UDL Principles	Mrs. McGowan's Grade 1 Butterfly Study	
1. Use multiple formats and media to present information	Pictures and illustrations * Posters * Magazine/book pictures * Photos taken at Meijer Butterfly Gardens Websites Victoria Butterfly Gardens A Dance With the Butterflies Butterflies in NJ Butterflies of North America Videos: Magic School Bus - Butterflies Eye Witness - Butterflies & Moths	Movies * The Butterfly Life Cycle – Internet movie clip of painted lady metamorphosis Read aloud books I Wish I Were A Butterfly by James Howe Where Butterflies Grow by Joanne Ryder Where Does the Butterfly Go When It Rains? by May Garelick Text to speech * PowerPoint slide show introducing topic
2. Use multiple strategies to engage and motivate students	Visual Strategies * Simple colorful, posters & photos & illustrations * Videos * Large print text (poems) * Pre-selected websites * Observation of insects in different stages in the classroom	Auditory/ExpressiveStrategies * Class discussions * Class brainstorming * Asking & answering questions * Describing Tactile/Kinesthetic Strategies * Measuring caterpillars & recording in log * Role-playing
3. Students demonstrate learning through multiple performance and product formats.	 Writing or Drawing * Match body part to correct sense by writing or pasting words (Use as pretest to assess what students know about topic) * Illustrate life cycle stages (in a circle or as timeline) * Make a written list * Use at least one of the senses/body parts in a creative writing piece Telling * Tell about the topic * Tell about each stage in order 	Making * Create a model with classroom materials * Create illustration using computer software * Contribute to group slide show using MaxShow (PowerPoint/Scholastic Keys) Doing * Pretend you are a butterfly and demonstrate understanding in your performance * Use Kidspiration Life Cycle (interactive) with talking interface

Mrs. McGowan's Grade 1 Butterfly Study UDL calls for three goals to consider in designing lessons:

- 1. Recognition goals: these focus on specific content that ask a student to identify *who, what, where,* and *when.* To support *multiple recognition pathways,* students can select
 - Images or text depicting butterfly life cycle stages
 - Graphic organizer created in Kidspiration.
 - 4 square organizer written by student

2. Strategic goals: these focus on a specific process or medium that asks a student to learn how to do something using problem solving and critical thinking skills. To support *multiple strategic pathways*, students can:

- Listen to (text to speech) or read directions for Kidspiration Butterfly activities.
- Choose to read on screen or print activity results.
- 3. Affective goals: these focus on a particular value or emotional outcome. Do students enjoy, and appreciate learning about the topic? Does it connect to prior knowledge and experience? To support *multiple affective pathways*, students:
 - Have real-life personal experience with butterflies (sometimes with caterpillars too)
 - Will have direct experience with live insect larva and butterflies
 - Choose activities that are varied and fun to engage in (whole-class, individual, partners or small groups).