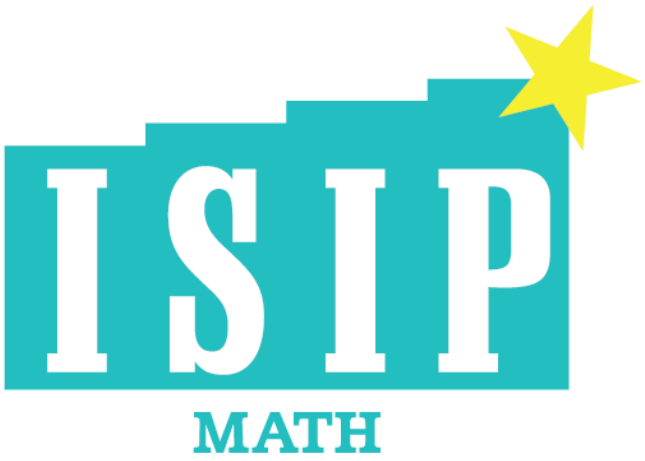
Istation's Indicators of Progress (ISIP) Math

Administration Guide
Version 1

Computer Adaptive Testing System for Continuous Progress Monitoring of Math Growth for Students Grade 2 through Grade 8



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Chapter 1: Introduction

ISIP™, Istation's Indicators of Progress, Math (ISIP Math) is a sophisticated, Computer Adaptive Testing (CAT) system that provides Continuous Progress Monitoring (CPM) by frequently assessing and reporting student ability in mathematics throughout the academic years.

Designed for students in Grades 2-8, ISIP Math provides teachers and other school personnel with easy-to-interpret, web-based reports that detail student strengths and deficits and provide links to teaching resources. Use of this data allows teachers to more easily make informed decisions regarding each student's response to targeted mathematics instruction and intervention strategies.

Assessments are computer-based, and teachers can arrange for entire classrooms to take assessments as part of scheduled computer lab time or individually as part of a workstation rotation conducted in the classroom. The entire assessment battery for any assessment period requires thirty minutes or less. It is feasible to administer ISIP Math assessments to an entire classroom, an entire school, and even an entire district in a single day, given adequate computer resources. Classroom and individual student results are immediately available to teachers, illustrating each student's past and present performance and growth. Teachers are alerted when a particular student is not making adequate progress so that the instructional program can be modified before a pattern of failure becomes established.

It is well established that assessment-driven instruction is effective. Teachers who monitor their students' progress and use this data to inform instructional planning and decision-making have higher student outcomes than those who do not (Conte & Hintze, 2000; Fuchs, Fuchs, Hamlett, & Ferguson, 1992; Mathes, Fuchs, Roberts, 1998). These teachers also have a more realistic conception of the capabilities of their students than teachers who do not regularly use student data to inform their decisions (Fuchs, Deno, & Mirkin, 1984; Fuchs, Fuchs, Hamlett, & Stecker, 1991; Mathes et al., 1998).

However, before a teacher can identify students at risk of mathematics failure and differentiate their instruction, that teacher must first have information about the specific needs of his or her students. To link assessment with instruction effectively, math assessments need to (a) identify students at risk for math difficulties; students that may need extra instruction or intensive intervention if they are to progress toward grade-level standards in math by year end; (b) monitor student progress for skill growth on a frequent and ongoing basis, and identify students falling behind; (c) provide information about students who will be helpful in planning instruction to meet their needs; and (d) assess whether students have achieved grade-level mathematics standards by year end.

In any model of instruction, for assessment data to affect instruction and student outcomes, it must be relevant, reliable, and valid. To be relevant, data must be available on a timely basis and target important skills that are influenced by instruction. To be reliable, there must be a reasonable degree of confidence in the student score. To be valid, the skills assessed must provide information that is related to later mathematics ability. There are many reasons why a student score at a single point in time under one set of conditions may be inaccurate: confusion, shyness, illness, mood or temperament, communication or language barriers between student and examiner, scoring errors, and inconsistencies

in examiner scoring. However, by gathering assessments across multiple time points, student performance is more likely to reflect actual ability. By using the computer, inaccuracies related to human administration errors are also reduced.

The collection of sufficient, reliable assessment data on a continuous basis can be an overwhelming and daunting task for schools and teachers. Screening and inventory tools use a benchmark or screen schema in which testers administer assessments three times a year. More frequent continuous progress monitoring is recommended for all low-performing students, but administration is at the discretion of already overburdened schools and teachers.

These assessments, even in their handheld versions, require a significant amount of work to administer individually to each child. The examiners who implement these assessments must also receive extensive training in both the administration and scoring procedures to uphold the reliability of the assessments and avoid scoring errors. Because these assessments are so labor intensive, they are very expensive for school districts to implement and difficult for teachers to use for ongoing progress monitoring and validation of test results. Also, there is typically a delay between when an assessment is given to a child and when the teacher is able to receive and review the results of the assessment, making its utility for planning instruction less than ideal.

Continuous Progress Monitoring

ISIP Math grows out of the model of Continuous Progress Monitoring (CPM) called Curriculum Based Measurement (CBM). This model of CPM is an assessment methodology for obtaining measures of student achievement over time. This is done by repeatedly sampling proficiency in the school's curriculum at a student's instructional level, using parallel forms at each testing session (Deno, 1985; Fuchs & Deno, 1991; Fuchs, Deno, & Marston, 1983). Parallel forms are designed to globally sample academic goals and standards reflecting end-of-grade expectations. Students are then measured in terms of movement toward those end-of-grade expectations. A major drawback to this type of assessment is that creating truly parallel forms of any assessment is virtually impossible; thus, student scores from session to session will reflect some inaccuracy as an artifact of the test itself.

Computer Application

The problem with most CPM systems is that they have been cumbersome for teachers to utilize (Stecker & Whinnery, 1991). Teachers have to physically administer the tests to each child individually and then graph data by hand. The introduction of hand-held technology has allowed for graphing student results, but information in this format is often not available on a timely basis. Even so, many teachers find administering the assessments onerous. The result has been that CPM has not been as widely embraced as would be hoped, especially within general education. Computerized CPM applications are a logical step to increasing the likelihood that continuous progress monitoring occurs more frequently with monthly or even weekly assessments. Computerized CPM applications using parallel forms have been developed and used successfully in upper grades in reading, mathematics, and spelling (Fuchs et al., 1995). Computerized applications save time and money. They eliminate burdensome test administrations and scoring errors by calculating, compiling, and reporting scores. They provide immediate access to student results that can be used to affect instruction. They provide information organized in formats that automatically group children according to risk and recommended instructional levels. Student results are instantly plotted on progress charts with trend lines projecting year-end

outcomes based upon growth patterns, eliminating the need for the teacher to manually create monitoring booklets or analyze results.

Computer Adaptive Testing

With recent advances in Computer Adaptive Testing (CAT) and computer technology, it is now possible to create CPM assessments that adjust to the actual ability of each child. Thus, CAT replaces the need to create parallel forms. Assessments built on CAT are sometimes referred to as "tailored tests" because the computer selects items for students based on their performance, thus tailoring the assessment to match the performance abilities of the students. This also means that students who are achieving significantly above or below grade expectations can be assessed to more accurately reflect their true abilities. There are many advantages to using a CAT model rather than a more traditional parallel forms model, as is used in many math instruments. For instance, it is virtually impossible to create alternate forms of any truly parallel assessment. The reliability from form to form will always be somewhat compromised. However, when using a CAT model, it is not necessary that each assessment be of identical difficulty to the previous and future assessments. Following a CAT model, each item within the testing battery is assessed to determine how well it discriminates ability among students and how difficult it actually is through a process called Item Response Theory (IRT) work. Once item parameters have been determined, the CAT algorithm can be programmed. Then, using this sophisticated computerized algorithm, the computer selects items based on each student's performance, selecting easier items if previous items are missed and harder items if the student answers correctly. Through this process of selecting items based on student performance, the computer is able to generate "probes" that have higher reliability than those typically associated with alternate formats and that better reflect each student's true ability

ISIP Math Items

The purpose of the ISIP Math item bank is to support teachers' instructional decisions. Specifically, the item bank is designed to serve as a computerized adaptive universal screening and progress monitoring assessment system. By administering this assessment system, teachers and administrators can use the results to answer two questions: (1) are students in Grades 2-8 at risk of failing math, and (2) what is the degree of intensity of instructional support students need to be successful at math? Because the assessment is designed to be administered at regular intervals, these decisions can be applied over the course of the school year (Hill, S., Ketterlin-Geller, L.R., & Gifford, D.B, 2012).

The ISIP Math assessment consists of 1) mathematics content and 2) level of cognitive engagement. The content of the assessment is based on the Curriculum Focal Points (National Council of Teachers of Mathematics [NCTM], 2006), mathematics content standards published by the Common Core Standards Initiative, and state standards from California, Florida, New York, Texas, and Virginia. The cognitive engagement dimension refers to the level of cognitive processing at which students are expected to engage an assessment item. This consists of five interdependent strands that promote mathematical proficiency: (1) conceptual understanding, (2) procedural fluency, (3) strategic competence, (4) adaptive reasoning, and (5) productive disposition. The formative assessment item bank assesses student understanding of the content at varying levels of cognitive engagement. The item bank incorporates four of the five strands. Productive disposition is not assessed (Hill, S., Ketterlin-Geller, L.R., & Gifford, D.B, 2012).

To access the technical reports for the Universal Screener Instrument Development for each grade level 2-8, refer to the external links provided in this report.

Teacher Friendly

ISIP Math is teacher friendly. The assessment is computer based, requires little administration effort, and requires no teacher/examiner testing or manual scoring. Teachers monitor student performance during assessment periods to ensure result reliability. In particular, teachers are alerted to observe specific students identified by ISIP Math as experiencing difficulties as they complete ISIP Math. They subsequently review student results to validate outcomes. For students whose skills may be a concern, based upon performance level, teachers may easily validate student results by re-administering the entire ISIP Math as an on-demand assessment.

Child Friendly

ISIP Math is also child friendly. Each assessment begins with an introduction from The Chief, who briefly explains that the student's mathematical knowledge demonstrated on this assessment will help them become a Secret Agent. He informs the student that once his/her assessment is complete, (s)he will participate in math missions with Donnie, Stix, and Angel to defeat villains and save the world. This ties together the ISIP Math assessment and the Istation Math instruction and provides the motivation for students to do their best when completing the assessment.

The ISIP Math Link to Instructional Planning

ISIP Math provides continuous assessment results that can be used in recursive assessment instructional decision loops. First, ISIP Math identifies students in need of support. Second, validation of student results and recommended instructional levels can be easily verified by re-administering assessments, which increases the reliability of scores. Teachers can assign assessments to individual students at the Istation website at www.istation.com. The student logs in to the assessment, and it is automatically administered.

Third, the delivery of student results facilitates the evaluation of curriculum and instructional plans. The technology behind ISIP Math delivers real-time evaluation of results and immediate availability of reports on student progress upon assessment completion. Assessment reports automatically group students according to the level of support needed. Data is provided in both graphical and detailed numerical format at every test administration and at every level of a district's reporting hierarchy. Reports provide summary information for the current and prior assessment periods that can be used to evaluate curriculum, plan instruction and support, and manage resources.

At each assessment period, ISIP Math automatically alerts teachers to children in need of instructional support through the "Priority Report." Students are grouped according to instructional level. Links are provided to teacher-directed plans of instruction for each instructional level. There are downloadable lessons and materials appropriate for each group. When student performance on assessments is below the goal for several consecutive assessment periods, teachers are further notified. This is done to raise teacher concern and signal the need to consider additional or different forms of instruction.

A complete history of Priority Report notifications, including the current year and all prior years, is maintained for each child. On the report, teachers may acknowledge that suggested interventions have

been provided. A record of these interventions is maintained with the student history as an Intervention Audit Trail. This history can be used for special education Individual Education Plans (IEPs) and in Response to Intervention (RTI) or other models of instruction to modify a student's instructional plan.

In addition to the recommended activities, instructional coaches, intervention specialists, and teachers have access to an entire library of teacher-directed lessons and support materials at www.istation.com. Districts and schools may also elect to enroll students in Istation's computer-based math intervention program, Istation Math. This program provides individualized instruction based upon ISIP Math results. Student results from Istation Math are combined with ISIP Math results to provide a deeper student profile of strengths and weaknesses that can enhance teacher planning.

All student information is automatically available by demographic classification and by specially designated subgroups of students who need to be monitored. A year-to-year history of ISIP Math results will be available. Administrators, principals, and teachers may use their reports to evaluate and modify curriculum, interventions, AYP progress, the effectiveness of professional development, and personnel performance.

Chapter 2 - ISIP Math Administration

The specific directions for administering each of the subtests are presented in this section. These directions represent standardized procedures that when followed will help to ensure both test reliability and validity from classroom to classroom, teacher to teacher, and school to school. Information that describes the students' experience is also included in each subtest as well as information available to Administrators, Principals, and Teachers after completion of the assessments.

Teacher and Lab Manager Preparation

Prior to the Initial Administration of ISIP Math:

1. Students' names and their unique District ID numbers can be entered or imported to created student accounts at www.istation.com. Student ID numbers are encrypted to prevent interception or identification of student information.

2. After creating and processing your student accounts, print the students' login cards. Place the login cards in a file box near the computers in the lab and/or classroom. Login cards should be easily accessible to students.

3. Inspect all equipment to be used (computers and headphones) to ensure that they are operable. Check audio volume on computers prior to test administration. Check computers to ensure access to ISIP Math assessments. The assessment program can be easily downloaded by the click of a button from the Istation website at www.istation.com.

4. Prior to testing, become familiar with the tests to be administered and test formats.

5. Make sure the physical conditions in the testing location are satisfactory. There should be adequate lighting for all students, and students should be able to be seated so that there is ample space between them. Consider posting a "Testing – Do Not Disturb" sign on the classroom or lab door if the testing location is in a high traffic area or prone to interruption by other students. If the test group will exceed 10 students, it is recommended that arrangements for a proctor (lab manager, as an example, to assist the teacher) be made available to assist in the test administration observation.

6. For first-time users, ensure that students have sufficient proficiency in this medium. Students must be able to move a mouse pointer to an object on screen and click with the left mouse button. Elementary students should have no difficulty with this task.

Once the initial administration of ISIP Math is complete, subsequent administration of tests should require minimal preparation, including the inspection of computers and headphones to ensure they are operable.

Materials

Student login cards, pencil and paper, operable headphones, and computers with Internet access are required for test administration. There are no CD-ROMs to install or school-based servers to maintain. Administration for schools is virtually non-existent. ISIP Math is delivered through the Istation program downloaded from the Istation website at www.istation.com. After installation, any number of simultaneous students can be supported in ISIP Math generally using the bandwidth of a single web server. In the event that the school's Internet connection is lost, ISIP Math continues to function

normally and will synchronize with Istation servers when the Internet connection is restored. Since ISIP Math is delivered through the Internet, enhancements and modifications are provided to users transparently without a service call.

Accommodations

Accommodations are provided on assessments to students with disabilities, eligible English language learners, or students with other health impairments. Accommodations support students' access to the content of assessment by reducing or eliminating the effects of the disability or limitations. Accommodations do not change the content of the assessment.

To support students with disabilities on the ISIP Math Assessment, ensure that all accommodations identified on a student's Individual Education Program (IEP) are provided during the test administration. All accommodations that are provided to the student during the state accountability test should also be provided on the ISIP Math Assessment. Check with your state's accommodations policies and procedures for questions about allowable accommodations.

Already embedded in the ISIP Math Assessment is the ability for students to have the mathematics items read aloud.

Test Delivery

Upon student login to ISIP Math during each assessment period, ISIP Math will automatically deliver all assessments appropriate for that student for that time of year. The assessment runs seamlessly, without user or teacher manipulation. Tests are automatically scored by the program, and student results are immediately available to the teacher on the Istation website at www.istation.com.

Administration Guidelines

1. Orient the student to the assessment area and explain the assessment process and the setting before the test is begun. Encourage a positive attitude toward the test.

   SAY: Today we will be working on the computer to show how well you are learning to do math. It is important that you listen carefully, follow the instructions and do your very best!

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

   SAY: This is a test so keep your eyes on YOUR computer. Work as quickly as possible WITHOUT guessing. If you need help or when you have finished the test, raise your hand.

3. Pass out login cards and assist the students as they login to ISIP Math. 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 get started. In the first blank box, type your user name. 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, students who are easily distracted, students exhibiting frustration, and students who are not attempting to answer questions or are 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 very best.

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,

SAY: That's right. Follow the directions and answer each question. Remember this is a test, be sure to try hard and do your best

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

5. Disruptive behavior should not be tolerated. Students who are disrupting other students and the behavior is not corrected by intervention should be removed from the testing area. Computer time should be rescheduled so that the student has the opportunity to complete the assessment.

6. It is preferable, but not required, that the assessments be completed in a single session. Allow students to continue working in the assessment as long as they are being productive. The time allotment recommended for each assessment period is thirty minutes. Some users may experience a slightly longer testing session during their first testing session due to modeling within the assessment.

7. Some students will finish earlier than others. When they are finished, give them a book to read or other quiet activity.

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

9. Adherence to accommodations is discussed (elsewhere) within this manual.

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 become 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 response. 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 ability according to psychometric data collected.

10. 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. On the next student login, On-Demand assessments will run. The last of the two scores will be used as the current period indicator of the child'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

Chapter 3: Using and Interpreting ISIP Math Reports

Providing administrators, teachers, and parents with timely student data is the key ingredient to linking ISIP Math assessment results to instructional planning. In any data-driven or results-oriented model of instruction, the needs are the same:

- Information that will assist in the identification of students who need additional support or different forms of support in order to achieve math goals.
- Ongoing information on student performance against goals that will assist in evaluating the effectiveness of instruction and in developing and modifying instructional plans that can change math outcomes for students at risk of failure.
- Information that will assist in the evaluation of instruction and instructional supports at all levels— district, area, school, and classroom—and from year to year, which can inform decisions about allocating resources and efforts.

What is lacking in existing models is the availability of data early enough in assessment–instruction decision loops. When learning builds on prior concepts, the teacher must know quickly who is struggling and whether existing instructional methods are effective in preventing students from falling further and further behind. Only when data results in timely remedial actions can it significantly affect outcomes.

Understanding ISIP Math Scores

ISIP integrates computerized adaptive testing that accurately reflects the mathematical ability level of each student and measures growth over time. When administered regularly over time, it is possible to observe whether a student, or an entire classroom, district, or school, is making adequate progress in critical mathematics areas. Adaptive assessments use interactive content to measure a student's mathematical ability.

Test items were identified as easy/medium/difficult with regard to relative ease of each question for students in Grades 2-8.

To identify the student's overall math ability, the difficulty of the test questions presented changes with every response. If a student answers questions correctly, ISIP presents more challenging questions until the student shows mastery or responds with an incorrect answer. When a student answers a question incorrectly, ISIP presents less difficult questions until the student begins answering correctly again. The ability score is an estimate of the student's mathematical ability. It shows how a student is doing compared to his or her previous performance and to other students at the same grade level.

Ability Index

ISIP assessments use a measurement scale that aligns student performance levels with test question levels of difficulty on the same scale. The scale is divided into equal parts. These parts are called ability indices. All test questions are placed on the ability index scale according to their difficulty. Each increasing ability index is assigned a numeric value that indicates a higher level of difficulty. As a student takes an ISIP assessment, he or she is presented with test questions of varying ability indices or levels of

difficulty. Once ISIP determines the difficulty level at which the student is able to perform, the test ends and the student is assigned an overall math ability index.

ISIP Math is adaptive within the student's grade level, and the test questions are displayed based on student performance within his/her grade level. The student's overall mathematical ability index is used as the dividing line to determine students potentially at risk. Criteria become progressively more difficult with each assessment period. This ability index can be used by teachers to inform instruction around their students' strengths and weaknesses. Targeted instruction leads to better performance and maximum growth.

Instructional Tier Goals

Consistent with other math assessments, Istation has defined a three-tier normative grouping based on indices associated with the 20th and 40th percentiles. Students with an index above the 40th percentile for their grade are placed into Tier 1. Students with an index below the 20th percentile are placed into Tier 3. These tiers are used to guide educators in determining the level of instruction for each student. That is, students classified as:

- Tier 1 (40th percentile and above) on track to meet grade level expectations.
- Tier 2 (between 21st and 39th percentile) at some risk of not meeting grade level expectations.
- Tier 3 (20th percentile and below) at significant risk of not meeting grade level expections.

Since ISIP Early Math is a new assessment, Instructional Tier Goals will be established shortly after the beginning of each month when sufficient data is available to determine the appropriate goals. A year-to-year history of ISIP Math results will be available. Administrators, principals, and teachers may use their reports to evaluate and modify curriculum, interventions, AYP progress, the effectiveness of professional development, and personnel performance.

Growth

Growth within ISIP Math can be defined as an increased change in the student's score and improvement in ability over time. District, school, and student growth can be viewed on various ISIP Math reports.

Using and Interpreting ISIP Math Results

The technology underlying ISIP Math delivers computer-based assessments, real-time evaluation of results, and immediate availability of reports on student progress. Assessment reports automatically group students according to the level of support needed. Teachers are provided links to teacher-directed plans of instruction, downloadable lessons, and materials appropriate for each group.

Data is provided in both graphical and detailed numerical formats for every test administration and at every level of a district's reporting hierarchy. Data is seamlessly and securely shared by users within the district, based upon authorization levels. Data may be shared with state information systems if requested by a school district. Individual student information can be provided to parents or guardians of students tested.

Navigating ISIP Math Reports

ISIP Math reports are immediately accessible online at www.istation.com to administrators and teachers by logging in with their unique username and password.

Upon login, administrators and teachers have the option to view the ISIP Math Reports Homepage. This page provides an overview and easy access to all reports available on the Istation Reports website.

Accessing Downloadable Lessons

Teachers can access recommended teacher-directed lessons by clicking links to lessons under the Recommended Teacher-Directed Lessons headings on the Priority Report. Additional teacher-directed plans of instruction and downloadable lessons and materials are available in the Teacher Resources section of the Istation Reports website.

External Links

Perry, L., Basaraba, D., & Ketterlin-Geller, L. R. (2013). Imagination Station (Istation): Universal Screener Instrument Development for Grade 2 (Tech. Rep. No. 13-01). Dallas, TX: Southern Methodist University, Research in Mathematics Education.

Hill, S., Ketterlin-Geller, L. R., & Gifford, D. B. (2012). Imagination Station (Istation): Universal Screener Instrument Development for Grade 3 (Tech. Rep. No. 12-02). Dallas, TX: Southern Methodist University, Research in Mathematics Education.

Ketterlin-Geller, L. R., & Gifford, D. B. (2011). Imagination Station (Istation): Universal Screener Instrument Development for Grade 4 (Tech. Rep. No. 11-01). Dallas, TX: Southern Methodist University, Research in Mathematics Education.

Ketterlin-Geller, L. R., & Gifford, D. B. (2011). Imagination Station (Istation): Universal Screener Instrument Development for Grade 5 (Tech. Rep. No. 11-02). Dallas, TX: Southern Methodist University, Research in Mathematics Education.

Ketterlin-Geller, L. R., & Gifford, D. B. (2011). Imagination Station (Istation): Universal Screener Instrument Development for Grade 6 (Tech. Rep. No. 11-03). Dallas, TX: Southern Methodist University, Research in Mathematics Education.

Shivraj, P., Ketterlin-Geller, L. R., & Gifford, D. B. (2012). Imagination Station (Istation): Universal Screener Instrument Development for Grade 7(Tech. Rep. No. 12-02). Dallas, TX: Southern Methodist University, Research in Mathematics Education.

Shivraj, P., Ketterlin-Geller, L. R., & Gifford, D. B. (2012). Imagination Station (Istation): Universal Screener Instrument Development for Grade 8(Tech. Rep. No. 12-03). Dallas, TX: Southern Methodist University, Research in Mathematics Education.