Understanding the World: Asking Scientific Questions

Science of all types begins by posing a question. Questions may be motivated by simply wondering why something is the way it is. Or by noticing an interesting pattern in nature. Some of the most important scientific research has been motivated by relatively simple observations and questions. The best questions will also lead to research that is innovative and interesting.

In 1831, Charles Darwin sailed to the Galapagos Islands as a 22 year old naturalist aboard the HMS Beagle. The diversity of life he encountered prompted him to ask many questions, some as basic as "How did all the different plants and animals get to the islands?" Darwin also observed that differences existed between inhabitants of different islands. His capacity to ask questions based on his observations of the unusual animals and plants of the Galapagos transformed the way we understand the natural world.

This assignment lets you experience the Galapagos Islands, in a virtual sense, so that you, too, can ask questions about this inspiring part of the world. In June 2005, a group from Yale visited the Galapagos for the sole purpose of obtaining video footage and photographs for this course. The result is an interactive website where you can visit the different islands and observe the flora and fauna. From your observations, formulate questions. Do not worry if all your questions are not "good" questions. Darwin and all other scientists ask many more questions than they ever attempt to answer. You will discover that the very act of asking questions stimulates even more questions.

Question Pool:

The question-writing component of this assignment requires logging onto the Question Pool. The Question Pool can be accessed from the main project site, as well as from the link below, starting January 26th.

http://research.yale.edu:8084/galapagos/

Everyone in the class will follow the same schedule in the Question Pool phases of the assignment (see complete assignment for details). For quick reference, the three phases of the assignment are as follows:

<table>
<thead>
<tr>
<th>phase</th>
<th>description</th>
<th>deadline</th>
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<tbody>
<tr>
<td>1</td>
<td>Write and submit your 20 questions</td>
<td>February 4th</td>
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<tr>
<td>2</td>
<td>Rank the questions submitted by members of your section</td>
<td>By your next section meeting</td>
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<tr>
<td>3</td>
<td>Choose the question or issue that will focus your project</td>
<td>February 11th</td>
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Journal:

As you navigate the website and observe the sites and sounds of the Galapagos Islands, you have the option to write down your thoughts and observations to a personal Journal. To record an observation, enter your comments in the text box at the bottom of the page and click the "Save to Journal" button. Your comment will be tagged with the date, time and location where you made your observation. On first use, you will be required to log in using your CAS id and password. All subsequent entries will be automatically saved to your Journal from that point on.

To view the entries in your Journal, click on the "Journal" link at the top of the page.

This tool will be made available to you on January 19th.

Support:

Please contact your teaching fellow with any questions about the assignment or the material contained in the project site.

For help with any technical aspect of the project, please contact the Yale Center for Media Initiatives (CMI) by email at cmi.support@yale.edu.