Design a Reading Garden

Based on notes from Amy Schuchert, RLA, ASLA, and colleagues, and Jon Mueller and Keith Dixson, ASLA Indiana, and colleagues' 2008 Chapter activity

Reviewed by Jamie Csizmadia

Summary

Students learn about the profession of landscape architecture in the process of designing a reading garden. This activity focuses on process, and, therefore, could be used to design a dog park, community garden, arboretum, playground, or any other space.

- Students learn how to measure, analyze, and map a site, and determine desired elements for the space.
- Students work in groups to design a preliminary site plan and present it to the class. The landscape architects combine features of each group's work into a final plan.
- If the school wants to build the garden, landscape architects would produce a final design, and assist with securing donations for materials and construction costs.

This Career Discovery activity can be implemented in different ways depending on the time available and the audience's age. See the appendix for other implementation possibilities.

Publicize and Document Your Activity

By taking the time to create and implement a career discovery activity for WLAM, you achieve two great results—you promote the profession while teaching people about sustainability, ecological issues, and the technical aspects of landscape architecture.

Be sure to publicize your activity within your community and document it to share your experience with other ASLA chapters. Refer to the appendix for suggestions on publicizing and documenting your activity.

Grade Level: 6–8

Duration

5 to 8 class sessions (about 50 minutes each) over a 2 to 3 month period for design phase. Sessions 3, 4, and 7 could be omitted if time is a consideration. Construction requires additional time. Allow one month of lead-time for permission and planning. April is World Landscape Architecture Month—a great time to finish!

Personnel

- Teacher
- Landscape architects: 2 to 5 per session

Costs

- Printing (handouts, homework)
- Landscape architect volunteer time
- Building and craft materials (if built)

Learning Objectives

Students will learn:

- → About landscape architecture as a career.
- → How to measure objects they cannot reach (i.e., tree, building, light pole).
- → How to analyze site conditions (i.e., shade, sloped ground, trees).
- → How to map a site.
- → How math, writing, art, and social studies are relevant to the landscape architecture profession.
- → To work in groups to generate ideas and plans.

Materials

PROFESSIONAL MATERIALS

- Design magazines, product books
- Product samples
- Tools used by landscape architects (GPS units, laser, tape measures, etc.)

EQUIPMENT

- Computer and projector for presentations
- Computers for students
- Writing surface (board, flip chart, etc.)
- Markers to use on the writing surface

SUPPLIES

- Tape measures, yard sticks
- Scissors (in class or just at home)
- Donated hats, t-shirts

SESSION HANDOUTS (SEE APPENDIX)

- *Site Mapping*
- *Site Analysis*
- Site-specific reading garden site map

Preparation Checklist

At least one month in advance:

- ☐ Contact teacher and principal to determine if any permission clearances are required.
- ☐ Decide with school administration if the reading garden will be built.
- ☐ Predetermine the site for the reading garden.
- ☐ Decide whether to do the activity with just one class, several classes, or the entire school.
- ☐ Meet with the teacher(s) to discuss the activity outline including student assignments and grading.
- ☐ Discuss ongoing communication with teacher(s).

  Consider setting up a website or email address to communicate with the class. This will enable you to receive questions and images from the class.
- ☐ Review the national academic standards for this activity with the teacher(s) (see appendix).

One week prior:

- ☐ Visit the site and draw a site plan. Make 3–5 large copies for student groups to work with in Session 6.
- ☐ Use the site plan to create a *Reading Garden Preliminary Site Plan* handout for the Session 6 student assignment.
- ☐ Make copies of *Site Mapping* and *Site Analysis* handouts.

Between sessions:

- ☐ Schedule time before/after each session to synthesize student ideas, draw maps, and prepare production boards.

Procedure

OVERVIEW

The step-by-step procedures for facilitating seven sessions of the *Design a Reading Garden* activity are provided on the following pages.

- Session 1: Overview of Landscape Architecture and Project Introduction
- Session 2: Tour the Site and Conceptualize the Design
- Session 3: Site Mapping
- Session 4: Site Analysis
- Session 5: Designing the Garden
- Session 6: Preliminary Site Planning
- Session 7: Review Designs and Develop Construction Documents

Session 1: Overview of Landscape Architecture and Project Introduction

ADVANCE PREPARATION

- ☐ Set up projector
- ☐ Select photos of local landscape architecture projects to show students
- ☐ Select photos of projects similar to the reading garden to show students
- ☐ Be sure there's a surface on which to write your name
- ☐ Predetermine with the teacher the due date of the assignment students will complete between Sessions 1 and 2

WHAT TO DO

SET THE STAGE **TIME: 5 MIN**

1. Introduce yourself. Write your name where students can refer to it.

2. Tell students that today they will:
   - Learn about landscape architects and what they do
   - Be introduced to a landscape architecture project they will be working on over the next couple of months.

INTRODUCTION TO THE PROFESSION **TIME: 15 MIN**

3. Ask students to define the words "landscape" and "architecture" and write their ideas on the board. Discuss and correct any misconceptions.

4. Ask students what they think landscape architects do. Write their answers on the board (or computer with projector). Discuss and correct any misconceptions.

5. Tell students: Landscape architecture encompasses the analysis, planning, design, management, and stewardship of natural and built environments.

6. Ask students for examples of the types of projects landscape architects might design.

   Types of projects include: residential; parks and recreation; monuments; urban design; streetscapes and public spaces; transportation corridors and facilities; gardens and arboreta; security design; hospitality and resorts; institutional; academic campuses; therapeutic gardens; historic preservation and restoration; reclamation; conservation; corporate and commercial; landscape art and earth sculpture; interior landscapes; etc.

7. Ask students for local examples of projects created by landscape architects. Show pictures of local projects.

8. Ask students what type of education and training one might need to be a landscape architect.
   - Discuss required education, knowledge, skills, licensing.
   - Discuss collaborative aspects of the profession (work closely with other landscape architects and many other professions, including: engineers, hydrologists, archaeologists, biologists, planners, politicians and even educators).

9. Tell students about ASLA.

   Excerpt from ASLA's website:

   "Founded in 1899, ASLA is the national professional association for landscape architects, representing more than 15,000 members in 49 professional chapters and 72 student chapters. Members of the Society use the "ASLA" suffix after their names to denote membership and their commitment to the highest ethical standards of the profession. ASLA's vision is leading the design and stewardship of land and communities. Its mission: 'Landscape architects lead the stewardship, planning, and design of our built and natural environments. The Society's mission is to advance landscape architecture through advocacy, communication, education, and fellowship.'"

INTRODUCE THE READING GARDEN PROJECT **TIME: 25 MIN**

10. Discuss the reading garden project goal and scope.

    Goal:

    - Provide a useable, beautiful, and fun reading garden for students, faculty, and parents to use before, during, and after classes.

    Scope:

    - Get to know the site
    - Develop concepts for designing the reading garden
    - Research costs and select materials to gain an understanding of the money and materials needed
    - Draw constructible plans to build the approved concept
    - Build it! (maybe)

11. Show similar projects: including drawings, plans, photos.

WRAP UP **TIME: 5 MIN**

12. Ask students:
    - What are three things a landscape architect might design?
    - What is the project we will be working on for the next couple of months?

13. Review the assignment that students will complete between sessions.
    - Write this assignment on the board (or prepare a handout beforehand):
      - *Write a paragraph of at least 5 sentences and 100 words about how you feel when you are outdoors in a space you like.*
    - Tell the students when the assignment is due.

Session 2: Tour the Site and Conceptualize the Design

ADVANCE PREPARATION

- ☐ Be sure to tour the reading garden site (know the location and features)
- ☐ Gather design magazines, product books
- ☐ Research internet for sites students might explore for images
- ☐ Check with teacher for space on bulletin board to post images
- ☐ Check that the teacher has collected the students' between-sessions assignment; if possible arrive early to review them
- ☐ Check whether computers are available for student use and whether they will be able to print internet images
- ☐ Organize extra personnel (1 to 3 people—teachers, parents, or landscape architects) to lead groups

WHAT TO DO

SET THE STAGE **TIME: 10 MIN**

1. Remind the students of your name. Write your name where students can refer to it.

2. Tell students that today they will:
   - Review the assignment they completed between sessions
   - Visit the site
   - Start thinking about ideas for the design of their reading garden

3. Review the assignment students completed between sessions.

   Write a paragraph of at least 5 sentences and 100 words about how you feel when you are outdoors in a space you like.

   - Ask students to read their paragraphs or share a couple of ideas from their paragraphs.

VISIT THE SITE **TIME: 15 MIN**

4. Visit the reading garden site.
   - Familiarize the students with the site.
     – Ask students to identify the features they notice about the site (flat, sloped, shaded, sunny, quiet, noisy, big, small, close to other classrooms, etc.).

- Identify some of the site features. Ask students:
  - Why will this site be good for a reading garden?
  - Are there any site features that might limit what they can do with the space?

LEAD THE DESIGN ACTIVITY **TIME: 20 MIN**

5. Divide the class into two (or more) groups.
   - Have students gather images various sources of what they would like their reading garden to look like from
     - Use the internet, design magazines, product books, pictures of your projects, etc.
   - Post examples if there's space on a bulletin board in the classroom.

WRAP UP **TIME: 5 MIN**

6. Ask students:
   - Why do you think we visited the site today?
   - What did you find in the pictures that we might be able to use in designing the reading garden?

Session 3: Site Mapping

ADVANCE PREPARATION

- ☐ Bring tools (GPS units, lasers, tape measures).
- ☐ Organize extra personnel to lead groups (1 to 3 people—teachers, parents, or landscape architects).
- ☐ Make one copy of the *Site Mapping* handout for each student plus a few extras; familiarize yourself with the handout.
- ☐ Set up several stations in the classroom for students to complete Part 2: Paces of the *Site Mapping* handout. Put out marks from which students will calculate their average pace. Tape widths to measure with paces.

WHAT TO DO

SET THE STAGE — TIME: 10 MIN

1. Tell students that they will discuss images they found last session and learn about site mapping.

2. Review the images they found last session that show what they would like the reading garden to look like.
   - Ask students to:
     - Describe or show the picture of an image they found.
     - Explain what part of the image they want in the reading garden and why they want to include that part.

INTRODUCE THE SITE MAPPING ACTIVITY — TIME: 5 MIN

3. Show students some of the tools landscape architects use: GPS units, lasers, tape measures, and even parts of their body like a foot or arm when other tools are not available.

4. Tell students to think about how a space relates to them (their bodies).

LEAD THE SITE MAPPING ACTIVITY — TIME: 30 MIN

5. Introduce the concept of site mapping.
   - Divide the class into smaller groups with an adult leader for each group.
   - Pass out one *Site Mapping* handout to each student. Ask students to write their names on the handout.
   - Discuss the drawing (person height, arm length, foot size).

6. Work with students to complete the *Site Mapping* handout.
   - Complete Part 1: Measuring.
     - Read it aloud then discuss.
   - Complete Part 2: Paces.
     - Read and explain. Assign students to the stations you set up beforehand.
     - Point out to the students the marks for measuring their paces and the given width.
     - Allow 10 minutes to finish.
   - Complete Part 3: Measuring With Paces.
     - Read and explain.
     - Brainstorm objects in the room they could use for measurements.
     - Allow 10 minutes to finish.
   - Complete Part 4: Standard Distances
     - Read it aloud then discuss.
   - Complete Part 5: Everyday Objects
     - Read it aloud then discuss.
   - If students have not completed the *Site Analysis* handout in class, tell them to finish it before the next session.

WRAP UP **TIME: 5 MIN**

7. Ask students:
   - Do you have any questions about the handout?
   - Why do landscape architects sometimes use their feet or hands to measure?
   - Why do landscape architects need to map a site?

Session 4: Site Analysis

ADVANCE PREPARATION

- ☐ Make one copy of the *Site Analysis* handout for each student plus a few extras; familiarize yourself with the handout.
- ☐ Organize extra personnel to lead groups (1 to 3 people—teachers, parents, or landscape architects).
- ☐ Be prepared to take groups to the site to complete the *Site Mapping* handout.
- ☐ Create a site plan for the reading garden. Use it to develop a *Site Plan* handout and make one copy for each student plus a few extras.
- ☐ Predetermine with the teacher the due date of the assignment students will complete between Sessions 4 and 5.

WHAT TO DO

SET THE STAGE — TIME: 10 MIN

1. Tell students that they will:
   - Review the *Site Mapping* handout from last session.
   - Learn about site analysis.
2. Discuss the *Site Mapping* handout from last session.
   - Any questions?
   - What did you learn from the handout?

   Note: Arrange with the teacher in advance whether to collect the *Site Mapping* handout now, if it was not previously turned in.
3. Introduce the session topic.
   - Tell the students that they will think about the site conditions and how they will affect the design of the reading garden.

LEAD THE SITE ANALYSIS ACTIVITY — TIME: 35 MIN

4. Distribute a *Site Analysis* handout to each student. Ask students to write their name on the handout.
5. Work with students to complete the *Site Analysis* handout. If possible, break the class into smaller groups and have an adult leader work with each group.

- Complete Part 1:
  - Read aloud and ask for ideas. Direct students to fill in the blanks.
- Complete Part 2:
  - Read aloud and explain. Ask students to complete. Ask for examples of what students wrote.
- Complete Parts 3–5:
  - Read aloud and explain each part, then ask students to complete.
  - Students will probably need to go to the site to complete Parts 4 and 5.
- If students have not completed the *Site Analysis* handout in class, tell them to finish it before the next session.

WRAP UP **TIME: 5 MIN**

6. Ask students:
   - What kinds of conditions do landscape architects need to think about before they can plan a design for a space?

Session 5: Designing the Garden

ADVANCE PREPARATION

- ☐ Review key words in the paragraphs students wrote for their Session 1 assignment.
- ☐ Review images students gathered in Session 2 for ideas/themes.
- ☐ Board or large paper for students to draw site maps. Consider preparing large copies of the basic site outline for students to draw on.
- ☐ Paper and markers for students to record brainstorming ideas (easel size if possible).
- ☐ Organize extra personnel to lead groups (1 to 2 people—teachers, parents, or landscape architects).
- ☐ Arrange with the teacher to collect the student assignment in advance of the session.

WHAT TO DO

SET THE STAGE — TIME: 15 MIN

1. Tell students that they will:
   - Review the *Site Analysis* handout from last session.
   - Begin thinking about the design of their reading garden.

2. Review the *Site Analysis* handout students completed in the previous session.
   - Ask two or three students to quickly draw their site maps on the board.
   - While the selected students are completing their drawings, ask if there are any questions about the site analysis.
   - When the drawings are finished, ask the students to point out two site factors in their drawings and explain how they affect the site.

REVIEW WHERE YOU ARE IN THE PROCESS — TIME: 5 MIN

3. Tell students that landscape architects follow a process when they plan a landscape. First they analyze or assess the site, then they design, and finally they build. We just completed our analysis by gathering facts about our site using the *Site Mapping* and *Site Analysis* handouts. Now it's time to design.

4. Ask students what would be a good first step in the design phase. How could we come up with ideas for a design? If they don't come up with brainstorming as a process, let them know that's how they'll proceed.

- You could compare the brainstorming process to something they know how to do. For example, if they were creating a timeline for a social studies class, they would first gather the information they need, then brainstorm how they were going to display the information, then create the timeline. If time allows, ask students for other examples to reinforce the process.

FACILITATE THE BRAINSTORMING ACTIVITY **TIME: 25 MIN**

5. Discuss what brainstorming is (rules, pitfalls, mediator).

6. Direct students to brainstorm what they would like their reading garden to look like.
   - Divide the class into two groups (or more) with an adult leader for each group.
   - Be sure that each adult leader has paper and markers for recording the students' ideas.

7. Review work students completed in earlier sessions.
   - Read some of the key words from the paragraphs they wrote in Session 1. Show examples of the images they gathered in Session 2.
   - Ask students to work in their groups to brainstorm what they would like their reading garden to look like.
     - Have the adult leader record the group's ideas on large pieces of paper (that can be used for presentation).
   - After 10–15 minutes, reconvene the entire class and have each group present their ideas (2–5 minutes per group).
     - Keep the written brainstorming ideas to prepare for the next session.

WRAP UP **TIME: 5 MIN**

8. Provide the student assignment.
   - Assign (or let students choose) each student several words/images from today's brainstorming session.
   - Ask students to draw pictures that show how these words/images relate to the reading garden.
   - Give an example of a word and draw a sample picture.

Session 6: Preliminary Site Planning

ADVANCE PREPARATION

- ☐ Arrange the brainstorming ideas (from Session 5: Designing the Garden) into categories to discuss with students. Prepare a visual display (on a computer, poster board, or easel paper) to review with the students.
- ☐ Prepare examples of different methods for graphic representation of site plans such as bubble diagrams, word diagrams, pictograms, etc.
- ☐ Bring the 3–5 large copies of the reading garden site plan for students to work with in class.
- ☐ Bring copies of the *Reading Garden Preliminary Site Plan* handout for the student assignment. Be sure to have one copy of the handout for each student plus a few extras.
- ☐ Organize extra personnel to lead groups (1 to 4 people—teachers, parents, or landscape architects).
- ☐ Arrange with the teacher to collect the student assignment in advance of the next session.

WHAT TO DO

SET THE STAGE **TIME: 10 MIN**

1. Tell students that today they will:
   - Review their brainstorming ideas from the last session about the garden's design.
   - Share their thoughts on how some of the words and images from the brainstorming session relate to their reading garden design.
   - Develop a preliminary plan for the reading garden.
2. Review the brainstorming ideas the students created in Session 5: Designing the Garden.
   - Use the display you prepared in advance that displays the students' ideas organized into categories.
3. Review the assignment students completed between Sessions 5 and 6.
   - Ask a few students to explain how some of their words/images relate to the reading garden project.

LEAD THE SITE PLANNING ACTIVITY **TIME: 35 MIN**

4. Introduce the preliminary site plan activity.
   - Define “preliminary site plan.”
   - Present different methods for graphic representation of site plans such as bubble diagrams, word diagrams, pictograms, etc.

5. Run the activity.
   - Divide the class into 3 to 5 groups.
     - Have an adult leader work with each group.
     - Give each group a large copy of the reading garden site plan.
   - Direct each group to develop a preliminary site plan. Try to get each group to use different methods of graphic representation.
   - Reconvene the class and have each group present their ideas to the class. Collect these preliminary plan ideas for the next session.

WRAP UP **TIME: 5 MIN**

6. Provide student assignment.
   - Give each student a copy of the *Reading Garden Preliminary Site Plan* handout you have created based on the reading garden site.
   - Ask them to produce their own preliminary plan to discuss at the next session.

   Note: Arrange with the teacher to collect the student assignment in advance of the next session so you can combine the features of the various group and individual preliminary site plans into a preferred concept.

Session 7: Review Designs and Develop Construction Documents

ADVANCE PREPARATION

- ☐ Combine the features of the group and individual preliminary site plans into a preferred concept. The teacher will need to collect student assignment (completing the *Reading Garden Preliminary Site Plan* handout) and give them to you in advance.
- ☐ Organize to have computers with CAD installed available in the classroom. Ideally, have 5 computers available.
- ☐ Gather landscape architecture trade magazines.
- ☐ Organize extra personnel to lead groups (3 to 5 landscape architects); CAD knowledge required.

WHAT TO DO

SET THE STAGE **TIME: 10 MIN**

1. Tell the students that today will be the last classroom working session. They will:
   - Share their preliminary plans for the reading garden.
   - See the preliminary plan you created and provide their feedback.
   - Learn about how landscape architects use technology.

REVIEW PRELIMINARY SITE PLANS **TIME: 20 MIN**

2. Review student assignment *Reading Garden Preliminary Site Plan*.
   - Divide the class into about 5 groups with an adult leader for each group.
   - Ask students to present their preliminary site plans in their group in 2–4 minutes.
   - Each group will share one idea from each student's plan.

3. Present the concept you developed based on the groups' preliminary site plans created in *Session 6: Preliminary Site Planning* and the individual site plans students created between sessions.

4. Ask students what they:
   - Like about your plan
   - Don't like about your plan
   - Would change

LEAD THE CAD ACTIVITY **TIME: 20 MIN**

5. Tell students they will see how a design plan is entered into a computer to create a construction document.
   - Define construction document.
   - Explain what CAD is and how it helps a landscape architect construct the planned design.

6. Divide the class into small groups each with a computer and an adult leader.
   - Using the design concept you developed, show students how the information is entered into the computer.
     – If possible, build a 3D model. The goal is to show students how technology is used in landscape architecture.

WRAP UP **TIME: 5 MIN**

7. Thanks to all. Share any giveaways you may have (t-shirts, hats, pins, etc.).

8. If the school plans to build the reading garden, let students know there will be a follow up meeting with details about the construction.

Appendix

HANDOUTS

Landscape Architecture FAQs

Site Mapping

Site Analysis

Publicize and Document Your Activity

Don't let the effort you put into creating and implementing a Career Discovery activity go unnoticed!

Staff at ASLA National is always on hand to help promote your events to local media; feel free to contact them at anytime. If you would like to reach out to local media yourself, below are some tips to assure your name appears in print or online.

PUBLICIZE

For tips on reaching out to local media, refer to the PR Handbook, available as part of ASLA's Chapter Operations Workbook. It is online at: https://www.asla.org/ChapterOutreach.aspx

- Pitching the story to the media
- Formatting the press release
- Appealing to the audience
- Making the story relevant
- Social media tips

TAKE PICTURES & VIDEO

Be sure to take lots and lots pictures and video! ASLA National would love to share your activity online as inspiration for the other chapters.

Send us photos or video of your event featuring:

- Students interacting with professionals (we must have a signed photo release from parents to use the photos)
- Your presentation materials
- The activity in process
- The end result of your activity

DOCUMENT

Email our public relations and communications coordinator—at jtaylor@asla.org—to report on the activity or activities that your chapter completes.

Alternative Ways to Implement the Activity

This Career Discovery activity, *Design a Reading Garden,* can be implemented in different ways depending on the time available and the audience's age.

A YOUNGER AUDIENCE

Audience: Grades K–5
Estimated time: About 2 hours

GOAL

Shorten the activity to one session and work with a younger audience.

RESOURCES

You can excite and involve students by having them create a rough design for a reading garden or other project.

- Facilitate Session 1 of the activity as outlined in Plan A
- Distribute handouts of the proposed site
- Have students create their designs (individually or in small groups)
- Have the students share their designs

BUILD OUT THE READING GARDEN

Audience: Grades 6–12
Estimated time: Variable

GOAL

Extend the activity by building out the reading garden (or other project) that has been designed.

RESOURCES

This activity will take a substantial chapter time commitment to finalize design plans, secure materials, organize labor, and oversee construction. As this is taking place, consider keeping the students, their parents, and the school engaged by involving them in fund raising, media events, taking photos, and writing articles for the school paper.

National Academic Standards

The ASLA Career Discovery Program Activities correlate to the national standards created by the Mid-Continent Research for Education and Learning (McREL). McREL is a nationally recognized, private, nonprofit organization dedicated to improving education.

Academic standards are the skills and knowledge base expected of students for a particular subject area at a particular grade level. In the U.S. standards are not “standardized.” There are published sets of national and state standards, and some cities and local communities have created their own. Local academic standards can be matched to the McREL national standards.

ART

Standard 1. Understands connections among the various art forms and other disciplines

GEOGRAPHY

Standard 3. Understands the characteristics and uses of spatial organization of Earth's surface

Standard 4. Understands the physical and human characteristics of place

Standard 6. Understands that culture and experience influence people's perceptions of places and regions

Standard 14. Understands how human actions modify the physical environment

LANGUAGE ARTS

Standard 1. Uses the general skills and strategies of the writing process

Standard 4. Gathers and uses information for research purposes

Standard 8. Uses listening and speaking strategies for different purposes

Standard 9. Uses viewing skills and strategies to understand and interpret visual media

WORKING WITH OTHERS

Standard 1. Contributes to the overall effort of a group

MATHEMATICS

Standard 2. Understands and applies basic and advanced properties of the concepts of numbers

Standard 3. Uses basic and advanced procedures while performing the processes of computation

Standard 4. Understands and applies basic and advanced properties of the concepts of measurement

Standard 9. Understands the general nature and uses of mathematics.

Landscape Architecture FAQs

Landscape architecture is a profession committed to stewardship of the land while creating healthy, enjoyable, and secure places for the present and future. Landscape architecture combines art and science. It is the profession that designs, plans, and manages our land.

Landscape architecture has strong roots in the United States and early examples, such as Thomas Jefferson's Monticello, are still much admired. The actual term landscape architecture became common after 1863 when Frederick Law Olmsted and Calvert Vaux designed New York's Central Park.

WHAT DOES A LANDSCAPE ARCHITECT DO ON THE JOB?

Landscape architects deal with the increasingly complex relationships between the built and natural environments. Landscape architects use sustainable design practices to 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.

WHAT SKILLS DOES A LANDSCAPE ARCHITECT NEED?

- Sensitivity to landscape quality
- Understanding of the arts and a humanistic approach to design
- Ability to analyze problems in terms of design and physical form
- Technical competence to translate a design into a built work
- Skills in all aspects of professional practice including management and professional ethics

WHAT ARE THE EDUCATION AND LICENSING REQUIREMENTS?

A formal education is essential to gain the skills and knowledge to become a landscape architect. Professional education in landscape architecture can be obtained at the undergraduate or graduate level. There are two undergraduate professional degrees. These usually require four or five years of study in design, construction techniques, art, history, natural, and social sciences. There are generally three types of graduate degree programs. For more information visit ASLA's Career Discovery page: asla.org/yourpath

At present, all 50 states license (or register) landscape architects. Each state sets its own requirements for registration, but all require candidates to pass a national examination (the Landscape Architect Registration Examination, or LARE).

WHERE DO LANDSCAPE ARCHITECTS FIND JOBS AFTER GRADUATION?

Landscape architects are employed in private, public, and academic organizations. Private sector opportunities are found within landscape architectural, engineering, architectural, and planning firms. Landscape architects may also work with other types of private corporations that have physical planning departments, or offer products and services related to land planning and development. Public sector employment opportunities are found within federal, state, regional, and municipal agencies involved in land planning, development, and preservation. Landscape architects in academic practice teach and conduct research in the professional programs offered by colleges and universities across the country.

WHAT IS A LANDSCAPE ARCHITECT'S SALARY?

Landscape architectural salaries vary depending on the years of experience, geographical location, and type of position. The average annual salary and bonuses for those in the landscape architecture field total $78,600, according to the 2010-11 ASLA National Salary Survey.

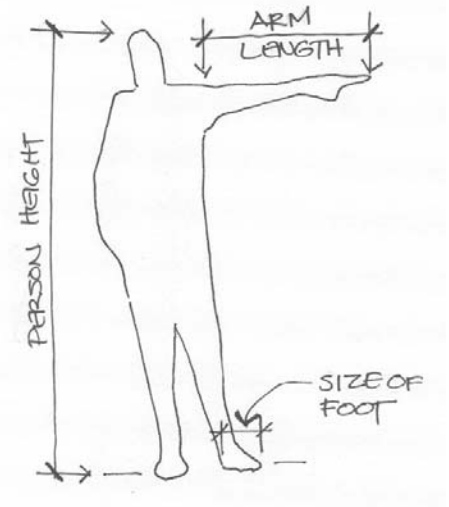
For more information about a career in landscape architecture, visit ASLA's Career Discovery page: asla.org/yourpath

Site Mapping

Name _____

Part 1 Measuring

How would you measure something you cannot reach: a tree, building, or light pole? Landscape architects often use their bodies for measurements. For small objects, you could use your foot, hand, or arm.



What are 3 things that may change or make it difficult to use your body to measure objects?

- _____
- _____
- _____

Part 2 Paces

Paces are the equal length steps you take when you walk. You can use your pace to make reasonable measurements of spaces even when you don't have a measuring tape. Each person's pace will be different. Take turns to complete the following activity.

1. Calculate your average pace.

   Stand with your toes touching the mark on the ground and take 10 steps forward.

   Measure the distance with the tape measure. _____ inches

   Divide by 10 to calculate your average pace in inches. _____ average pace

2. Using your pace, measure the width of the space marked between two pieces of tape.

   Stand with your toes touching the mark on the ground and count the number of paces it takes for you to walk between the two marks. _____ paces

   Multiply the number or paces by your average pace (in inches) to determine the distance between the two marks. _____ inches

3. Name 3 things in a reading garden site that could be measured with your pace.

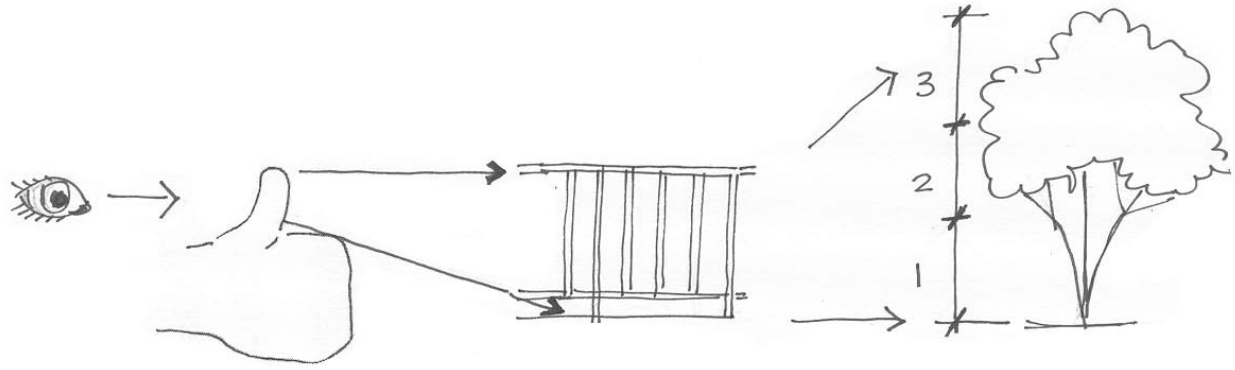
_____

4. List 3 things that could make it difficult to use your pace to measure objects.

_____

Part 3 Measuring with Paces

Sometimes the object is too big for you to measure by standing next to it or in a place you cannot reach. What then? Use a familiar object that is easy to measure by yourself with a yardstick or tape measure (fence in example).



Step 1 Step 2 Step 3 Step 4

Step 1. Hold your thumb with arm extended. Move back and forth until your thumb is the same height as the object. Then walk to the object you just measured counting your paces. What is the number of paces between you and the object? _____ paces

Step 2. Measure the object with a tape measure or yardstick.
What is that measurement in inches? _____ inches

Step 3. Select a different object to measure that you cannot measure with a yardstick (tree in this example). Standing by the object, walk away from the object the same number of steps you recorded in Step 1.

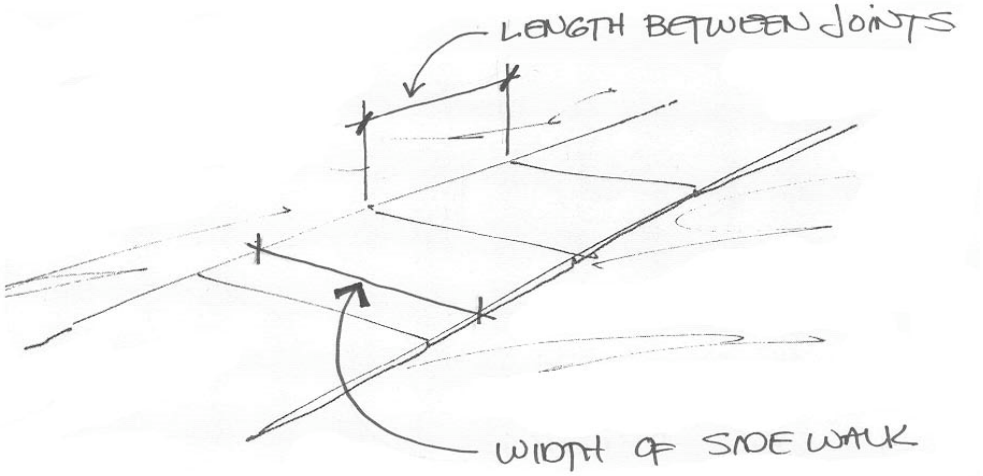
Step 4. Measure the new object with your thumb extended same as Step 1. Calculate the height of the object by multiplying the number of thumbs it takes to cover the object times the height of the object measure in step 2.

(____thumbs) x (_____ height of object measured in step 2) = _____inches (height of new object)

Step 5. Convert height to feet and inches. _____ feet _____ inches

Part 4 Standard Distances

Sometimes there are existing objects that do the measuring for you in the built world. Sidewalks, pens and pencils, ceiling tiles, tables, and stairs are only a few things that are standard sizes. If you know these standard sizes, you can make good estimates of the size of things around you.



Sidewalks are often 4 feet, 5 feet, or 8 feet wide. It's easy to see the difference when you know what to look for. Joints in sidewalks are also standard distances.

What are 2 reasons sidewalks have standard widths and lengths?

- _____
- _____

Part 5 Everyday Objects

1. List 3 everyday objects in or around your house that you could measure with your thumb.

_____

2. List 3 everyday objects too big to measure with a yardstick or tape measure that you could measure with your pace and thumb.

_____

3. List 3 objects that are standard lengths or widths that you could use to measure. Try to think of everyday objects in your kitchen, bathroom, bedroom, classroom, etc.

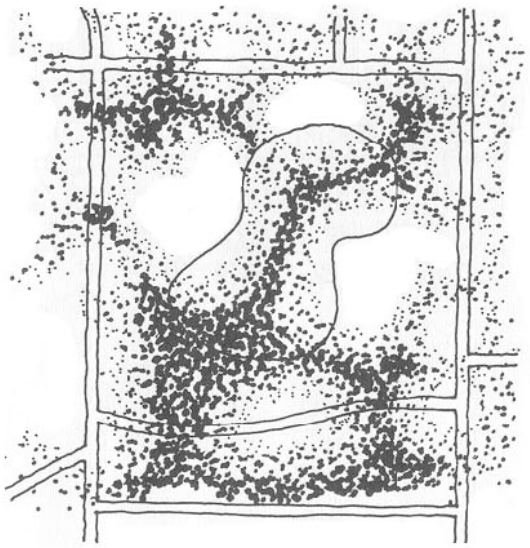
_____

Site Analysis

Name _____

Landscape architects study the site conditions before they work on a project because site conditions affect the design for an area. After collecting data on site conditions, landscape architects map the data so they can "see" how these conditions impact the site.

Part 1



The picture on the left is of a park with a grassy area in the middle.

1. What do you think the dark and light patterns in this map represent?

_____

2. What do you think the lines around the edges represent?

_____

Part 2

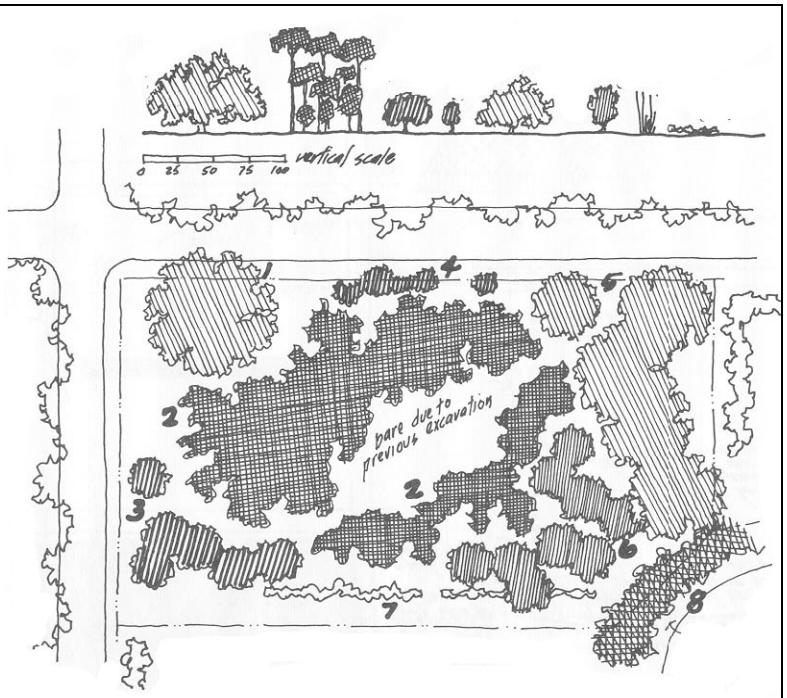
Site analysis and site mapping give you an understanding of a place and how your design will affect the site. Graphics (pictures) tell the story to others without many words.

Some things to think about in analyzing a site include:

- Where do buildings cast shadows?
- Tree coverage = shade
- Is the ground flat or sloped?
- Are there existing features that must be kept?
- Animal habitat

Part 2 continued

Part 3

List 4 words that describe site conditions you notice in the drawing on the right. 1. _____ 2. _____ 3. _____ 4. _____	

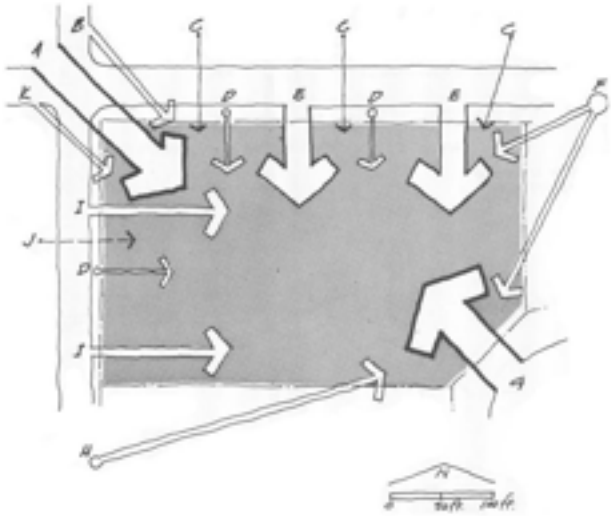
Symbols on a map show how things impact a site. When you draw something, you are creating a symbol for what you see.

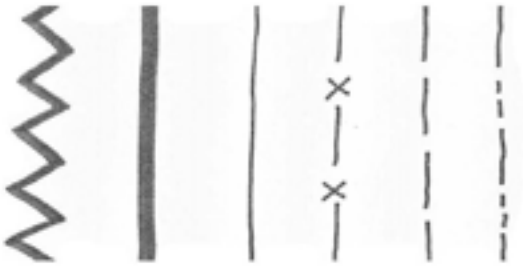
What are three symbols you see in everyday life?

- _____
- _____
- _____

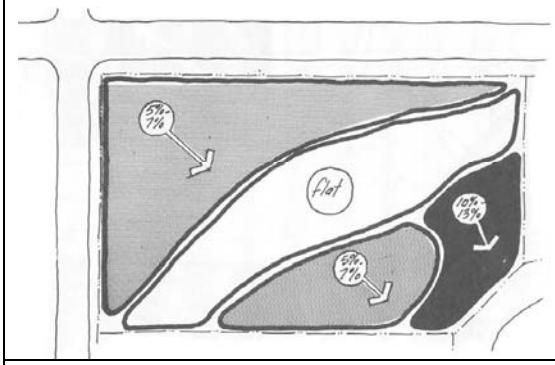
Part 3 continued

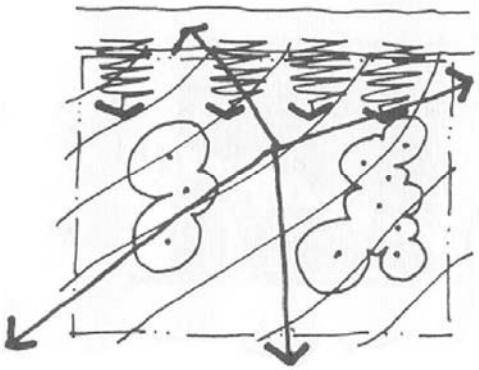
Here are some common symbols landscape architects use to make maps of site features and their impacts.





Arrows	Lines
Big arrows are important, small arrows are less important. Arrows point in the direction of the movement.	Thick lines are big or solid edges like walls. Thin or dashed lines are not barriers, but indicate locations of sidewalks, overhead power lines, underground utilities, etc.





Texture/Shading	Repeated objects
Heavy or dark areas represent things that are close together or difficult to walk through like shrubs. Light areas represent things that are less dense and easy to get around.	For objects that show up repeatedly in a site like light poles, fences, trees, doors, etc., it's easier to use a symbol.

Part 4

Locating existing features of a site is the first step in making a map that you can use for site analysis.

List five features you located in the site for your reading garden.

- _____
- _____
- _____
- _____
- _____

Locate the five features you listed above on the site plan for your reading garden. Use lines, patterns, textures, and symbols.

Part 5

Selecting the standards for studying a site is important. What you want to use the site for will determine the standards you choose.

What are 5 important site factors to consider in a reading garden? These are your standards for studying the site.

- _____
- _____
- _____
- _____
- _____

Look at the site plan of the area for your reading garden. To understand the area, make a map including the standards (site factors) you wrote above. Use symbols and lines like those in the examples to show how the site factors affect the site.