ABSTRACT
Outdoor education is a form of teaching that aims to integrate nature and outdoor exploration with traditional academic studies. Hands-on experiences in nature promote an understanding for natural processes and exist as a platform for cross-curricular learning. Through the creation and use of a schoolyard field guide I hope to foster an interest in outdoor exploration, personal discovery, and environmental awareness for the students at Moorestown Friends School (MFS) in Moorestown, New Jersey. In addition, the schoolyard field guide and accompanying teacher curriculum will serve as a valuable teaching tool for the greater MFS community.

BACKGROUND
Outdoor education is a method of teaching that links real life experiences with natural resources in an outdoor setting (Alexander, 1991). It can enhance existing science curriculum as well as provide valuable teaching opportunities in the fields of English, mathematics, history, social studies, and art (Mason, 2000; Alexander, 1991; Wagner, 2000). Furthermore, hands-on experiences in nature encourages critical thinking, learning through experience, and decision making while using the senses to discover and observe (Alexander, 1991).

Moving academic studies outside encourages students to develop environmental awareness and promotes positive human-nature relationships. By working in nature, students acquire an understanding for how their actions affect other living organisms and how people are affected by the way they use natural resources (Dopico, E., & Garcia-Házquez, E. (2011). Leaving the classroom: A didactic framework for education in environmental sciences. Cultural Studies of Science Education, 6(2), 311-326). Kirkland, J. (2007). No student left indoors: creating a field guide to your schoolyard. St. Ives Publishing, Lyons, PA.

REFERENCES

THE FIELD GUIDE
The format and outline for the schoolyard field guide was adapted from examples provided by Jane Kirkland in No Student Left Indoors: Creating a Field Guide to your Schoolyard. I created templates for each page of the guide using Microsoft Publisher. Student participants will be able to access the individual pages through a shared network in order to make contributions to the field guide.

Each contributor will receive a copy of the finished field guide upon completion of the after school program. In addition, each MFS classroom teacher for grades K through 5th will receive a copy of the field guide and the accompanying curriculum packet. Additional copies of the guide and curriculum packet will be made available for middle school and upper school teachers.

PROJECT OBJECTIVES
Main objective:
To create a schoolyard field guide with supplementary curriculum that highlights the natural features of an existing forested-wetland on the campus of Moorestown Friends School (see Figure 1).

Sub-objectives:
1. To involve a portion of the student body in the planning and implementing process.
2. To generate awareness for, and interest in, native New Jersey plant communities.
3. To provide access to the outdoors.
4. To encourage the use of nature and outdoor exploration in all academic areas of study.

PROCEDURES
The project began with an eight week after-school program for 3rd and 4th grade students. The program was titled the “Naturalist’s Club” and met eight times from January to February of 2012. During this period students conducted hands-on exploration of the wetland and sweet gum successional forest on the southern end of the MFS property. Plant and animal observations led to discussions of the similarities and differences between the two habitats, and students’ personal interests in animal tracking and mapping dictated many of the activity plans. After discussing ways in which to make the natural space more accessible for the MFS community, the group inspired the idea for the schoolyard field guide and worked collaboratively on a large-scale map of the natural area (see Figure 2).

The second after school session begins in mid April and runs through May of 2012. New and returning 3rd and 4th grade participants have signed up to assist in the research and creation of the MFS Schoolyard Field Guide. The second “Naturalist Club” will split their time between data collection in the forested wetland behind the school, and book construction in the school’s computer lab.

The field guide will include the following information:
• Forward. This will be a summary of the project as well as a message to the users.
• Contributors. The list of contributors will be a permanent record of the students who helped with the project.
• About Moorestown Friends School. This brief history will focus mainly on the land and how it has transformed over the past century.
• Map of Natural Area
• Content Pages. The remainder of the book will be dedicated to the date collected by the students. The information will be organized by habitats (i.e., the wetland and the sweet gum successional forest) and will include details on the structure, plants, and animals found in each.

No Student Le+ Indoors: Crea2ng

MFS Campus and Playing Fields

Wetland Features surrounded by a Sweet Gum Successional Forest

Fig. 1 A 2007 aerial photograph of the Moorestown Friends School campus shows the main campus in relation to the wetland feature and sweet gum successional forest.

Fig. 2 A portion of the incomplete student map showing the wetland feature (marked with yellow cattails) and the surrounding forest. Also visible are parts of the cross-country trail (dotted line) and neighborhood houses.

Kaitlin Bear; M.E.S Spring 2012
Readers: Sarah A. Willig and NancyLee Bergey

Forward

Jane Kirkland in No Student Left Indoors: Creating a Field Guide to your Schoolyard. I created templates for each page of the guide using Microsoft Publisher. Student participants will be able to access the individual pages through a shared network in order to make contributions to the field guide.

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