Deriving UDL Solutions

Model Template

Grade: 3 Teacher: Mrs. G. Subject: Science Standard: 6.23—Plants lifecycle

Goal: Research and present information on a flower.

Materials & Methods	Potential Barriers/ Missed Opportunities	UDL Solutions	
Printed textbook	Kevin—Difficulty seeing small text Bill—Doesn't tap his graphics skills Brian—Difficulty decoding/understanding word meaning	Electronic text with text-to-speech to read aloud CD-ROM or online encyclopedia; Web page with collections of images Spanish CD-ROM on flowers; link to Spanish Web site	
Lecture/whole class presentation	Jose—Difficulty comprehending meaning Helen—Distracted, may miss info Kiwa—Distracted, may miss info	Provide Spanish/English key terms translations with text-to-speech Provide Inspiration concept map of key ideas; eText outline with text to speech that students can access	
Library research	Brian—May have trouble keeping track. Kiwa—May not be able to abstract the project's important content.	Partially filled-in outlines; Web page with attached resources; collection of online resources, online or CD-ROM encyclopedia, linked to Inspiration outline of key project parts	
Create written report	Sarita—Mechanics-based difficulty expressing her ideas Jake—Format doesn't tap artistic talent	Word processor with spell check; talking word processor Graphics program—Kid Pix	
Flower drawing	Phillip—Drawing will be physically difficulty.	Word processing; selection of graphics to use in report	
Oral report on flower	Jorge—Format doesn't tap musical talent Brian—May be intimidated	Provide option of live or recorded music as part of demonstration Pair Brian with James, who can support him while working	
Independent project	James—Context won't draw on his leadership and collaboration skills. Helen—Could have difficulty working alone. Elizabeth—Deep knowledge of plants	Encourage James to support other students as they work Be sure to find aspect of project of particular interest to Helen and check in frequently. Support presentation with notes Pair Elizabeth with Jose to share her knowledge and enthusiasm	

Examples of UDL Solutions

Recognition Networks

Multiple Examples	Multiple Media and Formats
Multiple versions of story, math process, content	Multimedia glossary, online, CD-ROM or teacher-made
Multimedia collections	Alternative representations across media:
Images	E-text with text-to-speech
Sounds	Text and audio descriptions for still images
Text	Spoken descriptions for video images
Video/animation	Tactile graphics
Concept maps	Voice recognition—convert to text
Links to online examples from Web page	Image collections in concept maps
Multimedia concept map with online/local links	Text outline, highlighting key concepts
Animation of text meaning (software, Web)	Digital photographs from field trips or home
	Recorded, digitized sounds and stories
	Adjustable font size, color, background color
	Adjustable digital images (e.g., maps)
	

Highlight Critical Features

Visual concept maps (Inspiration)
Multimedia templates (Hyperstudio, PowerPoint)
Color highlighting in word processing
Graphic highlighting (circles, arrows, boxes)
Links to animations showing key elements
Software offering different presentations
E-text outline, main points (with text-to-speech translation)

Support Background Knowledge

Web pages with links to related information
Links to author information
Key vocabulary (image map, hyperlinks to words)
Translation to other languages (online tools)
Expansion of information—build multimedia collections
Online links to experts
Multimedia glossary, encyclopedia

Strategic Networks

Models of Skilled Performance	Practice with Supports
Product models—finished versions of target skill	Talking word processor (e.g., Write Out Loud)
Process models—showing process steps	Templates to structure work as appropriate
Collections of completed products	Scaffolds, use depending on goal:
(Web links/local)	Spell check, grammar check
Past student work	Built-in calculator
Work of experts	Clip media (all sorts), student projects
Teacher generated examples	Text-to-speech for content reading
Students in other settings	·
Multimedia collections—stories, facts, information	Graphic organizers (e.g., Inspiration)
Online links to work of experts	Hyperstudio story or presentation template
	Chapter-end answers partially structured
Ongoing Relevant Feedback	Demonstration of Skills
Digital voice record, play back	Multimedia presentation tools (Hyperstudio, PowerPoint)
Text-to-speech while writing	Web-capable graphic organizers (Inspiration)
Links to online mentors	Publishing software (Hyperstudio, Pagemaker)
Links to peers/editors (e.g., www.stonesoup.com)	Web site design tools (Home Page, Dreamweaver)
Digital portfolio—review and compare	Multimedia recording, image digitizing, digital cameras
Prompts to self-reflect, record reflections	Media banks—images, sounds, animations, video
Online publishing, local network or Internet	Digital recording
Digital graphing of progress	Draw tools

Affective Networks

Choice of Content and Tools

Selections of content for learning skills and strategies Web sites with supplementary, related activities Multimedia presentation and composition tools Digital cameras, recording devices Web page with content options and choices Selection of stories/non fiction for learning to read Tie activities to student's deep subject interests

	Adjustable	Suppor	t and	Challenge
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Software/Web sites offering management systems Optional scaffolds (– teacher/student discretion) Templates supporting process Templates supporting content Choice of level, same activity or goal Optional help (student or teacher discretion)

Choice of Rewards

Individualized feedback to support student needs Explicit feedback specific to student progress Minimal extrinsic "rewards" not tied to work Build student self-monitoring Feedback related to explicit student goals Opportunities for demonstrations Built-in structured peer feedback

Choice	of L	earning	Cont	ext
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"Web quest" designs, with varied structure
Software/Web sites, options for feedback and support
Flexible work groups—pairs, small groups, individual
Templates with optional structure and support
Earphones
Embedded hyperlinks, used at student option
Student choice of sources

Deriving UDL Solutions

Blank Template

Grade:	Teacher:	Subject:	Standard:

Goal:

Materials & Methods	Potential Barriers/ Missed Opportunities	UDL Solutions