

Responsible Land Use

Deeper Learning Postcard



School Windsor High School Windsor, VA, 23487
(757) 242-6172
rgibbs@iwcs.k12.va.us

Highlights

Vetted Project: Students explored various land uses through hands-on and on-site investigations to determine how the use affects groundwater.

Sustainability: Students are more aware of responsible land use for the county as well as input used in the Comprehensive Plan by the county government.

Driving Question: How does land use, such as agricultural, residential, and commercial development, affect pollution levels in groundwater and the connecting watershed?

Student Reflection:

Student 1 - "I liked sharing my ideas and opinions."

Student 2 - "I enjoyed learning about the county and how everything went into place."

Student 3 - "I enjoyed placing my input in a design for the community's future that would benefit all parties."

Student 4 "I believe that in order to design a desirable plan that all parties will benefit from, one must immerse themselves into the environment in question."

Teacher Reflection: Connecting the real world to the science investigations made the learning more meaningful and thought provoking for the students.

Lessons Learned: More time is needed to complete the Soil Investigation on site—only gave students 1hr but needed 2hrs at least. Do a better job of documenting student experiences and thoughts along the way while fresh.

I. Authenticity

Performing

Realistic Role

Demonstrating

Event

Exhibit / Contest

Lab Activity

Show / Program

Producing / Revising

Execute Multiple Drafts

Model or Prototype

Portfolio / Presentation Board

Product

Presenting

Utilize Visuals

Responsible Land Use

Deeper Learning Postcard

II. Media Produced

Nature-related

Lab Cultivation

Technical Writing

Lab / Research

Report

Task / Needs Analysis

III. Challenging Problems

Questions

Build a Better World

Self Reflection & Evaluation

Themes

Environmental

Field-based Work

Research-based

Topics: Physical World

Climate, Nature & Natural Resources

Exploring Earth & Space

Topics: Humans in the World

Habitation & Population

Work & Careers

Topics: Of the Mind

Implications of Decisions

IV. Achieved Literacy Skills

Information / Technology

Distinguish Quality Web Content

Master Uses of Technology

Financial

Identify Risk Management Strategies

Recognize Impact of Financial Decisions

Project / Work

Address Setbacks / Criticism

Adjust to Schedules / Contexts

Balance Various Roles / Responsibilities

Learn / Develop Expertise

Manage Time / Workload

Leadership

Balance Diverse Views

Leverage Strengths of Others

I. Parameters & Feasibility

Project Timeframe

More than 8 Weeks

Assessment Timeframe

More than a Class Period

of Project Members

Small Group

Flexible Group

Grade Level

High School (Grades 9-12)

Authentic Audience / Evaluators

Peers

Parents

Teachers & Administrators

Responsible Land Use

Deeper Learning Postcard

Community Members
Consumers / Clients
Government Officials
Industry Representatives

II. Intended Learning Outcomes

Creativity

Brainstorm
Change
Design / Create
Elaborate / Expand
Envision / Invent
Improve / Refine
Recognize Limits

Communication

Challenge Status Quo
Instruct
Point of View
Technical Presentation
Terms, Concepts or Calculations

Collaboration

Assume Shared Responsibility
Develop Trust
Encourage Others
Exercise Flexibility
Ignore Distractions
Incorporate Feedback
Manage People / Team
Respond to Failure
Value Contributions Made by Others

Critical Thinking

Balance / Weigh Alternatives
Clarify Meaning
Critique Reasoning of Others
Draw Analytic Conclusions
Negotiate
Overcome Obstacles
Persuade
Quantify
Rational, Objective Decision-making
Reflect Critically on Learning
Solve Problems Innovatively

Instilled Citizenship Values

Civic Activities / Organizations
Community & Public Issues
Community Service
Democratic Systems & Values
Lifestyle Respecting Environmental Resources
Personal Responsibility
Sense of Public Duty
Social Responsibility
Societal Influence & Political World
Strong Personal / Work Ethic

Responsible Land Use

Deeper Learning Postcard

III. Success Skills & Depth of Knowledge

Cognitive Demand

Identifying / Remembering
Comprehending / Understanding
Applying
Analyzing
Evaluating
Creating

Social & Emotional Skills

Self-awareness
Self-management
Group-awareness
Group-management

Learning Styles / Intelligences

Bodily / Kinesthetic
Interpersonal / Social
Intrapersonal / Introspective
Logical / Mathematical
Naturalist
Verbal / Linguistic
Visual / Spatial

Assessment Structures / Resources

Graphic Organizers
Interviews / Conferences
Rubrics

IV. CTEs & Disciplines

Career & Technical

Agriculture & Agribusiness
Energy, Environmental & Natural Resources
Government & Public Administration
STEM Research & Applications

Sciences

Earth & Geo Sciences

Social Sciences

Physical Geography