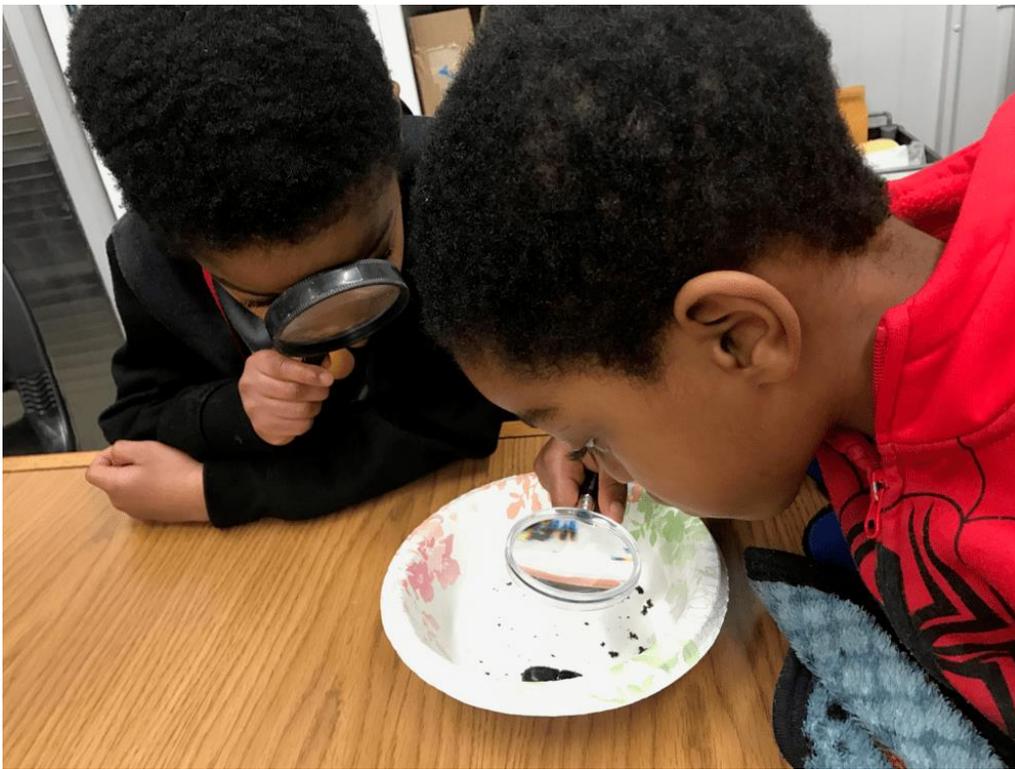


# State ESSA Plans Need to Include Accountability for STEAM Curriculum If States Want More African Americans and Hispanics in STEAM Careers

By Shawnta S. Barnes – July 21, 2017



The Every Student Succeeds Act is the reauthorization of the 1965 Elementary and Secondary Education Act (ESEA) and replaces No Child Left Behind (NCLB). Each state must submit an ESSA plan to the U.S. Department of Education. One area the plan must address is school accountability. According to the [U.S. DOE Accountability – FAQs document](#), states must measure the following each year for accountability:

(1) Academic Achievement

(2) Academic Progress (for elementary and secondary schools that do not award a diploma, as defined by the State)

(3) Graduation Rate (for high schools that award a diploma, as defined by the State)

(4) Progress in Achieving English Language Proficiency; and

(5) School Quality or Student Success (note: a State may include multiple indicators of School Quality or Student Success)

When it comes to the first measure academic achievement, the only measure states are allowed to use is the state's standardized English/language arts and math assessments; other subject areas cannot be included. Measures in other subject areas, such as science or social studies could be included in the fifth accountability measure school quality or student success. A state could choose any number of options to evaluate school quality or student success which means science and other subjects areas may not be included in holding that state accountable.

In most states, there has been talk surrounding the importance of STEM (Science, Technology, Engineering & Math) or STEAM (Science, Technology, Engineering, Arts, & Math) education. My husband, a Black man, who works for Indiana Office of Technology (IOT) as a Senior Database Administrator – Team Lead, is one of a few African Americans employed by IOT; the number of Hispanics employed is low too. To increase the number of African Americans and Hispanics pursuing STEAM careers, there have to be opportunities for these children to learn about these various disciplines in school.

Many times when students attend failing schools (schools that many times are serving minority and impoverished students), the focus shrinks to the subject areas in which school is held accountable to on standardized tests which are typically only English/language arts and math. Even though states currently give science and social studies standardized assessments, having dismal results or minimal improvement will not hurt the school's rating because the test doesn't count for accountability. I was in a meeting with a school superintendent who said, "We know schools focus on what they are held accountable." I assert it is almost

pointless for states to promote incorporating STEM or STEAM curriculum if there are no measures in place to hold schools accountable for each state's ESSA plan.

I worked in a school where science and social studies were removed from the school's schedule, in order to maximize the amount of time students spent in math and English/language arts to ensure standardized test scores improved. Teachers were told to use any opportunity they had to incorporate science and social studies into math and English/language arts. Teachers, whose evaluations were tied to the standardized test scores, were so fearful of their students not improving they were not about to spend any time on their own to try and figure out how to integrate academic disciplines even though this would be in the best interest of the students. One teacher told me, "Shawnta, I don't even know what the science standards are for my grade level." There were a few teachers who managed to get science in; they showed episodes of *The Magic School Bus*. Although I love *The Magic School Bus*, watching this show should not be the only science students receive just like free drawing should not be the majority of the art class curriculum.

I am becoming increasingly concerned about the subpar education many African American and Hispanic students are receiving in academically struggling schools. I touched upon this in a villanelle published in *Whirlwind Magazine*, a publication focused on issues of social justice around the world:

It's not just failing schools, all schools should be offering adequate courses in science, technology, and the arts. Students should not have their future options limited because the school didn't bother to offer certain classes because the state was not holding them accountable. I know you are thinking, "Schools do what is best for kids." They should, but the reality is some don't when they are not being held accountable.

In my husband's role as team lead at IOT, he is part of the interviews for potential new hires and he shared, "Most candidates are White or Asian – primarily Indian descendant. Rarely have we had Black candidates and I have not yet been part of an interview of a Latino candidate." To change the output of potential candidates, we have to ensure the input is happening in the K-12 world. ESSA accountability is one of the ways this can happen.