Subject #8: Problem Solving

Project #78: What's a Word Cloud and How's that Solve Problems? (using the Internet) Create a word cloud to pictorially display ideas, to identify important points in a lesson, or as a pre- or post- unit review

| Higher-order thinking skills | | Technology- specific | Subject Area/ Learning- specific | Standard: NETS-S |
|------------------------------|-------|-------------------------|-------------------------------------|---------------------|
| Seeing patterns, organizing, | | Graphic organizers, | Graphic organizers, language, | 2.b, 4.c |
| creating | | internet, multimedia | communication | |
| Grade level: | 2-8 | | | · |
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Prior knowledge: Project 99: Internet Basx Time required: 10 minutes student time; 30 minutes teacher time to create Wordle Software required: internet browser Vocabulary: word cloud, graphic organizer, blog, tag

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Lesson Description

 Sometimes called 'data visualization', word clouds (as shown in the insets) show graphically what's important

based on word size, color, placement.

• A free cloud creator from

<u>Wordle.net</u> produces word pictures from user-generated input. The more frequently a word appears in the source text, the larger it is in the cloud. (Color in a Wordle is just for

aesthetics.) The result is a graphic design communicating the important concepts of an idea. The

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inset analyzes Martin Luther King's *I Have a Dream speech*. What do you think his speech emphasized?

Another popular use of word clouds is to find synonyms and related ideas for writing. Check out Visual Thesaurus at www.visualthesaurus.com. а subscription online service that visually displays word connections.

Word maps let you search for just the right word and then explore related concepts, revealing the way words and meanings relate to each other.

- If you have a blog, you probably have a cloud to rank your entries. This one is from Wordpress.org.
- On the next pages, you see a variety of word displays.
 What do they all have in common? They

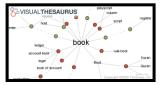


turn black and white numbers into fascinating information, the type that inspires students to explore real-world challenges and facilitate the learning process by replacing intimidation

with positive engagement.

Computer Activity

• Take an anonymous



survey of which computer program students like best. Or, if you have a blog, have students enter their answers there. Add each result to <u>Wordle.net's</u> 'Paste in a bunch of text'

- box. Push 'go'. <u>Wordle.net</u> will create a multi-colored picture of the results. You can adjust colors, font, layout, alphabetic order.
- Plug the same survey into Manyeyes at <u>http://manyeyes.alphaworks.ibm.c</u> <u>om</u>, a free cloud creator (with registration) from IBM's brilliant research minds. See samples on the next few pages of a tag cloud, a word tree and a phrase-net.

Extensions

• Compare this method of determining a concept's importance to entering data into Excel and creating a graph. Which method do your students prefer?

Troubleshooting Tips

• Some of the words are too small to read. (That means they are infrequently used, which communicates quite a bit.)

Here are some clouds created at http://wordle.net

A Wordle using the text in this book:



Word Cloud created with Tagxedo using words on Class Start Page



Tagxedo based on hints from this year's fifth graders to next year's group:



Never Heard of Tagxedo? Read on

If you haven't discovered <u>Tagxedo (http://tagxedo.com</u>), you have a treat in store. As its tagline suggests, it is a tag cloud with style. Think <u>Wordle (http://wordle.net)</u> on steroids. Tagxedo takes words and turns them into pictures, with all the options you couldn't find on Wordle. Start with words (or a website, your Delicious links, an RSS feed, a news event or search results for a term). Select colors, fonts, shape. Here's a list of <u>101 Ways to Use Tagxedo</u>. I've culled my favorites out for you:

- as a discussion of back to school stuff
- what students want to learn about a subject (I'm having my 8th grade Photoshop class create one advising me what they want to learn about photo editing)
- input an essay/book report they've written to see what words pop out as most important. They can then shape it and color it to match the ideas.
- input words from a website they enjoy
- input words from an historic document to see what is the important theme
- any written project normally difficult for visual learners will take on new life with this program
- each student contributes 10 words to describe ****. Write them down on your Smartboard and enter into Tagxedo
- make a Class Tagxedo with the teacher's name larger and students all around him/her
- at the beginning of the school year, ask each student to make a Tagxedo about himself/herself
- make a cover page-turns words about the report topic into a picture
- paste a student essay into Tagxedo. See if other students can work out (a) topic and (b) title of essay. If they fail to do so, this suggests that the essay lacks sufficient focus on the question and student should make some edit, try it again! (thanks <u>russelltarr</u>)
- contrast candidates in a Political debate
- summarize a field trip report
- appreciate other languages. Make Tagxedo with non-Latin languages
- teach students about cultures of the world. Add words about a specific culture and shape the Tagxedo like the country. This can also be done for states.
- make a Guess-the-Quote game. Enter all words from a quote and see if the students can figure out the quote.
- brainstorm a topic. Enter all the words about a topic the student comes up with.
- create a synonym word Wall. Look up synonyms of overused words at <u>thesaurus.com</u>. Enter into Tagxedo.
- Track a poll over time. Make a Tagxedo of knowledge on a subject at beginning/middle/end/whatever to show how ideas are evolving.

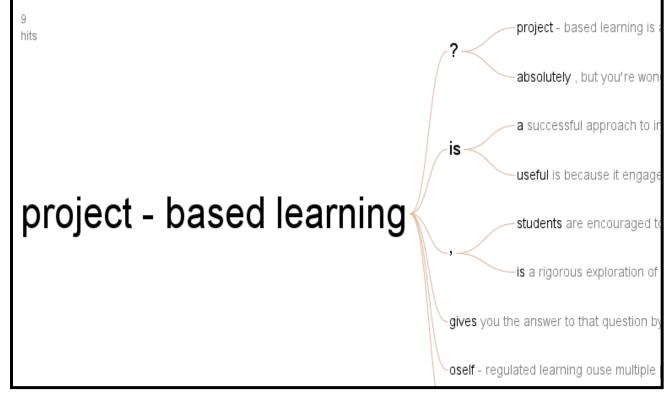
For more ideas, visit the <u>Daily Tagxedo.</u>

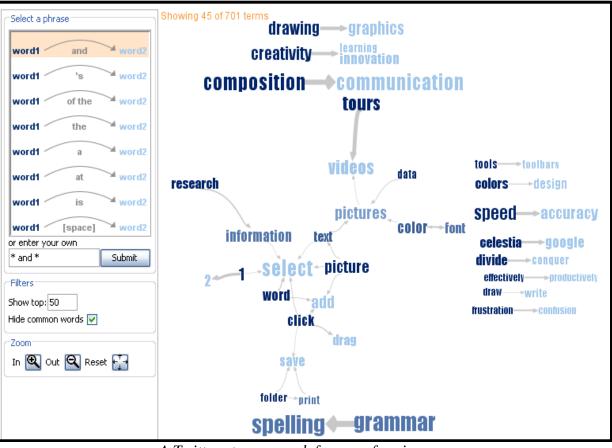
How do you use it?

<u>Clouds created using http://manyeyes.alphaworks.ibm.com :</u>

| A tag cloud—alphabetized by phrases in the book | | | | | |
|---|---|--|--|--|--|
| lesson | subject a activity • address bar | | | | |
| area area learning-specific art graphics art www b bar bass browser C can issions california missions communication project Computer grade vocabulagrade critical thinking description • design galary dialogue bas digital citizen digital version earth eccesstems table excel extensions • file folder | activity cover page flash drive flash drive folder save-as | | | | |
| game http: good digital google earth google images grade level grammar spelling higher-order thinking ho | iliday card holiday filer holiday letter | | | | |
| holiday memory html html html http www index html internet basx internet browser keyboard shortcuts keyboarding programs kidg | ein kidpix basx kidpir powerpoint kids http | | | | |
| kids www. knowledge introduction knowledge project language arts learning-specific standard lesson description | ON level2-5 level 3-5 math http | | | | |
| minutes meaned insponentiate ms word nets-tappying online instantial online sustained oregon trail org page pages paint bucket placing proverpoint priori problem solving project 10 project 102 project 16 project 55 project 62 project 70 project 82 project 99 publisher publisher project required required ms science wallpaper—windows screen shot show students silent reading Skills technology- software required solve project 90 | 30 required 45 required internet | | | | |
| spelling practice Sponge activities standard subject #1 subject #12 subject #2 subject #4 subject area sustained sil | ient technology project | | | | |
| technology- textbar thinking skills time required tips • title page toolbar troubleshooting t | ips ukschools virtual tours | | | | |
| specific vocabularybuilding webcams virtual word word www.bbc www.eduplace www.pbs • add -direck • open • page • project -select -show -slide | -student +students project | | | | |

A word-tree—showing relationships between words





A phrase net of correlated words:

