**Needs Statement for Lives in Context Project**

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**Completing Your Needs Statement**

* Please answer the questions that follow. Interview the main client contact at the organization with which you are working to obtain the required information. You can meet in person, use a video conferencing tool like Skype or Google Hangouts, or use the phone. Use email only as a last resort.

**Who is the target group for this project and where are they located?**

* 7th grade science students in Corpus Christi and Seminole Texas.

**Describe the specific problem the project will address. Identify the key subject matter or curricular requirements (TEKS) to be addressed.**

* **§112.19. Science, Grade 7**
  + (4) The strands for Grade 7 include:
  + (A) Scientific investigation and reasoning.
  + (i) To develop a rich knowledge of science and the natural world, students must become familiar with different modes of scientific inquiry, rules of evidence,
  + (2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and field investigations. The student is expected to:
    - (E) analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends.
* **§126.15. Technology Applications, Grade 7**
  + (3) Research and information fluency. The student acquires, analyzes, and manages content from digital resources. The student is expected to:
    - (D) process data and communicate results.
  + (6) Technology operations and concepts. The student demonstrates a thorough understanding of technology concepts, systems, and operations. The student is expected to:
    - (D) understand and use software applications, including selecting and using software for a defined task;

**Describe the degree of the target group’s motivation to be involved as learners. Note any special characteristics of your audience such as age, low English language or reading skills, or cultural background that will impact the design of your project.**

* Using the technological tool, CHRGIS, the 7th grade target groups’ motivation would increase regardless of their location or cultural background. This is an all-inclusive activity for any type of learner because the tool contains visuals. The students should be able to see the changes in the aerial photographs. Corpus Christi students would feel a connection to the material because the beach is a major landmark and the students from Seminole would appreciate the gained knowledge of things effecting a habitat different from theirs in Texas.

**Identify any motivational, incentive, or environmental (i.e., lack of proper tools or equipment) factors that may be hindering desired performance.**

* Location and distance. Students may or may not feel a disconnect from the material being presented. This will depend on if they’ve ever been to a beach of any kind. However, using the technological tool that contains images and data from beach sites, the students’ motivation will increase because the lesson will contain a virtual hands on experience with the CHRGIS tool. The only hinderance would be the lack of technology if attempted in a school where the student to computer ratio (even if just in a lab) is not 1: 1.

**Describe the learning outcomes your project will address. List the major learning goal(s) and supporting objectives.**

* Students will learn to recognize temporal and spatial change as they compare aerial photographs. Students will identify change in beach shape and the development of new features using the CHRGIS tool. In addition, wave refraction can be identified in the aerial photographs allowing students to see the force driving the changes in the shape of the beach. Finally, students can see how building coastal structures can stabilize a beach and change how wave energy impacts a beach.
* The student will:
  + Explore University Beach shoreline shape using the CHRGIS tool with 100% accuracy.
  + Using a Google doc with inquiry questions about the University beach, the students will identify the changes in the beach’s shape and answer these questions with a minimum of 70% accuracy.
  + After all students are finished with their inquiry questions, a class discussion on the reasons the students found for the change in the beach shape and the impact of wave energy and humans on the shoreline will take place