

# Developing Teachers and Unlocking Student Potential through Brain Science

A Grantmaker's Reflections on the Journey  
of a Cross-Sector Partnership



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Entrepreneurial Philanthropy for Breakthrough Impact

## What is Mind, Brain, and Education Science and Why Does It Matter?

***“Despite the fact that the work of educators targets the organ of learning, most teachers and school leaders have little understanding of the architecture of the brain and how it receives, filters, and applies information.”<sup>1</sup>***

Education neuroscience is the intersection of education, cognitive science, and psychology. It explores how learning happens in the brain, which in turn enables educators to develop and use strategies to improve student achievement and motivation. There are several fundamental concepts in Mind, Brain, and Education (MBE) science. One is brain plasticity, or the lifelong ability for the brain to change based on experiences.<sup>2</sup> Another is recognizing and navigating the effect of emotions on the brain and learning.<sup>3</sup>

Understanding how the brain learns allows teachers to use research-based teaching strategies that empower students to thrive. St. Andrew’s Episcopal School teachers, who are all trained in MBE science, conduct assessments in specific ways to optimize learning.<sup>4</sup> Because frequent retrieval of information significantly enhances recall ability, teachers use more formative assessments, such as ungraded (and minimal-stress) surprise quizzes. Teachers give students opportunities to correct their tests, since research shows struggling with an answer leads to better retention. Students also learn that memory is enhanced when they limit multitasking, such as switching between studying and email, social media, or text messages.

Understanding how the brain functions enables both new and experienced teachers to help all students achieve their highest potential.

***“...we can help all young people, at all stages of schooling, the most advanced student, the ‘just fine student,’ and the struggling student; we can help them all to rewire their brains to become better learners and higher-achieving students.”<sup>5</sup>***

## Introduction

In 2007, a parent, a teacher, and a private school leader asked themselves: ***how can understanding how the brain works help teachers more effectively reach, engage, and instruct students so they can achieve their highest potential?*** The question would lead them all on an explorative and collaborative journey resulting in the creation of a first of its kind research and professional development center known as the Center for Transformative Teaching and Learning (CTTL). Today, more than a decade later, the CTTL is a robust arm at St. Andrew’s Episcopal School, training teachers in Mind, Brain, and Education (MBE) science to improve student learning locally, nationally, and internationally.

The teacher in that initial conversation, Glenn Whitman, is now the Director of the CTTL, co-author of *Neuroteach*, and recognized as one of the leading educators in the field of MBE science. The parent, Gabriela Smith, became Founder and President of the Crimsonbridge Foundation, and her hallmark is entrepreneurial philanthropy. The private school head, Robert Kosasky, leads a thriving school recognized for teaching excellence. The partnership that developed was a special one—a “friendship and intellectual partnership” grounded in a shared trust and mutual respect for the others’ unique expertise. In 2009, recognizing the potential for education neuroscience to make a dramatic impact in public education, Gabriela introduced the CTTL to Teach For America D.C. Region (TFA DCR) and seeded a partnership that has continued for a decade. The CTTL has since trained hundreds of TFA DCR corps members serving thousands of public-school students in Washington, DC.

A partnership is a journey. This case study, told from the grantmaker’s perspective, reflects on the history of the cross-sector partnership of the CTTL, Crimsonbridge, and TFA DCR. It then offers a path for establishing and maintaining successful long-term collaborations. Finally, it presents insights on the unique role philanthropists can play in partnerships and specific actions they can take to ensure success at each stage of the journey.



## Laying the Groundwork: Building the Center for Transformative Teaching & Learning (CTTL)

According to Dr. Mariale Hardiman, co-founder and director of Johns Hopkins University's Neuro-Education Initiative, the CTTL is a "sterling example" of how research can inform and improve teaching and learning.<sup>6</sup> As the research and professional development arm of St. Andrew's Episcopal School, all St. Andrew's teachers are trained in and utilize Mind, Brain and Education (MBE) science. The CTTL has additionally trained national and international teachers from more than 20 states and five countries. Preeminent university professors and researchers, organizations, and funders partner with the CTTL.



The CTTL's roots were established in 2007 in an adventurous partnership between St. Andrew's and Gabriela Smith. St. Andrew's is an independent school, preschool through grade twelve, that seeks "to know and inspire each child in an inclusive community dedicated to exceptional teaching, learning, and service."<sup>7</sup> Gabriela Smith, an entrepreneurial philanthropist, recognized an opportunity to advance the mission of the school by integrating the science of learning into instruction. She introduced All Kinds of Minds (AKOM), a program that has created a neurodevelopmental framework to help teachers understand how students learn, to the

Head of the School, Robert Kosasky, and teacher Glenn Whitman. She provided the funding for St. Andrew's teachers, including Glenn, to attend their first AKOM training. It was a hit because it aligned well with the school's mission.

Before long, with the support of its leadership, St. Andrew's fully committed to the AKOM philosophy and method of teaching. St. Andrew's teachers became trainers themselves, and soon all teachers at the school were trained in AKOM, earning the school the title of AKOM School of Distinction in 2011. The school became an action research laboratory, where teachers could immediately apply what they were learning in the classroom. The school, and Glenn especially, became more and more invested in education neuroscience, seeking out other experts and researchers in the field. St. Andrew's was soon developing its *own* vision and brand for this work.

By 2011 the CTTL launched, creating a center within, but distinguished from, the school and solidifying the CTTL's work. Though integrated with St. Andrew's, the research and training arm now had the ability to develop its own brand, creating a revenue stream and enhancing its chance for long-term sustainability. As a philanthropist, Gabriela recognized the power of this shift.

The CTTL began to train teachers and leaders of other independent schools in the Greater Washington, DC region and beyond. Gabriela helped initiate and fund this process, connecting local independent schools to the CTTL. As other schools experienced the power of MBE science, they invested in further learning.

After sending five teachers to a training, Georgetown Visitation Preparatory School launched a three-year initiative to train all its educators in the curriculum.<sup>8</sup>

The CTTL has continued to flourish.

Smaller foundation grants have created a strategic opportunity to leverage support from larger foundations. It opened its new space, the Crimsonbridge Research Center, in 2016. Most recently, the CTTL launched Neuroteach Global. Funded by the Zuckerberg Initiative and Omidyar Group, Neuroteach Global is a digital application that makes it possible for any teacher

anywhere to complete and receive credit for MBE science courses, anytime. It's comprised of a series of game-based micro-courses that provide short bursts of micro-learning, real-world classroom missions, and feedback from MBE science-trained teachers. Neuroteach Global creates a pathway for teachers and school leaders globally to become MBE science certified.



## Expanding Reach through Public-Private Partnerships: Teach For America D.C. Region

Even as St. Andrew's was first establishing its roots in MBE science, Gabriela had a vision for this work to reach beyond the walls of St. Andrew's and into public school classrooms. In 2009, she connected Teach For America D.C. Region (TFA DCR) and St. Andrew's, and a cross-sector partnership was born. Since then, more than 700 TFA DCR teachers have been trained in MBE science, reaching thousands of students.

The decade-long partnership between TFA DCR, the CTTL, and Crimsonbridge has taken many forms, adapting to organizational needs, changes in leadership, and lessons learned along the way. The driving mission, however, has always been to help every child reach their

potential by enhancing teacher quality and efficacy through training in the principles and strategies of neuroeducation.

In all iterations of the collaboration, TFA DCR corps members have learned through study and mentorship with experienced St. Andrew's teachers. For example, in the Excellent School Visits program, TFA DCR teachers observe classes at St. Andrew's and exchange ideas with teachers around best practices.

This experiential learning provides ideas for next-day application. One TFA DCR corps member stated, "Previously, I knew that some students benefit from different 'learning styles' and often learned about Howard Gardener's multiple intelligences; however, the neurodevelopmental constructs [from the AKOM] are very specific and give me more concrete language to use and a list of characteristics to look out for in planning my lessons and catering to different students' needs."

In 2016, the CTTL and TFA DCR further formalized their partnership through a multi-year grant agreement with Gabriela's newly-created foundation, the Crimsonbridge Foundation. Cohorts of teachers participate in an annual, year-long professional development programs, as well as the CTTL's intensive week-long summer training, the Science of Teaching and School Leadership Academy.



The partnership continues to evolve. With the introduction of ground-breaking Neuroteach Global, TFA DCR plans to provide *all* of its teachers with an introductory understanding of MBE science. Teachers can then select to dive deeper through expanded learning opportunities with the CTTL. To make this possible, the Crimsonbridge Foundation has invited partners to evolve the original grant agreement accordingly.

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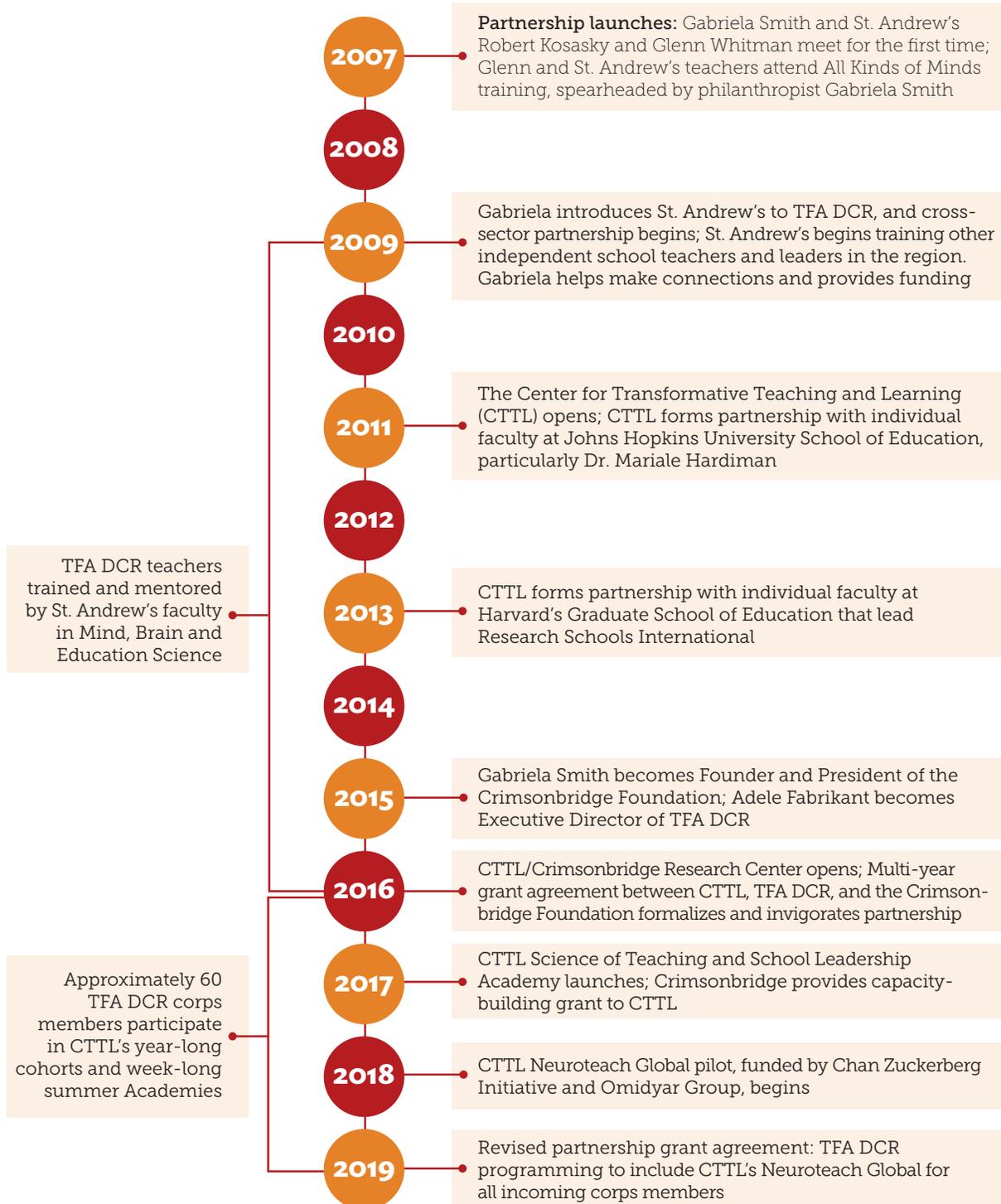
*“Through this innovative partnership with the Crimsonbridge Foundation and the Center for Transformative Teaching and Learning, our teachers have had unparalleled opportunities to improve their teaching practices aligned with cutting-edge science about how the brain learns best. By making this revolutionary approach to education more widely available to students and teachers from all backgrounds, our partnership is playing a meaningful role in advancing student achievement across the DC region.”*

**– ADELE FABRIKANT, EXECUTIVE DIRECTOR, TEACH FOR AMERICA D.C. REGION**

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While it is unusual for independent schools to work with public schools in this way, St. Andrew’s views itself, as Glenn says, as a “private school with a public purpose.” The partnership with TFA DCR was a natural fit. Additionally, partnering early on with an organization as well-known and highly regarded as TFA bolstered the CTTL brand, earning it a significant level of credibility from the start. In turn, TFA DCR has exposed its teachers to internationally-recognized professional development opportunities. Most importantly, the partnership has ensured students from under-resourced schools and underserved communities benefit from quality teaching.

## EVOLUTION OF A CROSS-SECTOR PARTNERSHIP



## The Journey of Partnerships: Lessons Learned

A partnership is defined as “a collaborative relationship between entities to work toward shared objectives through a mutually agreed division of labor.”<sup>9</sup> The inherent nature of cross-sector partnerships, and specifically partnerships between donors and recipients, can be challenging, yet can provide tremendous opportunity for growth.

No journey in partnership is entirely smooth. While the partnership of CTTL, TFA DCR, and Crimsonbridge has been successful, it has not been without its challenges. There were leadership changes. There were staff changes and additions. There were stops and starts. There were missteps and times when partners had to backtrack and re-route. Yet what matters most is how partners learned from those hardships and evolved individually and as a collaborative. Like any journey, a collaboration has a distinct beginning, middle, and destination. The success of the journey requires equal attention to all parts, by all partners.

### 1. Travel with the right people

It is crucial to travel with the right partners from the beginning. The best collaborators are high-quality leaders excited about a shared vision and willing to do the work necessary to make it happen.

Each partner makes their own unique contributions. St. Andrew’s was a school that was willing to experiment. Glenn was a talented teacher willing to lead and turn a vision into reality. Robert was a leader willing to trust his team. Gabriela was a philanthropist passionate about the work, with a vision for what was possible. TFA DCR offered dedicated teachers in touch with students’ needs in public schools. Each partner has been essential to success.

Perhaps most importantly, the right partners provide fuel for the long journey. According to Gabriela, “Respecting and trusting your partners unlocks your ability to think big, overcome challenges, build on each other’s strengths, and work collaboratively towards a shared vision.”

Ask:

- *What expertise and capabilities does this vision require?*
- *Who are the right people for this journey?*
- *Can we work together effectively?*

## 2. Begin with a destination

Align the mission with all partners. Adele Fabrikant with TFA DCR stated that essential to the partnership was “a clarity about what we all want to be true.” Although the destination may shift as new information becomes available or as unanticipated factors arise, partners must maintain a shared and clear notion of the where they are headed.

Ask:

- *What is our shared vision? What do we all want to be true?*
- *Does our vision strike a balance between ambitious and realistic expectations?*

## 3. Build a flexible roadmap and navigate the path together

Once the destination has been set, strategy ensures the team can get there. Embracing shared responsibility helps utilize the resources and expertise of each partner. While each partner offers their expertise, the others contribute perspective, as well.

Ask:

- *Is our strategy clear to all partners?*
- *How does it maximize the potential contribution of each partner?*

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*“There is talent, intelligence, and creativity ready to flourish in every child. Through our strategic partnership, we each bring vision, expertise, resources, and passion to help schools develop excellent teachers. Together, we can help each child reach their potential.”*

**– GABRIELA SMITH, PRESIDENT AND FOUNDER, CRIMSONBRIDGE FOUNDATION**

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## 4. Keep going!

As partners navigate the path together, they will undoubtedly reach forks in the road and unexpected roadblocks. The team may need to pause, for example, when the leadership of one partner changes. TFA DCR experienced a few changes in leadership between 2010 and 2015. The stability offered by a steady leader, Adele Fabrikant, since 2015 has allowed the partnership to resume its journey at a swifter pace.

During trying times, communication, respect, and patience are vital. Glenn stated, “We agreed: we’re going to be fully transparent.” Adopting an entrepreneurial mindset that does not shy away from risk can also help a team successfully cross difficult terrain.

Ask:

- *How can we help each other?*
- *What can we do to overcome the obstacles we're encountering?*

## 5. Pause to reflect on progress and the partnership

At certain points along the journey, every partnership must stop, admit what is and is not working, and then keep moving forward. These tests of endurance are critical to either the growth or dissolution of the partnership. Confronting challenges directly as a team ensures all members are aligned and that the journey is continued in a way that best benefits all involved.

Ask:

- *Are we still clear on the benefits and value of this partnership?*
- *Is the partnership still relevant? Is there a new vision for it?*

## 6. Celebrate milestones

Equally important is pausing to celebrate progress and milestones. This celebration could take many forms: a news article, an event, or a conference where partners share their story. Crimsonbridge, the CTTL, and TFA DCR have presented at conferences together, such as the National Network of Schools in Partnership Conference, sharing their journey. Achieving critical milestones are also great times for partners to express appreciation toward one another. When all players feel valued and acknowledged for their contributions, sustainability is enhanced.

Ask:

- *Where are the milestones along the journey?*
- *How can we celebrate our success and each other?*

## 7. Journey on behalf of others

Having a goal larger than the sum of the partners provides inspiration and focus, particularly during times of trial. In the TFA DCR, CTTL, and Crimsonbridge partnership, all partners were clear about their commitment to developing excellent teachers so students may flourish: "...to benefit each student who deserves to have a teacher, in every year of his or her academic journey, and at every point of his or her day, who believes in his or her potential, and who knows the science behind teaching, how brains learn, and how students thrive."<sup>10</sup>

Ask:

- *Why are we on this journey?*
- *Who will ultimately benefit?*

## The Role of the Grantmaker

On such journeys, the responsibilities of being the driver and navigator traditionally are relegated to grantees. Though many donors support partnerships between grantees, their role is often limited to a grant-related financial transaction. In these relationships, the funder can be inadvertently positioned as a sideline observer or passenger without exploration of what other relevant resources, expertise, and talent the philanthropist may be in a position to contribute. Open communication, shared trust, and mutual respect for each other's unique expertise not only strengthens relationships, but effectively leverages the full potential of all partners.

There are a variety of unique roles a donor, philanthropist, or foundation may assume in a partnership.

## A Donor Inspired: Launching the Crimsonbridge Foundation

When Gabriela Smith first began her partnership with St. Andrew's in 2007, she was an anonymous donor. Her primary intent was to help advance the mission of the school and create something revolutionary to improve teacher efficacy and student learning. Through her experience as a philanthropist with St. Andrew's, the CTTL, TFA DCR, and other ventures, Gabriela was inspired to create a foundation. She founded the Crimsonbridge Foundation in 2015, which has aided her in formally and openly engaging in her passion: ensuring high quality education for all. Now with a team of five, Crimsonbridge has established other entrepreneurial partnerships, such as the Hispanic Education Imperative, which seeks to expand access to Catholic schools for Hispanic families through partnerships with the Archdiocese of Washington, nonprofits, universities, and schools. Visit [www.crimsonbridge.org](http://www.crimsonbridge.org) to learn more about the Crimsonbridge Foundation's work.

### Visionary

A visionary philanthropist introduces a concept and sustains the vision. Early on, Gabriela saw the potential for St. Andrew's to teach MBE science across the country. She knew she had the right partner on board—one dedicated to the work and with the talent and potential to grow the seed of an idea into something significant. She also had the vision of expanding the reach of St. Andrew's from independent to public schools, and brought TFA DCR on board to actualize this vision.

Similarly, in any collaboration, there is at least one champion that drives the relationship forward, particularly when the path gets muddy. At those times, the philanthropist can be that driver who leans in and encourages all partners to keep going.

### Strategist

In a partnership journey, there may be times when a grantmaker sees hazards and potential roadblocks that perhaps its partners do not yet see. The changes necessary to overcome those obstacles may require resources that the organization does not yet have. It may require difficult conversations and tough decisions. A donor can strategically assist.

An example is capacity building. Particularly when an organization is at a critical juncture of growth, having the capacity that keeps up with programmatic growth is crucial for long-term sustainability. The CTTL experienced rapid success in developing and expanding its programmatic work, but Gabriela noticed the potential for organizational capacity to fall behind. She initiated a conversation to discuss these observations and worked closely with St. Andrew's leadership to develop a strategy. She provided a challenge grant to ensure the CTTL had the people, space, and funding it needed while also encouraging sustainability through the cultivation of new funding sources. While such conversations can be tricky, they serve to strengthen the partnership and the possibility for long-term success.

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*“The leadership role the Crimsonbridge Foundation plays in supporting private and public school partnerships validates the importance of enhancing teacher quality and closing the student achievement gap with best practices from each school sector.”*

– GLENN WHITMAN, DIRECTOR, CTTL

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### Innovator

When partners first lay out their roadmaps, they cannot see the detail of each mile. It's necessary to take risks and be adaptable: “Several studies of how partnerships operate indicate that practitioners manage the complexity by adopting a long-term, flexible, and organic approach.”<sup>11</sup>



Partners' interests, desires, capacity, and needs change over time. When new factors come into play and initial goals are no longer relevant, a philanthropist (and all partners) must be willing to allow for shifts. When TFA DCR participant attendance lagged a few years in a row, the Crimsonbridge Foundation's Executive Director Danielle M. Reyes encouraged all partners to engage in open conversations to gather feedback, identify possible causes, and chart a new course for the future, one that considered the growing role of online learning and the launch of Neuroteach Global. Ten years ago, no one could have predicted that the majority of people could study on their smart phones. Adjusting the multi-year grant agreement to allow for the incorporation of Neuroteach Global means there is now an even higher potential for impact.

## Conclusion

A partnership is a journey. It requires the right partners who are driven by a shared vision, who navigate the path together with respect and patience, and whose adventurous spirit overcomes obstacles along the way. A positive collaborative experience not only achieves an objective, but also creates a space for each partner to learn, grow, and excel in their own right.



The decade-long, cross-sector partnership of the CTTL, TFA DCR, and Crimsonbridge started as three people asking one question: can providing teachers more knowledge about how the brain learns significantly improve student achievement? From this question, a research and professional development center was born. A foundation was created. A leading teacher training program joined the quest to develop exceptional teachers through neuroscience. National and international teachers from more than 20 states and five countries have been trained in Mind, Brain, and Education science. What started as

three people asking a question is now three organizations and countless individuals making the answer a reality for students around the world.

This unique partnership has left a positive imprint on all partners. Adele stated, "I use this as a model when I'm considering or evaluating other partners." In reflecting on this partnership, the Crimsonbridge Foundation hopes to offer a roadmap for others on their own collaborative journeys.

## References

- 1 Hardiman, M., & Whitman, G. (2014). Assessment and the learning brain: What the research tells us. *Independent School*, 73(2), 4.
- 2 Tokuhamma-Espinosa, T. (2011). What mind, brain, and education (MBE) science can do for teaching. *New Horizons in Education*. Retrieved from [http://www.traceytokuhamma.com/index.php?option=com\\_tz\\_portfolio&view=article&id=220:what-mbe-can-do-for-teaching&catid=24&Itemid=336](http://www.traceytokuhamma.com/index.php?option=com_tz_portfolio&view=article&id=220:what-mbe-can-do-for-teaching&catid=24&Itemid=336)
- 3 Whitman, G., & Kelleher, I. (2016). *Neuroteach: Brain science and the future of education*. Lanham, MD: Rowman & Littlefield.
- 4 Hardiman, M., & Whitman, G. (2014). Assessment and the learning brain: What the research tells us. *Independent School*, 73(2).
- 5 Whitman, G., & Kelleher, I. (2016). *Neuroteach: Brain science and the future of education*. Lanham, MD: Rowman & Littlefield.
- 6 Strauss, V. (2013, March 5). A school brings brain research to the center of its curriculum. *The Washington Post*. Retrieved from <https://www.washingtonpost.com>
- 7 Mission and Episcopal identity. (n.d.). Retrieved from <https://www.saes.org/about/mission--episcopal-identity>
- 8 Georgetown Visitation Preparatory School. (2013). *School strives to educate "All Kinds of Minds:" New professional development program highlights latest brain research*. Washington, DC: Author.
- 9 Partnerships: Frameworks for working together. (2010). *Strengthening Nonprofits: A Capacity Builder's Resource Library*. Retrieved from <http://strengtheningnonprofits.org/resources/guidebooks/partnerships.pdf>
- 10 Hardiman, M., & Whitman, G. (2014). Assessment and the learning brain: What the research tells us. *Independent School*, 73(2), 9.
- 11 Partnerships: Frameworks for working together. (2010). *Strengthening Nonprofits: A Capacity Builder's Resource Library*. Retrieved from <http://strengtheningnonprofits.org/resources/guidebooks/partnerships.pdf>



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