

BrownSTEM Schools Instructional Model Executive Summary

The vision of BrownSTEM Academies is to inspire and nurture facilitated learning experiences in underserved communities that create critical thinkers who become action-oriented leaders. It is our deliberate intention to strategically design an innovative learning experience for underserved students by spearheading “disorientation rituals” that are a paradigm shift to “reimagining the student experience”. The tenets of our instructional model are aligned to the Deeper Learning Outcomes as outlined by The William and Flora Hewlett Foundation (www.hewlett.org/programs/education/deeper-learning/what-deeper-learning);

1. Mastery of Core Academic Content
2. Critical Thinking and Problem Solving
3. Collaboration
4. Self-directed Learning
5. Academic Mindset

Additionally, BrownSTEM schools intend to interweave these strategies within each school with fidelity ensuring alignment to the Deeper Learning Outcomes and tenets of our instructional philosophy and approach:

Connect- to a community of learners

Empower - activating students to lead their own learning

Contextualize - tie subjects to each other and keep it real

Reach - network beyond school walls

Inspire- customize learning to motivate each student

Wire- Make technology the servant not the master*

Specifically speaking the Deeper Learning Outcomes and strategies will be implemented via a “Teaching Hospital Model”, as described by Eric Newtown, Senior Advisor to the President of John S. and James L. Knight Foundation, as “a model of learning-by-doing that includes college students, professors and professionals working together to digitally inform and engage a community.” BrownSTEM schools “teaching hospital model” will offer a mixture of these six different elements into one cohesive combination:

- Students doing the work! Teachers will serve as facilitators, coaches, and advisors to provide support but 90% of the heavy lifting is owned by the student

- Exceptional teachers at every level guiding students to improve the quality and impact of the educational experience
- Professors and other recognized education experts bringing in topic knowledge and raising issues to elevate the levels of teaching and learning
- Students become innovators pioneering new tools and techniques
- Academics and practitioners alongside students doing major research projects
- Everyone working together with an emphasis of not just informing a community but engaging with it
- Be an incubator and accelerator for the next generation of STEM leaders

*Excerpted from Martinez, Monica, McGrath, Dennis (2014) Deeper Learning: How Eight Innovative Public Schools Are Transforming Education in the twenty-First Century