Pechocho's Pause: A 10-Minute Reset Project

A Grant Proposal for Integrated Health Science, Marine Biology, and Social-Emotional Learning

Discipline Health Science · Marine Biology · SEL	**Level** High School (Grades 9–12)
Duration 10-Minute Reset Curriculum Unit	**Format** US Letter · Formal Grant Submission



Goals and Objectives

The purpose of *Pechocho's Pause* is to integrate health science, marine biology, and social-emotional learning (SEL) for high-school students. Inspired by Pechocho, a dolphin who signals when he needs space by holding a wooden slat, this curriculum teaches students to identify emotional triggers, regulate stress, and communicate boundaries respectfully.

Students design their own "slat" keychain as a nonverbal reset tool, applying biological concepts, reflective writing, and empathy-based communication.

Program Purpose

To integrate health science, marine biology, and social-emotional learning (SEL) for high-school students through a research-informed, project-based curriculum unit centered on nonverbal boundary communication.

Student Objectives

- Analyze stress responses in dolphins and humans.
- Identify emotional triggers and coping strategies.
- Create a personalized slat keychain.
- Demonstrate empathy-based communication.
- Write a reflective analysis connecting science and SEL.

Florida Standards Alignment

This curriculum unit is designed in direct alignment with Florida Department of Education standards across three core disciplines, ensuring academic rigor and cross-curricular integration.

Health Education

- **HE.912.C.2.4** – Communication & emotional health
- **HE.912.P.8.1** – Stress-management strategies

Science

- **SC.912.L.17.20** – Human impact on marine behavior
- **SC.912.L.16.13** – Environmental influence on adaptation

English Language Arts

- **ELA.912.C.1.4** – Clear, organized expository writing

3

Core Disciplines

Health, Science, and ELA standards addressed simultaneously.

5

FL Standards

Discrete Florida DOE benchmarks met within a single unit.

Course Overview

Pechocho's Pause introduces SEL and emotional regulation through a science-based lens. Students explore how animals communicate stress, compare biological responses, and apply coping strategies to real-life situations.

Biological Stress Responses

Comparative analysis of stress physiology across species.

Emotional Regulation

Evidence-based strategies for managing emotional states.

Nonverbal Communication

Tools and signals for expressing needs without words.

Empathy and Boundaries

Frameworks for respectful interpersonal communication.

Creative Design

Student-led fabrication of a personalized reset tool.

Reflection and Analysis

Written synthesis connecting science content to lived experience.

Lesson Plan & Overview

Pre-Lesson Activities

- Emotional triggers survey (SPARK)
- Class discussion: "How do humans show they need space?"
- Marine-science mini-lesson: Pechocho's story

Lesson Components

- Define the challenge: Create a personal reset tool.
- Science connection: Compare dolphin vs. human stress responses.
- Creative design: Build the slat keychain.
- Reflection: Emotional triggers and coping strategies.
- Presentation: Share reset strategy with class.

Required Materials

- Acrylic/cardstock slats
- Key rings
- Markers/paint pens
- Hole punch
- Reflection sheets
- Journals
- Marine-science visuals



SPARK–SHAPE–SHIP Framework

The instructional framework is organized into three sequential phases, each building upon the prior to guide students from self-awareness through design and into community practice.

SPARK

Awareness & Idea Generation

Identify emotional triggers, stress signals, and personal needs.

SHAPE

Plan & Design

Define your reset strategy and design your slat keychain.

SHIP

Build & Share

Share your tool, explain your strategy, and practice classroom empathy norms.



Step-by-Step Procedure

The following four-step procedure operationalizes the SPARK-SHAPE-SHIP framework within the classroom setting, culminating in the establishment of lasting empathy-based classroom culture norms.

1 SPARK: Awareness & Idea Generation

Emotional triggers survey, class discussion, identify personal stress signals.

2 SHAPE: Plan & Design

Choose colors, symbols, and words for your slat; draft your reset strategy; write your reflection.

3 SHIP: Build & Share

Create your slat keychain, present your reset strategy, sign the class empathy pledge.

4 Classroom Culture

Establish norms for respectful communication; practice Pechocho's Pause routine.

Student Worksheets

Three structured worksheets guide students through each phase of the SPARK-SHAPE-SHIP framework, providing scaffolded prompts for reflection, design, and iteration.

SPARK Worksheet

- What overwhelms you during the school day?
- How do you usually show you need space?
- What helps you calm down?
- Who benefits when you communicate your needs clearly?
- Sketch your first slat idea.

SHAPE Worksheet

- Write your reset strategy.
- Reframe it for your daily school context.
- Pick a constraint: Time, Materials, or Stakeholders.
- Draft your challenge statement: "How can I communicate my need for space respectfully and consistently?"

SHIP Worksheet

- Build: Describe your slat design.
- Test: How will you use your slat during the school day?
- What worked well? What needs improvement?
- Iterate: What will you change next time?

Student PowerPoint Guide

Students create a short presentation as a culminating assessment artifact. The presentation synthesizes scientific content, personal reflection, and design documentation across six structured slides.

01

Title Slide

Pechocho's Pause

02

Slide 1

My emotional triggers

03

Slide 2

My biological stress response

04

Slide 3

My slat design (photos or sketches)

05

Slide 4

My reset strategy

06

Slide 5

How Pechocho inspired me

07

Slide 6

My empathy pledge

The student presentation serves as the primary summative assessment, integrating science content, SEL reflection, and creative design documentation into a single cohesive artifact.

References

The following sources informed the development of the *Pechocho's Pause* curriculum, including its scientific foundations, SEL framework design, and alignment with Florida Department of Education standards.

Society for Science

SEL & STEM Integration

Marine Mammal Behavior Research

Foundational literature on cetacean stress signaling and behavioral adaptation.

Florida DOE Health Education Standards

Official benchmark documentation for HE.912 and SC.912 standard series.

Classroom SEL Frameworks

Evidence-based models for social-emotional learning implementation in secondary settings.