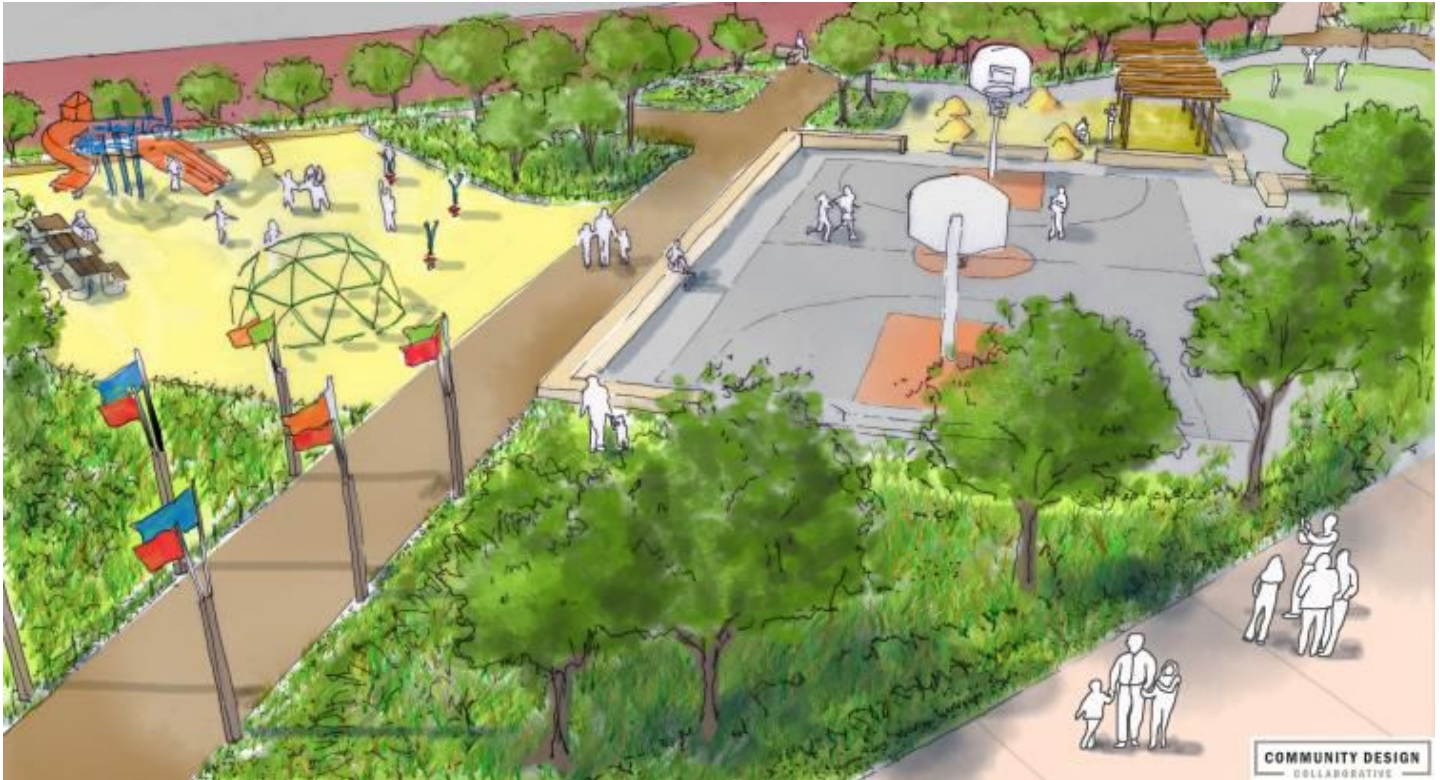


**Philadelphia Green Schools:**  
Green Schools, Thriving Neighborhoods



**A Guide for Green Schoolyards:**

A comparative analysis of the Green Schoolyards guides published by the Center for Ecoliteracy, Evergreen, and Community Design Collaborative

By  
**Catherine Baltazar**

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Professor Anne Whiston Spirn  
Mami Hara

## Introduction

The Philadelphia Water Department has created and developed an initiative that aims at promoting green infrastructure projects on school grounds with the hopes of encouraging thriving schools and neighborhoods. By boosting both educational and recreational opportunities for schools, green infrastructure projects have the ability to provide benefits for children and the surrounding community. Moreover, green schoolyards inspire longer-term improved environmental conditions, both in terms of aesthetic (the greening of urban communities) and environmental education (cities as part of the natural environment of urban areas).

The goal of these projects is to avoid having to incorporate more grey infrastructure into urban areas and to instead substitute these solutions with greener options like rain gardens. Additionally, one of the ways to ensure the efficiency of these projects, especially those in schoolyards, is to have as much involvement from the greater community as possible. Allowing community members to partake in these activities encourages positive environmental stewardship amongst everyone, not only the children in schools. However, it is important to be able to provide students, educators, administrators, and community members at large with a guide that will allow them to be able to have as much information as possible to be able to implement green infrastructure projects of their own in other communities.

As such, this paper aims to provide an overview and recommendation for a potential guide that could be used by students, educators, administrators, and community members at large by analyzing and critiquing other examples of Green Schoolyards guides.

For the purpose of this analysis, the following guides:

1. “The Learning Grounds: Guide for Schools” by Evergreen
2. “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” by Center for Ecoliteracy
3. “Transforming Philadelphia’s Schoolyards” by Community Design Collaborative

were reviewed and analyzed based on different components:

- Interactivity: How interactive are these guides? What makes them interactive? Do they encourage readers to take action?
- Comprehensiveness: Is the guide written for all audiences? Or who is the target audience? Can everyone, regardless of educational background, understand the guide?
- Incorporation of Partnerships & Collaboration: What role are partners given in these guides? Who are the ideal partners? What kinds of collaboration do they encourage within participating parties?

Each guide will receive a thorough analysis, identifying the pros and cons of what is working and what was not.

Following the analysis, a sample outline of what the ideal guide and the content for the guide should look like will be included, based on the components that were working best from the three aforementioned guides. The goal of the new guide should be to allow all readers to be able to have the tools and resources available to create a Green Schoolyards regardless of where they are located.

## **Green Schoolyards Guide #1:** “The Learning Grounds: Guide for Schools” by Evergreen

Evergreen is a Canadian national non-profit environmental organization with a mission statement to inspire cities to be greener and more sustainable<sup>1</sup>. The organization has four different focus areas of programming called Greenspace, Children, Food and CityWorks. Each area of programming includes various resources, including, but not limited to, different planning and design toolkits and guides. For the purpose of this analysis, I will be focusing on their “Children” program, more specifically the “Greening School Grounds” component of it. The “Greening School Grounds” focus provides schools with the resources they would need to develop a green schoolyard project from start to finish, and even provides project managers with information on the funding opportunities available through Evergreen.

An example of one of the tools available for schools is the green schoolyards guide called, “The Learning Grounds: Guide for Schools,” which includes two supplementary resources, “All Hands in the Dirt: A Guide to Designing and Creating Natural School Grounds” and “Getting Started Workshop<sup>2</sup>” as part of the packet. The resources were designed to provide a step-by-step guideline to schools to create and develop their own “greening projects” on their campuses.

From the three aforementioned guides for Green Schoolyards, “The Learning Grounds: Guide for Schools” is perhaps the most interactive and among the most comprehensive. There are many aspects of this guide that make it an effective tool to use. And based on the previous categories, they are as follows:

1. *Interactivity: How interactive is the guide? What makes it interactive? How does it encourage readers to take action?*

Upon first glance, it is obvious to see that “The Learning Grounds: Guide for Schools” has visuals that make it interactive. The Title Page and Table of Contents (as shown in Figure 1), both have fun, interactive fonts that are welcoming for all audiences. The decorative font is used to establish whom the target audience for this guide is: students, parents, educators, and community members. The mutuality of the font is perfect for the tone the guide is setting: that anyone and everyone can participate in these projects.

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<sup>1</sup>According to the Evergreen website, their mission statement is “inspiring action to green cities.”  
<http://www.evergreen.ca/our-impact/children/greening-school-grounds/>

<sup>2</sup> The resources addressed in this report are available here: <http://www.evergreen.ca/get-involved/resources/school-ground-greening/>

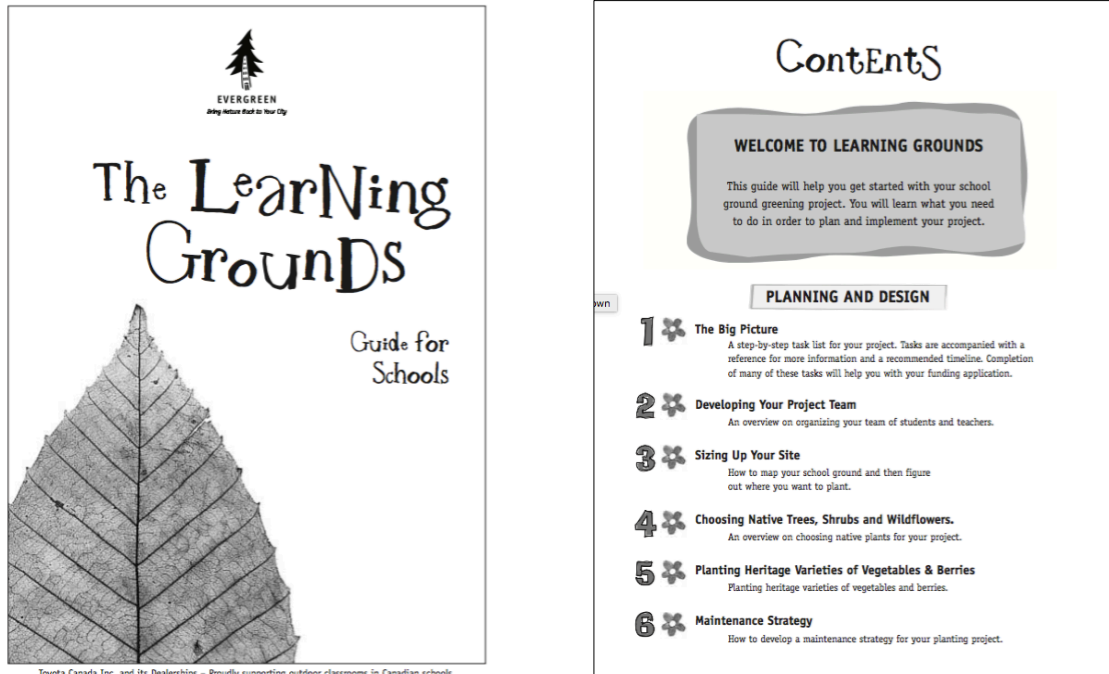


Figure 1. Sample pages from: “The Learning Grounds: Guide for Schools” published by Evergreen

The drawings, as we see in the two selected pages, also help draw the reader’s attention to the guide. By nature, people are attracted to visuals and marketing firms often aim to use images to capture a reader’s attention. In most cases, readers are more likely to read content containing some sort of image or visual than content without them. In fact, a Forbes article<sup>3</sup>, regarding the use of visual marketing for advertising, stated that consumers consider clear, detailed images to be essential and can carry more weight than product or service information, full description, etc. Moreover, the images are not only meant to get readers to read the content, but also because they are fun, they continue to call for all audiences to take action. The fun floral numbers can be interactive for parents sharing this guide with their children, and the visual content draws the attention of potential participants. The combination of the drawings and the fun, interactive font used in “The Learning Grounds: Guide for Schools” encourage engagement between the reader and the information provided.

Furthermore, the chosen pictures and text augment each other. By using plants and flowers as visuals for the guide, the general theme of “environmental” is constantly reinforced throughout the guide.

Another way that “The Learning Grounds: Guide for Schools” is interactive and keeps readers engaged is through the strong use of lists. By providing information in the form of a checklist, participants that are following the step-by-step instruction of the guide can “check off” each step as they progress, which allows them to feel successful throughout the process. There are many

<sup>3</sup> Forbes article written by Dan Schawbel called “Leverage Visual Marketing to Grow Your Business.” It can be found here: <http://www.forbes.com/sites/danschawbel/2011/10/06/leverage-visual-marketing-to-grow-your-business/>

benefits to using a checklist for projects like those encouraged in the guide. I will also elaborate more on this topic in the upcoming section, *Sample Outline for Ideal Guide*.

Checklists help with organization. With projects, like those for Green Schoolyards, with many components and parties involved, it is essential to keep track of every step of the way. Checklists in the form of to-do lists, as are used in “The Learning Grounds: Guide for Schools” (example shown in Figure 2.), are easy to use and are efficient with time and resource management. Evergreen uses checklists to guide and show readers how easy greening a schoolyard can be. With the resources readily available to the reader, the guide suggests that there can be no excuse for inaction.

LGG – refers to this guide      AHD – All Hands in the Dirt

<b>1. GETTING STARTED</b>		
<b>A) Form a Committee</b>	<b>Resources</b>	<b>Recommended Timeline</b>
<b>Task</b>		
<input type="checkbox"/> Plan a meeting with your committee.	LGG Ch.2	September
<b>B) Research</b>	<b>Resources</b>	<b>Recommended Timeline</b>
<b>Task</b>		
<input type="checkbox"/> Start your research with a review of Evergreen resources.	Print & on-line resources <a href="http://www.evergreen.ca/en/lg/lg-resources.html">www.evergreen.ca/en/lg/lg-resources.html</a>	September–October
<input type="checkbox"/> View the videos. Involve staff, students, parents & the community.	<i>A Crack in the Pavement</i>	
<input type="checkbox"/> Check out this resource if you need to convince anyone about the benefits of your project.	<i>Nature Nurtures</i>	
<input type="checkbox"/> Take a walk around the site with your committee.	LGG Ch.3, AHD p. 23–28	September–December
<input type="checkbox"/> Visit other schools that have greening projects or check out what other schools have done on the Evergreen’s on-line project registry.	LGG Ch.15 <i>Design Ideas</i> Project Registry ( <a href="http://www.evergreen.ca/en/lg/lg-projects.html">www.evergreen.ca/en/lg/lg-projects.html</a> )	September–October May–August

Figure 2. Checklist example from the “The Big Picture” section of “The Learning Grounds: Guide for Schools” published by Evergreen.

As is shown in Figure 2, this particular checklist offers a general layout for a possible road map that can be used for any project. It includes a Task List (1<sup>st</sup> column), a Resources Column (2<sup>nd</sup> column) and Recommended Timeline (3<sup>rd</sup> column). Evergreen created this particular checklist based on different factors for each column. For example:

1. Task List Column: Tasks are based on the recommendations other schools gave regarding the design, planning and implementation phases of past, successful projects.

2. Resources Column: When available, some of the tasks from the Task List Column might reference supplementary resources that could be helpful during that particular step
3. Recommended Timeline Column: Timeline was in reference to when each step should be finished by in order to meet a Funding Application deadline for specific Evergreen grants. *Important to note that deadline referenced in guide is January 26<sup>th</sup>, 2005.*

While these columns are particular to Evergreen and Canada, there are ways to re-design this checklist to better suit the needs of schools and communities in both Philadelphia and beyond. A sample checklist will be included in the *Sample Outline for Ideal Guide* section of this paper.

Another way the guide is interactive is that it provides a few tips and questions at the end of most sections to remind readers of why they are pushing for a green schoolyard as well as provide tips for some of the ways to better achieve their goal. The questions cause for readers to be constantly reminded of why they are pushing to implement a green schoolyard in their community, which can be positive in grounding the project. While the tips can offer pointers to ways to more effectively and efficiently get the project finished, they also serve as reminders that these projects can take time and to allow for that to happen.

Overall, based on the aforementioned reasons, “The Learning Grounds: Guide for Schools” is a strong example of an interactive guide. I will be extracting some of the previously mentioned components of this guide for the *Sample Outline for Ideal Guide* section and elaborate on how Philadelphia can also benefit from the successful components of Evergreen’s existing guide.

On another note, again, from the three guides to be analyzed, “The Learning Grounds: Guide for Schools” is not only the most interactive, but it is also one of the most comprehensive for all audiences of the three guides. It is the most comprehensive based on the following:

2. Comprehensiveness: *Is the guide written for all audiences? Or who is the target audience? Can everyone, regardless of educational background, understand the guide?*

As noted earlier, the most important aspect of making a successful guide is being able to identify and define whom the target audience is. For Evergreen’s “The Learning Grounds: Guide for Schools,” it seems that the target audience includes students, parents, educators, and community members. The language that is used in the guide avoids the technical jargon that often times offsets readers from communities where they might not have a strong educational background, which is prevalent in many communities of color. Moreover, the use of technical jargon in guides like these can reduce the capacity of an audience to be able to understand and retain the intended messages of the author. This happens because readers who are not familiar with the language will be excluded from extracting the actual meaning behind the words.

The use of jargon can also cause for the reader to deem the author less trustworthy. According to a study<sup>4</sup> published by the Society for Personality and Social Psychology, the less concrete the language used is, the less trustworthy you can seem. In other words, simpler messages have

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<sup>4</sup> Information of study by Hansen, Jochim and Wanke, Michaela called “Truth from Language and Truth from Fit: The Impact of Linguistic Concreteness and Level of Construal on Subjective Truth” published by the Society for Personality and Social Psychology on November 12<sup>th</sup> 2010.

greater resonance, are easier to remember, easier to share and most likely to be acted upon. All of which are essential features for having a successful Green Schoolyards Guide.

A successful example of one of the ways Evergreen’s “The Learning Grounds: Guide for Schools” is comprehensive can be seen from Figure 3. The use of the word “you” encourages readers to use the guide in the ways that most benefits **them**. While, we are the creators of the guide, it is certainly up to the reader to interpret what they can out of it, which is why the goal for the design of the guide should be to make it easy for readers to understand what resources are available for their initiatives. Evergreen does a great job at allowing readers to have the freedom to do what works best for their projects. Also, the use of the word “team” encourages collaboration amongst all interested parties and the expertise and skills they can offer.

# 2

## DEVELOPING YOUR PROJECT TEAM

The process of building a Green Team for a successful project is found in **AHD p. 17–21**. Here are some basic steps to get you started.

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1


### How to Build an Effective Team

**1. The Participatory Process**

- Having a wide range of people involved (i.e. staff, students, parents and the community) is the best way to plan and complete a project. It ensures a broad base of support that will sustain the project for many years.
- To learn more about key people to include in your project, refer to **AHD p.7**.

**2. A Summary of the Team’s Skills and Interests**

- Once you have gathered together all those interested in your project, find out what skills and areas of interest you have available in your group.
- Check out the skills inventory in **AHD p. 15**. Copy this form and distribute to all those interested in participating.



Debby Norton

**3. Group People Into Task Areas**

- Using an organizational chart (like the one below), note who is interested in each area. This will help you identify what skills are present and what additional skills your team requires.
- Even if there is only a small group of people involved, divide the tasks to focus efforts and define areas of responsibility.
- If you have several people interested in the same area, they can share responsibility for the task.

**How to Use the Organizational Chart:**

- Create your own list of tasks to put across the top of the chart. Refer to **The Big Picture** for ideas.
- Committee members can choose which areas they would like to be involved in.

Name	Planning	Fundraising	Planting	Maintenance	Publicity	Other
Cam	☑			☑		refreshments
Debby		☑		☑		Web page
Tim			☑		☑	photos
Elizabeth			☑	☑		

Figure 3. Sample from the “Developing Your Project Team” section of “The Learning Grounds: Guide for Schools” published by Evergreen.

Furthermore, the wording of some of the action points also encourages action; it inspires readers to move beyond what they are reading about how to successfully implement a green schoolyard project, and actually make it happen.

Lastly, one of the other important components that Evergreen’s “The Learning Grounds: Guide for Schools” can be improved is the Incorporation of Partnerships and Collaboration. While, the guide was exemplary in its interactivity and comprehensiveness, the ways in which it incorporates partnerships and collaboration is on. The reasons are as follows:

3. *Incorporation of Partnerships & Collaboration: What role are partners given in these guides? Who are the ideal partners? What kinds of collaboration do they encourage within participating parties?*

The guide makes an immediate acknowledgement of its partnership with Toyota and other corporate partners. Evergreen places a huge importance on corporate partnerships in helping them achieve the goal of their mission statement. This is not to say that corporate partners are not essential or relevant to Green Schoolyards, the problem is that in some sections of the guide, there are references to using these partners as the only recommended funding source for projects.

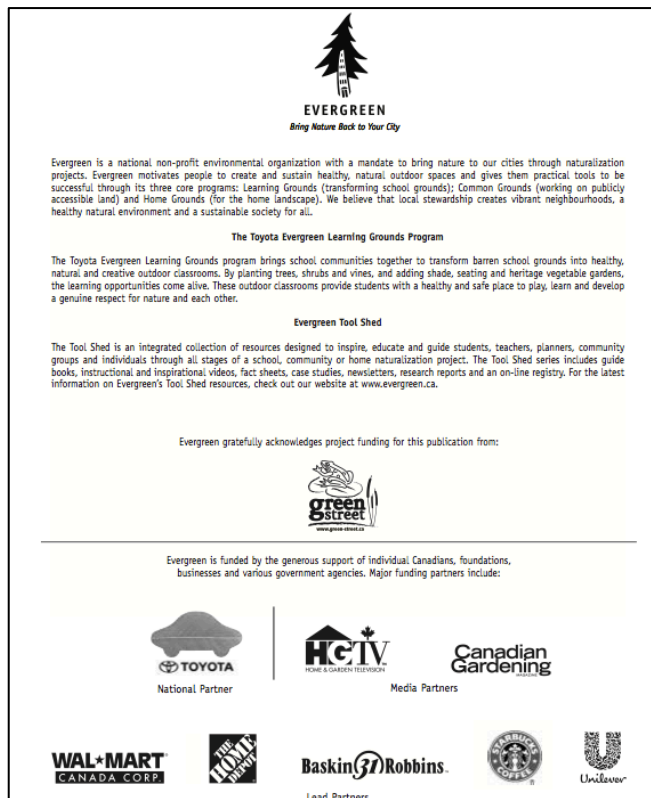


Figure 3. Example of some of Evergreen’s most active partners, which include Toyota. Page taken from “The Learning Grounds: Guide for Schools” published by Evergreen.

In the case of Philadelphia, Toyota is not the main auto partner for the city, but rather Subaru. Regarding this analysis, it is uncertain, in terms of funding opportunities, whether Subaru is supportive of Green Schoolyard initiatives.



While corporate partnerships are given more weight in the guide, another incorporation of partnerships and collaboration included, is the way the guide makes a strong recommendation to readers to conduct a survey that aims at including the perspectives and knowledge of the surrounding community. This part is especially relevant, as green schoolyards projects tend to be more successful when all interested parties are considered during the designing, planning and implementation steps. The constant reminder for the reader to keep all participating parties in communication and up-to-date with each progressing step is also especially essential as well as present in “The Learning Grounds: Guide for Schools.”

While the guide is successful in keeping readers engaged and informed, in order for the guide to be used in Philadelphia, there were some aspects not addressed or developed as well as they could have been.


For example, the guide fails to effectively mention what are the ways to keep maintenance of these projects after they have been implemented. Evergreen considers maintenance to be dealt with on a voluntary-basis, and does not offer an alternative for this approach. What if these green schoolyards projects were to be implemented by communities of color, whom might face other obstacles, including, but not limited to, financial, social and cultural barriers? In these cases, it might be difficult to provide incentives for community members to donate time and energy to the maintenance of these projects when there are other difficulties and hardships to overcome. Another suggestion made is to have local businesses and organizations donate time. In this case, there could be an incentive for this to happen, but there would be no consistency regarding this alternative. One would have to have a calendar organized and filled out to ensure that there is some form of maintenance. As such, there is no consistent maintenance plan included in the guide that could actually be implemented. The guide by the Center for Ecoliteracy, “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms,” provides an alternative option for maintenance, which I will discuss in a later section.

Another aspect of “The Learning Grounds: Guide for Schools” that should have been elaborated on is regarding for what levels of education creating green schoolyards is for. It can be assumed that the educational audiences for this particular guide are students from K-8. While there are some curriculum materials for students in high school (see Figure 4.), the section titled, “Greening High Schools” only contains an article explaining the importance of greening high schools and not necessarily how to achieve such.

**Other curriculum resources:**

**Worms Eat Our Garbage: Classroom Activities for a Better Environment**  
Mary Applehof. Kalamazoo, Michigan: Flower Press, 1993.

**The Wonderful World of Wigglers: Exploring the Mysteries and Magic of the Mighty Earthworm**  
Julia Hand. Food Works, 1997.



**Beans and their Buddies: An Integrated Primary Science Resource**  
Sandy Pollmer and Diana Mumford, eds. Gabriola, B.C.: B.C. in the Classroom Foundation.

**Grow Lab: Activities for Growing Minds**  
Burlington, Vermont: National Gardening Association. 1990.

**Feeding Minds, Fighting Hunger**  
This site offers "an international classroom for exploring the problems of hunger, malnutrition and food insecurity." There are sample materials and lessons, and an interactive forum for exchanging ideas and experiences around the world. For primary, intermediate and secondary levels.  
<http://www.feedingminds.org/>

**Discovering the Food System: An Experiential Learning Program for Young and Inquiring Minds**  
This site offers on-line curriculum for understanding the food system, and is designed for teachers and leaders of middle- and high-schooled aged youth. <http://www.cce.cornell.edu/foodsys/>

**Teaching unit on how to educate about food systems, Green Teacher 65, Summer 2001**  
Activities and topics include: What is a Sustainable Food System?; A Three Sisters Garden; Classroom Hydroponics. Order copies on-line at [www.greenteacher.com/contents65.html](http://www.greenteacher.com/contents65.html)

**Gardens for Growing People**  
Tips and activities for working with kids in the garden—<http://www.svn.net/growpepl/>

**Kids Gardening**  
<http://www.kidsgardening.org/>

**Children's Stories about Gardening**  
<http://www.city.toronto.on.ca/parks/programs/storybooks.html>

Figure 4. Information regarding other curriculum suggestions offered in “The Learning Grounds: Guide for Schools” published by Evergreen.

Furthermore, the guide does offer plenty of supplementary materials that can be tweaked to support high school level education. More on this topic will be addressed in the *Sample Outline for Ideal Guide* section of this paper.

Collaboration is another aspect of partnerships that is briefly mentioned throughout the guide. While it does include different ways to students, parents, educators, and community members to be involved, it fails to acknowledge how school administration or school district can also partake in the projects. In a city, like Philadelphia, where the school district plays a lead role in how public schools work, it would be virtually impossible to not include them as part of the projects. For Philadelphia, a component that addresses the different ways that school officials like administrators and school district can help with these projects, is necessary to ensure a long-term success for any green schoolyard project. Moreover, the Philadelphia Water Department, which is leading the revolution of green schoolyards, must also be included or at least considered for the projects. Not including any of the aforementioned parties would be a huge mistake for project leaders.

**Green Schoolyards Guide #2: “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms”** by Center for Ecoliteracy

The Center for Ecoliteracy is a non-profit organization working to promote environmental and ecological education in schools. They specifically work with schools to encourage them to become learning hubs for understanding the role nature plays within their natural environment<sup>5</sup>. The organization has various different resources, including, but not limited to, books, pamphlets, guides, professional networking resources, and provides consulting for different groups. They also work at all scales from local to national.

For the purpose of this analysis, I will be focusing on the 2009 guide called, “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms,” which was created by the Center for Ecoliteracy in collaboration with the Life Lab Science Organization, one of the leading organizations advocating for garden-based education.

Among some of the topics covered in this guide are: connecting school gardens to school curriculum, learning ways to involve the community, and identifying the responsibilities of each participating party in school garden projects. The 51-page guide provides information that would be relevant to making the case for having school gardens on school campuses.

From the three aforementioned guides for Green Schoolyards, “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” by Center for Ecoliteracy is among the most comprehensive, but is not as interactive as Evergreen’s “The Learning Grounds: Guide for Schools.” While this tool is informative, there are many aspect of it that make it less interactive in comparison to “The Learning Grounds: Guide for Schools.” Based on the previously mentioned categories, the reasons are as follows:

1. *Interactivity: How interactive is the guide? What makes it interactive? How does it encourage readers to take action?*

“Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” begins with a text heavy page about the work of the Life Lab Science Organization and their reasons for why gardening is a useful tool for engaging students to care about our natural environment (See Figure 5.). While relevant information, the pages lacks the visual content to keep the readers engaged. Evergreen is a great example of how effective text heavy pages can be when it includes visuals to help guide the reader to the end of the page.

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<sup>5</sup> According to the Center for Ecoliteracy website, their mission statement is to “promote ecological education.” <http://www.ecoliteracy.org/about>

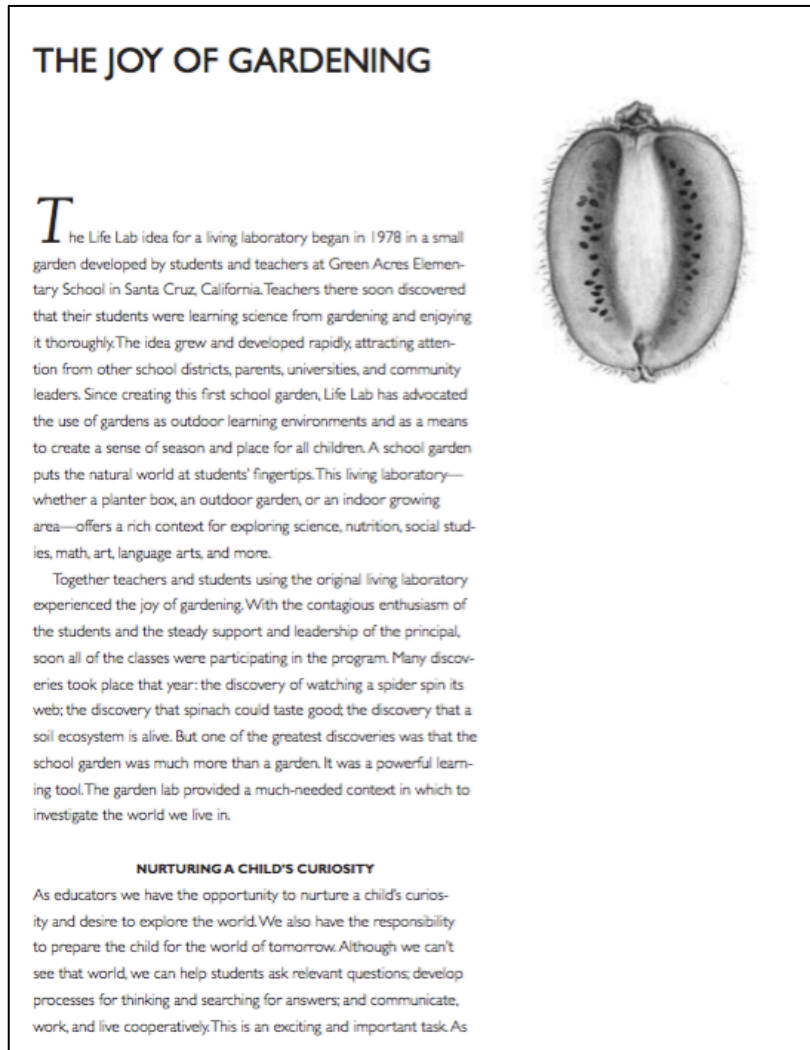


Figure 5. Sample page from “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” published by the Center for Ecoliteracy in 2009.

Moreover, as we can see from the selected page, there is enough space to allow there to be more images instead of only having the one image. The choice of only having one drawing selected that of half a kiwi is not necessarily connected to what the text is saying.

On a different note, the font selected for this guide is easy to read and legible. While it is not as “fun” as the font chose by Evergreen, this font does make it easy for audiences to understand what is written. In this case, it seems that the general tone for the guide is for it to be more informative than interactive. There is less engagement encouraged between the text and the readers, and instead opts to have a more informational direction instead.

If a reader were to pick up this guide, the information within the guide would not actually spark a reader to create a new project, but rather elaborate on an existing project. Lastly, this guide does not only use drawings, but also incorporates some photographs taken at a particular Center for Ecoliteracy project location. The photographs chosen contribute strongly to the message the

guide is pursuing: that school gardens are effective tools in teaching children about the natural environment within their school campus (see Figure 6.).



Figure 6. Sample page and photograph from “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” published by the Center for Ecoliteracy in 2009. The photograph is captioned: “Teaching a sense of place: students re-create the surrounding neighborhood in their garden.”

Another way the green schoolyards guide, “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” differs from Evergreen’s “The Learning Grounds: Guide for Schools” is in the ways it does not include or incorporate any form of checklists. In the sections where the Center for Ecoliteracy has step-by-step instructions on how to prepare a garden site or how to transition the garden into an outdoor classroom, the instruction is provided in a basic numerical list. It can be assumed that the reader can choose to checkmark each step after it has been completed, but the layout of the text can be jumbled together in a space-preserving manner

(see Figure 7.). It seems that the goal was to provide all of the information in a one-page checklist.

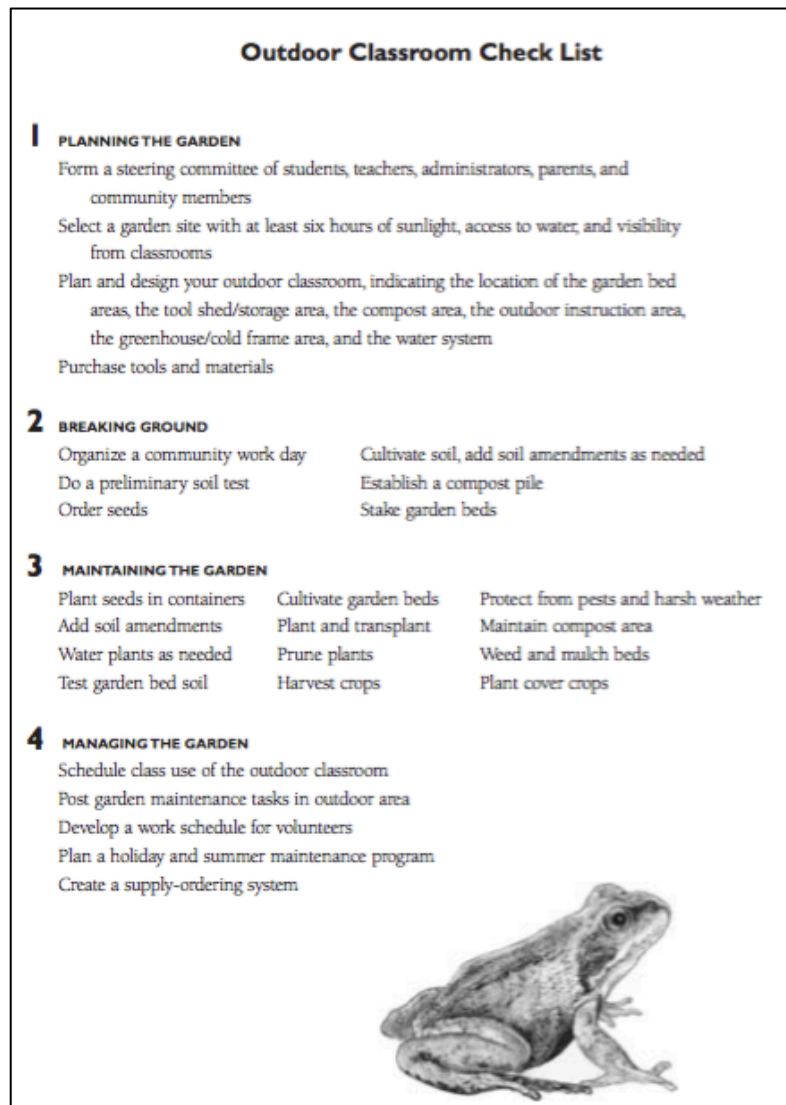


Figure 7. Sample page of the “Outdoor Classroom Checklist” provided in “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” published by the Center for Ecoliteracy in 2009.

This choice to have all of the information in this format is clearly not as interactive as the list made available by Evergreen’s “The Learning Grounds: Guide for Schools” (see Figure 2. for reference).

Overall, it seems that in comparison to Evergreen’s “The Learning Grounds: Guide for Schools.” the Center for Ecoliteracy’s “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” guide is not as interactive. The guide, however, does meet Evergreen’s guide, in terms of its comprehensiveness. The reasons are as follows:

2. Comprehensiveness: *Is the guide written for all audiences? Or who is the target audience? Can everyone, regardless of educational background, understand the guide?*

The Center for Ecoliteracy's guide possesses the ability to be understood by all audiences because of the word choices it uses. For example, the guide uses language that ensures that everyone who is interested in making school gardens into outdoor classrooms can and should participate. It advocates for school garden by prioritizing all of the efforts to be for the benefit of the children, above all. Thus, the target audience for the guide becomes anyone and everyone who care about the children and youth of the community.

This guide, too, avoids the use of technical jargon, except when necessary. The technical jargon is present in sections where explanations for certain plants species are given or to determine the origins of school gardens are relevant are from. Furthermore, the guide constantly reminds readers that there should be no reason for not having a garden on school grounds, and that so long as there is an interested party, there should be a school garden.

This concrete and direct language allows for the Center for Ecoliteracy to be perceived as trustworthy for all audiences, because all audiences can understand the guide. Also, the guide clearly identifies what role each party involved in the project should play, from students to school administrators. More about this will be discussed in the Incorporation of Partnerships and Collaboration section to follow.

Lastly, another component of "Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms" that is addressed in a different way, in comparison to Evergreen's guide is in reference to the Incorporation of Partnerships and Collaboration, which is as follows:

3. *Incorporation of Partnerships & Collaboration: What role are partners given in these guides? Who are the ideal partners? What kinds of collaboration do they encourage within participating parties?*

The Center for Ecoliteracy guide differs from Evergreen in that it does not address a certain corporate partner or any explicit partner for that matter. The types of partnerships and collaborations it encourages are more related to the work between all involved parties: students, educators, administrators, and community members. There is a greater focus in prioritizing these kinds of relationships for the better of the schools and the surrounding communities. The guide, itself, is divided up based on who is reading what section. The kinds of suggestions offered are customized for that particular audience, which is helpful for distribution purposes.

Moreover, the guide also gives equal priority to all participating parties and instead opts to address why each component is crucial to the success of a school garden. Instead of solely assuming the responsibility of the school garden on the students, teachers or community member, the Center for Ecoliteracy explicitly distributes equal weight to the kinds of help each supporting party can provide. Lastly, the language of the guide reinforces the belief of a shared garden with words like "your garden" and "your outdoor classroom," which can be mutual for all readers.

This guide also makes a recommendation for the reader to conduct a survey that will allow for all participating parties to list what they are looking for with a school garden and what they hope the community will benefit from the project. Again, this part is especially crucial to the project

because it keeps all parties in the loop with as much knowledge as possible for the benefit of the project.

Furthermore, in comparison to the Evergreen guide, the Center for Ecoliteracy’s *Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms*” actually incorporates a position called the “Garden Coordinator,” who will be responsible for all the tasks and duties related to the school’s garden, including maintenance (see Figure 8., for a full list of the responsibilities).



Harvesting lettuce in early spring. © CEL/Tyler

such as lettuce, radishes, carrots, and broccoli in early spring so that students can harvest them before school is out, and slow-growing crops such as pumpkins, corn, and tomatoes in late spring so that students can harvest them in the fall.

**GARDEN COORDINATOR**

No doubt you realize, it’s helpful to have someone to coordinate the daily details. Some schools that Life Lab works with have a part-time aide, a parent volunteer, or even a teacher with time officially allotted to garden responsibilities.

Schools fund their paid aide position in various ways—sometimes with district funds and grants, sometimes with fundraisers. Garden fundraisers can offer unique community events. Selling live plants, plant seedlings, and seeds provide communities with valuable products and promote personal gardens. Consider an annual harvest festival, which not only generates cash, but is loads of fun and gets the community excited about the school garden program. You also might consider inquiring about a mentor program through your school district. Some teachers have received stipends and materials budgets through their district office so they can work as garden program mentors at their site or within their district. Schools that do not have an aide often rely upon an active steering committee of teachers, volunteers, and an administrator.

But remember, no matter how much help you may have, we strongly recommend that teachers continue to participate in the outdoor classroom. Unless teachers are present during the student garden experiences, they cannot realize the numerous opportunities for incorporating the garden experience throughout other curricular topics. The garden should not become a pull-out program.

Figure 8. “Garden Coordinator” job description with full details of job responsibilities and funding sources, provided in *“Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms”* published by the Center for Ecoliteracy in 2009.

This job description also provides information on how this position could be funded, which is especially relevant. In contrast to Evergreen’s *The Learning Grounds: Guide for Schools*,” the Center for Ecoliteracy provides more accessible funding options and suggestions that could perhaps be applied in Philadelphia. Furthermore, as Figure 8 shows, regardless of the creation of



this position, the school garden, once implemented should be continuously used by everyone, in order to fully indulge in the benefits of the garden.

Yet, while the guide is successful in keeping readers informed, in order for the guide to be used in Philadelphia, there were some aspects not addressed or developed as well as they could have been.

For example, the guide fails to elaborate for what levels of education the green school gardens projects is for. Based on the photographs chosen for the guide, it can be assumed that the educational audiences for this particular guide are students from K-8. The guide often makes references to children making greater use of school gardens, and fails to explicitly address whom these “children” are. Again, the guide does offer the opportunity to tweak the information provided to suit the educational needs and level of high schools. More on this topic will be addressed in the *Sample Outline for Ideal Guide* section of this paper.

### **Green Schoolyards Guide #3: “Transforming Philadelphia’s Schoolyards”** by Community Design Collaborative

The Community Design Collaborative provides different non-profit organizations in the greater Philadelphia area with pro bono design services, volunteer opportunities, and other advocacy efforts<sup>6</sup>. This particular collaborative offers non-profits different resources by matching organizations with architects, landscape architects, urban planners, etc., based on the project of the organization. Their entire efforts are to provide opportunities for non-profits to indulge in the various expertise and skills available through the Collaborative.

For the purpose of this analysis, I will be focusing on the guide published in 2015 by the Community Design Collaborative titled, “Transforming Philadelphia’s Schoolyards,” in collaboration with the Philadelphia Water Department’s *Green City, Clean Waters* campaign. This particular guide was created for both school and communities to make schoolyards an active component of Philadelphia’s *Green City, Clean Waters* stormwater management plan, which encourages the use of green infrastructure over grey infrastructure. Yet, the guide was also created and designed for schools and communities that want to apply for a “Design Grant” from the Community Design Collaborative.

Moreover, this particular design guide contains the following content<sup>7</sup>:

- Case Studies: The stories of three different schools that worked with the Collaborative to receive access to resources for different scales and budgets.
- Design Elements: Contains a well-illustrated list of suggestions by the Collaborative’s volunteers with designs to be integrated in different schoolyard projects over an extended period of time.
- Steps to a Green Schoolyard: Provides a breakdown of the step-by-step process nonprofit educational organizations can undergo from beginning to end, plus information fundraising, implementation and positive stewardship.

As such, it is important to keep this target audience in mind for the following analysis. From the three aforementioned guides for Green Schoolyards, “Transforming Philadelphia’s Schoolyards” by the Community Design Collaborative is the most directly applicable to the city of Philadelphia, but lacks in its ability to be interactive and comprehensive for audiences beyond the designated target audience for the following reasons:

1. Interactivity: *How interactive is the guide? What makes it interactive? How does it encourage readers to take action?*

The visual component of this guide is geared towards a more professional audience. The typography chosen for this design was made to allow the guide to be content-heavy and

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<sup>6</sup> As stated in the Community Design Collaborative website, their mission statement is: “The Community Design Collaborative provides pro bono design services to non-profit organizations in greater Philadelphia, creates engaging volunteer opportunities for design professionals, and raises awareness about the importance of design in revitalizing communities.” More information can be found here: <http://www.cdesignc.org/about>

<sup>7</sup> The following information is taken from the Community Design Collaborative website and can be found here: <http://www.cdesignc.org/guides/schoolyards>

professional in style. It was clear that the guide was created to contain a lot of content and was specifically designed around that content. Because the target audience for this design is more client-type, the chosen typography does not necessarily have to be about fun and interactivity. While typography can bring interest to a design, especially one with primarily text only, it can also serve an essential purpose in hierarchy, repetition, and design organization. With intelligently designed headlines and with so much text on the page, it can easily become difficult to read and focus on one piece of content. However, smart typography will embrace vertical rhythm, correctly planned content widths, and adequate whitespace for easy legibility from one piece of content to the next.

The following Figure 9a. and 9b. allow the reader to see the design of some of the pages:



Figure 9a. Page titled, “Steps to a Green Schoolyard” from the guide called, “Transforming Philadelphia’s Schoolyards” published by Community Design Collaborative in 2015.

We can see in this example, that while the basis for this particular page is text, there are still some small info graphic-type images that contribute to the text at hand. Furthermore, in this particular page, we can see how the design is, indeed, more for the design and planning processes of a green schoolyard project.



## Make a (conceptual) plan

The success stories in this guide demonstrate the value of a preliminary design, called a *conceptual plan*, which will help you envision possibilities, establish priorities, and build consensus right from the start. You will find that the plan is essential to communicating your vision and beginning to orchestrate funding and support. On a practical level, a conceptual plan will help you identify the best locations for play areas, plantings, outdoor learning, and more. It can break the project into smaller steps or phases and help you find creative ways to integrate a myriad of contributions (plants, play equipment, or labor, for example) from many sources.

### 1 Do your homework

A conceptual plan begins with a good understanding of the physical environment of your schoolyard. It will help you early in the design process to:

- Ask students, teachers, and nearby residents how they use the schoolyard now and what they like and dislike about it.
- Assess the spaces and existing equipment and furnishings within the schoolyard, to determine which are obsolete, damaged, or well-loved by students.
- Identify good locations for new elements such as green stormwater infrastructure.

### 2 Come back to the big picture

Brainstorming with stakeholders ensures that your schoolyard responds to your community and has a clear, compelling vision. Some of the big-picture questions to ask during the conceptual design process are:

- What is special about the school building, site, and surrounding neighborhood?
- How can the schoolyard support education, the environment, and community health and wellness?
- What unmet or emerging local needs could the schoolyard address?
- How can we sum up our vision for our school or schoolyard with a few, well-chosen words?

### 3 Learn about the entire design process

It will help you to know the traditional design phases for typical capital building projects. Down the road, your team will need to commission additional design services from a planning, architecture, landscape architecture, and/or engineering firm in order to realize any major improvements. By that time, your network and fundraising efforts are likely to be well in place.

Figure 9b. Sample checklist provided for a Green Schoolyards Project in the guide, “Transforming Philadelphia’s Schoolyards” published by Community Design Collaborative in 2015.

This example uses a step-by-step format for how to create a conceptual plan for green schoolyards projects. In contrast to the checklist example provided by Evergreen’s “The Learning Grounds: Guide for Schools” seen in Figure 2, this checklist is more professional looking and allows for less interaction. Plus, the layout of the checklist also has a lot of information that can cause of for the real purpose of the guide to be buried under all of the extras.

In other sections of the guide, there is a strong usage of photographs or images designed by the Collaborative that help the reader envision what their own green schoolyard project would look like, from design to implementation. These images draw the attention of the reader to what their project could potentially look like. Because nowadays, visual content is consumed much more quickly than text, even though some pages are text heavy, if a reader were to skip through those pages and simply look at the images provided, they would still be able to grasp the greater message without necessarily reading the text. Lastly, the visual content shows the reader the final product, instead of directly telling them about it. The use of the “show, don’t tell” aspect of good marketing is used effectively in the pages with images as shown in Figure 10.

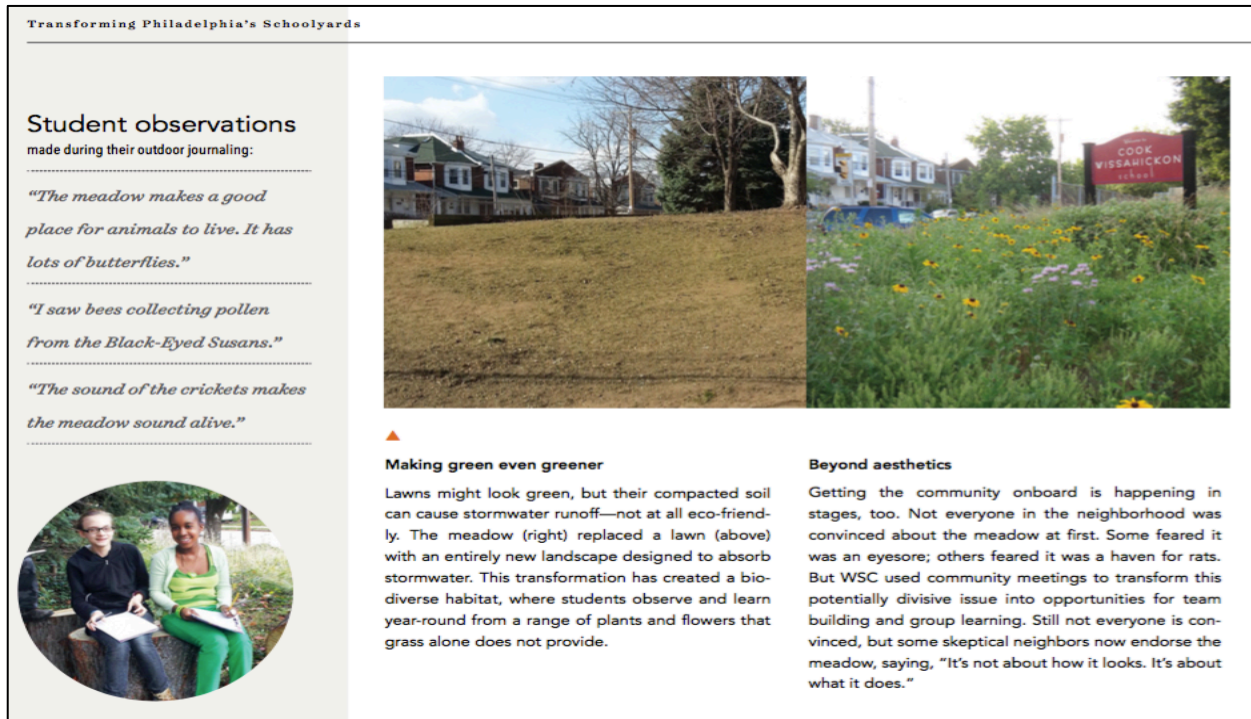


Figure 10. Sample page from the guide, “Transforming Philadelphia’s Schoolyards” published by Community Design Collaborative in 2015, with before and after photographs of a project.

Unlike the other two mentioned guides, this page offers a reader to see the potential of their project before their own eyes. While no two projects could yield the same result, the possibility of success for a reader, when presented with a realistic example, can be more effective than a hypothetical example.

The physicality of the guide, while designed beautifully and as was mentioned previously, was not designed for all audiences. Therefore, what makes this guide less comprehensive for all audiences? The reasons are as follows:

2. *Comprehensiveness: Is the guide written for all audiences? Or who is the target audience? Can everyone, regardless of educational background, understand the guide?*

The language used in this particular guide is more related to the selling of a product or service. Meaning, the guide suggests that if you were to follow the recommendations made, you will yield a successful product, which in this case is a successful green schoolyard project. Furthermore, the language also suggests that the recommendations and successful case studies made by the Collaborative are what every community reading the guide should aspire to reach. Again, this is not to say that this is not a possible goal to want to reach, but rather sets a higher expectation for groups seeking aid from sources that might not come from the Collaborative.

Another component of the guide’s comprehensiveness is the use of case studies (see Figure 11.). In many ways, case studies are used as marketing staples. The Collaborative uses them to show how customers have successfully implemented their resources and services. Instead of simply talking about their services, the case studies allow prospective readers to see them. Again,

another “show, don’t tell” example implemented by a learning guide. In this case, the case studies tell a story that allow for readers to be able to resonate with the Collaborative. Moreover, by providing illustrations of these successful projects, readers can both read and see successful projects.



Figure 11. Sample page from the guide, “Transforming Philadelphia’s Schoolyards” published by Community Design Collaborative in 2015, with general information regarding the three chosen case studies.

Additionally, case studies help the focus be on the reader. Instead of explicitly focusing on the services provided by the Collaborative, the case studies focus on the different ways the communities and schools benefitted from using the Collaborative and having a Green Schoolyard. The Collaborative is able to describe the process and results from the recipient’s perspective. Future prospects react better to case studies because they are able to want the same results as the case study example.

The “Transforming Philadelphia’s Schoolyards” guide also makes a good job at including the importance of partnerships and collaboration for these projects. Based on the next category it does so in the following ways:

3. *Incorporation of Partnerships & Collaboration: What role are partners given in these guides? Who are the ideal partners? What kinds of collaboration do they encourage within participating parties?*

Because the Collaborative worked hand in hand with the Philadelphia Water Department, it is no surprise that many of the recommendations for funding and initiatives, are those run by the Department (see Figure 12). While it does mention other ways to get funding, as we can see from Figure 12, the “Key Resource” is a funding opportunity from the Philadelphia Water Department. Not only so, but the Collaborative also advertises their own resources as available to communities.

Transforming Philadelphia's Schoolyards

## Find the funding

### Diversify your sources

Your funding will not come from one source. Successful schoolyard champions learn to broker and coordinate funding and in-kind donations. These may include:

- **School students and family members**—for modest, engaging fundraisers to build interest, reinforce the vision, and expand your group of “Friends.” (For example: a penny drive to raise funds to purchase a weather station.)
- **Alumni of the school**—for more formal fundraising efforts, like direct appeals and special events.
- **Community members and groups**—for funding or endorsements for the project.
- **Your local school district**—for materials, labor, and coordination of other capital improvements to support the project.
- **Businesses**—for local donations or recruiting corporate volunteers.
- **Foundations**—for direct financial support. Grant applications may need to focus on the priorities of the funder, which could be stormwater management or other long-term goals.
- **Nonprofits**—for in-kind donations, especially of expertise and materials.
- **Public agencies**—for significant funding, especially for infrastructure that has citywide benefit. (See the “Key Resource” at right.)
- **Public officials**—for support through funding and policy.

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### Key Resource

#### LEVERAGE FUNDING FOR STORMWATER MANAGEMENT

It is wise to integrate into your plan ways to manage how stormwater moves through your schoolyard—in a green, sustainable way. Stormwater management is responsible and sustainable (visit [phillywatersheds.org/watershed\\_issues/stormwater\\_management](http://phillywatersheds.org/watershed_issues/stormwater_management)). It can be a catalyst to jump-start funding from other sources in support of other schoolyard elements. (The “Design Elements” section lays out a menu of these options.)

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SMIP Grants from the Philadelphia Water Department (PWD)

PWD has shown national leadership in managing stormwater through its *Green City, Clean Waters* plan, and a number of recent initiatives have focused on stormwater management in urban and suburban locations. Funding through agencies like this can provide significant leverage to realize your schoolyard vision.

Schools in Greater Philadelphia should visit PWD’s Green Schools website ([phillywatersheds.org/greenschools](http://phillywatersheds.org/greenschools)) to learn more about grants through the Stormwater Management Incentives Program (SMIP).

Figure 12. Sample page regarding funding from the guide, “Transforming Philadelphia’s Schoolyards” published by Community Design Collaborative in 2015.

On a different note, the “Transforming Philadelphia’s Schoolyards” guide makes a strong effort to connect green schoolyards projects to the classroom in their “Connect the Classroom” section. Much of this section argues the importance of classrooms making the most out of having green schoolyards projects on their campus. The priority becomes the education of the children and youth of the neighborhood. The guide also recommends working with school district officials, and allowing them to also participate in the development of green schoolyard projects.

By having collaboration with all of the interested parties, practicing positive stewardship and arranging for maintenance go hand in hand. This guide recommends having all participating parties contribute to the overall conversation regarding the division of labor regarding maintenance. This would be an effective tool providing information to get the wheels turning

around this conversation, but unfortunately, the guide does not offer suggestions on the different ways to conduct maintenance to the green schoolyards projects.

As mentioned previously, while the guide has the ability to offer tools, resources, and suggestions that can be applicable to the city of Philadelphia, it is far from perfect. There are many visual components that can be modified as well as the layout of certain aspects of the guide, to better suit more universal audiences. Yet overall, the guide provided helpful information regarding the use of case studies as examples, the use of images of successful projects and the use of information pertinent to different relationships between students, teachers, school officials and district officials.

The next section will provide a sample outline to what an ideal guide for green schoolyards for Philadelphia would look like and provide an analysis of why the chosen components are relevant.

### Sample Outline for Ideal Guide: What could the ideal guide for Philadelphia look like?

The following, Figure 13, is an example of what the Table of Contents would look for the Ideal Guide. Each section was chosen specifically as the overarching header for a more detailed chapter to be written. It is important to note that each section will contain either photographs or drawings pertinent to the topic being addressed as well as be in checklist format when relevant for easier communication of information. In the case of text heavy pages, the particular section will also provide general information in the form of an info-graphic.

The chapter titles are:

1. “Successful Case Stories for You”
2. “Steps for Getting Started with your own Green Schoolyard”
3. “Organizing Your Project Team”
4. “Connecting the Classroom”
5. “Choosing Your Project Site”
6. “Make Sure to Pick Your Native Trees, Plants and Shrubs”
7. “Finding the Funding!!”
8. “Selecting the Perfect Green Schoolyard Coordinator”
9. “Taking Care of the Schoolyard: Maintenance”
10. “Make Your Green Schoolyard be Known!”

For example, Chapter 1 “Successful Case Stories for You” will contain information regarding other different case studies, as was used in “Transforming Philadelphia’s Schoolyards” (Community Design Collaborative, 2015). As was addressed earlier, the use of case studies is an excellent way to encourage readers to plan, design and implement their own green schoolyard project. This section will also include before and after photographs of these projects that will also serve as encouragement for readers. The images will also help keep readers engaged and interested in gaining some background information as to why they should invest in a Green Schoolyard in their community.



Chapter 2 “Steps for Getting Started with your own Green Schoolyard” will have a step-by-step checklist, as was used in Evergreen’s “The Learning Grounds: Guide for Schools.” The difference is that this checklist will be modified and customized to have resources available to reader specific to Philadelphia. This may include, but is not limited to, some of the grants

## TABLE OF CONTENTS

### 1 Successful Case Stories for You

Read more about the other successful projects you can learn from! Resources and other tools are also available to help you kick start your own project!

### 2 Steps for Getting Started with your own Green Schoolyard

A step-by-step checklist to keep you organized and focus for your project! The checklist includes a Task List along with connections to other available resources at the local, state, and national scale, as well as a Timeline to get your Green Schoolyard on track and ready for whatever month you begin!

### 3 Organizing Your Project Team

You can create a school garden! This section provides an overview on how to get your team of students, teachers, community members, school administrators and officials involved!

### 4 Connecting the Classroom

Why are Green Schoolyards important? Information on how Green Schoolyards projects contribute to the overall benefits for children inside and outside the classroom.

### 5 Choosing Your Project Site

Information on how to map your school grounds to pick a site, and the process for designing a site map and plan.

### 6 Make Sure to Pick Your Native Trees, Plants and Shrubs

The use of native species is an important! This section provides an overview on how to choose your native species!

### 7 Finding the Funding!!

Information on how to find different kinds of funding, including the "how to write" for grant applications and donor letters.

① **Selecting the Perfect Green Schoolyard Coordinator**  
 Once your Green Schoolyard project has been implemented, you will need a point of contact! This section provides an overview of the responsibilities of a Green Schoolyard Coordinator!

② **Taking Care of The Schoolyard: Maintenance**  
 How to develop a maintenance strategy for your projects with your Green Schoolyard Coordinator!

③③ **Make Your Green Schoolyard be Known!**  
 Register your Green Schoolyard online and see what other schools are doing!

Figure 13. Sample page for what the Table of Contents would look like for the Ideal Green Schoolyards Guide. Information based on the Green Schoolyards Guides published by Evergreen, the Center for Ecoliteracy and the Community Design Collaborative. Created by author 2015.

mentioned in the Community Design Collaborative’s guide. There will also be other forms of resources including information on different design ideas, themes for green schoolyards projects, videos of other students enjoying green schoolyards, etc. The tasks will also be somewhat based on those listed by Evergreen, but will be modified to be applicable to past Philadelphia green schoolyards projects. Lastly, the recommended timeline will be based on a regular calendar year combined with planting seasons and funding deadlines.

Chapter 3 “Organizing Your Project Team” will include information on how anyone can push for a Green Schoolyard Initiative at their local school. Moreover, it will provide information pertinent to the different parties who should be involved in Green Schoolyards project, including, but not limited to students, teachers, community members, school administrators and officials. Each will have a section with information on what are some of the different ways each participating party can collaborate to the overall effort. Information for this section will come from past projects successes and lessons learned.

Chapter 4 “Connecting the Classroom” will mostly be related to the information provided by the Center for Ecoliteracy’s guide, “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms.” This section will focus on the educational advantages for students to have access to a Green Schoolyards, as well as the benefits for teachers to also encourage the use of these green spaces within the campus property. This chapter will also provide information

specific to the ways a teacher or educator can connect curriculum to garden areas and green spaces.

Chapter 5 “Choosing Your Project Site” will provide information on how to teach students and community children the different ways to map their school, in order to best identify locations for green schoolyards projects, such as rain gardens. Additionally, once a site is selection, this section will also provide information on the next steps on planning and designing said component of green schoolyards. The information for the designing and planning section can mostly be used from the Community Design Collaborative’s guide, with expected modifications for more general readers to understand.

Chapter 6 “Make Sure to Pick Your Native Trees, Plants and Shrubs” will have information in a similar format to what can be found in Evergreen’s “The Learning Grounds: Guide for Schools.” This chapter can be modified based on the information regarding the city of Philadelphia’s native plant, trees and shrub species. An identification key will be included as well as some information on where the reader may acquire certain plant species. Furthermore, part of this section must also include information regarding the relevance of using native species that can be incorporated into class curriculum.

Chapter 7 “Finding the Funding!!” will have information regarding how to find different funding sources for different parts of the project. It will also have lists on different available grants, donors, venues, etc. Additionally, information on how to apply for general grants will be included with a step-by-step checklist for applications. A sample donor letter, similar to that provided in Evergreen’s “The Learning Grounds: Guide for Schools” will be included for readers to use. Funding can be particularly tricky for this case, but the idea is to combine the funding sources listed in “Transforming Philadelphia’s Schoolyards” (Community Design Collaborative, 2015).

Chapter 8 “Selecting the Perfect Green Schoolyard Coordinator” will include a potential job description for an individual or two who will be responsible for the daily activities to be conducted in different parts of the schoolyard as well as other daily duties applicable dependent on location. Information on how to fund this position will also be available. Some information for this particular section can be combined from the Center for Ecoliteracy’s “Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms” and the Community Design Collaborative’s “Transforming Philadelphia’s Schoolyards.”

Chapter 9 “Taking Care of the Schoolyard: Maintenance” will also be a tricky section, as the goal is not to solely leave the responsibility to the Green Schoolyard Coordinator or to community members/volunteers. This section will include information on how to equally distribute the labor amongst the aforementioned parties, as well as school custodians. There will also be a list of some possible suggestions for incentives as provided by the Center for Ecoliteracy and Evergreens’ guides.

Finally, Chapter 10 “Make Your Green Schoolyard be Known!” This particular section will be dedicated to ensuring that other schools become aware and learn about the different kinds of green schoolyards, with the hopes of sparking an interest. The best way to allow for other

schools to want to have a green schoolyard is to see for themselves the successes of other schools, while also being made aware of the possible challenges to face. This idea is similar to that presented in Evergreen's guides, which focuses on registering particular Green Schoolyard projects online and allowing other schools to learn how to create their own project on their campus. The online registry can also inspire healthy competition to different schools, which can serve as motivation to fight for the best green schoolyard of Philadelphia.

### Conclusion

In conclusion, advocating for and taking full advantage of a green schoolyard cannot be stressed enough. But the best way to ensure that this happens is to be able to provide students, teachers, community members, school administrators and officials with the tools on how to do so without adding an extra burden on their workload. Moreover, in order for this to be effective, the guide made available should be one that is as interactive, comprehensive and inclusive of partnerships and collaboration as possible.

As such, this paper has provided an analysis of three different kinds of effective Green Schoolyards guides, from Evergreen's "The Learning Grounds: Guide for Schools" to the Center for Ecoliteracy's "Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms" and finally to the Community Design Collaborative's "Transforming Philadelphia's Schoolyards." The information gathered from this analysis was then used to provide an overview of what the layout of an ideal guide could look like. By gathering the successful components of each of the aforementioned guides, this new ideal guide would be able to provide the information necessary for Philadelphia readers. It is my belief that while this guide would still need to be modified, that the overall layout incorporates as much of the best of each guide, making it a truly interactive, comprehensive and inclusive guide.

### Acknowledgements

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### Figures

Cover Page Image: <http://thenotebook.org/articles/2013/08/07/greening-initiative-at-lea-school-gets-boost-from-water-department-peco>

Figure 1. Title Page and Table of Contents images from "The Learning Grounds: Guide for Schools, Second Edition" published by Evergreen: <http://www.evergreen.ca/downloads/pdfs/Guide-for-Schools.pdf>

Figure 2. Checklist example from the "The Big Picture" section of "The Learning Grounds: Guide for Schools" published by Evergreen: <http://www.evergreen.ca/downloads/pdfs/Guide-for-Schools.pdf>

Figure 3. Sample page from the "Developing Your Project Team" section of "The Learning Grounds: Guide for Schools" published by Evergreen: <http://www.evergreen.ca/downloads/pdfs/Guide-for-Schools.pdf>

Figure 4. Information regarding other curriculum suggestions offered in "The Learning Grounds: Guide for Schools" published by Evergreen: <http://www.evergreen.ca/downloads/pdfs/Guide-for-Schools.pdf>

Figure 5. Sample page from "Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms" published by the Center for Ecoliteracy in 2009: <http://www.ecoliteracy.org/sites/default/files/CEL-getting-started.pdf>

Figure 6. Photograph captioned: "Teaching a sense of place: students re-create the surrounding neighborhood in their garden" from "Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms" published by the Center for Ecoliteracy in 2009: <http://www.ecoliteracy.org/sites/default/files/CEL-getting-started.pdf>

Figure 7. Sample page of the "Outdoor Classroom Checklist" provided in "Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms" published by the Center for Ecoliteracy in 2009: <http://www.ecoliteracy.org/sites/default/files/CEL-getting-started.pdf>

Figure 8. "Garden Coordinator" job description with full details of job responsibilities provided in "Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms" published by the Center for Ecoliteracy in 2009: <http://www.ecoliteracy.org/sites/default/files/CEL-getting-started.pdf>

Figure 9a. Example of a page titled, "Steps to a Green Schoolyard" from the guide, "Transforming Philadelphia's Schoolyards" published by Community Design Collaborative in 2015: <http://www.cdesignc.org/uploads/files/547129531651180934-collaborative-transforming-philadelphias-schoolyards-guide.pdf>

Figure 9b. Sample checklist provided for a Green Schoolyards Project in the guide, "Transforming Philadelphia's Schoolyards" published by Community Design Collaborative in 2015: <http://www.cdesignc.org/uploads/files/547129531651180934-collaborative-transforming-philadelphias-schoolyards-guide.pdf>

Figure 10. Sample page from the guide, "Transforming Philadelphia's Schoolyards" published by Community Design Collaborative in 2015, with before and after photographs of a project: <http://www.cdesignc.org/uploads/files/547129531651180934-collaborative-transforming-philadelphias-schoolyards-guide.pdf>

Figure 11. Sample page from the guide, "Transforming Philadelphia's Schoolyards" published by Community Design Collaborative in 2015, with general information regarding the three chosen case studies:

<http://www.cdesignc.org/uploads/files/547129531651180934-collaborative-transforming-philadelphias-schoolyards-guide.pdf>

Figure 12. Sample page regarding funding from the guide, “Transforming Philadelphia’s Schoolyards” published by Community Design Collaborative in 2015: <http://www.cdesignc.org/uploads/files/547129531651180934-collaborative-transforming-philadelphias-schoolyards-guide.pdf>

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