



Georgia Association for Supervision  
and Curriculum Development

# The Reporter

Issue Theme: Brain-Based Learning

*Four-Time International Award-Winning Newsletter - Spring 1999*

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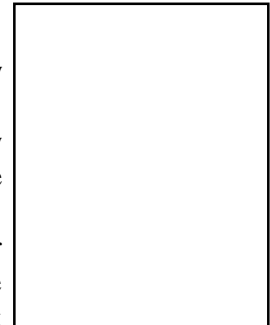
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## President's Remarks

**W**hat an exciting time it is to be an educator! We now know more about the means by which learning occurs than during any other period in history. We now know that all of the practices that we as educators felt were right are actually right for children and learners of all ages. Gone is the need for straight rows. Teachers are no longer evaluated by the noise levels in their classrooms. Students are no longer isolated from each other, but have now become part of a learning community. The explosion of information about brain based instruction has caused us to take a critical look at how to best facilitate learning. We can no longer view students as vessels to be filled with a prescribed amount of curriculum each year, whereby those who "get it" are promoted and those who don't are retained. We now understand that nutrition, classroom conditions and instructional delivery can significantly impact the way in which a person learns, and these findings are changing the way classrooms look and the activities going on inside of them.



**John Jackson**

Schools throughout Georgia have increased student achievement through both simple and dramatic changes in the learning environment. Some schools have adopted procedures allowing students to carry water bottles in order to keep their brains hydrated and ready to learn. Classrooms are being converted into warm inviting places, flooded with mood calming music and low light. These classrooms are filled with "constructive noise" because effective teachers understand that our brains are social brains and humans enjoy group work and collaboration.

Armed with research that shows how the brain learns, we are forevermore changing the educational landscape for the better. Think back on your school experiences and compare them to today's schools—the richness of the classroom climate, the wealth of information, the dedication of the teachers, administrators and parents—and you can only feel blessed to be a part of this great era in American education!

On another note, I want to inform you that the Board of Directors will be seeking your input and opinions concerning the ongoing debate over public school accountability. Special sessions will be held at the Annual Conference in March and we are presently constructing a page on our website to collect your views on this issue. In the past, the leadership of Georgia ASCD has consciously chosen to stay away from the political arena, feeling that the mission of the organization was solely to promote effective instructional practices; however, the line between the politics and the classroom sometimes becomes

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# The Reporter

Spring 1999

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Graphic Design by  
*Troy Bassett*

# From The Editor

Dear GASCD Colleagues,

It has truly been exciting putting together this issue on Brain-Based/Brain Compatible Learning, one of the "hottest topics" in education today as evidenced by the recent issue of Educational Leadership devoted entirely to the subject. As you already know, "A Bridge to the Future: Brain-Based Learning" was the theme chosen for the 1999 Georgia ASCD Spring Conference, March 18-19, at Clayton College and State University in Morrow, Georgia. (See pages 18 - 21.) It is also the theme of our first annual Fall Conference, a one-day event to be held on September 27 at the Crowne Plaza in Macon, featuring Dr. Robert Sylwester of the University of Oregon. (You will be receiving more information about this conference this summer.)

Doris Shaughnessy

We believe you will be influenced, informed, and maybe a little intrigued by the articles that follow beginning with the very first one, by noted authority and consultant on Brain-Based Learning, Dr. Fritz Mengert. In this highly enlightening article, Dr. Mengert describes some of the scientific and philosophical underpinnings of Brain Compatible Learning and cautions against implementing environmental or instructional changes without a clear understanding of the rationale and processes involved. This article is followed by one from David Butler, principal of Mt. Zion Elementary School in Carroll County, relating how Mt. Zion, after studying and implementing brain-compatible instructional strategies, has increased student achievement significantly and created a more positive, enthusiastic school climate. Next, there are articles from two schools (Gulf Shores Elementary in Baldwin County, Alabama, and Cleveland Road Elementary in Clarke County, Georgia) describing some of the "nuts and bolts" of creating a brain-compatible environment and how implementation has affected their students and teachers. Finally, I have saved for last an outstanding article from Ann Richardson, Coordinator of Language Arts, Reading and Gifted for Fayette County Schools, challenging all educators to build this bridge to learning with an appreciation for its contextual framework and an unclouded view of the "big picture."

Other articles in this issue include informative updates from the Georgia Department of Education and an article from Dr. Ann Spears on the issue of attracting and developing strong school leaders in the face of critical shortages. Happy reading, and I hope you enjoy the issue!

Sincerely,

*Doris A. Shaughnessy*

Doris Shaughnessy  
Vice President for Research and Publications

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blurred. We feel this is the case regarding accountability, for we know that whatever criteria are chosen by legislators to judge schools and classrooms will be the primary focus of teachers and administrators. This will indeed impact curriculum and instruction throughout the state.

Sincerely,

*John Jackson*

John Jackson  
President, GASCD

# What Is ASCD?

**A**SCD is an international nonprofit and non-partisan association of individuals who share the belief that all students can succeed in a challenging, well-planned educational program. With over 190,000 members, ASCD is one of the largest education associations in the world.

ASCD is committed to the mission of *Forging Covenants in Teaching and Learning for the Success of All Learners*. Because its members—superintendents, principals, supervisors, teachers, specialists, school board members, professors of higher education, and central office staff—are involved in every facet of education, ASCD possesses a unique vantage point in the education community. The Association looks beyond isolated concerns to address systemic issues as it works to transform education and create a better future for students.

ASCD provides leadership in the areas of supervision, instruction, and curricular design. Serving as a catalyst for positive change in education, ASCD disseminates information on educational research and practice and forges links among educators around the world through:

- Media and technology;
- Publications and training programs;
- Seminars and conferences;
- Affiliates in every state and around the world;
- A topical Networks program; and
- Panels, study groups, and collaborations.

## A Tradition of Progress

Since its inception in 1943, ASCD has worked to improve teaching and learning by serving as a clearinghouse for ideas and a forum for debate. The Association has foreseen significant trends in education and sought to shape the future to benefit students and schools. With the help of ASCD, talented educators have been able to effectively integrate pioneering concepts into classroom practice.

## The Association at a Glance:

160,000 members, including superintendents, principals, teachers, specialists, school board members, professors, central office staff, counselors, and supervisors.

## Affiliates:

Sixty-eight affiliates located in the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, Canada, the Caribbean, Europe, and East Asia.

## Networks:

ASCD's 52 networks connect educators with similar interests and concerns on topics ranging from indigenous peoples' education to teacher leadership and school-university partnerships.

## Annual Conference:

ASCD's Annual Conference gathers over 10,000 educators each year to one of the most diverse and rewarding events in education.

**This Year's Conference:**

**1999: San Francisco, March 6-8**

## Publications:

ASCD's many publications include:

- *Educational Leadership*, the ASCD Journal
- Books on current topics in education
- *ASCD Update*, the official newsletter of ASCD
- *Curriculum Update*, a quarterly supplement to *ASCD Update*
- *Journal of Curriculum and Supervision*, a refereed, scholarly journal published quarterly
- *The ASCD Curriculum Handbook*, updated regularly
- *The Curriculum/Technology Quarterly* newsletter
- *The ASCD Yearbook*

## Affiliate Action

### What is Georgia ASCD?

*Georgia ASCD is a professional organization dedicated to improving instruction in Georgia and to developing the capacity of each member for leadership.*

*Georgia ASCD provides a forum for state and national issues, the exchanging and sharing of quality educational practices, resources and effective implementation models through opportunities for involvement of persons interested in and supportive of quality instruction.*

*The organization offers an environment for interaction, problem solving, policy analysis, joint planning, research, and publications.*

### What are the Benefits of Membership?

- *Networking with educational colleagues and advocates across Georgia.*
- *Communicating through a regular Georgia ASCD Newsletter.*
- *Providing a forum for contemporary issues in education through local/regional Drive-in Conferences.*
- *Training offered both on a statewide and regional basis.*
- *Participating in a two-day statewide conference featuring nationally known consultants.*
- *Maintaining a working relationship, representation, and a leadership role in International ASCD.*

### Contact:

*Office of the Exec. Director, Georgia ASCD • Aderhold Hall • The University of Georgia • Athens, Georgia 30602*

*Annual Dues: \$25.00*

### What is the Relationship Between Georgia ASCD and ASCD?

*Georgia ASCD is an independent state unit affiliated with international ASCD through compatible constitutions and participation in the governance of ASCD through membership on the national board of directors.*

*ASCD provides special services and assistance to the state unit. On approval of the Georgia ASCD board, the state president recommends national committee appointments, articles for national publication, and programs for the national conventions. Georgia ASCD and ASCD cooperate still further in providing the opportunity for joint dues solicitation.*

## GASCD Membership Application

Enclosed is my check in the amount of \$25.00 in payment of the membership fee for the Georgia Association for Supervision and Curriculum Development during 1999-2000.

Miss, Ms., Mrs., Mr., Dr. \_\_\_\_\_

Title, Responsibilities \_\_\_\_\_

Work Address \_\_\_\_\_

Home Address \_\_\_\_\_

Mail Address Desired: School  Home  Membership: New  Renew

Telephone: Home \_\_\_\_\_ Work \_\_\_\_\_

District (Office/School): \_\_\_\_\_

Member of National ASCD: Yes  No

Please Return This Application & Check To:  
GASCD, G-2 Aderhold Hall, University of Georgia, Athens, GA 30602

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<b>Awards Committee</b> —	
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# Georgia ASCD Award Recognition Program

*Georgia ASCD will present four Quality Educational Leadership Awards at the Spring Conference in March. The awards and nomination qualifications are as follows:*

## **CHILDREN FIRST**

This award recognizes an individual or group of individuals for initiative in developing and implementing a program consistent with the mission and beliefs of Georgia ASCD and international ASCD. The award includes a \$500 stipend.

The criteria used in selecting the Children First award recipients are demanding. The group or individual must:

- Advocate good schooling for “at-risk” students;
- Use talent, commitment, and energy to positively influence the education of “at-risk” students;
- Champion increased financial support of strategies resulting in high achievement for “at-risk” students;
- Enhance the capacity of districts and schools to recruit and retain the “best and brightest” personnel; and
- Identify, develop, and support programs that serve the needs of “at-risk” students and their families.

## **INSTRUCTIONAL IMPROVEMENT (Leadership Kelly)**

This award recognizes an individual or group of individuals for initiative in developing and implementing a program consistent with the mission and values of Georgia ASCD that has had a powerful impact

on the improvement of instruction in Georgia. Nominations must be submitted by Georgia ASCD members; however, the individual or group does not have to hold Georgia ASCD membership.

## **CAREER PERFORMANCE (Career Kelly)**

This award recognizes an individual member of Georgia ASCD whose cumulative accomplishments show exemplary professional dedication and good works consistent with the mission and values of Georgia ASCD. Nominations must be submitted by Georgia ASCD members.

## **QUALITY CONTRIBUTION TO SCHOOLS AWARD (QUSIE)**

This award recognizes an individual or group in the non-school community who has developed and sponsored an initiative which has substantially

supported the mission and values of Georgia ASCD. Nominations must be submitted by Georgia ASCD members.

## **RAY BRUCE FELLOWSHIP FOR ADVANCED STUDY IN EDUCATIONAL LEADERSHIP**

This fellowship recognizes one outstanding individual who is currently enrolled in a graduate program in educational leadership or instructional supervision at an accredited institution of higher learning in the state of Georgia. A \$250 cash award to go toward graduate study will be presented to an individual who has demonstrated initiative and commitment to education consistent with the mission and values of Georgia ASCD. Nominations may be submitted by a college dean, department chair, advisor, or any Georgia ASCD member. An individual does not have to hold Georgia ASCD membership to be nominated.

*Applications for the awards are available from Georgia ASCD District Directors or you may contact:*

**Jean Walker**  
Awards Chair  
Gwinnett County Schools  
150 Hunt Street  
Norcross, GA 30071  
(770) 448-2188

# “The Brain: The Reality of Meeting the Mystery”

**Dr. Fritz Mengert ♦ Emeritus Professor at the University of North Carolina Greensboro**

Well, it has happened. Brain Compatible Learning has become one of the fads which frequently sweep across the field of education disappearing in several years only to be replaced by yet another fad. People and agencies are “teaching” about the brain after having read a few books that sell some data as a solution to the problems of educating our children. These “teachings” are met with the dictum spoken by many among us that educational practices follow the pattern of the pendulum swing. First we move toward one fad, then away from it toward something different and often contradictory. The shifts are frequently related to commercial ventures marketing video packages, instructional unit materials, software, and books offered as a panacea for school curriculum. These products are sold with little interest in preceding programs and with no interest in integrating such additional resources into the general curriculum.

In its most simplistic form, the faddism labeled as brain compatible learning results in classroom environments being modified. The environmental changes result in classrooms being made more conducive to stress free learning; but the teaching in the room continues as it has for decades. Teachers are being made aware of some simple brain physiology and are being asked to extrapolate from that information “new” ways to approach the teaching/learning tasks. The ultimate form of faddism is represented in the reams of material that claim to be “good for the brain.”

Lest the premise of this article be unclear, brain compatible learning, as epistemological inquiry and a reconstitution of education, represents an ongoing study and pedagogical implementation, by teachers, of neuroscientific findings. It is not about commercial materials; it is about teacher education.

There can be no doubt that educators ought to know about the brain, be in contact with recent brain research that suggests ways to educate, and give serious thought to implementing teaching approaches that are compatible with brain function. At minimum, professional schools of education should teach teachers the rudiments of confronting research of all types so they can distinguish its value for a specific purpose. It seems only reasonable that brain research be prominently included among those things studied and evaluated.

At the in-service level, faculties surely should undertake a careful study of the brain with emphasis on the recent research that might portend a shift in the traditions of teaching. Many of the time-honored traditions in teaching are premised on thin-to-no substantial data, and it is time they be examined in the light of modern consciousness. The study of the brain has been absent from nearly every teacher preparatory curriculum in the history of education. In fact, education has been studied primarily as a social/cultural/psychological project with only a passive interest in the learner herself and no interest in the teacher as a person. To a large extent education is a cultural function and in a democracy it is a vital one, indeed. Introducing our youth to cultural history and social structures is a role that education needs to treat seriously and carefully. Heritage studies premised in democratic thought aspire to inform us of social and political justice. This moral sensibility is central to brain compatible teaching, lest teachers fall prey to racial and cultural prejudices which will distort the learning and experiential growth of the children they teach and the culture we are shaping.

The foundation of all curriculum matters must be measured by what it is we feel children must know in order to carry on the social structures which precede their stewardship. Heated arguments—social, political, and cultural in nature—have and should go on about these issues. John Dewey’s work did not settle these arguments; it only started them from a scientific perspective.

**Dr. Fritz Mengert** is a specialist in Phenomenological and Neurophenomenological Epistemology. He is emeritus professor at the University of North Carolina Greensboro where he taught courses of Neurophilosophy, Epistemology, Philosophy, Phenomenology, and Ethics in the Department of Cultural Studies. Professor Mengert holds degrees from Ohio State University, Columbia University, and Kent State University. He has been on faculty at Kent State University, Ohio State University, and the University of Kentucky as well as the University of North Carolina Greensboro. He has been a visiting professor at Ohio State University, the University of Toronto, Kent State University, and Western Reserve University. Dr. Mengert has taught at all levels of public education and has served as a principal and assistant superintendent of public instruction. Dr. Mengert presently consults on a regular basis with several school systems in Georgia and Mississippi and has taught seminars and made presentations for Georgia Regional Educational Service Agencies and the Georgia Department of Education.

Delivery systems for getting curriculum to the learner are yet a different matter. Good teaching is an expression of the teacher's understanding of how the child acquires learning and what immediate and long-term use it will have. This issue has been complicated by recent brain research that suggests that there are universal brain functions that appear to be "instinctual" for the brain. Steven Pinker's work suggests that the brain comes to speech-language as part of a discrete set of developmental stages which is not an imitative process as once thought. Other studies have revealed that counting (addition and subtraction) also appear to be universally existent in the developmental stages of the brain.

The role of imitation, modification, and tutoring is less understood neuroscientifically than it is socially or culturally. That is to say that certain behaviors can be modified or encouraged; however, the relationship of the child with the flow of neuro messages is, at this point, not clearly understood. It is reasonably accepted that the activity of the left hemisphere interprets the environment around the learner to the learner; however, the foundation and formation of the interpretation is yet unclear. Hence, in order to truly teach the individual, there is a matrix of communications, understandings, and developmental stages, which must be considered in the presentation and expectations of our teachings.

What is understood is that the brain processes and learns during off-task times at quite possibly a higher level than when it is on-task and that it is likely that schools presently give too much information too fast for appropriate assimilation. Schools, which are clearly social organizations, are over-stimulating learners with far too few places and spaces for the brain to process and digest information. Of course, this may be the emblem activity for describing individual differences. It appears quite clear that some brains process data more effectively when under duress than do others, yet it seems to be an appropriate hypothesis that stress and competition are the enemies of acquisition and recall. For decades, schools have founded much of their activity on the premise that "in the real world," there is ongoing competition and that the youngster needs to be prepared to participate competitively "out there." Yet, if one examines the roots of social competition, it is easy to see that most of it is not about the accumulation of knowledge or the rapidity of recall, but rather it is about economic standing and social position. One would not argue against schools orienting children to these facts, but there is reason to believe that this process ought to be separate from educating the brain. It can be rightfully suggested that the brain is, in fact, a democratic instrument and in

large part, open and willing to receive information and to integrate that information into the individual life of its holder. To suggest that all children must learn the same things at the same time for the same purpose is inconsistent with what we know about the brain. If the same claims were made about our bodies, one could then argue that all children should run at the same speed, jump to the same height, and sing with the same voice.

Brain compatible learning suggests that every child has the right "to come to know" as his/her neuro message system allows. And that the school ought attend to matters of curiosity, focus, interest, and environmental insight with the same energy it does in the presentation of broad range informational subject areas and curriculum. It is not too much to argue that curiosity may, in fact, drive the engine of acquisition and that children learn at the

rates their brains advocate for them to learn. Nutrition, environment, and interest may be the precursors to learning rather than the demands of the society in which the school is set. This, then, would suggest that teachers confront a whole new set of issues and that those issues be related to epistemological understandings rather than matters of acquisition and recall. For example, it seems to be appropriate to suggest that in most of our human activity language precedes thought; or said in a different way, the greater our dexterity with language, the more facility we have to understand the life we are living.

**To suggest that all children must learn the same things at the same time for the same purpose is inconsistent with what we know about the brain. If the same claims were made about our bodies, one could then argue that all children should run at the same speed, jump to the same height, and sing with the same voice.**

The extraordinary importance of language and its role in distinguishing life events must be of the highest priority in the development of learning. Not only should reading be a priority, but also the exchange of information in oral and written form; the precision of stating and searching for meaning is an epistemological essential. Knowing that consciousness in all of its mystery is the product of the brain which can be said to be the epitome of mystery would require teachers to be careful and sensitive to matters of intellectual evolution and consciousness phenomena and formation. To organize schools chronologically as we have done is to behave as though all brains develop their capacities and acuties at the same time. To argue that this is false is to understate that position. Genetics, environment, experience, and opportunity are key components in our coming to know yet are as different as the faces fronting the brain and defy categorization. Further, education founded on the notion that information and

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# Creating a Brain-Based Culture in Schools

David B. Butler ♦ Principal ♦ Mt. Zion Elementary School

Over the last three years, Mt. Zion Elementary School in Carroll County, Georgia, has implemented a brain-based instructional program that has changed the school's culture, philosophy, learning environment, and instructional program. In this article, the principal, David B. Butler, will explain the major components in this successful change process which has resulted in phenomenal gains in student achievement as measured by the Iowa Test of Basic Skills (ITBS).

It was during a year-long school-wide improvement plan study that the staff realized that the teaching methods and instructional delivery were extremely traditional and classrooms were set up to accommodate the needs of only one person, the teacher. Instruction was textbook guided and worksheet driven, and the children were being forced to conform to a prescribed curriculum regardless of ability. No matter how efficiently these teaching methods were implemented, the students were not acquiring basic reading skills much less becoming independent learners.

During the course of study and research involved with the improvement plan, the staff worked closely with Dr. Fritz Mengert, a brain-compatible learning consultant and emeritus professor at the University of North Carolina, Greensboro. It was during these in-services and conversations that the most current information about the brain and how it learns became available to the teachers and administration. Later, a more in-depth study of Geoffrey Caine, Renate Caine, Eric Jensen, Marie Carbo, Kenneth Dunn, Rita Dunn, and Robert Sylwester provided additional enlightenment about the practical implications of brain-based research to classroom instruction.

The primary focus to emerge from the school-wide improvement plan was the belief that every decision made in the school must be based on the best interests of children in order to provide a brain-compatible, child-centered, and developmentally appropriate learning environment which promotes the highest level of achievement for each individual. There was a clearly defined expectation that all school personnel approach duties and responsibilities with a positive attitude, cooperative spirit and professional behavior in hopes that each child would leave this school with a passion for read-

ing and a love of learning.

## TEACHER ATTITUDES AND EXPECTATIONS

The most critical realization for the teachers was that all brains can learn unless damaged or deformed at birth and that the brain's primary function is to constantly input and process information to make sense of its surroundings (Mengert, 1997). Given these facts, where does one look to sufficiently explain why students are not succeeding? Traditionally, the blame is laid at the feet of the parents due to deprived home life, for it is commonly believed among many educators that poor children make poor students. Dr. Mengert and the administration convinced the staff that a child's home life, even if economically deprived, does not necessarily reflect the potential of that child's brain. This understanding led the staff to acknowledge that while many students from low socioeconomic families, 67% of the school population in 1996-97, come to school not adequately prepared to read and learn, it is still quite possible to assist them in becoming successful learners and citizens.

An integral and critical component in accomplishing this goal was to promote a paradigm shift in attitudes and expectations. The staff at Mt. Zion Elementary affirm the belief that "all children can learn and succeed, but not on the same day or the same way." (William Spady, 1974.) All children are gifted, and it is the teacher's responsibility to help children discover their areas of giftedness by providing a wide array of instructional activities on a daily basis to both stimulate and challenge students. When students choose not to participate or engage in classroom or homework assignments, the problem may be inherent in the assignment and not the student. Far too often, educators indict the student when a closer and more truthful analysis should lead one to question the design and effectiveness of the assignment itself. Acceptance of the brain-

based tenet that every brain can and wants to learn demands that teachers be more responsive to students' needs in the design of instructional activities and more responsible for student success or lack thereof. As Harry Wong (Wong & Wong, 1991) most appropriately summarized the impact of teacher

*Understanding the physical considerations and research-based rationales for the brain compatible classroom is important, but the most critical and essential element to its creation is the attitude, personality, and demeanor of the teacher.*



expectations on student success: "Whether you as a classroom teacher expect a student to succeed or fail, you're probably right."

## RESTRUCTURING THE CLASSROOM ENVIRONMENT

"The most recent neurological and cognitive research in brain-based education contends all brains can and will learn if the brain is not prohibited from fulfilling its natural and normal process." (Sylwester, 1990.) In attempting to establish a classroom environment conducive to learning, the staff's intention was to create conditions that optimize the brain's potential to fulfill its primary function, to process information and make sense of its surroundings. It is imperative that the classroom environment be a totally non-threatening, risk-free environment in which every student feels safe and comfortable. An environment of low stress with high challenge is the ideal condition to realize the learning potential of the brain. Reluctance to learn cannot be attributed to the brain for learning is the brain's primary function, its constant concern, and we become restless and frustrated if there is no learning to be done.

Alternative lighting (floor lamps, desk lamps, or track lighting) is another essential component to a brain compatible learning environment. Traditional fluorescent panel lighting in the ceiling is generally too bright for many students' comfort levels and also excites or agitates students with ADHD characteristics. Allowing students choice in alternative seating—bean bags, floor pillows, rockers, sofa, for example—not only creates a comfortable home-like environment and lowers stress but allows students to naturally migrate to areas of the room where light matches their learning needs. Providing students some freedom of choice and allowing movement and mobility in the classroom accommodates two of the basic human needs, freedom and empowerment (Glasser, 1998). Additionally, baroque and classical music played in the background during class tends to have a calming effect on the brain which further reduces stress in students (Weinberger, 1998).

Glucose, the primary fuel for the brain, is expended rapidly during intense concentration, and this and other chemical reactions also dehydrate the brain. Students are allowed water bottles and are encouraged to drink adequately during the school day, something which not only hydrates and cools the brain but also replenishes glucose for optimal synaptic connections. Serotonin, another chemical critical to optimal brain functions, is replenished by allowing the intake of nutritional snacks such as pretzels, popcorn, raw vegetables and fruit or juice during instructional activities. Many students process and learn better if allowed intake just as some learners process and learn better during movement and hands-on activities. Motion and movement activities or simply taking students on a short walk are also excellent means of creating fuel

for the brain. The most effective time for academic focus is immediately after physical exertion. According to Carbo, Dunn, and Dunn (1991), many students experience academic difficulty because they are seldom taught in ways congruent with how they best learn. The teacher in a brain compatible classroom will utilize a variety of instructional techniques and activities to accommodate each style of learner, allowing each student the opportunity to be successful on a daily basis.

Understanding the physical considerations and research-based rationales for the brain compatible classroom is important, but the most critical and essential element to its creation is the attitude, personality, and demeanor of the teacher. One can find a brain compatible environment in the most traditional of classroom arrangements with desks in straight rows and students working only with textbooks and worksheets, if the teacher understands the importance of establishing a concerned, caring, and trusting relationship with each and every student.

In a brain compatible classroom any correction of mistakes or redirection of inappropriate behavior is conducted in a very low profile manner or in private so that no student is dehumanized. Raising one's voice or using a disrespectful tone towards a student in class increases the stress level of not only that student but also the class as a whole. The increased stress level in the class causes the brain to

downshift and withdraw into a protective mode, greatly hindering any intended learning (Caine & Caine, 1994).

## INSTRUCTIONAL DELIVERY

"If students don't learn the way we teach them, we must teach them the way they learn!" (Dunn, K, 1994.)

Because the brain operates in cycles of attentiveness and "down-time" (Jensen, 1996), lessons are structured to last no longer than thirty minutes and usually only fifteen to twenty minutes in lower grade levels (kindergarten through second grade). Whole group instruction, though appropriate at times to introduce a new lesson, is kept to a minimum. Station-centered instruction is utilized during the majority of the day allowing students to rotate every twenty to thirty minutes to a new activity and a new group of peers. All students K-5 are engaged in literature-based instructional activities incorporated within math stations. Different learning modalities are accommodated by the station activities, which are teacher designed to intrinsically motivate students to become engaged and to persist with difficult assignments until they succeed. Both science and social studies are integrated through the language arts station activities and the use of authentic literature. This literature-based approach to teaching science and

*The implementation of brain-based principles on a building-wide basis has resulted in significantly higher standardized test scores, reduced behavior problems, increased attendance, and a renewed enthusiasm and excitement for learning in students, parents, and teachers.*

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# IMPLEMENTING BRAIN-BASED LEARNING AT GULF SHORES ELEMENTARY SCHOOL

**Dr. Bob Zeanah ♦ Principal ♦ Gulf Shores Elementary School**

Brain research that began approximately seventeen years ago is revealing some startling developments regarding the impact on learning and learning environments. Teachers at Gulf Shores Elementary School spent the previous school year studying the research and visiting a school having a great deal of success employing research on brain-based learning and brain-compatible environments.

What began as a conversation between Dr. Bob Zeanah, the principal of Gulf Shores Elementary School, and Keela Thompson, one of the teachers who has served in several leadership positions of the school, turned into a yearlong professional development activity for the school and its faculty. Together they identified Mount Zion Elementary School in Mount Zion, Georgia, as a school that was implementing research from brain-based learning. Two telephone calls later, Dr. Bob Zeanah and David Butler, the gregarious principal of Mount Zion Elementary School, had arranged for four teachers to visit the campus.

Dr. Zeanah and Keela Thompson decided to select other teachers to participate by a unique method. Dr. Zeanah copied an article about brain-based learning for the entire faculty and placed it in the morning mail. Three teachers commented to him that they thought the article was interesting, so he chose those three teachers to accompany him and Keela Thompson to Mount Zion. The enthusiasm of the teachers after their visit resulted in three additional visits being made by Dr. Zeanah. In all a total of 22 teachers and 6 parents, as well as the cafeteria manager and school's snack manager, visited Mount Zion Elementary School over the next five months in order to learn first-hand about brain-based learning and brain-compatible environments. In addition, six teachers attended workshops on brain-based learning and implementing brain-based learning in classrooms.

Teachers at Gulf Shores Elementary School began reading books and journal articles about brain-based learning

and brain-compatible environments in order to become more familiar with the subject. For the entire school year, they shared information and ideas. In addition, the parent newsletter published monthly by the school principal contained one article each month on the subject.

Emphasis on real-life situations for learning and hands-on activities constitute the instructional methods used. Three instructional techniques are associated with brain-based learning: immersing students in learning experience; eliminating fear, while maintaining a highly challenging environment; and providing opportunities for students to internalize information by actively processing the information.

"Teaching with this philosophy is great fun," notes third grade teacher Lynn Norwood. "I am more excited about teaching now than I have been in a long time."

Also associated with this technique is the creation of a state referred to as "relaxed alertness." A brain-compatible environment provides a learning climate for students that is non-threatening and relaxing. Gulf Shores El-

ementary School teachers are enhancing their classroom environments to suit the individual differences of students. Additionally, indirect lighting, comfortable seating (such as sofas, bolster-type chairs, mats, beanbag chairs), stimulating aromas, certain plants that remove chemicals from the air, background music (particularly baroque) and motivational posters are provided in each classroom.

"I find the students are calmer and quieter. The classroom feels like a safe and good place to learn," says fourth grade teacher, Susan Laroque.

Second grade teacher, Holly Brett, puts it succinctly, "When the child feels good, the brain feels good and can learn a whole lot more."

A local real estate corporation in the community became

**"Teaching with this philosophy is great fun," notes third grade teacher Lynn Norwood. "I am more excited about teaching now than I have been in a long time."**

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# BRAIN-BASED LEARNING

## AT

# CLEVELAND ROAD ELEMENTARY SCHOOL

**Editor's Note:** The following two articles were written by teachers at Cleveland Road Elementary School in Clarke County. The first article, by Cyndi Landen Clark, describes implementation of brain-based practices from the perspective of the classroom teacher. In the second article, physical education teacher Johnetta Barnett discusses the impact of brain-compatible research on the P.E. program at Cleveland Road.

### Brain-Based Learning: A New Challenge By Cyndi Landen Clark

Oh, no! Where are our desks? What do you mean it's time to rotate? Why do I have to drink water? These are all questions I've heard in my classroom this year as I began a new endeavor to make my classroom a brain-based learning environment.

My school, Cleveland Road Elementary, has begun a year-long study with a neuroscientist [*ed.—Dr. Fritz Mengert*] to learn how the brain functions and what we as teachers can do to maximize teaching time. Within this short essay, I will attempt to share my brief experiences with the brain-based classroom.

To be honest, as a twenty-year veteran teacher, my first response to some brain-based changes that another Georgia elementary school had made was that it was okay for them but don't expect me to try to change. As last spring rolled around I decided something new was what my fifth graders and I needed. So I made some changes in my math/science classroom. I was amazed and bewildered at the initial results. The students loved it and were more responsive, more material was covered, and the information "stuck" better. As my teammate heard and saw the changes we decided these changes could work across the grade level with all subjects. Visualize with me our classrooms as we enter and begin to learn more.

Be prepared to see something totally unconventional. We started by implementing some basics that have been proven to improve learning by using what we know about how the brain functions. Short of stealing, we begged, borrowed, and bought tables for our classrooms. The purpose was to utilize more cooperative learning groups. We had many students pose the question, "Where are we going to stuff our junk?" We purchased a tall bookshelf and secured dividers to create "lockers" for them. As part of their welcome back bags, we also provided water bottles.

I was amazed and bewildered at the initial results. The students loved it and were more responsive, more material was covered, and the information "stuck" better.

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### Brain-Based Learning through Brain Gym Exercises By Johnetta Barnett

Some educators are jumping on the bandwagon of brain-based learning while others are reluctant to try this style of teaching. Personally, I have been intrigued by the research findings on brain-based instruction for a long time. As a physical education teacher, I was especially interested in how to incorporate these ideas about teaching into my classroom. I found a program called Brain Gym to be very useful in supporting the other brain-based initiatives going on at my school, Cleveland Road Elementary School. I will tell you more about Brain Gym a little later.

Cleveland Road Elementary has had its hands in the "brain-based pie" for some time. Three years ago some of our teachers attended a "Singing and Reading" workshop conducted by Shirley Handy. The workshop was innovative, and our teachers brought back great ideas for their colleagues to incorporate into their classrooms. It has been a slow process; however, I believe that brain-based learning is an area which Cleveland Road Elementary will focus on and pursue wholeheartedly.

Dr. Fritz Mengert, well-known educational consultant, has been integral in helping our school stay focused in our efforts. He has suggested that there be an environment that supports brain-based learning. Some of the strategies for this environment include encouraging students to: drink plenty of water to help stimulate electrolytes; eat peppermints ("brain food") especially before testing; and have snacks throughout the teaching process. The lighting in the classroom is also a major factor in student achievement. Desk and floor lamps provide lighting that is most conducive to learning—fluorescent lighting has been found to over-stimulate students. Center-oriented instruction, which allows students to rotate between learning stations, helps students to receive their academics with a better focus. Students generally become restless if they have to stay seated for long periods of time. Center rotation helps solve this problem and cuts down on some of the minor discipline problems that teachers encounter.

The key to any type of learning is nutrition. Breakfast is the most critical meal of the day. Students have a "running start" if they are served breakfast. Just as one cannot start a car without

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# Building a Bridge: Finding a Firm Footing for Brain-Based Learning

Ann Richardson ♦ Coordinator of Language Arts, Reading, and Gifted programs ♦ Fayette County Board of Education

Hailed as a bridge into the future, brain research promises to help dedicated educators develop instructional practices that will be more effective than ever before. Current research is “hard” science. Thanks to modern imaging equipment we can watch the brain at work; we know which areas generally process certain kinds of information and which are called on to control specific tasks. We are amazed at the plasticity of the organ. We are learning the language of the neuroscientist: cerebral cortex, neurotransmitter, neuron, dendrites. We are beginning to know a great many things about the brain and how it learns.

The problem is not what we know. The problem is what we do not yet understand. As educators, we are in a position similar to ones we have occupied before. We are on the cusp of developing practices, systems, philosophies, and pedagogies based on information that is emerging from scientific labs and studies almost daily. The danger inherent in our current position is that we may well start the pendulum of educational change swinging one more time and forget actions of the past which were too hasty or were based on too little evidence or were overextended and subsequently weak and inefficient. Pat Wolf and Ron Brandt (1998) warn that educators need to move carefully and thoughtfully. They need to be excited about the prospects and promises of current scientific research, but they must understand that classrooms are not laboratories and students are not rats.

Brain-based instruction with all of its promise for improved instruction and learning is not and never will be a panacea for poor teaching or ineffective administrative support. Brain-compatible instruction will not cure all that ails the country’s—or Georgia’s—educational systems. To be sure, such instruction has great potential for enormous good, but it also has great potential for enormous failure. For the educator, the danger of brain-based instruction is not inherent in the science or the information developed from scientific observations. The danger is that once again a promising system of information might well be trivialized, used as a shield behind which to hide that which should be changed or scrapped, or overextended to the point that the strengths promised by brain-compatible instruction become the weakest points of classroom practices. A brief look at just a few “brain facts” will illustrate the precarious state in which we find ourselves. It will also highlight the challenge to those who are constructing

this bridge of promise.

Theorists like Daniel Goleman and Alfie Kohn tell us that emotions are critical to learning. We are warned that classrooms need to be free of threat. No one argues that point. The danger to effective instruction is inherent in how this “brain fact” is interpolated into practice. Free of threat is very different from free from challenge. Threat implies harm, and the loss of self-direction and dignity. Challenge implies the opportunity to try the difficult and to find in the attempt that tasks are not always easy nor are answers always precise. The importance of challenging students cannot be over-emphasized. Kotulak (1993) reported that unless a brain is challenged regularly, it loses some of its dendritic connections. If threat is confused with challenge, there-

fore, learning is disrupted. The safe environment required for students to take risks disappears. Expectations for student achievement are diminished. Students revert to the safe and mundane. To avoid this, it will be necessary to find ways to help teachers, administrators, students, and parents distinguish challenge from threat.

Pat Wolfe and Renate and Geoffrey Caine tell us that learning is

an attempt to formulate patterns. We are admonished to teach the patterns. Certainly patterns occur in every subject of the curriculum, but a single-minded focus that requires only the rote memorization of patterns is counterproductive. Knowing why we teach a pattern and helping students discover how that pattern will be applicable in life is essential. Instruction must include ample opportunities for a student to apply the pattern, to explain it, to experiment with it, and in so doing, to internalize the pattern itself. Students must also be given the opportunity to develop their own patterns and to have those patterns both challenged and validated. This “brain fact” requires us to be brutally honest with ourselves. We may not adopt or allow the adoption of the teaching of patterns on the basis that this is a component of brain-based learning. To do so puts other essential elements of the curriculum at peril. For example, the patterns taught in sentence diagramming are important facets of a student’s foundational knowledge of sentence structure. If, however, a teacher perceives sentence diagramming to be the teaching of writing, the pattern has been misrepresented, and students have not been given the full range of instructional and learning opportunities that they deserve. To implement effective brain-compatible instruction,

*Brain-based learning will provide a bridge to the future only if we, as educators, use the precepts being developed from hard, scientific research wisely.*



therefore, it will be necessary to examine carefully the elements of all curricula to ascertain the patterns inherent in each and to be certain that the patterns we teach are in fact essential and taught to the levels of understanding and application. It will be necessary to insure that students are taught that patterns are just component parts of a much larger framework, component parts which will help them assemble and establish an understanding of that larger picture. This span of the bridge cannot be constructed without a thorough understanding of curriculum.

The work of Marian Diamond reveals the importance of an enriched environment. John Bruer (1998) argues the term “complex” would be more precise than “enriched.” Although some may regard Bruer’s note as simply a matter of semantics, he has recognized the inherent danger in the “brain fact.” If teachers conceive, for example, of Diamond’s findings as requiring a filling of the classroom with “stuff,” the result may well be the introduction of distraction rather than the creation of an effective learning environment. If teachers conceive of Bruer’s call for a complex learning environment as a frenetic pace through as many different activities as possible, instruction becomes a skimming of the surface with little time or focus on depth and understanding. The inherent promise of brain-based instruction will have been distorted if we fail to understand that “enriched” means more than “more stuff.” An enriched environment in brain-based learning terms is a dynamic situation in which students confront difficult tasks and complex issues. Students are not passive recipients of information but active participants in the construction of their own understanding. If students are studying science, they “do” science; they don’t merely read about it in texts. If students are studying medieval Europe, enriched instruction is not limited to the learning of battle names or capitals of countries or the genealogy of a royal family. A brain-compatible unit would include the exploration of the why’s and how’s of medieval Europe. Enriched, complex instruction would not be limited to the textbook lesson, but would include the exploration of how the events of the period and place influenced the music, the science, the literature of the day.

*Free of threat is very different from free from challenge.*

Enriched means deeper knowledge as well as broader knowledge. Enriched means exploring connections not just within the topic but beyond. To avoid the inherent danger in the implementation of this “brain fact,” it will be necessary to work with teachers, administrators, and parents to develop a thorough working understanding of the parameters of “enriched” instruction. Enriched is not more homework nor is it necessarily more field trips. “Enriched” means being presented with a scope that has depth and breadth, and “complex” requires the juggling of multiple strands and sources of information and issues and the possibility of being confronted by an issue that has no easy answers, if any at all. This span of the bridge will never be constructed if left to those who want only Scantron-graded tests and one textbook.

Is this element of brain-based learning—an enriched, complex environment—really that important? Wolf and Brandt (1998) assert it is. They affirm the importance of complex, enriched instruction by describing the research of Craig Ramey of the University of Alabama. Ramey’s work focused on the question of whether the results that Diamond observed with rats could be replicated in human children. His study introduced early-intervention programs into the lives of impoverished children. He found that by providing a diverse, enriched experience, he could raise intelligence test scores by 15 to 30 percent. The work of Ramey is currently one of very few studies that validate the achievements possible with the application of brain-learning theory. More such research is certainly needed, but the first results are promising. If we are to learn from Ramey, we must work to insure that classroom instruction is both enriched and complex and not merely more of more.

*The inherent promise of brain-based instruction will have been distorted if we fail to understand that “enriched” means more than “more stuff.”*

That learning is enhanced when facts and skills are embedded in memory is yet another key facet of what has been learned through brain research. The inherent danger in interpolating this idea into classroom practice is the tendency to rely too closely on only the easy words *facts*, *skills*, and *memory*. Certainly those words are essential in the attempt to construct a sound foundation of information and ability, but constructing that base of knowledge could easily be interpreted as the work only of drill, worksheets, and rote memory. Those activities have a place in the instructional framework. Instruction, however, cannot be limited to such practices. Human beings, for example, have an array of memories; the number and identity depend on the theorist being consulted, but learning and instruction should involve the use of all of those memories. To teach in such a way that students use just one is to limit both the development of the student and the scope of that individual’s understanding and core of knowledge.

Spatial or episodic memory, for example, requires not just sight but movement. Whether students are learning sign language as an adjunct to their reading or using manipulatives to develop mathematical understanding, activity tends to imbed the experience in selected areas of the brain. It is not unusual to see students who have been taught or who have developed physical cues for vocabulary words going through the physical motions on a test in order to retrieve information. It will be essential, therefore, to insure that teachers understand and incorporate the facilitation of more than one memory. This span of the bridge will be constructed only by those superior teachers who have at their fingertips an array of instructional practices and use them.

The “brain fact” that had been accepted long before scien-

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# GEORGIA DEPARTMENT OF EDUCATION NEWS AND UPDATES

## Curriculum Updates

From Dr. Cindy M. Cupp ♦ Director of Curriculum and Reading ♦ Georgia Department of Education

### Reading

Georgia's Reading First Interview Tapes and Manual

The Georgia Department of Education has signed a contract with Georgia Public Telecommunications Commission to produce Reading First Interview Tapes including a Training Manual and videotape. Each Reading First school system will receive one set of tapes. Each set will consist of four videos for kindergarten through second grade, four videos for third through fifth grade, four videos for sixth through eighth grade, four videos for ninth through twelfth grade, one training video and one training manual. These videos are intended to provide interviewing principals with a tool to identify the prospective teachers' ability to diagnose and assess reading strengths and weaknesses in students. Information gained through this process will help administrators determine appropriate teacher training for effective implementation of the Reading First program. The interview tapes will be ready for distribution to all sixteen RESAs by April 1, 1999.

### SIA

Special Instructional Assistance (SIA) and the Remedial Education Program (REP) will conduct a statewide conference on reading May 26, 1999, at the Centreplex in Macon, Georgia. This conference will feature dynamic speakers from local school systems presenting on a variety of topics. Presentations will provide participants with innovative, successful ideas to enhance their local programs. Personnel from the Department of Education will also present updates on SIA, REP, and Reading First. Registration information will be sent to local systems soon.

### Reading First

We are excited and encouraged to hear of many successes relating to the implementation of the Reading First project. Classrooms across Georgia are seeing the results of teaching a balanced reading program that consists of systematic, explicit phonics; sight word instruction; and quality children's literature. Field consultants are visiting schools to provide training and support for administrators and teachers.

An on-line discussion database for Reading First has been established. This web site offers users the opportunity to direct questions, comments and suggestions to both the Georgia Department of Education and other Reading First schools. The intent of this web site is to provide all the educators of our state a forum for discussing curriculum concerns and sharing ideas. This database may be accessed at <http://etcmcn.gcsu.edu/read1st.nsf>. When prompted for a userid and password, enter the userid *Read First* and the password *read1st*. This site should prove to be both informative and resourceful.

### Power Pack

The Curriculum and Reading Division is excited to announce the second year of Power Pack. Students in 136 Power Pack schools have received three additional books to add to their home library through the gracious donation of the Georgia Power Foundation. The three children's books selected this year are Amazing Grace by Mary Hoffman, The

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## Highlighting Achievement in Georgia Schools

Dr. Kay Wideman ♦ Curriculum Program Manager ♦ Georgia Department of Education

On September 17 and 18, 1998, representatives from across Georgia gathered at the World Congress Center in Atlanta to participate in the first *Highlighting Achievement in Georgia Schools* conference. The theme for the conference was "Teaching Tools for Successful Schools." Five goals, set by a distinguished Steering Committee\* chaired by Dr. Franklin Shumake, had been set for the conference. The goals were: to significantly improve student achievement in all Georgia schools; to identify and publish examples of best practices among all school improvement efforts in Georgia schools; to document and celebrate successful school improvement efforts in Georgia; to serve as a resource for schools that want to improve; and to bring to scale school improvement efforts in Georgia. The committee dreamed of a way to accomplish these goals and it happened.

The conference was made possible through the collaborative efforts of agencies and organizations committed to improving education in Georgia. These groups, including the Georgia Department of Education, the Governor's office, the General Assembly, and the Georgia Partnership for Excellence in Education, wanted to feature schools throughout Georgia that exemplified best practices that contributed to student achievement. Over 100 schools presented successful practices follow-

ing an application process. Participants were given a "Toolbox" containing descriptions of each presentation at the conference. Thanks to the idea from Georgia Superintendent of Schools, Linda Schrenko, who observed similar toolboxes at a conference in another state, participants were given the "tools" needed to begin to plan and implement some of the best practices seen at the conference.

At the opening luncheon, Governor Zell Miller was honored for his dedication and accomplishments that have benefited Georgia schools. Mr. Johnny Isakson, State Board of Education Chair, presented him with an album of student art, poetry, and photographs representing schools and communities throughout each RESA district.

The range of presentations attracted all disciplines and all grade levels. Some of the topics included were: Spectacular Science for Adolescents with Attitude, Foreign Language at 5: The Ideal Age to Begin, Sharing Teaching Tools at a Small School, Integrating Technology into the Everyday Tasks of Education, The Impact of Fine Arts on Student Achievement, America Reads, The Peach Plan, SAT Summer Seminar: A Coaching Design That Works, Active Learning: Using Community

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Relatives Came by Cynthia Rylant, and The Josefina Story Quilt by Eleanor Coerr. The Power Pack project has been an overwhelming success. Positive responses have been received from teachers, students, and parents.

**English/Language Arts**

Increased focus on reading should yield improved achievement in the next ten years; however, until achievement improves, additional assistance must be given to students who are still reading significantly below grade level when they enter ninth grade. Currently, there is no course to improve reading skills on the ninth and tenth grade levels; therefore, the proposed courses “Ninth Grade Principles of Literature and Composition” and “Tenth Grade Principles of Literature and Composition” are designed to meet this need. Reading strategies must be taught to raise the success level of students.

Ninth and Tenth Grade Principles of Literature and Composition Labs I and II focus on literacy development with emphasis on reading and writing strategies taught through literature-based activities. The course curriculum includes the language arts strands reading, writing, speaking, and listening, presented through the use of applied (hands-on) techniques. The recommended class size is 20. The courses will be elective for college preparatory students and core for technical/career preparatory students.

Applied Communication Labs I and II have been changed and will now be call Applied Literature and Composition to emphasize the use of literature and composition skills. These courses will be core for both college preparatory as well as technical/career preparatory students.

**Science**

The science area will soon be engaged in developing activities to support the Quality Core Curriculum. Georgia teachers and Georgia Youth Science and Technology Center directors will team to develop new activities and revise the activities produced for the original QCC. This initiative will also utilize two Georgia Innovation Programs, “Hands-on Science,” validated in 1994, and “Science A-la-Carte,” which is currently completing validation. These programs are composed of hands-on activities for K-8 science and are available for adoption.

**Gifted Ed**

The focus for gifted education this year is program effectiveness evaluation. New regulations for gifted program delivery models went into effect August 1, 1998. These regulations provide (a) clear descriptions of the purpose and recommended focus of six allowable types of instructional models, and (b) stringent requirements for counting ser-



Resources and Primary Objects, and The Three R’s and Then Some...Continuing Excellence. Some “Toolboxes” are still available for sale and can be ordered for \$38 each by calling (404) 223-2280.

The Highlighting Achievement Web site at <http://www.gatoolbox.org> can also be a valuable resource. A discussion thread is available and viewers are encouraged to use it to ask questions and provide suggestions. Participants had the opportunity to receive staff development credit. Follow-up GSAMS conferences will provide these participants the opportunity to share how the tools from the conference are being used in planning and implementing school improvement.

All five conference goals were accomplished. Student achievement in Georgia has improved as demonstrated by these best practices that were identified and celebrated. The Toolbox and Web site are valuable resources that are contributing to school improvement efforts in Georgia schools. Because of the success of this conference that focused on the

vice provided through any of the models at the gifted FTE weight. Each system has been asked to examine its local program descriptions and revise them as necessary to more clearly describe the intended outcomes of gifted program instruction. Numerous workshops during the second half of the year will provide local gifted program personnel with assistance in evaluating the effectiveness of their gifted program instruction in meeting those goals. We will stress greater program accountability as we document the impacts of gifted programming on student achievement.

**Fine Arts**

Fine Arts are now included in the core elective options for ninth and tenth grade high school students seeking diplomas with distinction. This action occurred at the July 1998 State Board of Education meeting after an appointed State Board Task Force, headed by Dr. Brenda Fitzgerald, recommended this addition. In light of the additional core requirements as a result of the 1997-98 revised graduation rule, fine arts students would have had to give up arts to take “required” courses. A series of hearings were conducted so that the Task Force could hear from arts educators and interested citizens. A range of suggestions was made for consideration. Ultimately, the decision was made to include Fine Arts in Area X in the State Board of Education RULE 160-4-2-46.

As a result of the work of this Task Force, a fine arts work group was formed this summer to develop a design for improving fine arts education for all Georgia students. The result of that group’s work is under review.

**Math**

The Quality Core Curriculum (QCC) Mathematics Revision Team met during the summer of 1998 in order to review the high school mathematics courses. The team recommended to delete, add, and revise several courses in order to continue to improve mathematics instruction and student achievement. The State Board of Education approved the recommendations at the November 12, 1998 State Board Meeting to become effective in the 1999-2000 school year.

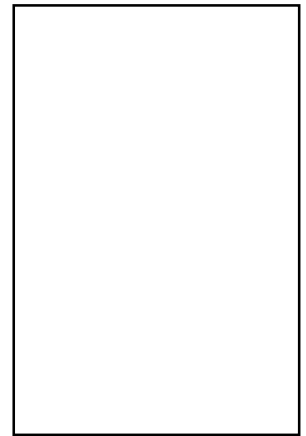
**Social Studies**

There has been considerable and renewed interest on the part of Georgia educators in grades K-12 to improve the social studies instructional program. Georgia educators are eagerly preparing to implement the Revised Quality Core Curriculum in social studies. Such an example may be found in Douglas and Camden Counties, where 4th and 5th grade teachers are piloting new social studies textbooks. In those counties and in several other counties, teachers who are piloting the program will be making recommendations about the appropriateness of the new textbooks to their colleagues.

positive and successful practices in Georgia, chances are that the conference could become an annual event.

*\*Steering Committee:* Kathy Ashe, Georgia House of Representatives; Don Chapman, TUG Manufacturing; Chuck Clay, Georgia Senate; Ann Cramer, IBM; Lon Crim, Spelman College; Craig Dowling, Georgia School Improvement Panel; Art Dunning, University System of Georgia; Diane Hopkins, Georgia Partnership for Excellence in Education; Johnny Isakson, State Board of Education; Gary Lee, UPS Foundation; Richard Marable, Georgia Senate; Jim Mullins, DeKalb County Schools; Mark Musick, Southern Regional Education Board; Donna O’Neal, Advancing Education, Inc.; DuBose Porter, Georgia House of Representatives; Holly Robinson, Georgia Department of Education; Linda Schrenko, State School Superintendent; Franklin Shumake, 21st Century Schools; Tom Upchurch, Georgia Partnership for Excellence in Education; John Varner, Hearthstone Educational Services; David Watts, Governor’s Office of Planning and Budget.

## WHERE ARE THE SCHOOL LEADERS??



**Ann Spears**

The “graying” of school administrators and their eligibility for retirement are a growing concern of Georgia superintendents and boards of education. At the end of the 1998 school year, there were 313 building-level principals in Georgia who could claim 30 years or more in the education profession. In a casual conversation with a Georgia RESA director recently, I learned that the organization’s annual retirement conference is attracting twice as many registrants this year than last. And on a personal note, the scarcity of quality school-level administrator applicants was impressed upon me during the last six years as I sought to hire assistant principals on four different occasions when my assistants were promoted to full principalships within the school system. “Why were more quality applicants not there?” I asked myself, each time becoming a little more perplexed.

The school leadership problem is not unique to Georgia. Nationwide, the entire profession is aware of the importance of effective school-level leadership; and most of the nation is feeling the crunch for quality principals. The lead article in a recent National Association of Secondary School Principals’ newsletter was one that delineated the scarcity of building principals, bemoaned that fewer quality leaders were being motivated to take the principalship, and despaired of any quick turn-around in the trend. Increasingly, educators of all job titles are realizing that school improvement takes place precisely there — at the school level, the closest to the issues. A quick comparison of the table of contents of a 1988 issue of *Educational Leadership* with a recent issue illustrates the shift from more general curriculum and instruction matters to the leadership in classrooms and in the principal’s office in curriculum and instruction matters. The next time you receive a resource catalog from ASCD, glance at the titles of video series and publications available, and you’ll realize the dramatic shift to school-level human resource development and involvement.

Well... that’s the problem. What do we in Georgia do to

begin remedying the situation in a methodical, results-oriented manner? Let’s look at three different aspects: (1) a definition of terms, (2) promising efforts already in place in our state, and (3) proposed solutions.

First definitions and terms. My definition of *effective* and *quality* is fairly standard — where all children are learning and progressing educationally and socially, and where clients, community, and stakeholders have a high degree of satisfaction with the efforts and results of the institution. Further, it seems that effective administrators must possess three characteristics — skill, motivation, and will.

*Skills* are those behaviors we can teach and that may be performed exactly when and how they were taught — but, perhaps, in a perfunctory, check-list manner. So, in addition

to the skills of leadership, there must be the *motivation* and the *will* to lead. All three characteristics must be present. *Motivation* is the fire-in-the-belly for school improvement — an abiding belief that we have a moral obligation to cause children to learn and to assist teachers in causing that learning to take place. Motivation comes from a world-view that allows an administrator to greet each new day with optimistic anticipation and with a belief that he can make the school better that day. Then, there must be the *will* to lead. All prospective administrators are taught to ob-

serve instruction, to evaluate teachers, to organize, to develop a team approach to decision-making, to discipline students, and to involve the community in schools. But the truly effective school leader must have the *will* to get up out of her chair, leave the paperwork and computer, and go visit classrooms everyday; to make notes to affirm the good things teachers are doing and to have the difficult conversations with all teachers that will improve student engagement and learning in the classroom; to let go of power and to involve all staff members in decisions, solutions, and leadership; to

*The school leadership problem is not unique to Georgia. Nationwide, the entire profession is aware of the importance of effective school-level leadership; and most of the nation is feeling the crunch for quality principals.*



call on the expertise of central office personnel and to make them members of the team; to display courage in addressing parental concerns as well as student discipline fairly and equitably; to sacrifice time and leisure to fulfill the many responsibilities a school site demands; and, finally, not only to envision and plan, but to follow up and to follow through. It has become somewhat trendy to distinguish between a *leader* on the one hand and a *manager* on the other. I concur, however, with Howard Gardner, who says that he has never seen a good leader who was not also a good manager. Leadership/management require both skill and will.

Let's turn now to the efforts being made to encourage the potential for school leadership in Georgia educators. Six RESAs — Northwest Georgia, Middle Georgia, Central Savannah, First District, Southwest Georgia, and Heart of Georgia — along with Gwinnett County are piloting the Professional Enhancement Program (PEP), a technology-assisted leadership assessment and development program created by Dr. David Lepard of George Mason University. PEP provides beginning leaders — lead teachers, department chairs, assistants — insight into their strengths/weaknesses in fourteen critical areas: problem analysis, judgment, organizational ability, delegation, decisiveness, group leadership, interpersonal sensitivity, range of interests, personal motivation, educational values, stress tolerance, oral presentation, oral communication, and written communication. If the interaction of *skill*, *motivation*, and *will* is significant to effective leadership, it is important to note that PEP offers assessment and suggestions for an individual growth

*There is cause for concern. But Georgia has defined the problem and is leading the way in providing practical solutions that will produce quality school leadership for the 21st century.*

and Central Savannah — are developing the following six curriculum components of Leadership 21: Leading Schools for the 21st Century, Curriculum and Instructional Leadership, Organizing for Effective Instruction, Business and Fiscal Accountability, Building School and Community Relationships, and Student Services. The modules will include training manuals and guides and student manuals that incorporate practical application strategies. While the curriculum will be taught in three locations in Georgia and will include nationally recognized educators and practitioners, the modules are being developed thoroughly enough that they may be taught by local systems, departments of education, RESAs, or universities.

Local school systems are increasing the motivation of their educators to become administrators with informal mentoring programs through which a principal mentors one or two staff members throughout the year and provides them opportunities to sample and explore administrative tasks and responsibilities. This principal can tell you that the “graying” of school administrators may have more to do with the pace and intensity of school activity than it does with mere age! While that may be a tongue-in-cheek assessment of the problem, it does impact one's motivation to be a principal. The mentoring process could help structure perceptions about principal activity, thereby guiding motivation into productive directions.

Typically, each issue of *The Reporter* includes a commentary by a Georgia educator on a topic that International ASCD has designated at its annual conference as a timely and significant educational issue. However, in this edition of *The Reporter*, we have explored the compelling state and national issue of school leadership that — while not specifically focusing on such topics as student assessment, or equity, or technology — does pervade all of school improvement.

There is cause for concern. But Georgia has defined the problem and is leading the way in providing practical solutions that will produce quality school leadership for the 21st century.

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# **1999 Annual Spring Conference**

## **“A Bridge to the Future: Brain-Based Learning”**

Sponsored in collaboration with  
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skills can be deposited in a knowledge bank ready for withdrawal at a time of need and purpose is neurologically unsound. The brain organizes its holdings on the bases of their value for integration into the present life of the learner. To assume that a six-year-old is learning to be eight or that a teenager is learning to go encounter college is, again, to miss the point of individualization. Six year olds are six and living the life of a six year old with a curiosity which is the product of their experiences up to that time, with only the slightest understanding or regard as to what it might be to be eight. Even *that* language diminishes the critical nature of the development of the individual brain which “comes to be” in relationship to “how it has been and what it is now.” Speculation and preparation for the future is artificial.

This discussion brings us to the consideration of what education would be like, if in fact, it were based on insight and research about what is presently known and conjectured about the brain. First it is easy to suggest that schools should be as stress free as possible for a social institution. That means that the physical environment and the social structure of the school ought to be modified on the basis of providing comfortable, non-threatening yet challenging settings where curiosity and involvement would be at a premium. It further suggests that the relationship between teacher and learner be less of an authoritarian relationship and more of one with the flavor of mentoring, monitoring, and encouraging. Studies show that most problems of so-called discipline are, in fact, failures of educational programming to involve the learner with regard to his own interests and essential needs. This is not to ignore the fact that some children simply cannot be fitted into an organized social structure and must be treated in ways which involve counseling, rehabilitation, and redemption. However, in large part, curious, active, and involved children do not violate the canons of appropriate behavior if those canons have regard for the curiosity and needs of the child.

Further, brain based teaching must be centered on allowing for individual differences and providing for a diversity of learning possibilities built around similar themes. Matters such as the culture of the child and the variety of behaviors she brings with her to school need to be part of the preparation for teaching that child, done with less emphasis on the requirement that the child meet and adhere to the culture of the school. There should be no question about openly and carefully treating the elements of diversity, for brains themselves are essentially diverse. Part of the reduction of stress in the classroom is making conscious space for quiet times and times for rumination and organization. The rapid pace of the modern classroom, with obese curricula and expectations on teachers, are offensive to neuro knowledge acquisition and diminish the democratic nature of the brain itself.

In the light of brain research, it is time to reevaluate education that is based on memory and performance, and to consider, again, aesthetics. Music, art, dance, drama, and literature are vehicles of cultural understandings and personal trust and knowing. The motor and vestibular systems of the body have a one to one relationship with the acquisition of knowledge and skill. We have assumed too long that underachievement is a matter of choice for the child rather than a matter of underdevelopment. It is paradoxical in this technological age that we so easily accept simple solutions to extraordinarily complex issues of learning. Clearly, “wanting to” can modify “being able”; but in more realistic ways “coming to want to know” may be as complicated as “coming to know.” So it makes pedagogical sense to have numerous paths for children to travel and yet arrive at the same objective—some slowly, some rapidly, some directly, some indirectly, with all paths premised on the notion that the traveler has tastes and choices befitting her desires.

**Knowing about neuro pattering and functioning is not only a scientific obligation; it is a spiritual one, too.**

“The old school” was much less complicated socially and politically and could more easily adjust to learning styles and behaviors. Recess (independent play), dancing, drama, music, drawing, coloring, painting, and recitation of lessons learned was commonplace. Although teachers were likely unaware of the wisdom of that protocol, it did make for a less stressful, more aesthetic setting in which education could be provided. Of course, those times have faded into their own simplicity and we are now living in a time of great social, cultural, and technological complexity where our children need exposure to the highest quality experiences and preparations. Nevertheless, the value of contemplation and its relationship to comprehension ought not be disregarded. The acceleration of educational programming ought not replace the value of carefully organized curriculum that centers on neural potential as an individual resource for the child. Ignoring how the brain processes experience leads to failure and frustration over which the learner has little control.

Let me close by giving the following suggestions for rethinking the quality of learning and teaching. Low stress-high challenge environments where individual tastes and curiosity are given the same weight as chronology and achievement provide the foundation on which learning and teaching can be offered at its highest level. Teachers ought to understand the mind-brain-body relationship and, at the very least, consider it a key factor in the education of the child. Knowing about brain cycles as they relate to the cycles of learning and the need for discussion, cooperation, and exchange of views and information ought to amplify the quality of the learning environment. Making the treatment of individual differences more than a homily by studying and relating learning to and from the life that the child brings into the classroom is equally important to speculation about the life that we want him to take away from the classroom. At minimum,

teachers on all levels of education ought to understand the rudimentary functioning of the brain, the role of neurotransmitters, the importance of appropriate nutrition and activity to the health and mental capability of the child, and the dire need for success and joy as teachers fire the curiosity of the child.

One can think about the brain as one of the last human frontiers on this planet. Every day science unravels new information about how we “come to be.” That work has begun to show what we have “begun to be,” and in some cases we are dazzled by human potential which evolves from human capability. There can be no question that the brain is a spiritual instrument as well as an instrument of learning and a repository for knowing. Of all

places where reverence for the brain and for the guidance and application of its products are respected and honored, it should be in our schools. Knowing about neuro patterning and functioning is not only a scientific obligation; it is a spiritual one, too. For nearly every adult looks back to his/her schooling and identifies a teacher who, in some dramatic or simple way, made a difference in his/her life. Some teacher said s/he could sing, or run fast, or write well, or exhibit signs of scientific insight; and the life of that person was forever changed. Schools and teachers must not be so centered on the standardization of learning and the satisfaction of meeting objectives formed outside of their communities that they miss the opportunity to encounter love, hope, faith, and dedication to honor.

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## Continued from page 11

These bottles are filled throughout the day with water and ice, which we get from the lunchroom each morning, since we know the brain and body have to stay hydrated for learning to take place. We have decreased the amount of fluorescent lighting by using lamps throughout the classrooms to provide indirect lighting. In the background, quiet classical music can always be heard playing. The students have gotten so accustomed to it that they have asked for particular tapes each morning. Our students are allowed to have a healthy snack anytime of the day. We have found it interesting how variously their hunger pains strike.

Once the physical environment was established, the real work began. As summer approached we spent time planning what it was we wanted to accomplish. We wanted a comfortable environment, a place where we could reach each student every day on his or her own level, and we wanted to establish and enhance their own interest in their education.

Think back to your last mandatory meeting—how long could you sit still before your mind started wandering or you started shifting in your seat? For most people it is 20-30 minutes, so why do we expect students to sit for an hour or more without moving? Using this premise, we established instructional rotations. These rotations are thirty minutes in duration. Our students are divided into six groups and they change subject areas, groups, and even rooms for every rotation. The instructional areas include mathematics, reading, science, social studies, writ-

ing, and language arts. My teammate, our aide, and I provide direct instruction in math, reading, and social studies. Our science is hands-on so students conduct experiments and observations usually on a daily basis. The language arts program is a computer-based instructional program with reinforcement sheets. These rotations began after the first month of school. They continue daily except on Thursdays when we have DARE, 4-H, S.N.O.O.P.S. or other such programs.

Each morning we begin with a group meeting where we make announcements, discuss rotations for the day, and ask for questions or complaints (always dangerous with fifth graders!).

The advantages of all these changes have been many so far. We know we are doing a better job of individualizing lessons as we teach four reading levels and four math levels. The students are more focused and are learning to take more responsibility for their own education.

It has been difficult for some students to be able to relocate so often and to think about what they have to do. Of course, our ADHD students benefit from so much movement. Our rooms tend to look disorganized as some students may be working on a science project, others completing math problems on the board, reading their Accelerated Reader book, or using the computers.

Is this brain-based learning just a new whim? No one knows for sure. For the students we have now and their many needs it is proving to be beneficial in making school a better place to learn.

social studies is reinforced when students utilize computer software programs in the classroom and computer lab.

Recent brain research indicates learning is tied to emotion. Dr. Mengert agrees and contends that to “emote is to learn and to learn is to emote.” (Mengert, 1998.) The successful classroom teacher will find ways to make learning contextual and to attach meaning to the lessons. By discussing feelings of characters in books and relating these fictional situations to real life, one can enhance the creation of meaning and memory within students.

The fine arts are also instrumental to the creation of a brain-based instructional program. Children should be provided with many opportunities to manipulate, create, perceive, and appreciate the visual and performing arts. Mt. Zion Elementary has implemented both art and music programs over the last three years and is attempting to infuse the arts throughout the curriculum in the 1998-99 school year. In order to create a sense of ownership, student-generated artwork is displayed throughout the building.

In addition, the practice of “looping,” also in line with brain-compatible research, has been implemented school-wide. Each homeroom teacher remains with a group of students for a second year as they “loop” up to the next grade level. For example, a kindergarten teacher completes kindergarten and first grade with the same group of students. This practice creates a sense of family due to the strong interpersonal relationships developed among students, teachers, and parents and greatly reduces the stress involved in both parents and students when the child transitions to another teacher’s room. Additionally, it is easier to customize the curriculum so that each child is instructed on his/her appropriate instructional ability with no consideration for grade level boundaries. Teachers are encouraged and expected to take children from “wherever they are” to “as far as they can go.” Through the process of a two-year “loop,” academic and social expectations are established quickly

and the quality of instructional time is increased and maintained.

## RESULTS

For the three years prior to the implementation of brain-based principles in both physical classroom environments and instructional delivery, Mt. Zion Elementary students scored consistently below local, state, and national averages on the ITBS. In the spring of 1998, third grade scores in both reading and math were at or above national average while their language total scores almost doubled from the 33<sup>rd</sup> percentile to the 62<sup>nd</sup> percentile (see Table 1). Reading scores for fifth graders increased twenty-four percentile points over their third grade scores in 1996 to the 51<sup>st</sup> percentile. In addition, even though reading and writing were the primary instructional priorities, the social studies class composite averaged in the 58<sup>th</sup> percentile, an increase of twenty-nine points, and science scores rose twenty-four percentile points to the 65<sup>th</sup> percentile (see Table 2).

Discipline referrals have declined significantly since the restructuring of the learning environment and implementation of station-centered instructional activities (see Table 3). It is believed that the comfortable, risk-free classroom environment, which allows for student movement and mobility and frequent peer interaction, has given students the opportunity to be more responsible for their own actions. As students become empowered to make choices that impact their learning now and ultimately throughout their adult lives, they become more intrinsically motivated to become successful lifelong learners and less likely to exhibit disruptive behavior.

The implementation of brain-based principles on a building-wide basis has resulted in significantly higher standardized test scores, reduced behavior problems, increased attendance, and a renewed enthusiasm and excitement for learning in students, parents, and teachers. As Ivan Illitch so appropriately stated in 1976: “We don’t need laws that make children come to school, we need schools that make children want to come.”

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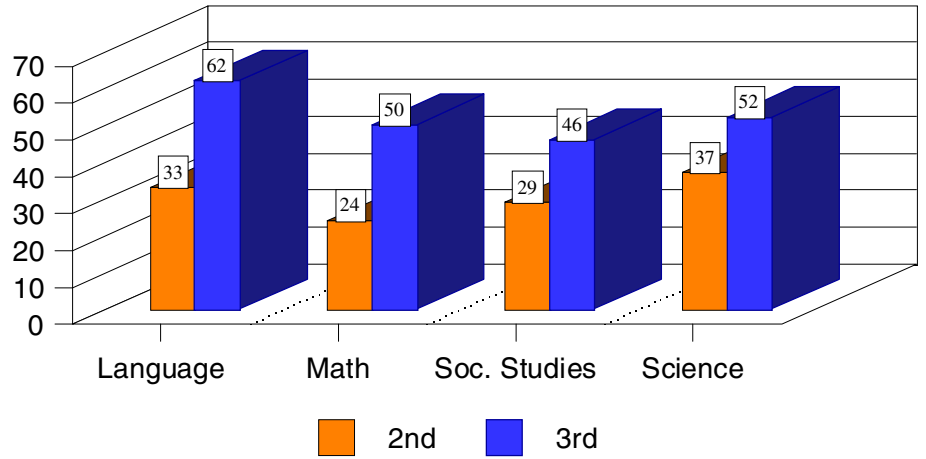


**Table 1**

Grade	Language	Math	Soc. Studies	Science
2nd	33	24	29	37
3rd	62	50	46	52

## Looping: 2nd & 3rd Grades

ITBS National Percentile Rank

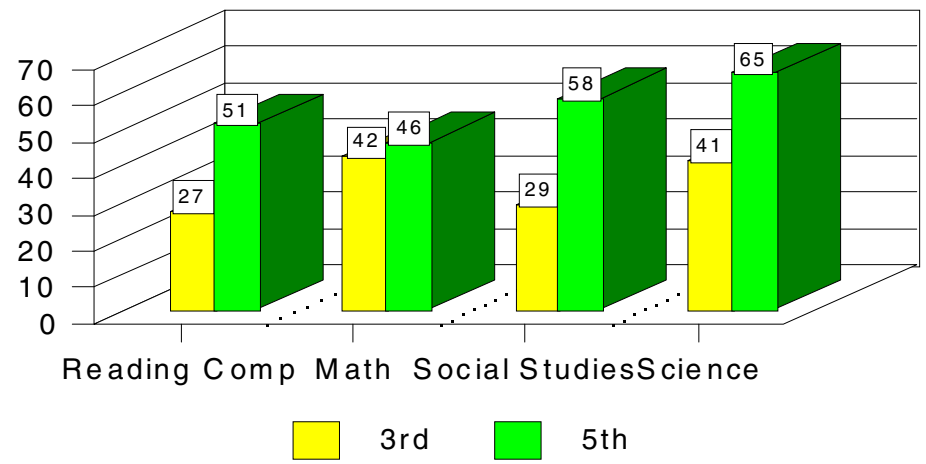


**Table 2**

Grade	Read Comp	Math	Soc. Studies	Science
3rd	27	42	29	41
5th	51	46	58	65

## Looping: 3rd & 5th Grades

ITBS National Percentile Rank

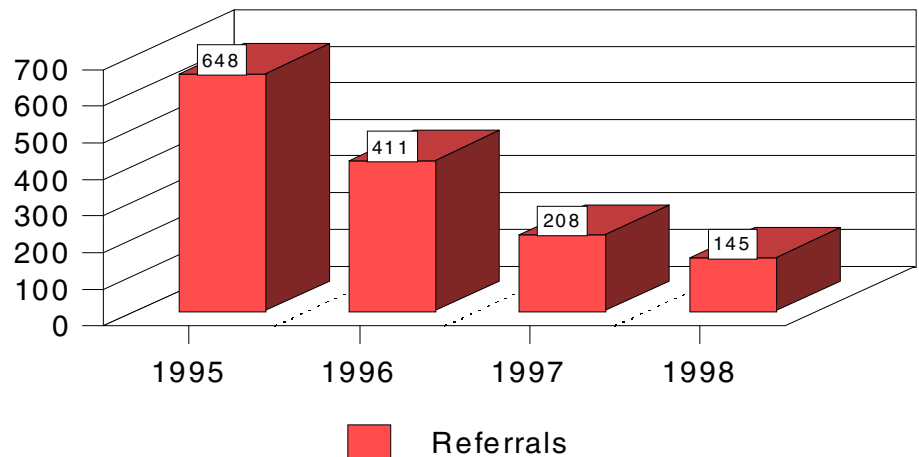


**Table 3**

Year	1995	1996	1997	1998
Referrals	648	411	208	145

## Discipline Referrals

Mt. Zion Elementary



tific research provided hard evidence is the fact that all individuals are different. No single human brain is precisely the same. Each person, adult and child, is unique. The challenge this introduces into the classroom is enormous. The danger inherent in this “brain fact” is that teachers will be required (and perhaps already are) to focus so much energy on the differences among their learners that they fail to address the similarities. If we are to develop the sense of community in classrooms which facilitates instruction and learning, the focus must be on our common attributes, not our differences. To focus only on differences will fragment instruction to the point that teachers will be unable to teach effectively. Certainly we are different. Whether one applies the simplistic tests of hemisphericity or the more complex analysis of a Myers-Briggs, the results are the same: We are different. We are, however, also amazingly similar. If we are to reclaim excellence in instruction, theorists, administrators, teachers, and parents must focus on developing a shared understanding of what a fair program of brain-based instruction actually looks like. Teachers cannot be told to achieve a “balance.” To focus on a “balanced” program is to distort what is needed. Balance implies equal amounts of everything along the continuum. A class might not require nor be prepared for everything on that continuum. To deliver a “balanced” program, therefore, would not be brain compatible. Only the most flexible of administrators and teachers will be able to construct this span of the bridge.

Certainly the work of the scientists and theorists has expanded the possibilities of what should and can be done by educators. To step blindly into this newest of the whirlwinds that periodically spin their way through the field of education is to be foolish. To accept the challenge with an open mind, a creative eye, and a compassionate frame of mind, however, is an act of hope. Brain-based learning will provide a bridge to the future only if we, as educators, use the precepts being developed from hard, scientific research wisely. Let us learn from the past. Let us not discard that which is already good. Much of what occurs in classrooms is and has been “brain-based.” Sylwester (1995) noted that “the cognitive sciences are discovering all sorts of things that good teachers have always intuitively known.” The best teachers throughout time have instinctively used the techniques, strate-

gies, and pedagogical theories of brain-based learning. The practices of these individuals are being affirmed. We need to let them know that this is the case.

Other teachers, unfortunately, will use selected precepts of brain-based learning as a shield to continue unwise and ineffective instructional practices. They will use one element, perhaps effectively, and reassure themselves that their classrooms are reflections of best-practice brain-learning strategies. The use of music, for example, might well be one of those components. In a classroom, music is a valid element of brain-based learning. Weinberger (1998) cites a study in which students were taught basic music appreciation techniques. Reading comprehension scores on a standardized test indicated significant improvement for those students in the experimental group. The mere use of music, however, does not automatically transform a classroom into a viable learning environment. The incorporation of one tiny sliver from the array of “brain-based learning” components must never be allowed to be evidence that effective brain-com-

*we must work to insure that classroom instruction is both enriched and complex and not merely more of more.*

patible instruction is being practiced. Those who construct this strand of the bridge will be required to be those strong of spirit, for they may be required to tell the emperor that he is wearing no clothes.

The challenge for educators is not whether to accept the precepts of brain-based instruction. The challenge for educators is to learn from our past. To build

a bridge, one must start from one point, construct a span, and establish a firm footing on new ground. That is the challenge. We have a rich educational history in this country. Some of our efforts have been noteworthy, others have not. Some of our efforts have started with demonstrated success in some classrooms but have failed when translated into others. In some cases we have hidden behind popular terms and labels in order to stave off the need to change. We have distorted theories when we tried to implement them with too little understanding and training; we have engaged in bitter rhetoric when we should have engaged in intensive study and practice. We have, however, also succeeded admirably in many situations. Brain-based learning provides one more opportunity. Whether we succeed in establishing the connection in the future or whether we find ourselves once more floundering in the rapids of public distrust and doubt depends on whether we are alert to the dangers. The choice is ultimately ours. We can flounder or we can become the builders of bridges. Ladies and gentlemen, put on your hard hats.

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the proper fuel in the engine, the brain cannot operate without its proper fuel. Exercise and nutrition are very important for students to do well and to function properly. Brain Gym provides one of these components (i.e., exercise) while supporting other aspects of the teaching/learning process.

Brain Gym was developed by Paul and Gail Denison of Ventura, California. The Denisons stress the importance of Brain Gym exercises to a comprehensive approach to brain based instruction. These exercises are simple, enjoyable movements that help students to focus, concentrate, prepare for academics, and relax more effectively. There is an exercise for every educational task one encounters. If these exercises are introduced and used daily, the end results are phenomenal.

Brain Gym is considered a self-help program. The exercises are easy to learn and can be comfortably performed at any time; however, full concentration is required. When exercising with Yoga and Ti-Chi, students have to concentrate in order to remain balanced and focused—a skill that could carry over to, complement and enhance the academic program.

Research on brain-based learning and Brain Gym in particular is ongoing. Every day new information is being discovered on how the brain functions. Educators must be knowledgeable about how to excite young minds for learning and they should not be intimidated by the challenges and opportunities that brain-based learning offers. At Cleveland Road Elementary School we are committed to stimulating our students' minds through this "new" approach to learning.

## *Women's Leadership Issues Network*

### WHO, WHAT, WHY, HOW, WHEN and WHERE...

#### **WHO...**

The Women's Leadership Issues Network (WLIN) is one of ASCD's member-initiated endeavors. Georgia ASCD Executive Director, Dr. Donna Q. Butler, received a grant from ASCD to develop the network. She and Dr. Margaret Blackmon, former President of Virginia ASCD, are co-coordinators for the network. WLIN supports ASCD's strong commitment to diversity and professional development as outlined in the association's belief statements, mission statements, and goals.

#### **WHAT...**

The Women's Leadership Issues Network explores the role of women in educational administration, while fostering professional development and contribution among women educators. Specifically, the network provides professional development information and activities, explores equity issues, and conducts research on women in education.

#### **WHY...**

The network formed as a result of the expressed professional development interests of women from across the country. As Drs. Blackmon and Butler worked with women at the local, state, and national levels, they found that few leadership training opportunities address the specific needs of women administrators. Further, they found that women are very much interested in positive professional contacts and in planning for professional growth. Forming a network to promote the needs and interests of women seemed like an exciting and challenging way to share leadership training ideas.

#### **HOW...**

Network goals include establishing the network worldwide—with regional coordinators; developing a newsletter, focusing on issues important to women educators; encouraging affiliates to include professional development opportunities, specifically designed for women administrators, at state and regional conferences; encouraging each affiliate and ASCD to include articles and recurring columns on women's professional development issues in their journals and newsletters; establishing a listserv for continuous discussion of important issues and current research; working with ASCD to include women's professional development opportunities at the annual conference; and sponsoring conferences on women in educational leadership.

#### **WHEN and WHERE...**

Network membership is open to all educators who are interested in women's leadership issues. The annual meeting for WLIN will be held during the ASCD Annual Conference in San Francisco. The meeting will be held on Saturday, March 6, 8:00-9:30 am, Hilton, Building 3, Fourth Floor, Union Square 22.

If your plans include attending the ASCD Conference, we hope that you will join us for the annual meeting of the Women's Leadership Issues Network. Bring your ideas and your creativity and begin to develop your professional network! If you are unable to attend the meeting and would like to join WLIN, please contact Dr. Donna Q. Butler at (706) 542-4051 or dqbutler@coe.uga.edu for more information.

#### **Presentation planned for San Francisco...**

Drs. Blackmon and Butler will present a two-hour workshop—the fourth to be sponsored by the Network—on Sunday, March 7, 3:00-5:00 p.m. A description follows:

#### ***Women As Leaders: Effective Strategies for Professional Development***

*This workshop guides participants through a personal and professional exploration of challenges and opportunities facing women in leadership roles. Through creative interactive strategies, participants examine who they are as educational leaders, consider long-term career goals, and discover effective strategies for meeting those goals. Current research on women in educational administration will be presented and, for continued learning beyond the session, participants will receive a reading list. **Session #:** 2343, **Location:** Hilton, Building 3, Ballroom Level, Continental 9.*

#### **JOIN US...**

Women leaders contribute to the quality of life and work culture in varying and important ways. The Women's Leadership Issues Network presents an excellent opportunity to meet other women from around the world, to share ideas and experiences, and to grow professionally. We hope that you will decide to join us in this exciting adventure!

interested in the work of the teachers at Gulf Shores Elementary School with brain-based learning and brain compatible environments. After a presentation by teachers Thompson and Norwood, a grant of over \$10,000 was awarded to the school. Baldwin County Board of Education, along with several businesses, matched the grant, resulting in approximately \$20,000 being made available to achieve the desired brain-compatible environments.


Meaningful materials for students – novels, encyclopedia, almanacs, dictionaries, magazines, and documents that are from everyday real world settings – are used to stock brain-compatible environments. Further, brain compatible classrooms are jam-packed with pictures, puzzles, models, manipulatives, and other enriching materials.

Research has also indicated the need for frequent water and nutrition during learning activities. Teachers provide nutritional snacks at all times throughout the day, as well as encouraging students to drink water while completing classwork.

Kelly Wallace, third grade teacher and a strong proponent of water in the classroom, says, “It takes about a week for students to get used to drinking water in the classroom. After about a week they get where they just sip on it through-

out the day and the water keeps their brains hydrated.”

Information gained in the visits to Mount Zion Elementary School and from other research resulted in changes in the school cafeteria and snack program. The school breakfast began including protein each morning, which research indicates is beneficial to learning and concentration. The school lunch began including more fruit and raw vegetables as a part of the daily offerings. Offering soup more often to students provides a nutritional form of additional liquids students can consume during the school day. Further, greater effort to eliminate monosodium glutamate from all ingredients served to students also became a priority. As a result of the successes seen at Gulf Shores Elementary School, the Baldwin County Child Nutrition Supervisor is now requiring all local school cafeteria managers to serve protein at breakfast, and the bid list submitted to vendors indicates that no product containing monosodium glutamate may be bid.

Attention the school is receiving as a result of the changes is coming from several sources. An elementary school curriculum class from nearby University of South Alabama is planning a visit as a part of their studies. Additionally, school improvement plans for the school system include the recommendation of Gulf Shores Elementary School as a model for school improvement. 

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