Project SYNCRERE Ignites

On April 27, 2009, President Barack Obama, in a speech given at the National Academy of Sciences Annual Meeting, informed the nation about a developing initiative to inspire more American students to pursue careers in science, technology, engineering, and mathematics (also known as S.T.E.M).

Within that speech, the president particularly singled out a considerably overlooked portion of America’s youth, stating the new campaign would create opportunities for “women and minorities who too often have been underrepresented in scientific and technological fields, but are no less capable of inventing the solutions that will help us grow our economy and save our planet.”

A roaring applause followed thereafter.

It seems as though Obama’s call for underserved minorities in S.T.E.M. industries has not fallen on deaf ears.

In fact, here in Chicago, three incredibly forward-thinking African-American men had already begun contemplating and analyzing along those very lines highlighted by Obama.

His words, in turn, implemented a confirmation that their steps toward educational change would soon come to the forefront.

In 2008, Project SYNCRERE (Supporting Youth’s Needs with Core Engineering Research Experiments), a not-for-profit initiative, was birthed at the hands of mechanical engineer Jason Coleman, electrical engineer Seun Phillips, and finance manager George Wilson.

Collective products of Chicago’s South Side and the Chicago Public School (CPS) system, the three embarked on a shared desire to infuse minority youth with increasingly important math and science skills.

“Just being a product of CPS myself, I understand the lack of exposure that students get to the engineering and technology-related fields,” Coleman says. “So the three of us collectively came up with the idea.”

After unanimously quitting their respective careers in corporate America, Coleman a mechanical specialist for Motorola, Phillips a senior electrical engineer for Motorola, and Wilson a business manager at Northwestern University, all became entrenched in seeing Project SYNCRERE develop.

The result?

A continually flourishing organization devoted to propelling forward a new diverse generation of scientists and engineers.

What’s In A Name?

The name, Project SYNCRERE, is no coincidence.

It intentionally describes the founders’ sincere commitment to broaden the depths of intellect within the African-American community by using project-based learning.
Targeting students in grades 3-12, Project SYNCERE, through a uniquely devised curriculum, encompasses an array of engineering disciplines from mechanics to electricity.

With the help of group activities and modern technology, instructors look to sharpen students’ organizational, communication, research, critical-thinking and problem-solving skills, ultimately increasing the relevance of math and science to them.

Each project is broken into three components: First, in small groups, students discuss and brainstorm ideas for a given problem. Then, in efforts to formulate a solution, they read, research, calculate and build models. Lastly, there is a student-to-instructor presentation that articulates learned concepts.

On any given day, during the in-school and after-school programs, students can be seen in class constructing a rocket, robot, or solar car.

Jamaine Smith, a 12-year-old 7th grader at Dumas Elementary School, feels his Project SYNCERE courses relieve the stress of other conventional classes.

He says, “In this class, it’s hand’s on. You don’t have to actually just sit there and read the whole time or write all day. You come in, they tell you what to do, they help show you how to do it, and you get it done. It’s like a lot easier.”

In addition to an easier understanding, Smith also says the courses help give him an edge over students in other classes, as Project SYNCERE covers certain material in advance.

“In the students with which it works, Project SYNCERE has seen scores increase by 27 percent and work soar from “C” and “D” quality to that of “A”s and “B”s.”

And the numbers don’t lie.

Through Project SYNCERE’s internally contrived pre-assessment and post-assessment testing, which is primarily based upon ISAT (Illinois Standards Achievement Test) extracted curriculum, the trio have seen scores increase by 27 percent and work soar from ‘C’ and ‘D’ quality to that of ‘A’ and ‘B’.

Ultimately, they have chosen to credit the project-focused teaching style for students’ improved information retention and overall focus.

Despite what might be assumed, a child’s IQ does not have to be at genius-level to be a part of Project SYNCERE — the program has made conscious efforts to embody an all-inclusive space, indiscriminate of GPAs and test scores.

Phillips believes it’s important to keep enrollment open-ended, suggesting it may be the standard approach to material that is barricading student interest.

“We feel it’s very important to keep it open because some students may not be performing well in their classes, but it could just be because they haven’t been reached out (to) in a certain way so that the material is not sinking in to them … or they’re just not interested,” he says.

Helping Students Re-Think Career Choices

The program has gone even further to debunk theories that African-American youth are unconcerned with math and science fields. And this revelation could not have come at a better time.

According to the U.S. Bureau of Labor Statistics, S.T.E.M. workers earned about 70 percent more than the national average in 2005. However, African Americans, on average, made up about 5.2 percent of national engineering students between 2000 and 2008.

Often times, minority youth become tangled within the traps of the glamorized and instantly-gratifying arenas of sports and entertainment, and this ever-persistent challenge facing the African-American community has not gone under the radar for Project SYNCERE. So the program has increasingly become committed to reshaping the occupational concentration of Black youth through exposure.

Coleman explains that the program aims to shift students’ infatuation with the sports and entertainment industries.

“There are a lot of Black boys and girls who look like them and aspire to be these things (in sports and entertainment), but a very small percentage of them actually make it,” he says.

“A New Generation of Scientist and Engineers

Novel Results via Project Based Learning

Interestingly, though project-based learning seems to create an utterly sensible outcome, it still goes so often unconsidered and unnoticed versus traditional lecture-style learning.

“Through utilization of the different engineering projects, we’re really able to relate to students and show them how these different math and science courses that they’re taking in school will relate to different real world applications,” Coleman says.

This intent became apparent after what started as a classroom recycle center design morphed into a school-wide recycling initiative. As a result, students were left with a sense of accomplishment after having witnessed their very own creations translate into the epitome of real-world solutions.

“Doing these fun and exciting projects, the students are able to see a different approach into math and science, which strikes their interest,” offers Phillips. “They are able to receive the course material in a different manner, where it’s more suitable for them, where they can finally make sense of it.”

“So we really stress the importance of education and having them make sure they come up with a Plan B.”

Going forward, Project SYNCERE hopes to continue fostering an emergence of vibrantly intelligent minorities in S.T.E.M.-related careers.

Coleman, Phillips, and Wilson would love nothing more than to see their citywide operation reach global proportions. And although the program has received an outpouring of support from teachers, principals, and parents, the three would like to strengthen their financial pool of resources, which is now primarily based on funding from CPS.

“We all know the economy has had a negative affect across the board,” Wilson says. “But I am hoping that we get more money from the foundations, corporations and individual donors as we grow and as the economy turns around.”

(Note: To learn more about Project SYNCERE and how you can contribute, visit www.projectsyncere.org.)