

Lesson Plan	Barrier	UDL Principle	What could be done to improve/change instruction? (from old to new lesson)	Which technology resources could be used to enhance this lesson?	How do these resources support UDL
<p>Goals/Objectives</p> <p>Students will demonstrate knowledge of the process of natural selection</p>	<p>*Computer use/skills *Visuals: sight issues, background knowledge, can they gather meaning *Audio: hearing issues, Sound quality, *not enough choices for the students' differences in learning</p>	<p><i>Multiple means of Representation</i></p>	<p>*many more options for perception...visual, audio, computer game, manipulatives *activate/summary of prior knowledge (the previous lesson) is available for review during this lesson *only represented old lesson one way with the manipulative activity and paper chart and questions. more representation now with interactive Glog, spreadsheet, graphing program, audio, and visual</p>	<p>*Glogster: the lesson is now a totally interactive glog along with the manipulative. www.glogster.com</p> <p>*create a graph.com for graphing http://nces.ed.gov/nceskids/createagraph/default.aspx</p> <p>*google doc survey for question analysis https://spreadsheets.google.com/</p> <p>*google doc spreadsheet to share data. https://spreadsheets.google.com/</p> <p>*google doc checklist for what to turn in https://spreadsheets.google.com/</p> <p>*interactive game for the beginning engagement http://science.discovery.com/interactives/literacy/darwin/darwin.html</p>	<p>*Provide options for perception: Visuals, audio, interaction, colorful, simple shapes and design *terms linked with definitions to assist with background knowledge. *Audio to clarify directions and some vocabulary *Video of background info from previous lesson provided in glog</p>

Students will demonstrate knowledge of the process of natural selection	<ul style="list-style-type: none"> *limited tools for lesson implementation *not enough choices to engage all because each has own preferences 	<i>Multiple Means of Engagement/ action</i>	<ul style="list-style-type: none"> *previous tool to engage was a photo of an unusual organism for the students to determine what environment would be best for it. ...limited. Also the activity is just a manipulative activity with the toothpicks and reading the directions...also limited *New lesson has many aspects to keep and get students engaged and keep them interested...the interactive game or survival, the audio directions as they use the toothpicks, the on-line data reporting, graphing and analysis. *group work to provide for cooperation and interaction between classmates. The amount of interaction can be individualized. 	*same as above	<ul style="list-style-type: none"> *providing choices to recruit interest *using varied tools *varying lesson/presentation of material *having active participants *providing for interactions *group work and cooperation to allow for sustaining efforts *offering various levels of challenge *checklist for task regulation *feedback by seeing other group results of data
Students will demonstrate knowledge of the process of natural selection	<ul style="list-style-type: none"> *limitations of students *each has different ways to show learning takes place...were there enough options? *different learning styles 	<i>Multiple Means of Expression</i>	<ul style="list-style-type: none"> Limited expression in the old lesson. Paper-pencil activity and questions for assessment New lesson allows for expression in varied ways: multimedia activity and evaluation activity *check lists and modeling to assist with executive function 	<ul style="list-style-type: none"> *same tools as above * tools for evaluation-elaboration activity http://www.voki.com http://toondoo.com http://shidonna.com 	<ul style="list-style-type: none"> *provide for physical action: manipulative part and computer interaction, group members to assist as needed *Options for communication and expression *Multimedia *Options for executive function: checklist, providing background info, definitions, modeling

All of these resources provide for all types of learners: visual, auditory and kinesthetic and provide for many more that the old lesson provided. The goal is to PROVIDE MULTIPLE means of all of the UDL principles and I think this plan has greatly improved in this area.