

Project work (PW) under the NLSC

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Learning Outcomes

By the end of the session, you will have learned:

- What a project is
- Why we do projects
- Types of projects
- Examples of projects
- Steps for writing a project
- How projects are assessed
- A sample project report

What is a project

Projects are structured activities undertaken to:

- Deepen understanding and application of classroom content
- Address pressing and unanswered questions
- Develop problem-solving and generic skills
- Solve societal problems and contribute to communities

Why Do Students Do Projects?

- **Deepen Understanding:** Enhance comprehension and application of classroom content.
- **Problem Solving:** Develop critical thinking and problem-solving skills.
- **Real-World Application:** Address real-world and societal issues.
- **Skill Acquisition:** Gain generic and specific skills.
- **Engagement:** Increase engagement and motivation through hands-on activities.
- **Collaboration:** Foster teamwork and collaboration.
- **Creativity:** Encourage creativity and innovation.
- **Assessment:** Provide a comprehensive way to assess understanding and skills.

Types of Projects

Simple and Routine:

- These projects are straightforward with direct process lines and require limited resources.
- Religious Education (R.E.): Investigating methods of worship in the community and how they build relationships.
- Geography: Exploring community activities and their impact on the local climate.
- Process: Involves simple investigation, recording, and reporting.

Types of Projects

- **Simple and routine project**

- ❖ These projects are straightforward with direct process lines and require limited resources.
- ❖ Examples of such projects include experiments with well defined procedures, book reviews, developing maps for a given location/use of campus to locate places, identifying ones origin among others.

- The projects take short time.
- Process: Involves simple investigation, recording, and reporting.
- The primary goal is often to reinforce knowledge and skills acquired during the teaching and learning process and to develop the learner's ability to follow instructions and execute tasks correctly.

- **English**

- Write collection of poems (not less than 20 on the same theme)
- Developing a calendar
- Write and stage drama skit
- Produce school or class magazines not less than 70 pages

- **Projects in History**

- School Museum
- Documentation of family background, school, Important Personalities in school and environment
- News bulletin on school history
- Documentation on migrations e.g refugees

- **CRE**

- Worship projects, start a choir, Worship instruments, Thematic plays
- Charity to the needy etc.

- **Entrepreneur**

- Any money-making venture derived from the learning outcomes

- **Performing Arts**

- Concerts
- Songs, plays, dances thematically

- **Art and Design**

- Products of art with new innovations

???????



Simple and Non-Routine:

- These projects involve innovative and creative approaches with direct process lines, though they are somewhat extraordinary but still require limited resources.
- These projects require the learner to identify a problem or challenge and formulate a solution to the identified problem.
- The projects require the learners to demonstrate the application of knowledge and skills from different subject disciplines from the start to completion of the project.
- Inventing new uses for cassava beyond the usual applications.
- Developing a homemade water filtration system using common materials to provide clean drinking water.
- Creating artwork using recycled materials to promote environmental awareness.
- Designing a new recipe that incorporates local, underutilized ingredients in innovative ways.
- Building a simple weather station to monitor and record local weather patterns using basic sensors.

Projects from S.3 to S.4

- i) The learner shall be required carry out **one integrated project** from S.3 to S.4. This project shall run from S.3 term 1 to S.4 term 2.
- ii) S.3 to S.4 carry out simple non-routine project.
- iii) S.3 to S.4 do an individual project.
- iv) Project work from S.3 will be guided by a theme provided by UNEB on annual basis.

Competency

s/n	Project Competency	Timelines
1	PROJECT PLANNING	Term 2 S.3
2	PROJECT IMPLEMENTATION	Term 3 S.3
3	PROJECT REPORTING	Term 1 S.4
4	PROJECT DISSEMINATION	Term 2 S.4

PROJECT PLANNING

1. Identifies a project
2. Develops a project Title
3. Establishes the purpose of the project
4. Develops project objectives
5. Justifies the project i.e explains the reason for carrying out the project / the benefits/positive impact the project
6. Identifies resources for the project
7. Develops a project activity/plan
8. Integration of different subject disciplines.
9. Incorporates cross cutting issue
10. Generic skills

Project Planning

Item	Activity	Score
1	Identifies a project	
2	Develops a project Title	
3	Establishes the purpose of the project	
4	Develops project objectives	
5	Justifies the project	
6	Identifies resources for the project	
7	Develops a project activity/plan	
8	Integrates knowledge and skills of different subject disciplines	

9	Incorporates cross cutting issues	
10.	Demonstrates generic skills in the project planning process	
	Critical thinking and problem solving.	
	Communication.	
	Creativity and innovation	
	Cooperation and self- directed learning.	
	Mathematical computation and ICT proficiency	

Identifying and Planning a Project

1. How to Identify a Project

- **Interest & Passion:** Choose areas that excite you.
- **Skills & Expertise:** Leverage your strengths.
- **Needs & Gaps:** Address specific community needs.
- **Feasibility:** Ensure you have the resources and support.

2. What is Making You Angry?

- **Specific Issues:** Identify what triggers your anger.
- **Root Cause:** Understand why it bothers you.

3. Pressing Problem to Solve

- **Research & Analysis:** Identify a relevant problem.
- **Evaluate Solutions:** Assess the practicality of your solutions.

4. Desired Community Impact

- **Vision & Goals:** Define the difference you want to make.
- **Impact Assessment:** Ensure your efforts have a positive effect.

The Project Theme

- This is a statement that gives the major idea to guide project ideas of learners for a specific period.
- Environmental Sustainability, a responsibility for all

What is environmental sustainability?

- **Environmental sustainability** is the ability to preserve and protect the natural environment over time through appropriate practices and policies, meeting present needs without compromising the availability of resources in the future.

Key Areas of Focus for Environmental Sustainability

- Resource Efficiency**

Optimizing material, energy, and water use to minimize environmental impact.

- Waste Reduction**

- Strategies: Reduce, reuse, and recycle materials throughout project lifecycle.

- Example: "Eco-Hub" project can divert 95% of construction waste from landfills through on-site sorting and local recycling partnerships.

- Sustainable Sourcing**

- Choosing environmentally friendly materials and suppliers.

- Example: "Riverdale Park" project used locally sourced, recycled materials like steel and wood to reduce carbon footprint and support local economy.

- Carbon Footprint**

- Total greenhouse gas emissions from project activities.

What goals should we aim to achieve?

- To achieve environmental sustainability, a number of key goals must be achieved, including:
- *Reducing greenhouse gas emissions*, especially in crucial sectors such as power generation, industry, agriculture and transportation.
- *Increasing the production and use of energy from renewable sources.*
- *Implementing policies to conserve biodiversity by addressing its causes.*
- *Adopting sustainable practices in agriculture and the food chain*, such as precision agriculture strategies, optimizing and increasing soil quality and productivity through a series of targeted interventions using technology, regenerative agriculture and agrivoltaics, non-soil cultivation methods such as hydroponic or aeroponic systems, and reducing food waste.
- *Raising awareness and engaging communities* on the issue of environmental sustainability.







Key Environmental Challenges

- 1.Global Warming and Greenhouse Gas Emissions
- 2.Habitat Destruction and Species Extinction
- 3.Overconsumption and Scarcity of Natural Resources
- 4.Inadequate Waste Management and Plastic Pollution
- 5.Industrial and Transport Pollution
- 6.Fossil Fuel Dependency and Energy Consumption
- 7.Soil Degradation and Water Waste in Agriculture
- 8.Urban Sprawl and Inefficient Land Use
- 9.Unchecked Economic Growth Harming the Environment
- 10.Lack of Awareness and Participation in Environment Conservation

TOPICS

- 1.Climate Change Mitigation
- 2.Biodiversity Conservation
- 3.Natural Resource Management
- 4.Effective Waste Reduction and Recycling
- 5.Pollution Control for Air and Water
- 6.Renewable Energy Transition
- 7.Sustainable Agricultural Practices
- 8.Smart Urban Development and Land Use
- 9.Economic Development with Environmental Protection
- 10.Environmental Education and Public Engagement





Project Identification

- Over time, there have been long-term changes in temperatures and weather patterns resulting in remarkable shifts in climate worldwide. Since the 1800s, human activities have been the main drivers of climate change, primarily due to the burning of fossil fuels (like coal, oil, and gas), which produces heat-trapping gases and clearing of plant cover.
- In Uganda, several households mainly use firewood and charcoal as the main source of fuel for cooking. This has resulted in the accumulation of carbon dioxide in the atmosphere as the trees are cut down. This phenomenon has accelerated climate change in Uganda. This is realized in general increase in temperature in the country, and changes in rainfall patterns and amounts.
- However, many local food markets and households release much food waste into the environment. Therefore, to cut down the usage of firewood and charcoal, biogas production using food waste, and potentially faecal waste at the household level should be encouraged.



Project Title

- Biogas production from food waste as an alternative to firewood and charcoal, a household solution to climate change in Uganda
- Community-Driven Biogas Production Initiative for Sustainable Development in Uganda
- Transforming Food Waste into Biogas: A Domestic Strategy for Mitigating Climate Change in Uganda
- Empowering Rural Communities with Solar Cookers: Promoting Renewable Cooking Solutions in Uganda

OBJECTIVES

- ✓ To produce biogas using household food wastes sufficient for cooking and lighting in a home.
- ✓ To reduce the amount of food waste released by homesteads into the environment.
- ✓ To reduce the rate of deforestation and the amount of carbon dioxide produced.
- ✓ To raise awareness about the benefits of sustainable energy and promote environmental conservation.

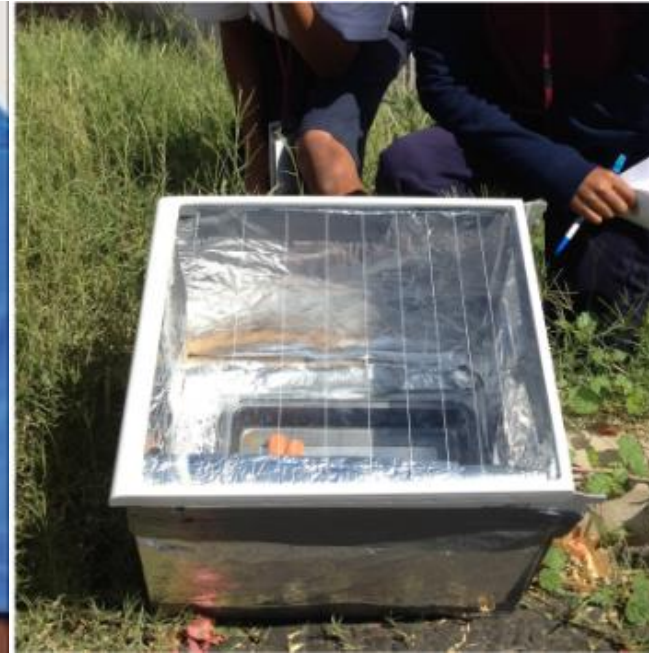
Purpose of the Project

- To use household food waste to produce biogas for cooking and lighting to replace the usage of firewood and charcoal

Other Project ideas

- Solar cooker
- Making trays
- Biogas production
- Biomass briquettes
- Solar chargers
- Hatching machine















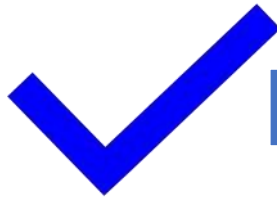






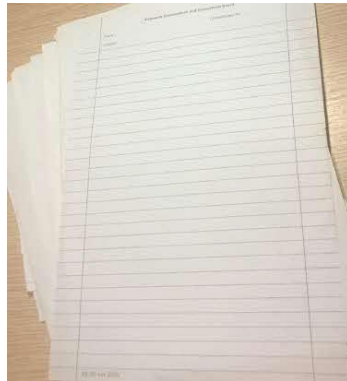
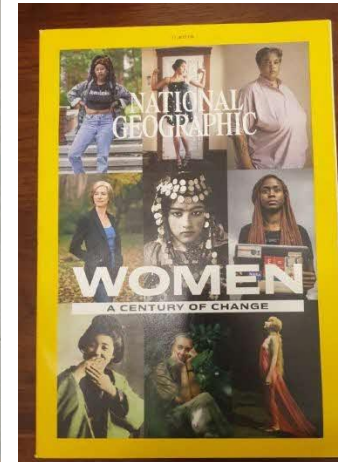






List of items that can be recycled - PAPER

Empty &
rinse
before
recycling





List of items that cannot be recycled - PAPER



Paper packaging that is contaminated with food



Disposable cup



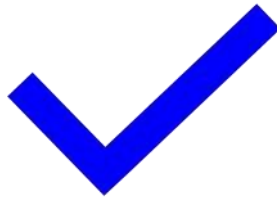
Tissue paper



Toilet paper



Wax paper



List of items that can be recycled -

Plastic film



Empty and Rinse
before recycling



Bubble wrap



List of items that cannot be recycled - PLASTIC



Food packaging
with foil



Polystyrene
Foam



Biodegradable
Plastic Bag



Disposable
cutlery

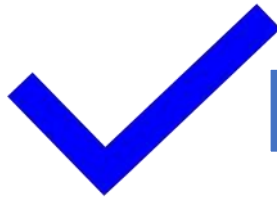


Melamine
Products
(Plastic Plate)



Used straws

Do not put food waste in the recycling bin



List of items that can be recycled - GLASS



Empty and Rinse
before recycling



PROJECT IMPLEMENTATION

- Gathers resources for the project
- Uses the gathered resources
- Engages stakeholders
- Creates a product/service
- Generic skills

PROJECT REPORTING

- Uses an appropriate report format
 - ❖ Title
 - ❖ Introduction
 - ❖ Body
 - ❖ Conclusion
- Develops content of the project report for the introduction
- Develops content of the project report for the body;
- Develops content of the project report for the conclusion
- Keeps project records
- Generic skills

PROJECT DISSEMINATION

- Disseminates the project through speaking or signing.
- Publishes the project report
- Generic skills

PROJECT DISSEMINATION

- **Disseminates the project report**

- Presentation of the report
- Use power point

- **Publishes the project report**

- ✓ School library
- ✓ News Papers
- ✓ Magazines
- ✓ Posters/Bill boards/Notice boards
- ✓ Project exhibition
- Generic skills

LINEAR ECONOMY



TAKE

MAKE

WASTE

CIRCULAR ECONOMY



- Project work is one of the curriculum requirements of the New Lower Secondary Curriculum without which learners shall not be graded. School administrators and teachers are called upon to ensure that learners are assessed in project work in line with the assessment modalities provided by UNEB.

A Teaching Win for Me

"A teaching win for me is when students stop asking, 'Will this be tested in UNEB or on the exam?' and start caring more about the material's relevance to society than just memorizing it for a test. It's a true victory when they no longer ask, 'How many marks will this item take?' but instead engage deeply with the content, driven by genuine curiosity and a desire to make a difference."

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