Philip Vera Cruz Social-Ecological Model Poster Assignment

Background: A big question for biologists and social scientists is: How do organisms/people become who they are? In both fields it is important to show how factors influence an individual but also how an individual influences those factors around them. An ecological map helps us create models where we can analyze this phenomenon.

Directions: In a large poster paper (at least 3 ft. by 3 Ft.), draw a Social-Ecological map of Philip Vera Cruz. Your poster should include the following:

1. A title
2. The Ecological Map for Philip Vera Cruz needs to include at least 4 levels.
3. For each level, draw at least 3 scenes depicting the biotic or abiotic factors that influence the individual. Drawing needs to be colored and traced in ink or marker (no pencil on the final draft).
4. For each scene write in 2-3 complete sentences how this biotic or abiotic factor affects the individual. Writing needs to be legible and in ink or marker.
5. Draw at least 3 arrows. The arrows represent how Philip Vera Cruz affected the factors around his life. Inside each arrow, describe in 1-2 complete sentences how Philip Vera Cruz affected or changed this factor. Each arrow needs to be pointing to a different factor.
6. Poster should be full, colorful and pleasing to look at. Below is the Rubric that will be used to grade your assignment:

Philip Vera Cruz Social-Ecological Model Rubric

Students Names: ____________________________________________Average Score: __________________

Biology Content Standard 6 Stability in an ecosystem is a balance between competing effects. As a basis for understanding this concept: a. Students know biodiversity is the sum total of different kinds of organisms and is affected by alterations of habitats.

Common Core Standards:
Scale, Proportion and Quantity: Using the concept of orders of magnitude allows one to understand how a model at one scale relates to a model at another scale. (HS-LS2-2)
Stability and Change: Much of science deals with constructing explanations of how things change and how they remain stable. (HS-LS2-6), (HS-LS2-7)

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| Model     | Students show all of the following criteria:  
- Model shows 4 levels in appropriate order.  
- Each level shows at least 3 factors that are appropriately placed.  
- At least 3 arrows are drawn showing effect on factors.  
- Arrows are pointing to different factors.  
| Students only show 3 of the previous criteria.  
| Students only show 2 of the previous criteria.  
| Students show none of the previous criteria.  |
| Drawings  | Students show all of the following criteria:  
- Each level of the model shows at least 3 drawings  
- Drawings are pleasing to look at and show effort.  
- Model fills the entire poster, shows effort and is pleasing to look at.  
| Students only show 2 of the previous criteria.  
| Students only show 1 of the previous criteria.  
| Students show none of the previous criteria or incomplete.  |
| Writing   | Students show all of the following criteria:  
- Each scene is explained by 2-3 complete sentences.  
- Each arrow is explained by 1-2 complete sentences.  
- Each writing piece is traced in ink or marker.  
- Each writing piece is neat and readable.  
| Students only show 3 of the previous criteria.  
| Students only show 2 of the previous criteria.  
| Students show none of the previous criteria.  |