Urban Ecology

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What is urban ecology? How can humans create sustainable and efficient modern urban ecosystems? Students explored how humans interact with nature in urban ecosystems, applying concepts of sustainability and efficiency to design improved modern cities. They researched green building techniques, transportation options and alternative energies. In both their science and Humanities classes, they wrote articles and created original illustrations to explain their chosen topics. After a series of peer critiques, the articles were published in an Urban Ecology magazine that we sold at our school's annual Exhibition Night. We sold over 70 issues that evening, and orders are still coming in.

Teacher Reflections

What struck me from the outset was that the subject matter was very adult. Initially it was difficult to get 6th graders to care about "green" design. Once we got underway, the best part was seeing the students getting excited, creating their artwork and laboring to make their articles perfect for the magazine. Towards the end, our classroom literally turned into a magazine workroom. Bobby and I were editing, and the students were scurrying around scanning artwork, helping each other edit, working in Adobe Indesign, creating models of their topics and perfecting their layouts. It was an incredible vision of controlled chaos.

—Nicole Costa

I was amazed at how 6th graders grasped high-level concepts about ecologically sustainable building technologies. Not only did they become experts on their topics, but they convincingly debated the pros and cons with adult guests on Exhibition Night when we premiered the magazine. The repeated comment that I heard from adults was, "I can't believe this was created by kids!" I think the authentic, purposeful nature of the project helped students step up to the challenge of learning about advanced topics such as hydrogen fuel cells and solar thermal technology. My favorite part was teaching the students about page layout and design for the magazine, where I could bring my skills as a graphic designer into the classroom. We used real-world models (a collection of science magazines) to help our students generate expectations and high standards for their graphics, illustrations and writing. Multiple peer critiques helped us create a polished product and facilitated student-centered learning throughout the project.

—Bobby Shaddox

To learn more about this project and others visit the HTH Digital Commons and Bobby Shaddox's and Nicole Costa's digital portfolios at
http://www.hightechhigh.org/dc/
http://staff.hightechhigh.org/~ncosta and http://staff.hightechhigh.org/~bshaddox

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