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‘’Our Actions are Our Future!’’

Let's Go Green-Booklet

Erasmus+

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Pre-Test Survey Results Purpose:

Measure teachers' and students' environmental awareness and gardening knowledge before project activities.

Participants: 200 students, 20 teachers

Student Survey (n=200):

Indicator	Result
Practice recycling at home	150 students (75%)
Understands local biodiversity concepts	Can identify at least 5 plants in the school garden 120 students (60%)
Knows basic composting techniques	110 students (55%)
Interested in gardening activities	90 students (45%)
	180 students (90%)

Teacher Survey (n=20):

Indicator	Result
Conduct environmental activities at school	18 teachers (90%)
Familiar with biodiversity education	16 teachers (80%)
Use hands-on gardening activities in lessons	14 teachers (70%)
	Confidence in teaching nutrition through gardening 17 teachers (85%)

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Observation:

Students are highly motivated but many lack hands-on knowledge of biodiversity and composting.

Teachers have strong theoretical knowledge but require structured resources for practical school garden integration.

School Garden Education Program Booklet

Day 1: Introduction and Awareness Raising

Activities & Duration:

School garden visit (150 min)

Pre-test survey for 200 students and 20 teachers (30 min)

Logo contest announcement (50 student entries, 10 teacher entries)

Presentation: Environmental Awareness Raising (90 min)

Topics:

- Formal, non-formal, and informal environmental learning methods
- Biodiversity in school gardens: identify at least 10 local plants & 5 helpful animals
- Common pests, diseases, and natural treatment methods

Measured Outcome:

- 170 students (85%) could list at least 5 ways to support biodiversity
- 19 teachers (95%) reported increased knowledge of pest management

Seminar: Basic Gardening School Education Program (120 min)

Topics: agriculture principles, food systems, nutrition, environmental stewardship

Measured Outcome:

- Each teacher drafted a 2-page school garden integration plan
- Students correctly identified 5 edible plants and described their nutritional benefits (85%)

Workshop: How to Grow a School Garden (180 min)

Activities:

- Plan garden layout for 10m x 6m area
- Soil preparation and composting (target: 200 kg compost mixed)
- Select 8 plant species suitable for local climate

Outcome:

- 100% completion of garden plan and soil preparation
- Students recorded 3–5 observations about soil, compost, and plant selection

Day 2: Planting and Hands-On Activities

Partner Video Presentations (45 min)

Each country shows cultivation of a vegetable/fruit native to their region (5 min per partner)

Outcome: 100% of students actively engaged; comprehension verified with short quiz

Hands-On Gardening Workshop (180 min)

Planting: cucumbers (40 plants), tomatoes (60), lettuce (100), potatoes (100 tubers)

Measured Outcome:

- Each student plants at least 2 plants (200 students)
- Students record growth observations in individual logbooks

Student Workshop: Mobile Gardening “Garden in a Box” (120 min)

Construct 20 garden boxes (10 plants per box)

Outcome: 200 students participate; process video recorded (15–20 min)

Teacher Workshop (150 min)

Prepare 4 lesson plans:

1. Farm to Table – track growth stages of 5 crops
2. Agriculture in My Life – map local food sources
3. Food from Around the World – present 2 international crops
4. A Farmer’s Life for Me – create diary of farm activities

Measured Outcome: Peer review scored clarity 4.6/5, feasibility 4.8/5, creativity 4.7/5

Day 3-4: Biodiversity Lab

Activities & Duration: 2 days, 4 hours/day

Forest biodiversity exploration (students divided into 20 groups of 10)

Create biodiversity collage: 12 letters, each covered with 4–5 species

Teacher worksheets and student fact sheets for 15 native plants & 10 animals

Measured Outcome:

- 180 students (90%) correctly identify at least 5 native species
- Each student describes ecological role of 4 species
- Teachers produce 2 worksheets and 1 fact sheet per student group

Day 5: Waste Management & Creative Recycling

Seminar: The Big 5 of Waste – 90 min

Content Covered:

- Refuse: identify unnecessary items (e.g., single-use plastics)
- Reduce: limit consumption (e.g., reusable bottles)
- Reuse: creative reuse (e.g., jars as plant pots)
- Repurpose: transform waste into useful objects (e.g., t-shirts into tote bags)
- Recycle: proper sorting of plastic, paper, glass, metal

Outcome: 190 students (95%) can list all 5 R's with examples

Workshop 1: Recycling Sorting Game – 120 min

Teams of 10 students sort 500 mixed items

Measured Outcome: 92% correct sorting; students can explain recycling process for each category

Workshop 2: Waste-Free Lunch & Recycling Scavenger Hunt – 150 min

Step 1: Waste-Free Lunch Preparation

Each student brings lunch ingredients in reusable containers

No single-use plastics, no disposable packaging

Example menu:

- Sandwich in reusable wrap
- Fruit: apple or banana
- Veg sticks in small reusable box
- Reusable water bottle

Measured Outcome:

- 200 lunches prepared without any disposable waste
- Students learn practical ways to reduce daily waste

Step 2: Recycling Scavenger Hunt in Local Park

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- Teams of 10 students collect recyclable items (plastic, paper, glass, metal)
- Minimum target: 15 items per team
- Measured Outcome:
  - 20 teams completed task successfully
  - Photos and videos document collection
  - Students demonstrate ability to identify recyclable vs. non-recyclable materials

Reflection & Discussion (30 min)

Students share what they learned about waste reduction and environmental responsibility

Teachers facilitate discussion on applying Big 5 principles at home and school

OUTPUTS

How to Grow a School Garden Planning and Management Program Booklet Purpose:

This booklet provides a step-by-step guide to plan, implement, and manage a school garden, integrating environmental education, nutrition, and hands-on learning for students.

1. Introduction

Why a School Garden?

- Enhances students' understanding of agriculture, nutrition, and biodiversity
- Encourages sustainable practices and environmental stewardship
- Provides hands-on learning in science, math, and social studies

Program Goals:

1. Create a sustainable school garden
2. Foster students' awareness of healthy food and the environment
3. Promote collaboration among teachers and students

2. Planning the Garden

Step 1: Identify Purpose and Objectives

Objectives examples:

- Grow fruits and vegetables for school use
- Create a biodiversity-friendly area
- Support lessons in science, nutrition, and sustainability

Step 2: Choose Garden Location

Ideal site:

- 5–10 meters from the main building
- 6–8 hours of sunlight daily
- Accessible for students and teachers
- Good drainage and water access

Step 3: Decide Garden Type and Size

Types: Raised beds, in-ground plots, container gardens, vertical gardens

Example Size:

- 10m x 6m area for a medium school garden
- 4–6 raised beds of 2m x 1m for easy management

Step 4: Select Plants

Choose according to:

- Climate and soil type
- Growing season
- Educational purpose

Suggested plants for school garden:

- Vegetables: tomato, cucumber, lettuce, carrot, potato
- Herbs: basil, mint, parsley
- Fruit: strawberries, blueberries (if climate permits)
- Native flowering plants for pollinators

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3. Garden Design & Layout

Sketch the garden plan showing:

- Pathways for easy access
- Location of each bed/plot
- Watering points

- Compost area

- Assign roles to students/teachers for bed maintenance, watering, and monitoring growth

4. Soil Preparation

Test Soil: Check pH (ideal: 6–7) and nutrients

Enrich Soil: Add compost, organic matter, and mulch

Steps:

1. Remove weeds and debris
2. Loosen soil to 20–30 cm depth
3. Mix in compost (50–200 kg depending on garden size)
4. Smooth soil and shape beds

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5. Planting and Maintenance

Planting Schedule:

Plan according to seasons and crop types

Example:

- Spring: lettuce, tomato, cucumber
- Summer: beans, peppers
- Autumn: carrots, potatoes

Maintenance Tasks:

Watering: 2–3 times per week, depending on weather

Weeding: Weekly removal of weeds

Pest and Disease Control:

- Monitor for common pests
- Use natural treatments where possible

Fertilization: Organic compost monthly

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6. Water Management

Use drip irrigation or watering cans

Collect rainwater if possible

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Avoid waterlogging; ensure good drainage

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7. Composting & Waste Management

Purpose: Turn food scraps and garden waste into organic fertilizer

Steps:

1. Collect plant scraps, fruit/vegetable peels, dry leaves
2. Layer greens (wet) and browns (dry)
3. Turn compost weekly
4. Ready in 2–3 months for soil enrichment

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8. Student Engagement & Learning Activities

Assign student groups to manage beds

Activities can include:

- Planting and harvesting logs
- Measuring plant growth (science experiment)
- Observing pollinators and wildlife
- Cooking or nutrition lessons with harvested produce

Encourage reflection and documentation through photos, journals, and videos

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9. Safety Guidelines

Use gloves and tools safely

Avoid harmful chemicals

Maintain pathways to prevent accidents

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10. Evaluation & Sustainability

Track growth, yield, and biodiversity (measure number of plants, insects, flowers)

Collect student feedback

Share results with school community

Plan for next season based on lessons learned

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11. Resources & Materials

Tools: spades, rakes, trowels, watering cans, gloves

Seeds and seedlings: local suppliers or seed banks

Compost materials: kitchen scraps, dry leaves, grass clippings

Educational: logbooks, worksheets, fact sheets

Appendix

Sample Planting Calendar (Temperate Climate Example)

Month	Planting Activities	Notes / Maintenance
March	Sow lettuce, spinach, peas indoors or in greenhouse	Keep soil moist, protect seedlings from frost
April	Transplant lettuce and spinach to raised beds; sow carrots, radish	Thin seedlings as they grow
May	Plant tomatoes, cucumbers, beans, peppers	Support climbing plants with stakes or trellis
June	Sow basil, parsley, herbs; monitor irrigation	Apply organic mulch to retain moisture
July	Harvest early crops (lettuce, spinach, radish); continue watering	Check for pests (aphids, caterpillars)
August	Sow autumn crops: kale, broccoli, cabbage	Keep soil enriched with compost
September	Harvest tomatoes, cucumbers, beans; prepare soil for winter crops	Mulch and protect sensitive plants
October	Sow garlic, onion, winter lettuce	Prepare compost area for organic matter collection
November	Clear dead plants; add compost to beds	Cover beds with straw or leaves for winter
December–February	Garden dormant; plan next year's planting	Indoor herb sowing possible

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Sample Student Observation Sheet

Purpose: Track growth, health, and biodiversity in the school garden

Date	Plant/Bed	Stage (Seedling, Flowering, Fruit)	Height (cm)	Notes (Water, Pests, Flowers)	Photo/Sketch

Example Observations:

Tomato seedling: 15 cm, leaves healthy, noticed 3 ladybugs (beneficial insects)

Lettuce: flowering, needs watering daily, no pests observed

Daily/Weekly Maintenance Checklist

Daily Tasks:

Remove any visible pests manually

Check plant supports and ties

Record observations in logbook

Water all plants (check soil moisture)

Weekly Tasks:

Weed all beds and pathways

Turn compost and add new organic matter

Inspect for diseases (fungus, mold)

Harvest mature crops

Update student observation sheets with growth measurements

Plan next week's planting or maintenance activities

Optional Monthly Tasks:

Fertilize with organic compost or liquid fertilizer

Prune plants as necessary

Evaluate garden progress and plan improvements

Conduct biodiversity observation: count insects, note new plants or wildlife

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A Mini Guide for Primary School Teachers

How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Creating a school garden is a wonderful way to bring nature, science, and teamwork to life.
This guide will help teachers plan, set up, and manage a simple educational garden project with their students.

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How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Planning and Preparation

Choose the location

sunny location
easy access to water.
safe and accessible for students

Create a garden team

find the garden coordinator.
create a student gardening club
assign roles like:
watering team
weeding team
observation/documentation team
decide the main goal of your garden:
educational (learning plant life cycles)
ecological (composting, pollinator garden)
social (herbs or veggies for the cafeteria)

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How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Designing your garden

Make a simple plan

Draw your garden layout:
Beds or boxes
Paths
Compost area
Storage space for tools

Choose what to grow

Vegetables: lettuce, radishes, carrots, beans, onions
Herbs: mint, basil, parsley, chives
Flowers: marigolds, sunflowers, calendulas

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How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Setting up the garden

Prepare the soil

Remove weeds, loosen the soil, and mix in compost or organic soil
Raised beds or planters are great for beginners

Planting and sowing

Follow a planting calendar
Teach spacing, watering, and plant labeling

Label the plants

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How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Daily care and maintenance

Water regularly
Weed the beds weekly
Observe and document plant growth:
take photos,
measure height,
write in a garden journal

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How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Harvest and celebration

Organize a Harvest Day

Cook simple dishes using the harvest (salads, tea)

Reflect on what worked well
and what to improve next season

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How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Extra Ideas

🌼 Herb Corner
small, aromatic plants for cooking or tea

🐝 Insect Hotel
attract pollinators and teach about biodiversity

♻️ Compost Bin
teach about waste reduction and soil cycles

👣 Sensory Path or Garden
plants with different smells, textures, and colors.

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How to Start and Run a School Garden

BEAUTIFUL GARDENS, NATURALLY!

Garden template

```
-------------------------------------------------------
| SCHOOL GARDEN PLAN TEMPLATE |
|-----------------------------------------------------|
| 🌻 Flower Bed | 🥕 Vegetable Bed 1 | 🥦 Veg Bed 2 |
|--------------------|--------------------|-------------|
| 🌿 Herb Corner | 🌻 Flower Bed 2 | 🧺 Compost |
|-----------------------------------------------------|
| 🪑 Sitting Area / Outdoor Classroom |
-------------------------------------------------------
```

Notes:
You can draw this on graph paper or recreate it digitally.
Adjust the number of beds depending on space.
Leave clear walking paths between beds (at least 40–50 cm).

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Lesson Plans

Lesson Plan 1 **From grain to loaf**

Lesson Plan 2 **Food Around the World**

Lesson Plan 3 **The Importance of Agriculture in Our Lives**

Lesson Plan 4 **A Farmer's Life**

Lesson Plan 1

From grain to loaf

THE MAIN OBJECTIVES

- Provide students with knowledge about the path of bread from grain to consumer
- Use modern teaching methods to engage students and arouse their curiosity

STEP BY STEP

- Introducing students to the theme of the lesson "The Way of Bread".
- Using a digital resource - an interactive whiteboard, students watch the animated film "The Way of Bread".
- Discussions about what was seen and answers to questions.
- Viewing and analyzing PowerPoint slides "From grain to bread".
- White bread and wholemeal bread tasting, comparison.
- Represent the bread making process from grain to loaf in a drawing.
- Students divide into groups and present a puppet theater performance from drawn pictures.

Methodology / Didactic Tools:

Verbal instruction, practical activity, group work, puppet show

Lesson Plan 1

From grain to loaf

Additional Materials / Equipment Needed:

- White A4 sheets
- Markers, scissors, pencils, glue
- Visual materials: images or slides “The Way of Bread”
- Interactive whiteboard
- Digital resources

Conclusion:

- Assess students’ ability to recognize types of bread and explain the bread-making process.
- Develop listening skills, independent work, and teamwork.

Recommendations and Guidelines:

- Strengthen students’ knowledge of cereal crops and their processing.
- Continue to improve the pedagogical process by including more diverse and engaging teaching methods.

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Lesson Plan 2

Food Around the World

THE MAIN OBJECTIVES

- Name dishes from different countries
- Recognize that people from different countries eat different food
- Know where each dish comes from
- Identify and describe a typical dish from their own country

STEP BY STEEP

1. Teacher asks: “What is your favorite food?” to introduce the topic.
2. Discuss: “Do people eat the same food in different countries?”
3. Brainstorm food vocabulary.
4. Show a PowerPoint presentation with food from around the world; students guess the country.
5. Reading comprehension: students read about dishes and choose three they’d like to try.
6. Group work: students compare choices using ordinal numbers.
7. Poster activity: students create and describe a dish from their own country.
8. Presentation: students share and display their posters.
9. Summary discussion: review what was learned about food and culture.

Methodology / Didactic Tools:

- Interactive whiteboard
- Computer with internet access

PowerPoint presentation available at: https://tiny.pl/dcxwl

Lesson Plan 3

The Importance of Agriculture in Our Lives

THE MAIN OBJECTIVES

- Understand the importance of agriculture in our daily lives: providing healthy and nutritious food, job creation, contribution to the economy, and preserving the environment through sustainable practices.
- Recognize agricultural products we consume regularly.
- Raise awareness about the role of farmers and the food production process.

STEP BY STEP

1. **Introduction (10 min)**: Greet students and ask questions such as “What do you know about agriculture?” or “Where does our food come from?” Explain the topic and goal of the lesson.
2. **Discussion (15 min)**: Talk about what agriculture is and why it is important. Highlight food production, materials, and jobs created by agriculture. Encourage students to share examples.
3. **Exploration (15 min)**: Show images of fruits, vegetables, cereals, and animal products. Students identify foods and discuss how they are produced.
4. **Reflection (10 min)**: Ask what would happen if agriculture did not exist. Lead a discussion on the consequences of not having enough food.
5. **Ending (5 min)**: Summarize key points and emphasize gratitude to farmers and the role of agriculture in our survival.

Lesson Plan 3

The Importance of Agriculture in Our Lives

Methodology / Didactic Tools:

- Chalkboard, flipchart, colored markers
- Pictures, music, or multimedia presentation
- Worksheets or drawing materials (optional)

Lesson Plan 4

A Farmer's Life

THE MAIN OBJECTIVES

- Learn about the daily life, duties, and tools of farmers.
- Recognize the value of agriculture for society and the environment.
- Appreciate farmers' contributions to sustainable living.

STEP BY STEP

1. Conduct an interview with a farmer to learn about their daily work.
2. Visit an active farm and record observations in a story format.
3. Create a 3D model or artwork related to agricultural life using clay or playdough.
4. Label and color images of farming tools and describe their functions.
5. Use the Six Thinking Hats technique to summarize learning and reflect on the experience.

Methodology / Didactic Tools:

Out-of-class teaching techniques – travel, observation, interview
Six Thinking Hats technique

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Lesson Plan 4

A Farmer's Life

Cross-Curricular Connections

- Visual Arts: Three-dimensional activities, drawing and coloring farming tools.
- Physical Education: Discussion on nutrition and natural agricultural products; connecting farming and healthy living.
- Music: Learning farm-related songs such as "Old MacDonald Had a Farm". (Link: https://supersimple.com/song/old-macdonald-had-a-farm-2018/)

Evaluation Questions

- Why do farmers produce the products they do? What are the benefits?
- How do farmers decide what to produce?
- Would you like to live on a farm?
- Do you want to be a farmer?
- What is farming?
- What are the duties and responsibilities of a farmer?
- What are the easy and difficult aspects of farming?

Biodiversity Lab – Hands-On Program

Duration:4–5 hours

Participants: 200 students, 20 teachers

Objectives

Students will identify and describe native plants, animals, and their habitats.
Understand ecological relationships such as food webs, pollination, and symbiosis.
Develop observation, recording, teamwork, and creative skills.
Teachers will create worksheets and fact sheets for classroom integration of biodiversity education.

Materials

For Students:

Clipboards, pencils, colored markers
Field guides or printed sheets of local plants and animals
Magnifying glasses and hand lenses
Cameras or tablets for photographing species
Insect nets and small containers for temporary observation
Large poster boards for biodiversity collage
Glue, scissors, printed images of plants, animals, and habitats
Structured observation sheets

For Teachers:

Templates for worksheets and fact sheets
Example diagrams of food webs and ecosystems
Laptops or tablets for creating digital resources
Pens, highlighters, sticky notes

Activities

Introduction and Instructions (30 min):

Teachers introduce the concept of biodiversity: species richness, habitats, ecological roles, and the importance of conservation.
Students are briefed on observation techniques: recording species, taking notes, photographing specimens, and noting interactions.
Students are divided into groups of 10 for structured field exploration.

Field Observation and Identification (2 hours):

Each group explores assigned sections of the school garden and nearby forest.

Students identify:

- At least 5 native plant species
- 3 insect or arthropod species
- 1 bird or small mammal species if visible

Record observations including: species name, habitat type, number of individuals, and ecological interactions (e.g., pollination, predation).
Take at least 3 photographs per group.
Teachers supervise, help with identification, and ensure safety.

Data Recording and Preliminary Analysis (30 min):

Students organize field notes in structured observation sheets:

Species	Type (Plant/Insect/Bird/Mammal)	Habitat	Number Observed	Notes/Interactions	Photo Taken (Y/N)

Each group should record 8–10 species with habitat and interaction notes.

Biodiversity Collage Creation (1.5 hours):

Groups create a poster spelling ***"BIODIVERSITY"***, filling each letter with:

- Drawings or printed images of native plants, animals, and habitats
- Short facts (species name, ecological role, habitat)

Materials: poster board, printed images, glue, scissors, markers
Outcome: Completed collage covering all letters with accurate facts

Teacher Workshop – Worksheet and Fact Sheet Preparation (2 hours):

Teachers create classroom-ready materials:

- 2 worksheets per student group: species identification, habitat matching, and food web activities
- 1 fact sheet per group highlighting 10–15 plants and 5–10 animals with names, habitats, and ecological roles

Materials are saved digitally and/or printed for classroom use

Reflection and Presentation (30–45 min):

Each group presents its biodiversity collage to peers
Students explain ecological interactions between species and habitats
Teachers facilitate discussion on conservation, human impact, and the connection to sustainability and food production
Students articulate at least 3 ecological relationships and 2 conservation actions

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Assessment Rubrics

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Student Assessment:

Criteria	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2)
Species Identification	≥10 species, correct names & habitats	8–9 species	6–7 species	<6 species
Observation Notes	Detailed, clear, includes interactions	Mostly clear, some interactions	Basic info, limited interactions	Incomplete or unclear
Collage Creativity & Accuracy	All letters complete, accurate facts, creative layout	Most letters complete, mostly accurate	Some letters missing, basic layout	Few letters complete, inaccurate
Participation	All tasks completed, active in group	Most tasks completed	Some tasks completed	Minimal participation

Worksheets and fact sheets are complete, accurate, and ready-to-use for classroom

Expected Learning Outcomes

Students identify 8–10 local species and describe habitats and ecological roles
Students create visually appealing and informative biodiversity collages
Teachers gain structured resources for future biodiversity education
Students develop observation, documentation, teamwork, creativity, and critical thinking skills

Optional Extensions

Digital biodiversity gallery on the school website or e-booklet
Biodiversity journal documenting seasonal changes in the school garden
Integrate observations with sustainability and conservation projects (pollinator gardens, habitat restoration)

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Seminar Presentation: Refuse, Reduce, Reuse, Repurpose, Recycle – The Big 5

Duration:90 minutes ***Participants:*** 200 students, 20 teachers

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Presentation Structure

Slide 1 – Title Slide

Title: ***"Waste and Creative Recycling: The Big 5"*** Subtitle: Learning how to manage waste responsibly Visual: Recycling symbols, school garden image, students recycling

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Slide 2 – Introduction to Waste Management

Talking Points:

- What is waste? Types of waste: organic, plastic, paper, metal, glass
- Environmental impacts of poor waste management
- How human behavior affects pollution and ecosystems

Visuals: Images of landfills, plastic pollution in oceans

Slide 3 – The Big 5 Concept

Explain the ***Five Rs***:

1. ***Refuse:*** Say no to unnecessary single-use items
2. ***Reduce:*** Minimize consumption of resources
3. ***Reuse:*** Find new uses for old items
4. ***Repurpose:*** Transform waste into something useful
5. ***Recycle:*** Properly sort and process waste materials

Visuals: Icon for each R

Slide 4 – Refuse

Talking Points:

- Identify single-use plastics, excessive packaging, disposable cutlery
- Alternatives: reusable water bottles, cloth bags, metal straws

Activity: Quick poll – How many single-use items do students use daily?

Visuals: "Refuse single-use" infographic

Slide 5 – Reduce

Talking Points:

- Buying only what you need, reducing energy and water use
- Choosing products with minimal packaging

Activity: Students brainstorm ways to reduce waste at school and home

Visuals: Before/after images of waste reduction

Slide 6 – Reuse

Talking Points:

- Creative ways to reuse jars, bottles, clothes, and paper
- Example: Jar as plant pot, old t-shirt as shopping bag

Activity: Show examples from school or previous projects

Visuals: Pictures of reused items

Slide 7 – Repurpose

Talking Points:

- Transforming items for new purposes
- Example: Wine bottles into garden watering tools, old crates into garden beds

Activity: Students suggest items in their home that could be repurposed

Visuals: Photos of repurposed items

Slide 8 – Recycle

Talking Points:

- Sorting waste: plastics, paper, glass, metal

- How recycling reduces landfill and conserves resources
- Local recycling programs

Activity: Quick sorting game with sample items

Visuals: Recycling bins and symbols

Slide 9 – Creative Recycling Projects

Showcase examples:

- Making bird feeders from bottles
- Upcycling cardboard into school garden markers
- Students' past projects (if available)

Activity: Students design a mini recycling project for school

Visuals: Photos, diagrams, step-by-step guides

Slide 10 – Reflection and Discussion

Questions to students:

- Which R is most challenging to implement in daily life?
- How can we reduce waste in our school garden?

Encourage students to share ideas and personal actions

Visuals: Group discussion image, brainstorming bubble

Slide 11 – Measurable Outcomes

At the end of the seminar:

- 95% of students can name the Big 5
- Students can identify at least 3 examples of each R
- Students generate at least one actionable idea for reducing school or home waste

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Slide 12 – Call to Action

Encourage students to implement ***Big 5 principles*** at school and home

Suggest tracking waste reduction progress in journals or digital logs

Visuals: Icon set of the 5 Rs with actionable tips

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Interactive Component Ideas During the Seminar

1. ***Polls:*** How many disposable items do you use per week?
2. ***Sorting Game:*** 200 mixed items sorted into correct recycling bins
3. ***Mini-Project Brainstorm:*** Students propose one “waste-free” or “upcycled” item for the school

Workshop Sessions: Recycling and Waste-Free Activities

Duration: 3–4 hours ***Participants:*** 200 students, 20 teachers

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Session 1: Recycling Sorting Game

Objective:

Students will practice proper waste sorting and understand the recycling process.
Reinforce knowledge of the Big 5 principles: refuse, reduce, reuse, repurpose, recycle.

Materials:

Labeled bins for plastic, paper, glass, metal, organic waste
Mixed sample items (bottles, cans, paper, food scraps, packaging)
Gloves, aprons
Clipboards and score sheets
Camera for video recording all stages

Step-by-Step Instructions:

1. ***Introduction (10 min):***
   - o Teachers explain the rules: Students will sort a pile of mixed waste into the correct bins.
   - o Emphasize accuracy and teamwork.
2. ***Group Organization (5 min):***
   - o Students divided into small teams (5–6 per team).
   - o Assign each team to a station with mixed items.

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3. ***Sorting Activity (30–45 min):***
   - o Students sort items into bins while teachers monitor.
   - o Encourage discussion about why each item belongs in a certain bin.
   - o Teachers and organizers video record each team's process.
4. ***Scoring and Discussion (15 min):***
   - o Check each bin for correct sorting.
   - o Award points for accuracy and speed.
   - o Discuss common mistakes and tips for better sorting.

Measured Outcomes:

Each team sorts at least 90% of items correctly.
Students can name the correct bin for at least 10 common waste items.
Students demonstrate understanding of recycling rules and processes.

Session 2: Pack a Waste-Free Lunch & Recycling Scavenger Hunt

Part A: Pack a Waste-Free Lunch

Objective:

Teach students practical ways to minimize food packaging and single-use plastics.

Materials:

Reusable lunch boxes, utensils, water bottles
Locally sourced fruits and vegetables, sandwiches, snacks
Tablecloths and plates for demonstration
Camera to document the activity

Step-by-Step Instructions:

1. ***Introduction (10 min):***
   - o Discuss the environmental impact of single-use packaging.
   - o Show examples of wasteful vs. waste-free lunches.
2. ***Hands-On Activity (30–40 min):***
   - o Students plan and pack their own lunch using reusable containers.
   - o Encourage creative solutions:
     - Reusable beeswax wraps for sandwiches
     - Reusable snack bags
     - Homemade drinks in reusable bottles
   - o Teachers document the process with photos/videos.
3. ***Reflection (10 min):***
   - o Students present their lunch and explain their choices.

- Discuss benefits for environment, school, and personal habits.

Measured Outcomes:

95% of students pack a lunch using reusable containers.
Students can list at least 3 ways to reduce lunch waste.

Part B: Recycling Scavenger Hunt in Local Park

Objective:

Students identify recyclable materials in real-life environments.
Reinforce the Big 5 principles in action.

Materials:

Scavenger hunt checklist (items to find: plastic bottle, paper, metal can, compostable item, repurposed item)
Clipboards and pencils
Bags to collect recyclables safely
Camera to document findings

Step-by-Step Instructions:

1. ***Preparation (10 min):***
   - Students receive scavenger hunt sheets and instructions.
   - Explain safety rules for handling items in public areas.
2. ***Scavenger Hunt (45–60 min):***
   - Teams search the park for items matching their checklist.
   - Record location and type of each item found.
   - Photograph items for digital gallery or discussion.
3. ***Discussion and Sorting (20 min):***
   - Return to school or meeting area.
   - Teams sort collected items into correct recycling categories.
   - Teachers review and give feedback.

Measured Outcomes:

Students identify and sort at least 80% of scavenged items correctly.
Students can explain how each item can be reused, repurposed, or recycled.
Increased awareness of littering impact and sustainable habits.

Combined Outcomes for Both Sessions

Students demonstrate practical understanding of recycling and waste reduction.
Students engage in teamwork, problem-solving, and creative thinking.
Teachers obtain video documentation and evidence for assessment and reporting.

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