Analyzing the Residential Landscape

Unit C. Nursery, Landscaping, and Gardening

Problem Area 2. Residential Landscape Design

Lesson 1. Analyzing the Residential Landscape

New Mexico Content Standard:

Pathway Strand: Plant Systems

Standard: IV: Exercise elements of design to enhance an environment (e.g., floral, forest, landscape, farm).

Benchmark: IV-A: Apply basic design elements and principles to create a design using plants.

Performance Standard: 1. Conduct a site evaluation for physical condition and design implications. 2. Apply elements of design (e.g., line, form, texture, color). 3. Incorporate principles of design (e.g., space, scale, proportion, order). 4. Use landscape design drawing tools including Computer Aided Design (CAD) and industry-specific software.

Student Learning Objectives. Instruction in this lesson should result in students achieving the following objectives:

1. Describe how to determine the client’s needs and desires.
2. Explain the purpose of a site analysis plan.
3. Identify the purpose of a base plan.
4. Describe the components of a site analysis plan.
**List of Resources.** The following resources may be useful in teaching this lesson:

**Recommended Resources.** One of the following resources should be selected to accompany the lesson:


**Other Resources.** The following resources will be useful to students and teachers:


*The Landscape Design Process*: Vol. II. Vocational Education Productions (Video).

**List of Equipment, Tools, Supplies, and Facilities**

- Writing surface
- Overhead projector
- Transparencies from attached masters
- Photos of new homes without landscaping
- Drafting supplies

**Terms.** The following terms are presented in this lesson (shown in bold italics):

- Base plan
- Family inventory sheet
- Site analysis plan
- Vegetation
- Views

**Interest Approach.** Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

Begin the lesson by passing out photos of newly built homes. If the opportunity exists, go to an actual home that is to be landscaped. Ask the students to write the steps they would follow to landscape the site. What should they do first, second, etc., and why is that the logical order? Begin a discussion about why one should observe and plan a landscape before physically planting anything.
Summary of Content and Teaching Strategies

**Objective 1:** Describe how to determine the client’s needs and desires.

**Anticipated Problem:** How does a designer determine what a client needs and desires for their yard?

I. One of the very first steps in the design process is to meet the customer and complete a *family inventory sheet*. When a landscape designer initially meets the people they will perform the work for, it is actually more of an interview. The designer is interviewing the customer in order to find out what they want their property to look like. At the same time, the customer is relying on the designer to ask the right questions to gather all the needed information. The information is then recorded on an inventory sheet. Some possible questions that could be asked during this interview are:

A. What are the family specifics for this home?
   1. The number and ages of family members
   2. Family hobbies (i.e. baseball, gardening, badminton)
   3. Pets

B. What are the gardening interests of the family?
   1. Do the clients want a vegetable garden, annual garden, bulb garden?
   2. How much time do they want to spend in the yard doing maintenance?

C. How does the family plan to use the space?
   1. Patio or deck
   2. Pool or open yard for lawn games
   3. How much entertaining is to be done?

D. Are there any favorite plants that the family wants included in the landscape?
E. Are there any plants that should be avoided in the landscape?
F. Any thing else that may pertain to the specific yard should be discussed at this time.

One way to help students master this objective is to have them interview potential clients. The clients can be actual people or they can be classmates posing as clients. The students should practice interviewing the “client” and filling out an inventory sheet on the “client’s” needs. The inventory sheet can take any form from a list of questions that should be asked to an outline of pertinent information. The video mentioned in the resource section shows an example of an interview that was done with a client. This may be shown before the students complete their mock interviews.
Objective 2: Explain the purpose of a site analysis plan.

Anticipated Problem: What is the purpose of a site analysis plan?

II. Before a landscape designer can start changing a landscape site, they must know what is already on the site. The designer needs to complete careful observations of the site and record these observations on a site analysis plan. The site analysis plan is a sketch of the home, the property lines, and a record of observations about the site that the designer can then later refer to when they begin the design process.

Using TM: C2-1A, show the students an example of a site analysis plan. Next, a discussion could be led on what observations you should write down to lead into the next part of the lesson.

Objective 3: Identify the purpose of a base plan.

Anticipated Problem: What is a base plan?

III. In order to have an accurate representation of a home site, a designer needs to draw a base plan of the home. The base plan would consist of:

A. A scaled drawing of the home. This should include doors, windows, and any existing hardscapes, (i.e. sidewalks, driveways, patios).
B. Property lines
C. Utility lines and easements

The students can master this concept by actually visiting a home site. The students would need to take along drafting supplies, paper, and a tape measure. They could then proceed to draw an overhead view of the house and its lot. This drawing should be done to scale, maybe a 1/8 scale. (One inch on paper equals eight feet in the real yard.) Utility lines and easements can be marked ahead of time by calling a service company to come out before planting is done. If it is not possible to actually visit a home, obtain the blueprints of a house and sketch the base plan from the prints.

Objective 4: Describe the components of a site analysis plan.

Anticipated Problem: What are the components of a site analysis plan?

IV. A site analysis plan is a record of observations done on a site to be landscaped. This is done before any design work is started on the yard. A site analysis plan includes the following observations:

A. Vegetation—Any existing trees or shrubs on a site should be noted on the plan. Notes should include the size and location of the plants and comments about the removal of any unwanted plant material.
B. Soil—It is important to know what kind of soil is present at various locations throughout the site. The type of soil would affect the plants that could thrive on the site and the amount of water drainage off the land. Any areas of land that are sloping or elevated
should also be noted. Notes should be made to include the addition of topsoil in any location on the site.

C. Microclimate—It is important to visit a site throughout the day to determine areas of full sun or shade and the temperatures. Another thing that might affect an area’s microclimate is the wind exposure.

D. Macroclimate—The macroclimate of a site would discuss sun exposure, temperature, and wind of the entire area and its surrounding sites. The microclimate would focus on these factors in smaller, more isolated areas like around the entryway or in the back corner of the yard.

E. Views—The views of a site would include how people within the yard will be looking out into neighboring yards and how neighbors looking will see the landscaping. Any areas that need to be screened, framed, or enhanced, should be noted on the site analysis plan.

Students can again achieve this objective by visiting a site to be landscaped and recording all of these observation on the base plan of the home.

Review/Summary. Use the student learning objectives to summarize the lesson. Have students try to match items like vegetation, property lines, or customer needs with the appropriate plans (family inventory, base plan, site analysis plan). The student responses can be used to determine which objectives need clarification.

Application. Application of this lesson can be achieved through the following ways:

Showing TM: C2–1A
Showing the video The Landscape Design Process Part II
Reading the related sections of Introduction to Landscaping: Design, Construction, and Maintenance

Evaluation. The evaluation of the student achievement over the lesson objectives will be in the successful performance of the interview, the site drawings, and the written test. A sample written test is attached.

Answers to Sample Test:

Part One: Matching
1 = c, 2 = b and c, 3 = c, 4 = a, 5 = c, 6 = b

Part Two: Completion
1. macroclimate
2. family inventory plan
3. drainage
4. slope
Part Three: Short Answer

1. It is important to know what is already on the site to be landscaped so you can decide how to change the yard or incorporate existing features into the new design.
   a. Soil
   b. Microclimate
   c. Macroclimate
   d. Views
   e. Existing Vegetation
Lesson C2–1: Analyzing the Residential Landscape

**Part One: Matching**

Instructions: Determine where the following items belong. Write the letter of the appropriate response next to each item.

- a. Family Inventory Plan
- b. Base Plan
- c. Site Analysis Plan

_______ 1. Existing vegetation
_______ 2. Property lines
_______ 3. Views from the yard
_______ 4. Customer wants a vegetable garden
_______ 5. Soil
_______ 6. Location of windows and walkways

**Part Two: Completion**

Instructions: Provide the best word that completes the following statements.

1. The ____________ refers to the climate over the entire area of a site.
2. The _________________ is a list of the wants and needs of the client.
3. Soil should be observed before designing a landscape because it affects the ____________ of water.
4. The ____________ of the land is how quickly the land becomes elevated.

**Part Three: Short Answer**

Instructions: Provide the to the following questions.

1. Why is it important to do a site analysis of the location you wish to landscape?
2. List the five components of a site analysis plan.
   a.
   
   b.
   
   c.
   
   d.
   
   e.
SITE ANALYSIS PLAN

6% slope away from house on all sides

6-8" loam topsoil throughout

Good view of yards

Fairly level area

View of neighbor’s patio

View of neighbor’s deck

NORTH

New Mexico Horticulture Lesson Plan Library