Earth Club

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Overview: A school Earth Club supports collaboration between students, teachers, administration, and the community with the students at the heart of planning and leading change. This can be an afterschool or before-school club, a lunch group, or an activity during class.

Targeted Grade 5 Possible K-12

Standards-Based Curricular Connections:
Participation in an Earth Club can support your curricular goals in many ways including, but not limited to, the example below.

<table>
<thead>
<tr>
<th>NGSS Standard(s)</th>
<th>Common Core ELA Standard(s)</th>
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<tbody>
<tr>
<td>5-ESS3-1 Protecting Earth’s resources</td>
<td>W.5.7-9 Research Build and Present Knowledge</td>
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<td></td>
<td>SL.5.1-2 Research and Speaking/ Listening</td>
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There are many other potential connections, based on your grade-level and curricular goals. Check your grade-specific standards for others.

Earth and Human Activity
- **5-ESS3-1** - Obtain and combine information about ways in which individual communities use scientific ideas to protect the Earth’s resources and the environment.
  - Have students research how organizations in their town support the protection of Earth’s resources.
    - Investigate your town’s website: what commissions and offices work to protect that town? (conservation, land use, sewer/water, zoning, etc.) (W.5.7-9)
    - Have groups of students choose one commission or office and summarize the activities that it does. Students might interview the chair/director of their assigned commission/office. Present findings to the whole class. (SL.5.1-5)
  - Have students choose an issue or project that protects the environment.
• Completing a PLT GreenSchools! School Site Investigation might be a great first step. See https://www.plt.org/about-project-learning-tree-greenschools-program for more information.

• For example, students might choose to address water runoff and pollution. Students could investigate local storm drains and “nonpoint source pollution.” Next steps would include researching the topic, interviewing local experts, and then developing a plan to create a positive impact on this issue.
  • Moriarty Environmental Sciences Magnet School’s project included labeling storm drains, creating a public service announcement, and creating informational flyers.

• Science & Engineering Practices: Asking questions (for science) and defining problems (for engineering); Constructing explanations (for science) and designing solutions (for engineering); Obtaining, evaluating, and communicating information.

• Crosscutting Concepts: Cause and effect; Stability and Change; Systems and system models.

Other Potential Connections: The following list provides a general overview of other possible uses for an Earth Club.

Engineering – Complete a schoolyard inventory for water runoff. Understand the problems that currently exist, and create a plan to help to improve the schoolyard water management. (For example: Moriarty Environmental Sciences Magnet School students are starting a project that will remove a large concrete area in the front of the building and install a garden with a solar fountain. This will allow more water to be absorbed rather than running off and improve the look of the school entrance.)

Math – Students could practice ratios, proportions, measurements, and calculations while developing ways to reduce their school’s water runoff, and chart and graph data collected over time.

Engagement and Community Involvement:
Some of the most meaningful learning activities are ones that allow for community and parental involvement. Earth Club may be used to promote community engagement in the following ways:

Ask parents and community members to help with construction and implementation of the Earth Club’s plan including expertise, labor and materials needed. Student can also reach out to the public through persuasive letters to the media to document their efforts.
Additional Resources

Project Learning Tree’s GreenSchools! https://www.plt.org/about-project-learning-tree-greenschools-program

Standards Navigate the Next Generation Science Standards (http://www.nextgenscience.org/search-standards) and Common Core State Standards (http://www.corestandards.org/).

These suggestions are examples only, and may require adaptation. Check your grade-specific standards to determine whether or not the suggestions provided meet your individual curricular needs.

For more information, contact ctgreenleaf@ctgreenschools.org

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