M5 GDD_Group 1 Let's Get Moving

Game Summary

Working Title	Let's Get Moving: Group 1
Game Type	**Adventure Learning** (outdoor exploration) Reference Source: http://www.irrodl.org/index.php/irrodl/article/view/755/1435
Game Genre	Earth Science Content-based game Game-based learning interactivity with gamification elements; Inquiry based learning applying the *scientific method of inquiry:* 1. ask questions (form hypothesis) 2. Make predictions > conduct experiments to test hypothesis 3. gather data > analyze data > draw conclusions > communicate results
Game Platforms	Storyline/PC/Mobile
Game Description	The user will travel with a Robot Professor back in time to learn about the how processes of deposition and erosion change land over time. The user will travel to four different areas to see the how wind, water, waves, and glaciers changes the Earth by the building up and tearing down of it's surfaces.
Game Goal	The goal is for the player to collect passport stamps as he or she time travels through each of the four (4) different geographical areas: (a) ice; (b) wind; (c) water; and (d) (a) wind; (b) water; (c) wave; and (d) glacier. In order to win the game, passport stamps for all earth destinations must be earned/collected. Collect stamps for passport; trip; itinerary; get to all destinations; professor travels back in time; any point in geography - use robots too dangerous for human

Target Audience	Middle-School Students; 6th, 7th, and 8th grades Science Students: Osceola, Okeechobee, & Volusia, Florida County School Systems

Game Structure Describe your design for each game element.

Game Element	Description

Action/Interactivity	● Navigation buttons
	  ○ World Map
	  ○ Start Screen
	    ■ Resume Game
	  ○ Difficulty Selection
	  ○
	● Audio Controls
	  ○ Mute/Unmute
	  ○ Levels
	● Video Controls
	  ○ Play
	  ○ Pause
	● Interactivity
	  ○ View dynamic content
	  ○ Make informed predictions
	    ■ Move Sliders to estimate 'landing' from portal jump (i.e. will there be a Slip face or Seif?)
	  ○ Stack Objects (accomplished on the backend by leveraging using image-matching features in articulate)

Consequences	● Incorrect Answers*
	○ Drain Robot's Fuel
	○ 1x wrong answer: user receives updated feedback from Fate
	○ 2x wrong answers return to previous question in the same unit. User receives updated feedback from Fate
	○ 2x wrong on first unit return user to World Map and 'fades' the Previous badge earned (as if it's being erased from existence!). User receives updated feedback from Fate
	○ If no badge has been earned yet, 2x Wrong answers asks user if they'd like to change Difficulty
	*Adjusts based on difficulty.
Rules	● User can select any unit from world map
	● At any time user can
	○ Return to world map
	○ View content information to make informed decisions
	○ Ask Fate for more information and receive a hint
	○ Change difficulty
	○ Save their progress
	○ Exit game
	● Landings have an 'acceptable range' *
	*Adjusts based on difficulty.

Scoring	Students will answer five questions (both multiple choice and short answer) worth 1 point each. Students must score at least ⅘ to progress to a new area on the map. The multiple choice and short answer questions will be based on the some of the questions from the "Let's Get Moving" exit ticket sheet.
Progress	Progress is determined by students earning different passport stamps/badges as they travel to different regions on the map demonstrating their knowledge of how water, waves, wind, and glaciers shape the earth's surface. Students must earn all four (at least) passport stamps/badges to win game.
Feedback	Instructional feedback will be provided. ● Pretraining drag-and-drop: students will be notified if they correctly/incorrectly placed the photos in the photo album. After incorrectly placing photos, they will be prompted to repeat the pretraining section. ● Erosion lab will begin with a tutorial of the controls and their function using popups and hover. ● Level 1 difficulty case will provide guidance through steps of answering the call for help, the use of the erosion lab, analysis and completing the report. ● After completing a case report, the student will be provided feedback by either being prompted or asked to try again.
Goal	● Obtain all passport stickers as proof to show robot professor to earn travel to return to the future.

Narrative

Main Theme: The learner guides a time-travelling robot (an avatar) to visit geographic destinations. They must visit all their destinations to collect stamps for the robot's "passport" before it can return to the future.

Note: the 'professor' provides a convenient didactic proxy i.e. someone that can instruct the learner and provide clues. Additionally, selecting a human agent to speak through the robot allows us to provide audio narration that's preferable to impersonal voices and tones.

Story: As things would have it, your dog has uncovered something shiny and metallic while out on a stroll. Could it be? Indeed, a robot springs to life before your eyes. The voice -- oddly human -- greets you and explains its origin. Her name is Fate and she thought she'd lost contact with her "V-Bot" -- people in the future use them to vacation in time! There's just one big problem: Fate's "V-Bot" got stuck in *your* time and never finished its' original itinerary. Fate's V-Bot still has (at least) four destinations to visit. You'll have to be her travel agent. It won't be easy. Before you can warp to the next location, you must first consider what might happen to the landmasses at each destination. Will Death Valley be a vast stretch of freshwater lakes? Will Niagara be an arid desert? Making things even more complicated, Fate's V-Bot has a limited number of 'jumps' it can make. You'll need to make some tough decisions along the way. Luckily, Fate's a scientist -- we're all scientists in the future -- and she's full of information. You'll have plenty of clues so you can get the V-bot back to Fate!

Suggested Game Flow Diagram