Algebra Readiness Progress Monitoring: Administration Training

Erica N. Mason | Leanne Ketterlin Geller

Southern Methodist University | University of Missouri | University of Texas at Austin

***Algebra Readiness Progress Monitoring*: Administration Training**

Purpose

The purpose of this technical report is to describe how teachers were trained to administer the *Algebra Readiness Progress Monitoring* (ARPM) measures.

Method

At Sites 1 and 2, during the third Core PD, teachers were introduced to the ARPM measures. Teachers were directed to the ARPM administration website (www.istation.com) and provided with their username and password information. Teachers had the opportunity to explore the site and locate their virtual classroom of consented student participants.

The Algebra Readiness Progress Monitoring Classroom Quick Sheet and Troubleshooting Guide were given to teachers. The Quick Sheet included abbreviated directions for preparing for administration, directions about how to assign assessments, how to administer the ARPM measures with fidelity, and how to view students' results (see Appendix A). The Troubleshooting Guide included complete directions for how to prepare for administration, assign assessments, administer the ARPM with fidelity (including scripted language), and access students' results (see Appendix B).

Following this initial training during Core PD, coaches offered additional support as needed to teachers experiencing technical or other difficulties administering these measures.

APPENDICES

Appendix A

Algebra Readiness Progress Monitoring Classroom Quick Sheet

<u>My teacher log in information</u>

www.istation.com   Campus/Domain: **ISIP Math studies (a.research)**

Username: _____Password: _____

<u>Prior to your first administration</u>

1. Log in and verify that your students are listed within your classroom.
2. Print student log in cards.
   a. Click on the "Classroom" tab at the top of the page after logging in.
   b. On the side bar, click "Login Cards"
   c. Click "Select All" and then "Print Selected"

<u>Assigning Assessments</u>

1. Before students can take the measures, they need to be manually assigned. It may be a good idea to do this when viewing the results from the previous session.
   a. Click on the "Classroom" tab at the top of the page after logging in.
   b. One the side bar, click "On Demand Assessments"
   c. Check the grey boxes for each measure you are assigning. Students should take all three, each week.
   d. Click "Update On Demand Assessments," a "Success" message should appear.

<u>Administration</u>

1. Pass out log in cards and ensure students have headphones.
2. Students will click on the Imagination Station App icon and log in.
3. Once logged in, students will selected the "ISIP Algebra Readiness" icon.
4. The app will explain how to use the buttons on the screen, what skills are being assessed, and encourage them to do their best work.
5. At the start of each measure, there will be a short demonstration of how to answer the type of question and an example problem.
6. After each measure, the student is shown their score. It may be helpful to have the student record their scores on a chart or graph for their own benefit.

<u>Viewing results</u>

1. After your students have completed the session, view and graph the results as soon as possible.
   a. Click on the "Classroom" tab at the top of the page after logging in.

b. Under the blue student banner, click on an individual student's name.
c. At the bottom of the screen, click on "Session Activity/Detail"
d. Under "Session Summary" Click on the session you are interested in viewing.
e. Scroll down and the score will be reported, as well as an item-by-item description of how the student performed.

See "Troubleshooting Guide" for further questions.

Appendix B

Troubleshooting Guide

Algebra Readiness Progress Monitoring Troubleshooting Guide

* Paper versions can be printed as a backup method via Canvas.

**Downloading Istation and Logging in**

1. Go to Istation.com

2. Click on "download and technical info"
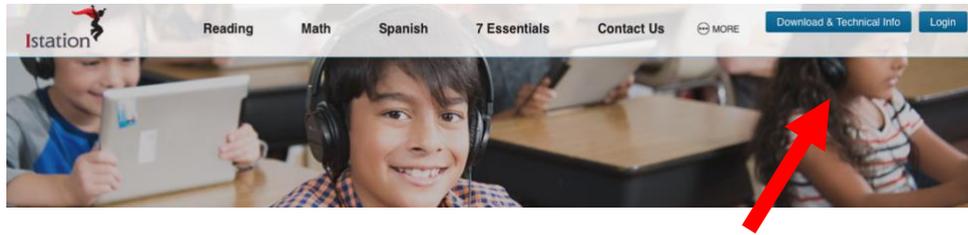
3. Download using the platform (windows/mac) of your computer

4. After installation, click on the icon to open the program

The Imagination Station

5. On the configuration page type "a.research" in the domain field and click ok
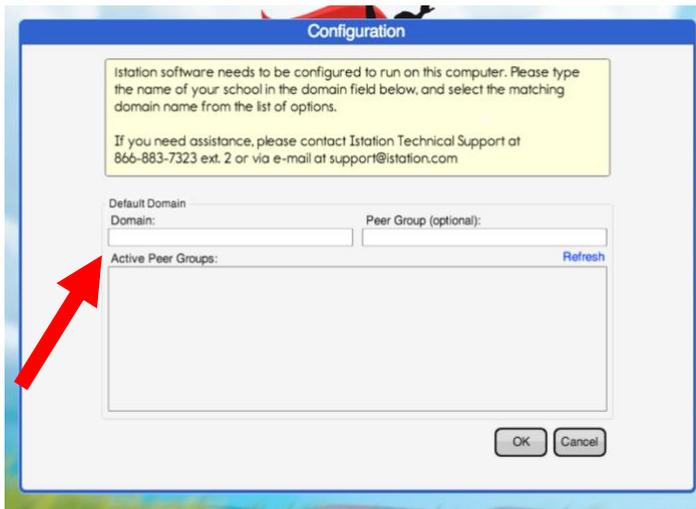
6. Enter your username and password.

7. Select ISIP Algebra Readiness
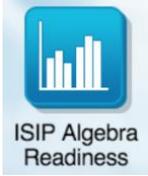
ARPM Administration Guide

Administration Guidelines

1. Orient students to the assessment area and explain the assessment process and the setting before beginning the test. Encourage a positive attitude toward the test.

   SAY: Today you will be working on the computer to demonstrate your readiness for Algebra 1. It is important that you listen carefully, follow directions, and do your best work.

2. Instruct students to work independently and to quietly raise their hands if they need assistance.

   SAY: Because this is a test, you should work independently, with your eyes on your computer screen. The three subtests in ISIP™ Algebra Readiness will measure your ability to reason through mathematical statements without having to actually solve them. So it is important to answer each item as quickly as possible without guessing. Raise your hand if you need help and when you have finished.

   Even if you work as quickly and carefully as possible, time will likely run out before you complete very many of the mathematical statements in each subtest. This is part of the test design, so do not worry if you do not finish.

   Once you complete a subtest, the program will automatically present the next one until all three subtests have been completed.

3. Pass out login cards and assist students as they log in to the ISIP Algebra Readiness assessment. For first-time use, consider modeling the login steps on a computer or a

projection screen. The test will begin as soon as the student presses OK on the login screen.

SAY: Let's begin. In the first blank box, type your username. In the second blank box, type your password. Put your headphones on and click OK.

4. Observe and monitor student performance to ensure validity and reliability of test results.

If students need assistance or must take a break, first press the pause key on the keyboard. This will interrupt the assessment currently being given without penalty to the student. The assessments are timed activities. Failure to pause will result in the assessment continuing to run while assistance is being provided. When the student is ready to return to the assessment, press the pause key again. The assessment will automatically return to the same question where the student left off.

Be aware of fatigue and other behavioral issues such as students losing interest, being easily distracted, exhibiting frustration, not attempting to answer questions, or not trying. All of these behaviors often invalidate results. If any of these behaviors are noted, interrupt the student activity.

To assist students:

a.   Ask the student to remove the headphones.

b.   Sit with the student at the computer.

c.   Do NOT provide answers or suggestions on how to respond to questions.

d.   If students appear to have lost interest or are not trying,

SAY: Remember, this is a test. It is important that you follow the instructions and do your best work.

e. If the student appears frustrated or asks for assistance, ask the student to repeat the instruction for the assessment.

If the student responds correctly, reinforce their understanding. Then encourage the student to continue working.

If the student responds incorrectly, provide guidance and have the student demonstrate understanding of the directions before they continue the assessment.

5. Disruptive behavior should not be tolerated. If a student is disrupting others and their behavior is not corrected by intervention, the student should be removed from the testing area. Computer time should be rescheduled so that the student has an opportunity to complete the assessment.

6. It is preferable that the assessments be completed in a single session. Encourage students to continue working in the assessment as long as they are being productive. The approximate time required to complete the entire assessment is 15 minutes, so most users should be able to follow these recommendations. The initial testing session may be slightly longer due to the modeling within each section of the assessment.

7. Document any absent students and schedule time for makeup assessments.

NOTE: Using the pause key to allow for more response time during the assessment is not advised. The response time given to each item was built in at the time psychometric data was collected in order to determine the difficultly of each item. If the pause key is used to lengthen

item response time, the psychometric data collected on the items becomes invalid, and ability scores may not be an accurate measure of student performance.

The objective of computer adaptive testing is to adapt the assessment based on student responses. If students are unable to answer questions in the response time given, they will be given less difficult items. An ability score obtained from modifying the test is not a score of the student's true ability according to psychometric data collected.

8. Review test reports. If student results do not match teacher expectations or understanding of current skill knowledge, the assessment may be repeated on a different day with different probes. Go to www.istation.com and assign On-Demand assessments to the student in question. Next time they log in, On-Demand assessments will run. The last of the two scores will be used as the current period indicator of the student's skill level.

Student results may require validation in the following situations:

- Session is interrupted (i.e., fire drill, class disturbance).
- Student answers randomly without listening to directions or reading questions.
- Student refuses to complete the assessment.
- Student becomes ill.
- Results aren't typical of student performance.

Assigning Assessments

1. Log into Istation

2. Click on the Classroom tab:
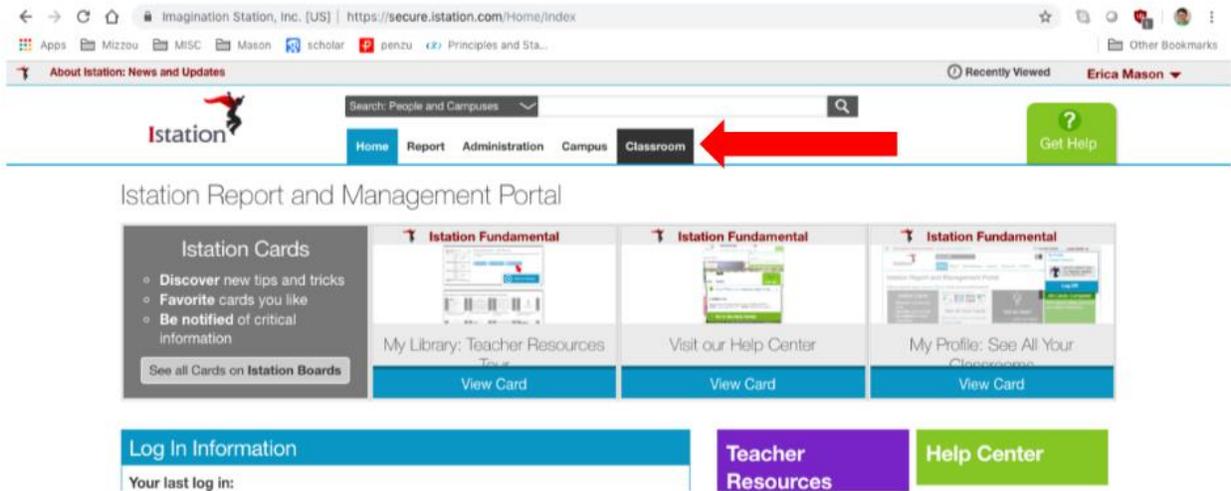
3. On the left-hand menu, choose "On Demand Assessments":
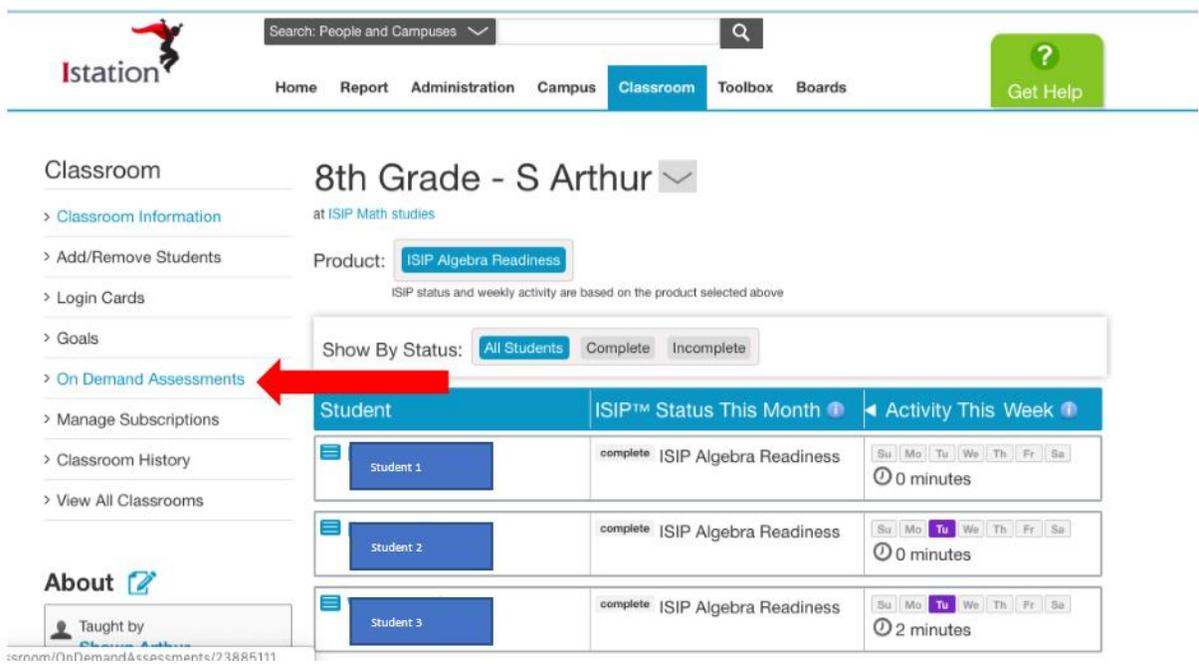

4. For each student, check the appropriate assessments you'd like to assign.

5. Finally, click "Update On Demand Assessments".

6. A "Success!" message should appear.
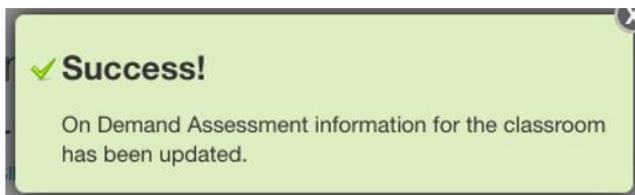
Viewing Student Results

1. Log into IStation

2. Click on the Classroom tab:
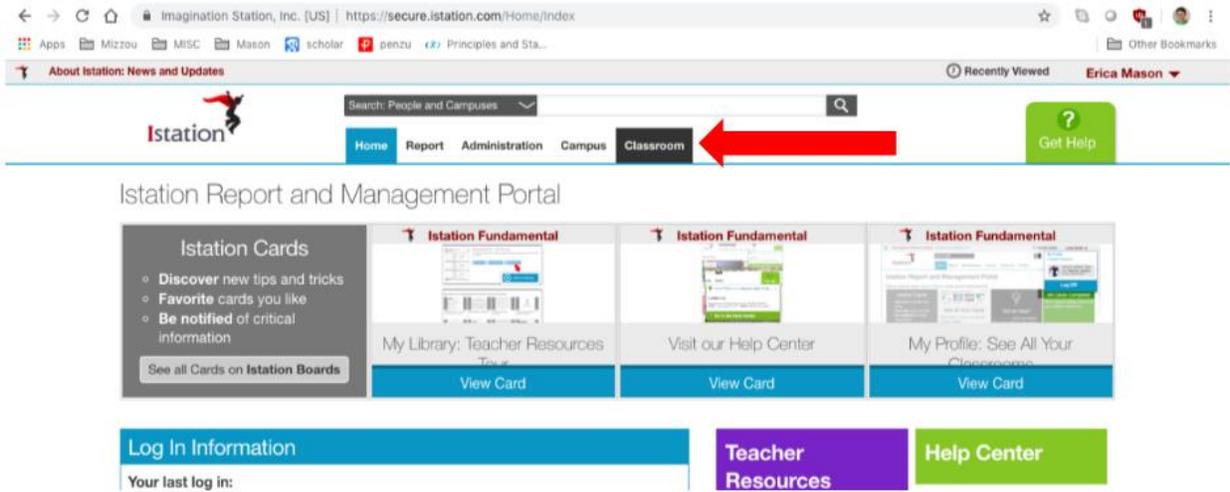
3. Under the blue Student banner, click on an individual student's name:
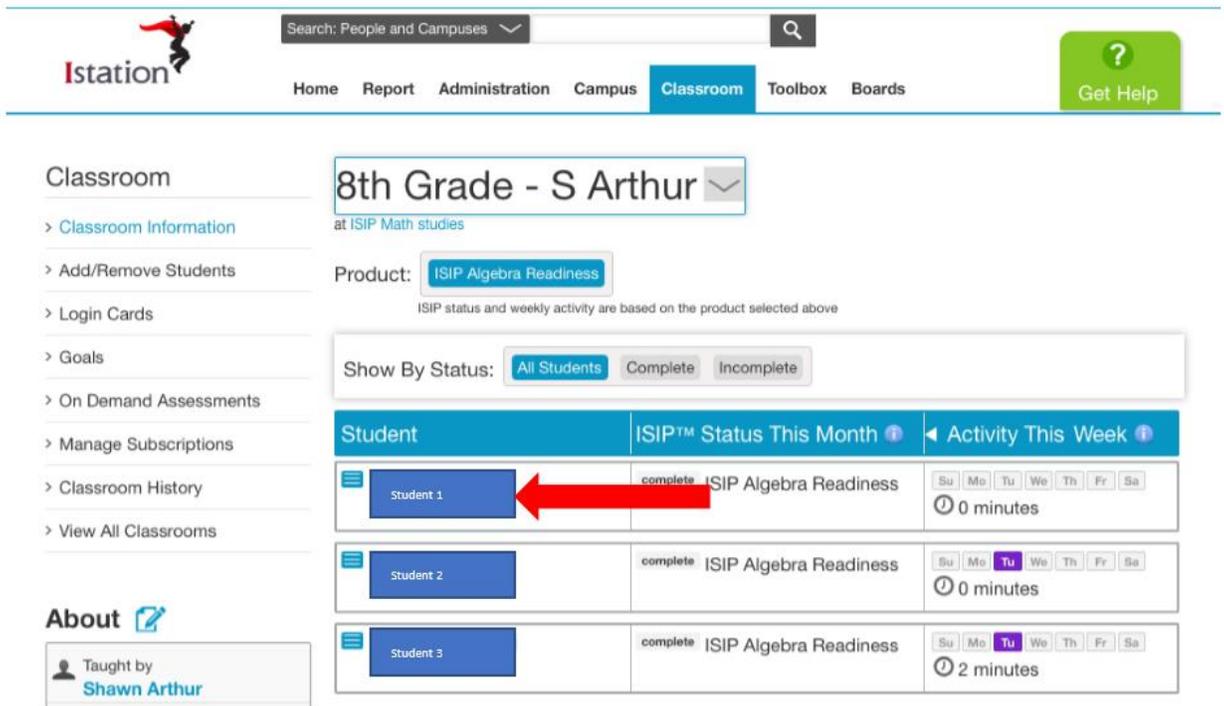
4. At the bottom of the screen, click on "Session/Activity Detail":

5. Click on the session you're interested in viewing:

6. Scroll down and the score will be reported, as well as an item-by-item description of how the

   student performed.

Session's Activity Details

All activities completed unless otherwise noted.	Score
Login 00:00	
Control Room 00:23	
Algebra Readiness Progress Monitor: Quantity Discrimination 05:33	7/12
Algebra Readiness Progress Monitor: Proportional Reasoning 03:45	9/16
Algebra Readiness Progress Monitor: Number Properties 03:44	8/13
Algebra Readiness Progress Monitor: Outro 00:05	
Algebra Readiness Progress Monitor: Outro 00:04	
Control Room *(Status: Logout)* 00:21	
• Indicates activity has been scored.	

Details for Algebra Readiness Progress Monitor: Quantity Discrimination	**Status: Completed**

Date taken: Fri Nov 02 2018 12:58:21 PM (-05:00)
Date recorded: Fri Nov 02 2018 01:03:55 PM (-05:00)
Total time: 05:33

Question and Answer Options	Response	Score	Response Time
$\dfrac{2}{1,000} \ < \ 0.256$	<	1	00:10
$\dfrac{4}{7} \ > \ -\dfrac{8}{9}$	>	1	00:06
$6^5 \ > \ 6 \times 5$	>	1	00:18
$23.4\% \ < \ \dfrac{23}{4}$	>	0	00:07
$\sqrt{114} \ < \ 11$	=	0	00:10
$4\dfrac{5}{6} \ > \ 4\dfrac{4}{9}$	<	0	00:06
$-19 \ < \ 18.2$	<	1	00:13
$\sqrt{100} \ > \ (3)^2$	>	1	00:11