

Lesson Topic: Adaptations in the animal kingdom

Objectives:

- Students will be able to understand how adaptations can help an animal survive in their environment.
- Students will be able to understand how adaptations can hurt an animal in certain situations and environments.
- Students will be able to further their knowledge about the anatomy (head, wings, etc.) of birds.

Instructional technique:

- Students will work together in pairs to complete the worksheet provided to them. Pairs work better with this assignment because this way students are able to divide the work up more evenly than with bigger groups. This also allows students who may have trouble reading or comprehending English to receive help from their peers.

Why is this lesson important?

- This lesson is important for students to learn and understand how the survival of an animal is very dependent on its environment and anatomy. This could also pave the pathway to the students understanding adaptations in humans as well.

Procedure:

- 1.) The teacher will first do a quick review with the students on what an adaptation is and how they are important. Students will be asked to give examples of types of adaptations as well as when adaptations might be necessary to take place. The purpose of this activity is to further a student's understanding of adaptations, meaning that it should be conducted after the students have already been exposed to the material.
- 2.) After the introductory activity, students will be paired off and the supplemental worksheet for the activity will be handed out (each student will have their own worksheet to fill out).
- 3.) The students will then be instructed to go to the following website:
<http://www.projectbeak.org/adaptations/build.htm>.
- 4.) The students will then work together to create three different types of birds to see what each survival rate will be. To create the birds, they will choose the head, the wings, the feet, and the habitat. As the students make their selections, they will circle on the worksheet what they choose.
- 5.) Once the bird is created, the students will then record what the survival rate is and why it was so low or so high. The students will create three different birds in total.

6.) Once the students have created three different birds, they will then record which bird of the three had the highest survival rate and which had the lowest survival rate. The students will also be asked to list why the survival rate is what it is.

Closure:

- The teacher will end the activity by bringing the class back together to discuss what they learned during the activity, what they found interesting, etc.

Adaptations for different learners:

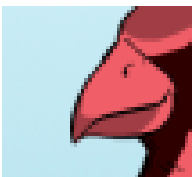
- For this lesson, the teacher would pick the student's partner for them. This way if there is a student who may struggle with reading or a student who is a non-native speaker, they have a peer to help them. In addition, non-native speakers could get the handout/homework in their native/first language so they can understand what is expected of them in the lesson.

Homework:

- The homework assignment that follows this in-class activity is a separate handout where students are asked to create their own animal with adaptations of its own. The students will be asked to draw a picture of their animal in its habitat and write a short paragraph (5-6 sentences) about their animal.

Evaluation:

- To determine if the objectives have been met, the teacher will provide an exit ticket to the students. This exit ticket will be short, no more than 3 questions, and be about adaptations and the anatomy of birds. An example of a question would be as follows:



A bird with this type of beak has a diet of...

- a.) seeds and nuts
 - b.) insects
 - c.) nectar from flowers
- The teacher may also include questions from what was taught earlier in the week as this activity is meant to be conducted after the students have already been learning about adaptations in the animal kingdom.

- To further assess the student's progress, the teacher could also include questions related to the activity/birds on a future test.