Lesson Plan Abstract

LESSON TITLE: Explore Design - Landscape Architecture

LESSON TOPIC: Landscape Architecture Design Thinking, Design process, and presentation.

PURPOSE OF LESSON:
Students will:
A. Be introduced to landscape architecture as a design profession, learn how it affects their everyday life, and get a brief overview of what a landscape architect does. They will learn how landscape architect’s use a design process to design meaningful outdoor spaces that improve the health and wellbeing of their community and environment.
B. Participate in a series of mini-activities giving them a hands-on exposure to the design process LA’s use for each project. They will work individually and as groups to come up with ideas and concepts to solve the challenge: how to improve your neighborhood through the design of public outdoor spaces. In the end they will present their ideas to the group.

KEYWORDS: Landscape Architecture, Design Process, Inventory/Analysis, Concept Design, Communication

TARGET GRADES: 6th – 8th Grades

DURATION: 1.5 hours for the Landscape Architecture session
(the full Explore Design is 9 sessions, 1.5 hours each; these can be done in any manner that fits into a school’s schedule)

STUDENT RATIO: Recommended 4-5 students per volunteer professional

MATERIALS & EQUIPMENT:
- PowerPoint presentation, computer, flash drive, projector
- Paper for Sketching
- Tracing Paper
- Post-it Notes
- Rulers/Scales
- Markers, colored pencils, pens
- Scissors
- LAM or other landscape magazines with inspirational, or product imagery for use in the activities.
Specific to the school/class, presenter will need to provide a base map of the school or park area the students will use to design on top of. It helps for it to be a place the students are familiar with (i.e., their school).

Handouts:
- So you want to be a Landscape Architect
- School Site Map
- College Giveaways (optional)

PREPARATION: Teacher/professional will need to review the workbook to prepare for the slides and activity time lengths.

Gather supplies needed for the activities, and presentation. Check with school to see if presenter needs to bring projector or computer.

Print out handouts, and base maps for presentation and activities.
Lesson Plan Outline

LESSON PLAN OUTLINE:

Please see attached Explore Design Workbook for lesson plan outline and lesson plan.

Lesson Plan

LESSON PLAN:

Please see attached Explore Design Workbook for lesson plan outline and lesson plan.

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EXPLORE DESIGN DAY 4: LANDSCAPE ARCHITECTURE
PGASLA
Objective:

Students will be introduced to landscape architecture as a design discipline. They will learn how LA’s use a design process to design meaningful outdoor spaces that improve the health and wellbeing of their community and environment.

Class Schedule:
01. Intro / Ice Breaker / Recap - 10 min
02. What is Landscape Architecture - 5 min
03. Interpretation - 10 min
04. Conceptualization - 20 min
05. Evaluation - 20 min
06. Clean Up - 5 min
07. Communication - 10 min
08. Q & A / Wrap up - 10 min

Presenter’s Supplies:
01. PowerPoint presentation
02. Computer
03. Flash drive
04. Projector

Today’s Supplies:
01. Paper for Sketching
02. Tracing Paper
03. Post-it Notes!
04. Rulers or Scales
05. Markers
06. Colored Pencils
07. Scissors

Handouts:
Handout A - So you want to be a landscape architect
Handout B - School Site Map
Handout C - College Giveaways
Introduction
5 minutes

Slide 57
01. Go around room, everyone introduce yourself
   a. favorite activity to do outside
   b. favorite outdoor place

02. Volunteer: prompt kids and ask questions about the places they enjoy. What do they like about it? (views, shady/cool spot, secluded, activity space, etc) What does it feel like to be in that space?

03. Volunteer: prompt students about spaces they dislike and why? (parks w/ no shade, crowded parking lots, etc.) How would they improve these spaces?

Slide 58
04. “I want to be a landscape architect” video - play first 3 minutes.
What do you think landscape architecture is? Just by the name.
- You learned what architecture is right? What is Architecture? (design of spaces inside of buildings)

Landscape architecture is the design of spaces in the built and natural environments to benefit public health and wellbeing.
- Explain how it is difficult discipline to define because it almost has no boundaries. Landscape architecture is the design of outdoor spaces of all sizes.
- Examples of variety of spaces landscape architects design: city parks, sports fields, urban plazas, sculpture gardens, zoos, landscape restoration, playgrounds, gardens, green roofs, and more!

What defines a “space” outside?
- Similar to the rooms in a building we design spaces to have “walls” and “ceiling” but we use natural features to do this.
- Ask kids to point out different “rooms” they can see in the images.
- What ‘defines’ these rooms? What are the boundaries?
- Is there an overhead boundary?

What is “scale”?
- When designing we have to think about how the design will impact the surrounding area. Sometimes that is a small impact, sometimes it has a big impact that is far-reaching.
- Think about “scale” as if you are in a plane flying at different heights above the ground. You can see more or less depending how high you are.
- Site Scale: you are closer to the ground, like standing on top of the school building. You can see more details, but you can’t see how the edges of the space are connected to the surroundings. What can you see in the space scale image?
- Neighborhood Scale: A little higher you can see more of the surrounding area but it’s a little harder to see the details. What kind of things do you notice at this scale? Can you make out cars? Ponds? Trees?
- Community Scale: When zoomed way out you can see the whole city or multiple cities. Remember last week when Planning talked, what did you learn about from them? At this scale we think about large spaces that may have multiple smaller spaces inside of it. Here we think about where large spaces are located in natural systems.

This happens thru a specific Design Process (At ‘Design Process’ slide, volunteer explain quickly the design process and tell students they will be doing a mini activity for each of these step of the process.)
- Interpretation (Analysis & Goals): diagnosing or analyzing situations influenced by ecological cultural and economic factors at multiples scales
- Conceptualization (Designing & Ideas): Proposing Solutions
  - Define programs (things you do in spaces/activities that require space)
  - Bubble diagrams (defining spaces)
- Evaluation (Evolving Designs): Assessing both intended and unintended consequences of design decisions
- Communication (Presentation & Feedback): Presenting ideas through verbal and graphics
Explore Design Day 4: Landscape Architecture

**Interpretation**  
*Presentation, 5 minutes  
*Activity, 5 minutes

**Conceptualization**  
*Presentation, 5 minutes  
*Activity, 15 minutes

**Evaluation**  
*Presentation, 5 minutes  
*Activity, 15 minutes

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**Slide 65–66**

- **Overview:** Landscape architects begin the design process by interpreting client/stakeholder needs, analyzing site and context, and developing program.
  - Image of designer in stakeholder meeting using drawing with public to assess needs.
  - Images of designer(s) on site, inventorying site conditions.
  - Site analysis graphics (summary diagrams and photos).
  - Images of programming matrix, communicating goals and objectives of the proposed program for an outdoor space.

**Slide 68**

- **Overview:** Iterative design process of generating many alternatives, and testing many ideas.
  - Early design sketches, may be abstract or inspirational
  - Conceptual design sketches of multiple alternatives
  - Measured drawings of design ideas to test fitness to site and program.

**Slide 69**

- **Mini-Activity:** (Individual activity) - Abstract design iteration / model making charette
  - Design a park to improve your school.
    - How is the space improving your school?
    - Relate your ideas back to what came up during the brainstorm.

**Slide 70**

- **Overview:** Refine concept ideas developed in Conceptualization phase against existing site conditions. Work towards a Final Concept that meets goals set in Interpretation Phase.
  - Sketches showing several conceptual design alternatives side by side
  - Designers over design development drawings at desk
  - Public discussing illustrative display boards of conceptual or design development in a community venue

**Slide 71**

- **Mini-Activity:** (Small Group activity) Fit design concepts on a site and work within site constraints.
  - Make ideas work together in one site.
Communication

Presentation, 5 minutes
Activity, 5 minutes

Slide 72

- Overview: Presenting ideas to public group or client. May require additional graphics & a presentation telling the story of the design.
- Conceptual design sketches for internal and client-designer communication.
- Illustrative graphics for communication with public and gathering resource support for project
- Design development graphics to test and communicate more detailed aspects of design internally and with client/stakeholders.
- Construction documentation (layout & dimension plan, grading plan, and construction details would be good) to communicate what the built design should be like with all those involved in the construction.

Slide 73

- Mini-Activity: (Small Group activity) presentation portion of mini-activities
- Present what each group created in Evaluation stage. What parts of Conceptualization phase influenced final design. Small groups present their designs.

Design Process Example

Slide 74

- This is a website that has a good example of the design process. Click through the images on main page to go from sketches to renderings to construction document’s to construction and final product.
- https://asla.org/yourpath/index.html

Q&A

Personal Stories

10 minutes, Slide 75

- Volunteers sit at front of class and allow students to ask questions about the profession
- “We couldn’t cover everything about landscape architecture today so this is time for you to ask whatever questions come to mind”
- Hand out college information and take-homes for students.

Closing Remarks

What Landscape Architects Do

10 minutes, Slide 76

- Wrap up the day by revisiting the goals of landscape architecture. Using the process you just learned you can accomplish these goals and make an impact on the spaces around you.
- Design places that connect people to the natural world.
- Create landscapes for people’s everyday lives and their most memorable moments.
- Conserve and restore landscapes.
- Remake cities for brighter, greener futures.
SO YOU WANT TO BE A LANDSCAPE ARCHITECT?

What is a Landscape Architect?

A landscape architect is a designer who uses art and science to combine the natural and built environments, creating spaces that enhance people's everyday experiences. It is the profession that designs, plans and manages our land.

The term 'landscape architecture' became common after 1863 when Frederick Law Olmsted and Calvert Vaux designed New York's Central Park. Today, landscape architects deal with the increasingly complex relationships between the built and natural environments.

Landscape architects plan and design traditional places such as parks, residential developments, campuses, gardens, cemeteries, commercial centers, resorts, transportation facilities, corporate and institutional centers and waterfront developments. They also design and plan the restoration of natural places disturbed by humans, such as wetlands, stream corridors, mined areas and forested land. Their appreciation for historic landscapes and cultural resources enables landscape architects to undertake preservation planning projects for national, regional and local historic sites and areas.

Working with architects, city planners, civil engineers and other professionals, landscape architects play an important role in environmental protection by designing and implementing projects that respect both the needs of people and of our environment. This type of sustainable vision and wise use of our environmental resources is work that is in demand today and will continue to be needed in the future.

Three steps to becoming a landscape architect: education, internship/experience and examination

Landscape architects must hold a professional degree in architecture from one of the 69 schools of landscape architecture that have degree programs accredited by the Landscape Architectural Accreditation Board (LAAB).

All states require individuals to be licensed (registered) before they may call themselves a Professional Landscape Architect (PLA) and contract to provide landscape architectural services. During the time between graduation and becoming licensed, landscape architecture school...
How do I prepare in high school to be a landscape architect?

While still in high school, you should plan a strong college preparatory program of courses in English, history, and other humanities subjects such as social studies, psychology, theater and communications/public speaking, which will sharpen your communication skills. Courses in mathematics, including geometry, trigonometry, algebra and physics, will help develop problem-solving techniques. Science courses such as biology, ecology and geology will give you a base knowledge of Earth sciences to build on.

Art courses — drawing, painting, sculpture, or photography — will be helpful in developing your ability to visualize, conceptualize and think creatively, which are important skills in design.

Courses in computers, 3D modeling and business will be extremely helpful in preparing for a career in landscape architecture. Develop positive skills to use your entire life. Learn how to manage your time and get projects done well and promptly. Project management is a huge responsibility in any design professional’s office.

A well-rounded education is essential for success as a landscape architect, and it is just another emphasis that every course is important.

Check out these websites for more information

Landscape Architecture Overview: www.asla.org/design/index.html

Prairie Gateway Chapter of the American Society of Landscape Architects: www.pgasla.org

American Society of Landscape Architects: www.asla.org

Your Path to Landscape Architecture: www.asla.org/yourpath/index.html

Colleges with a Landscape Architecture Program: www.asla.org/schools.aspx

Council of Landscape Architectural Registration Boards (CLARB): www.clarb.org

After receiving a license, all landscape architects must complete a required amount of continuing education throughout their career in order to maintain their license. The number of hours a year depends on the state in which they are licensed.

Begin your career exploration by considering these ideas:

Discover architecture. It is diverse and has many opportunities for specialization—become familiar with the options.

Be interested In the design of the built environment, including public space, and how people use it. Volunteer for organizations such as your local nature center or Parks & Rec. Department.

Ask questions. Most big cities have a local ASLA Chapter (American Society of Landscape Architects). They are a great resource and are happy to help you learn more about landscape architecture and give you information about careers. Talk with landscape architects; observe landscape projects and construction sites; visit landscape architecture firms and schools and speak with landscape architecture students.

Prepare for professional education. Develop a broad interest in the arts and humanities and a solid background in environmental sciences and math. Consider taking Advanced Placement courses while in high school.

Learn communication skills. Writing effectively, speaking clearly, and developing freehand drawing skills are essential to pursuing a career in landscape architecture.

Read. Books and magazines on landscape architecture and design, and browse the web for landscape architecture design websites and blogs.
EXPLORE DESIGN :
LANDSCAPE ARCHITECTURE
TODAY’S PLAN

01 Ice-breaker
02 Video
03 What is Landscape Architecture?
04 Design Process (Designing a Park!)
INTRODUCTIONS

Introduce yourself by telling us:

• Your favorite outdoor space
• Your favorite outdoor activity
I WANT TO BE A LANDSCAPE ARCHITECT

VIDEO: https://vimeo.com/13825811
LANDSCAPE ARCHITECTURE

What is it?

Any ideas?
Landscape architecture is the design of spaces in the built and natural environments that benefit public health and wellbeing.

Landscape architects design outdoor spaces of all shapes, sizes and types.
The goal of landscape architecture is to:

- Design places that connect people to the natural world.
- Create landscapes for people's everyday lives and their most memorable moments.
- Conserve and restore landscapes.
- Remake cities for brighter, greener futures.
WHAT DEFINES AN OUTDOOR SPACE?

Architects design indoor spaces with walls, windows, doors, ceilings and floors.

Landscape architects do the same thing outside but with natural elements.

Wall: Shrubs/Grasses, Fences, Walls

Ceiling: Trees, Trellis, Pergola

Floor: Bricks, Sidewalk, Gravel, Grass Lawn
WHAT IS SCALE?

Scale refers to the size or amount of space you can see in a plan.

Landscape architects use different scales to understand what is surrounding a project.
THE DESIGN PROCESS

Interpretation (Inventory & Analysis)
Conceptualization (Concept Development)
Evaluation (Analyzing Designs)
Communication (Presentation & Graphics)
INTERPRETATION
(Inventory & Analysis)

- Analyze the site and surroundings
- Identify potential issues for designing
- Influencing elements
INTERPRETATION
(Inventory & Analysis)

- Define goals of the client
- Brainstorm program elements
INTERPRETATION

As group let’s brainstorm ideas for your school to add a new outdoor space!

• What is there now?
• What would make the space better?

Write ideas on post-it notes!
CONCEPTUALIZATION
(Concept Development)

- Propose Solutions
- Define activities / programs
- Illustrate space requirements
CONCEPTUALIZATION

- Work individually
- Use scratch paper and materials to design a park space that will improve your school’s outdoor spaces.
- Come up with lots of concepts! (iterations)
- Use Post-It ideas we brainstormed
- Think about how each concept is going to improve the school
EVALUATION
(Analyzing Design)

• Name each design option
• If/Then stage. “If we do this, then this happens…”
• Who/What is affected? How are they affected?
• May need to create models of concepts
• What concept works best for site and surroundings?
EVALUATION

• Work in small groups
• Discuss everyone’s concepts
• Discuss how concepts will work on school site
• As group, come up with one final concept!
• Draw final group concept to present to class!
• Clean up when finished
COMMUNICATION
(Presentation & Graphics)

Sharing ideas!

• Community/Client meetings
• Final concept graphics
• Site Plan
• Material Boards
COMMUNICATION

- Groups present final concept to the class
- Everyone speaks
- What part of individual concepts influenced final design?
- How will this design improve the school?
DESIGN PROCESS EXAMPLE

- Images from each step in process, from concept to fully constructed.

- https://asla.org/yourpath/index.html
Q/A STORY TIME

Ask any questions of the presenters

Presenters can share a little bit of their story

• how they became a landscape architect

• how they became interested in landscape architecture
CLOSING AND CLEAN-UP

01 Please return all supplies to a volunteer

02 What did you learn today?
   What landscape architects do:
   • Design places that connect people to the natural world
   • Create landscape for people’s everyday lives and their most memorable moments
   • Conserve and restore landscapes
   • Remake cities for brighter, greener futures