

Case Study #1 - Alex

Title/Theme/Unit: Biology

Target Audience: High School (9th, 10th or 11th grade students)

Total Length of Lesson: 50 minutes

TEKS: Biology 10a Science concepts. The student knows that biological systems are composed of multiple levels. The student is expected to describe the interactions among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals.

College and Career Reading Standards: Science, VI. Biology, F. Systems and Homeostasis. 1. Know that organisms possess various structures and processes (feedback loops) that maintain steady internal conditions.

ELL Language Objective (Aligned with ELPS Cross-Curricular Second Language Acquisition Essential Knowledge and Skills 3D): Speak using grade-level content area vocabulary in context to internalize new English words and build academic language proficiency.

Objectives:

By responding to the questions at the end of the chapter in writing, the students will be able to demonstrate knowledge of the immune system with 80% accuracy.

Assessment: In order to monitor student progress, the teacher will:

- assess and verbally respond to student responses offered during group discussion,
- read students' responses to the prompt for the exit slip, and
- grade the students' answers to the chapter questions.

Materials: Textbooks for students, teacher-developed power point

Resources: Teacher's guide for textbook, Internet sites:

Instructional Components:

Anticipatory Set:

The teacher will show a video clip of the shoot-out at the OK Corral.

(<http://www.youtube.com/watch?v=gAnPHM4ChTo&feature=related>) The teacher will lead a short discussion of ways in which people defend themselves from danger.

Activate Prior Knowledge:

As this lesson is part of a larger unit on physiology and the students have already studied pathogens, the teacher will then ask the students in which ways the body defends itself against pathogens.

Procedures for Presenting and Learning New Material:

The teacher will have the students partner read pages 208-215 in the textbook which describes the immune system. The teacher will then present additional information about the concept using a power point presentation. She will have a “handout” copy of the presentation for each student which leaves room for the students to take notes next to each slide. During the presentation, she will ask questions that relate the information in the power point to what the students had read in the textbook.

For all students, including ELLs, use Think Pair Share to respond to the following sentence stems.

An ____ is any substance that elicits an immune response, from a virus to a sliver.
(antigen)

Our immune system protects against disease by identifying and killing _____.
(pathogens)

Disorders in the immune system can result in diseases such as _____. (autoimmune diseases, inflammatory diseases and cancer).

After the presentation, the students will then begin to answer the questions (in writing) at the end of the section. Questions that are not answered during class time will serve as homework.

Closure:

The teacher will end the lesson by referring back to the video clip shown at the beginning of the lesson and ask student to write one or two sentences about how the content of the video related to the day's lesson. The students will leave the exit slips with her as they leave the classroom.

Alex

Alex is a 15-year-old boy in the tenth grade and a student in the class for which this lesson plan was written. His first language is English. He had difficulty learning to read and write, lacking in the ability to make sound/letter associations and decode unfamiliar words. In the second grade, Alex was identified as having specific learning disabilities. Since then, Alex has received special education services primarily in a resource room for English language arts and reading, while being included in the general education curriculum. He is able to read independently at the seventh grade level but continues to struggle with unfamiliar words. Alex also has asthma for which he takes daily medication at home and occasionally needs to see the school nurse to use an inhaler. He is a self-isolating student who does not readily join into whole-class discussions or contribute to group learning situations. There is no in-class support for this student.

Accommodations/Modifications/Enrichment – In all classes, there are students who need some adjustments made to the lesson in order to meet their different learning needs. Adjustments include:

Accommodations – changing anything but the curriculum, changing the “how”

Modifications – changing the curriculum based on students’ IEPs

Enrichment – enhancing the curriculum

Using the information provided about the lesson and the student, decide if this student is one who needs adjustments made to the lesson. If this is the case, should accommodations, modifications, or enrichment be provided by the teacher? After making this decision, respond to the following:

- 1a. Identify one instructional component or student activity that could be adjusted for the student.
- 1b. Explain why the component or activity could be adjusted for the student.
- 1c. Describe how you would adjust the component or activity to meet the needs of the student.
- 1d. Explain how your adjustment would be effective for the student in making progress toward achieving the lesson’s objective(s).