

Bali Starlings

Overview: Students will create a compass systems model using the media of their choice to identify the positive and negative impacts of the conservation effort of the Bali Starlings on each sustainability compass point. This is one lesson of a six-week thematic unit designed to highlight intellectual, kinesthetic, artistic, and intrapersonal learning.

Grade: 8 – Global Awareness Thematic Unit **Estimated duration:** 2 days

Significant Concept: There are many angles to consider in this conservation effort

Topic: Animal Conservation

Area of Interaction: Environmental Conservation and Community

Essential skills:

- Using the Compass model for understanding systemic impacts.
- Using systems thinking tools such as Connection Circle, Behaviour over Time Graphing, and closed loop diagramming to understand causal relationships between different factors or variables.
- Creating graphics.

Background required: Understanding of the history of the Bali Starling and the conservation effort.

Resources/Materials: Computer, poster paper, colored pencils.

Outline Day-One:

1. Begin discussion about the need to conserve the Bali Starling. Why should we do it? Who benefits? What does it take?
2. Students research (online) and discuss in small groups their understanding of the effectiveness of conservation efforts over time of the Bali Starling (e.g. Past 50 years or so and into the future with a 'business as usual' scenario – meaning nothing radical changes in the immediate future as far as these efforts go). Students will develop their own Behaviour over Time' graphs for the Bali starling.
3. Review the definition of sustainability and the different aspects of the Compass model.
 - N – Nature
 - E – Economy
 - W – Well-Being
 - S – Social
4. Ask Students to look at each compass point and consider how the conservation efforts to protect the Bali Starling impacts each area in positive and negative ways, listing each on the compass point.
5. Students are then instructed to create a systems relationship diagram using a "Connection Circle" to identify how the different Compass-framed factors that they have identified are related in a cause and effect way (making sure to show directionality of cause and effect with lines and arrows).
6. Students will then create a visual "causal loop diagram" showing how all of these listing these points in the compass model. Students may use poster paper or create a digital image.
7. Students share their models with peers and ask Socratic questions about each other's choices.
8. Home work: Tell students that tomorrow we will welcome into class Pak Ajik, a man who traps exotic birds and sells them on the gray market. Students are to create a list of questions they have for him, using sensitivity to not cast blame or guilt upon him.

Outline Day-One:

1. Review the positive and negative impacts that the students identified yesterday. Ask them to consider these points from a different perspective as we welcome Pak Ajik into the classroom.

2. Introduce Pak Ajik
3. Students pose questions for Pak Ajik.
4. Afterwards, discuss with the students the different perspective that Pak Ajik has when he considers the conservation of the Bali Starlings in the compass model.
5. Students study and discuss their CLD systems map and identify “leverage points” for more systemic (integrative) conservation efforts and also brainstorm what things could be done at these leverage points.
6. Each group present to the class their CLD with leverage points and new ideas for more holistic conservation that links to all four points of the Compass.

What the Compass does:

- Shows that even well-meaning conservation efforts come at a cost.
- Explore differences between needs of different people.
- Gives students a big picture of view of what is required for conservation efforts.

Lesson created by: Glenn Chickering, Global Awareness teacher, Green School, Bali

