BrainSTREAM

Metuchen School District
Rick Cohen, Assistant Superintendent
Julie Anderson, Special Education Teacher
Alexandra Gonzalez, 4th Grade Teacher
Christine Wardlow, ELA Teacher
Why create BrainSTREAM in Metuchen?

The problem was threefold:

1. Focus School
2. Shift to Common Core
3. Authentically Engage Our Students
Authentically Engaging Everyone in Problem Solving starts with Administrators and Teachers Designing Solutions and Solving Problems together

BrainSTREAM Presenters:

Rick Cohen
Assistant Superintendent / Principal of Moss School / NCLB Coordinator / PD Coordinator / BrainSTREAM Director / After-school BrainSTREAM Teacher

Julie Anderson
Special Education Teacher / 4th Grade Resource and Inclusion / Co-teacher / After-school and Summer BrainSTREAM Teacher / BrainSTREAM Teacher Trainer / District Service-Learning Trainer

Alex Gonzalez
4th Grade Teacher / Inclusion / Co-teacher / After-school and Summer BrainSTREAM Teacher / BrainSTREAM Teacher Trainer / District Service Learning Trainer

Christine Wardlow
9th-12th Grade English & Language Arts Teacher/Summer BrainSTREAM Teacher Leader / BrainSTREAM Teacher Trainer/ District Service Learning Trainer/Metuchen Education Association Secretary
Genesis of BRAINSTREAM

Results of 2013 Title I Summer Program to develop Basic Skills and prevent summer slide:

The Title I participants of our Title I summer program experienced more of a summer slide than Title I eligible students who did not participate at all in our summer program.
How do we authentically engage our most struggling students in learning CCSS in the Summer?

**By Teaching:**
- Critical Thinking Skills
- Social Problem Solving Skills / SEL
- Design Thinking
- Teaching for Intelligence
- Threading it all Together

**Expert Guidance:**
- Dr. Robin Fogarty and Brian Pete
- Dr. Maurice Elias
- BPL - Carlos Moreno and Eunice Mitchell
- Dr. Yvette Jackson
- Dr. Grant Wiggins
### Summer and After-school Brains.t.r.e.a.m. 1/2014 - 5/2015 Results

<table>
<thead>
<tr>
<th>Data set</th>
<th>Title I DID NOT Participate (n=164)</th>
<th>Title I DID participate SWATT/STREAM (n=70)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average SGP score</td>
<td>29 (Low Growth)</td>
<td>44 (Typical Growth)</td>
</tr>
<tr>
<td>Median SGP</td>
<td>23 (Low Growth)</td>
<td>37 (Typical Growth)</td>
</tr>
<tr>
<td>Average Summative Raw PARCC Score</td>
<td>711</td>
<td>725</td>
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What does academic success look like?

...Is it time for recess yet?

Bueller....Bueller.....
What Authentic Engagement Looks Like... & How We Do it
Students Lead The Way

The Lemonade War

Jacqueline Davies

Students Lead The Way
Inspiring Students to Feel empowered
TURN "I CAN'T...!"
INTO "WHY NOT...?"
How do we engage our students?

'I expect you all to be independent, innovative, critical thinkers who will do exactly as I say.'
Redefining our role as teachers
Student Interests lead to Authentic learning Experiences
Making Real World Connections
“People who are crazy enough to think they can change the world, are the ones who do.”

- Steve Jobs
A Proud Moment

My English skills students are dressed to impress at their design exhibition. The evening program featured the result of a design thinking/problem-based learning unit featuring oral history interviews they conducted with noteworthy senior citizens from the Metuchen community.

Attendance was voluntary; however, these students showed up, dressed well, and served refreshments. They were proud of their work—and I was proud of them.
Design thinking works because it’s...

1. **Accessible:** Students can make connection with the real world. For example, this assignment asks them: How might you design a mural about nonconformity?

2. **Engaging:** Students assess their public-speaking skills using Youtube and a class-created rubric. We can use design thinking to engage kids in self-assessment.
3. Collaborative: Etymology students work on a group writing and mural to redefine the word “thug” for their generation.

4. Standards-Aligned: Common Core standards allow the flexibility to choose content that will engage students; in this case, students research the etymology of a word taken directly from news headlines.
Providing Answers, leading horses to water, and other Practices I’ve abandoned since incorporating Design Thinking

Student: Mrs. Wardlow, how can I present a journal in the way that be interesting?
Me: How have other presentations in the past engaged you?
Student: I could pass the journal around for people to read.
Me: Does that sound like the most interesting way to present information?
Student: No, it sounds boring.
Me: I agree. How could you engage more than just sight in your presentation? How could you incorporate the other senses or make the audience respond?
Student: I don’t know.
Me: The correct answer is, “I don’t know...yet.”
1. Asking questions, Tapping into students’ strengths, and developing self-Reliance

I ask myself:

● How far can I push them today?
● Do they seem receptive?
● Have they shared information with me about their strengths that would help me to guide them?
● Has their performance on formative assessments demonstrated a level of competence that would lead them to good answers?

My answers to these questions guide my questioning of the students.

I ask my students (metaphorically):

● What does it feel like to be thirsty?
● What have you done in the past to find water?
● Are there other people who’ve tried to find water?
● What made them successful?
● How can you use your skills and talents to find water?
2. Letting go of sacred content

Educator Alan Purves explains in his essay “Telling Our Story about Teaching Literature”:

“Unlike scientific reading and discussion, the reading and discussion about literature are not exact; rather than provide correct answers, they provide tried and proven procedures that serve people that are going to deal with other kinds of information. They are the groundwork for law, for business, for participation in a world of information. They are centuries old and, I think, no less needed today as a part of the process of harnessing the mind” (137).
Transferable skills practiced via Brainstream & Design Thinking:

- **Researching** content
- **Discerning** strong, weak, and biased media
- **Self-monitoring** their progress
- **Reflecting** on the effectiveness of their strategies
- **Generating** digital content
- **Incorporating** peer feedback into their work
- **Presenting** to authentic audiences

1. **Who did you interview?**
   - Mayor Tom Vains
   - Mayor of Madison, historian & model
   - Mr. Martin Jason
   - Producer of the film "Dreams & Truth"
   - Gov. Florio, former Governor of New Jersey and a US Senator
   - Mrs. Florio, former Elementary School Teacher

2. **What questions did you ask?**
   - Accomplishments
   - Families
   - Careers
   - Advice for younger generation
   - Why did you choose to live in Madison?
   - What changes have you seen in Madison?
The best part

Think of your class as a radio station. If students have some control over what is played, they'll stay tuned in.

-@teachergoals

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