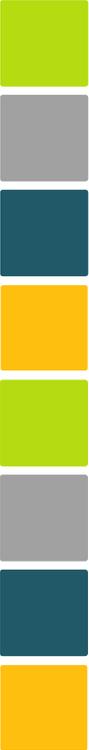


# Welcome!

## Opportunities in Landscape in the K-12 Environment

### Please Note:

**AIA Credit or a Certificate of Participation:** If you plan to watch this webinar in a group environment, and are interested in receiving credit, please note the following: to have documentation of webinar attendance, ***you will need to individually register and then individually login / logout for the webinar.*** This action provides an online documentation of your attendance.

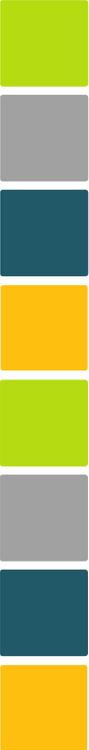


# AIA CES/CEUs

Request a certificate of attendance – via email.

Wait for the last slide before sending request for certificate.

Certificate will be emailed to attendee after webinar.



# AIA CES / CEUs



## **Provider Name:**

Ohio Facilities Construction Commission

## **Provider Number:** G442

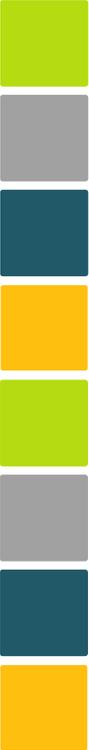
## **Course Title:** Opportunities of Landscape in the K-12 Environment

## **Course Numbers:** Web27

## **Credits:** 1.0 LU/HSW AIA CEUs

## **Speaker:** Ed Melvin

## **Date:** March 21, 2018

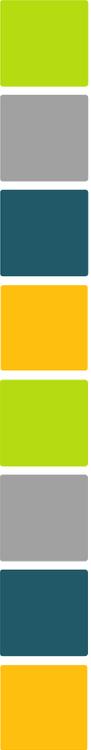


# AIA CES / CEUs

This course is registered with AIA CES for continuing professional education. As such, it does not include content that may be deemed or construed to be an approval or endorsement by the AIA of any material of construction or any method or manner of handling, using, distributing, or dealing in any material or product.

Credit(s) earned on completion of this course will be reported to AIA CES for AIA members. Certificates of Completion for both AIA members and non-AIA members are available upon request.

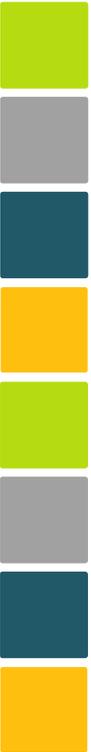
Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.



# Course Description

The webinar will focus on these defining issues:

- Understanding LEED in landscape design
- The difference between environmental management and maintenance
- How outdoor spaces contribute to social understanding
- Learning and landscapes: The convergence of outdoor classrooms and STEAM curriculum.

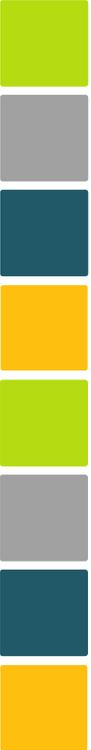


# Local Professional Development Credit (LPDC)

School district personnel may request a certificate of attendance – via email.

Wait for the last slide before sending request for certificate.

Certificate will be emailed to attendee after webinar.

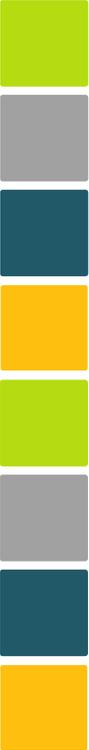


# Will the Webinar be Recorded?

Yes – the webinar is being recorded and you will find the recording and the PPT in the OFCC Webinar Archive within five business days of the webinar.

## **Webinar Archive:**

<http://ofcc.ohio.gov/NewsEvents/Webinars/WebinarArchive.aspx>



# Have a Question?

Please use the Question feature on the right side of your screen at any time during the webinar.

Responses will be provided at the end of the webinar.

# OPPORTUNITIES OF LANDSCAPE IN THE K-12 ENVIRONMENT



# Introduction

I am Ed Melvin.

- *Practicing Landscape Architecture for 30 years*
- *Leader of Landscape & Outdoor Learning Studio at SHP Leading Design*

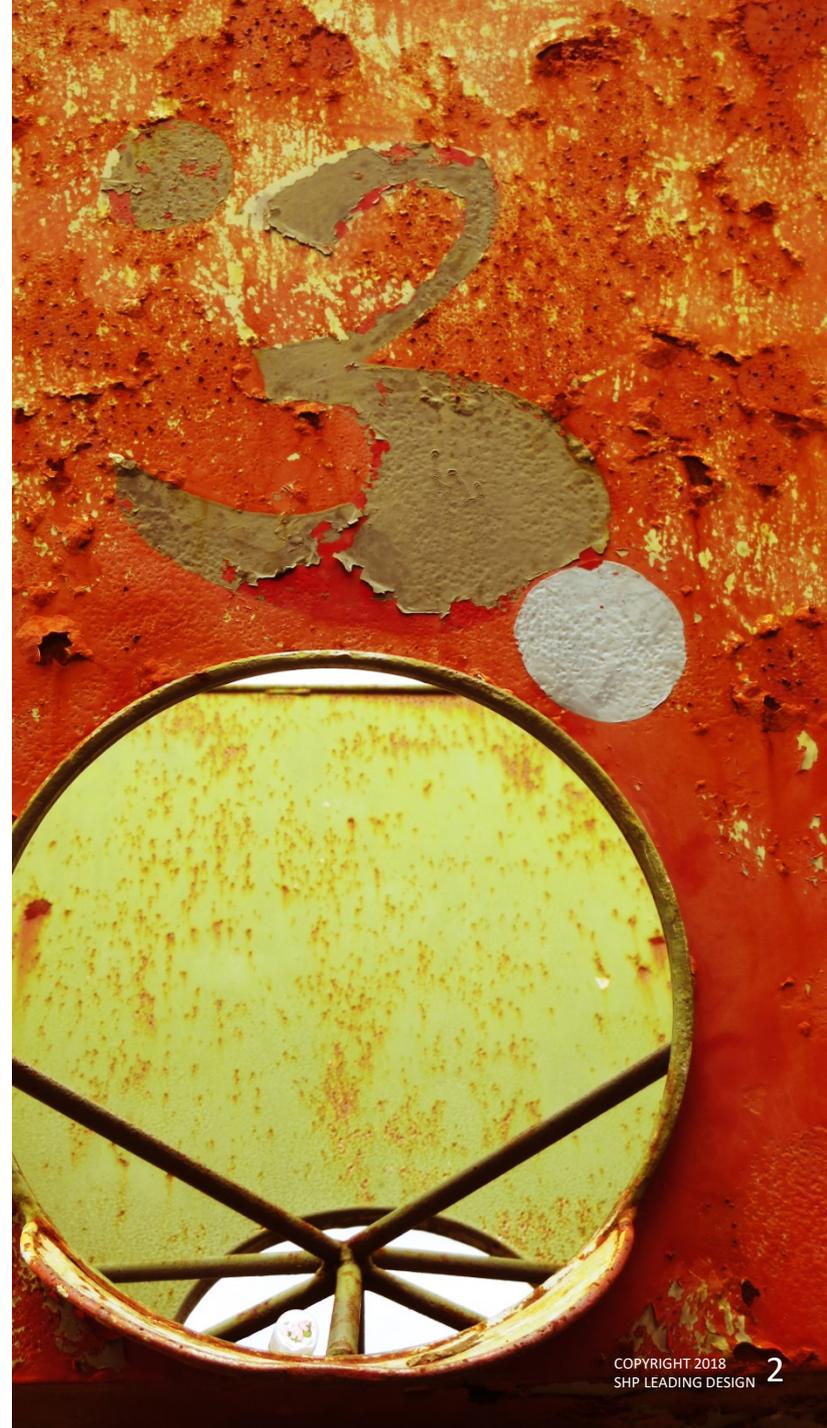
Email: [emelvin@shp.com](mailto:emelvin@shp.com)

Blog: <http://shp.com/thought-leadership/outdoor-learning/>

TW: [@elmstudio](https://twitter.com/elmstudio)

*“Do we learn **kindness** or the mask of kindness?”*

*-- Pablo Neruda*



# Agenda

- Opportunities **of** Landscape in the **K-12 Environment**
  - Management & Maintenance
  - Understanding LEED in Landscape Design
  - How outdoor spaces contribute to our social understanding
  - Learning Landscapes: The convergence of outdoor classrooms and STEAM curriculum



# Management & Maintenance

## A PARTICIPATORY PERSPECTIVE

Management: to manage

“To **handle** or direct with a degree of **skill**.”

-- Merriam-Webster



Maintenance: to maintain

“To **keep** in an **existing state**.”

-- Merriam-Webster



# LEED:

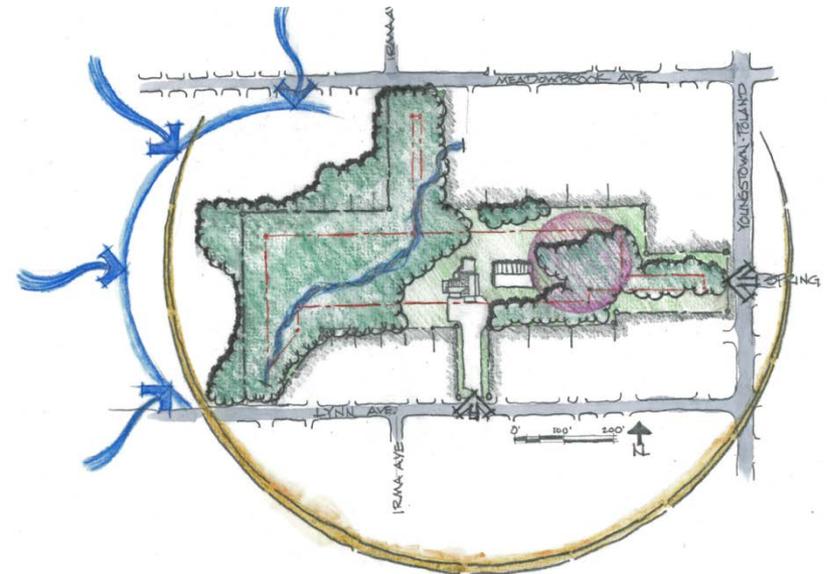
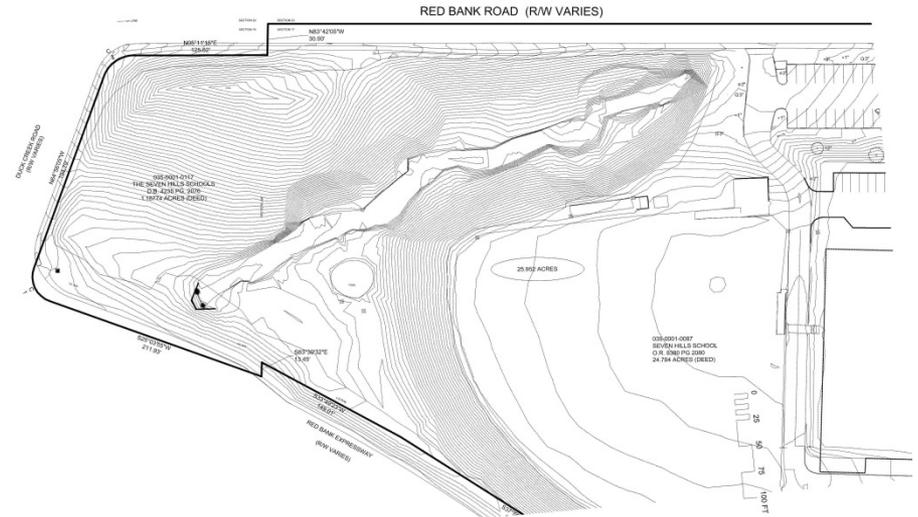
## Leadership in Energy and Environmental Design

- Sustainable Sites
  - Rain Water Management
    - Reduce rainwater runoff **quantity**
    - Improve rainwater runoff **quality**
  - Protect or Restore Habitat
    - Restore 30% of the site, using native or adaptive vegetation
      - “Low to no mow” grass areas
      - Tree selection to include seeded species and varieties.
  - Open Space
    - Provide 30% of the site that is not building or hardscape surfaces
- Water Efficiency
  - Limit or have no permanent irrigation systems
    - Directly related to the habitat credit and the importance of plant selection

# Site Perspectives

## Site Offerings

- Location
- Topography
- Weather
- Structures
- Water
- Vegetation
- Security



# Site Perspectives

## Site Location



High Diversity  
Complex Population

## Urban



© 2012 Andrew Morang

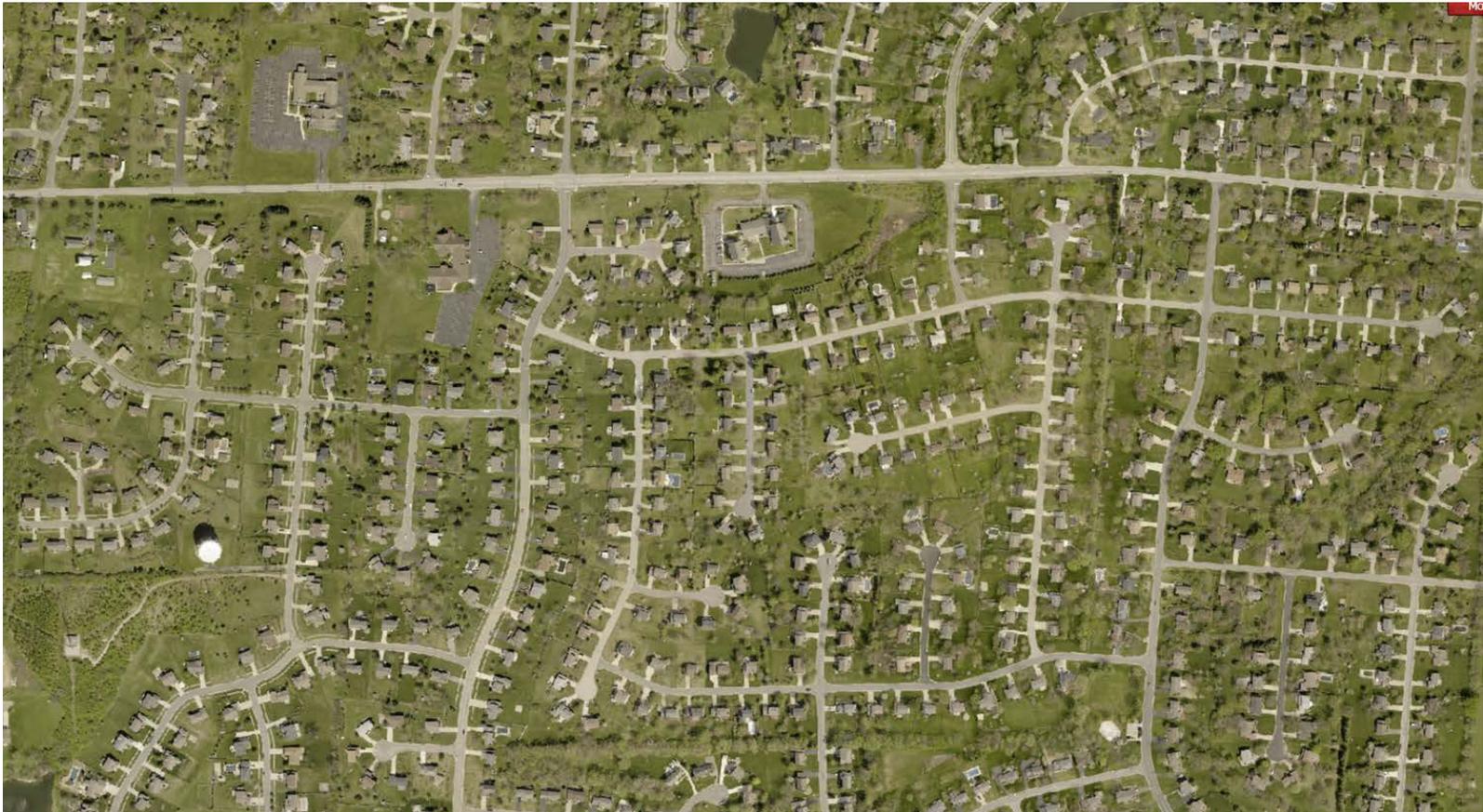


# Site Perspectives

Site Location

# Suburban

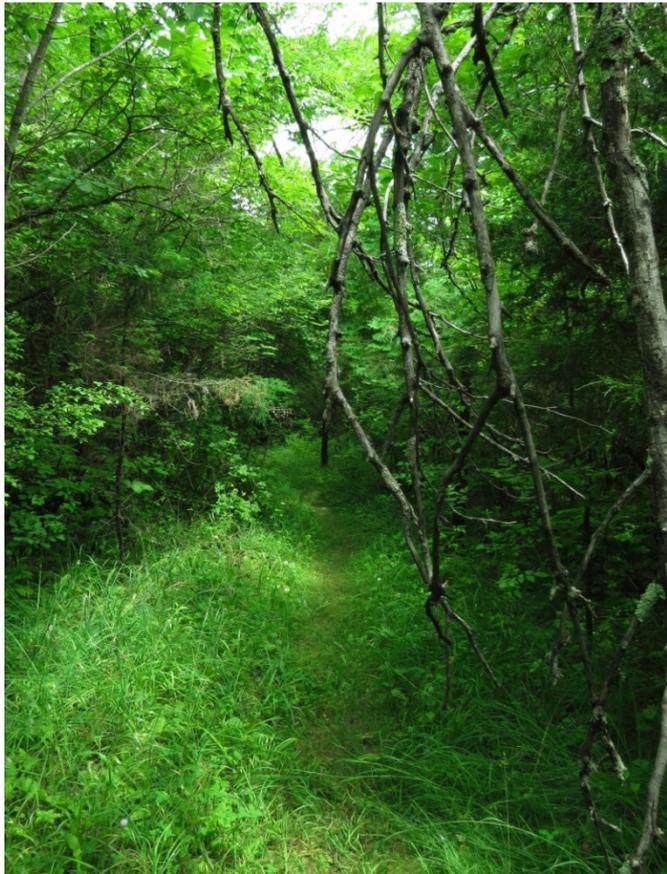
High & Low Diversity



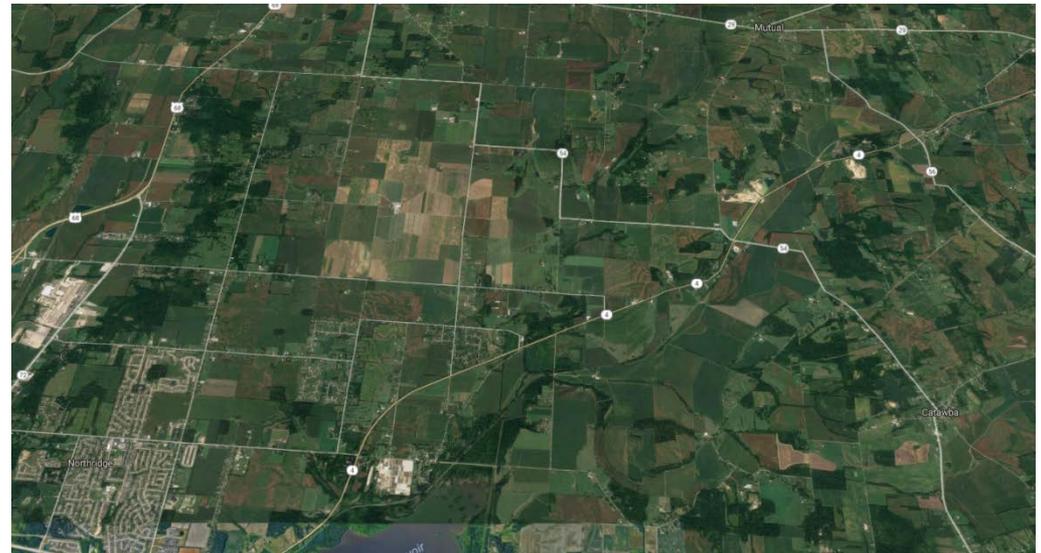
# Site Perspectives

# Rural

Site Location



Population Proximity

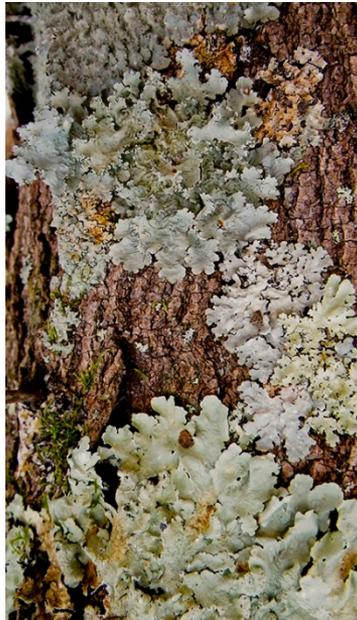
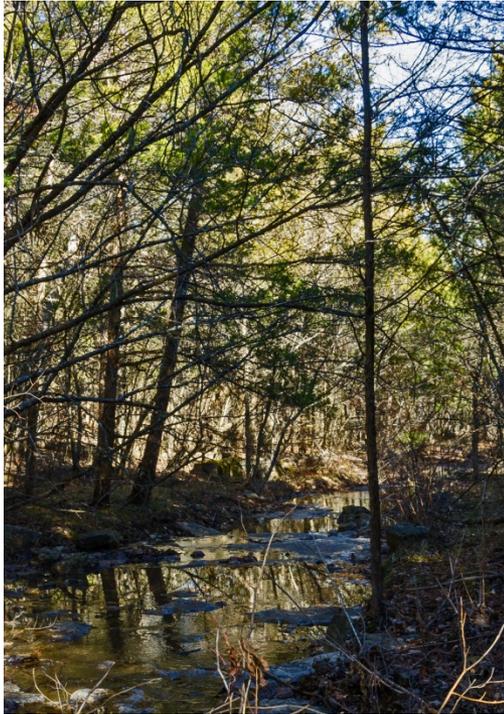


# Contextual Parameters: Science

Site Offerings

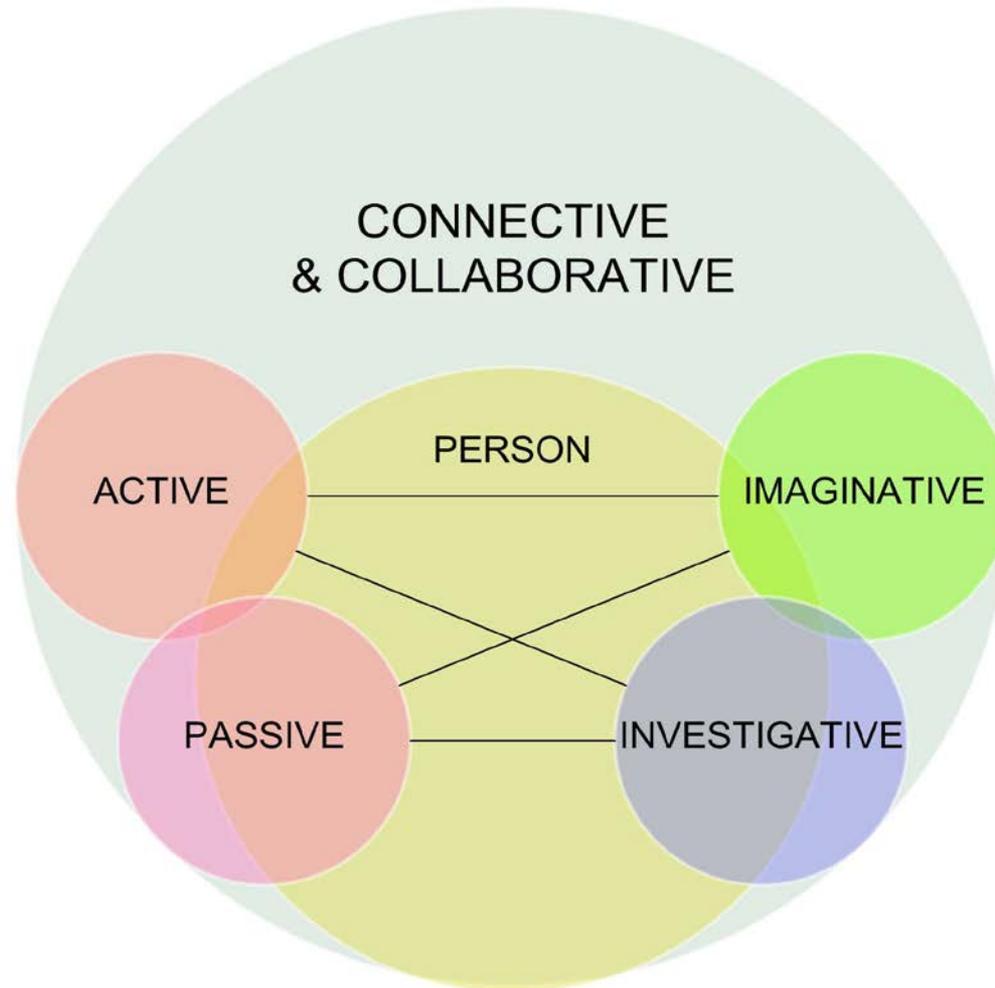
Unique

Findings



# Social Understanding

How can the landscape and outdoor spaces contribute to our social understanding?



# As a Person - Connective



*“**Imagination** is more important than knowledge. For knowledge is limited to all we now know and understand, while **imagination embraces** the entire world, and all there ever will be to know and understand.”*

-- Albert Einstein

Secure Freedom – being secure within your surroundings as a person to freely be oneself, to grow and develop.



View of Earth from the rings of Saturn, taking by Cassini (April 2017)

# Collaborative Learning

## Building & large parts

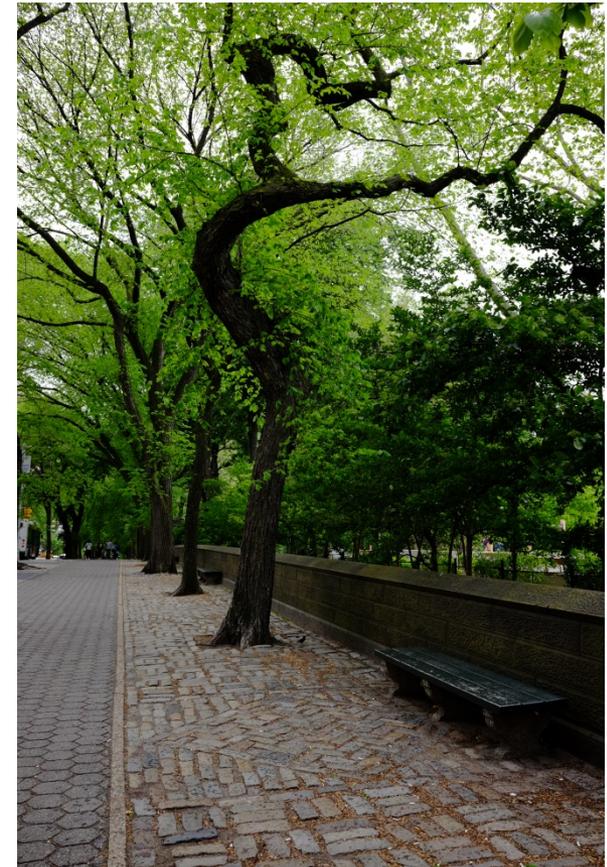
- Materials sized to require two hands or two children
- Stationary and movable materials
- Variety of size and weight



# Learning Landscapes

## The Convergence of Outdoor Classrooms and STEAM Curriculum

- **S** -The science of things, landscape is living and always in process. All outdoor space offer the opportunity to apply the **scientific method**.
- **T** - Technology is a broad category of **tools** we can use in observation, analyzing, theorizing, and reporting
- **E** - Engineering: Technology in **practice**
- **A** - Art: this, from my perspective, is where the imagination lives and is an umbrella over all other things and also the home for language, fine arts, media...
- **M** - The most advanced math we humans have been able to conger up is all about understanding the **Nature of Things**.



# Learning Landscapes

## The Convergence of Outdoor Classrooms and STEAM Curriculum

### Affordance

“Affordance theory states that the world is perceived not only in terms of object shapes and spatial relationships but also in terms of object possibilities for action (affordances) — perception drives action.”

-- J. J. Gibson

# Everything is an Opportunity

## Leaves

- Way finding
- Artistic Expression
- Mathematical Exercise
- Connective Understanding



# Elements of Outdoor Learning

## Loose parts

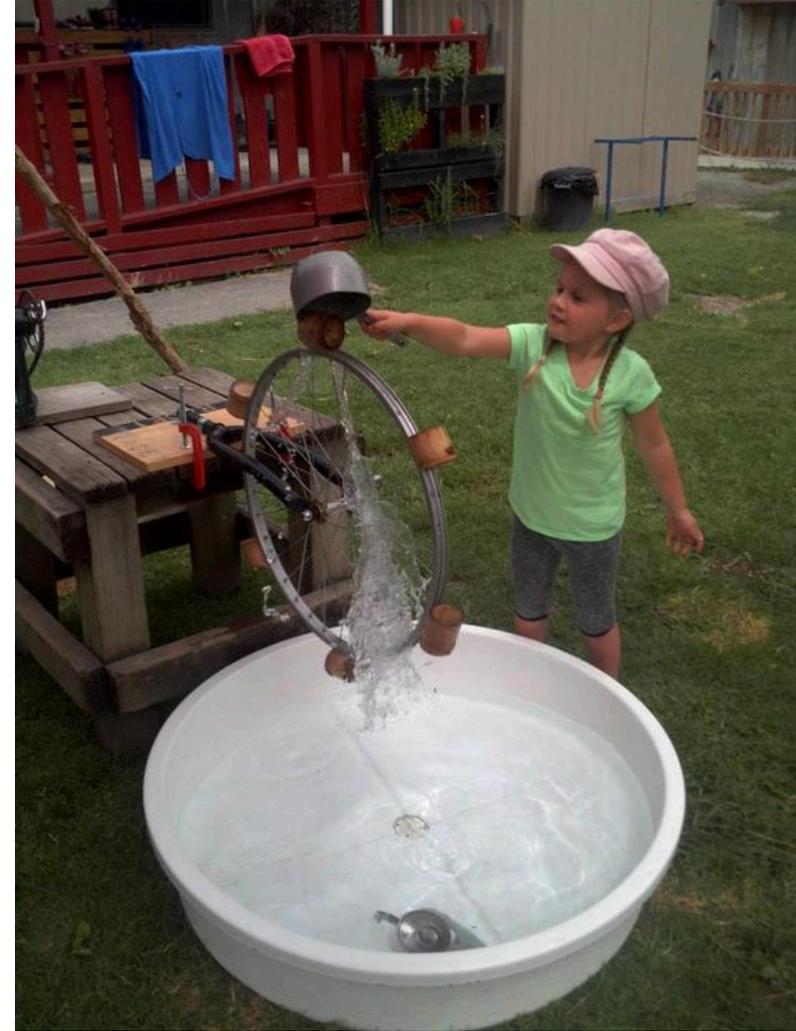
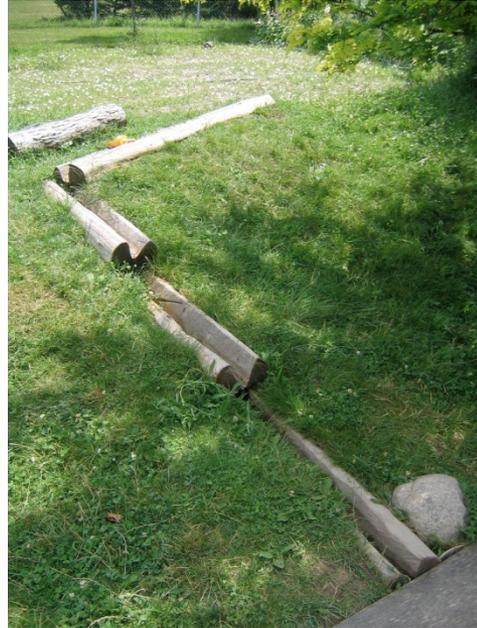
- Sized to be manipulated with a single small hand
- Materials that can be used inside and outside



# Elements of Outdoor Learning

## Water

- Rainwater collection
- Water properties
- Puddles
- Garden works
- Texture



# Elements of Outdoor Learning

## Art Creation

- Work space for creating
- Material storage
- Water access
- Adaptable



# Elements of Outdoor Learning

## Music & Sound

- Sound Quality – musical notes
- Natural sounds



# Elements of Outdoor Learning

## Garden

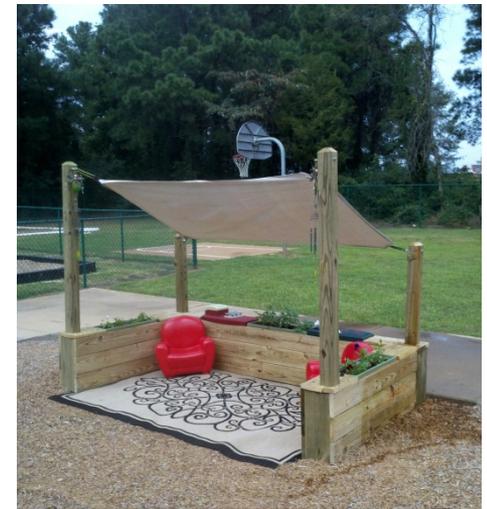


# Elements of Outdoor Learning

## Secret Places



- Intimate space
- Multiple and diverse
  - Visibility



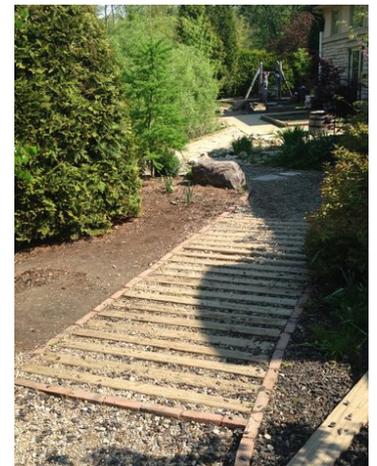
# Elements of Outdoor Learning

## Gathering, Meeting Room & Circulation



# Elements of Outdoor Learning

## Pathways & Thresholds



# OPPORTUNITIES OF LANDSCAPE IN THE K-12 ENVIRONMENT



ENDLESS SCHOOL PROJECTS FOR DISCOVERY AND LEARNING



UNDER THE TREES



RAIN BARREL ART



STUMP SEATS



1 Alternate#5 Courtyard Access  
Scale: 1/16" = 1'-0"



2 Courtyard Bed/Lawn Plan  
Scale: 1" = 30' ft



TEE PEE ROOM

# Planning and Development

## Inquiry

- **What Exists**
- **What we Imagine the possibilities to be**
  - Relationship with what exists
  - What will it afford?
- **Who (ownership)**

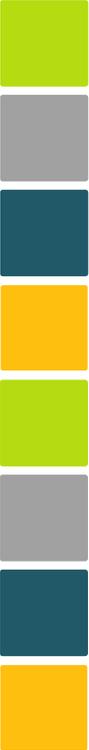
## Planning

- Whole school endeavor

## CPTED

- Crime **P**revention Through Environment Design
  - Visibility
    - Plant of Choice=**T**rees
  - Pedestrian and Vehicular separation
  - Vehicular barriers



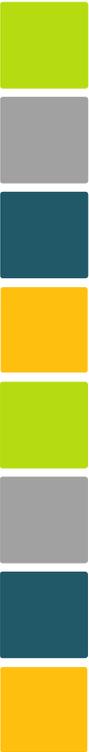


# A Reminder...

If you are interested in a *certificate of participation* for your attendance at this OFCC webinar, you will need to individually register and then individually login / logout for the webinar. GoToWebinar provides us with a login and logout time for each attendee which acts as the digital documentation of your attendance for certification and auditing purposes. In order to receive a certificate of participation, attendees must attend the entire webinar. *Please wait for the last slide to appear that indicates webinar has ended.*

Credit is not offered to attendees who watch an OFCC webinar in a group environment.

***This process has been approved by the Ohio Facilities Construction Commission and the Ohio Architects Board / Ohio Landscape Architects Board***



# Questions?

Ed Melvin

Email: [emelvin@shp.com](mailto:emelvin@shp.com)

Blog: <http://shp.com/thought-leadership/outdoor-learning/>

TW: [@elmstudio](https://twitter.com/elmstudio)

Glenn Rowell

[glenn.rowell@ofcc.ohio.gov](mailto:glenn.rowell@ofcc.ohio.gov)



# **This concludes The American Institute of Architects Continuing Education Systems Course**

**Provider Name:  
Ohio Facilities Construction Commission**

**Provider #: G442**

**Contact:  
[sue.meyer@ofcc.ohio.gov](mailto:sue.meyer@ofcc.ohio.gov)**

