A FOUNDATIONAL RESEARCH STUDY
CONNECTING RESPONSE TO INTERVENTION
RESEARCH TO THE STUDY ISLAND PROGRAM

February 13, 2009
ACKNOWLEDGEMENT

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The author,

Jennifer Watts, Ph.D.
TABLE OF CONTENTS

Acknowledgement ............................................................................................................................................i

Introduction.......................................................................................................................................................1

Background and History of Response to Intervention ...............................................................................1

Response to Intervention Models ..................................................................................................................3

Alignment of Study Island to Response to Intervention.............................................................................6

Are Response to Intervention Models Effective? ........................................................................................13

Conclusions........................................................................................................................................................15

References..........................................................................................................................................................17

List of Figures

Figure 1. Illustration of the problem-solving process in a problem-solving model of RTI .....................3
Figure 2. Illustration of the standard treatment protocol model of RTI......................................................4
Figure 3. Immediate feedback and remediation feature of Study Island ..................................................7
Figure 4. Illustration of the normative sample Study Island provides ....................................................9
Figure 5. Illustration of the problem-solving process within Study Island.............................................10
Figure 6. Using Study Island features to group students based on similar need in a standard treatment
protocol approach of RTI ...............................................................................................................................11
Figure 7. Illustration of the built-in remediation feature of Study Island .............................................13

List of Tables

Table 1. Comparison of RTI Models within a Multi-tier Service Delivery System ....................................5
Table 2. Summary of how Study Island Aligns with RTI Models within a Multi-tier Service Delivery System..........................................................16
INTRODUCTION

On December 3, 2004, President George W. Bush signed into law the reauthorization of the Individuals with Disabilities Education Act (IDEA) that expanded and changed the formula for identifying individuals with learning disabilities to include alternative models of classification beyond IQ/achievement discrepancy (IDEA, 2004). Specifically, the reauthorized act allowed for the classification of students who are at risk for learning disabilities. This expansion of the previous system included and encouraged the use of processes and techniques to determine if a child is responding to scientific research-based interventions as part of the overall evaluation. These changes paved the way for the use of Response to Intervention (RTI) methodology as an identification system, progress monitoring tool, and instructional delivery framework for all classrooms in order to identify and aid students who are at risk for academic failure.

Because of the need to address the instructional requirements of all students within a classroom through an efficient system including scientifically research-based methods, RTI models have gained in popularity and implementation within the national educational system. In response to this effort, educational publishers have created materials and assessment systems designed to aid schools in effectively implementing RTI procedures within their classrooms. By incorporating differentiated instructional delivery mechanisms and progress monitoring tools into the same program, educational publishers are providing educators with the necessary tools to meet the needs of all students and determine if they are responding to the instruction within an RTI framework. One such program, Study Island, is a Web-based standards mastery program that combines highly specific and dynamic content with real-time reporting to create a customized assessment, diagnostic, and instructional program built to each state’s standards. By creating an interactive and flexible instructional platform, Study Island provides engaging, ongoing practice and remediation to help students meet their state-required standards in the major content areas. The Study Island program combines data-driven progress monitoring tools and differentiated instructional practice to fit effectively within RTI implementation.

Study Island has contracted with Magnolia Consulting, LLC, an external, independent consulting firm specializing in educational evaluation, to conduct a review of the academic theory and scientific research associated with RTI. Additionally, this work will provide documentation that connects the key features of the Study Island program to RTI models and methodology, as well as the scientific research literature, in order to establish how Study Island supports RTI models of instructional practice and progress monitoring.

BACKGROUND AND HISTORY OF RESPONSE TO INTERVENTION

Although the reauthorization of the IDEA in 2004 permitted educators to use RTI methodology as an alternative means for identifying students eligible for special education services, educators had been using RTI-like procedures within classrooms for decades. However, the emergence of RTI methodology within the IDEA reauthorization has led to an increased awareness and usage of RTI techniques within the general classroom, not only as a classification system for students at risk, but also as a means to determine if all students are responding to general education or intervention.
What is Response to Intervention?

The National Association of State Directors of Special Education (NASDSE) defines RTI as “the practice of (1) providing high-quality instruction/intervention matched to student needs (2) using learning rate over time and level of performance to make (3) important educational decisions.” (NASDSE, 2005, p. 5). Theorists describe high-quality instruction as instruction that has its basis in scientific research and which research has shown to be effective for the majority of students. The goals of RTI are to determine how individual students respond to this instruction and to modify and extend the instruction when a student is no longer responding favorably to the instruction (NASDSE, 2005).

In an implementation of an RTI instructional framework, educators use student data, which can come from a variety of sources, such as benchmark assessments or classroom-based measurement assessments, to determine a student’s learning rate and performance level in response to the instruction he or she receives. Educators base their decision to intervene with instruction that is more intensive after analyzing a student’s learning trajectory over time. If a student consistently fails to meet standards, instructors then provide intervention services. Educators determine the duration and intensity of the intervention, as well as the need for even further intervention, based on a continual examination of student performance over time (NASDSE, 2005). For those students who fail to respond to the highest level of intervention, instructors can ultimately recommend them for screening for special education services.

Origins of Response to Intervention

One can trace the origins of RTI to several converging theories of problem-solving processes and data-driven decision-making models applied within educational settings. Some theorists liken RTI models to an application of the scientific method to solving educational problems, citing the Bransford and Stein (1984) IDEAL problem-solving process model as an early example. The IDEAL model, while pertinent for any problem-solving task, functions well when applied in educational settings, making it a forerunner of RTI processes. The steps in a problem-solving process model are

- Identify the problem
- Define the problem
- Explore alternative solutions
- Apply solution
- Look for the effects of the application

Data-driven decision making within a classroom using curriculum-based measures designed to track student progress in order to both plan and evaluate instruction is at the core of RTI methodology. Early models of these procedures, such as Deno's (1985) data-based program modification model, combine problem-solving steps, assessment procedures, and evaluative decisions to determine if students are making progress and if the student’s progress is relative to the class. This model also encourages educators to use data to improve their interventions with students who are struggling (Deno, 2003). RTI models also have roots in Bergan’s behavioral consultation model (Bergan & Kratochwill, 1990), which applies problem-solving and progress monitoring techniques to change
behavior within a classroom to a desired trajectory (see NASDSE, 2005, for a more in-depth description of these models).

Current RTI implementation typically proceeds through a multi-tiered service delivery mechanism, which allows for an efficient allocation of classroom resources. This approach is rooted in successful public health models that promote a multi-tiered approach of prevention, intervention, and care in which only those individuals that are identified as not responding to prevention receive intervention services (Adelman & Taylor, 1998; Walker et al., 1996). These models identify individuals at risk for developing difficulties and aim to prevent those difficulties from becoming severe.

Together, these theories formed the basis of RTI models of instructional delivery, but researchers have further enhanced and expanded on these theories to arrive at the RTI models in use within today’s educational institutions.

**RESPONSE TO INTERVENTION MODELS**

Theorists classify RTI models into two general categories: problem-solving models and standard treatment protocol models. With problem-solving models, teachers provide intervention to students who do not respond to general instruction, typically in the form of research-based strategies that they have tailored to meet each individual student’s needs. Educators engage in a problem-solving process for each student to determine what that student specifically requires (see Figure 1). Teachers then provide the intervention on an individual basis and monitor student response to the instruction (Fuchs & Fuchs, 2006). As students respond to the intervention, instructors can move these students back into the general instruction classroom.

![Figure 1. Illustration of the problem-solving process in a problem-solving model of RTI.](image-url)
In a standard treatment protocol approach, instructors utilize a single broad-based intervention that will address multiple needs at once. Typically, these interventions are supplemental programs with a proven research base (Fuchs, Moek, Morgan, & Young, 2003). Educators base the determination of which students receive the intervention on an evaluation of whether a student is responding to general instruction. Instructors then typically administer the intervention to small groups of students with similar needs (see Figure 2). As with problem-solving models, teachers monitor student progress to determine if students are responding to the instruction and to decide if a student needs even more intensive instruction (Fuchs & Fuchs, 2006). As students respond to the supplemental or intensive intervention, they can move back into general instruction.

**Figure 2. Illustration of the standard treatment protocol model of RTI.**

### Multi-tiered Delivery System of Response to Intervention Models

The NASDSE recommends that educators base the instructional framework of either a problem-solving model or a standard treatment protocol RTI approach on a multi-tiered delivery system (NASDSE, 2005). Although researchers disagree on how many tiers to use in practice (Reschly, 2005), most practitioners favor a three-tier service-delivery model that layers the instruction based on student need (Vaughn, 2003; Vaughn, Linan-Thompson, & Hickman, 2003). In a three-tier model, Tier 1 refers to the use of general core instruction to which the majority of students (70%–80%) will respond and meet proficiency. Approximately 15%–20% of students will require Tier 2 intervention (either supplemental group instruction or individualized instruction), and about 5%–10% of students will require extended, intensive instruction at Tier 3. Table 1 displays how both a problem-solving model and a standard treatment protocol model would function within a three-tiered system, the main difference between the models occurring within Tier 2 intervention.
### Table 1.
Comparison of RTI Models within a Multi-tier Service Delivery System

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<thead>
<tr>
<th></th>
<th>Problem-Solving Model</th>
<th>Standard Treatment Protocol</th>
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<tbody>
<tr>
<td><strong>Universal Screening</strong></td>
<td>An assessment is administered to all students to identify students who are potentially having difficulties.</td>
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</table>
| **Tier 1**                  | All students receive high-quality, research-based core instruction. Frequent progress monitoring is conducted to determine student performance levels and rates of growth in response to the instruction.                      | Students whose progress in Tier 1 is not adequate receive additional support:  
1. Instructional decisions are made based on each student’s individual performance through a problem-solving process.                                                                                   | Students whose progress in Tier 1 is not adequate receive additional support:  
1. Instructional decisions are made following a standard protocol. The same decision process is applied for all struggling students, regardless of specific need.                  |  
2. Intervention is delivered individually to each student as needed.                                                                                                           | 2. Intervention is delivered to a group of students with similar needs.                                                                                               | 3. The intervention is standardized, often scripted, addressing multiple skill sets at once with one research-validated intervention.                                       |
| **Tier 2**                  | Students whose progress in Tier 1 is not adequate receive additional support:  
1. Instructional decisions are made based on each student’s individual performance through a problem-solving process.                                                                                   | Students whose progress in Tier 1 is not adequate receive additional support:  
1. Instructional decisions are made following a standard protocol. The same decision process is applied for all struggling students, regardless of specific need.  
2. Intervention is delivered to a group of students with similar needs.                                                                                                           |  
3. The intervention is flexible and tailored to each student based on demonstrated and changing needs and is based on research-proven strategies.                                       | 3. The intervention is standardized, often scripted, addressing multiple skill sets at once with one research-validated intervention.                                       |
| **Tier 3**                  | Students whose progress is still insufficient in Tier 2 may receive further, more intensive intervention that may or may not include the use of specialized programs or tutoring programs outside the classroom. In some cases, students may be screened for special education services. |                                                                                                                                                                                                                        |                                                                                                                                                                                                                        |

For those practitioners who include a fourth tier in their delivery model, the difference lies in the middle tier. Most agree that Tier 1 constitutes general instruction, and the final tier is intensive, extended intervention services. In a four-tier model, if a student does not meet proficiency at Tier 1, instructors will try both small-group supplemental instruction (as found in a standard treatment protocol model) and individualized instruction (as found in a problem-solving model) before recommending a student for further intervention services outside the daily classroom or for special education screening (Reschly, 2005). Therefore, a four-tiered model is essentially a combination of both RTI models. In either a three- or four-tier model, as students respond to the intervention, instructors can move students back into the upper tiers of instruction.
The *Study Island* program is a versatile Web-based standards mastery program built to each state’s standards. It functions as a diagnostic and progress monitoring tool as well as an instructional practice delivery platform. *Study Island* combines rigorous academic and dynamic content with skill-based questions to create a unique program that fosters learning instead of memorization. Going beyond traditional workbook-style skill practice, *Study Island* offers a customized, self-paced, and student-friendly format that engages and motivates students to succeed. Because *Study Island* uses a single, online-delivery platform across core subject areas and grade levels, instructors can implement the program in any instructional environment or assign students to use the program while at home. This adaptability of the program can promote high rates of usage both in and out of the classroom.

Additionally, *Study Island* combines multiple study modes that accommodate different learning styles. The program offers state-specific question formats to ensure that students practice skills in their preferred style while reducing potential test-taking mistakes. *Study Island* uses real-time reporting to provide teachers with instant feedback regarding student progress and to drive differentiated instruction within the classroom based on demonstrated-student need. Together, these key features, based on solid scientific research (Watts, 2008), contribute to the strength of the *Study Island* program.

During program implementation, educators can use *Study Island* with individual students at their prescribed instructional level, as supplemental practice with small groups of students, or as a whole-class approach. This flexibility allows for the implementation of *Study Island* within any RTI framework, and it can aid instructors with all aspects associated with RTI methodology. *Study Island* aligns well with either a problem-solving model or a standard treatment protocol model of RTI, and it can be an effective tool to use within the context of a multi-tiered instructional delivery system.

**Alignment to Tier 1 in Both Models of RTI**

Initially, *Study Island* can help to prevent instructional difficulties during Tier 1, general instruction, by providing students with a platform to practice skills taught within the classroom. The *Study Island* program reinforces those skills through immediate corrective feedback and targeted remediation of specific skills and objectives, helping students not to fall behind. For example, Figure 3 below demonstrates an example of the type of learning opportunities available as a student progresses...
through the topics. After a student attempts each question, an explanation of how to solve the problem is available, providing instant instructional feedback that the student can immediately apply.

The *Study Island* program also incorporates motivational factors into the implementation and design of the program in diverse ways to both engage students to stay on task. For instance, *Study Island* builds instructional opportunities into the standards practice in order to motivate students to apply skills as they learn them. Students can monitor their own progress as they complete lessons and feel successful watching their mastery level rise. When students reach the specified mastery level of an objective, they earn a personalized reward in the form of a blue ribbon icon, which serves as a concrete symbol of recognition for their academic achievements and further motivates students to succeed.

As part of the *Study Island* program, students also have access to a wide variety of simple and short games that they can play when they have answered a question correctly. Students compete with other *Study Island* users to try to achieve the highest score on the games. This competition is intended to motivate the students intrinsically to perform well on the task in order to have a chance to play the game and compete with their peers. One of the most significant motivational factors *Study Island*
provides is its open architecture, which allows students the ability to complete topics in any order and switch between tasks as desired. This offers students ownership of their learning environment, allowing them to set their own goals, plan personalized learning experiences, execute their work with flexibility, and regulate their own progress.

Common across both RTI models is a need for ongoing assessment to determine if students are responding to this general, Tier 1, instruction. *Study Island* uses a comprehensive system of assessment tools that allow educators to establish an initial performance baseline for each student and continually monitor student performance against his or her baseline as well as state-specific content standards and learning objectives. *Study Island* also includes clicker technology that teachers can use in conjunction with program implementation to create an interactive and engaging environment for students, as well as a means to obtain immediate feedback of students’ understanding during whole-group instruction. After teaching a lesson, instructors can present questions from the *Study Island* program to the whole class, and students respond to the questions using the clickers. The clicker software immediately reports the students’ answers, which allows teachers the ability to provide instant remediation, if needed, or to move on quickly to the next topic, confident that students have mastered the previous material.

“Teachers really love *Study Island*. It is so easy to use. It is so friendly to use. The grades, or the levels, are emailed back to teachers so they know where students stand. In addition, they can select exactly the right standards that students are weak in, or students are struggling in, or students need extra work in. They can assign those lessons and then go back and see how students did.”

* Cindy Farlino, Principal
  Meredith School
  Philadelphia, Pennsylvania

Instructors can utilize student performance reports generated by the *Study Island* program to measure a student’s performance relative to other students within the classroom, school, or state. By consistently evaluating student progress against the proficiency standards for the state and a student’s peers through these mechanisms, teachers know how well individual students are responding to general classroom instruction. Not only then does *Study Island* provide tools to track an individual student’s response to instruction continually, the collective student performance data that is accessible through the program provides educators with a large normative sample of student performance data for comparison (see Figure 4 for an example of the type of normative data that is available through the *Study Island* program). Researchers have indicated that comparing individual student performance to a large normative sample on an ongoing basis may be one of the most effective ways to determine if a student is responsive to instruction (Fuchs, 2003). By using a large normative sample, as opposed to a single classroom, it helps to eliminate the possibility of inadequate instruction as the cause for non-responsiveness. Thus, *Study Island* allows for the determination of non-responsiveness through dual discrepancy, which results in identification that is more precise. Fuchs and Fuchs (2002) define dual discrepancy non-responsiveness as when “the student not only performs below the level demonstrated by classroom peers but also demonstrates a learning rate substantially below that of classmates” (p. 77).
“Students learn test-taking strategies, and [the program] indicates where students need help so that teachers can specifically target those areas.”

Roger Lewis, Principal
Schieq Primary School for Arts and Enrichment
Cincinnati, Ohio

Study Island allows instructors to monitor student progress toward meeting content standards on an individual basis. Instructors can use the administrative functions of Study Island as a guide during the Tier 2 problem-solving process to identify and define the specific academic problems each student is having based on his or her performance level for each objective (see Figure 5). The example presented in Figure 5 shows a hierarchical representation of a student’s performance on the math topics within Study Island. The topic areas designated as “high priority” are the areas in which this student needs further attention.

When students begin to fall below the requisite proficiency levels or below the relative performance of their peers and are in need of Tier 2 intervention, teachers can immediately assign intervention work to these students through the Study Island program or within the classroom and continue to monitor student progress toward mastering state objectives. Study Island includes additional specialized features that contribute to its flexibility for use in either model of Tier 2 intervention.

**Alignment of Study Island to a Problem-Solving Model Approach for Tier 2 Intervention**

*Figure 4. Illustration of the normative sample Study Island provides.*
Educators can use this kind of diagnostic information to tailor their classroom instruction for each student or to prescribe specific practice through the Study Island program that includes instructional content matched to each student’s most adaptive learning mode in order to help students gain mastery at their demonstrated need. The ability of the program to prioritize a student’s needs into tiers allows teachers to develop targeted and individualized instructional paths for each student that quickly provide intervention where a student demonstrates the greatest need. As students progress, the flexibility of the instructional delivery platform allows students to concentrate efficiently only on the skill areas that are still problematic, and instructors can feel confident that the program is targeting the areas students most need.

Figure 5. Illustration of the problem-solving process within Study Island.

Alignment of Study Island to a Standard Treatment Protocol Model Approach for Tier 2 Intervention

Instructors can use the administrative features of the Study Island program to set the proficiency standards for mastery of objectives to match the required proficiency levels of their state and then monitor student progress of the class as a whole toward meeting those proficiency levels. When students fall short of the requisite proficiency levels or begin to demonstrate predictable difficulties with a set of objectives, educators can group these students together based on their general need. For example, Figure 6 illustrates how Study Island tracks each student’s proficiency score on the
essential objectives in that state. Teachers can use this information to group the students based on similar need. They can then either implement small-group, supplemental instruction within the classroom or use the Study Island program to prescribe a set of effective, research-based topics to these students as a group.

Supplemental practice through the Study Island program can proceed online or with printable worksheets. This gives instructors a chance to produce positive change efficiently for a larger group of students all at once without sacrificing limited classroom time to individualize instruction. Additionally, the standard treatment protocol model allows for greater quality control and implementation fidelity across classrooms when instructors are delivering a single intervention (Fuchs et al., 2003). Using Study Island as a standard treatment provider can help educators achieve this consistency across classrooms.

Figure 6. Using Study Island features to group students based on similar need in a standard treatment protocol approach of RTI.
Alignment to a Combined Tier 2 Approach

Although there are distinct differences between the two models of RTI, the NASDSE recommends implementing the best features of both approaches concurrently (NASDSE, 2005). A problem-solving process that helps educators diagnose and address individual academic deficiencies, combined with a Standard treatment protocol model approach that can efficiently reach a large numbers of students at once, can help instructors meet the needs of all struggling students. The data-driven nature and logic of the problem-solving process also provide an accurate and quick method for identifying students who are struggling and aid educators in effectively monitoring student progress.

Districts may choose a standard treatment protocol model of RTI because it is typically not practical or efficient to implement individualized instruction to a large number of students. However, the versatile format and reporting features of the Study Island program allow instructors to implement the best features of both RTI models concurrently without overextending teacher resources. With Study Island, instructors can customize individual topics as needed or use the program to provide identical, but effective, question groups to all struggling students as supplemental practice that correlates with classroom instruction.

Alignment to Tier 3 in Both Models of RTI

Across both models of RTI, those students who do not respond to Tier 2 intervention may need further, more intensive intervention. Districts may offer specialized programs that offer extended and more intense instructional support or screen students for special education services. The ongoing progress monitoring system of Study Island can alert instructors when students are becoming non-responsive to Tier 2 interventions or continually struggling with on-grade-level material. In these cases, students may need instruction that is more intensive or need to practice with lower-grade-level material. Through the automatic building block feature of the program, Study Island can immediately use student performance data to shift lessons down to built-in, automatic remediation topics at lower grade levels, providing students with the opportunity to build the skill background necessary to be successful with higher-level skills. Students must meet proficiency at these building-block levels, earning a white ribbon icon to return to on-grade-level topics. This ensures students receive all the remedial instruction they need to be successful on higher-grade-level material (see Figure 7 for an example of how Study Island can track and move students through remedial instruction based on performance proficiency. This example also demonstrates the type of building-block topics the program provides to help students improve when they do not meet proficiency at the required proficiency level).
Are Response to Intervention Models Effective?

Research demonstrates that the application of multi-tiered RTI models within instructional settings has been effective regardless of the approach. Through a review of the available research on RTI implementation, Coleman, Buysse, and Neitzel (2006) found that although there was considerable variability in how researchers define, implement, and evaluate RTI methods, the empirical evidence suggests that RTI is an effective methodology for identifying children at risk for failure and ameliorating academic difficulties.

Vellutino et al. (1996) demonstrated that most struggling students were not learning disabled but instead “instructionally disabled” and could effectively respond to individualized intervention enough to enter back into the general instruction classroom. However, as predicted by the multi-tiered model, a small percentage of students still required further intervention. Torgesen et al. (1999) extended these findings, suggesting that, to have the most impact, Tier 2 intervention needs to be intensive and include explicit, skill-level instruction instead of broad extensions of the general classroom instruction. Study Island meets both of these conditions with Tier 2 intervention that is
explicit and skill-based. The automatic building-block process of the program provides students with intensive intervention as needed, allowing students to gain proficiency at lower grade levels to work their way back up to grade-level material.

Marston, Muyskens, Lau, and Canter (2003), found empirical support specifically for the problem-solving process used in RTI methods; however, they conclude that the problem-solving process can be subjective, be complex, result in different outcomes depending on the provider, and require training to implement effectively. The Study Island program provides an efficient, objective, and reliable mechanism for implementing the problem-solving process within an RTI model without sacrificing additional resources. Study Island uses consistent criteria for identifying student deficiencies and provides strategic remediation and targeted solutions for each student. The data-driven evaluative systems within Study Island can accurately monitor when students have reached and maintain desired proficiency levels.

In their review of the evidence supporting RTI, Fuchs et al. (2003) concluded that, although a standard treatment protocol model is effective in that it offers several advantages in implementation efficiency and consistency, as well as the inclusion of research-based strategies, it has several disadvantages. It is difficult to know if any one intervention is appropriate for all struggling students. Furthermore, as Vellutino et al. (1996) and Torgesen et al. (1999) found, intensive intervention may be essential to bringing about improvement. In some cases, up to 70 or 80 intervention sessions or tutorials may be necessary, which may be impractical for any one teacher to provide without additional resources. Study Island can overcome both of these difficulties through the flexibility of the program. If a single intervention is not working for all struggling students, instructors can use the program to differentiate the instructional practice to meet these students’ needs. Additionally, instructors can utilize the Study Island program to provide students with as much practice as necessary to help students reach the desired proficiency levels and master the required skills and objectives without additional teacher resources.

Although RTI models are effective at identifying children at risk and ameliorating academic difficulties (Coleman et al., 2006), research has demonstrated that it is sometimes difficult for students to maintain success at the expected proficiency levels when they return to the general instruction classroom (Fuchs et al., 2003; Vaughn, Linan-Thompson, and Hickman, 2003). In their evaluation, Vaughn et al. found that although 96% of students in Tier 2 instruction were successful enough to return to general instruction, only 66% thrived. Over one-third of these students failed to make minimal progress when they returned to general instruction. As Fuchs (2003) concluded, responding well to an assessment designed to measure intervention success does not necessarily mean that general instruction will meet a student’s ongoing needs. Study Island can offer ongoing instructional support and progress monitoring for students who return to general instruction but may be continually at risk for academic difficulties. Students can continue to practice skills on and
off grade level through the program until they can maintain the requisite proficiency levels that lead to the mastery of content standards.

CONCLUSIONS

The emphasis on implementing RTI methods in classrooms within the United States is high. A national survey of state departments of education in 2007 found that every state department in the union, as well as the District of Columbia, indicated current or intended use of RTI methodology. Furthermore, this survey showed that RTI training efforts are underway in 90% of states, and the majority of states indicated that they promote the use of a combined approach model of RTI within a multi-tiered service delivery system (Hoover, Baca, Wexler-Love, & Saenz, 2008). The increased accountability that teachers face in the No Child Left Behind era has helped to foster a movement toward quick identification of students at risk for academic failure and the use of data-based decision making to determine the course of intervention.

RTI procedures and the Study Island program provide effective solutions to meet these needs. Study Island gives educators access to both a comprehensive assessment package and a flexible instructional practice system within a single program. Study Island aligns well with the widely used models of RTI, either alone or in combination, and functions efficiently in a multi-tiered service delivery system (see Table 2). Additionally, the versatility and customizable nature of the Study Island program can overcome many of the disadvantages associated with RTI implementation, making its use both suitable and desirable in any RTI environment.
## Table 2. Summary of How Study Island Aligns with RTI Models within a Multi-tier Service Delivery System

<table>
<thead>
<tr>
<th>Problem-Solving Model</th>
<th>Standard Treatment Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Universal Screening</strong></td>
<td><em>Study Island</em> uses a comprehensive system of assessment tools that allow educators to establish an initial performance baseline for each student.</td>
</tr>
<tr>
<td><strong>Tier 1</strong></td>
<td><em>Study Island</em> can help to prevent instructional difficulties during Tier 1, general instruction, by providing students with a platform to practice skills taught within the classroom. The <em>Study Island</em> program reinforces those skills through immediate corrective feedback and targeted remediation of specific objectives, helping students not to fall behind. <em>Study Island</em> also aids educators in continually monitoring student performance against his or her baseline as well as state-specific content standards and learning objectives.</td>
</tr>
<tr>
<td>Students whose progress in Tier 1 is not adequate receive additional support through the <em>Study Island</em> program:</td>
<td>Students whose progress in Tier 1 is not adequate receive additional support through the <em>Study Island</em> program:</td>
</tr>
<tr>
<td>1. <em>Study Island</em> allows instructors to monitor student progress toward meeting content standards on an individual basis. Instructors can use the administrative functions of <em>Study Island</em> as a guide during the Tier 2 problem-solving process to identify and define the specific academic problems each student is having based on his or her performance level for each objective.</td>
<td>1. Instructors can use the administrative features of the <em>Study Island</em> program to set the proficiency standards for mastery of objectives to match the required proficiency levels of their state and then monitor student progress of the class as a whole toward meeting those proficiency levels.</td>
</tr>
<tr>
<td>2. Educators can use this diagnostic information to tailor their classroom instruction for each student or to prescribe specific practice through the <em>Study Island</em> program that includes instructional content matched to each student’s most adaptive learning mode in order to help students gain mastery at their demonstrated need.</td>
<td>2. When students fall short of the requisite proficiency levels or begin to demonstrate predictable difficulties with a set of objectives, educators can group these students together based on their general need. They can then either implement small-group, supplemental instruction within the classroom or use the <em>Study Island</em> program to prescribe a set of effective, research-based topics to these students as a group.</td>
</tr>
<tr>
<td>3. As students progress, the flexibility of the instructional delivery platform allows students to concentrate efficiently only on the skill areas that are still problematic.</td>
<td>3. Study Island provides instructors a way to standardize the instruction and produce positive change efficiently for a larger group of students all at once, creating greater quality control and implementation fidelity across classrooms.</td>
</tr>
<tr>
<td><strong>Tier 3</strong></td>
<td>The ongoing progress monitoring system of <em>Study Island</em> can alert instructors when students are becoming non-responsive to Tier 2 interventions. In some cases, students may just need instruction that is more intensive or practice with lower-grade-level material. The <em>Study Island</em> program can immediately use student performance data to shift lessons to lower grade levels to provide students with the opportunity to build the skill background necessary to be successful with higher-level skills.</td>
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REFERENCES


