

PROJECT NAME:

It's All About ME!

PROJECT NEEDS ASSESSMENT:

According to the American Heart Association the number one and three causes of death in Americans are heart attack and stroke, respectively. Statistics indicate that childhood obesity is on the increase nationwide. Northside elementary physical education standards require students to learn and appreciate that a healthy body is essential to lifelong well-being. There are multiple TEKS covered at each grade level such as K.4, 1.4, 2.4, 3.4, 4.4, and 5.4. Critical to this understanding is a need to visualize the anatomical structures involved with the circulatory, respiratory and skeletal systems. Most elementary students have no knowledge of the anatomy of their own bodies. There is a real need to allow students to visualize their internal organs so as to appreciate the need to keep them healthy. Life-long health knowledge and habits begin in the elementary ages and therefore it is critical to emphasize healthy choices and the consequences of an unhealthy lifestyle.

PROJECT GOALS:

1. Provide anatomically accurate teaching models of the human skeleton, heart and lungs to enable elementary students to visualize these important internal organs and systems.
2. Instill in students the need and desire to develop healthy bodies and life styles at an early age and to maintain them throughout their active lives.
3. Help elementary students realize that healthy life styles are a choice that they make and that unhealthy choices may result in serious compromises in their health as adults.
4. Visual learners, especially our students that struggle academically, are able to process these complicated systems better due to the visual representation.

PROJECT OBJECTIVES:

At the completion of this curriculum, ABC Elementary students will be able to:

1. Using a life-sized skeleton, name and locate specific bones of the skeleton.
2. Using a heart and lung model, locate and name the chambers, valves and major vessels of the heart.
3. Improve their knowledge of the heart and lungs by tracing the path of the blood through the heart and lungs and identifying where gas exchange occurs.
4. Strengthen their understanding of specific risk factors for cardiovascular disease including stress, diabetes, obesity, smoking, and an inactive life style.

PROJECT DESCRIPTION:

It's All About ME! is a year-long multi-unit curriculum found only at ABC Elementary which emphasizes a working knowledge of the human body and its functions. This program is designed to help elementary students at all grade levels realize that healthy bodies and healthy life-style decisions are essential. The program includes units covering skeletal, cardiovascular and respiratory system anatomy and physiology presented on a level appropriate for elementary-aged students. Each grade level has TEKS which require information from each of these units to be taught. Each month-long

unit includes lessons covering the anatomy of that system along with student-centered activities. During October, the skeletal unit teaches all grade levels basic skeletal anatomy. Unit activities include a skeleton puzzle and word association games to help students remember the location and name of the bones. As It's All About ME! each bone is introduced, the students are given a phrase and an action to help them associate the bone with its location, for example "scratch your cranium", "shut your mandible" or "hug your humerus". In February, the cardiovascular and respiratory systems are emphasized. In this unit, lessons focus on cardiac anatomy and physiology. Students are taught the anatomy of the heart and lungs by walking through a larger-than-life heart and lung model set up using the entire gym floor. During this activity students are required to simulate red blood cells as they travel a path through the heart and lungs, exchanging oxygen and carbon dioxide as they reach the appropriate anatomical structure. Participating in this activity allows students to kinesthetically experience the functioning of the heart and lungs. Anatomically accurate teaching models of the skeleton, heart and lungs will allow students to visualize the actual size, shape and location of these structures and thus solidify their understanding of how these structures contribute to the healthy functioning of their bodies.

DESCRIPTION OF TARGET POPULATION:

The target population for It's All About ME! will include all 600 students from Kindergarten through fifth grades that attend ABC Elementary physical education classes currently and in the future.

PROJECT EVALUATION:

Objective 1: Assessment would involve students naming and locating required bones on an articulated human skeleton. Discussions center around the functions of bones.
Objective 2: Students must accurately label a heart diagram identifying each chamber, valve and major blood vessel.

Objective 3: Using a larger than life heart and lung model laid out on the gym floor, students walk the path of blood flow through the heart and lungs. Along the way each student must successfully exchange oxygen and carbon dioxide and complete an activity at each anatomical landmark in the heart. Failure to successfully complete the circuit results in a "heart attack" after which the student must perform an activity in the "hospital" in order to rejoin the lesson.

Objective 4: A student-centered game is employed in which students acquire various risk factors for cardiovascular disease. Following the game class discussions center around how accumulated risk factors increase chances for heart disease.

PLANS TO SUSTAIN PROJECT:

It's All About ME! will be sustained each year through the physical education curriculum. Acquisition of durable, anatomically accurate models will enable physical education teachers to continue teaching this curriculum for many years.

BUDGET:

Full size articulated plastic human skeleton, dissectible heart & lung models