Lesson Eight — Survival

Objective: Students will continue to explore the intelligence and life skills of humans and nonhuman animals begun in Lesson Seven, considering, for example, which skills are the mark of intelligence, and how we should treat others who are or who are not intelligent.

Materials Required

Copies of the stories below to hand out to students

Story One

For years, Danny tried to get a job in a design and advertising firm, but he was unsuccessful. Everywhere he applied, he was told he lacked sufficient education and training. Danny had not attended college because he could not afford to do so. He always had to work.

After many rejections, Danny gave up the notion of working for an advertising company, but he continued to believe in his design skills. He looked for businesses in the city where he lived that he thought needed to update and improve their image and, without speaking to their owners, he created possible new designs for their menus, signs, and marketing strategies.

One by one, he visited the businesses, his new designs in hand, and presented his ideas. Most of them loved his designs and hired him immediately. Within five years, Danny was the highest paid graphic artist in the city and had hired four staff to assist him.

Story Two

On a road at a university campus in Japan, crows and humans line up patiently, waiting for the traffic to halt. When the lights turn red, the birds hop onto the road and place walnuts picked from nearby trees in the path of the cars. When the lights turn green again, the birds fly off and the vehicles drive over the nuts, cracking them open. When pedestrians can once again cross the road, the crows join them and pick up their meal. If the cars miss the nuts, the birds sometimes hop back and put them somewhere else on the road, or perch on electricity wires above the road and drop them in front of vehicles.

The crows in Japan have only been cracking nuts this way since about 1990. Crows in California have also been seen doing it. The crows already knew about dropping clams from a height above the seashore to break them open on rocks, but this method did not work for walnuts because of their soft green outer husk. Researchers believe they probably got the idea after noticing cars driving over nuts fallen from a walnut tree overhanging a road.

Story Three

In the rough waters off the California coast, a small boat carrying Daryl Graffenreid and his older brother sank. The men knew the waters were full of sharks and that they could

not survive for long. Daryl decided to swim toward land for help. He was joined by several curious sea lions. Daryl shouted to a baby sea lion who came within arm's length, "Go get help!" The baby swam off.

Daryl began to feel weak and was losing consciousness. Several large sharks were circling him and he thought his life was at an end. Suddenly, out of nowhere, 15–20 sea lions surrounded him and formed a barrier between him and the sharks. The sea lions stayed and protected him until a Coast Guard vessel pulled up alongside him. His brother was already on the boat.

Story Four

A woman who lived in a U.S. city went to the rainforest to work with indigenous people in South America who were building a camp where teenagers would come to learn about peace. The woman asked the indigenous people to paint letters on a welcome sign, but they had never used a paintbrush before and they made a mess. She thought they must be unintelligent.

The next day, the same group of indigenous people was assigned to clear an area where a cabin was to be built and the woman from the city was put in charge of the effort. A truck dropped off machetes and the driver told the woman they would have to be sharpened. She did not know how to sharpen or use a machete. Without any explanation from her, the indigenous people immediately picked up the machetes, sharpened them on a rock, and began to use them. They thought the woman must be quite unintelligent to not know how to sharpen and use a machete. In her world, there was no need to learn to use a machete. In the world of the indigenous people, there was no need to learn to use a paintbrush.

Story Five

Donkeys are extremely brave and caring. Donkeys all over the world have saved horses, goats, sheep, and other animals from wolves and other animals. A recent news story told of a donkey who saved goats from a mountain lion:

Veterinarian Art Colyer was awoken in the middle of the night by the sound of his goat, Buttermilk, crying for help. When he ran out to check on her, he saw that a mountain lion had grabbed her face and nose in his mouth and was pulling her out of a small pond. Colyer watched helplessly, as there was nothing he could do without putting himself in danger.

Suddenly, his donkey, Poppy, began circling the mountain lion and repeatedly kicking him with her front and back legs. The mountain lion fled over the fence. Buttermilk suffered bite and claw marks on her face and was treated for her injuries. The mountain lion never returned, and since the incident, Buttermilk and Poppy have been inseparable.

Story Six

John Simpson, an Australian stretcher bearer serving in Turkey during WWI, worked together with a donkey to save the lives of wounded soldiers. With bullets and shrapnel raining down on them, donkey and man made their way through a valley to carry water

to soldiers, pick up those who were injured, and transport them to a first-aid station. Even after John was killed by enemy bullets, the donkey continued to carry the critically wounded soldier on his back to the beach and then led other concerned stretcher-bearers back to John's body.

The man chose to risk his life to save the wounded soldiers, while the donkey was an involuntary participant. This is often true of many animals working for humans. The man was honored by having his name inscribed on the "roll of honor" on an Australian war memorial. The donkey too was honored, in other ways.

Questions for Discussion

Many nonhuman animals have been honored as heroes in military and civilian situations, their feats recorded in history books:

- Rescue dogs who searched burning and collapsed buildings for people still alive on September 11 in New York City.
- Search dogs who rescued people stranded by avalanches, earthquakes, or mud slides.
- Birds who saved thousands of people by carrying messages, even after they had been shot.

In Story Six, the soldier and the donkey were honored. The donkey traveled through the same enemy fire as the man and, in addition, bore the burden of carrying injured soldiers.

As you learned in Lesson Six, donkeys instinctively avoid threatening situations. How do you imagine the donkey felt walking through a hail of gunfire, with bombs exploding all around?

Do you think the donkey also deserved to be honored? Why or why not?

Although the donkey could probably have escaped, he did not. Why do you think the donkey stayed? Do you think the donkey sensed that he was needed and his job was to help, or do you think he was simply forced to keep walking back and forth through enemy fire?

Activity One

Review with the class the discussion of intelligence from Lesson Seven. Ask students to write a description of how they would prove their own intelligence to someone who does not speak their language and who is from a completely different culture.

Then divide the class into pairs and explain that the members of the pair do not understand each other's language. Members of the pair will take turns proving to their partner that they are intelligent by communicating in some other way.

Once both partners have had a turn, bring the students together and discuss with the class how they proved to their partner that they were intelligent.

Questions for Discussion

Ask students the following questions and either discuss their answers in class or ask them to write their answers as an in-class or homework assignment:

- Were you able to express yourself to your partner in a way that communicated your intelligence?
- Was the experience frustrating? Why?
- Which groups of humans might experience this same type of frustration in trying to express themselves and be understood for who they are? (those from other countries and those who have speech impediments for any number of reasons, for example)
- How does this relate to nonhuman beings and our perceptions of them and their intelligence?
- Do you think you could create a test that would accurately measure another being's intelligence? What standard would you use to measure their intelligence?
- Do you think you would pass an intelligence test created by nonhumans? What if it asked you which leaves in the forest were edible, which contained medicine for different ailments, and which were the best to make a nest from? If you took that test, do you think you would seem intelligent or not so intelligent to them?

Activity Two

Ask students to use knowledge they have gained from these lesson plans or from their own experience to list, either on the board or on paper, things they cannot do that other animals can do, such as:

- Detect cancer by smell (dogs) or detect water by smell (elephants can detect water sources up to 19.2 km away)
- Migrate thousands of kilometers to and from a destination without a map or compass (birds)
- Feel underground vibrations of thunder more than 160 kilometers away through their feet (elephants) so they know to walk there to find water
- Locate plants in a forest that are the appropriate medicine for specific ailments (many animals do this)

Then ask students to make a second list of things they can do that most other animals cannot do (although some animals may do some of these things when forced or taught to do so by humans), such as:

- Tie shoes
- Write words on paper or on a computer that others understand
- Ride a bicycle
- Draw
- Play musical instruments
- Build machines, bridges, buildings, and other structures

Finally, look through both lists and put a check next to each ability that either humans or nonhuman animals require for survival.

Note: scientists used to think animals could not do certain things that humans can do, but they discovered that many species of animals also make and use tools, like we do, as well as have language and build structures. Today, architects copy the structures of termites, for example, because these tiny insects know how to ventilate and cool their dwellings without wasting energy, as humans do when they use air conditioning. Beavers are master builders, building dams and lodges for their families from whatever materials they find in their environment. Birds and whales make music. Humans were not the first discoverers of antibiotics. Ants were using antibiotics 60,000 years before humans.

The aim of this activity is for students to understand that every living being is an individual, with unique abilities. Some animals can do things that most humans cannot and vice versa. We all are using whatever abilities we have to survive and hopefully thrive on the planet and to avoid unnecessary suffering. By respecting one another and by sharing the planet that is home for all of us, we can learn from one another and help each other to achieve that goal.

Activity Three

Read the following to students:

Close your eyes and imagine that you are alone in a forest, in a place that is completely unfamiliar. You are wearing clothing and shoes, but you have no food or shelter. Keep your eyes closed as you answer the following questions silently, to yourself:

- In which direction will you walk to find food, water, and shelter? How will you choose a direction?
- After two days of walking without food, you are very hungry. Do you know which plants are safe to eat?
- If you choose to eat animals, how will you catch them?
- If you do manage to catch them, would you eat them without cooking them?
- If you choose to cook the animals you caught, how will you start a fire?
- It gets very cold in the forest at night and you need shelter. What will you do to stay warm and safe?

Ask students to open their eyes. Discuss their answers and include the following questions as part of the discussion:

- Most nonhuman animals meet and solve challenges like these every day. Do you consider that intelligence? Why or why not?
- Which animals do you think would survive if left alone in the forest? Why?
- Which animals do you think would not survive if left alone in the forest? (cats, dogs, and tropical birds, for example) Why?

Activity Four

Read the following two sentences to students and then ask them the questions below:

One of the stories in Lesson Seven is about a dog who knew the person he saved. Other stories above (about sea lions and donkeys) are about animals who did not know the person they saved.

Ask students the following questions:

- Would you be willing to rescue someone you did not know? Would you be more likely to rescue someone who is in your circle of friends and family? What about someone of another species?
- Do you think you are more intelligent than:
    - Birds who can fly thousands of kilometers from one destination to another without the use of a compass or map?
    - Whales who could communicate with other whales from one pole to the other were it not for noise pollution caused by humans?
    - Elephants who can detect everything from water underground to an impending tsunami through vibrations in their feet?
- Do you think only animals are intelligent or only humans are intelligent or both are intelligent, just in different ways?
- Does it matter that some animals are more capable or more intelligent than others in certain ways? Why or why not?
- Some animals would not naturally depend on us for their survival, but we have domesticated them and, in some cases, turned them into servants so now they must depend on us for their wellbeing. Can you think of examples? (cats, dogs, horses, donkeys, and so on)
- Should what we perceive to be the intelligence of a human or a nonhuman animal determine how we treat them? For example, if a younger brother were less intelligent in math than his older brother but could draw very well, should he be treated differently from his brother? Should he have rights, freedom, and be treated with compassion only if he is good in math? Why or why not?

Resources

Story One:

Sikora, Rae. Personal account.

Story Two:

Davies, Gareth Huw. "Bird Brains." PBS: The Life of Birds.
http://www.pbs.org/lifeofbirds/brain/
http://tinyurl.com/4urkqq

Marzluff, John M. and Tony Angell. *In the Company of Crows and Ravens*. New Haven: Yale University Press, 2007.

Story Three:

Steiger, Sherry Hansen and Brad Steiger. *The Mysteries of Animal Intelligence: True Stories of Animals with Amazing Abilities*. New York: Tor Books, 2007.

Story Four:

Sikora, Rae. Personal account.

Story Five:

Asistio, Audrey. "Donkey Saves Goat From Mountain Lion in Paradise." khsltv.com. 13 September 2010.
http://www.khsltv.com/content/localnews/story/Donkey-Saves-Goat-From-Mountain-Lion-in-Paradise/2dQqTdANZ0SMWV-LBuACtw.cspx
http://tinyurl.com/23vnfzz

Story Six:

"Simpson and His Donkey."
http://www.convictcreations.com/history/simpson.htm
http://tinyurl.com/3bdzy4k

