Chapter 1
Green School Frameworks

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ABSTRACT
Many green schools frameworks exist to guide schools toward environmentally responsible choices. Through the various lenses that green school frameworks provide, we can see a fuller picture of what comprises a green school—within the physical space, the organizational culture and the educational mission. This chapter describes the underlying themes within several major K-12 green school frameworks in order to better explain each framework’s purpose and interrelationship. The frameworks within this chapter vary in reach and scope, but all have similar aims: to create supportive school environments that teach students a deeper sense of their responsibility toward their community and their world. Because the goals of all green schools are, at root, global in scale, the pathways and the metrics can appear complex. This chapter provides an overview of the most widely-used frameworks to clarify the powerful underlying values that tie them together.

INTRODUCTION
With 25% of America’s population headed to school every day as students, teachers and staff, it is no wonder that schools hold a central place in our communities, both physically and socially. Pressure on educators and educational leaders to ensure student success means that everyone has an opinion about what will make a school better. One recent overview of green schools rating systems, both local and national, found 27 systems commonly used in the United States (Dautremont-Smith, 2012). To make matters more complicated for school advocates, staff and leadership, research continually shows that what works in transforming one school community may or may not work in another (Datnow, 2005; Durlak & DuPre, 2008). Through a fuller understanding of the current landscape of the green schools movement, those who are working to transform schools in their communities into more sustainable environments will better clarify and refine their own efforts.

Taken broadly, the concept of a green school is not a new one. Since the late nineteenth century, designers and educational professionals have debated the best way to heat, cool, ventilate and light a school while providing the optimal conditions for learning (Baker, 2012). Likewise, environmental education and Education for Sustainability have deep roots in the Nature Study movement at the turn of the last century (Comstock, 1911) and the...
Conservation Education movement during the Dust Bowl and Great Depression (Maher, 2007). What is new at this point in history, however, is a widely recognized movement that unites several disciplines, including green school building construction and operation, environmental literacy and the participatory values that support healthy organizations.

The words framework and program are used interchangeably in this chapter to refer to systems that support, classify and clarify action. Within the programs discussed, a few are rating systems; these are specifically systems that give rank to participants based on points or levels of achievement. Among the major frameworks included here, over 10,000 schools are represented. In examining the systems utilized by these schools, this chapter illuminates the united goals of a variety of frameworks, and therefore their power within a movement to make schools healthier, safer and more efficient places to teach and learn.

**OVERARCHING GREEN SCHOOLS CONCEPTS**

According to the Center for Green Schools at the U.S. Green Building Council (USGBC), a green school is a school that creates a healthy environment that is conducive to learning while saving energy, resources and money. The core of this definition is the popular triple bottom line of sustainability historically used in the business community: social, environmental and economic (Elkington, 1997). More than perhaps in any business sector or organizational endeavor, the social impact—the message that school environments send and the lessons that these environments teach—is essential to how environmental sustainability is implemented within schools.

In 2011, the U.S. Department of Education launched the Green Ribbon Schools Award Program, a monumental step forward for the green schools movement. The award’s application asks schools to demonstrate their progress toward three aspirational goals: zero environmental footprint (including energy, water, waste and carbon), a positive impact on occupant health and performance and demonstrated environmental literacy by all graduates (U.S. Department of Education, 2013). The three pillars—environmental impact, human health and ecoliteracy—act as a simple, elegant organizing principle for schools journeying toward whole-school sustainability (see Figure 1). As a variation on the traditional triple bottom line, the three pillars match more closely with the intentions of school operations and management.

While Green Ribbon Schools is an outcome-focused award program that encourages quantifiable progress in three categories, there is also a deeper culture shift within a school—an input of cultural norms—that allows this measurable progress to take hold. Many of the green school frameworks that will be discussed in this chapter focus on outcomes to help schools show their progress. However, a missing piece also needs to be addressed in any conversation about green schools: What does it take to shift the culture of a school to allow students, parents, faculty, staff and leadership to see sustainability as central, not auxiliary, to their success? In order for the shift in practices to truly take root, a change in organizational culture and values must occur as well. This cultural shift is incredibly hard to measure or compare across schools because it is unique to each school. However, it is an element that is important to understanding the full picture of successful green schools efforts.

**DEFINING SUSTAINABILITY: LESSONS FROM THE CORPORATE WORLD**

Before diving into the frameworks that exist to measure and track green school successes, it will be helpful to look at the broader effort to define success in sustainability as a whole. In a recent paper examining the role of sustainability