World Zoo: Parent-Child Interaction
Curriculum Unit 13.01.04
by Breanna J. Evans

Introduction to the Unit

In kindergarten, students want to know what is going on in the world around them and they feel empowered when retaining and reciting “real life” facts. As a kindergarten teacher, it is my job to feed the hunger for knowledge as well as entertain and nurture them. This unit will entertain my students and parents through fictional texts as well as nurture their need for knowledge with non-fiction texts. The fiction will allow for imaginations to roam as the animal characters in the text are personified and complete daily tasks that only humans can. This entertainment will set a platform for my students to receive the true facts in the nonfiction texts and compare and contrast the two. My students will be able to distinguish between fiction and non-fiction text features and ultimately, they will be able to recognize realness in stories that we read together. As for nurturing my students and parents, inviting them to participate in activities and class trips will resolve unanswered questions about different animals and places around the world. Both my students and their parents will be able to witness how these animals interact with their babies and the child rearing process in different animal classes. The division between fiction and non-fiction in this unit will allow my students and their parents to inquire about the unknown and research to find information that is true. The fiction will be interactive and engaging for the students; however, the non-fiction will be satisfying for them as well.

The twenty six students in a kindergarten classroom all have different life experiences; however one thing that holds true for all of them is a lack of experience with diverse people, places and animals. In order to prepare my students for "real life" situations, I am going to expose them to animals that are from various backgrounds and countries around the world.

My experiences in the inner city classroom have helped me to realize that although I am responsible for my students' learning, there is a barrier that many of them face on a daily basis. Often, there is a disconnection between home and school and this impacts student behavior, work ethic, parent-teacher interaction and even student-teacher relationships. Parental involvement and interaction with children determines how well the teacher can get their lessons across to the students and vice versa. This unit will provide the students and the parents with the opportunity to come to school and learn alongside their children about how animals raise their babies. The parents can in turn spend more time engaged in their children's education and actively learn about various topics that they will need to help their children on homework or projects with.
Initially, I set out to find why the kindergarten era of students in the inner city public school systems fared so low on the DRA assessment compared to their counterparts from more affluent areas in the state. My question was: How can these students be so far behind at such a young age? The answer to this question is compounded in many different areas of education and parenting. I found that the DRA assesses reading skills of students and even in cases where a student cannot read the words; they can use picture clues and context clues. However in many instances, students like mine have no prior knowledge on the non-fiction materials we teach. Some of my students struggled to use context clues and picture clues on the assessments because they did not know the animal presented to them or they did not know what the specified animals ate or even where they lived so they could not comprehend the text presented to them. This unit sets out to provide background knowledge on various animals around the world and increase parental engagement.

I began researching different ways to invite parents to read to and with their children in hopes that they would carry out these strategies in their homes. Then, I researched animals that have dynamic relationships with their parents. I wanted to find out how the elephant, seahorse, penguin and the wolf nurture their young. I know that these are animals that my students do not have prior knowledge about especially since they are not domesticated and common animals in the community we live in. This is a perfect opportunity to expose my students to new animals in their natural habitats while incorporating family interactions in my lessons. The animals we will examine will be animals that we would see at a Zoo, animals from around the World. I surveyed my class of twenty-six students and only three of them had actually visited a zoo. It would be a wonderful opportunity to take a class trip to the zoo and have parent volunteers to accompany you and build a stronger bond between teachers and parents. This unit will allow students to interact with the zoo animals and use literature and non-fiction texts to build background knowledge.

**Content Objectives**

- Students will be able to identify and label the following animals by name: seahorse, elephant, wolf and the penguin
- Students will be able to categorize the named animals into the appropriate classes: mammal, fish, and bird
- Students will be able to order the stages of the life cycle of the seahorse, elephant, wolf and penguin
- Students will be able to identify the unique family characteristics of each animal in the unit
- Students will be able to compare the characteristics of an animal family to the characteristics of human families
Animal Families

The Penguin

The penguin is a bird that does not fly. Birds have feathers and a backbone and they hatch from eggs. Unlike most birds, penguins swim gracefully in water or waddle clumsily on land. This bird spends most of its life in the ocean and webbed feet help them move as fast as 25mph. This allows the penguin to escape from bigger predators like the shark, orca, and leopard seals. Penguins also use their speed to catch and eat fish, squid, crab and krill (a penguin favorite).

There are 17 species (types) of penguin in the world and they have various physical characteristics. Some penguins have colored hair, striped chests or even colored eyes. The tallest penguin can be as tall as a fourth grade student and the smallest penguins can be the size of a young duck. All penguins have streamlined bodies with strong flippers for swimming. They use their feet and tails to steer while in the water. They have a white belly and a black back similar to a whale. Penguins have two layers of feathers that keep them protected from the weather.

All penguins live in colonies in the southern hemisphere. The colony is a group of penguins that live close together to fight the odds against solo birds. The colonies allow for predators to be spotted easily and the colony provides a greater chance of survival when predators attack. The chances of being caught are lower when there are many penguins in the same place. Almost every colony of penguins can be found on a coast because it is a short distance to hunt and travel back home. These penguin colonies can be found in Antarctica, Australia, New Zealand, South Africa, and in areas outside of South America.

Penguins breed once per year and the different species have different parental responsibilities. The mother emperor penguin lays two eggs and only one egg will survive. The father emperor penguin incubates that one egg for two months. While the father penguin keeps the egg warm, the mother hunts and brings food back for the father to eat. All other species of penguin take turns incubating their eggs while the partner hunts for food. After 33-64 days of incubation depending on the species, a baby chick is ready to hatch from its egg. Penguin chicks are fed regurgitated fish and krill from the parent penguins. As the chicks grow, the parents take turns finding food and caring for the young. A young chick is ready to fledge and take to the ocean after at least 50 days of nurturing from parents.

In relation to human families and child-rearing, a few dynamics come to mind. The emperor penguin raises their young in a way that humans would consider "the working parent". Although both parents love their young, in an effort to provide the best life for them, they work opposite shifts allowing only one of them to be physically present at a time. The hardworking mother will leave her egg with the father penguin to go and bring food home for the family to eat. She is the ultimate breadwinner and at times she can be misunderstood as too busy for her baby or not engaged in the rearing of the child. Often, the working mother is assumed neglectful. However, in some cases the mother is the sole provider who is obligated to work long hours for days on end. As a teacher, we encounter parents that are not present as much as we would like them to be, however there are a few things we can do to accommodate the parents to allow them to be engaged in our classrooms. Teachers can correspond via mail, email, texts and phone calls inviting them to events, keeping them informed of the topics of study and allowing them to visit and volunteer in the classroom when they are available. There are resources and ideas for parental involvement in the Parent Outreach section of the unit.
The Seahorse

The sea horse is a fish that lives in the ocean where the water is shallow and warm. The characteristics of a fish are: they live under water, they have a bone skeleton, they are cold-blooded and they breathe under water through gills. Fish also have fins that help them to swim under the water. This means that the sea horse is a fish. The sea horse does not look like an ordinary fish. Its head looks like a horse and that is where it gets its name from. The scientific name for a sea horse is Hippocampus which means "horse-like sea monster" because for a long time, no one could classify the sea horse into a class. The sea horse is also known as the shyest fish of the sea.

The sea horse swims standing up straight and it swims very slowly using small fins on its head and one large fin on its back. Since the sea horse swims slowly, it must camouflage to hide from predators like other bigger fish. The sea horse can change color to blend in with its surroundings. They can come in many sizes and colors depending on where they adapt and live. The sea horse lives in corals at the bottom of the ocean. The smallest sea horse is a half inch tall and the biggest sea horses are as tall as fourteen inches tall. The long tube-shaped snout of a sea horse sucks up its food from the floor of the ocean. They like to eat tiny shrimp, krill and plankton. This fish is covered with stiff bony plates rather than being covered by scales like many other fish. Sea horses have sharp spines and knobs on their bodies to help fend off predators. If a fish bites a sea horse, the fish will be poked and might leave the sea horse alone.

The sea horse is born from the father, not the mother. The parent sea horses do a dance together and the mother sea horse lays her eggs in a pouch on the father's stomach. The mother can lay up to three hundred eggs at one time. The eggs grow inside of the pouch and it gets bigger and bigger until they are ready to hatch. Once the baby sea horses are born, they wrap their tails around each other's and spin around while exploring the ocean for the first time. After a few hours the sea horses go off on their own to find their own homes and start their own families.

The parenting process of the sea horse is similar to human single parenting by the dad. Like human single dads, the sea horse dad is a caretaker for his young and he has the important job of protecting his young until they are old enough to fend for themselves. The father seahorse uses his body as a shield for his eggs and he takes them where ever he goes until they are ready to hatch, then they swim off on their own. Although the mother seahorse lays the eggs, she is not present for the birth of her babies and if at all, she does not return to the home until the babies are hatched and have gone off on their own.

The Wolf

Wolves are mammals that have live on land. Wolves have live births and are warm blooded which means their body temperature stays the same in all surroundings. Another important characteristic of a mammal is that they have hair. Wolves are covered in hair or fur. Mammals have skeletons and they breathe air through lungs. This is why wolves pant and move up and down while breathing. Wolves are members of the dog family and therefore related to jackals, foxes, coyote and domestic house dogs too.

Wolves look like dogs. They have four strong legs for running and a tail as well as a muscular body covered in fur. They have long snouts to sniff out prey and sharp ears that stand tall to hear when predators are near or when members of the pack are in danger. Wolves are excellent hunters because they have strong jaws and extremely sharp teeth.

Most wolves live together in a group of five to eight wolves that hunt together. This group is called a pack. In
some cases, a pack can have as many as thirty wolves in it. Wolves that are born into a pack have a higher chance of surviving because the older pack members help to raise them to be strong hunters themselves. Another benefit of being part of a pack is having other wolves to help capture big prey animals and share the food together. Wolves hunt elk, moose, muskoxen and caribou as well as small prey like rabbits, beavers, squirrels, and even fish.

Wolves use howling as a way to communicate to other animals. A howl can be heard over six miles away. The wolf sticks his nose in the air and lets out wails as other wolves join in to share the conversation. Other sounds the wolf makes include snarls, barks, squeaks, whines, and whimpers. The sound a wolf uses will depend on the message that they are trying to send. Wolves use howls to connect with other lost members of the pack, to gather the pack before a hunt, or even to warn other packs about their "marked" territory. Just like humans, wolves send messages that are kind and affectionate to other members of the pack or family. When two members of the same wolf pack meet, they wag their tails, whine out loud and lick each other's fur.

In the pack, the leaders are known as the alpha male and the alpha female and they are the only wolves in a pack that can have babies. The wolf breeds once per year around the end of the winter so that the cubs (baby wolf) can arrive in the spring. The mother wolf can have up to ten baby cubs in a litter (group) at one time. Newborn cubs only weigh one pound and cannot see or hear for the first few weeks and therefore, cannot protect themselves from harm. In this way, they are just like newborn babies. They need their parents to take care of them and even feed them milk. While the mother protects her cubs and feeds them her milk, the other pack members bring her food from the hunts to help her survive. After eight weeks, the cubs are big enough to eat small animals that they hunt and the mother goes hunting leaving the cubs with an adult wolf that "babysits" the cubs.

Shortly after, wolves are considered grown enough to help hunt and by eighteen months old, they are full sized and can start their own families.

Wolf families are compared to stay at home mothers who stays home to feed and nurture the babies and the father goes off to hunt. In some cases, older siblings are helping to provide food for the young. "Stay at home wolf moms" teach the young how to survive and take care of themselves until they are strong enough to fend for themselves and either stay at home or venture off on their own. Many human children have a babysitter that allows parents to go and get things done while the children stay home. In the cases where the wolf cubs are big enough to stand on their own, the stay at home mom can go work part-time to help the father with hunting while the cubs stay with an older sibling wolf or "babysitter" as humans call it. This can be just like a large community taking care of each others children or having an active extended family that raises the young.

**The Elephant**

The elephant is the largest land mammal alive. Unlike other mammals, the elephant can grow for their whole life. Ultimately, the largest are also the oldest elephants. The Indian elephant can be anywhere from nine feet to eleven feet tall and the African elephant can be anywhere from seven feet tall to thirteen feet tall.

There are only two species of elephant and they are the African elephant and the Asiatic (Indian) elephant and this is because elephants live only in Africa and Asia with the exception of those elephants living in the Zoo in various countries. The elephant can survive in different habitats or weather conditions. Some can live in grassy savannah, in tropical rainforest, dry lands and even in mountain areas.
Female elephants are called cows and they live in family groups with all of the daughters of the family leader. The leader of the family group is usually the oldest female. Normally, the family group consists of eleven or twelve elephants. Family groups can join with other family groups to eat and travel together forming bonds called kin.

Male elephants are called bulls and at the age of fourteen, the young bulls leave their family group to be with a group of adult male bulls.

In elephant families, as groups are formed, some of the weaker elephants are left behind. If they are sick or have become injured, it is common for the group to keep moving to try and find water holes or food. The abandoned elephants may struggle to keep or or they may rest and get healthy again. In either instance, another passing group could come along and adopt the straggling elephant. The once helpless elephant could get support and love from other family groups and may start a new journey with the new family.

Humans adopt new children into their families and give them an opportunity to be a part of a family again. Due to the leaving and gathering of family members and the constant migrations, some family groups pick up their relatives and some baby elephants are raised by their grandmothers.

Grand-parenting has become a huge family dynamic in families all over the world. In grand-parenting, it is usually the grandmother that raises her grand children in order to compensate for something their children lack. In my classroom, the grandparents that raise children do so because the parents are young and evade responsibility for their children. In other cases, the parents may have passed away and the grandparent is the next in line to take care of their children. Elephant grand-parenting is very similar to human grand-parenting.

**Family Outreach**

As a teacher in New Haven, CT I often find a sense of disconnect between the homes of the students and the actual classroom. Often, an assumption is made that parents of inner city students do not care about education. Looking from the outside in, one might feel as though the family dynamics of a child actually hinders their educational growth. Statistics state that inner city students fare lower on tests, have higher truancy and dropout rates, and display more behavioral issues than their affluent counterparts. I feel as though if we provide more resources and understanding for people, then, we would see more improvements and engagement in education.

Statistics also show that the lack of parental involvement is directly correlated with the failure rates. The question remains, what can we do about this? The most obvious however more uncomfortable answer is to get the parents more involved. This is uncomfortable because as a teacher, your job is to teach the students in your classroom how to be successful and intelligent and the curriculum says nothing about parent engagement. However, when you consider that your students would learn so much more if they were continuously being pushed and educated even outside of school and that if you provided parents with the resources to do so, then you would raise your class test results and close part of the achievement gap. The following narrative provides some strategies to bridge a gap between the parents and the teachers in an effort to teach parents expectations for the school year as well as provide opportunities to get immersed in their child's learning in a positive way.
Inviting your student’s parents to visit your classroom as often as possible is a great first step in bridging the gap. At Open House in the beginning of the school year, you will have a great opportunity to set the tone for parent engagement, to set high expectations and to share about yourself as a teacher and as a human being. Being open and honest with parents is vital in building a safe environment for the students in your class. You can have every form and permission slip possible available for completion at this time. This will require some planning ahead, but it will give parents a heads up on what to expect for the school year. If you can set dates for the field trips early and present the dates to your parents, then they will have ample time to request days off, find babysitters or notify other family members to come in their place if they are too busy. While parents are in your classroom for the first time, invite them back for read-alouds, field trips and parent-child crafts. Parents want to feel welcome in your classroom and this will help foster and build a relationship between parents and teachers.

Another great way to invoke parental engagement is to include them in the class lessons. When presenting this unit to your class and discussing how different animals nurture their young babies, parents could come to class and hear stories with their child or read stories to the class. Great read-alouds stick with children and they learn vocabulary and concepts about print within the classroom. Stories that accompany this unit and can help teach lifelong lessons include Tacky the Penguin by Helen Lester. This story had nonfiction facts about penguins however it had personified characters that were penguins that learned a valuable lesson about friendship and having respect for others that are physically different from you, especially when you need them. Parents could help out in the classroom and further promote the learning of their own children at home while referring to the stories and concepts in the literature and non-fiction texts shared in the classroom. As parents spend time in the classroom, they learn the vocabulary and educational language that the teacher uses throughout the school day. In turn, the common language can be used at home and at school and ultimately build stability and knowledge in kindergarten children.

When planning field trips try and invite parents or use "force" to get them involved in the process. "Force" could mean sending home a sign-up sheet for trip chaperones where parents are provided with various options to choose from whereas if we send home a permission slip with yes or no as an option to chaperon, the parents could choose no. Try your best to get the parents there because any opportunity for a child to see the leader figures of their lives in the same place will symbolize strength and a united front for them.

There are family oriented crafts that accompany this unit and can serve as a fun way to bridge the gap previously mentioned. One of the in class crafts include a heart shaped parent elephant and child elephant to be decorated and designed to be attached at the snout to symbolize family togetherness. Another craft could be making puppets and having a class production for the students to act out for their parents.

**Classroom Activities**

**Activity I**

Objectives: Students will be able to determine the reason why the author wrote the text and share with their classmates the main facts they learned about the wolf.

Students will be able to identify and name characteristics of the wolf.
Pre-Read Activity: As a class list all the things you know about the wolf in the (K) section of the KWL chart. Label each idea with the student name that shared the idea. Then generate a list of questions the class has about the wolf in the (W) section for what we want to know. Think aloud and model the thought process.

Read Aloud: Wolves by Jen Green and discuss the characteristics of the wolf as you go along.

Post-Reading Activity: List all of the things that your class has learned about the wolf including what they look like, what they eat, where they live and how they act. Explain to the students that the author wanted readers to learn all about wolves and that is why they wrote the information in the text. Share with the students that authors write non-fiction texts to share true information and facts about different things. Show students the non-fiction text features that allow us to know the difference between fiction and non-fiction texts including the table of contents, labels and photographs in opposed to pictures.

Activity II

Objective: Students will be able to order the stages of the life cycle of the wolf.

1. Refer back to the story previously read about the wolf, focusing on the life cycle of the wolf. List the 3 stages of the wolf life cycle on the board as a fetus (unborn), baby pup, young pup, and adult wolf.

2. Explain how the life cycle of wolves are similar because we are both mammals.

3. Make a cycle on the board with the four spaces to insert the stages

4. Have students help you order the four stages

5. Have students independently order the stages and write the name of the stage underneath each stage or have the stages on a paper that can be cut into four and placed into order and explained by each student.

Activity III

Objective: Students will be able to draw a wolf and label the body parts appropriately.

1. Refer back to the posters completed prior to this lesson and circle all facts that are related to how the wolf looks.

2. Sketch a picture of a wolf including all of the characteristics that were gathered

3. Label each part of the wolf and explain that labels give the reader an understanding of what is in the picture in the books

4. Labels should include: sharp teeth, snout nose, four legs, a tail, fur, paws, and claws

5. Allow students to draw their own wolves and include at least 3 labels.
Teacher Bibliography


Holmes, Kevin J.. Elephants. Mankato, Minn.: Bridgestone Books, 2000. This non-fiction text shares great facts and illustrations on the elephant and it has a great labeled photograph of the elephant on page 4.


Kalman, Bobbie, and Jacqueline Langille. What is a fish?. New York: Crabtree Pub., 1999. This non-fiction text will provide the reader with the characteristics of a fish as well as the life cycle of a fish. The book has excellent photography from under the sea.


Spock, Benjamin, and Martin T. Stein. Dr. Spock's the school years: the emotional and social development of children. New York: Pocket Books, 2001. This story written by a pediatrician allows parents to understand their child's educational and social encounters to help prepare parents for the stages children phase through.

Theodorou, Rod. Mammals. Oxford: Heinemann Library, 1999. This non-fiction text is great to use as an introduction to the different classes of animals that we explore in the unit. The ways that mammals take care of their young babies is recorded throughout this text.


Walsh, Melanie. Living with Mom and living with Dad. Somerville, Mass.: Candlewick, 2012. This story can be used to share family dynamics that are not traditional in your classroom.

**Student Bibliography**

Buckley, Carol. Tarra & Bella: the elephant and dog who became best friends. New York: G.P. Putnam's Sons, 2009. This is a true story about a dog and an elephant that become friends and communicate together.

Butterworth, Christine, and John Lawrence. Sea horse: the shyest fish in the sea. Cambridge, MA: Candlewick Press, 2006. This story has excellent photographs and captions about the seahorse.


Hora?cek, Petr. My elephant. Somerville, Mass.: Candlewick Press, 2009. This fictional text lends to the imagination as a young boy brings an elephant through his house making a mess in every room until a grandparent finds the time to play with the young boy.


Lester, Helen, and Lynn Munsinger. Tacky the penguin. Boston: Houghton Mifflin Co., 1988. Print. A comical story about a penguin that does not fit in with the elegant penguins, who saves the day and becomes a hero in the community.


Schaefer, Lola M.. What is a mammal?. Mankato, Minn.: Pebble Books, 2001. This is a non-fiction text about the mammal lists the characteristics of a mammal and the text is on a level C for beginning readers to read independently.
"Seahorses, Seahorse Pictures, Seahorse Facts - National Geographic." National Geographic - Inspiring People to Care About the Planet Since 1888. http://Nationalgeographic.com/animals/fish/sea-horse (accessed May 26, 2013). Photographs of different seahorses that you can describe and compare with the students throughout the unit.

Stefoff, Rebecca. Sea horse. New York: Benchmark Books, 1997. This story will give a detailed description of the seahorse and the characteristics of the seahorse as well as the life cycle of a seahorse.

Willems, Mo. I will Surprise my Friend!. New York: Hyperion Books for Children, 2008. This fictional story is about an elephant and piglet that play a human-like game of hide and seek.

Willems, Mo.. Elephants Cannot Dance!. New York: Hyperion Books for Children, 2009. This is a fictional story about an elephant learning to dance from his best friend a pig. The moral of the story is to try your best and great things will come.

Materials

In order to teach this unit, you will need the stories listed above in the student reading list. It would be helpful to have a laminated KWL chart that your students could help you fill in for each animal that you decide to present in your unit. The KWL chart would allow you to chart ideas and findings in order to refer back to them when comparing the animals to humans or other animals. A laminated Venn Diagram could be used when comparing the animal families to human families. It would also be helpful to have a laminated story web that you could use for the various animals we will explore in the unit. The film the March of the Penguins can be viewed on Netflix or rented from the local library.

For the parent craft days, prepare the crafts with construction paper, markers, glue and various decorations for the craft.

Appendix

Common Core State Standards Reading Standards for Literature

Integration of Knowledge and Ideas

One standard addressed in this unit is "with prompting and support, ask and answer questions about key details in a text.". In lesson I, this is achieved by having the students list the questions they may have about the wolf and answering these questions on the board as the lesson goes on and the informational texts are read. Students will also achieve the common core state standard that states "with prompting and support, identify the main topic and retell key details of a text". In lesson I students will be able to determine the reason why the author wrote the text and share with their classmates the main facts they learned about the wolf, elephant, penguin or seahorse.

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