

Student Reflection Paper: Enhancing the Humanities in Schools Like Ours

By Everett Brokaw

This issue's humanities reflection presents a student's argument for attention to the humanities in a math, science, and technology program. Everett Brokaw, a senior at the Illinois Mathematics and Science Academy, recognizes that his specialized school experience has been enriched by personal journeys through literature and through encounters with faculty who integrate math, science, technology, and the arts in their daily instruction.

Schools like ours pride themselves on rigorous classes focused upon mathematics, science, and technology (MST). In many of our schools, classes in the humanities are taken alongside those in math and science. Further, our institutions enroll some of the brightest students in the nation. Integrating the humanities into our students' experiences is vital to a results-oriented education.

With our schools' specialization in math and science, the humanities provide an amazing opportunity to support those fields. Cooperation and integration are key. Writing classes can focus on proper formatting for research papers. History classes can teach the history of mathematics or technology. From a student's perspective, the classes mesh with one another. For example, last semester I enrolled in History of Astronomy, taught by Dr. Rob Kiely, a science historian, and the connections were amazing. Foreign language courses allow students to conduct and present research in new, diverse settings. Our English courses can tap into the wealth of literature written about the sciences; for example, LeCouter's *Napoleon's Buttons* engages both the historian and the chemist. Interdisciplinary cooperation with the humanities is a great approach for the MST-focused curriculum, if applicable. Integration with the humanities provides a meaningful complement to the MST concentration.

Throughout my three years at the Illinois Mathematics and Science Academy (IMSA) I have been particularly interested in balancing the MST-heavy curriculum around me with my own interests in literature and

theology. I have done two years of research on faith-based literature by completing, reviewing, and discussing a total of over 40 books alongside two amazing mentors and numerous other individuals. I chose the works, and the choice to conduct research was entirely my own. Therefore, when I speak of the humanities, I immediately jump to this particular example, because reading has become a passion.

A critical element of the entire project was my free choice. I was able to choose what material I read and, moreover, choose to read it; the project became my own because I was engaged in my work. Students, though, rarely, if ever, possess either option in a literature course: they cannot choose whether to read or which book to pick up. A simple poll of our students would probably show that they despise *Heart of Darkness*, and logic tells us that forcing them to read it likely results in a decreased passion for literature. Making an experience such as reading painful through the choice of material makes it difficult for students to take an interest. Some of us (myself included) can appreciate Conrad's work for its high quality of literature, but future doctors, mathematicians, and engineers will probably find it stifling, along with the curriculum in which it is taught. There needs to be a compromise between literature that is high in quality and that which is accessible by the students. I do not suggest that we throw out the classics. Perhaps, though, there needs to be a more thoughtful approach to the literature chosen for discussion.

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Our students have a desire for philosophy, a capacity for deep discussion amongst themselves about the real issues of our time. They can make meaningful connections between the events in their own lives and the books they read, and the same is true with the art they view or the historical situation they examine. If our students are to be engaged in their learning, I think it quite fitting that they are given a fair opportunity to offer their input: not just by raising their hands in the classroom, but by contributing input in the curriculum itself.

The details of student-input booklists may get tricky, but I address the overall mission: In order to engage the students in what they are learning, let them choose some of what they encounter. Here I focus upon reading. I do not suggest that our syllabi become a matter of democracy, but offering students the chance to nominate a few the books for an English class may be a very worthwhile endeavor. From experience and many long discussions with my peers, I will say that students are by and large willing to read a book if they think it worth their while, but that the contrary is also true. When students are engaged in a given book (I cite *Crime and Punishment*), the discussions are deep and personal both in and out of class.

Countless times over the past three years I have sat under the trees and talked about literature with interested students: coffee shops and our residence halls are also favorites. We talk about books that made us think, that taught us something, and books that were just fun. Students really do care about books, but probably more about books that are of interest to their generation instead of the teachers. Ask students that graduated from your institution what they found the most engaging, and put them in the curriculum whenever possible. I guarantee that you will not regret doing so. I just finished *Brave New World* and *The Perks of Being a Wallflower*, and I think that students in schools like ours would be able to take a lot from both. Try some books that will help them, like Richard Light's *Making the Most of College*. Reason and the current attitude of the students can also come into play; Kerouac's *On*

the Road may be a great choice for the last book before graduation or summer break.

I should offer some sort of disclaimer, because I feel I have been fortunate in my classes at IMSA, especially the humanities. A vital element therein has been the discussion, rather than lecture, setting. The desks are arranged in a circle rather than in rows, and the teacher does more facilitating than teaching. The seminar setting in which the students are at the center really makes the course personal. This, if not currently the practice at all schools like ours, is an amazing opportunity to engage students.

Overall, I feel that our schools must examine the worth of humanities within the math, science, and technology setting. We must attempt to maximize the humanities' potential, both as ends to themselves and means to greater contextual understanding of math and science. I focus here upon a few examples such as reading, student-input curricula, and interdisciplinary humanities, but the possibilities are endless. Our best tools are a group of the most innovative and motivated students in the country. They push their own limits and our curriculums should help them do so on a few of their terms. Ask their opinions and take their advice, especially your own graduates, who can speak for how well their MST-based education works in college and beyond.

I would invite anyone interested in reading or developing a curriculum along the lines suggested here to contact me <brokaw@imsa.edu>. I would also like to thank my mentors, Dr. Bosco and Mr. Casey, and all who have helped me along the way.