BrainSMART®

Graduate Degree Programs That Support 21st Century Readiness for All Students

Master’s & Ed.S. Degrees with a Major in Brain-Based Teaching

Your Partner in Supporting 21st Century Readiness for All Students

Consulting     Graduate Programs     Professional Development

Learning, Teaching, and Leading

127 W. Fairbanks Ave, Suite 235 • Winter Park, FL 32789
PHONE 866-SMART61 • FAX 800-725-5508 • www.BrainSMART.org
October 2010

Dear Advocate for 21st Century Readiness for Every Student:

Shouldn’t every child learn from a teacher who understands the science of learning, including how the brain learns best?

More has been learned about the brain and mind in the last ten years than in the previous two hundred. At the same time emerging studies identify the skills students need to thrive in the global knowledge economy of the 21st century. The synergy of new knowledge about how learning occurs best in the classroom and what students need to know and be able to do provides an exciting opportunity for leaders from states, schools, and districts to have a positive impact on the lives of their students.

Teaching the three Rs and the four Cs in ways that connect the science of learning and the art of teaching

For the past three decades, my passion has been about discovering more about the science of how people learn and to identify what new generations of students need to know and be able to do to thrive, thus reaching their potential. As the first decade of the 21st century ends, it is clear that the traditional focus on the three Rs is necessary but not sufficient. In the BrainSMART graduate studies, our focus is twofold: (1) to help teachers align their instruction with what is known about the science of learning and (2) to help teachers cultivate within students the skills of critical thinking and problem solving, communicating and collaborating, and—key in the 21st century—creating and innovating. Just as it is obvious to us that we must make positive changes in our educational system, it is crystal clear that it is our teaching force that makes the difference!

The BrainSMART online graduate studies are designed to help educators teach in ways that allow students both to learn core content and to become innovative thinkers and problem solvers by developing their cognitive assets. Importantly, not only is the framework of our programs well integrated, but the content is fresh and motivating for teachers. Read on to see for yourself some statistics on the impact of these programs, followed by teachers’ stories in their own words. We are proud that positive word of mouth about the programs has led to almost 3,000 enrollments from 47 states since 2001. A recent survey revealed that more than 96% of graduates would recommend the program to their colleagues.

We believe these stories will inspire you to want to take action ensuring the same success for your own communities and students. The great news is that making sure all students have access to teachers who understand how the brain learns best is an attainable goal. We understand that resources are scarce. Time is short. Money is tight. Maximizing every available resource is essential. That’s why we are so passionate about equipping teachers with the skills and strategies they need to help more students learn more of the time. It is indeed within reach for all teachers to improve student learning. We hope you will join us in bringing this life-changing information to more teachers so that they will, in turn, make an immediate difference with their students.
Want to bring BrainSMART to your schools and communities?

◆ Business leaders can lead in their communities by procuring these cutting-edge effective learning experiences for teachers who wish to become more effective instructors:

  ▪ Offer scholarships to teachers.
  ▪ Become a BrainSMART corporate sponsor.
  ▪ Talk with your local school districts about the programs.
  ▪ Sponsor local learning communities.
  ▪ Provide access to high speed Internet and/or computers so teachers without these important tools can access the programs (and ongoing research).

◆ School administrators can play a key role in supporting teachers as they choose these programs:

  ▪ Support contractual language that values the degrees.
  ▪ Support teachers in the process.
  ▪ Create local learning communities.
  ▪ Establish a BrainSMART model school.
  ▪ Share information about the programs with your teachers.

Supporting the highest quality teacher learning experience is a wise and fiscally responsible use of the limited resources available to communities, schools, and school districts. We look forward to meeting you at the conference and hope you will partner with us to improve teaching and learning to create a brighter today and tomorrow across America!

Sincerely,

Donna Wilson, Ph.D.
Head of Academic Affairs
President, BrainSMART
127 W. Fairbanks Ave. #235
Winter Park, FL 32789
www.brainsmart.org
donna@brainsmart.org
Professional Cell 941-993-3081

P.S. Connect with us during the conference and we will contribute to your investment by coming free to your community to help you get started! We will assist you to establish a customized plan for providing students with teachers who understand the science of learning and how to use that information to make sure students are ready for success in the 21st century.
BrainSMART®

Graduate Degree Programs
That Support 21st Century Readiness for All Students

Master’s & Ed.S. Degrees with a Major in Brain-Based Teaching

Improving Teacher Knowledge and Skills Is Key to Enhancing Learning in Our Nation’s Schools

Donna Wilson, Ph.D.
EDUCATIONAL CONSULTANT TO COMMUNITIES AND SCHOOL DISTRICTS
“Over the past decade a clear consensus has emerged that teacher quality is the most important school-related factor in student outcomes. It dwarfs every other school-related variable with regard to academic performance.”

—Ellen Moir, Dara Barlin, Janet Gless, and Jan Miles, New Teacher Mentoring (Harvard Education Press, 2009)

“Learning is the result of integrating all information perceived and processed. This integration takes form in structural modifications within the brain.... Today it is useful, even essential for educators and anyone else concerned with education to gain an understanding of the scientific basis of learning processes.”


Improving Teaching by Applying the Science of Learning

In 1999, the National Academy Press published its seminal work How People Learn: Brain, Mind, Experience, and Work, highlighting the essential fact that learning changes the function and structure of the brain. Since then, leading research groups around the world have built on these findings in the context of improving teaching and learning.

To thrive in the 21st century, we must all be lifelong learners. This is especially true for today’s students—and their teachers. Supporting ongoing, sustainable education for teachers is a crucial component of ensuring that every child has the requisite “21st century knowledge and skills to succeed as effective citizens, workers and leaders” to fulfill the stated mission of the Partnership for 21st Century Skills. No other educational investment makes more of a difference in students’ academic performance than effective teachers.

“Learning is change. It is change in our selves because it is change in the brain. Thus the art of teaching must be the art of changing the brain.”

—James E. Zull, Director of the University Center for Innovation in Teaching and Education, Case Western Reserve University, The Art of Changing the Brain: Enriching the Practice of Teaching by Exploring the Biology of Learning (Stylus Publishing, 2002)

BrainSMART: A Global 21st Century Organization

BrainSMART is a global leader in codeveloping graduate degree programs, professional development, and consulting that put current learning science into practice. The organization was awarded a prestigious Annenberg Challenge Grant and chosen by the Florida Department of Education to lead a successful three-year initiative, Scholarships for Teachers in Action Research. For more than a decade, founders Donna Wilson and Marcus Conyers have personally shared their research-based strategies with more than 150,000 administrators and teachers from all 50 states and hundreds of school districts across the country, as well as at conferences of the National Association of Elementary School Principals, National Association of Secondary School Principals, Association for Supervision and Curriculum Development, National Education Association, National Board for Professional Teaching Standards, and International Reading Association. This year BrainSMART is working extensively with the National Association of Elementary School Principals and the South African Principals’ Association. Since 2001, approximately 3,000 educational leaders and classroom teachers from across the United States, Canada, Europe, and Japan have enrolled in BrainSMART and Nova Southeastern University’s innovative online graduate programs focused on Brain-Based Teaching.

“Neuroplasticity illustrates the phrase ‘use it or lose it.’ When you use the synaptic connections that represent a skill, you strengthen them, and when you let the skill lie dormant, you weaken those connections.”

The graduate degree programs with a major in Brain-Based Teaching are proven effective in helping teachers increase student learning in their classrooms. In fact, these teachers are so enthusiastic about the impact of their studies that they are inspired to share what they have learned with colleagues and parents. This investment creates sustainable improvements.

“Finally! Teachers now have concrete, research-based strategies for improving student performance. Designing the curriculum for all learners with brain-based research in mind is essential for every student's opportunity for personal achievement. I only wish my teachers had known what I know now!”

—Leanne Maule, 2009 Georgia Teacher of the Year

**NSU Brain-Based Graduate Degree Programs for Teachers and Administrators**

Nova Southeastern University offers three advanced degree programs for classroom teachers and administrators: Master's degrees in Brain-Based Teaching (with concentrations in Learning and Teaching or Reading and Literacy), Ed.S. with a major in Brain-Based Teaching (concentration in Instructional Leadership), and Ed.D. minor in Brain-Based Leadership. Teachers in our programs model the use of 21st century technology and skills to earn their degrees. Our specific focus of these programs is teaching the 4 Cs (critical thinking and problem solving, communicating, collaborating, and creativity and innovation) alongside the 3 Rs in ways that connect the science of learning and the art of teaching. Most importantly, because we make the science of learning and teaching motivating, teachers enjoy becoming more effective in their classrooms locally as they earn their graduate degrees.

**96% of graduates say they would recommend the program to colleagues.**

89% of Graduates Consider Themselves Better Teachers

Graduates learn the skills and strategies they need to improve teaching and learning:

- 89% of graduates consider themselves better teachers.
- 82% are better able to differentiate instruction.
- 91% have added more brain-based teaching strategies to their teaching practice.
- 88% think and reflect more on their teaching practice.
- 89% are better able to employ strategies for making important knowledge memorable.*

The bottom line is an increase in student learning: More than three-quarters of graduates from these programs say their students are learning more.

This white paper features excerpts from just a few of the many stories graduates have shared about classroom applications of brain-based teaching and learning strategies that support development of 21st century skills.

*Based on a survey of Brain-Based Teaching program graduates April and June 2010, including more than 100 responses (approximately 65% response rate).
Leanne Maule applied what she learned in earning her Ed.S. degree with a focus in Brain-Based Teaching in her classroom—and then shared those positive results and effective instructional strategies with teachers across the state of Georgia.

“This program has provided me with an incredible arsenal of instructional strategies to meet just about any challenge I could have in the classroom. It usually takes years of successful teaching to acquire these skills, but BrainSMART gives you the opportunity to learn them in a little over a year.”

—Theresa Dodge, Massachusetts middle school teacher

After Theresa Dodge earned her M.S. degree, she led teachers at Greenfield (Mass.) Middle School to form a book study group on BrainSMART 60 Strategies for Increasing Student Learning. This provided an opportunity for teachers to learn and share the results of using those strategies in their classrooms with Ms. Dodge on hand as an instructional mentor.

Former Louisiana Principal Priscilla Bourgeois was so impressed with what she learned when working on her Ed.S. degree focused on Brain-Based Teaching that she helped a cadre of teachers in her school receive a grant to help pay for their continued studies in effective instruction. By supporting her teachers’ professional development through the graduate programs, Ms. Bourgeois was able to sustain a culture of instructional improvement locally.

**Working Together for Student Success**

Teachers can work together to share effective instructional strategies. After earning her M.S. degree with a focus on Brain-Based Teaching, Florida teacher Tammy Daugherty consulted with her principal to plan “Breakfasts with the Brain,” regular half-hour sessions before school for discussions with teachers throughout her school about improving instruction by obtaining knowledge about how learning occurs.

Since earning her degree, Ms. Daugherty has been honored as Math Teacher of the Year and Teacher of the Year at her school and was one of five finalists for Teacher of the Year in Orange County, Florida. She has also been successful in qualifying for grants from the business community to underwrite mentoring other teachers and purchasing video and audio equipment to support students with diverse learning strengths.

Karen Sinclair, Director of First Congregational Church Weekday Preschool and Kindergarten in Winter Park, Florida, says earning this degree equipped her with a foundation of knowledge “to build a learning community and to model best practices in education. Using cutting-edge research and the latest discoveries in human brain function, the BrainSMART curriculum provides scientific evidence for why children learn best with certain instructional practices.”

—Denise Friedman, elementary school teacher in Skokie, Illinois

“The strategies learned in this program teach you as much about your own way of thinking as it does about the way your students learn. This understanding will allow you to model best practices for lifelong learning, leading, and collaborating for everyone within the learning community.”

Administrator Karen Sinclair
Guiding Students to Become Self-Directed

A cornerstone of our approach is teaching students how to learn, work together and communicate by equipping them with thinking skills they can apply to all content lessons and in their lives outside of school. We cannot assume that children come to school with the necessary skills for learning. Instead, we must explicitly teach them how to gather and process information, get organized, use their time wisely, define and solve problems, express themselves effectively, finish what they start, and learn from experience. These assets will serve them well in school and throughout their lives as members of the 21st century workforce.

Douglas Stewart, an associate professor at the O’More College of Design in Franklin, Tennessee, who earned his M.S. with a major in Brain-Based Teaching shares an example. He describes a project-based/peer-assisted learning project in an Information Literacy course he teaches:

Students are permitted to select a topic of interest in their design area and are asked to develop, through research, PowerPoint presentations and written documentation of the impact of their design discipline on life in the global context. They use graphic organizers to work together to create a mind map of the total concept. Using the thinking skills of systematic search and planning, they identify a beginning point, research it thoroughly, and can keep coming back to the central thrust of the project on the graphic organizer to keep focused on the centralized concept. Within that framework, they are able to complete their project in a progressive and logical manner.

The Power of “I Can!”

Fostering a positive classroom environment focused on learning success is another crucial element of supporting student achievement. Classroom management techniques from the BrainSMART approach that emphasize “the centrally important teacher-student relationship and coaching for thinking” are immediately applicable and effective in the classroom, as are the “cognitive assets,” or thinking skills, says Benjamin Schmauss, an elementary school teacher in Clark County, Nevada, who earned his M.S. degree focused on Brain-Based Teaching. As just one example, “practical optimism (a way of thinking) helps kids to develop the life skill of enduring and looking at situations in a constructive manner. Allowing them to frame failure as another step to learning and achievement is invaluable.”

In her New Jersey middle school classroom, program graduate Therese Reder also proactively models and instills the asset of practical optimism—the confidence that students can achieve what they set out to do—along with teaching them systematic planning and search skills to gather what they need for learning projects. She also emphasizes the importance of finishing power...
with a PowerPoint presentation of memorably incomplete images, like half-finished bridges and boats, facilitating a student discussion of the importance of skilled planning and completion of important projects.

**Differentiating Instruction for All Learners**

Another aspect of teaching that is critical to the success of all learners is differentiating instruction to reach students at all levels and with a variety of different learning styles and strengths. In order to provide ample opportunity for all students to succeed, Ms. Reder has developed a new project on learning about cells that incorporates opportunities for students to learn about their own academic strengths and to build their cognitive skills. As students engage in individual research on different types of cells, they have access to a wide variety of source materials and options in creating a model of a plant or animal cell. This project-based approach encourages initiative and supports individual learning styles and preferences, Ms. Reder notes.

Working with elementary students in his Georgia school, BrainSMART teacher D’Jon McNair codeveloped a practical math project that applies children’s analytical skills to shopping for the best deals. They collect and compare ads from three different stores and take a shopping field trip where they compare bargains to figure out whether half-off or two-for-one is the better deal, for instance. Students and their parents are also encouraged to hone these math/shopping skills at home.

After graduation from the graduate degree program, Mr. McNair also assisted in an effort at his school to employ technology to help students identify their preferred learning styles through an engaging computerized survey; the survey results can be shared with teachers to help incorporate information about how students learn best into lesson planning.

**The Best Investment for a Bright Future**

As the classroom experiences of Mr. McNair and other teachers featured here demonstrate, teaching students in the ways they learn best is an effective and motivating approach to equip youth with the skills they need to succeed. A growing body of educational research supports the need for effective teachers; thus, an investment supporting the highest quality teacher learning experience is a wise and fiscally responsible use of the limited resources available to schools and school districts today. BrainSMART is experienced in equipping teachers and educational leaders with the knowledge and skills necessary to help students become the critical and creative thinkers they need to succeed in school today and in the workplaces of the future. Our programs offer a unique framework and accessible structure to help teachers use research and a fresh approach to improve teaching and learning in their schools. A primary vehicle for teachers to access BrainSMART is through the graduate degree programs.
About the Author

Donna Wilson, head of academic affairs and president of BrainSMART, earned her Ph.D. in Educational Psychology along with qualifications as a school psychologist and completed postdoctoral studies in the application of practical cognitive science in education. Dr. Wilson is the lead developer of graduate programs focused on practical applications of cognitive and brain research, including Master’s degrees with a major in Brain-Based Teaching (with concentrations in Learning and Teaching or Reading and Literacy), Ed.S. degree with a major in Brain-Based Teaching (concentration in Instructional Leadership), and Ed.D. minor in Brain-Based Leadership, with Nova Southeastern University.

The author of 20 books on applications of cognitive and brain research, she has presented at a variety of conferences for the National Association of Elementary School Principals, Association for Supervision and Curriculum Development, American Educational Research Association, Teachers of English to Speakers of Other Languages, National Association of Secondary School Principals, National Association of School Psychologists, and other organizations. In addition, she has led professional development for more than 75,000 educators in 35 states. As a leader at the community level, former university faculty member, administrator, and school psychologist, Dr. Wilson’s passion is to put cognitive research into practice so all students can reach their full learning potential.