

Panyard Science: A 2010 Melody

Dorian Barrow

Success in teaching science will remain an “unsung melody,” and will continue to elude the “secondary schools’ science orchestras” in Trinidad and Tobago (T&T), unless changes occur in current teaching methods. Last year, for example, the pass rate in the Caribbean Examinations Council’s (CXC) Caribbean Secondary Examination Certificate (CSEC) examinations in the sciences reached a low of 33% passes in Human and Social Biology—a subject considered the softest in the science field. This, in the context of the Ministry of Education’s goal of an 80% pass rate in the CSEC examinations by the year 2010. This target will be difficult to achieve if the science in our secondary schools continues to be taught in the same fashion, or if our science teachers continue to make the same elitist, exclusionary assumptions about teaching and learning.

A new teaching paradigm—one more inclusive and hopefully more indigenous to T&T—is urgently needed to achieve the 2010 targets. Maybe it is time, as Lloyd Best has advocated, to bring the panyard method of educating, with its unique inclusive approach to teaching and learning, to the science classroom to achieve the levels of success we all wish for.

This may be more urgent than the policy-makers at the Ministry may wish to admit, as the current CSEC results are well below the 2010 targets. In 2005, for example, there were a total of 21,000 T&T entries for the seven CSEC science examinations—15% of all entries. Of these students, 13,515 (64%) got passes in the science subjects. Students’ overall performance in science will have to be improved by an average of 18% to achieve the 2010 targets.

This increase could remain elusive if there are no plans to ensure that all the key stakeholders do what is required to ensure that this goal is achieved in the next five years (by 2010). These plans might include the identification of those schools whose students are underachieving in science, and of some of the fundamental reasons why these schools’ classroom learning environments are constraining students’ achievement in the sciences. In addition, a customised strategic plan, which would clearly articulate how these schools could move to the 80% passing rate expected by 2010, is required.

But even with this, success in science teaching in our secondary schools could be elusive if science teachers are not prepared to change their paradigm of teaching to one that is embracing of more students, more student-centred, inquiry-based, and creative. Science classrooms have to become more like panyards, where people come on their own volition, where nobody is turned back, and where peoples’ creativity and imagination are allowed to bloom unimpeded.

This Carnival period might not only be a good opportunity to bring “pan” to our science classrooms, but also to serve as a catalyst for shaking out the underachieving secondary schools, for identifying the constraints in their science learning environment that are contributing most to students’ poor performance, and for creating, with them, a melody

that would assist them in moving positively forward in optimizing students' performance on the CXC science examinations.

The success of such an intervention is predicated on several critical assumptions, not the least of which is the assumption that the issue of underachievement in science is an authentic problem in T&T for secondary school students, their teachers, parents, and the State, and that there is the political will—both public and private—to have this problem resolved in the interests of all concerned parties, especially the students.

School of Education, UWI, St. Augustine