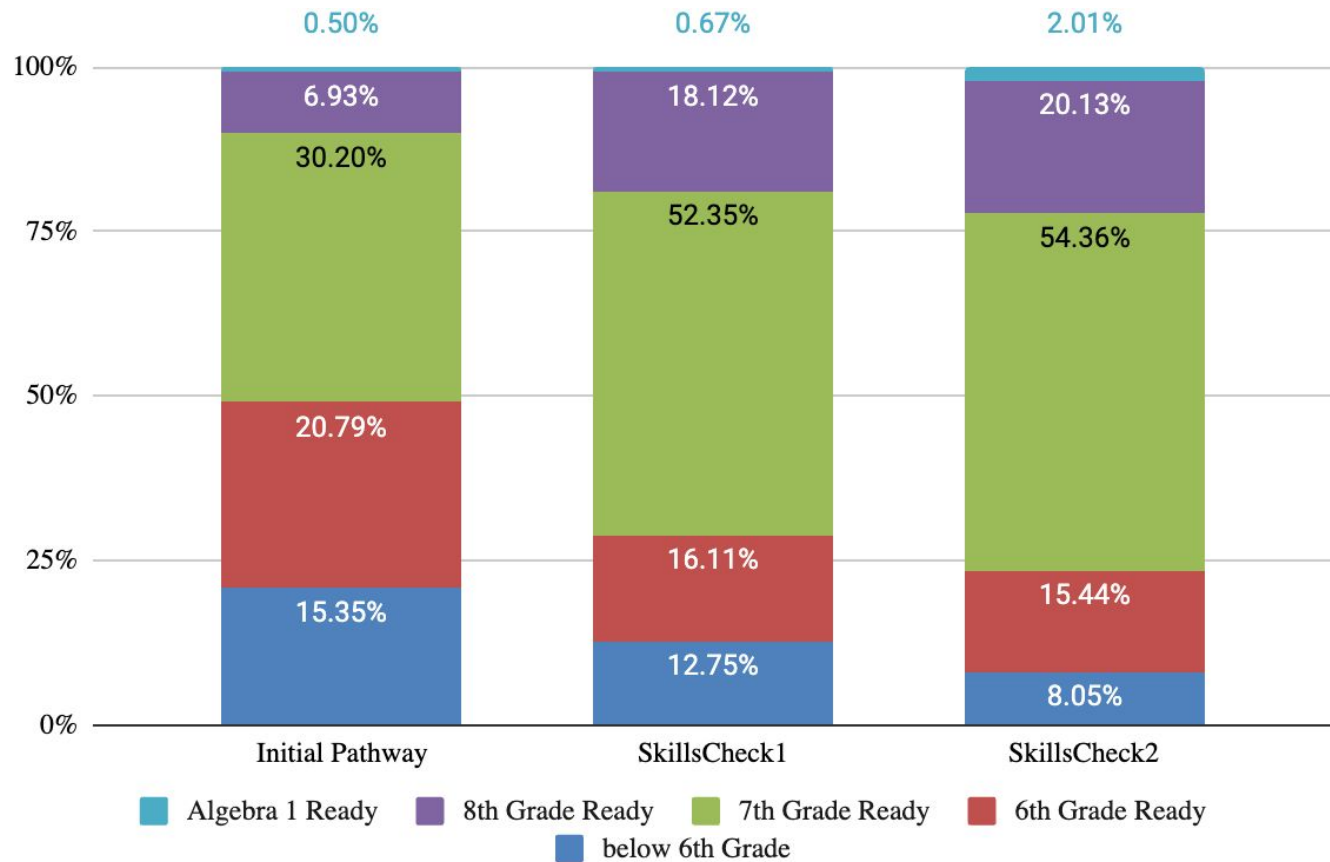
Large MT School Use Case:

Benchmark use
only. EdReady study
path was not used.



Pathway to Algebra - 149 students

2024-2025



Placement Case



Montana Board of Regents Placement Policy May 2024

“

2. Campus placement guidelines should emphasize determining the level of support needed and appropriate course placement for students to pass gateway math and writing courses within the first year while minimizing credits to passing the course.

To align with national best practices, students are generally to be placed into college credit-bearing courses, and additional support such as corequisites should be added when appropriate. In rare cases when institutions demonstrate that students have a higher likelihood of success in a pre-requisite course than a credit-bearing college level course with support, institutions may offer a prerequisite model.

3. Campus placement models must include multiple measures, including academic measures, students' educational goals and degree paths, and college readiness skills. **Placement models should allow students opportunities to build skills to avoid pre-requisites and place directly into college-level courses.**



Figure 3: EdReady Placement
(test without working up a level)
n = 545

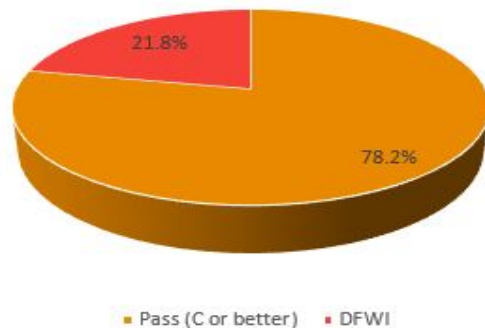


Figure 4: Traditional ACT test as placement

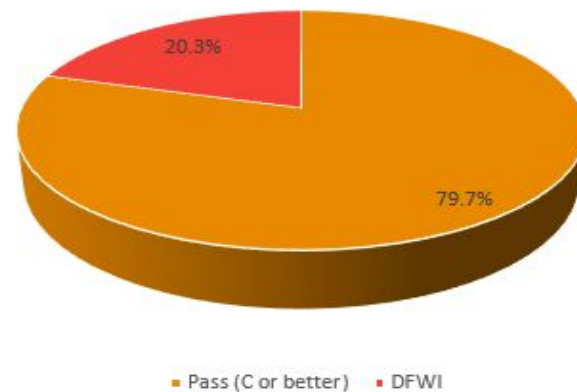


Figure 2: EdReady Placement plus study plan
(increased one placement level or more)
n = 85

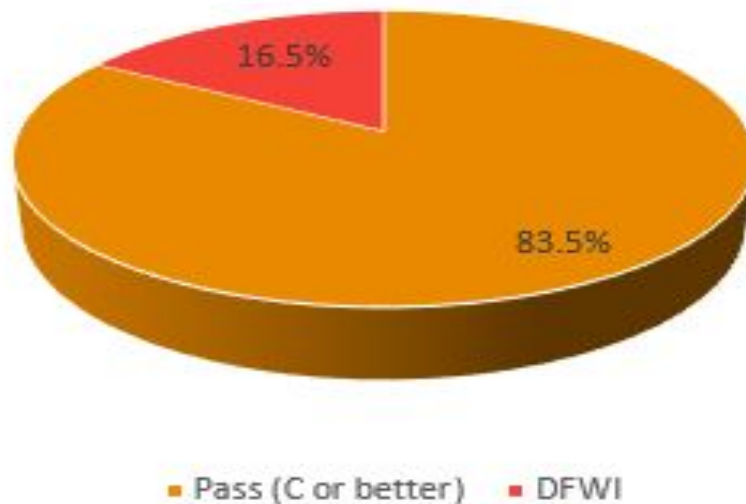
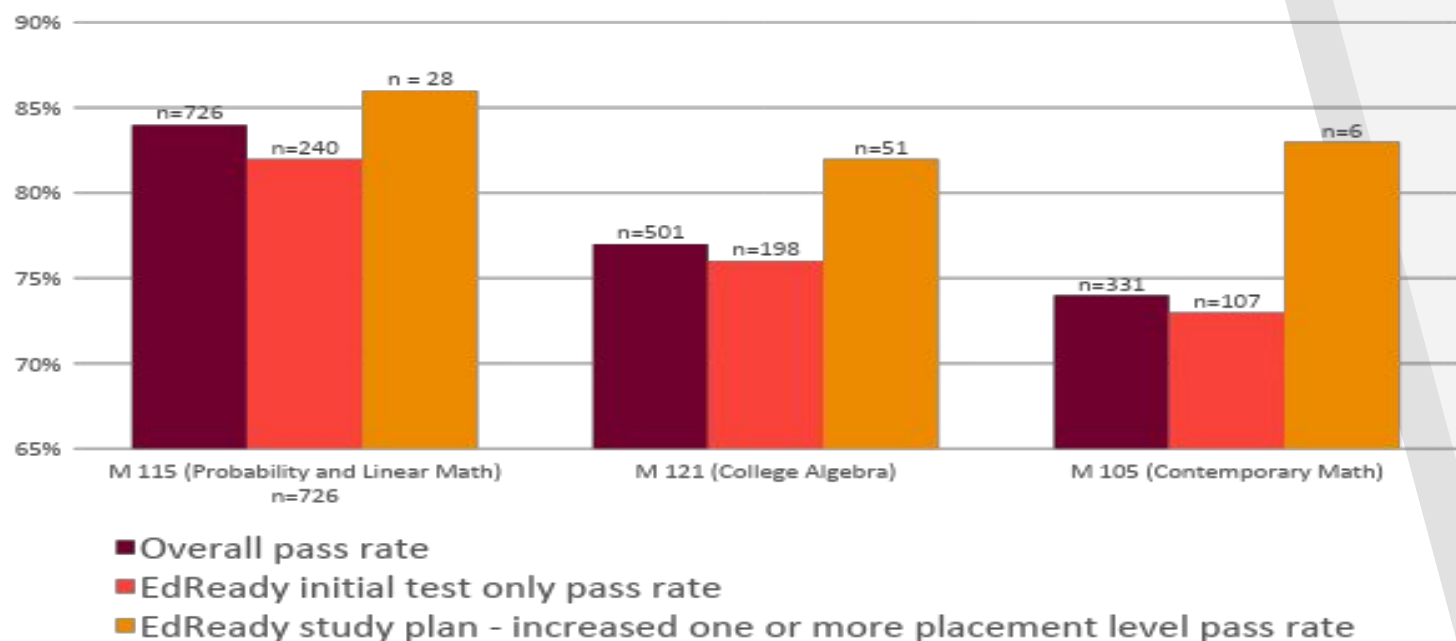


Figure 1: Gateway, college-level math course pass rates by overall student population and by students who used EdReady for math placement



Explaining the Scaled Initial Scoring

Initial EdReady Score Upon Completion of Diagnostic

ER ID Score	Example Class Titles Only	Level Abbreviation
<46	Pre-Algebra	Level 1
46-48	Intro to Algebra	Level 1.5
49-51	Intermediate Algebra/Non-STEM Math	Level 2
52-54	CoReq College Algebra	Level 2.5
55 - 65	College Algebra	Level 3
66 - 69	Pre-Calculus	Level 4
70+	Ready to test for Calculus	Level 4.5

Explaining the Scaled Study Path Scoring

Study Path Improvement Scores

ID Level -> Study Pathway Placement Level	Current ER Score
Level 1 -> Level 1.5	65
Level 1 or 1.5 -> Level 2	69
Level 1 or 1.5 or 2 -> Level 2.5	73
Level 1.5 or 2 or 2.5 -> Level 3	78
Level 2.5 or 3 -> Level 4	97
Level 4 -> Level 4.5	100

Time for Questions

How Long Does Set
Up Take?

Do you have a need
that we didn't
address?

What Are Our Next Steps?

What did you hear today
that sparked your interest?

How long does
training take??



Upcoming Events

Meet with our team members at these upcoming events to talk more about what EdReady can do for your students!

*Be sure to join us for our **upcoming November webinar, ‘Generating Early College Program Success: Closing the Readiness Gap’** with Brenda Kurtz from Cochise College, **November 20th at 11am PT / 2pm ET!** Check our website for further details!*



Thanks for joining us today!

GET IN TOUCH

William Engfer
wengfer@nroc.org

Lauren Tarson
ltarson@nroc.org

Book a Demo:



Prepare your students for what's next.



EdReady Montana & EdReady Classroom Team



Ryan Schrenk
Program Director

ryan@mtda.org



Jason Leonard
Operations Manager

jason.leonard@mtda.org



Virg Hale
Ambassador

virg@mtda.org



Jacquie Teasdale
Ambassador

jacquie.teasdale@mtda.org



MTDA
EdReady Montana

EdReady
CLASSROOM

