

Lesson Four — Our Primate Relatives

Objective: Students will consider our relationship with our closest nonhuman relatives and the ethical issues surrounding our use of them.

Materials Required

Handouts:

Copies of the True Accounts and the Background material, below

Videos:

Jane Goodall's film *Chimps: So Like Us*, or other films about gorillas, chimpanzees, or bonobos

The YouTube video of the Kyoto University, Japan, memory study showing that chimps outperformed human college students in tests of how well they could remember the sequence and location of numbers flashed on a computer screen. (Numbers from 1 to 9 were flashed on a touch-screen computer monitor and then replaced by blank squares. The chimps were able to remember which number appeared in which location on the screen and touch the squares in the appropriate order far better than human college students.)

<http://www.youtube.com/watch?v=nTgeLEWr614> or <http://tinyurl.com/26t5du>

Background About Primates

Humans are part of a group of mammals called primates, which includes monkeys, apes, and lemurs. Our subgroup within the primate group is called Hominidae (also known as Great Apes). We share this subgroup with orangutans, gorillas, and chimpanzees, including bonobos.

Chimps communicate in a way that is very similar to humans, using vocalizations, hand gestures, and facial expressions. More than 98 percent of bonobo DNA is the same as human DNA. Wild and captive chimpanzees, gorillas, and orangutans have all been videotaped laughing when wrestling, chasing each other in play, or being tickled. Chimpanzees like their armpits and belly tickled, just like humans.

Primates are kept in captivity in laboratories, zoos, and people's homes.

Some Background About Primates in Laboratories

Approximately 70,000 nonhuman primates are used in laboratory experiments every year in the United States and the European Union. There are also experiments on nonhuman primates in Israel. Some primates are bred in captivity for this purpose, while others are caught in the wild.

Some experiments study primate behavior. In others, primates are injected with diseases or drugs. They may be operated on and parts may be cut or severed from their bodies.

Primates are often used over and over again and moved from one type of experiment to another. Some have been kept in a cage and used in various research projects for 40 years.

One well-known U.S. researcher had a small, round, tube-shaped chamber made out of stainless steel. The sides of the chamber were sloped and made of a slippery material. Baby monkeys were put into the chamber and left alone for six weeks. The monkeys soon realized they could not climb up the sides to escape, and after a few days, they stopped moving and huddled at the bottom of the chamber. They suffered despair and depression, were unable to socialize with other monkeys, and never mentally recovered. The researcher said he designed and performed this experiment to study depression.

True Account One

Knuckles, a chimp afflicted with cerebral palsy, lived in a social group at a research facility. Adult male chimps normally put on displays to intimidate younger males, but none of the other chimps took advantage of Knuckles' disability. Even the alpha male gently groomed Knuckles.

True Account Two

Chimpita took refuge in a mango tree and refused to come down to his keeper, Madam Abreu. "So," she said, "I went to the tree and, speaking to him, pretended that I was injured in the arm and suffering. Immediately, on seeing that I was in trouble, he jumped from the tree, and coming to me held my arm and kissed it strongly. And so we were able to catch him."

True Account Three

Researcher, Geza Teleki, was following a group of chimps when he realized he had forgotten his lunch. While the chimps fed in a nearby tree, Geza tried to knock down some fruit with a stick, but after ten minutes, he was still hungry and empty handed. An adolescent male chimp noticed his plight, collected fruit from the tree where he was feeding, climbed down the tree, and gave it to Teleki.

True Account Four

Orangutans are afraid of water. They don't even like to be out in the rain. When a river flooded, one orangutan mother in Borneo was stranded in a tree for days, her baby clinging to her belly. Desperate wildlife officials trying to save her threw a rope to her across the deep, flowing water. She reached out and caught it. Keeping the baby's head above water, she held onto the rope and with her free arm, dog paddled to safety.

True Account Five

A male chimpanzee, named Flint by Jane Goodall, was eight years old when his mother, Flo, died. Flint sat over Flo's body for many hours, occasionally tugging at her hand. He became more and more lethargic. Three days after her death, he climbed a tree and stared at the sleeping nest he had shared with her. Within a month of his mother's death, Flint died. The scientist who observed them in the wild said he died of grief.

True Account Six

Dian Fossey was a scientist who studied mountain gorillas by observing them in their natural habitat. One mountain gorilla was orphaned at about three years old after humans killed her entire family before her eyes, so they could more easily capture her. After the young gorilla had spent a month in a very tiny cage, Dian Fossey adopted her and named her Coco. When she arrived at Fossey's gorilla sanctuary, Coco was very ill. She was released into an indoor enclosure with windows. When Coco first looked out the window of her pen at a forested mountain like the one she grew up on, she sobbed, and tears ran down her face.

True Account Seven

Scientist Roger Fouts taught sign language to a chimpanzee named Booe, as part of a non-invasive language experiment. During the years they worked together, a bond formed between human and chimp. When the experiment ended, over Fouts' protests, Booe was sent away to be used in other types of research where, for over a decade, he was forced to live in barren cages 1.5 meters by 1-5 meters by 2 meters (5 feet by 5 feet by 7 feet), including at a biomedical laboratory owned by New York University, called the New York Laboratory for Experimental Medicine and Surgery in Primates (LEMSIP).

Throughout the decade of biomedical research on Booe, Fouts wrote, he was not regarded as an independent "chimpanzee being," revered for his individual qualities or features, but rather, as "property," to be used against his will in hepatitis experiments.

One day, the producer of a TV news magazine told Fouts he was planning a show about the morality of biomedical experiments on chimps and asked Fouts if he would be willing to be videotaped visiting Booe at LEMSIP.

"I wanted to say 'No,' " Fouts said. He had avoided going to LEMSIP since Booe and the other chimps he worked with were transferred there. "Seeing them would be agonizing because I knew there was nothing I could do to rescue them or help them."

He didn't know if Booe would remember him. "But if he did remember, he might well think I was there to free him, something I could not do. It would break my heart and his. But I also knew that through television, we could take millions of people inside a biomedical laboratory. If there was any chance that this wide exposure might improve conditions or help Booe, then I would do it."

He drove to LEMSIP in the back seat of the TV station's long, black limousine. "I couldn't help thinking that the back of the limo was bigger than Booe's cage," he said.

He wondered what 13 years alone in a cage would do to someone's mind and personality. "But the closer we got to LEMSIP," Fouts said, "the more I hoped that Booe would not remember me, that he would see me as just another lab-coated visitor passing through. I didn't want to sign GOODBYE to Booe. I was sure I would break down."

When they arrived at the lab, they were escorted to Booe's windowless barrack. Booe lived in a "hot unit," where all the inmates were infected with one virus or another. Booe was infected with Hepatitis C, a virus that can cause progressive liver disease.

This is the story of their visit in Dr. Fouts' own words:

Through the door I could see my friend sitting alone in his cage.

He looks the same, but bigger, I thought.

The last time I saw Booe he was a young teenager. Now he was twenty-seven.

This is really happening. It's too late to turn back.

I hesitated another moment then entered the room in a low crouch. I approached Booe's cage uttering gentle chimpanzee greetings.

A big smile lit up Booe's face. He remembered me, after all.

HI, BOOEE, I signed. YOU REMEMBER?

BOOEE, BOOEE, ME BOOEE, he signed back, overjoyed that someone actually acknowledged him. He kept drawing his finger down the center of his head in his name sign — the one I had given him in 1970, three years after NIH researchers had split his infant brain in two.

YES, YOU BOOEE, YOU BOOEE, I signed back. GIVE ME FOOD, ROGER, he pleaded.

Booe not only remembered that I always carried raisins for him, but he used the nickname he had invented for me twenty-five years earlier. Instead of tugging the ear lobe for ROGER, he flicked his finger off the ear. This was like calling someone Rodg' instead of Roger. Seeing him sign my old nickname floored me. I had forgotten it, but Booe hadn't....

I gave Booe some raisins, and the years just melted away, the way they do between old friends. He reached his hand through the bars and groomed my arm. He was happy again. He was the same sweet boy I met on that autumn day decades earlier. I was a young know-it-all professor then, right out of graduate school. I yelled at Booe one day, and he humbled me in front of my very first college students by lifting me off my feet and letting me dangle there....

Thirteen years in a hellhole, and he's still forgiving, still guileless. Booe still loved me, in spite of everything that humans had done to him. How many people would be so generous of spirit?

As we signed back and forth and played CHASE and TICKLE through the iron bars, I forgot about the cameras and the millions of people who would be watching this. For one wonderful moment I even forgot where we were. But only for a moment.

I MUST GO NOW, BOOEE, I signed after a while. Booe's grin changed to a grimace, and his body sank. I MUST LEAVE, BOOEE. Booe moved to the back of his cage. GOODBYE, BOOEE.

As we left LEMSIP, I shook hands cordially with the director, Dr Jan Moor-Jankowski, as if we were two colleagues who had just transacted some mundane piece of business. I was overwhelmed by shame. I was ashamed of Booee's hepatitis, ashamed of the professionalism of Moor-Jankowski and myself, ashamed of the respectability that hung over all this suffering.

After our limousine pulled out through the heavily barred security gate, no one spoke for the whole drive back to the hotel.

Activity One

Show films about primates—perhaps the Jane Goodall film *Chimps, So Like Us* or the Kyoto University, Japan memory study on YouTube:
<http://www.youtube.com/watch?v=nTgeLEWr614> or <http://tinyurl.com/26t5du>

Discuss in class what you have seen.

Activity Two — Culture and Language

Lesson Three considered how culture and language can create barriers to understanding other humans. Discuss the following in class:

- If it is difficult to understand people from other cultures who speak a different language, how is that similar to trying to understand nonhuman primates?
- Nonhuman primates have families, language, preferences, and can feel pain and pleasure. How do we know this without sharing a language with them? Either ask students to read the true accounts and background information above aloud in class, or distribute them to students and ask them to read the information silently. Then ask students to discuss this question.

Activity Three

Create two columns on the blackboard. Label one column: What we have in common or can assume we have in common with other primates.

Label the second column: What we do not have in common or can assume we do not have in common with other primates.

Ask students to name what we do and do not have in common with other primates and list their answers in the appropriate column. Then go to Activity Four.

Activity Four

Discuss the following as a class:

Why do you think primates and other animals should or should not be kept in captivity? Ask students to name the pros and cons of keeping them in captivity for entertainment (zoos and circuses) or for experimentation.

Teacher: for information on this topic, refer to the Animal Experimentation fact sheet included with the lessons.

Activity Five

Ask each student to choose one of the accounts above (and on a handout sheet) and write a story from the perspective of the nonhuman primate described in the account. Explain to students that they can include any imaginary elements they wish, including the character's thoughts, for example.

Resources

Background About Primates in Laboratories:

"Animal testing." *Wikipedia, The Free Encyclopedia*. 9 May 2011.
http://en.wikipedia.org/wiki/Animal_testing
<http://tinyurl.com/nu3gx>

True Account One:

"Mentally disabled chimp offers insight at conference." *Monkeys in the News*. 28 March 2007.
<http://www.monkeyday.org/2007/03/mentally-disabled-chimp-offers-insight.html>
<http://tinyurl.com/4yrn69w>

True Account Two:

Dewey, Russell. "Emotions in Chimpanzees." *Psychology: An Introduction*. 18 September 2008.
http://www.psywww.com/intropsych/ch08_animals/emotions_in_chimpanzees.html
<http://tinyurl.com/3mxedxz>

True Account Three:

LaLand, Stephanie, *Peaceful Kingdom: Random Acts of Kindness by Animals*. San Francisco: Red Wheel/Weiser, 1998.

True Account Four:

Shears, Richard. "Amazing moment an orang-utan caught a rope thrown by humans and swam across flooded river to save her baby." *Mail Online*. 19 March 2009.
<http://www.dailymail.co.uk/news/worldnews/article-1162917/Amazing-moment-orang-utan-caught-rope-thrown-humans-swam-flooded-river-save-baby.html> or
<http://tinyurl.com/c7jcnh>

True Account Five:

Goodall, Jane. *The Chimpanzee Family Book*, The Jane Goodall Institute for Wildlife Research, Education and Conservation. Saxonville, MA: Picture Book Studio, 1989.

True Account Six:

Fossey, Dian. *Gorillas in the Mist*. First Mariner Books, 2000.

True Account Seven:

Fouts, Roger and Stephen Tukul Mills. *Next of Kin: My Conversations with Chimpanzees*. New York: Avon Books, Inc. 1997.