

Teaching our Teachers about Green



Bruce Offner

Redesigning curricula to help sustainability

TODAY'S HIGH SCHOOL STUDENTS ARE the next generation who will redefine our future and help make our built environments greener and more sustainable. However, to create this "generation green" we need to give students the knowledge and introductory skills that will stimulate and enable them to pursue careers in sustainable design and construction. The curricula and materials which currently exist for educating high school students about design and construction does not include the foundation for understanding sustainability. Our students should have the core, plus some advanced concepts of sustainability introduced to them in high school in order to help them succeed in the changing construction industry. Our emerging builders can learn about sustainable design and construction through modifications of the current curriculum taught in the classroom, and the insertion of these techniques, can be done by our teaching staff supplementing what is already in place. There is no need to go out and spend thousands of taxpayer dollars on new books. Books are not the solution.

Creation of new curricula has been resisted by most educators, so even contemplating the insertion and teaching of sustainable design and construction is disruptive to the norm. Moreover, some teachers perceive that they lack the skills to convey the

complexity of the topic. Many think that in today's market most courses about sustainability are focused upon models of environmental degradation and technological energy models. Basically, the topic scares them, and if approached in that vein, it definitely should!

Truth be told, ecological systems can be understood through other means and methods, ranging from the environmental to the aesthetic, the biological to the ethical, the practical to the theoretical. Our teachers can explore using many perspectives to send the message. I would recommend starting with the human aspects and you won't find these hidden within their current construction technology syllabus.

Here are some ideas:

Teach Regionally:

Schools need to base their teachings on the immediate environmental conditions that drive design and construction decisions. There are many strategies which may be a fit for most climates and locations, but many do not. For example; a rain garden or storm water retention basin shouldn't be designed in an arid climate. Educating about sustainability requires teaching systemic thinking and engagement with local and regional conditions and then connecting their impact on global issues.

Teach Big Picture:

Teaching with a perspective in anthropology, or "cultural ecology" is an approach which examines the "how" we live and considers our material accumulation, and the space with which we store it. This presents the understanding of why people desire a particular built environment. Why and how so many square feet of space are planned for what kind of action. Also, it is about how we covet that space (restoring it, re-configuring it, and re-conceptualizing it) essentially, all to store all of our "stuff"!

Teach Basic Human Needs:

Teaching with an environmental sociology approach brings to life one aspect of the "why" in design and construction. Students get the basics of how regional and community planning and design is used to strengthen the relationships between individuals. Our current development trends have alienated these basic social drivers from our lifestyle and have resulted in disconnected communities. We have designed habitats which have us living in isolation in our communities, homes and cars. We need to get back to building

neighborhoods that foster personal relationships, pride in place and accountability.

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Teach Involvement and Leadership:

We will need to encourage students to take a contributory leadership role in their community, perhaps as volunteers through their Environmental Advisory Councils. As their career path adapts to support sustainable systems, they will be prepared to succeed in it and have a capacity to respond to

the institutions that resist change. Promoting environmental literacy and community service and encouraging the broad accessibility to the public will go a long way in providing the generation "X and Y" a greater opportunity for employment and give them a voice in the green world.

How we design and build relies on our desire to configure it in a manner that suits the basic needs of existence. Teaching them the basic tenants, we will help them design and construct buildings that are responsibly built and that have a minimal impact on the environment during the building process and for the life of the building. Conveying these perspectives to students may not be commonplace, but awareness of human influences on the environment serves as the starting point. Also, with these initial approaches, the answer to the whether or not an environment is sustainable question becomes clearer. Regardless of our comfort level in the incorporation of this sustainability perspective into our curriculums, it is imperative that we do so, and do so successfully, to insure our youth have the knowledge base and tools to succeed in the marketplace.

So, how can our Administrators and Board of School Directors, elected officials and others make these programs successful? First and foremost there must be a commitment to train the teachers in green concepts. Once the teachers are educated, they will be better equipped to modify their curriculums. And then by executing this plan in a green learning environment, the teaching will also be by example.■




Bruce Offner has authored curriculum for LEED® Core Concepts and Green Associate, Generic Green Collar training, and co-authored the Residential "Building the Green Home" curriculum.

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