

Stories From Mississippi

Results From College to Kindergarten

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KEY CONCEPTS

- Research and significant reading test score results at the community college level
- “Eureka” moments of students and teachers to empirical research and test results
- Thinking Maps® as a common language—from college to preschool throughout the state

The source of the mighty Mississippi River is Lake Itasca, a small glacial lake in Minnesota. Upon exiting the lake, a shallow area of rapids approximately 2 feet deep allows individuals to wade across the river using stepping-stones to guide and assist them. As the river continues south, it picks up speed, running more quickly with less resistance, and becomes wider and deeper. All along the way, the flow is fed by tributaries that make it an even more powerful force to be reckoned with. Upon reaching New Orleans, the river is 200 feet deep and half a mile wide. The river continues its journey into the Gulf of Mexico.

From the Mississippi Delta to the Gulf Coast and across the state, Thinking Maps have been spreading wider and deeper from district to district, teacher to teacher, and student to student. Over the years, as districts begin the implementation of the maps, they are, as we call it, “wading in the water.” If during that first year they stumble, there are stepping-stones offered by educators from schools around the state upon which to rely and receive help. Using Thinking Maps effectively and over multiple years, teachers begin to move with greater ease from map to map, all the while adding depth to the content they are teaching to students. During this journey, educators are given assistance in connecting maps with grade-level objectives, writing processes, reading comprehension strategies, state standards, and a variety of creative ways to use these valuable tools with their students. As teachers continue to use Thinking Maps, the ownership transfers to students whose thinking becomes deep and expansive, enriched and powerful.

The results offered here range from prekindergarten to college classrooms. At the end of this chapter a story is told by middle school teacher Suzanne Ishee about an educational community,

the Pass Christian School District, physically wiped off the map by Hurricane Katrina on August 29, 2005, and then rebuilding, rising up again to the highest levels of success.

THINKING MAPS AT THE COLLEGE LEVEL

In 1981, I joined the faculty at Jones County Junior College in Ellisville, Mississippi, as a reading, study skills, and English instructor. I was faced with the challenge of how to address the individual needs of students, transcending their differences while maintaining the purported integrity of the college curriculum. The setting is a melting pot for ability levels, a range of potential courses, and advanced educational plans. Because most community/junior colleges are committed to the open-door policy of admitting students regardless of their ability, age, experiential background, or career aspirations, they are faced with the profound problem of how to treat such diversity. ACT composite scores may range from 8 to 32, while a profile of personal characteristics of these students presents a new, less traditional type of student clamoring to be taught. Supported by civil rights litigation and generous government and scholarship aid and buttressed by a prevailing confidence in the efficacy of advanced education as well as the demands of a complicated technological society, these students have come in unprecedented numbers.

When I began teaching at Jones County Junior College, I was baffled by the apparent failure of the students to transfer thinking skills taught in my classes to other academic areas. After nearly 10 years of frustrating efforts to find more effective strategies, I discovered Thinking Maps, which produced significant results. As I began using the maps, my colleagues from other academic areas informed me, "Your students are doodling in my class. They are drawing circles and squares while I am lecturing." "Oh no," I confidently replied. "They are not doodling—they are thinking!" I realized that I had a set of visual tools for learning, a vehicle I needed to help students develop and transfer critical thinking skills to various academic areas.

As the use of Thinking Maps continued, a change occurred in the way students approached learning. They no longer looked at the magnitude of their textbooks, but instead they organized and simplified the material by mapping assigned readings. They began to recognize patterns of organization in paragraphs and passages by applying the appropriate Thinking Map to specific reading selections. Making further connections of the thought process to Thinking Maps enabled them to see the type of thinking required to complete a particular task. One of my college students had been diagnosed with attention deficit disorder as a young girl and had been sent to numerous tutors who equipped her with a variety of study strategies that did not work. After being taught Thinking Maps, she commented, "I like Thinking Maps because they are how I think anyway; now I have ways to organize all that information." She proceeded to make a perfect score on her first American History test after mapping the material.

RESEARCH FINDINGS: READING COMPREHENSION AT THE COMMUNITY COLLEGE LEVEL

After I used the maps for several years in my college classes, I believed it was important to determine whether or not Thinking Maps, interwoven with an existing college reading course, would have a significant effect on reading scores or be affected by the status (traditional/nontraditional) of the student. The investigation was conducted over two semesters with a sample of 92 students forming the control and experimental groups. An analysis was made as to whether the treatment of mapping had resulted in a significant difference between the Thinking Maps control groups and "no-mapping" groups in reading scores as well as the variables of fast reading, phonics, comprehension, scanning, structure, vocabulary, and word parts. The necessary calculations were made using the multivariate analysis of covariance

(MANCOVA) using the Wilks's lambda criterion. Follow-up univariate analyses were used to clarify any significant multivariate results.

Statistically significant main effects were found for the treatment of Thinking Maps on reading comprehension. Significant differences at the .01 level were found for 5 out of 7 subtests of fast reading, comprehension, structure, vocabulary, and word parts, with the Thinking Maps group outperforming the no-mapping group on each of the five variables. The findings of the univariate treatment by status analysis of covariance were consistent with the results of the multivariate analysis, which found that only the main effects of treatment were statistically significant. The main finding reflected on what I saw happening in these college classes: *Thinking Maps made a significant difference in reading test scores*. Whether a person was characterized by age, social roles assumed, or other criteria such as being traditional or nontraditional had no significant impact on reading test scores.

These findings were published in my dissertation at the University of Southern Mississippi (Ball, 1998). The research findings along with improved student performance and satisfaction reinforced my confidence in Thinking Maps as an indispensable visual language for teaching and for learning. Each semester I surveyed my students at the end of the term as to which strategies used were most beneficial, and 90% of the students chose Thinking Maps as most helpful in studying textbooks, organizing material, retrieving information, and taking tests. Their responses included the following: "Why did I have to be in college before I learned about Thinking Maps?" "Thinking Maps are really useful and have brought my grades up." "Thinking Maps move me right into what I am doing."

BEYOND EXPECTATIONS

I will always remember the day Diana entered my reading and study skills college class at Jones County Junior College with all the reservations of an older, returning student. She appeared bright but unsure of her ability to do well after being out of school for many years. At 16 years of age she had been diagnosed with arthritis, and by her late 20s she had been diagnosed with multiple sclerosis. Diana had been told she could never be an effective learner because of her disabling conditions, but despite the time lapse since her previous formal education, and her lack of confidence, she excelled in the activities in my class. Through the use of Thinking Maps, she was able to organize content material for discussions and tests. As time passed, Diana shared her joy from successes experienced as a result of using Thinking Maps, not only in my class but also in other areas. She believed she had found a set of visual tools by which her limitations and negative predictions could be overcome.

From her achievement in the basic classes, she set a goal of becoming a licensed practical nurse and entered the nurse's aide program. However, after only two weeks into her new endeavor, she sadly informed me that she was withdrawing from college. Surprised, I questioned why, and she answered, "I failed my first nurse's aide test. Now I realize the predictions have come true—I am too limited to meet college requirements." I was not as convinced as she for I had seen her potential. Answering my question about which technique she was using to study, she said, "The Notetaking System of Learning, SQ3R (Survey, Question, Read, Recite, Review), and Thinking Maps." "How often have you used Thinking Maps?" I asked, to which she replied, "A little." My response was, "Don't use them a little—use them a lot!" She left my office that day with her spirits lifted and a promise to apply Thinking Maps to her studies.

After two weeks, she appeared with a smile on her face and the declaration that she had decided to stay in college. When asked what had changed her mind (and hoping it was success), she replied, "I have been using Thinking Maps daily." As a result, she had made an A on her last nurse's aide test. She was absolutely elated, and from that day on, she experienced success on tests in that program, leading to her entry into the Licensed Practical Nursing (LPN) program, where she excelled. As she progressed in her studies, she began assisting her

peers in learning how to organize their material. Not only did she win the gratitude of her fellow students, but the instructors were impressed with Diana's outstanding performance on tests, class work, and state board examinations. Diana completed her LPN training as an outstanding student and quickly secured a position in a hospital as an LPN. As a result, the nursing staff proposed and established a pilot program in which all entering LPNs would learn how to use Thinking Maps.

NURSING: A PILOT PROGRAM SET UP AT THE COLLEGE LEVEL

The ripple effect from the utilization of Thinking Maps was impressive. Based on the success of students in my college classes as well as the achievements of my student Diana and the interest of other nursing students and the nursing instructors, a pilot program was set up in spring 2002 at Jones County Junior College (JCJC) by which entering LPN students would be instructed in the use of Thinking Maps in their nursing courses. Upon taking the exit exam at the conclusion of the structure and function course, 100% of the students passed the exam, the first time this had occurred in 17 years. Another group of entering LPN students was taught Thinking Maps in spring 2003, with a 100% passing rate on the comprehensive Fundamentals of Nursing exam (Educational Resources Inc.) given at the end of the semester. Sandra Waldrup, the director of practical nursing, said, "The practical nursing faculty is constantly trying to identify methods which would make learning and retention easier for our students. The volume of information they need can be overwhelming. Thinking Maps provide a consistent way to organize and link related concepts into a manageable system. Our students benefit from Thinking Maps as indicated in their evaluations."

As I began the fourth semester of Thinking Maps training for LPNs in fall 2003, one of my students remained after class to say, "My mother is working successfully as an LPN after completing the course at JCJC. When I told her you were teaching me about Thinking Maps, she shared with me that she had profited from using Diana's nursing notes, which were all in maps. I feel confident that I will make it using the Thinking Maps, which my mother passed on to me."

Another student in the fourth-semester training, Heather Lewis, wrote, "I am using Thinking Maps for the LPN program, and wanted you to know that my grades have gone from Cs and Bs to high Bs and As. I'm so glad, and now I am using the maps in everything."

FROM COLLEGE TO PRESCHOOL

After using Thinking Maps in my classes and seeing positive results from their application, I felt compelled to share these visual tools with others. I thought that if college students who believed they could not perform satisfactorily were succeeding with the help of Thinking Maps, could not this tool also make a difference in the lives of prekindergarten through 12th-grade children *before* they became frustrated and deemed themselves failures?

My outreach began as I presented the results I had experienced from the use of Thinking Maps at conferences and workshops across Mississippi. I contacted school districts from which many JCJC students come, discussing the benefits of teaching Thinking Maps to their students before they enter college. Jones County, a district I call "the pioneer of Thinking Maps in Mississippi," indicated its willingness to introduce the tools to its K-12 teachers. Located in a largely rural area of the state, the Jones County School District, composed of seven elementary, three middle, and three high schools, piloted Thinking Maps across the district in Grade 4. Twenty-five fourth-grade teachers utilized the maps, and after one year, the district's score increased from level 3.5 to level 4.3 (with 5.0 being the highest), with the fourth-grade's scores increasing most significantly. Thomas Prine, former superintendent of Jones County School

District, states, "Thinking Maps allow children when confronted with a problem to have a process that they can use to organize their thoughts, enabling them to solve that problem. As a result, the students in our district have excelled district-wide."

By the mid-1990s, as the successful use of Thinking Maps became better known, interest grew. During the 1995–1996 school year, Dr. Susan Rucker, principal at Brandon Middle School, implemented Thinking Maps in Grades 4–8 in her school. Dr. Rucker states, "As former principal of Brandon Middle School, I saw the use of Thinking Maps as a way to help students organize their thinking processes. The program proved to be a success for students who had difficulty with performance-based thinking skills. Students of all ability levels showed improvement."

Throughout Dr. Rucker's school, maps were evident everywhere: on the floor, on the ceiling, in display cabinets, in the hallways, in the classrooms, even in the cafeteria. After the introductory Thinking Maps training, Dr. Rucker's expectations included having teachers explain in their lesson plans how the maps would be used and show evidence of dialogue between teacher and student, teacher and teacher, and student and student on Thinking Maps as well as evidence of student and teacher utilization of the maps. When the statewide performance-based scores were published that year, Brandon Middle School students had significantly increased their score by 10 performance-based points in all but one grade level, leading Brandon Middle School to be named one of only five Blue Ribbon Schools in the state that year.

Dr. Penny Wallin, former superintendent of the Picayune School District, was one of the first teachers to be certified by the National Board for Professional Teaching Standards in Mississippi and in the nation and used Thinking Maps when she was a classroom teacher. She states, "In my roles as National Board Certified Teacher and administrator, I understand the importance of equipping learners with pathways to learning. Although all students do not learn in the same way or at the same rate, they must think and process. Thinking Maps are truly useful for a lifetime, providing consistent, common visual tools that support the eight thinking processes as identified by research."

Pass Christian, a small school district (two elementary, one middle, and one high school) located on the Mississippi Gulf Coast, began training its middle school teachers in the use of the maps. After a year of Thinking Maps implementation, the writing scores of seventh-grade students on the state writing assessment increased from level 2.2 to level 3.0 (with 4.0 being the highest level). Only 2 students received level 4 in 2002, while 40 students attained level 4 in 2003. Upon investigation of what had made such a difference, it was noted that most of the students achieving level 4 had been instructed in Thinking Maps and had been using them in their classrooms. As a result of these successes, additional training took place in both elementary schools and the high school to ensure district-wide immersion in Thinking Maps for all levels. Later in the chapter, the use of the maps in this district over a nine-year period will be reviewed.

The impact Thinking Maps have had on the education of Mississippi's students is impressive. To date, approximately 350 schools (234 elementary, 69 middle, and 47 high schools), 15,000 teachers, and 429,000 students have been exposed to the maps.

THE RIVER RUNS DEEP AND WIDE

It appears that one of the reasons for the outstanding results and longevity of Thinking Maps in Mississippi schools is the depth of training followed by the degree to which the maps are implemented. After a school has used Thinking Maps for one year, teachers from each school are selected to become expert trainers for their school. Criteria of selection include expertise in the use of the maps, the employment of innovative methods, and the ability to communicate and collaborate effectively with colleagues. A network of Thinking Maps trainers across the state has been established, and meetings are conducted to keep these individuals updated and to provide additional curriculum ideas for their schools.

As an extension of the development of an expert teacher-based training group, the first annual Thinking Maps Conference was held at JCJC in October 2002. This gathering brought together over 300 educators, from kindergarten to college, from all over the state to experience the power of these common visual tools. Keynote addresses were given, but most important, teachers presented a range of Thinking Maps applications in breakout sessions. The “Thinking Maps Gallery” highlighting student and teacher projects provided an opportunity for educators to share ideas and to see integration of the maps with all levels and areas of curriculum.

This gallery of work from K-12 schools from across the state showed that this common visual language has the capacity to connect all learners. Much like the examples shown in the gallery, the examples shown in Figures 14.1a-d illustrate the developmental range of the use of just one tool, the Brace Map, focused on only one piece of content knowledge, the structural parts of the eye.

Figure 14.1a Kindergarten Brace Map of the Eye

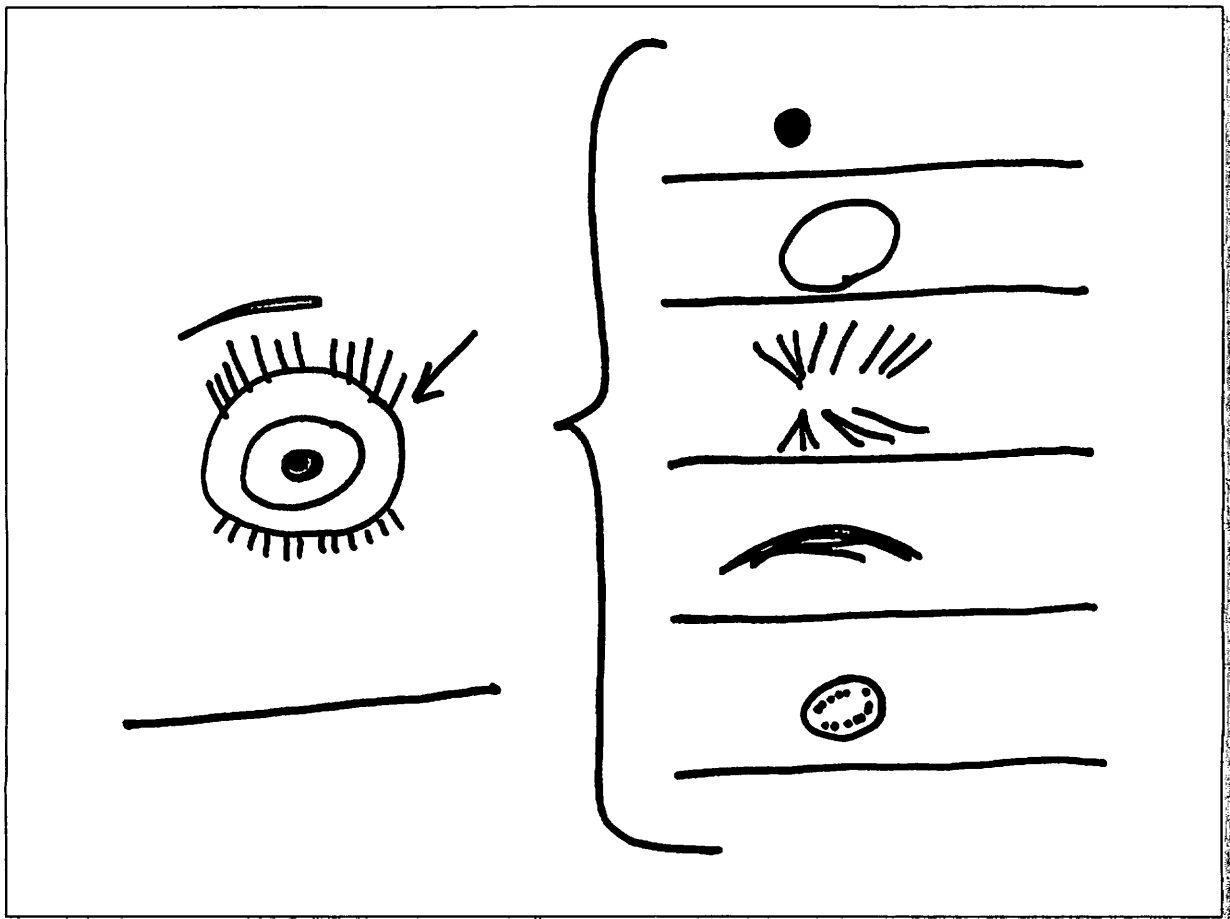


Figure 14.1b Fifth-Grader Brace Map of the Eye

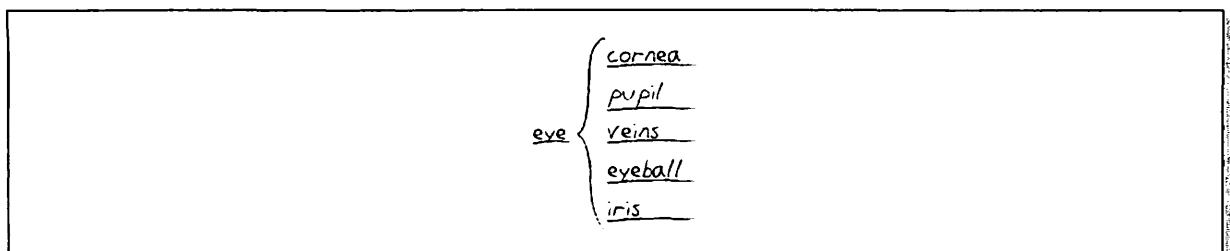


Figure 14.1c Eighth-Grader Brace Map of the Eye

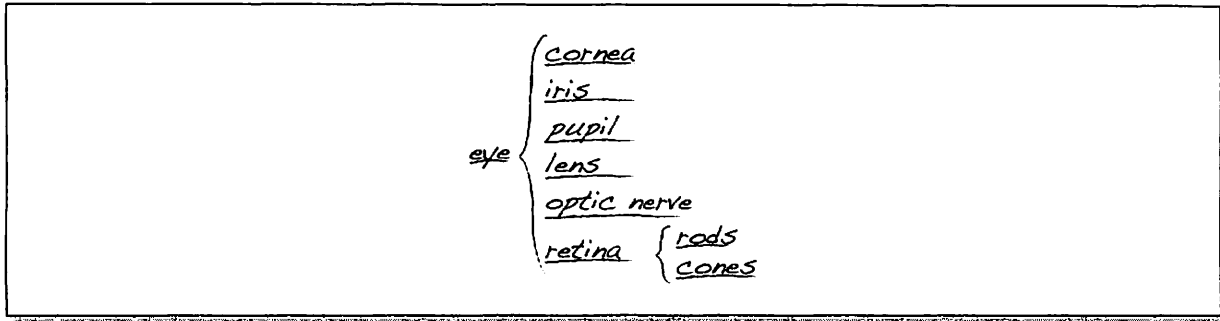
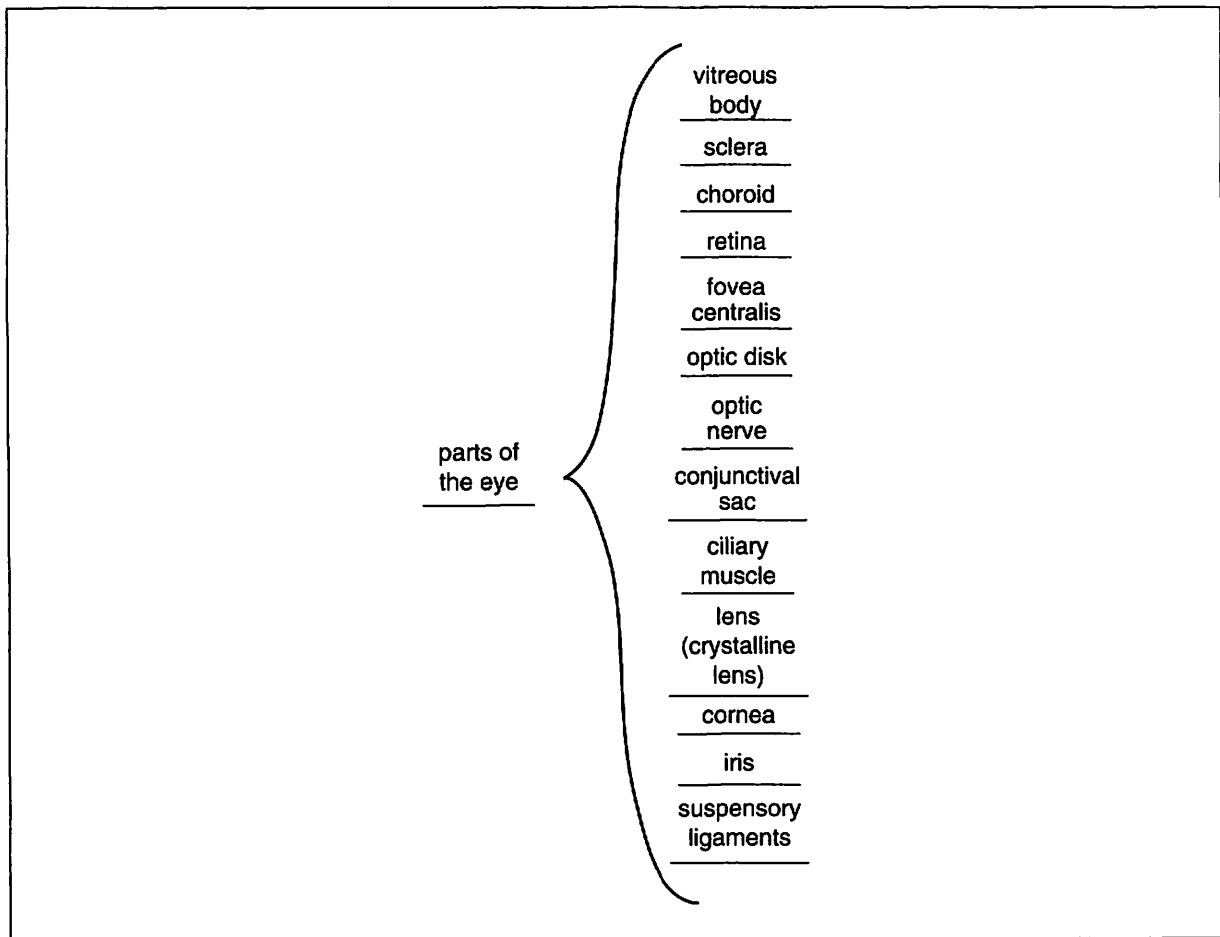


Figure 14.1d College Nursing Student Brace Map of the Eye



These examples show how the same concept created at varying levels of vocabulary and difficulty may be presented using Thinking Maps as a common visual language to enhance depth of learning, bonding students from kindergarten, to fifth and eighth grade, to the college levels.

As a professor and now as a change agent in schools, I am continually made aware of the far-reaching implications and possibilities of the maps for students and teachers. Traveling to

numerous school districts across the state, I have seen Thinking Maps used in classrooms from preschool to 12th grade. Not only do I share with these teachers what I have learned about Thinking Maps, but I also take away many new and exciting ways to use maps in my college classroom. Throughout my 25 years of teaching, I have tried many interventions to help students become more successful learners and have often changed strategies and texts. One thing, however, has not been altered—use of Thinking Maps. When my students ask, “May I take these home to my children?” or say, “I helped my child with his Bubble Map last night and he helped me with mine,” I am certain that Thinking Maps are the bridge not only from subject to subject but also from generation to generation.

It is gratifying to know that Thinking Maps are credited with student successes and teacher satisfaction throughout the state. Over the past year I have asked educators in several school systems to give me feedback on what they have seen happen in their schools, and for their analysis of the results on standardized tests. Of course, because schools and school systems are complex and performance changes have many dimensions, it is difficult if not impossible to demonstrate a direct correlation between the implementation of Thinking Maps and changes in standardized test scores without a refined research design.

Given this frame of reference, it is still important for educators to discuss their observations from the field, as Thinking Maps are implemented across all grade levels in each school over many years. Descriptions of how the maps have been implemented and the perceptions of the effectiveness of Thinking Maps from educators in some of the districts that have implemented Thinking Maps over one to nine years are helpful for our understanding of the effectiveness of these tools over time. These educators give voice to what is a complex shift in performance by teachers and students.

Pascagoula School District 2010

By Ann Parrish, Curriculum and Instruction Specialist

In 2009, the Pascagoula School District implemented Thinking Maps in two of our elementary schools and both of our sixth-grade schools. Each school has a trained trainer, and the four curriculum specialists are trained as trainers as well. As the year progressed, we saw more and more evidence of growth in teachers as they utilized the maps. Trainers presented staff development mini sessions in after-school meetings, and we were able to give teachers suggestions as we observed lessons and reviewed lesson plans. Thinking Maps are an excellent way for our students to organize their thoughts and facts for later applications. They are wonderful for teacher introduction of a new skill or concept and for extension and student applications by using multiple Thinking Maps. During the 2009–2010 school year we saw student work displayed in classrooms and hallways, as well as school displays, which used Thinking Maps to share information for visitors, and we looked forward to starting the next school year with full implementation beginning on day one. We were so pleased with the first year of implementation that we decided to add four more schools for the second year. In a year of budget cuts, this speaks volumes. Our goal is to eventually have total immersion in our district.



Tupelo City Schools 2010

By Diana Ezell, Assistant Superintendent

In July 2009, the Tupelo Public School District (TPSD) administrative team was trained in Thinking Maps, while the district's 20 instructional coaches were trained as trainers for Thinking Maps. The district plan had been for the administrators to use Thinking Maps during meetings and team planning

throughout the 2009–2010 school year, and at the same time the instructional coaches would integrate Thinking Maps in their coaching sessions.

During the training of administrators and instructional coaches, a unanimous decision was made not to wait but to begin training all teachers in the district in the fall of 2009. Collectively, they identified a need for a common language from prekindergarten through 12th grade and did not want to wait a year. The trainers worked with Dr. Ball to develop a plan for introducing and reinforcing the use of Thinking Maps in the classrooms. On the first day of school, Thinking Maps were displayed in the hallways, and the excitement continued throughout the year. The TPSD lesson planning elements include Thinking Maps as a requirement so that Thinking Maps are used in every subject. The district scores on benchmark assessments improved throughout the year across the district.



Gulfport School District 2010

By Carla J. Evers, Director of Instructional/Federal Programs

Because of the professional learning experiences that our teachers in the Gulfport School District have had with Thinking Maps and *Write . . . from the Beginning* (Buckner, 2000) since 2003, we have been better able to prepare our students to use the maps to organize their thinking and process information at deeper levels. Students at all levels routinely use multiple Thinking Maps to help them structure their writing and thought processes in cross-curricular applications. The maps have been particularly helpful in schools with higher poverty rates in that their use has encouraged vocabulary development and improved composition skills.

MINDS OF MISSISSIPPI

It now has been over five years since Hurricane Katrina came ashore. The city of New Orleans, Louisiana, was a tragic and unbearable center of destruction, with the winds and water penetrating the city and destroying lives and neighborhoods. Little known to the outside world, just up the Gulf Coast was where Katrina actually made landfall: along the stretch of land of the small coastal towns of Pass Christian and Gulfport in Mississippi. For several years before the devastation of Katrina, Pass Christian had brought Thinking Maps to its community of learners with great success. As you will find out below in the personal and professional reflections from Suzanne Ishee, facing the trauma and the challenge of rebuilding a community and its schools from the ground up to becoming the top-performing school system in the state was propelled by an enduring focus on student thinking.

**THE PASS CHRISTIAN SCHOOL DISTRICT STORY
PASS CHRISTIAN SCHOOL DISTRICT 2010
BY SUZANNE ISHEE, PASS CHRISTIAN MIDDLE SCHOOL TEACHER**

In every teaching environment, educators look for the “magic bullet” that will open up their students’ abilities to access and process information in such a way as to invite application in all areas of life.

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Often overlooked is the innate ability that all learners have to think about and focus on information presented to them on a daily basis. When given the opportunity, no matter what the circumstances are, people of all ages and positions in life will grow and come together, as long as there is a common language to link them to their experiences. This is a story that begins in a small town in southern Mississippi along the Gulf of Mexico. It explores the ability of a people to survive and thrive in spite of the direst of circumstances—Hurricane Katrina.

Thinking Maps were introduced in the middle school of the Pass Christian School District in 2002. After data collection of student progress on standardized tests, it was found that the district was in the middle of the continuum on statewide test scores prior to the implementation of the maps. After the first year of applying the Thinking Maps to students' learning, the results were amazing! When the seventh-grade writing assessment results were released, we were elated to see that the students had jumped from 3% to 30% achieving a perfect score of "4." The only variable in the before and after scores was the use of Thinking Maps in the classrooms.

From 2002 to 2005, student achievement increased dramatically in all areas of assessment. From kindergarten to high school, scores rose to the top levels across the state of Mississippi. Although the demographics of the district did not fit the statistical data of how students should perform, student achievement continued to climb. Over 60% of the students were on free or reduced lunch prior to Hurricane Katrina. The high school was recognized as a national Blue Ribbon School, and the two elementary schools and the middle school commanded great respect for their achievements. Success was expected and became a point of pride among the learning community.

As students traveled from classroom to classroom, teacher to teacher, and school to school, they were able to use a common language for learning as introduced by Thinking Maps. Learning looked the same and sounded the same no matter where the students found themselves. The Pass Christian School District became the place to visit for other districts in the state and served as a model for continued excellence. Over a few short years the district had reached the top level of achievement as measured by the state—a level 5.

Everything Changed

On August 29, 2005, everything changed. The small town of Pass Christian, as well as many other towns and cities along the northern Gulf of Mexico, was virtually wiped off the face of the map. Hurricane Katrina roared ashore with an unprecedented tidal surge and changed the way the community, as well as the school district, looked at the world. In a matter of 12 horrendous hours, people, places, and things disappeared into the Gulf of Mexico. The Pass Christian School District staff members, *85% of whom became homeless themselves*, had to clear away the debris and discover what was left to re-create the learning environment for their students. Stripped of its entire physical community, the educational community came together with the sole purpose to survive and thrive. There were no books. There was no technology. Only one building remained, and even that structure had been damaged by 4 feet of water that traveled inland from the highest storm surge ever recorded.

Daily survival was uppermost in everyone's minds. Finding food and shelter for the homeless, locating missing persons, and identifying the dead became the "new normal." School and learning could have become mere distractions to the populace. However, the Pass Christian School District became convinced that the loss of the learning community would mean the loss of the entire community. Recovery was only possible if a common thread could be used to connect everyone—students, staff, and parents. That common thread was the language of metacognition—the ability to think and to evaluate those thoughts. Thinking Maps were there before the storm, and they were there after the storm, providing continuity in the midst of chaos.

The Pass Christian School District was faced with what appeared to be the insurmountable task of rebuilding a learning community when virtually all was lost. Students and staff came together to continue their pursuit of excellence by using the common language of Thinking Maps! This common

language for learning, this metacognition, allowed the entire community to rise above circumstance and to heal and prosper in the face of a national disaster. The district was able to derive meaning from incredible loss.

Staff came together to begin rebuilding a school district, piece by piece. In a world that was out of control, it became a matter of necessity to give the students and staff a means of gaining control over the overwhelming task set before them. One of the most critical factors in the district's survival was the awareness of a common frame of reference—the use of Thinking Maps district-wide. This became the starting point of the realization that although Pass Christian, Mississippi, was literally removed from the face of the political map, students and staff still had their “mental maps.” Instead of dwelling on what was not, individuals and groups could focus on what was.

For seven weeks, staff worked diligently to prepare a site for the district to return to the business of educating its children. Trailers were brought in to serve as classrooms. As students and staff entered their new environment, it became evident that the definition of school had changed. It was no longer the brick-and-mortar buildings with orderly hallways decorated with the work of diligent students. School became “people” and shared memories of survival. It was a place to vent and deal with emotions that would unexpectedly rise to the surface with very little provocation. Nothing looked the same. Even the makeup of individual classes was altered due to the loss of students and staff, many of whom had moved to other states and schools as a result of losses from Hurricane Katrina. Where and how could the school district begin to put the pieces together to ensure that the students did not lose what they had already acquired? The answer was apparent in what was already there—the “comfort zone” of Thinking Maps.

Beth John, director of curriculum and testing in the Pass Christian School District, said, “Thinking Maps are not a school tool. They are a life tool.” In this context, staff and students began the journey back to a cohesive learning environment. They drew on what they knew about thinking and learning and charted a course to achieve even greater things than had been accomplished prior to Hurricane Katrina. They were determined to not let the storm define who they were as a community of learners. It was through this process that the real essence of learning stood out so dramatically. Learning became the application of the processes that were inside the students and the staff. Although much had been lost in the physical realm, every individual still had all that was needed to move forward. The Pass Christian School District quickly identified Thinking Maps as a key component to recovery.

The commitment to excel and thrive was not limited to the classroom. Each staff member of the district bought in to the premise that it would take everyone to re-create a community. Thinking Maps played a strategic role in daily planning and assessment and in establishing long-range goals. Individuals and groups were on the same page because of a common language established before the storm. This commonality extended into the community as a whole. Things began to come together. As the debris from the storm was slowly removed from the streets and areas where buildings and homes once stood, the emotional clutter was peeled away by the thought processes of individuals and groups. Continuity provided control. Control brought peace of mind. The impossible became the improbable.

Today, four and a half years after Hurricane Katrina forever changed the community's perspective, the Pass Christian School District has made tremendous strides in rebuilding all that was lost. By entering the post-Katrina world and surviving and thriving, the Pass Christian School District's story became “everyman's” story. Returning to learning was the one component of normalcy that reflected what was before the storm and helped bridge the gap to the future. In time it became apparent that the Pass Christian School District story was one to be shared with the world. The Pass Christian School District decided to document its journey through video.

The Pass Christian system applied for a grant from the Thinking Foundation to tell this story and was awarded the grant in 2009. Interviews with administrators, teachers, and students became the oral history of how Thinking Maps provided the impetus for recovery. Students were filmed in their

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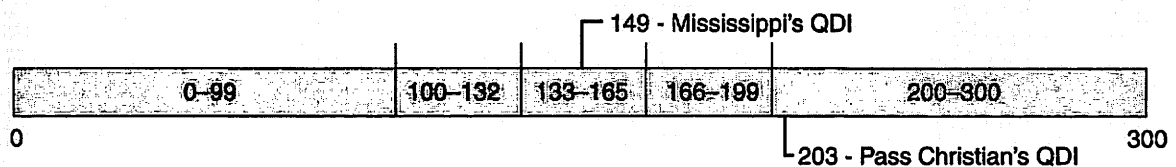
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classrooms using the maps for continued success. Dr. David Hyerle conducted question-and-answer sessions with staff. Out of the many hours of footage the concept became reality, and *The Minds of Mississippi: The Pass Christian School District Story* was born as a film documentary and was released in January 2011, more than five years after Katrina made landfall. Through the process of documenting where the district had been and where it was going, the documentary became more than a story. It became affirmation and absolution for all involved in the production.

As one member of the Pass Christian School District said, "For the rest of the world Hurricane Katrina is over. For the staff, students, and community of Pass Christian, Katrina will forever remain a part of our hearts and a part of our past." Thinking Maps continue to play a huge role in continued excellence in the Pass Christian School District. In the yearly evaluation of school districts in the state of Mississippi, the Pass Christian School District is ranked number one in the state based on empirical evidence referenced to national norms as reported in November 2009.

Moving Beyond the Pain

The state of Mississippi has adopted a much more stringent testing model designed to rank students with the rest of the United States of America. The QDI (Quality of Distribution Index) is a representation of the distribution of student test scores across the various statewide assessment instruments. The scale of 0–300 (300 being the highest ranking) indicates where a school district performs against other districts in the state as well as on a national level. For the 2008–2009 yearly assessments the Pass Christian School District achieved a score of 203 as opposed to the state average of 149. As illustrated by the figure below, the Pass Christian School District performed far above the average school district in the state.



This evidence is a strong indicator of the effectiveness of the Thinking Maps in maintaining the recovery from loss to acceptance to progress as a district and as a community. A walk through classrooms today reveals students and teachers actively engaging in the learning process and dialogue through the use of Thinking Maps.

The Thinking Maps also are used to plan student interventions in the tier process to help students overcome deficits and to promote an across-the-board approach to intervention. Dr. Peggy McCullough, intervention strategist at Pass Christian Elementary School, created a Thinking Map to ensure that all students are correctly placed in the tier process and to guide the teaching staff throughout the process.

The Pass Christian School District is looking forward to the release of the documentary *The Minds of Mississippi: The Pass Christian School District Story*, as a way to share with the world its success and struggle to keep a community together during the aftermath of Hurricane Katrina. The experience of this district can be applied universally to any community, culture, or people trying to survive crises of any magnitude. If a system of order and familiarity can be established to bring a common way of evaluating and planning in any difficulty, then survivability becomes a realistic goal. Thinking Maps provide a common language to break down barriers and give continuity to process. Through process, order is established, and common goals are achieved.

The common language for learning introduced to the Pass Christian School District almost eight years ago has proven to be one of the threads that held the community together under the direst of circumstances. Thinking Maps helped the Pass Christian School District in its journey to recover, revive, and rebound after almost total destruction. The journey continues today.

THE RIVER KEEPS MOVING FORWARD

It is gratifying to know that the deep integration of Thinking Maps into schools and classrooms throughout the state is thriving with improvement of student performance and positive feedback from teachers and administrators. It should not take a catastrophic event to sharpen our view about what is important for students living in the 21st century. Thinking Maps, by providing a common language in a variety of settings from the delta to the coast, keep Mississippi moving forward. Thinking Maps are woven throughout the educational community much as the Mississippi River winds its way through the geographical landscape. The stories of Mississippi, like the river, do not stop here. They continue to flow into the what-ifs and possibilities of the vastness of the mind.

REFERENCES

- Ball, M. K. (1998). *The effects of Thinking Maps on reading scores of traditional and nontraditional college students*. Doctoral dissertation, University of Southern Mississippi, Hattiesburg.
- Buckner, J. (2000). *Write . . . from the beginning*. Raleigh, NC: Innovative Sciences.