EDITORIAL: Educating Students for Social Criticism and Social Change Through Research-informed and Negotiated Action (RiNA) Projects

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Four years ago, I had the pleasure of being the guest editor of the first youth issue of the Journal for Activist Science and Technology Education (JASTE), and now, I have the honour of co-editing the second youth issue of JASTE with my colleague and friend, Dave DelGobbo from Stephen Lewis Secondary School, Peel District School Board. I introduced Dave to research-informed and negotiated action (RiNA) projects when I served as the Instructional Coach at his school. Over the last two years Dave and I have collaborated with Professor Larry Bencze from the Ontario Institute for Studies in Education, University of Toronto, whose research has informed the development of the pedagogical framework for RiNA (see Bencze, 2017). We have worked closely with Professor Bencze and his research team to build a more transformative and socio-politically engaged science curriculum, while becoming advocates for Science, Technology, Society and the Environment (STSE) education. Dave and I received a grant from the Ontario Ministry of Education that funds community-connected experiential learning opportunities for students. This grant has allowed us to engage Grade 10, 11 and 12 students from two high schools in research and actions on important social and environmental issues. I owe the Science teachers at Cawthra Park a debt of gratitude for their commitment to RiNA and for their collaboration over the last two years.

At the core of our work is the belief that we can empower and enable students to conduct both secondary and primary research on a variety of STSE issues so that they can take socio-political actions on issues that impact the well-being of individuals, societies and the environment. As a result, students will develop the habits of mind for scientific inquiry and civic engagement. Such an issues-based and action-oriented approach is still underrepresented in many science courses in our district. Science and technology education in most settings strives for a comforting ideal of apolitical, value-free practices (Alsop & Bencze, 2014). The RiNA pedagogical framework aligns with the Social Action Approach described by James A. Banks (2003) in his “Approaches to
Multicultural Curriculum Reform.” To quote Banks:

Major goals of instruction in this approach are to educate students for social criticism and social change and to teach them decision-making skills. To empower students and help them acquire political efficacy, the school must help them become reflective social critics and skilled participants in social change. The traditional goal of school has been to socialize students so they would accept unquestioningly the existing ideologies, institutions, and practices within society and the nation-state (Banks, 2003).

Our school district has prioritized equity and inclusion as one of our system’s goals. We believe that engaging students in social actions is an equitable practice needed to create a more inclusive science education. We need our young citizens of the now to become critical thinkers who will question practices that may produce social and environmental injustices. Our students need to develop the attitudes, skills and knowledge required for them to become agents of social change. With that said, the three goals of critical and activist science education can be expressed as: i) students need to become aware of power related problems in STSE relationships; ii) students need to inform their actions through self-directed research; and iii) we need to empower and enable students to take socio-political actions in their community. I describe in more detail how I guided my students through RiNA in a chapter published in the Science and Technology Education Promoting Wellbeing for Individuals, Societies and Environments (STEPWISE) book (Krstovic, 2017).

The second youth issue of JASTE is a celebration of the work that is possible when a group of committed students, teachers, researchers, and other stakeholders, comes together as a community of learners with a social justice and equity mindset. I would like to thank everyone who was involved in this project, and I hope that this youth issue of JASTE continues to inspire the next generation of students and teachers who embark on the journey to a more balanced, holistic and socio-politically engaged science education.

References:


