

For most programs, “. . .” will be replaced with “this experience.” However, the language might be unique for some programs.

Environmental Education Outcomes for the 21 <sup>st</sup> Century (EE21) – Online Version		
Outcome	Definition	Items
<b>Enjoyment</b>	Positive evaluation of the experience	How would you rate the program on a scale from 0 to 10?
<b>Action Orientation</b>	Intentions to perform behaviors relevant to the program’s content or goals.	As a result of this experience, do you intend to do anything differently in your life? (yes/no)
<b>Learning</b>	Knowledge regarding the interconnectedness and interdependence between human and environmental systems	How much did you learn about each of the following things as a result of . . . ? (anchors: nothing at all, a fair amount, a huge amount) <ul style="list-style-type: none"> <li>• How different parts of the environment interact with each other.</li> <li>• How people can change the environment.</li> <li>• How changes in the environment can impact my life.</li> <li>• How my actions affect the environment.</li> </ul>
<b>Interest in Learning</b>	Enhanced curiosity, increased interest in learning about science, the environment.	Did this . . . make you feel any <b>more interested</b> in any of the following things? (anchors: not at all, more interested much more interested) <ul style="list-style-type: none"> <li>• Science.</li> <li>• How to research things I am curious about.</li> <li>• Learning about new subjects in school.</li> </ul>
<b>21<sup>st</sup> Century Skills</b>	Critical thinking and problem solving; communication; and collaboration	How much did this . . . help you <b>improve</b> any of these skills? (anchors: not at all, a fair amount, a huge amount) <ul style="list-style-type: none"> <li>• Solving problems.</li> <li>• Using science to answer a question.</li> <li>• Listening to other people’s points of view.</li> <li>• Knowing how to do research.</li> </ul>
<b>Meaning/Identity</b>	A heightened sense of self-awareness, critical reflection, and purpose.	Did this . . . do any of the following things for you? (anchors: not at all, a fair amount, a huge amount) <ul style="list-style-type: none"> <li>• Taught me something <b>that will be useful to me</b> in my future.</li> <li>• Really made me think.</li> <li>• Made me realize something I never imagined before.</li> <li>• Made me think differently about the choices I make in my life.</li> <li>• Made me curious about something.</li> </ul>
<b>Self-Efficacy</b>	Belief in one’s own ability to achieve one’s goals and influence their environment.	How much do you agree with the following statements about . . . ? (anchors: not at all, somewhat, strongly agree) <ul style="list-style-type: none"> <li>• It made me feel more confident that I can achieve my goals.</li> <li>• It helped me to believe in myself more than before.</li> <li>• It made me feel more confident that I can make a difference in my community.</li> </ul>
<b>Environmental Attitudes</b>	Sensitivity, concern, and positive dispositions towards the environment	How much do you agree with the following statements about . . . ? (anchors: not at all, somewhat, strongly agree) <ul style="list-style-type: none"> <li>• It made me want to take better care of the environment.</li> <li>• It increased my connection with nature.</li> <li>• It increased how much I like being in nature.</li> </ul>
<b>Environmental Stewardship</b>	Motivations to perform stewardship-related behaviors.	Did this . . . make you any <b>more likely</b> to do any of the following things within the next year? (anchors: no more likely, somewhat more likely, way more likely) <ul style="list-style-type: none"> <li>• Help to protect the environment.</li> <li>• Spend more time outside.</li> <li>• Make a positive difference in my community.</li> </ul>
<b>Collaboration</b>	Motivation to collaborate more with others	Did this . . . make you any <b>more likely</b> to do any of the following things within the next year? (anchors: no more likely, somewhat more likely, way more likely) <ul style="list-style-type: none"> <li>• Listen more to other people’s points of view.</li> <li>• Cooperate more with others.</li> </ul>
<b>School motivations</b>	Motivation to work harder in school.	Did this . . . make you any <b>more likely</b> to do any of the following things within the next year? (anchors: no more likely, somewhat more likely, way more likely) <ul style="list-style-type: none"> <li>• Work harder in school.</li> <li>• Pay more attention in class.</li> </ul>
<b>Place connection (only included if appropriate for program)</b>	Development of appreciation and personal relationships with the physical location and its story.	How much do you agree with the following statements? (anchors: not at all, some, totally) <ul style="list-style-type: none"> <li>• Knowing this place exists makes me feel good.</li> <li>• I want to visit this place again.</li> <li>• I care about this place.</li> </ul>

Based on: Powell, R.B., M.J. Stern, B.T. Frensley, and D. Moore (2019). [Identifying and Developing Crosscutting Environmental Education Outcomes for Adolescents in the 21<sup>st</sup> Century](#). *Environmental Education Research*, 25(9), 1281-1299. Bob Powell, [rpb@clemsun.edu](mailto:rpb@clemsun.edu) Marc J. Stern, [mjstern@vt.edu](mailto:mjstern@vt.edu)