

RESULTS

with

PASSKEY: A PRESCRIPTIVE LEARNING SYSTEM



Acknowledgements

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Results. More than at any other time in recent history, attention is being focused on the results our schools produce. Expectations have been raised. Student performance standards have been identified for virtually every school subject. But now, more than ever before, teachers and administrators are being called upon to challenge their students to become inquisitive and active learners. To achieve the high goals set by the standards, educators and others involved in education will need to use an array of state-of-the-art strategies and tools.

This report tells the stories of nine schools in nine districts that have implemented *PassKey: A Prescriptive Learning System*, and have been successful in teaching their subject areas, as evidenced by student performance on assessments, and feedback and responses from teachers and administrators. These results demonstrate the benefits of an effective program as well as successful teaching practices.

The schools described here also share several other critically important, common characteristics. They all have

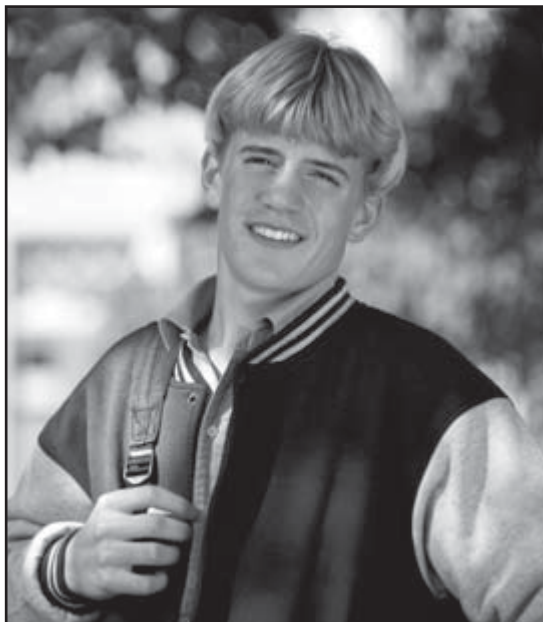
- improved student performance.
- created exciting climates within their schools to encourage learning.
- monitored student progress during the school year to ensure effective instruction.
- demonstrated the importance of maintaining high expectations for all students, not just the brightest or most privileged.

The leaders of the schools described herein are eager to share what they have learned and to see their practices and experiences spread to other schools. Please feel free to contact the people identified in each article. We have provided telephone numbers, addresses, and e-mail addresses whenever possible.

Let's learn from the examples set by these schools. In doing this, we can help our children become the successful learners they need to be to face the challenges and promises of the future.

Table of Contents

Acknowledgements	ii
Results Letter	iii
The <i>PassKey</i> Story	2
<i>PassKey</i> and No Child Left Behind	4
From Research to Real Life: Learning Theories and <i>PassKey</i>	6
Unlock Higher Scores <i>Locust Grove Public Schools</i> <i>Locust Grove, Oklahoma</i>	10
Unlock Student Focus <i>Heard County Middle School</i> <i>Franklin, Georgia</i>	12
Unlock Flexibility <i>Boyd County Public Schools</i> <i>Catlettsburg, Kentucky</i>	14
Unlock Empowerment <i>Crowley's Ridge Technical Institute</i> <i>Forrest City, Arkansas</i>	16





Unlock Motivation

Altus Public Schools
Altus, Oklahoma 18

Unlock Self-Paced Instruction

Haleyville City Schools
Haleyville, Alabama..... 20

Unlock Custom-Tailored Learning

Mission Trails Regional Occupational Program
Salinas, California..... 21

Unlock Performance

Crutcho Public School District
Oklahoma City, Oklahoma..... 22

Unlock Differentiated Instruction

Mulvane School District
Mulvane, Kansas..... 23

Additional Success Stories 24

Professional Resources..... 26

The *PassKey* Story

Created by Teachers

The *PassKey* program is an easy-to-use, computer-based learning system designed by experienced teachers to help students gain proficiency in math, reading, writing, science, and social studies. Each of the teachers who developed *PassKey* had at least ten years of classroom teaching experience. As a result of their exposure and involvement with real students, they knew the types of questions students would ask and the mistakes they would make. They were familiar with the correct approaches to learning specific skills, and they replicated these approaches by writing the content and computer codes that became the *PassKey* program.

PassKey works because it “thinks” the way students think. It anticipates their responses and leads them to the correct answers and the mastery of necessary skills.

The *PassKey* Approach

PassKey is a prescriptive learning system. This means that every lesson is skill-specific, focusing on precisely what students need to learn, and building on what they already know. The program is flexible and can be made available to students in computer labs, classrooms, or even at home.



PassKey's unique lesson structure includes a brief pretest, tutorial, guided practice, and post test.

Pretest—The pretest determines the student's learning needs and prescribes which lessons are needed to meet criteria for mastery. Because of this feature, students only work on the lessons they need.

Tutorial—An easy-to-use tutorial guides students step by step through the interactive teaching sequence. Questions with right and wrong answer feedback are integrated throughout the tutorial.

Guided Practice—Students then strengthen their new skills in a guided practice exercise that also provides feedback for both right and wrong answers. They can receive additional help anytime by clicking the hint button.

Post Test—The student is then directed to take a brief post test. Once that is completed, the score is reported to both the teacher and the student. If the post test confirms that the student has mastered the skill tested, he or she moves on to the next lesson. If the student did not master the skill, the lesson is reassigned.

To further delineate students' needs, *PassKey's* built-in *diagnostics* and electronic link to the Test of Adult Basic Education (TABE) will automatically assign appropriate lessons and make it easy for teachers to identify skill deficiencies in any or all of the subject areas.

PassKey's easy to use, *fully automated management system* helps teachers enroll students, track their progress through each lesson and subject area, and generate reports that include detailed individual and group records. It allows instructors to customize reports, navigation, testing, and tools to meet specific teaching and learning goals.

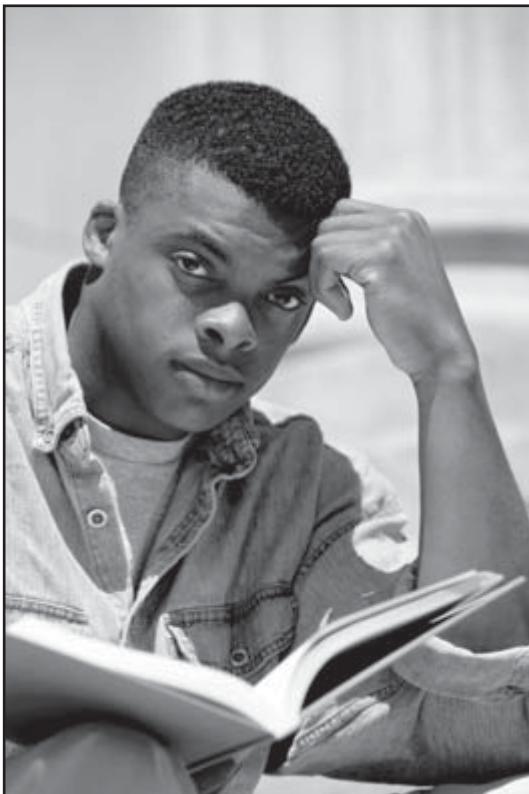
***PassKey's* Unique Benefits**

Built-in correlations to national and state proficiency tests and standards make it easy for teachers to assign the exact lessons students need for optimum test and classroom performance. *PassKey* effectively prepares students for success in all types of testing situations, which helps to improve a district's No Child Left Behind (NCLB) "report card."

PassKey helps save time because teachers spend less time on lesson administration and more time providing *individualized instruction*—without adding hours of preparation time to already crowded schedules. They can move from computer to computer, answering specific questions and meeting each student's unique learning needs. Students learn more and are able to demonstrate mastery more quickly.

PassKey's self-paced instruction sets the stage for student success. Students can move quickly through a series of lessons or return to a lesson to reinforce the skills and concepts presented. They appreciate the immediate, constructive feedback, the practice opportunities, and the interactive nature of the instruction they receive.

Students learn and are able to demonstrate subject mastery on all types of assessments. They are proud of their involvement in their own learning success. *PassKey* creates a win-win-win situation for students, teachers, and school districts.



Teachers like *PassKey* because they say "it really works!"

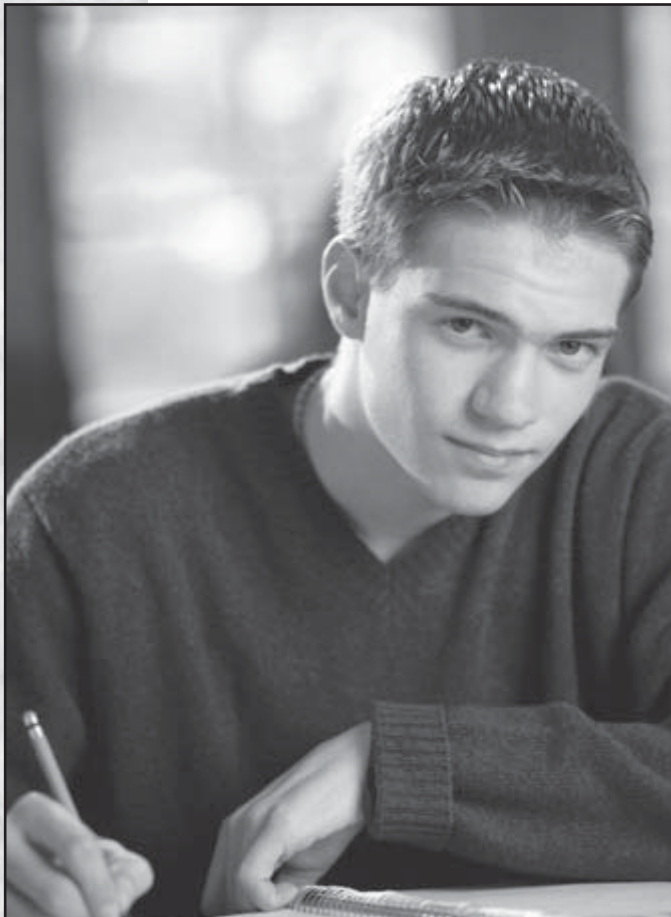
PassKey and No Child Left Behind

Providing Accountability

Accountability has become a key word in education. The landmark legislation No Child Left Behind (NCLB) holds states, school districts, individual schools, and teachers accountable for classroom results. States are implementing strong academic content standards for what every child should know in reading, math, and science for elementary and secondary schools. Students are expected to demonstrate their mastery of requisite concepts and skills through extensive testing.

Test results will be included in annual state and district report cards which the public can use to measure their schools' performance and their state's progress against the standards. These state and district reports will reveal the test results for every student group, including those who are economically disadvantaged; members of racial, ethnic, and language minorities; and students with disabilities. The report cards also will provide results by gender and migrant status to help identify and close the achievement gap between students of various groups.

In addition to increased accountability, NCLB supports the use of effective, research-based education methods and appropriate classroom technology.



Developing New Strategies

Teachers and administrators throughout the country are striving to meet the standards imposed by NCLB. In a highly diverse society, however, it can be difficult to close the learning gap. The old methods do not always work. A new millennium requires new strategies.

Glencoe/McGraw-Hill believes that all students, regardless of race, gender, ethnicity, socioeconomic group, or ability level, should have the opportunity and tools to succeed on state and federally mandated tests. Our unique *PassKey* program is an effective, proven method that addresses many of the concerns raised by the provisions of NCLB.

Effective Technology-Based Learning

Used in schools throughout the country for nearly 20 years, *PassKey: A Prescriptive Learning System*, is an easy-to-use, self-paced learning tool that helps a wide range of students gain proficiency in math, reading, writing, science, and social studies.

The program not only meets the requirement set forth by NCLB to improve student achievement, but it also aligns technology with state academic standards, to provide both remediation and instruction. Hundreds of computer-based lessons that span five skill levels and range from reading grades 1.5 to college entry challenge beginning and advanced learners. You are able to choose only the modules you need to achieve the results you desire.

This report presents the stories of nine schools from across the nation that use the *PassKey* program. Many of the schools find the program is successful for remediation purposes. Others conclude it is especially useful for their English Language Learners. Some teachers choose *PassKey* to give at-risk or learning disabled students an additional learning strategy. Additional schools find the program assists their gifted students to work ahead at their own pace. All of these schools give every student the opportunity to experience the *PassKey* difference.

Those who have used the program are eager to share their stories. You may contact the individuals identified in each article to learn more about how they have used *PassKey* to help their students, and how you might do so as well.

Whether the students are struggling with a subject area, looking for a challenge, preparing for a proficiency exam, reinforcing concepts, or strengthening workplace skills, the results are the same—an increase, sometimes dramatic, in test scores.



From Research to Real Life: Learning Theories and *PassKey*

How well do your students perform basic skills? Do they understand how to use those basic skills when they encounter complex tasks? Are your students active or passive learners?

Every student learns in a different way, and teachers are challenged by the need to meet these diverse needs. Research has shown that some approaches are more effective than others in teaching students the basic skills they need to develop before they can grasp more complex concepts. Research has also shown that computer-based technology is an effective tool for teaching students with widely diverse needs. The *PassKey* program brings together effective learning strategies and computer-based implementations to create a powerful learning tool.

Understanding the Learning Process

The Adaptive Control of Thought – Rational, or ACT-R, theory is a well known learning theory created by John R. Anderson and others at Carnegie Mellon University. The theory suggests that knowledge is gained through the understanding of simple principles. Once students have learned these simple principles, they can master complex tasks.

How do students learn simple principles? The ACT-R theory distinguishes between two types of knowledge. One type is *declarative knowledge* which refers to a person's knowledge of facts. The other type is *procedural knowledge* which refers to a person's ability to know how to perform tasks. Students must have both types of knowledge—they must know *what* they are trying to learn and *how* to learn it—to develop their basic skills.

Declarative and procedural knowledge are obtained in different ways. Students can develop declarative knowledge in two ways:

- By collecting information from their current learning environment (for example, by reading a lesson and learning the facts presented in that lesson).
- By remembering information that they gained by working through a similar problem in the past.

Developing procedural knowledge requires two factors:

- A student must want to solve the problem that has been given to them.
- The student needs an example of how to solve the problem. This example gives the student a model that they can follow.



How *PassKey* Teaches What to Learn

PassKey can help students develop both the declarative and the procedural knowledge that they need to learn. Each lesson in *PassKey* starts with a pretest. This pretest determines whether the student already has the basic skills taught in the lesson, or whether they need

to work through the lesson to gain those skills. In this sense, the pretest helps identify the declarative knowledge that students already know and the knowledge that they need to learn.

Students who do not pass the pretest then work through the lesson's tutorial. The tutorial contains the information or declarative knowledge that the student needs to learn. As students work through the tutorial, they can draw upon their knowledge of past lessons to build their skills. Teachers can either assign specific lessons to their students, or use the program's existing lesson order to ensure that students are acquiring the basic skills that they need to move forward.

A lesson's tutorial is followed by guided practice. Both the tutorial and the guided practice present similar information, which reinforces the concepts being learned and helps the students retain the declarative knowledge taught in the lesson.

How *PassKey* Teaches How to Learn

PassKey also teaches procedural knowledge. In every lesson, students clearly understand the concept they need to learn. The pretest, tutorial, guided practice, and post test, all revolve around this concept. As a result, students are motivated by knowing that completing the lesson's different elements will allow them to solve the problem with which they are presented.

Before they answer any questions in the tutorial, students are given examples of how to solve the lesson's problems. These problems allow students to learn by example, and provide models that students can reference as they step through the remainder of the tutorial.

In a lesson's guided practice, students demonstrate understanding by answering questions based on what they just learned in the tutorial. The "hint" element in this section helps students figure out the current answer as well as gain an understanding of how to apply the concept in future problems. In this way, the "hint" feature allows students to develop procedural knowledge by teaching them how to solve the problem before them.

PassKey Reinforces Learning

The ACT-R theory also states that obtaining declarative and procedural knowledge alone does not guarantee learning. Concepts need to be practiced many times in order for a student to become fluent in how to use them. The *PassKey* lesson structure of pretest, tutorial, guided practice, and post test provides students with multiple opportunities to practice their knowledge of the lesson's main concept.



Students are also allowed to progress through the *PassKey* lessons at their own speed. The self-paced instruction of the program will allow your students to work at their unique comfort level. Instead of feeling left behind, or held back by the pace of the classroom, students can learn at a rate research suggests is most beneficial to developing knowledge. By implementing *PassKey* into your instruction, you can help your students develop the basic skills that will lead them to grasp complex concepts.

How Computers Assist the Learning Process

The fact that *PassKey* is a computer program provides further benefits to student learning. Many students are familiar with fast-paced, interactive media, and may not respond positively to gathering information passively from lectures or texts. In recent years, many schools have enlisted the use of computers to help engage these students.

Some of the benefits computers bring to the classroom are immediate feedback on student progress, customization to meet students' needs, flexibility, the ability to target differentiated learning styles, and an increased tendency to motivate students to learn.

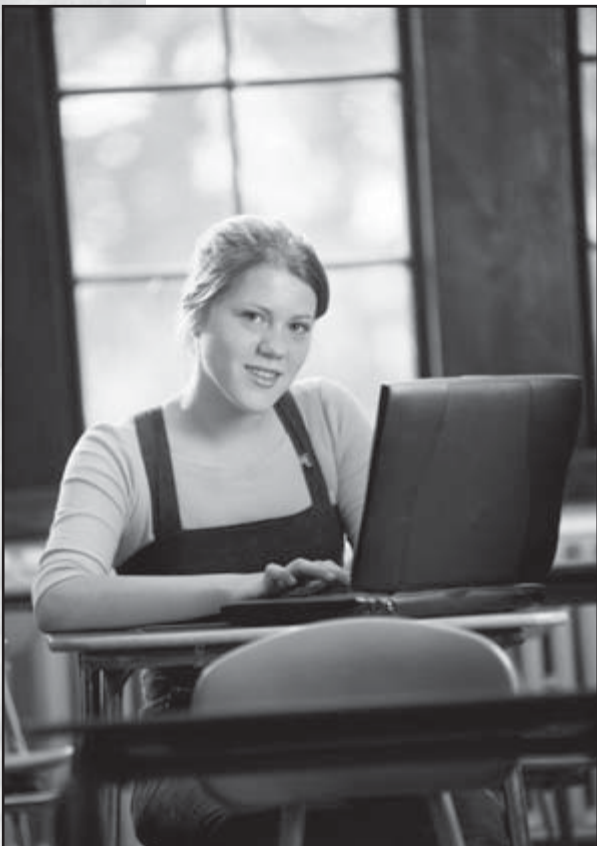
PassKey Generates Immediate Feedback

Learning happens fastest when students receive feedback almost immediately, and when they are given many opportunities to apply the feedback to what they are learning. With *PassKey*, the student receives feedback immediately. When the student first takes the pretest, his or her score determines whether or not they need to continue with the lesson. Within each tutorial and guided practice, if the student selects the incorrect answer, *PassKey* provides him or her with a helpful hint towards choosing the right answer.

The student's score on the post test determines whether or not he or she has successfully completed this lesson. If the student is not successful at completing the lesson, the lesson will be reassigned. At the end of the lesson, the teachers can access and print the student's progress by selecting from nine different reports. They can then turn over the feedback to their students in a timely manner.

PassKey Customizes Instruction to Meet Student Needs

A teacher can customize instruction to meet an individual student's needs by using *PassKey*. He or she has the ability to set up how the student will progress through the program. The teacher can select at what lesson levels students should be working and in what order they will complete them. As a result, students can learn the basic skills first and progress up to the more complex skills, or vice versa. *PassKey* also lets teachers give students the opportunity to self-select lessons. By choosing this mode, *PassKey* provides students with the power to self-assess their abilities and then customize their instruction appropriately.



PassKey Offers Flexibility

PassKey grants teachers the flexibility to satisfy many different arenas of learning. Teachers can present *PassKey* to students before, during, and after class time. *PassKey* is a great supplement to reinforce the basic and complex skills students learn in the classroom. It also works as a remediation or intervention tool to bring struggling students up to speed or as an enrichment tool to allow excelling students to move at their own pace. The convenience and comfort of self-paced instruction in *PassKey* creates a flexible learning environment for everyone.



PassKey Targets Differentiated Learning Styles

The colorful environment, interactivity, and audio features that make up *PassKey* allow teachers to help students with different learning styles. When instruction is interactive, it can help clarify certain concepts that are often passively learned in the classroom. *PassKey* lessons help ensure skill mastery and achievement by providing visual, audio, and interactive features that lectures and print materials sometimes lack.

In the tutorial and guided practice, student can complete a step-by-step approach that interactively highlights key instructional points. In Level 1 lessons, an audio button is provided for students to listen to as well as read the concept being taught. Throughout the sections of *PassKey*, stimulating graphics are included to allow students to visually understand the concepts illustrated.

PassKey Motivates Students

Completing lessons on the computer not only ensures skill mastery, but can also motivate students more than traditional textbook or workbook exercises. Computers in general can keep students engaged for extended periods of time, so when students use *PassKey*, they are more motivated to learn since it is computer-based. The self-pacing of the program also leads to student self-confidence because they are able to work comfortably without the pressure of others. The immediate feedback, customization, flexibility, and interactivity that are included in *PassKey* create an engaging environment where students remain focused and motivated throughout their learning experience.

PassKey was created to focus on precisely what students need to learn, and to build on what they already know. The instructional strategies that exist within *PassKey* apply to well-known learning theories that are research-based and effective. The unique elements of *PassKey* provide a motivating atmosphere for students and teachers to succeed in the learning process.

Unlock Higher Scores

Locust Grove Public Schools

Locust Grove, Oklahoma

Located at the southern end of Lake Hudson, just below Robert S. Kerr Dam, Locust Grove was the site of the Civil War's Battle of Locust Grove. This small town is also the home of the locust tree and many clearwater creeks and streams.

The Locust Grove school system is comprised of 1000 students. These students are about 68% American Indian (Cherokee), 70% of whom participate in the free and reduced lunch program. The Locust Grove schools average 16 to 20 students per class, with 48 teachers, total.

PassKey Implementation Model

Three schools in the Locust Grove district use *PassKey*: The elementary school, middle school, and high school. The Locust Grove elementary and middle school have been using *PassKey* since 2004, and the high school began using *PassKey* in 2006.

The upper-elementary students (third and fifth grade) use *PassKey* at least twice a week for an average of 30 minutes a session.

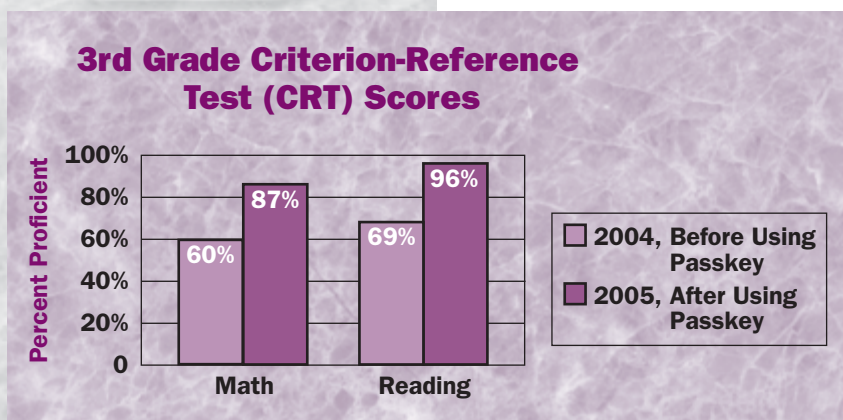
In the middle school:

- Sixth graders use *PassKey* once a week.
- Seventh graders use *PassKey* twice a week.
- Eighth graders use *PassKey* three times a week.

- All math enrichment students in the middle school use *PassKey* every day.

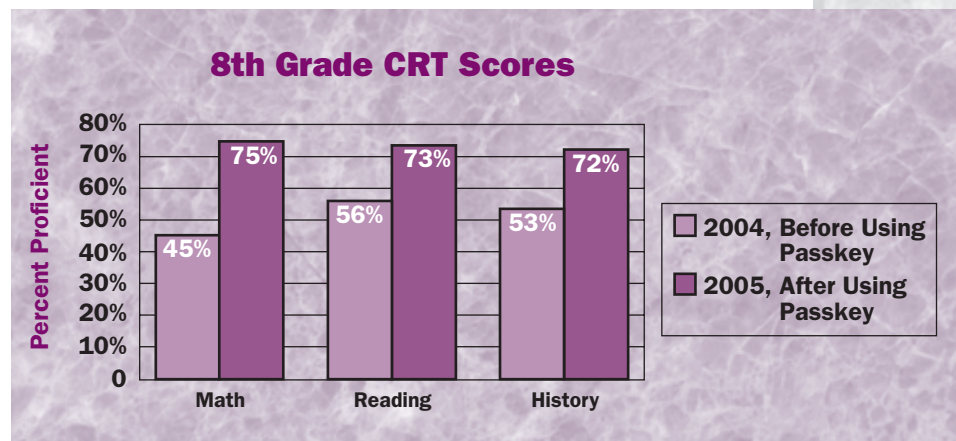
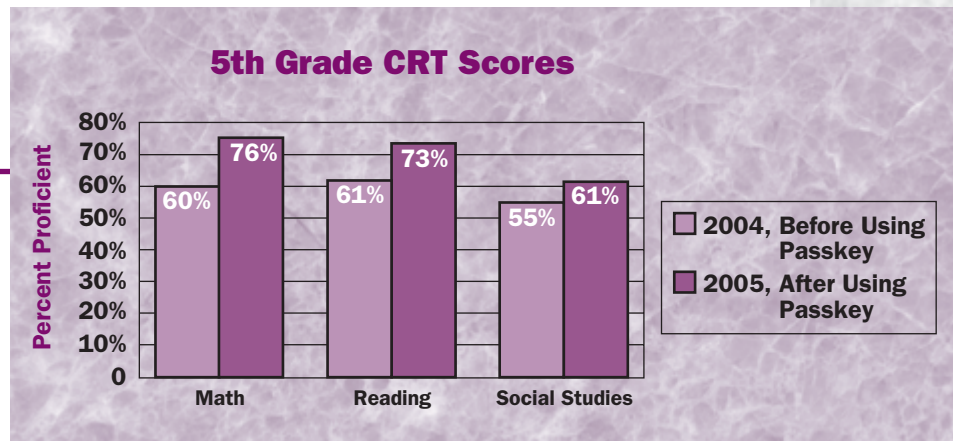
PassKey Results

In 2002, the Locust Grove fifth graders had some of the lowest scores on the Oklahoma Criterion-Reference Test (CRT) in the history of the district. The CRT is administered to students in grades three through eight. This test assesses how students will perform on the Priority Academic Student Skills (PASS), which is the state test in Oklahoma. All grades are tested on reading and math, but only grades 5 and 8 are tested in history.



Expect more.
Achieve more.

The administration implemented *PassKey* in 2004 and have tracked these students ever since. By eighth grade, the same group of students had some of the highest scores in the district. According to Dave Cash, Superintendent of Locust Grove Schools, "Making *PassKey* a required part of their day was the only variable. Nothing else changed for those students in the years between fifth and eighth grade—no new teachers, no influx of new students. Just *PassKey*." The eighth graders increased their math CRT scores by 30%, their reading scores by 17%, and their history scores by 19%. The only subject where *PassKey* was not used was science, and those scores went up only 3.33% from 2002 to 2005, as opposed to the increases of up to 66% in the classes that implemented *PassKey*.



In addition to the eighth grade class, many other students in the school benefited from using *PassKey*. Since its inception in 2004, math and reading CRT scores have increased dramatically for the upper elementary (third and fifth grade) students as well as the exiting middle school students. The third graders increased both their math and reading CRT scores by 27%. The fifth graders improved by 16% on their math scores, 12% on their reading scores, and 6% on their social studies scores.

PassKey Success

PassKey proved to be an invaluable tool for raising test scores in Locust Grove. As Dave Cash says, "I'm confident that once these kids get into high school, the high test scores and improved knowledge base will continue, especially because we've made *PassKey* a required part of our high school curriculum. Not only does *PassKey* improve skills, it turns weaknesses into strengths."

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Unlock Student Focus

Heard County Middle School

Franklin, Georgia

Franklin is the scenic home to the Chattahoochee River and Blackjack Mountain, and sits in the west central section of Georgia. Heard County Middle School (HCMS), located two miles south of downtown Franklin, is the only middle school in Heard County, which has a population of about 10,200. HCMS opened in 2002 and has a student population of approximately 525.

PassKey Implementation Model

Heard County Middle School began using *PassKey* in September of 2005. The students who use *PassKey* participate in a class called "Study Skills" in addition to their normal courses. The Study Skills class is held in a wireless laptop lab and is meant to help these students master the basic skills necessary to comprehend the concepts being taught in their other classes.

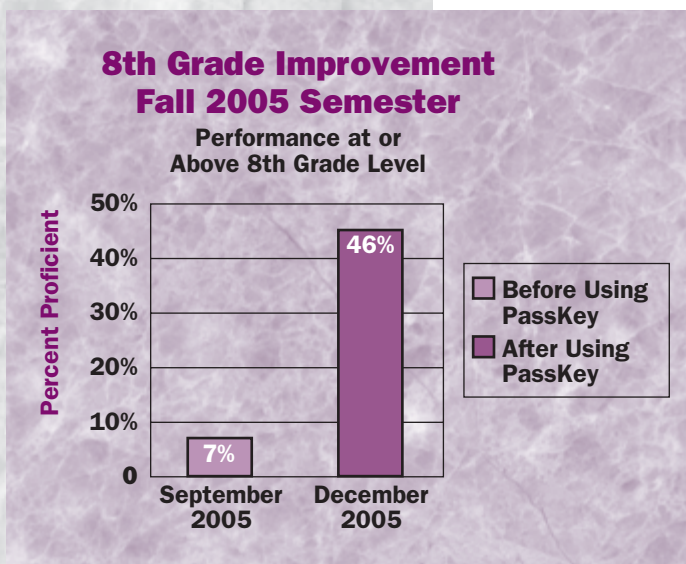
Deborah Santiago has four or five classes throughout the year, and each class has around 18 to 23 students from grades six through eight. The sixth and seventh grade students use the complete *PassKey* program, which consists of math, reading, writing, social studies, and science lessons.

The eighth grade Study Skills class is comprised of students who did not meet the math state standards, so they use *PassKey* for math only. There are a few special education students in this class who also use *PassKey*. The school purchased *PassKey* to help these eighth grade students become proficient with the math state standards so they could pass the Georgia CRCT (Criterion Reference Competency Test) at the end of the year.

PassKey Results

Half of the eighth grade Study Skills students used *PassKey* during the Fall semester (September 2005 – December 2005), and the other half during the following Spring semester. All the Study Skills students use *PassKey* for 45 minutes every day. In

the Fall semester, 7% of the students in her class were performing at or above eighth grade level. After using *PassKey* for the 18 week semester, 46% of her students were performing at or above eighth grade level. In addition to this increase, 76% of the students showed one or more grade



Expect more.
Achieve more.

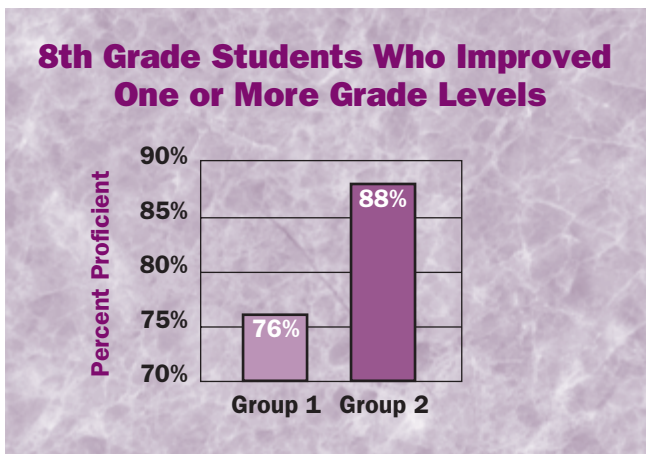
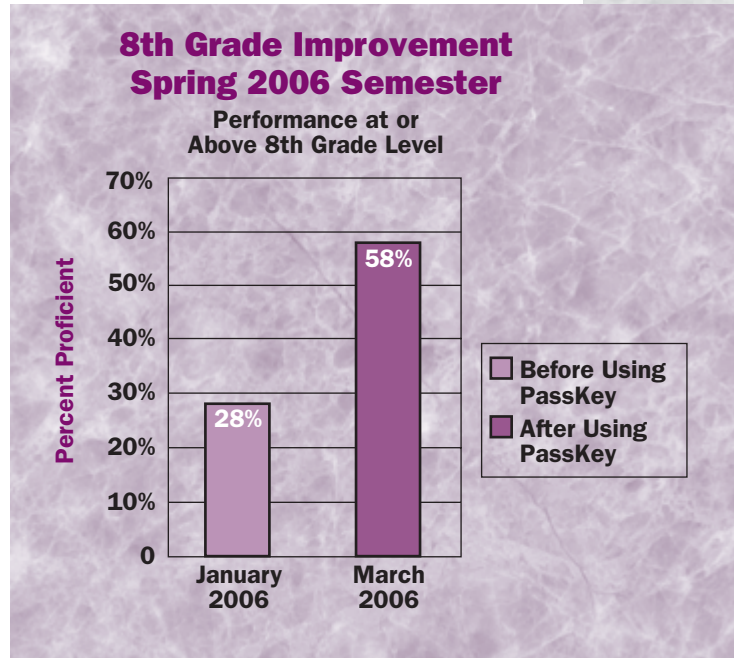
level improvement after using *PassKey*. Many of these students increased anywhere from one to six grade levels.

During the first 9 weeks of the Spring semester (January 2006 – March 2006), 28% of the students in her class were performing at or above eighth grade level. After using *PassKey* for the 9 week session, 58% of her students were performing at or above eighth grade level. Similar to the Fall semester, 88% of the students showed one of more grade level improvement after using *PassKey*.

***PassKey* Success**

After introducing *PassKey* to her classes, Ms. Santiago noticed a dramatic improvement not only in the students' academic performance, but in their attitudes. She says, "Kids seem to be more actively engaged in their academic achievement now that they have *PassKey*. Having the laptop in front of the children who are normally or easily distracted seems to really help to keep them focused. These kids are living in an age with so much technology around them. They need something they can relate to and learn from at the same time. *PassKey* meets these needs and has worked out remarkably well in our classes."

Ms. Santiago concludes, "By the time I finish the school year I will have exposed close to 500 students to *PassKey*. Kids look forward to coming to my class to get on the wireless laptops and get started in *PassKey*. They love it."



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Unlock Flexibility

Boyd County Public Schools

Catlettsburg, Kentucky

Boyd County was formed in 1860. It is located in the Eastern Coal Field region of the state, with elevations ranging from 515 to 1,140 feet above sea level. The county has a population of over 50,000 people.

The Boyd County Public School District serves approximately 3,300 students from preschool through grade 12. The district includes four elementary schools, one middle school, one high school, and an alternative middle/high school educational program.

PassKey Implementation Model

Boyd County has been using *PassKey* since 2000. In 2002, *PassKey* was implemented in the summer school program. This program was a child-centered, hands-on tutoring program designed to bring lower-achieving elementary school students up to grade level by the next school year.

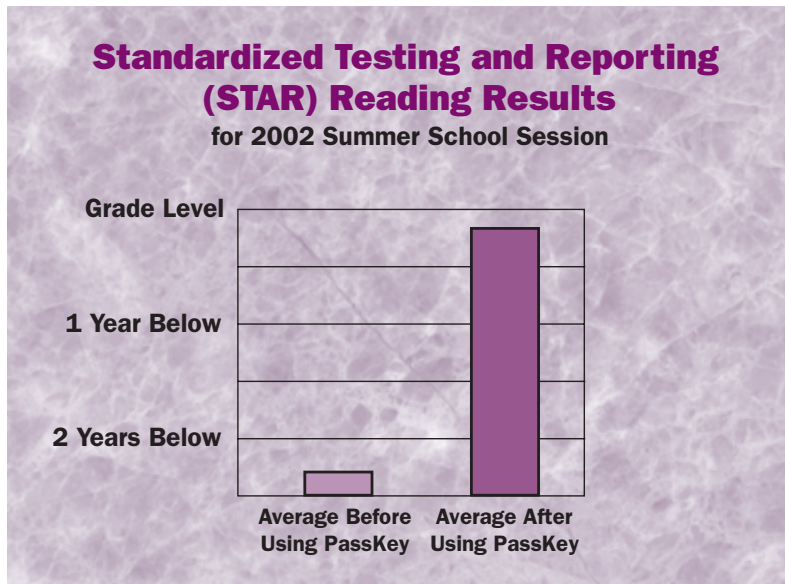
The daily summer school program was intensive. There were ten instructors for the 56 students, and the program featured small group instruction as well as opportunities to use *PassKey*. During a four-hour day, younger students worked on *PassKey* 30 minutes each day, while older students received two 20-minute sessions a day.

PassKey Results

According to Paula Burdette, a Teacher and Computer Lab Administrator for the Boyd County Schools summer school session, "In our summer school we have students in grades one through five who are achieving below grade level." She continues, "Our study ran only three months, and we were pleased with the results. We used the *PassKey* reading lessons for our first and second graders and both the reading and math lessons for students in grades three through five. Using *PassKey*, our reading scores increased from two months to two years, and our math scores increased by nearly a year."

The students were tested with STAR (Standardized Testing and Reporting). Before they used *PassKey*, their reading scores were an average of 22 months below grade level. After using *PassKey*, their reading scores increased two grade levels and their math scores by one grade level.





PassKey Success

Since the success of the summer school program, *PassKey* has been incorporated into the fifth grade curriculum, with about 72 students (in three different classes) using it regularly. Ms. Burdette claims, "*PassKey* is the primary computer program that we are using to bring up our test scores."

In addition, *PassKey* is used as a supplemental program for both remedial and gifted students. Students have specific assignments, and login to their classroom computers during unstructured class time. The Boyd County schools are committed to using technology as part of their classroom environment. *PassKey's* flexibility spans the breadth of the school to help them achieve this goal.

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"PassKey has so many options and lessons that it meets the needs of every student, whatever the grade level."

— Paula Burdette
Ponderosa Elementary School

Unlock Empowerment

Crowley's Ridge Technical Institute

Forrest City, Arkansas

The small community of Forrest City sits atop Crowley's Ridge, the rugged and beautiful outcropping that runs from Missouri through Arkansas. Forrest City has a growing population of over 15,000 people, and is located 45 minutes from Memphis and a little over an hour from Little Rock.

PassKey Implementation Model

LuAnne Faulk, an instructor at Crowley's Ridge Technical Institute in Forrest City, has one of the most unusual classrooms to take advantage of *PassKey's* unique learning system.



"I have a mobile 12-computer lab in a motor home that I take onto various manufacturing campuses," Ms. Faulk says. "My students are employed adults who need to develop or upgrade their skills to advance in their jobs."

The mobile lab Ms. Faulk uses has three sessions per week, and each *PassKey* session is about an hour long. Since most of these students have been out of the classroom for several years, Ms. Faulk uses *PassKey* as a refresher for basic academic skills.

Ms. Faulk's adult learners range from those working toward the General Education Development (GED) exam, to students who need a brush-up in disciplines such as trigonometry to earn industry certifications of various types. "My students just need to sharpen their skills and reinforce concepts they might have forgotten," Ms. Faulk says. She explains further, "Although we have the reading, writing,

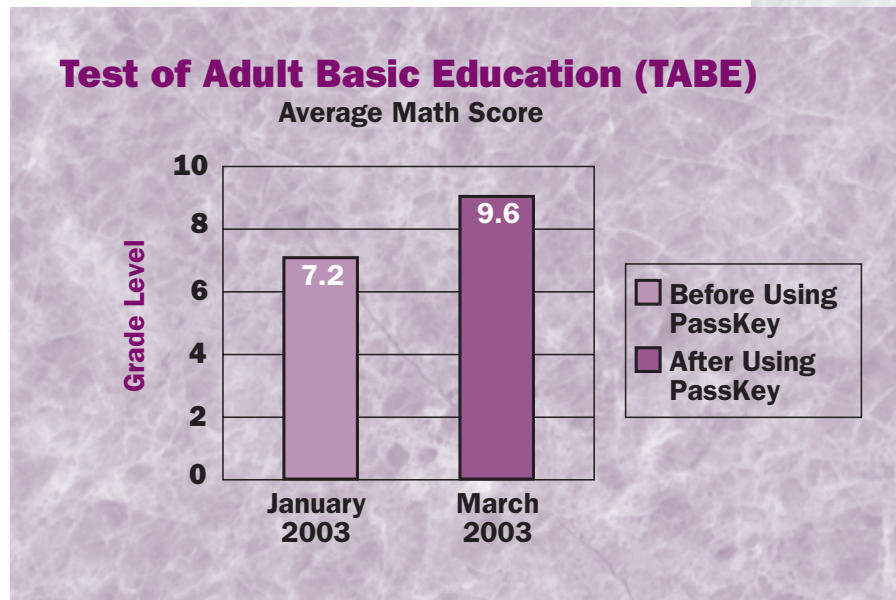
and science modules, my students work primarily with the *PassKey* math program, so our research involved math."

PassKey Results

Twelve students preparing for the GED took the Test of Adult Basic Education (TABE) to determine their proficiency; their average math score was grade level 7.2. For approximately ten weeks, from January to March 2003, the students used *PassKey* only three hours per week. By the end of the research period, the students' average scores had jumped to 9.6, more than two grade levels.

PassKey Success

For Ms. Faulk and her students, a huge benefit of *PassKey* is its ability to provide differentiated instruction. When Ms. Faulk is unable to help her students with an academic element, she likes that she can assign any individual lesson to assist them, and that they can take all the time they need to understand the element through *PassKey*. As Ms. Faulk says of the *PassKey* approach, "We love it. We use it because it works. We buy every upgrade that's produced because it's so effective, even with adults."



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"It works wherever you have computers and students who want to learn."

— LuAnn Faulk
Crowley's Ridge Technical Institute

Unlock Motivation

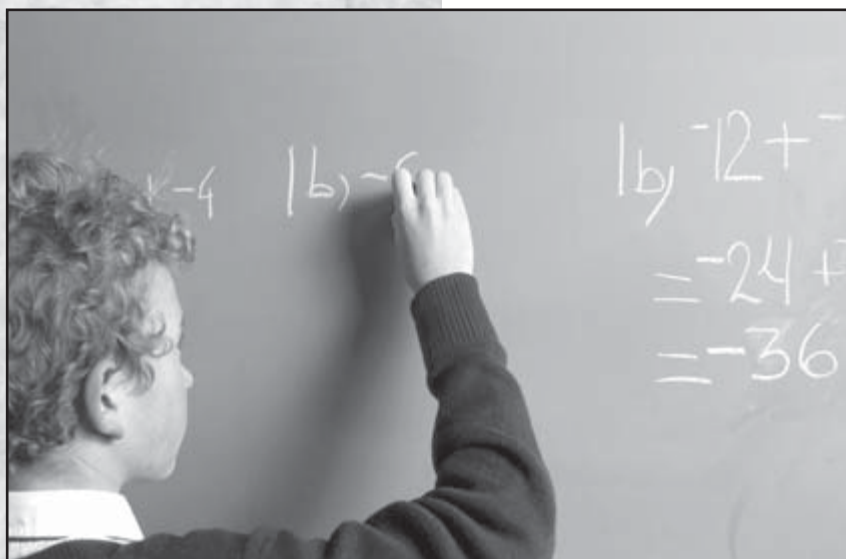
Altus Public Schools

Altus, Oklahoma

A growing community with a population of around 22,000, Altus is located in the southwestern corner of Oklahoma, and is home to the Altus Air Force Base. Altus is surrounded by rich, irrigated farmland and its denizens are able to enjoy the view of the Quartz Mountains, which are situated directly to the north.

The Altus public school system comprises eight schools, with a total student population of about 4,500.

PassKey Implementation Model



About 20 students at Altus Junior High had not passed the reading portion of the Oklahoma test and therefore would be ineligible to gain the permit for a driver's license. Rebecca York, Altus Public Schools Assistant Superintendent and Director of Curriculum, says, "They came to the reading teachers and me to ask what they could do. We gave them the *PassKey* option."

Before choosing *PassKey*, Altus personnel examined many software packages. "Most of them didn't reinforce what was going on in our classrooms," Ms. York says. "They had lots of bells and whistles, but really weren't all that educational. *PassKey*, with its correlation to the Oklahoma standards, promised more."

"One of the most important things in a student's life is getting a driver's license" says Ms. York, "In the state of Oklahoma, if a student isn't reading at grade level by the time of the eighth grade Criterion Reference Test (the Oklahoma Primary Academic Student Skills Test), he or she has to prove reading proficiency with another test that may be even more difficult. If the student can't pass those tests, he or she has to wait until the age of 18 before getting a license."

*Expect more.
Achieve more.*

PassKey Results

The 20 students at Altus Junior High worked on the *PassKey* reading program approximately one to two hours per week for ten months. Prior to using *PassKey*, the average reading score was in the 50th percentile. To pass Criterion Reference Test, students must score in the 70th percentile. After using *PassKey*, the average score of the Altus students jumped to the 75th percentile.

PassKey Success

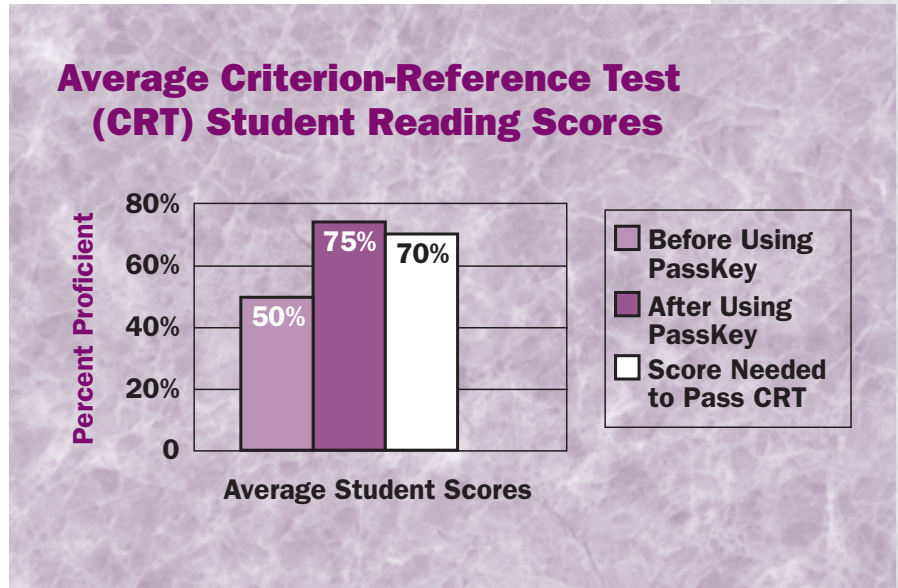
Using *PassKey* improved students' reading abilities so more students were eligible to take the driver's license test when they turn 16. The success of the eighth graders led to the school using the program with other grades in more subjects.

The L. Mendel Rivers Elementary school in the Altus district has incorporated *PassKey* into the daily curriculum for the second, third, and fourth grades. These classes use *PassKey* at least twice a week, in 30-40 minute sessions at a time. In total, about 275 of the school's 430 students use *PassKey* regularly to improve both their math and reading skills. The students are motivated to use *PassKey* because they know that using it will help improve their reading scores which, in turn, will help make them eligible to take the driver's license test.

"*PassKey* helped our students prepare for any reading test they had to take to get their driver's licenses," Ms. York says. "It was certainly an effective way for them to raise their reading scores and achieve an important milestone."

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Unlock Self-Paced Instruction

Haleyville City Schools

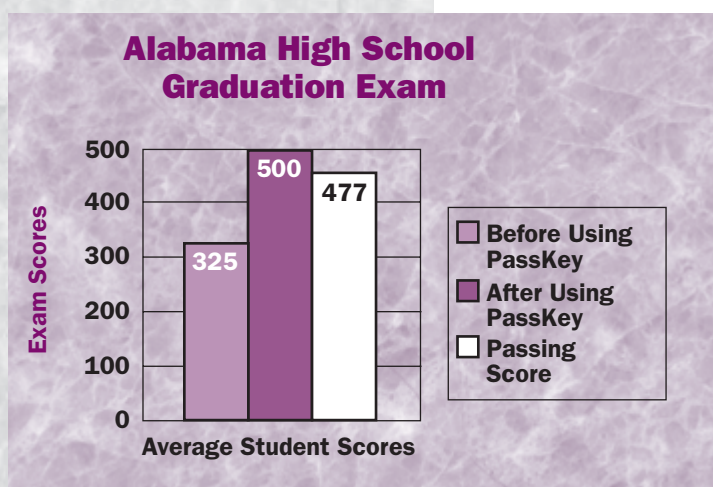
Haleyville, Alabama

H

aleyville is a small town nestled in the hills of Northwest Alabama with a population of 4,200. Haleyville High School was established in 1963 and has about 750 students.

PassKey Implementation Model

Haleyville City Schools began using *PassKey* to prepare students for the Alabama High School Graduation Exam. The score needed to pass the Alabama state test was 477. The average score of the Haleyville students prior to their *PassKey* experience was 325. In order for these students to pass the state exam, they were put in a 10-month program from September 2001 to June 2002.



PassKey Results

After taking the Exam, students went from an average score of 325 to 500 points. Not only did *PassKey* help Haleyville achieve a 175 point average increase in their score, but it also helped them exceed the state average for the exam. "The students improved tremendously," noted John

McCullar, a World History Teacher and Technology Director. He also said, that students, "really appreciated the self-pacing aspect of *PassKey*."

PassKey Success

Mr. McCullar praised the program saying, "*PassKey* is a very effective remediation tool." He also stated that, the most useful feature of the *PassKey* program was the correlation between the lessons and the Alabama state test. He claimed, "It got them ready for the actual test."

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Expect more.
Achieve more.

Unlock Custom-Tailored Learning

Mission Trails Regional Occupational Program

Salinas, California

M

ission Trails Regional Occupational Program (ROP) is located in the Central California Coast city of Salinas. Mission Trails ROP is a part of the Salinas Union High School District. There are close to 12,200 students in the district.

PassKey Implementation Model

Between August 2001 and June 2002, students from Mission Trails ROP started using *PassKey* to help prepare them for the General Education Development exam (GED). The students had generally been out of school for a year or two and often had less than 20 of the 220 credits needed to graduate from high school. When asked about his students, John Felice, the Assistant Director of the program said, "We're the last step for them." To prepare their students vocationally for the GED, Mission Trails ROP uses the Test of Adult Basic Education (TABE). The TABE allows the teachers to get a handle on how well students can be expected to do on the GED. After they discover their areas of difficulty, students use *PassKey* to master the concepts they are behind in.

PassKey Results

The students worked eight hours per week on *PassKey* to prepare for the GED. Before *PassKey*, the average score on the TABE was between fifth and sixth grade. After working on *PassKey*, the students' average score was above the tenth grade level in both math and reading.

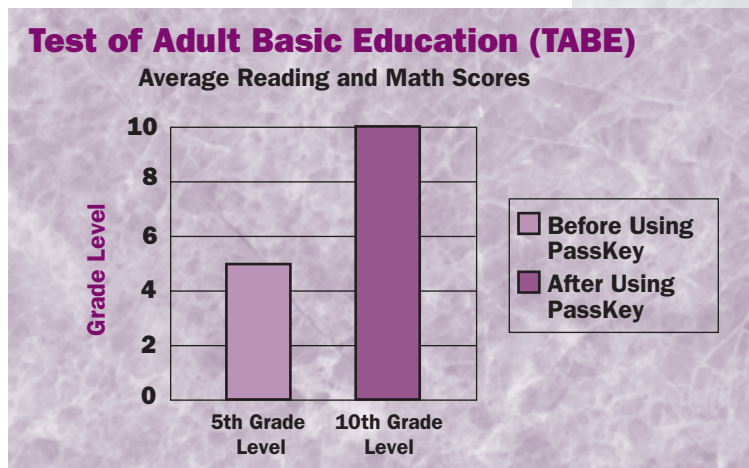
A third of the students immediately passed the GED. "The correlations to state and national tests are great," Mr. Felice said, "and *PassKey* allows us to custom-tailor a program for every student."

PassKey Success

PassKey helps Mission Trails focus on success. Mr. Felice said, "We've used it for years, and it is available campus-wide for enhancement, enrichment, as a tutorial, and a learning system for the GED. Our computer lab is staffed by a teacher and counselor who are dedicated to the students, the technology, and the system."

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Unlock Performance

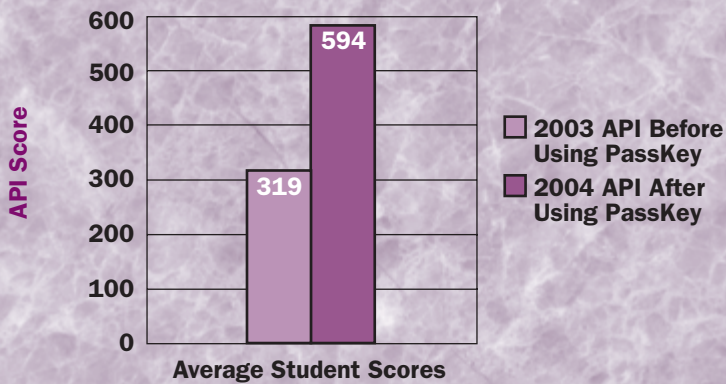
Crutcho Public School District

Oklahoma City, Oklahoma

C

rutcho Public School District is located in Oklahoma City which is the largest city in the state of Oklahoma with a population of approximately 525,000. The school district consist of grades Pre-Kindergarten through eighth grade and has about 300 students.

Academic Performance Index (API)



PassKey Implementation Model

In 2003, Crutcho Public School District was identified as the lowest performing school district in Oklahoma with an Academic Performance Index (API) of 319. The API measures school and district performance based on a variety of educational indicators. The API scale ranges from 0–1500 points. The school district purchased *PassKey* in 2004 to improve their API score.

PassKey Results

In 2004, the district was on the Federal school improvement list for the fourth year and had plans for restructured implementation under NCLB in 2005. However, Dr. Kermit Jones, the Superintendent, was pleased to state that *PassKey* raised the students' API scores by 86% for an overall score of 594. The school district's regular education students had an API score of 730, which means these students were closer to meeting the state guidelines of 790 for math and 768 for reading.

PassKey Success

Dr. Jones explains that, "The state has determined that Crutcho is in 'safe harbor' status this year, having met our annual yearly progress under NCLB. I feel *PassKey* was one of the instrumental programs in turning around our school."

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Expect more.
Achieve more.

Unlock Differentiated Instruction

Mulvane School District

Mulvane, Kansas

The city of Mulvane was founded in 1879 as a railroad/agricultural community and is just 10 miles south of Wichita. It is located in the Southeast portion of Kansas and there are approximately 5,500 residents living in Mulvane and close to 2,000 students attending schools in the Mulvane School District.

***PassKey* Implementation Model**

Mulvane School District began using *PassKey* about five to six years ago. They use it from their primary school to their grade school, intermediate school, and high school. All of their 2,000 students use *PassKey* for various subject areas. Some students use it for only 45 minutes per day, while others may work on the lessons for as much as two hours a day, three times a week.

***PassKey* Results**

Dana Vaughn, the Technology Assistant with the Mulvane School District, is particularly happy with the self-pacing aspects of the program. "It allows students to integrate technology at the speed that's comfortable for them. For example, one student may spend 15 minutes on a lesson, while another needs 30 minutes to master the same material. Students who have completed a lesson do not have to wait for the others to finish, and teachers can work with individual student concerns without holding up the whole class. That is a good use of instructional time."

Ms. Vaughn says the program's diagnostics are a favorite with district teachers. "We find out exactly what the students need to know. The audio feature is a big help for beginning readers, for students who need repetition, and for those who benefit from hearing and seeing the lesson material."

***PassKey* Success**

Ms. Vaughn concludes, "Students cannot work on *PassKey* all day. It cannot replace good teaching, but our teachers have found *PassKey* to be a great addition to their teaching styles."

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"PassKey works well in every classroom and for students of every ability level, including our Special Education students and our Extended Learning (gifted) program."

— Dana Vaughn
Mulvane School District

Additional Success Stories

I wanted to share with you the great success we have had using the *PassKey* software over the past seven years. I facilitate the Academic Support lab using *PassKey* at the Kansas City Kansas Area Technical School serving both high school seniors and adults. Quizzing out of a *PassKey* lesson builds self-esteem, but working through a tutorial is the most valuable part of this program. Students often tell me they never understood fractions, for instance, but they finally get it. The self-paced, finely detailed tutorials are what make *PassKey* so worthwhile. This program makes my job a real joy.

Sheryl Becker, Academic Support Lab Facilitator
Kansas City Kansas Area Technical School, Kansas City, Kansas



PassKey really finds the gaps in learning that kids can hide from their teachers. But you can't hide those weaknesses from a computer. *PassKey* keeps going back to the same skills until they are built in to the students' education.

Dave Cash, Superintendent
Locust Grove Public Schools, Locust Grove, Oklahoma

Students like the fact that *PassKey* was different. They enjoyed working on the computer. It was a new and different way to learn, and they really appreciated the self-pacing aspect of it. *PassKey* has been a great tool for us and for the students.

John McCullar, World History Teacher and Technology Director
Haleyville City Schools, Haleyville, Alabama

I want to let you know that *PassKey* has been a wonderful addition to the Shattuck Schools. Shattuck Elementary used *PassKey* last school year 2004–2005 and this school year 2005–2006. My teachers have appreciated its many features and are continuing to learn ways to integrate the software into our curriculum. I appreciate the training they have received and look forward to having my teachers learn even more ways to help their students in the future. I believe that we have only begun to tap *PassKey's* resources and potential for our students and that *PassKey* will continue to benefit Shattuck students.

Mack Morse, Superintendent
Shattuck Public Schools, Shattuck, Oklahoma

In May 2002, our district met with a representative demonstrating a computer-assisted instructional program entitled *PassKey*. We began using it consistently the following school year with all students in both elementary and high school. The results were extremely favorable, especially with our high school students.

According to the results of the Oklahoma State Testing Program, our grade 10 United States history scores raised from 52% to 92%. The instructor implemented the *PassKey* program and believed that much of the increase was due to its use. In addition, the grade 10 English End of Instruction test shows our score at 82% in 2002 and 87.6% in 2003. Our advanced scores in English II increased from 4.5% in 2002 to 68.8% in 2003. Once again, according to the instructor, much of the success was due to a consistent use of *PassKey*.

Finally, when many area schools were harvesting scores in Algebra I well below the state average of 14%, our instructor, an avid user of *PassKey*, can be proud of a score of 26%, giving our school an API of 1130 in this area. Not surprisingly, these students had been partially instructed through the use of the *PassKey* program. At Agra Public School, we will continue to strive for excellence and believe that *PassKey* has made a huge contribution toward that end.



Wes McFarland, Superintendent
Agra Public Schools, Agra, Oklahoma

PassKey is a great adjunct to their teaching. What is interesting is that we never have to use behavioral interventions in the lab. We simply do not have problems here.

John Felice, Assistant Director
Mission Trails Regional Occupational Program, Salinas, California

One of my reading students, a ninth grader, read at a STAR reading level of 3.6 when he came to my class. After using *PassKey*, he retook the STAR reading test, and passed it with a score of 8.3. This enabled him to take and pass his driver's license test, which had been denied to him due to his previously low reading level. It completely turned this young man around to where he was able to function in a regular classroom (where before he had been a severe behavioral problem.) It made such a difference that he has asked if he could take another reading course with me! Since that time, other reading students have greatly benefited from the *PassKey* program.

Nancy Block Riley, Reading Specialist
Putnam City North High School, Oklahoma City, Oklahoma

Professional Resources

For more information about the topics, skills, and strategies discussed here, consult the following resources.

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