

29 October 2020

Dear Colleagues,

Here is a summary of our two follow-up conversations, based on the October 15 webinar, *The Practical Education Network* by Dr. Heather Beem.

On Wednesday, we heard about “learning by doing” programs and practices in Jamaica (from Dr. Marlene Hines) and Senegal (from Dr. Edem Nunekpeku). Discovery learning or experiential learning, as it is called in Jamaica, has been embraced for the last several decades, as it has proven to be more successful in preparing students for jobs, higher education, and for life as educated citizens. Keys to success have included evidence-based policy changes; teacher education; changes in the exam structure from UK A and O levels to a Caribbean Secondary Education Certificate (CSEC). In Senegal, Dr. Nunekpeku, who teaches English and prepares students for TESOL/TEFL certification, emphasizes learning as sharing; for instance, rather than expecting students to memorize a 1000 word vocabulary list, he engages them in various activities that encourage the sharing of knowledge rather than competition (e.g., I know these 5 words and you know those 5 words and together we can have a conversation with 10 words). One of his students has begun a learning as sharing business, creating a moodle platform where teachers can upload and share curricula and ideas.

As we thought about teaching and learning in Ghana, Jamaica, and Senegal, we identified both challenges to, and components for, restructuring pedagogy. The challenges include a) resistance from teachers who have been trained to teach in less active ways; b) tests that serve as entry points to jobs and further education that are designed to reward certain types of answers and ways of thinking; and c) real-life time constraints, such as the 40 hours that Dr. Nunekpeku is given to prepare his students for their certification exams. The crucial components for restructuring active education include a) designing hands-on curricula components that are usable by teachers in classrooms, so that they do not need to “re-invent the wheel”; b) keeping track of data and using statistical information to show that activity-based learning prepares students better for standardized tests, even if those tests are not designed for such learning processes; c) finding allies and cultivating champions within the various schooling structures, including governmental and testing agencies, in order to work toward systemic change; d) integrating literacy into learning, by having students “write to think” as well as “write to communicate;” e) recognizing that while we can learn much from one another globally, education systems need to be attentive to and designed for their local constituents, and f) finding ways to reconstruct testing and test questions to further the goal of learning by doing.

We noted that these ways of teaching and learning require humility on the part of the teacher as well as a strong investment in seeing each student as bearing God’s image. As Christian teachers we can and should impart hope to our students that they can succeed.

On Thursday, we continued our discussion along similar lines and thought strategically about ways to translate PEN into other countries. Dr. Beem noted that PEN began by addressing the real question that real teachers ask: how can we get resources to teach science well in the classroom, but also quickly added building partnerships with government agencies and with NGOs who were engaged in nationwide educational interventions. Dr. Parimal Chandra Biswas noted his own educational practices in experiential education, in his university’s commitment to becoming a green campus, and also the interest of the National Council of Rural Education in promoting experiential learning for the development of skills and jobs, based on the works of Tolstoy and Gandhi. Together we identified the following action steps:

- Continue to develop ways for those from the Global South to learn from one another’s experiences.

- Explore the possibility of SCS sponsoring a workshop or training with Dr. Beem for those interested in translating PEN into their own countries.
- Build grassroots networks of enthusiastic teachers, schools, and organizations (such as the Ghana Association of Science Teachers) who “get it” and who will advocate for pedagogical change in their regions.
- Recruit professors who are committed to experiential learning to add credibility and their expertise to a developing program.
- Track progress and be able to demonstrate statistical improvement in test scores.
- Seek contacts with government officials in the Ministry of Education, including those who oversee district standards, to demonstrate success in the local schools and gain their cooperation.
- Work to institute change in teacher training programs.

We also talked about the role of the arts and humanities in experiential education and about bringing STEM, arts, humanities, and social sciences together into a holistic educational framework. As Christians, our desire to love and serve our students, our understanding of the unity of creation, our own experience of personal transformation through Jesus Christ, and our commitment to wisdom as the goal of education should continue to motivate us to pursue educational reform.

Again, many thanks for taking the time to talk together. May we continue to serve God to the best of our abilities.

Best,  
Susan