



GRISWOLD PUBLIC SCHOOLS

Superintendent's Update – Week of December 10, 2012

Testing is not a substitute for curriculum and instruction.

Good education cannot be achieved by a strategy of testing children, shaming educators, and closing schools.

~ Diane Ravitch, *The Death and Life of the Great American School System*

Calendar

- **Monday, December 10 – Board of Education Meeting in the GMS Library, 6:00 PM.** *Note:* Due to the Holidays, this is the only Board meeting in the month of December.
- **Tuesday, December 11 – Griswold Elementary School PTO Meeting in the Library Media Center, 6:30 PM.**
- **Tuesday, December 11 – Grade 7 Winter Concert in the GMS Auditorium, 7:00 PM.**
- **Wednesday, December 12 – Grade 8 Winter Concert in the GMS Auditorium, 7:00 PM.**
- **Thursday, December 13 – GES Winter Concert in the GES Cafetorium, 6:15 & 7:30 PM.**
- **Tuesday, December 18 – GHS Choral Winter Concert in the GHS Auditorium, 7:00 PM.**
- **Wednesday, December 19 – Building Committee in the GES Library, 6:00 PM.**
- **Thursday, December 20 – GHS Instrumental Winter Concert in the GHS Auditorium, 7:00 PM.**
- **Friday, December 21 – Edline grade posting by all teachers in Grades 5-12.**
- **Friday, December 21 – Early Dismissal. Winter vacation begins.**
- **Wednesday, January 2 – Classes resume.**



Save the dates for 2013-2014 Budget Meetings:

Be part of the budget process!

- **Monday, January 14 – Board of Education Meeting in the GMS Library, 6:30 PM**
 - Initial budget presentation to Board of Education
- **Wednesday, January 16 – Superintendent's Advisory Council in the Superintendent's Office, 7:30 AM & 8:45 AM.**
 - Budget presentation to parents
- **Wednesday, January 16 – Optional faculty meetings in the GMS Library, 2:30 PM & 3:45 PM.**
 - Budget presentation to teachers and staff members
- **Tuesday, January 22 – Special Board of Education Meeting in the GMS Library, 6:30 PM**
 - Budget presentation by GMS, GHS, and Technology at Special Board of Education Meeting
- **Monday, January 28 – Board of Education Meeting in the GMS Library, 6:30 PM**
 - Budget Presentation by GES, Curriculum, and Special Ed at Special Board of Education Meeting
- **Monday, February 4 – Special Board of Education Meeting in the GMS Auditorium, 6:30 PM.**
 - Public Hearing on Budget

Notes

❖ **High tech field trips during tougher budget times...**

As money gets tighter schools are finding creative ways to meet the needs of our students.

Field trips to museums, historic sites and other traditional landmarks are occurring virtually, more often, these days, as schools rely more on online broadcasts and interactive programs because of budget cuts and tight testing schedules. While in-person trips would be ideal, the electronic versions are great opportunities for students to interact with experts on location in such places as Colonial Williamsburg, Va. "They [students] are able to watch what's going on, ask follow-up questions and play games all in one sitting. It really gets them involved," said Nina Corley, a history teacher in Galveston, Texas.

With current testing requirements, budget cuts and the increased prominence of technology, school field trips are not what they were previously, according to school administrators. National museums and school districts are adapting to the transformation.

Source: "School field trips turn to virtual, digital technology," by Karly Moll, *USA TODAY*, December 3, 2012.

❖ **Wellness matters!**

It's as important for us to focus on our students' level of activity in addition to our students' eating habits in school. Right now the main focus is monitoring what children eat (while they are in school). But, if wellness is our goal then we also need to focus on the students' level of physical fitness and encourage an overall healthy lifestyle. As adults we can model this for our students. In fact, in next week's *Update* look for details on a wellness initiative for our whole staff as part of our commitment to good health – and, I promise it will be a great New Year's resolution!

Fit Kids Finish First On The Field And In Class, Research Shows from *The Inquisitor*, 12/6/12.

For kids, search shows that middle school students who were in good physical shape outscored classmates on standardized tests and take home better report cards.

Conducted at Michigan State University, this new research is the first study linking children's levels of physical fitness to both improved test scores and overall academic grades.

The study, published in the *Journal of Sports Medicine and Physical Fitness*, is also among the first to observe how academic performance relates to all aspects of physical fitness, including body fat, muscular strength, flexibility, and endurance.

Lead researcher Dawn Cloe states, "We looked at the full range of what's called health-related fitness," said Coe, who conducted the research as a doctoral student in MSU's kinesiology department and is an assistant professor at the University of Tennessee, Knoxville. "Kids aren't really fit if they're doing well in just one of those categories."

Data was collected from 312 students in sixth through eighth grade at a West Michigan school. Researchers then gauged the kids' fitness with an established program of push-ups, shuttle runs and other exercises.

They then compares those scores to students' letter grades throughout the school year in four core classes and their performance on a standardized test.

The results showed the fittest children got the highest test scores and the best grades, regardless of gender or whether they'd yet gone through puberty.

The findings suggest schools that cut physical education and recess to focus on core subjects "may undermine students' success on the standardized tests that affect school funding and prestige," said co-author James Pivarnik, who advised Coe on the project.

"Look, your fitter kids are the ones who will do better on tests, so that would argue against cutting physical activity from the school day," said Pivarnik, an MSU professor of kinesiology. "That's the exciting thing, is if we can get people to listen and have some impact on public policy."

Making fitness a bigger part of children's lives also "sets them up for future success," Pivarnik added.

"Fit kids are more likely to be fit adults," he said. "And now we see that fitness is tied to academic achievement. So hopefully the fitness and the success will both continue together."

❖ *December Employee of the Month*

Congratulations to **Dawn Bouchard, Cafeteria Manager at Griswold Middle School** who is our **December Employee of the Month**. He will be recognized by the Griswold Board of Education at their meeting on December 10. Please keep the nominations coming to [Robin Drobiak](#). If you nominated someone last month, you do not need to nominate them again as we will hold all nominations for consideration each month.

EMPLOYEE of the MONTH DECEMBER 2012

Dawn Bouchard
Cafeteria Manager
GMS



❖ *Please consider supporting the United Way during this season of giving!*



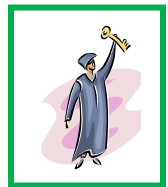
This is the week to give...

**Information was shared at the December faculty meetings!
Contact Robin Drobiak if you have any questions.**

❖ *Griswold 2022 Project...timeline.*

To keep everyone up to date on our project to develop a vision for the Griswold Public Schools:

| | |
|---------------|---|
| November 2012 | Survey data collected |
| December 2012 | Focus Groups to discuss data and vision |
| January 2013 | Committee meets with consultant for early draft of the vision |



Thank you for your responses to this request last week. We could use one more staff member from GHS and GMS.



I am looking for a few individuals from each building who would be interested in taking the raw survey data and, with the help of a consultant, develop the **Griswold 2022 Vision** that will feature belief statements, student outcomes, and an outline for our school district ten years into the future! Please contact me if you are interested in serving on this team. The commitment will be a maximum of three meetings.

Thoughts



Use your brain!

There are many initiatives in our public schools advancing change – as we know! Most often the best ideas for positive change are based on instructional strategies to be used by the teacher. Until very recently there has been little connection between brain research and educational practices. **What brain research makes clear to us is that we must think of change in the classroom more in terms of learner actions as opposed to strictly teacher actions.** The more we know about the brain and the actual science behind learning, the more credibility change efforts will have. I have attached three very brief articles (from *Edutopia*) on recent findings on brain research as it relates directly to educational practices. Getting this information directly into the hands of educators is crucial at this time!



Neuro Myths: Separating Fact and Fiction in Brain-Based Learning

by [Sara Bernard](#)

You've surely heard the slogans: "Our educational games will give your brain a workout!" Or how about, "Give your students the cognitive muscles they need to build brain fitness." And then there's the program that "builds, enhances, and restores natural neural pathways to assist natural learning."

No one doubts that the brain is central to education, so the myriad products out there claiming to be based on research in neuroscience can look tempting.

With the great popularity of so-called brain-based learning, however, comes great risk. "So much of what is published and said is useless," says Kurt Fischer, founding president of the International Mind, Brain, and Education (MBE) Society and director of the MBE graduate program at Harvard University. "Much of it is wrong, a lot is empty or vapid, and some is not based in neuroscience at all."

Still, there are some powerful insights emerging from brain science that speak directly to how we teach in the classroom: learning experiences [2] *do* help the brain grow, emotional safety [3] *does* influence learning, and making lessons relevant [4] *can* help information stick. The trick is separating the meat from the marketing.

So what's an educator to make of all these claims?

Standards of Proof

The use of neuroscience in education, relatively speaking, is young. Neuroimaging technologies have really only developed over the last 20 years, so virtually nothing is "proven" at this point. Neuroscientists can point to some aspects of how different parts of the brain function and connect with one another, but when it comes to education, no one can definitively outline more than a few broad concepts.

"My basic recommendation is that if a product claims to be proven by brain research, forget it," says neurologist and former classroom teacher Judy Willis. "Nothing from the lab can be *proven* to work in the classroom -- it can only correlate."

This might explain why some academics bemoan the term "brain-based learning," including Robert Sylwester, Emeritus Professor of Education at the University of Oregon. "As if it were kidney-based learning last year, and now it's brain based," he grumbles.

Some software companies will "make fabulous claims and have all these testimonials," adds Patricia Wolfe, veteran teacher and administrator and founder of Mind Matters, a workshop and online resource for translating brain science into classroom practice. But in many cases, she says, "the products haven't been tested by anyone who's not selling them."

Myth Busting

Some of the biggest neuro myths, or misguided beliefs about neuroscience that have invaded the general psyche, include the following:

- **The brain is static, unchanging, and set before you start school.** The most widely accepted conclusion of current research in neuroscience is that of neuroplasticity: Our brains grow, change, and adapt at all times in our lives. "Virtually everyone who studies the brain is astounded at how plastic it is," Fischer says.

- **Some people are left-brained and some are right-brained.** "This is total nonsense," says Fischer, "unless you've had half of your brain removed." This may have emerged from a misunderstanding of the split-brain work of Nobel Prize winner Roger Sperry, who noticed differences in the brain when he studied people whose left and right brains had been surgically disconnected.

- **We use only 10 percent of our brains.** This is also false, according to Wolfe, Fischer, and a slew of scientists across the globe. In fact, brain imaging has yet to produce evidence of any inactive areas in a healthy brain.

- **Male and female brains are radically different.** Though there may be subtle differences between male and female brains, there is absolutely no significant evidence to suggest that the genders learn or should be taught differently. This myth might stem from a misinterpretation of books such as *The Essential Difference: Men, Women, and the Extreme Male Brain*, which focused largely on patients with autism.

- **The ages 0-3 are more important than any other age for learning.** Even though the connections between neurons, called synapses, are greatest in number during this period, many of the published studies that have to do with teaching during these "critical" time periods involved rats and mazes, not human beings.

"Understanding the Brain: The Birth of a Learning Science," a report published by the Organization for Economic Co-Operation and Development (OECD), examines these and other unfounded neuroscience claims. Unfortunately, the science behind these ideas is often misunderstood and milked for profit.

Use What Works

Consider the case of [Fast ForWord](#) [5], the much-lauded phonics-based reading software, which is listed on the U.S. Department of Education's What Works Clearinghouse as demonstrating "potentially positive effects on the reading fluency and comprehension domains for adolescent learners." A 2008 study published in the *Journal of Speech, Language, and Hearing Research*, however, reported that the software "was not more effective at improving general language skills or temporal processing skills than a nonspecific comparison treatment."

Some neuroscientists maintain that Fast ForWord is a prime example of what happens in the brain-based education industry: A few limited studies with a neuroscientific basis are used to underscore decades of marketing. Yet many schools and teachers across the nation who've used Fast ForWord have seen astronomical gains in their students' reading capabilities.

In other words, the conclusions here are murky at best. If a strategy or program produces results, use it. Just don't assume that its value is unequivocally proven by brain science.

We don't need to be so wary of discoveries in neuroscience that we write them off, however. They can still contribute enormously to a dynamic classroom, especially if they're seen as a "tool, rather than a philosophy," as one educator, LoriC, put it in an [Edutopia.org discussion](#) [6]. (For specific strategies, see the "Fact" links at right.) "Maybe we need to approach this sort of learning like Thomas Edison might have," she wrote. "Try it, see what works, and learn as much from the failures as you do from the successes."

Plus, neuroscientists urge educators to trust themselves on this. If a claim seems off, it probably is, and if it confirms something that already seems to work, it's probably on the right track. "Usually, when scientists discover something true about the brain," notes Sylwester, "it doesn't surprise teachers."

Get Informed: Brain Books Recommended by Interviewees

Sousa, David A., ed. *Mind, Brain, & Education: Neuroscience Implications for the Classroom* [7]. Bloomington: Solution Tree, 2010.

Tokuhamma-Espinosa, Tracey. *The New Science of Teaching and Learning: Using the Best of Mind, Brain, and Education Science in the Classroom* [8]. New York: Teachers College Press, 2009.

Sylwester, Robert. *A Child's Brain: The Need for Nurture*. Thousand Oaks: Corwin, 2010.

Sylwester, Robert. *The Adolescent Brain: Reaching for Autonomy*. Thousand Oaks: Corwin, 2007.

Posner, Michael and Mary Rothbart. *Educating the Human Brain* [9]. Washington, D.C.: American Psychological Association, 2006.

Organization for Economic Co-Operation and Development. *Understanding the Brain: The Birth of a Learning Science* [10]. Paris: OECD Publishing, 2007.

Wolfe, Patricia. *Brain Matters: Translating Research into Classroom Practice* [11]. 2nd ed. Alexandria, VA: ASCD, 2010.

The Dana Foundation. *Cerebrum 2010: Emerging Ideas in Brain Science* [12]. New York: Dana Press, 2010.

Source URL: <http://www.edutopia.org/neuroscience-brain-based-learning-myth-busting>

Edutopia: What Works in Education



Neuroplasticity: Learning Physically Changes the Brain

by **Sara Bernard**

"There are a few broad principles that we can state come out of neuroscience," says Kurt Fischer, education professor and director of the Mind, Brain, and Education Program at Harvard University. Number one? "The brain is remarkably plastic," Fischer explains. "Even in middle or old age, it's still adapting very actively to its environment."

Translation: All those little brains in your classroom are physically growing and changing every time they learn something. And there are ways to keep that happening.

Despite the fact that the concept of neuroplasticity is broad, vague, and hardly new (the theory was born in the mid-1800s and was heavily researched throughout the 1990s), it is one of the most reliable and fundamental discoveries about the brain that we have to date. Intelligence is not fixed, it turns out, nor planted firmly in our brains from birth. Rather, it's forming and developing throughout our lives.

Your Brain on Learning

According to neurologist and educator Judy Willis (and suggested by a research-rich chapter in the second edition of *Developmental Psychopathology*, among many other publications), neuroplasticity is defined as the selective organizing of connections between neurons in our brains.

This means that when people repeatedly practice an activity or access a memory, their neural networks -- groups of neurons that fire together, creating electrochemical pathways -- shape themselves according to that activity or memory. When people stop practicing new things, the brain will eventually eliminate, or "prune," the connecting cells that formed the pathways. Like in a system of freeways connecting various cities, the more cars going to certain destination, the wider the road that carries them needs to be. The fewer cars traveling that way, however, the fewer lanes are needed.

Neuroscientists have been chorusing "cells that fire together, wire together" since the late 1990s, meaning that if you perform a task or recall some information that causes different neurons to fire in concert, it strengthens the connections between those cells. Over time, these connections become thick, hardy road maps that link various parts

of the brain -- and stimulating one neuron in the sequence is more likely to trigger the next one to fire. Thus, says Willis, "Practice makes permanent. The more times the network is stimulated, the stronger and more efficient it becomes."

Changing Brains in the Classroom

It turns out that if you tell students about this, it can have an effect on their brains too. Researchers Lisa Blackwell of Columbia University, along with Kali Trzesniewski and Carol Dweck of Stanford University, published a study in the journal *Child Development* in 2007 that found that both morale and grade points took a leap when students understood the idea that intelligence is malleable. Not only did those students who already believed this do better in school, but when researchers actively taught the idea to a group of students, they performed significantly better than their peers in a control group.

Willis also found this to be true in her middle school classroom. Her students were more motivated to study, she says, when they knew that they were all fully physically capable of building knowledge and changing their brains.

Here are a few tips for making your classroom friendly to malleable brains:

- **Practice, practice, practice.** Repeating an activity, retrieving a memory, and reviewing material in a variety of ways helps build thicker, stronger, more hard-wired connections in the brain.

- **Put information in context.** Recognizing that learning is, essentially, the formation of new or stronger neural connections, it makes sense to prioritize activities that help students tap into already-existing pathways (for instance, by integrating academic subjects or creating class projects relevant to their lives). In other words, nix the rote memorization. "Whenever new material is presented in such a way that students see relationships" between concepts, writes Willis, "they generate greater brain cell activity and achieve more successful long-term memory storage and retrieval."

- **Let students know that this is how the brain works.** Breaking through those neuro-mythological barriers that paint intelligence as predetermined may ease students' minds and encourage them to use their brains. Willis notes, "Especially for students who believe they are 'not smart,' the realization that they can literally change their brains through study and review is empowering."

Source URL: <http://www.edutopia.org/neuroscience-brain-based-learning-neuroplasticity>

Edutopia: What Works in Education



To Enable Learning, Put (Emotional) Safety First

by [Sara Bernard](#)

It may not be rocket science, but it sure is neuroscience: Happy learners are healthy learners.

While this may seem like (ahem) a no-brainer, there is a good amount of neurological evidence to promote the idea that if students do not feel comfortable in a classroom setting, they will not learn. Physiologically speaking, stressed brains are not able to form the necessary neural connections.

Some of the strongest findings in neuroscience -- findings that were suspected decades ago but only recently well-represented using functional magnetic resonance imaging (fMRI) -- tell us why that is: There are certain parts of the brain responsible for emotions. The amygdala, for instance, processes emotions, stores the memories of emotional reactions, and reacts so aggressively to stress that it will physically prevent information from reaching the centers of the brain necessary for absorbing new knowledge.

Fear and Frustration Get in the Way

A study published in the journal *Neurobiology of Learning and Memory* in 2002, for one, suggested that the amygdala is indeed the part of the brain involved in mediating emotional arousal -- and it has a strong impact on learning. Several studies before and since have confirmed these types of findings.

Even feelings like embarrassment, boredom, or frustration -- not only fear -- can spur the brain to enter the proverbial "fight or flight" mode. The amygdala goes into overdrive and gets in the way of the parts of the brain that can store memories, says neurologist and former classroom teacher Judy Willis, who has studied this phenomenon extensively.

Therefore, it makes sense -- on many levels -- to cultivate the learning atmosphere as much as the learning itself. "Reducing stress and establishing a positive emotional climate in the classroom is arguably the most essential component of teaching," writes Mariale Hardiman, a former teacher and administrator and current assistant dean of the Urban Schools Partnership at Johns Hopkins University's School of Education.

Brain-Soothing Tips

Judy Willis points to the following strategies for helping students, and their brains, feel comfortable:

- **Make the classroom stress free.** Lighten the mood by making jokes and spurring curiosity; create a welcoming and consistent environment through daily rituals, songs, or games; give students frequent opportunities to ask questions and engage in discussions without judgment; and determine achievable challenges for each learner.

- **Encourage participation, not perfection.** A classroom in which mistakes are encouraged is a positive learning environment, both neurologically and socially speaking. As cognitive neuroscientist and educational psychologist Mary Helen Immordino-Yang and Harvard doctoral candidate Matthias Faeth write, "Students will allow themselves to experience failure only if they can do so within an atmosphere of trust and respect."

- **Practice active listening.** "Focus on what students are *trying* to say," writes Willis. This kind of positive reinforcement from the get-go allows students to let their guard down (known in neuro-speak as calming their "affective filters"). Listening to students in general, and listening to their intentions in particular, can help relax anxious brains.

Source URL: <http://www.edutopia.org/neuroscience-brain-based-learning-emotional-safety>

Edutopia: What Works in Education

Try one tip from current brain research this week. We could transform the entire campus learning environment in a week!
Enjoy the season.
Paul K. Smith



The only person who is educated is the one who has learned how to learn and change.

~ Carl Rogers

