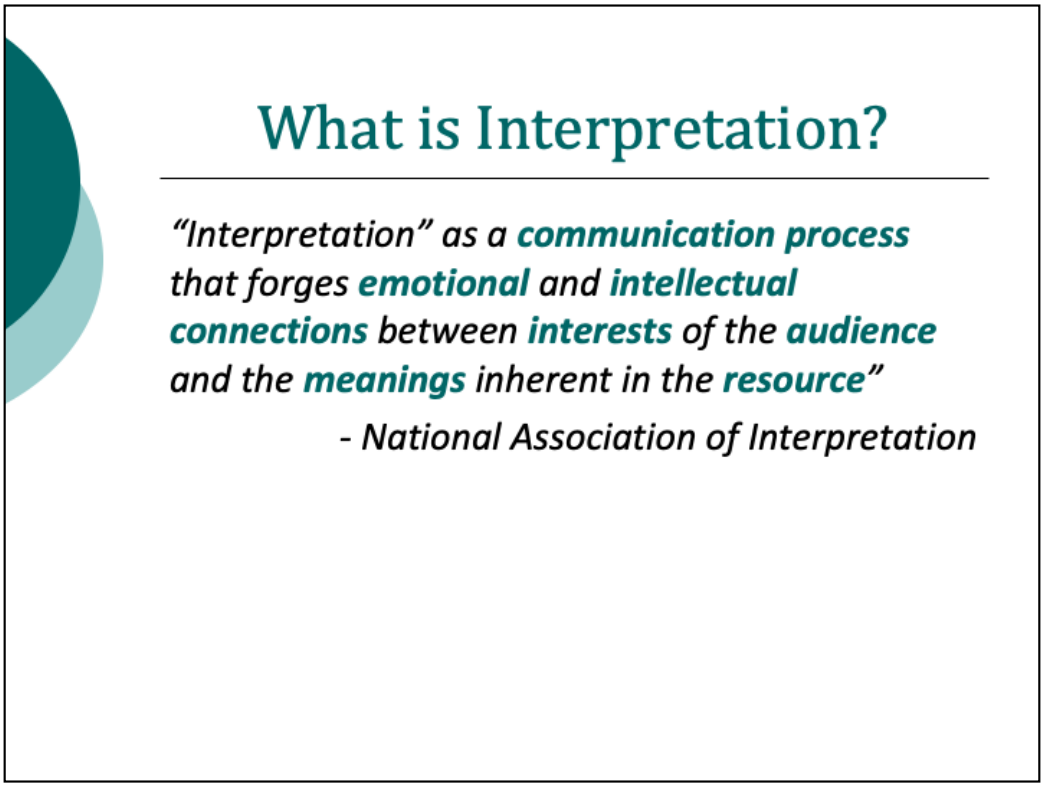
Interpretation

"If we can help young people keep alive their sense of curiosity, their joy of discovery and the hope for the future, then we really can help make the world a better place."

- Dr. Jane Goodall



The National Association of Interpretation (NAI) defines "interpretation" as a **communication process** that forges **emotional** and **intellectual connections** between **interests** of the **audience** and the **meanings** inherent in the **resource**. The resource being the things you interpret such as the animals, plants and exhibits. Interpretation is more than just delivering facts. Interpretation helps one to understand, value and appreciate and should inspire, engage and empower visitors. The ultimate goal of interpretation is to inspire others to actively support the San Francisco Zoo and Garden's mission and goals. A successful interpretation experience should connect the interest of the audience with the things you interpret (animals, plants, exhibits) so you can advance the mission of the San Francisco Zoo Note: the Zoo's mission is to "**connect**" people with wildlife, inspire "**caring**" for nature and advance "**conservation**" action.

As docents, we interpret in different settings and for audiences of various ages, interests and and backgrounds. We may interact guests using biofact carts or bags, conducting a school tour or simply talking with guests about the animals at various exhibits around the Zoo (roaming). Each of these examples requires somewhat different techniques and approaches, but the basics of interpretation are the same for each.

It is important to remember that many of our guests come to the Zoo to enjoy an outing and see the animals. They want to have an enjoyable experience – have fun! Many are in family groups, including children of various ages, each needing a somewhat different approach and style.

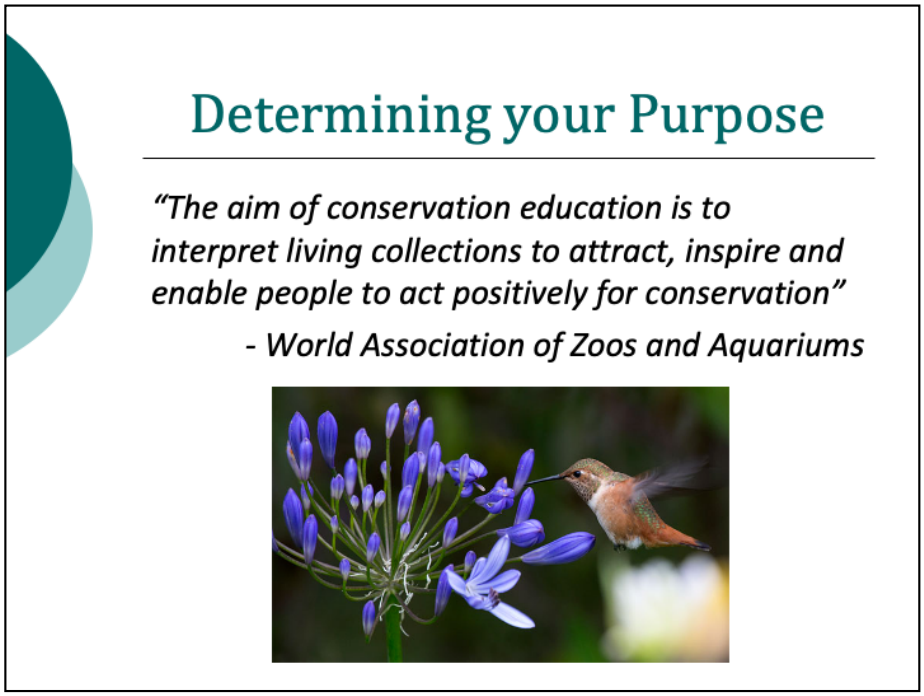
Your objective when interpreting is to have a purpose which provides direction and should spark the visitor's interest; this purpose should increase their understanding, awareness, and appreciation of animals and establish a sense of caring for the natural world. Endless lists of facts or lectures or signs won't do that. Interacting with visitors in thematic interpretive activities is an effective way to engage and connect with and educate the visitor. Visitors will hopefully leave not only happy that they had a good time but will also have an understanding of the importance of conserving all aspects of the natural world.

Involve the visitors! You want to communicate meaningful messages and involve guests through personal experience. When children are present it is important to include them in the conversation as well as the adults. Talk with them, not just at them by conducting a conversation. Use language and terminology they can understand. Effective interpretation is a two-way conversation. Ask questions, pique their interest, let them share and build their knowledge and provide additional information as you go. Inspire and provoke people to broaden their horizons. Put your message in a context to which the public can relate. Spark an interest in the visitors and get them to start thinking. Passion is key to good interpretation; show your enthusiasm for what you are doing, the Zoo and the animals.

Your interpretation can and should support the San Francisco Zoo's mission (connect, care & conserve). When the Zoo is successful in its mission, visitors leave with knowledge and enthusiasm and hopefully a sense of purpose that leads to positive actions. Send them off with a conservation action step and a smile. Inspire them to take an active role in conservation while provide an enjoyable and meaningful experience.

Note: See also Disney's 7 Guidelines to Wildlife Conservation Actions in the Docent Notebook touring folder.

"Do not try to satisfy your vanity by teaching a great many things. Awaken people's curiosity. It is enough to open minds; do not overload them. Put there just a spark. If there is some good inflammable stuff, it will catch fire." - Anatole France, as quoted in "*The Earth Speaks*"



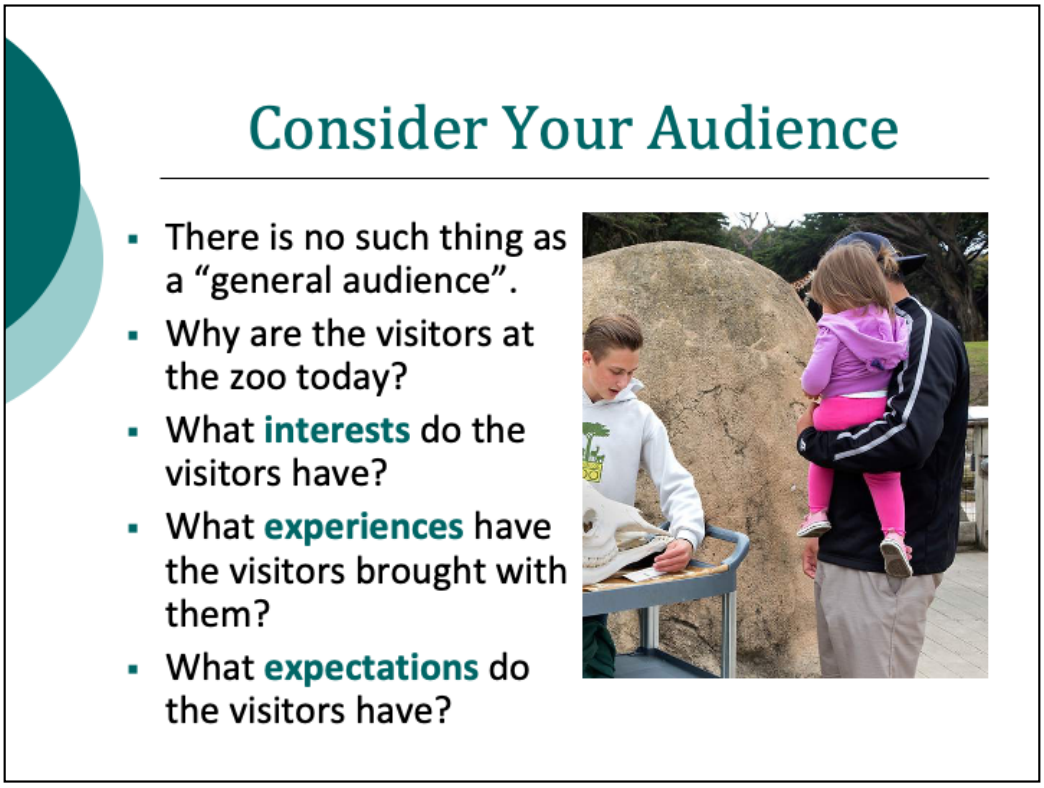
The first step in developing interpretation is to determine the **purpose** of why you are interpreting. The purpose provides direction and answers to why are you doing this in the first place. When determining the purpose of your interpretation, focus on your audience, the animal or exhibit you are interpreting and connect this with the Zoo's mission. Why should my audience care about this animal? How can I connect this animal with something they already know and care about? Not everyone will be ready to actively participate in conservation but by raising their curiosity and awareness, you are advancing the Zoo's mission.

Tours will afford you the opportunity to use a theme effectively (adaptations, habitats, etc.) and deliver pre-determined interpretive information, but you may find that you will also use material from related themes. You must adapt to the group and their interests.

An example of a purpose for an adaptations tour would be: Animals are well adapted to survive in the wild but need our help to survive human threats. If you are sharing biofacts in front of the rhinos, your theme might be: All species of rhinos are Endangered on the IUCN Red List of Threatened Species and the San Francisco Zoo and Gardens supports rhino conservation. **Note:** "**Connect**" and "**Care**" may be important aspects of your purpose for younger children. "**Conservation**" may be used more for teens and adults.

When interpreting using biofacts or when roaming, you will in most circumstances not be able to deliver a set presentation. You will have various amounts of time with guests. Some will just want to look and maybe ask a few questions. Others will want more detailed information and ask many questions. Use the biofacts to direct your questions to the guest and start a conversation (what do the teeth tell you about this animal?, etc.) Again, you must be adaptable in your interpretation. Children and adults alike can enjoy directed learning. Use the animal(s) at the exhibit to focus on various thematic information (behavior, physical features, enrichment, the need for conservation, etc.)

Once you have determined your purpose, you need to gather the information to support this theme. When choosing your information for your interpretation consider the **amount**, **accuracy**, and **appropriateness** of the information. Too much information will overwhelm a visitor. It is better to select a few bits of information that help support your theme than to present everything you know. For example if your topic is rhino conservation, you might have a theme/purpose that is "All species of rhinos are Endangered on the IUCN Red List of Threatened Species and the San Francisco Zoo and Gardens supports rhino conservation". Appropriate data to support your topic might include conservation status in the wild, rhino conservation programs around the world, breeding programs, threat of poaching, use of horns in Asia and Middle East, Asian vs African rhino, and historical vs current range. It would not support your theme to talk about eating adaptations the different rhinos have or share an experience you had seeing a rhino in the wild.



Knowing your audience is essential for a good interpretive experience. There is not such thing as a "general audience".

Why is it important to know your audience? Knowing the audience's interests, level of understanding, attitudes, and beliefs helps you figure out what content and messages people care about. Knowing who your audience is means that you can adapt the content of your interpretation to address the main concerns of your audience. Observe your audience; their body language can imply how they are responding to your interpretation.

To connect with your audience, you need to understand why your topic is important to them. What do they expect to learn from the presentation? Don't assume the audience is like you. Once you have an idea of what to say, knowing your audience also tells you the appropriate tone and voice for your message to keep people interested and engaged.

To learn about the audience, you can ask them open-ended questions. Open-ended questions are broad questions with no wrong answers and cannot be answered with a simple "yes" or "no". Visitors are more inclined to respond to these types of questions. They give everyone an equal opportunity to respond regardless of background, expertise, and experience. The type of questions that you might use include: What brought you to the zoo today? What did you come to see today at the zoo? Is this your first time at the San Francisco Zoo? What is your favorite animal?

With school groups having adaptations or habitat tours, you should ask whether they have been learning about habitats and/or adaptations in their class. What do they know about the subject? What are the elements necessary for survival in a habitat? Questions such as these will help you gear your interpretation to their level of understanding.

Note: see slide entitled "Age Appropriate Interpretation" for more information on interpreting to various age groups. Teaching to children is not dummying down information you tell adults.

We have already discussed that the first step in developing an interpretation is to determine its purpose, theme or big idea. The theme is the primary message you want to get across. If you are giving a tour to a school group, they will have requested different topics for their tours such as habitats or adaptations. By using a theme that revolves around that topic and reflects the SF Zoo's mission, people tend to remember the theme but forget the strings of facts. Your purpose should ultimately support the Zoo's mission and goals while meeting the needs and expectations of the guests. Themes can also be used when interpreting at an exhibit. One theme would be: animals are well adaptation to their habitat, but need our help to survive human threats.

When doing any interpretation, you need to be well organized as well as you need to know your subject. Review information about the animals you will be talking about in a tour or the talking points for the biofacts you plan to take out. When concepts are presented in a logical sequence, it is easier for the audience to remain focused. Have an introduction, body and conclusion to your interpretation. Remember the average time you will have most visitors is very short. With a tour you will have more time to get your points across.

Visitors are much more likely to enjoy, and retain, information if it is presented in ways that are relevant to their own personal experience. Link your interpretation to something the audience knows and cares about. For example, if you are interacting with guests in front of the lion exhibit, do not launch right away to a description of a lion's natural history. Instead, ask your audience questions like: "Are lions similar to your house cat?" "In which ways?" "How are they different?" In this way, your visitors will be able to draw comparisons between lions and animals with which they are much more familiar, like their own house cat.

Take your cue from the animal and what is is doing as the visitor is observing the animal. If the animal is moving, you can talk about what enables the animal to move the way it does, if it is eating, you can talk about its diet, or the role that the animal plays in its environment.

A simple way for children to start to understand the predator/prey relationship is: "Eyes on the side, animals hide. Eyes on the front, animals hunt." At the upper lake, you can explain how different species of pelicans exhibit different methods of eating. Eyes and eating are both concepts children can relate to. In front of a great ape exhibit (chimps, orangs & gorillas), you can talk about facial expressions as a means of communicating. Ask your visitors to show when they are mad or sad or happy. Great apes also use facial expressions to communicate.

One of the essential qualities of interpretation is that it is entertaining. Our visitors are interested in the animals but not in dry lectures. Avoid reading from your notes. Incorporate stories, humor and initiate two-way communication with the visitors. Sharing stories that highlight the Zoo's successes is one of the best ways to inspire visitors' support. Our job, as interpreters, is to convey information in ways that enable the visitors to have fun while they are learning. You want the visitors to go home wanting to learn more about the animals and to care about their natural world. Of course, the Zoo's mission of connect, care and conservation is always important part any interpretation.

How you present yourself is important in connecting with the visitors and can set the stage for an effective interaction or not. Research indicates that only 7% of our verbal message is communicated through words; 38% of our message is communicated through voice; and amazingly, body language accounts for 55% or our message! To be effective and persuasive in our verbal communication, it is essential to complement our words with the right tone and voice and the appropriate body language.

[As a demonstration about importance of body language when teaching this unit to new docent students: Have group stand up. Have them stretch your left than right arm as your talking. Then verbally say touch chin as you touch your cheek. Observe to see what they touch.]

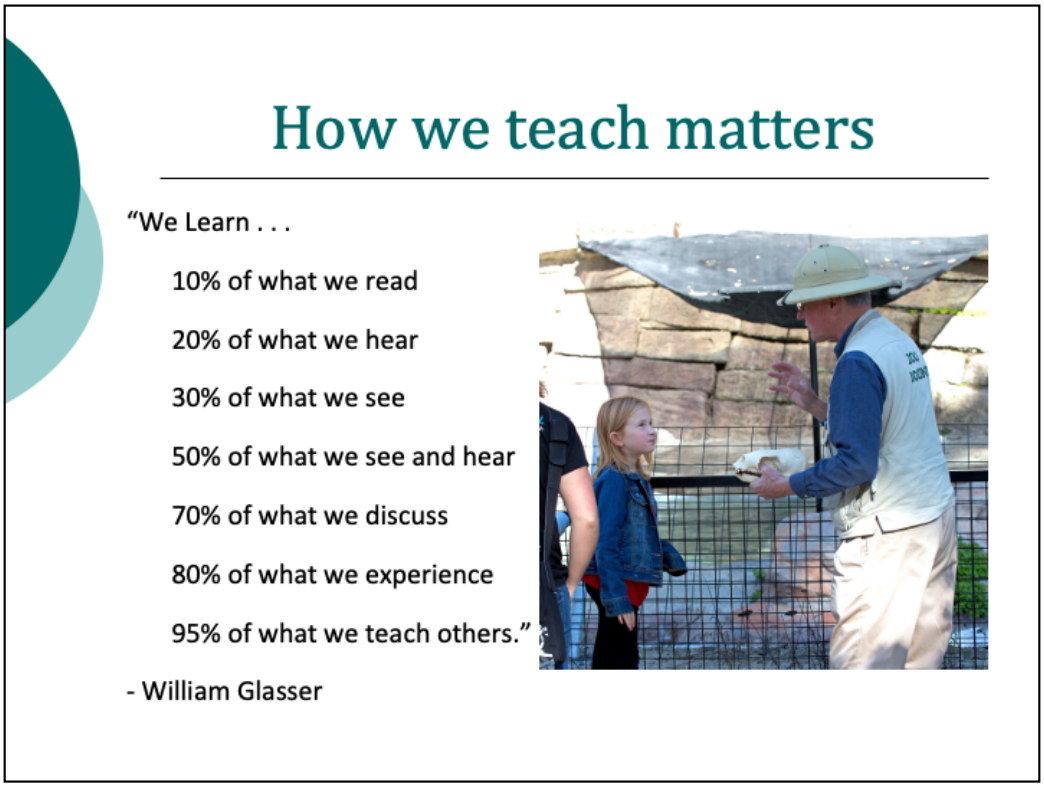
Words create images and can shape the visitor's perceptions of the Zoo, wildlife and conservation. Instead of "cage" use "habitat", "exhibit", "display" or "enclosure". Instead of "captive" use "managed care programs". Instead of "aggressive" use "protective". Instead of "lazy" use "adapted for low energy lifestyle on hot savanna". Instead of "global warming" use "climate change".

It is also okay to say you don't know the answer. It is better for your credibility and the credibility of the Zoo to provide accurate information than to guess about something. Choose information you include based on the age group of the visitors and be careful not to share information that has not yet been made public by the Zoo, e.g. information you might have overheard. **Note:** see slide entitled "Age Appropriate Interpretation" for more information.

As we just discussed, non-verbal communication is a major part of a successful interpretation experience. Eye contact is probably one of the most important and influential factors in establishing rapport with an individual or group. Eye contact helps make a connection between you and the guest. If visitors have name tags on, using their name may further strengthen this connection.

Nonverbal communication is a basic, primitive form of conveying information from one person to another. Be relaxed but stand up straight! This will promote a positive self image of self-confidence. You should be facing your audience when you speak; don't speak with your back to them. If you don't know what to do with your hands, have them down to your side. Crossing your arms may convey discomfort or disinterest in the visitor. At an exhibit you can stand at the side of your group and still be facing them as well as being able to see what is happening in an exhibit.

Articulate clearly and speak audibly so everyone can hear you; speak with confidence and clarity. The best sentences are the short ones; specific, clearly stated sentences are the easiest to interpret by guests. Pace yourself and speak slowly using a conversational tone. You may want to try varying your speaking rate for emphasis and feeling. The important thing is to smile. A smile is infectious and reflects your mood, enthusiasm and level of confidence.



There are different types of learning methods: visual, auditory and kinesthetic/tactile. People learn better when they're using as many senses as possible. Remember to incorporate different learning styles into your guest interactions that include seeing, hearing, feeling and doing.

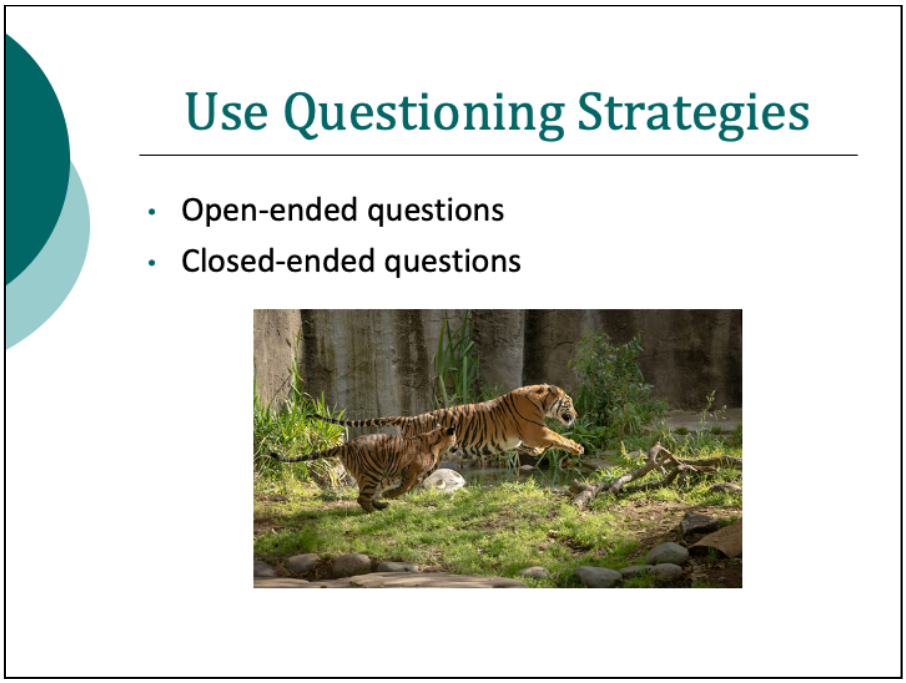
Visual learners benefit from seeing pictures of the animals, maps of the animal's range, and watching animal behaviors in the exhibit. Pointing out exhibit and animal identification signs will benefit this type of learner. You can also use maps, pictures and other information available in biofact resource binders.

Auditory learners benefit when information is heard or spoken; they benefit from strategies that involve talking things through. Point out noises the animals are making in their exhibit. Auditory learners will remember information best after reciting it back to the presenter.

Kinesthetic learners learn best when they can use tactile experiences and carry out a physical activity to practice applying new information. They learn from doing. Touching pelts or skulls reach the kinesthetic learner. Also, having them preform activities such as jumping like a kangaroo help the kinesthetic learner. You can have children use their two arms to guess how long a giraffe's tongue is. You can also have children stand on one leg in front of the flamingos or hop like a kangaroo in the outback. Children can respond to your questions with hand gestures or make facial expressions for various emotions to help them understand that the great apes communicate with facial expressions too. If you are talking about rhino conservation, you can have the children point to their fingernails and tell them that the rhino's horn is made out of keratin, the same materials as their fingernails and hair.

Because people learn in different ways and on multiple levels, using a variety of techniques is most effective. Incorporating all three of these basic styles of learning will benefit visitors' interpretation experience.

"The noblest pleasure is the joy of understanding." – Leonardo da Vinci



Asking question can engage the visitors in a conversation. Good questioning starts broad and becomes more focused as you progress. This creates a conversation between you and your audience. Ideally, you want to initiate a two-way conversation with the visitor. Ask the visitor questions which will get them thinking about the animal: "There is an animal in this exhibit called an Amur tiger. Do you see it? No? Well, it's there…use your eyes a little more and see if you can spot the tiger. You found it? Great! Do you know why it was hard to find the animal at first? Well, it's called camouflage, which means…" or "Do you smell that musky odor? That's the male gorilla. Why do you think it smells like that? Well it's an adaptation…" By engaging the visitor in this way, you can take them from their current knowledge base to the next level of understanding about the species.

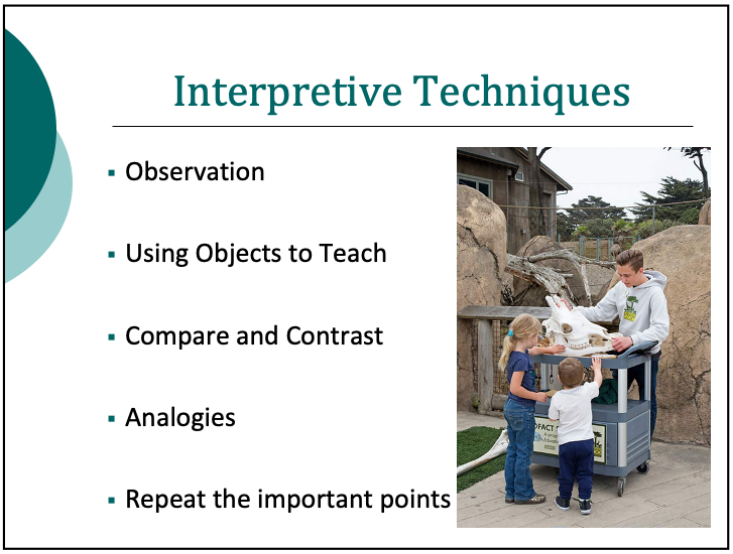
Suggested ways to provoke a visitor:

Open-ended questions, anyone can answer, every answer is right, good way to warm up your audience, let them know this is non-threatening, not a quiz. These questions cannot be answered with one-word answers such as "yes" or "no". Open-ended questions request that the mind broaden its field and discover the many possibilities and potential answers, regardless of whether they are the "best" responses. Open-ended questions often begin with what, why, how or who. These questions can draw your audience in and get their attention. Open-ended questions are important at the beginning of your interpretation. They give everyone in the group an opportunity to respond regardless of their background, expertise or experience. Open-ended questions are best used in the beginning when getting to know your audience and getting their attention. They offer a gateway into a conversation.

- Who do you think lives on the African savanna?
- Why do you think that there are no lions in the savanna exhibit?
- What do think of when I say "predator"?

Closed-ended questions zero in on specifics, focus on details, get more detailed, make comparisons or contrast two or more things, and/or direct attention to something. Closed-ended question are used to recall or clarify prior information and encourage observation and interpretation of wildlife's adaptations and behavior. Answers are generally brief and can be answered with "yes" or "no" or they have a limited set of possible answers.

- What color pattern do you see on the tiger? Does this help the tiger survive in his habitat?
- Where can the animal find each required part of a habitat in this exhibit (i.e. water, shelter, food)
- Do the giraffe and the zebra have the same diets? Are they eating the same things?
- Illegal wildlife trade threatens hundreds of species for their parts (i.e. pelts, tusks, horns). What does this animal have that humans might want to use? Rhino horn for medicine, furs for clothing, etc…



Have visitors use their powers of observation. The visitor may not see the animal in the exhibit or not notice a specific behavior of the animal nor what that behavior represents. For example, when a giraffe is drinking from the watering hole, point out the way the giraffe gets on his knees or spreads his legs apart to drink and how difficult it is for the giraffe to get up from this position. You can go on to explain how the is vulnerable to a predator attack and how this may have been a contributing pressure for a giraffe to adapt to water conservation. By observing an animal's actions or features, you can apply further methods to interpreting the animal and its habitat. Help visitors understand that we can learn about animals by using our eyes, ears and noses.

Using objects helps the visual and tactile learner. It allows the learner to understand a concept by putting it into real-life meaning. People remember what they experience. Biofacts are great teaching tools as well as small items that fit into your vest pockets such as:

- A kidney bean can show the size of a baby koala when it is born.
- Sandpaper can demonstrate how rough a cat’s tongue is enabling it to lick the meat off bones.
- A small sieve/strainer can demonstrate how a flamingo, use their beaks to filter small crustaceans from the water.
- Pictures show visitors what an animal's natural habitat looks like or maps show an animal’s range.
- Use ribbon to demonstrate the 18” length of the giraffe’s tongue or a 24” length of the anteater’s tongue.

One way to help visitors understand the diversity of the animal kingdom is to guide them with comparing similar characteristics in animals, as well as contrasting their differences. For example, you can compare two different animals - "How is a bird like a bat?" - in order to allow visitors to better understand similar characteristics in different classes or animals, and then ask them - "How are birds and bats different ?" - in order to help you teach the visitors about the differences between birds and mammals. This method works well with young children.

Analogies allow a learner to understand a new concept by putting it into terms with which they are already familiar. Use understandable words. Include examples, analogies, comparisons, similes, and metaphors to bridge the unfamiliar to the familiar.

- To imagine a snake shedding think about peeling a very tight sock off your foot in slow motion
- Believe it or not this rhino horn is made up of the same material as your fingernail
- How high can a snow leopard jump? (up to 20 feet) Almost as high as 5 of you stacked on top of each other!
- While standing in front of a rhino, have everyone squint their eyes until almost closed. This is the way a rhino sees- very poorly. perhaps, now is a time to ask a question about how they have adapted, how do they compensate
- Have you ever had a gummy bear? A gummy bear resembles the size of a newborn koala joey.

Repeat the important points to emphasize, especially with young school children when they are taking a tour with you. Messages are more effective when repeated and the students is more likely to remember. If someone asks a question, you should repeat that for the other visitors as well.

How do you construct a conversation? Be aware of the difference between having a conversation and simply providing facts to the guests. “Giving facts” means simply stating information. Here’s an example of “giving facts”: “This is a scorpion. It is from Africa. It can grow to be 8 inches long. It eats bugs.” Although these statements are accurate, it is a one-way conversation. Every conversation should include the hook, the meat and the message.

The **hook** grabs a guest’s interest and gets them into a conversation. A “hook” could be a question, a positive personal statement, an invitation to see or do something special, or a greeting. Open-ended questions can be the hook to your conversation. Looking at visitor’s hats and t-shirts may give you a clue of their interests. Little boys with dinosaur shirts on might get you talking about how birds are living dinosaurs. Other hooks include:

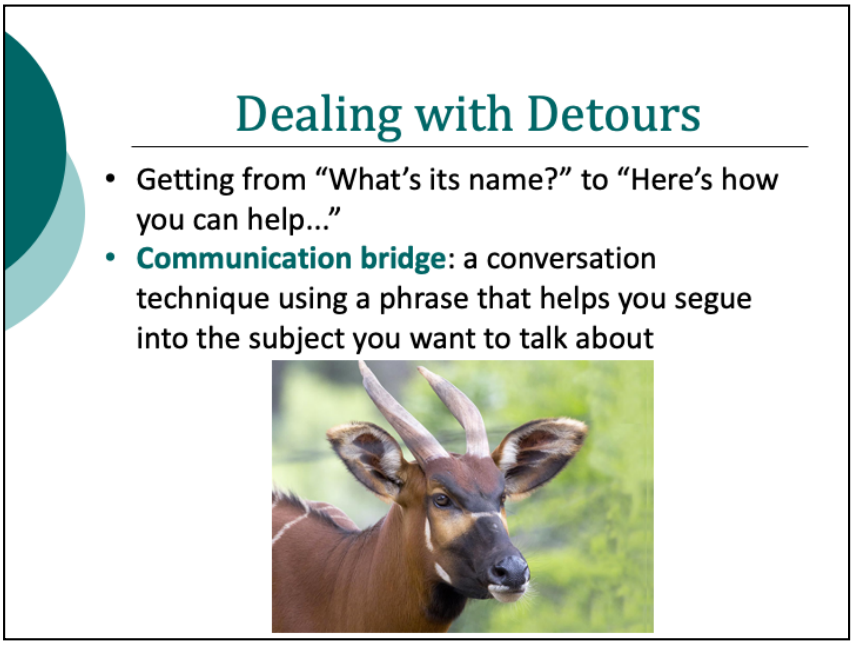
- Can you see the baby François' langur holding onto its mother’s belly? Do you see its orange head? Why might the baby be a different color than the adults?
- How tall are you compared to a giraffe’s leg?
- Would you like to see this really, cool emperor scorpion from Africa?

The **meat** is where the conversation becomes an interactive experience by incorporating questions. Structure the conversation to allow for guests’ input and be prepared for questions. It is also good to relate why the topic is important. Where it is relevant, include natural history, animal behavior, animal welfare, and veterinary health care information. Focus and integrating questions can be the “meat” of your interpretation.

- Can you count how many legs this scorpion has? That’s right, eight legs. Do you know any other animals that have eight legs? Spiders! Spiders and scorpions are related; they’re kind of like cousins and they have a lot in common. Both spiders and scorpions are great predators that catch and eat bugs.
- Where are the eyes positioned on this giraffe skull? Have the visitor close one eye and tell you how much they can see. Having both eyes on the side of your head, do you think you can see more around you?

Following the meat, you end with a **message** or relevance that can enrich visitors’ lives. You can use an integrating question to begin your message. Your message should answer the question: What is the most important message we should be trying to get out to the public about this topic? If we continue with our scorpion example, the message might be:

- Both spiders and scorpions are great predators that catch and eat bugs. That’s helpful for us since we don’t always like a lot of bugs around, especially bugs that bite. And there are so many other cool things about spiders and scorpions. When you get home, go to the library and check out some great books so that you can learn more about these awesome animals.
- Next time you see a spider, be sure not to harm it. You may even want to take a closer look and try to identify it and learn more about it. Spiders are truly amazing creatures.
- You can help wildlife too. You can visit some great internet sites (a young child should get help from their parents) that tell you all sorts of great information about your favorite animal. The more you know about animals, the better able you are to protect them. **Note:** See Disney’s 7 guidelines to Wildlife Conservation Action in the Docent Notebook touring folder for other ideas.



Many zoo visitors are well-educated and have a decent understanding of the animal world. Even so, the questions they're likely to ask are pretty basic: "How much does it weigh?" or "What's its name?". Visitors use simple questions as a way to initiate dialogue with you as an expert. They can be intimidated by your knowledge and ask "safe" questions to begin the conversation. While they may be interested in this information, they're more interested in engaging with an expert – YOU! Once they've asked the basic question, you can you steer them toward a broader discussion and turn it back toward your theme or some topic of greater conservation value.

Example 1: **How much does a grizzly bear weigh?**

Answer: What would you guess? Do you know that males weighs more than 600 pounds (females 300-400 lbs)? That's about as many as 4 of me (or insert how may it might be for you or the average person in the U.S.) When you weigh as much as a bear, it takes a lot of food to keep you going when you're active and in preparation for when you're not. What do you think they eat? What makes you say that? (Now you've gotten into a conversation about where they live and any adaptations an animal has for getting food and eating food. Most people think grizzly's eat fish, but they actually eat a lot of plants and insects. In Yellowstone National Park, some grizzly bears will eat as many as 40,000 moths in a year.)

Example 2: **What is that lion's name?**

Answer A: That lion's name is Jasiri. Do you think Jasiri is a boy/male or a girl/female? What made you say that? (You are now into a conversation about the mane of a lion and how that is useful to him) The mane can help a lion appear larger and therefore more threatening, warning away possible opponents or protect their necks from attacks by other lions. The dark, flowing mane can also help them attract the females.

Answer B: That lion's name is Jasiri. What's he doing now? Just lying around, right? Lions do that a lot. Sometimes in the wild, they will lie around up to 20 hours a day. Do you know why? It's not because they're lazy. They don't eat three small meals in a day. They usually eat a smaller number of large meals instead. They lie around the rest of the day to digest it. What do you think they have for a meal? What made you say that? (now you can have a conversation about the adaptations they have for hunting and use biofacts to show this) …or you could go down this route instead…Sometimes we put other things out in the exhibit to allow them to look for food and hunt. (you're now into enrichment if you want to go there)

Example 3: **Which one is which?**

Answer: That smaller eastern bongo is the female. You can tell by the horns, which are usually thinner, shorter, and more parallel than the males. If you were a bongo, how would you tell each other apart? One way is smell. Most animals have a sense of smell many times better than people. It helps them find their family, friends, enemies, and food. (you can go into adaptations/senses for recognition). Is this animal an endangered species? You're right. Even though they have these great senses for survival they are losing their homes to people. When you come to the zoo, you want to discover something cool about the animals, but we also want to find out ways to help them too… You can help these animals by…

Benefits of Interpreting with Biofacts

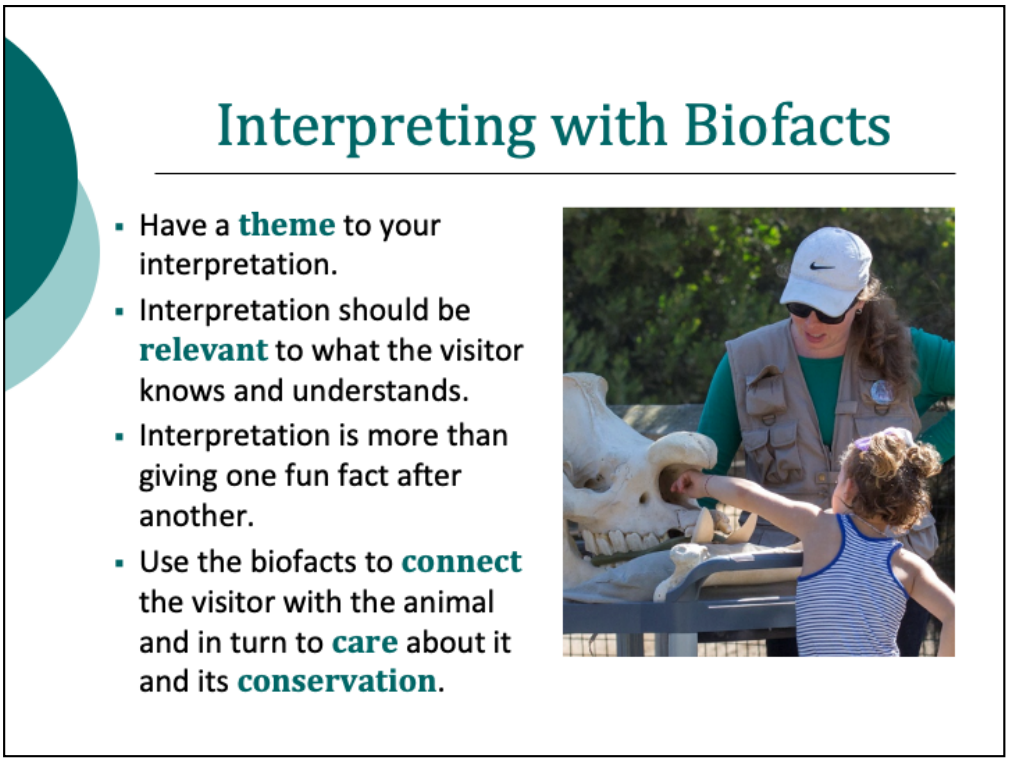
- Appeals to their curiosity, attracting them so you can serve as a resource
- Gives them the chance to experience an animal otherwise dangerous or unapproachable
- Increases the likelihood our visitors will remember more of what we are presenting
- Offers visually-impaired guests the opportunity to gain a broader sense of our animal collection
- Attracts the learners that are not going to read the graphics/listen to a narrator

Biofacts are an important tool for drawing the visitor in so they learn something and become interested in knowing more about the animal. They can be your "**hook**" to draw your audience in. When you are presenting a biofact to the visitors, they may ask you, "What is it?" Avoid automatically telling them the answer. Instead, ask questions and give them clues to aid their discovery. You may be asked, "Where did you get it?" Answer truthfully and share how we can honor the animals in our care by continuing to learn from them after their deaths.

Using biofacts can be beneficial to the basic learning styles: auditory, visual, kinesthetic learners. Be mindful that most of our biofacts came from our collection and were once living things. Treat them with respect. Most biofacts were expensive to prepare and are irreplaceable, so handle them carefully, return them in the original packaging and always keep them protected from theft.

When you are using biofacts, don't forget the animals. They are the greatest prop to bring your points across! Try to relate a biofact to something the visitor is observing. For example, you can show how the ears, eyes and nostrils are placed high on the hippo skull and then point to the submerged hippo and explain how this is an advantage; this allows the hippo to breathe and keep watch while most of its body remains submerged. If the animal starts doing something interesting or reinforces you point, draw the visitor's attention to the exhibit. The important thing to do is to draw the visitor in so they become interested in knowing more about the animal.

Note: the visitor should not be handling delicate biofacts such as skulls. Visitors may touch certain biofacts, but biofacts should remain in the hands of the docent at all times. When touching pelts, have the visitor use the back of their hand or small children find it easier to make a fist. This keep the natural oils we have on our hands off the pelts. **Note:** If someone is eating food, they should not touch anything until they have wiped off their hands. No food or beverages should be near biofact cars. Beware of children who are eating food near the biofacts.



Effective interpretation is more than conveying a bunch of facts to the visitor. When interpreting with biofacts have a theme, a point or message to what you are relaying to the visitor. A theme is different from the topic; a topic is the subject, whereas the theme expresses the main idea. Many different themes can be written for one topic. Think of a theme as a "thesis statement". Themes can give you a clear idea of the information you should include and exclude. You should tie the purpose/theme into the Zoo's mission. A topic may be habitats, whereas the theme would be animals are adapted to the habitat in which they live but they need our help to survive human threats. Other examples of themes may be: "the penguin is important to the environmental health of land and sea and the San Francisco Zoo is supporting their conservation" or "The giraffe occupies a unique niche on the savanna but needs our help to survive human threats".

You should be able to relate what you're saying to the visitor in a way they can actually understand. Presenting the information in relation to something they already know is useful when interpreting. For example, when showing a snake shed, you can relate it to taking off your sock; when a snake prepares to shed, it rubs its nose against a rough surface and makes a small tear in the old skin; then it simply crawls out of its scaly covering, turning it inside out in the same way a human takes off a sock.

Connecting the information to something the visitor cares about also adds the relevance of the information. Using examples, comparisons, analogies, metaphors and similes are great ways keep the information relevant for the audience. For example, can you think of a way to make snow leopards and climate change relevant to them? You can tell the visitor that the snow leopard has a thick, warm coat to keep it warm in its cold mountainous habitat just as you put have warmer jackets to keep you warm in the winter. The difference with the snow leopard is that it is unable to take off his coat as the temperatures rise. The snow leopard can only go so far up the mountain before there is no more mountain or food for itself.

When you are using biofacts, don't limit your conversation to the first two people that approach you to see what you have. Bring others into your conversation as well as they come to look. Make everyone around engaged in the conversation.

Skulls can provide clues as to what an animal may eat, whether it is a predator or prey animal and which senses are most important to the animal's survival. Draw the visitor's attention to the teeth, eye position, nasal passages and the attachment of the jaw to help tell the animal's story. With a pelt, do not just have the visitor feel it with the back of their hand. Talk about how the pelt protects the animal or keeps it warm in their environment or that provides camouflage. Pelts can be a great way to also break into a conservation message. **Note:** the docent training slides on interpreting biofact skulls and pelts should be reviewed to help you focus in on how to use biofacts effectively when you are out in the zoo.

Preparing for Docent-led Tours

- Plan out your tour ahead of time but be flexible if some animals are off exhibit.
- Confer with the teacher about learning objectives.
- Introduce yourself to your group.
- Be confident and take charge of your group but have fun.

In preparing for your tour, you should first determine the **purpose** of the tour that revolves around your topic (i.e. habitats, adaptations, shifting the balance. What message do you want to group to go home with? Does your purpose support the Zoo's mission? Consider all the information that you would like to share on your tour that supports your purpose. Remember to state the purpose of your tour at the beginning and repeat in the middle and at the end of your tour. The end of the tour is especially important time to repeat your purpose.

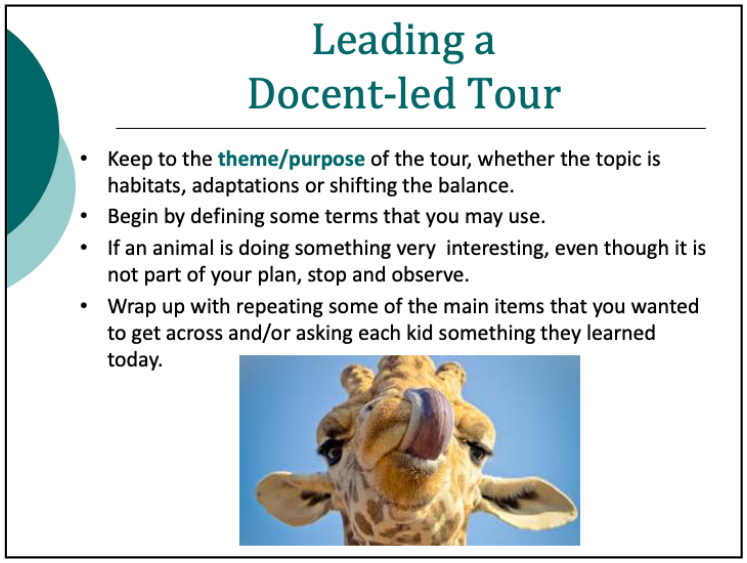
Know the information you plan to share. Nothing helps a tour go smoothly like thoroughly knowing the material you are presenting. The more you know about the animal/exhibit, and how the Zoo supports its mission, the more your confidence will grow. If you feel unprepared to answer a visitor's question, don't be afraid to say, "I don't know."

When giving a school tour, consult with the teacher to ask what her learning objectives are for the day and where and when she wants to meet at the end of the tour. Give students a chance to use the restroom before you start your tour. Gather your group, introduce yourself to make certain the students know that they belong with you. Identify the chaperones who will be accompanying you. Make certain that the chaperones understand their responsibilities to keep in back of the group and to make certain that none of the students get left behind. Lastly explain the ground rules for the students:

- You are the lead person at all times. No one runs head of you.
- When one person is talking the other people are listening.
- Have fun and ask lots of questions.

Be confident and take charge of your group. How you present yourself is important in connecting with the visitors and can be the difference between an effective interaction or not. The most important thing to remember is to relax, enjoy your tour and smile.

Note: See also tour tidbits, adaptation tours, habitat tours, insect tours, shifting the balance tours and tropical tours in the Docent Notebook touring folder to get other ideas on how you might want to lead your tours.



Giving a tour is where you put all these techniques together. Having prepared your **purpose** ahead of time, you want to get to know your audience by asking some open-ended questions that you get to know a little bit about why there are at the zoo and what they are interested in. Sample questions include: have you learned about habitats in your classroom?, have you been to the zoo before?, do you have a favorite animal? When beginning a habitat tour, you may start by asking "What is a habitat?" You want to make sure their definition includes everything the animal needs to survive, including food, water, shelter, and other animals of their kind. Use age appropriate language (see slide: Age Appropriate Interpretation). Remember you can give the best tour in the world, but unless the visitor understand what you have said, you have wasted their time and yours.

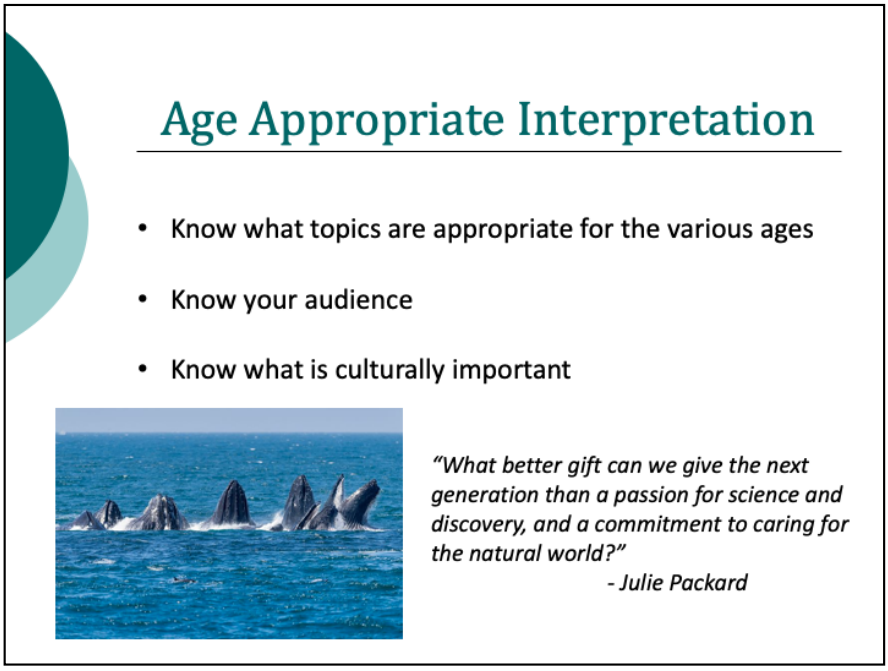
Successful interpretation starts with an effective introduction. Snag their attention. Include who you are and your role at that you are a docent at the zoo. You will want to give them an overview of their experience. How long is the tour and what you will be doing. Start with your main message. Grab their attention.

In a habitats tour you may go on an ask: How would you describe where you live? This is where you could bring in the concept of **biomes**. As you get to the savanna exhibit, ask: What type of plants do you mostly see? Grasses is correct. The savanna is a grassland where there are seasons of rain and seasons of drought. What happens when there is a drought? You may get answers such as: "The animals go find water". You could then talk about the zebra and how it migrates in search of better grazing pastures as well as other animals of the savanna. Ask: What would happen if an animal didn't have water? Are there other ways of getting water? This is where you could talk about an animal adapting to their habitat in order to survive. You can talk about the giraffe getting a lot of its water from the leaves that it eats and that how it doesn't need water every day. Ask: How else is a giraffe suited for its environment? A giraffes' coat patterns serve as camouflage, blending with shadows and leaves of the open, tree-dotted African plains. While other African herbivores, like the kudu and zebras compete for grass and small plants to eat, giraffes have the high branches with tender, young leaves all to themselves.

You need to adjust how long you stay at an exhibit by how attentive your visitors are. The younger kids may not be able to stay at exhibit as long as an older group of visitors. If you start to see a change in their attention, you should move on to the next exhibit that you have planned on your tour. Maybe you want to go to the lemurs and talk about their habitat and adaptations or go to the flamingos and talk about a water environment. Wherever you end up, you should continue discussing the same theme, in this case, habitats are the homes of animals that you can help protect along with the Zoo.

This is just one way to lead a habitat tour. There are many ways to do this. You should include several different habitats on a habitat tour. You can also show two different species that have adapted in similar ways but live in different habitats as the case with the meerkat and the prairie dogs. You should also try to include the different learning styles: audio, visual and kinesthetic. Take advantage of teachable moments.

Note: Some students may want to dominate the conversation. Don't let that happen. Make certain you involve all of the students on the tour. When you ask an open-ended question you can always say, "John hasn't had a chance to talk yet, John what do you think about this?" Or, "Let's hear from some other people today." Kids like to know that they are not invisible and that their opinions are important too. You can also have the children all respond by giving a thumbs or down for a question that is posed with two possible answers.



Your interpretive experiences involve an audience. Each group and each individual is unique so it is important to find out as much as you can about the visitors. Knowing what is typical at each age and stage of early development is crucial. This knowledge, based on research, helps us decide which experiences are best for children's learning and development. Using age appropriate topics and language promotes young children's optimal learning and development and also help foster curiosity and interest; gear your talk to the age of your audience and their level of knowledge. If you use a word like "climate" ask "who can tell me what that word means?" If they don't know, you need to explain it, using terms they can relate to and understand. Fairly young children can understand complex concepts if the explanation is made simple. Older children and teens may come with a wider knowledge base. The better you know your audience, the better you can ensure your interpretive experience is relevant and the level of understanding is appropriate for your audience.

Not all young children or teens will have the same knowledge or experience base. Some may be easily engaged, while others may need more encouragement before participating in a conversation. Know what is individually appropriate.

You might want to do an on-sight evaluation to determine something about your younger audience. "Seek first to understand" listen to the guests and observe them. Ask questions to find out their interests and what they already know and relate your question to life situations and experiences:

- How many of you have been to the zoo before?
- What have you been learning about animals at school or at home?
- Have you been learning about habitats? (if you are doing a habitat tour)
- What is your favorite animal?
- Do you have a pet at home?
- What do you want to see and learn more about today?

Another method of evaluation is to ask the visitor what they already know or what experience they have with an animal and go from there with your interpretation.

Note: Biofacts are powerful learning tools to use with children, especially when you employ a question/answer conversational technique, e.g. "look at these teeth"; "what kind of food do you think this animal eats and why?"; "are they like your teeth?"

Note: See also Age-appropriate topics, Tour tidbits and California Life Science Common Core Standards in the Docent Notebook touring folder. Also go to Next Generation Science Standards for California Public Schools: https://www.cde.ca.gov/pd/ca/sc/ngssstandards.asp

Challenging visitors may include those with negative perceptions of zoos and their treatment of animals, those who might challenge information you provide or provided on Zoo signage, guests who want more detailed information than you are prepared to provide, unruly guests calling out or shouting to animals, or one that has had a bad experience.

Do not ignore the situation or take it personally. If the person has had a bad experience, the first step to good service recovery is a prompt and sincere apology (I'm sorry that happened to you.)

The idea is to soften or reverse the negative with a positive. Do not get into an argument. Practice active listening, repeat concerns and expectations and clarify questions. You can take this time to provide additional information or make suggestions if appropriate. For example if a visitor does not believe in climate change, you can talk about the heat trapping blanket, regular vs. rampant CO_2 and how this is affecting the habitats of polar bears, wolverines and snow leopards. If a visitor doesn't think it is right to keep animals in zoos, you can talk about the benefits of a zoo and the enrichment and wellness care they receive. Tell them that our animals were born in zoos or have been rescued. You can also talk about the conservation programs and education that the zoos provide that are so vital to biodiversity globally. By providing enjoyable interpretive experiences, you might be able to change a visitor's negative to more positive ones. Provide information in a non-threatening, non "preachy" manner and respect the viewpoints of the visitor. Give the visitor something to think about or consider.

Always end on a positive note. Know when to get help from education, zoo staff or security.

Credits/Resources

- Disney's Conservation Education Manual
- Disney's 7 Guidelines to Wildlife Conservation Actions
- Freeman Tilden, "Interpreting Our Heritage" 1957; (Tilden's 6 Principles of Interpretation)
- Ham, Sam, "Environmental Interpretation: A practical Guide for People with Big Ideas and Small Budgets" 1992
- John Ball Zoo Interpretation Guide
- North American Association for Environmental Education- www.naaee.org
- National Association for Interpretation - www.interpnet.org
- National Association for Interpretation Guide Workbook
- San Diego Zoo Global Academy