WEB 2.0 IN ENGLISH LANGUAGE TEACHING: USING WORD CLOUDS

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Abstract: Wordle is a free word art tool that mixes any chunk of text in production of a visual representation of the content and creates word clouds from text. Word clouds visually highlight the most often used words in the passage. The more frequently a word appears in the text, the larger its size in the visual design. The user can alter the colors, style and layout of the word collage. Wordle has many advantages and benefits in various fields of study. This study aims to introduce Wordle.net as one of the most useful tools for English teachers. It presents different usages of wordling in teaching language skills – reading, writing, speaking and listening. The study also provides further recommendations for English teachers in using Wordle as a teaching tool.

Keywords: wordling, English language classrooms, English teaching, teaching language skills, teaching vocabulary.

1. Introduction

There are a large number of online tools that can be used for second/foreign language learning and teaching (Chapelle & Jamieson, 2008; Garrett, 2009; Godwin-Jones, 2009, 2010; Levy, 2009; Meskill & Anthony, 2010; Warschauer, 2010). The awareness of teachers about these tools is the necessity of education system. Wordle as a web 2.0 tool is one of the fruitful visualized teaching and learning tool. This paper is going to discuss the place and role of Wordle in CALL and present some techniques in foreign or second language teaching and learning classrooms.

2. Educational Technology & Language Teaching

Using technology in education in general and in language teaching in particular has lots of benefits to students, classroom and community. Kargozari and Tafazoli (2011) in a study mentioned that "vodcast" is a valuable means of instruction. They believed that by using some tools such as vodcasts, "students have access to the material of instruction whenever and wherever they liked". Kulik, Kulik and Bangert-Downs (1991) and Kulik and Kulik (1991) claimed that "students in classes that use computer aided instruction outperformed their peers on standardized test of basic skills achievement by 30 percent on average".

Baron and Goldman (1994) mentioned that "student with access to technology learn how to organize complex information, recognize patterns, draw inferences, and communicate findings". "Studies of students with disabilities show that technology can expand access to educational resources and enhance students' ability to process and remember information" (Zorfass, Corley and Remz, 1994). David Dwyer (1994) in his article mentioned that "the use of technology in the classroom improves students' motivation and attitudes about themselves and about learning. Technology-rich

schools report higher attendance and lower dropout rates than in the past." In psychological point of view, it is possible to say that, students who use technology, they benefit more from pride, confidence and self-esteem in their works. Integrating technology into classroom instruction had so many advantages for classrooms as well as students.

Tafazoli (2011) stated that "in classrooms integrated with technology, the role of a teacher changed from merely an authority or lecturer to a facilitator or coach". Tinzman (1998) believed that "technology use tends to foster collaboration among students in the classroom". Education without technology, in one hand, is: (1) passive, (2) formal, (3) instructor center, and (4) time dependant, and on the other hand, education with technology is: (1) active, (2) informal, (3) student center, and (4) time independent.

Web 2.0 is a term which is commonly associated with applications on the internet which facilitate interactive information sharing, collaboration and learning on the World Wide Web. Web 2.0 tools include wikis, web applications, social-networking sites, blogs, hosted services and many others are tools which give its users the ability to communicate with others in a virtual context. Wordle is a web application which is useful for language teaching and learning.

3. Wordle

Wordle is a kind of data visualization tool. Barret (2010) define data visualization tools as devices which use for representing information in the form of charts, maps, tag clouds, animation or any graphical means that make content easier to understand. Friendly (2008) mentioned that data visualization serves as a way to communicate information clearly and effectively through visual representation. These tools can help to make the understanding of complex thing easier because they provide data in multi aspects incorporating visual, textual animated input and etc.

Easy access to web 2.0 tools on the internet by users without needing to know the technology leads to wide application of data visualization tools. Word clouds are one of the most popular forms of data visualization. You may heard text cloud or tag cloud instead of word cloud which is a representation of word frequency. The frequency of the words in a text determines the size of a word in a cloud. There are some tools on the internet to provide such word clouds such as Wordsift, Tagxedo, Tagul, Tag Crowd and Wordle. Wordle which is created by IBM developer Jonathan Feinberg in 2009 is one of the most popular tools on the internet for generating word clouds. As mentioned in wordle.net, it is really easy to make word clouds you can (1) paste a bunch of text, (2) enter the URL of any blog, blog feed, or any other web page that has an Atom or RSS feed, and (3) enter a del.icio.us user name. Figure 1 shows a word cloud by using Wordle.

Some researches have conducted on the base of word clouds. Ramsden and Bate (2008) mentioned that word clouds has some benefits to education. They stated that word clouds can be use to examine teacher responses to a survey about podcasting in educational contexts. McNaught and Lam (2010), in a research which they used Wordle, argued that word clouds can be used as supplementary research tools for the triangulation of data. About Pendergast's (2010) research , Baralt, Pennestri and Selvandin (2011) stated that:

Pendergast (2010) used "tag clouds" to perform an analysis of the most commonly used terms from documents published by the American Association for Family and Consumer Sciences (AAFCS), creating what she referred to as a "folksonomy" of texts.

She showed that the clouds revealed a visual hierarchy of text, and concluded by suggesting that tag clouds be included on Websites next to the published documents. Pendergast argued that doing so would appeal to multiple generations, including the "millennials," who, according to her, are multiliterate and tend to prefer visual over textual information (p. 12)."

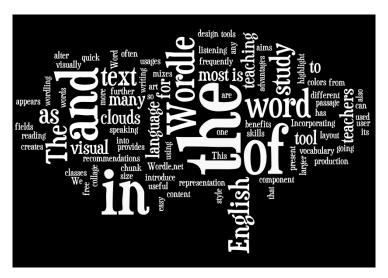


Figure 1: The paper abstract is converted by the authors into word cloud by Wordle.net

Baralt, Pennestri and Selvandin (op cit) have conducted an action research on using wordless to teach foreign language writing in which they mentioned Wordle can facilitate the teaching of foreign language writing within a dual coding theoretical framework.

4. Wordling & English Language Teaching

Wordle is fun, visual and entertaining. Wordle can be used for instructional purposes. These types of activities encourage students to react to topics or concepts and produce their own understanding based on that reaction. If we use only two pieces of hardware, a computer and a data projector, we can enlarge a Wordle picture on a screen or a white wall. This provides an opportunity for all students to benefit from projected picture. While overusing presentation software such as PowerPoint is not much more effective anymore, Wordle can be substitute as a teaching and learning medium instead.

In this section the authors are going to provide some techniques for teaching different language skills and components in which teachers benefit from and use them in their classes.

Listening: For listening skill, teachers can use Wordle in pre-listening stage. This stage helps learners by focusing on the topic, activating knowledge they have about the topic and providing clear view of learners about what they are going to do. By wordling, teachers can (1) discuss topic with the learners, (2) help the learners to develop their vocabulary related to the topic, (3) give learners information about the context, and (4) get the learners to predict what they will hear. By wordling listening

text to word clouds and displaying it before task, we can reach the goals of prelistening stage which Saetti (2009) mentioned the goals of pre-listening stage is "to activate the learners' linguistic knowledge and background information, the teacher expected to help the learners with unknown vocabulary and grammatical structures and to familiarize them with the topic of the input" (p.228).

Speaking: One of the crucial problems of students in speaking is the lack of vocabulary knowledge. Most of the time learners can not remember the exact words about the topic, so they may stop and pause in their speeches and even try to refer to their mother tongue to remember the necessary words. To prevent this pauses and stops, providing word clouds before and during speaking can be beneficial. In this case, learners are benefits from provided vocabulary which are exactly relevant to the topic.

Reading: Word clouds can also be used as part of a reading. The pre-reading activities are designed to "set a task for the learners, help the learners prepare for the task and motivate the learners to read" (Lindsay and Knight, 2006). Pre-reading activities should help the learners to achieve the aim of the reading activity such as: (1) stimulate what they already know about the topic, (2) provide them with background information that they need before they read, and (3) help them with words and phrases they will need to know before doing an activity.

Writing: In writing skill, Harmer (2004) mentioned that "writing process has four main elements: (1) planning, (2) drafting, (3) editing, and (4) final version. In planning stage or we can call it pre-writing stage we can use word clouds to brainstorm, providing some relevant vocabulary to trigger writing, in which learners prepare for what they will write. One of the main elements in writing is register, and one aspect of register is the choice of topic vocabulary. Wordling can provide such a topic vocabulary in which improves learners' performance in writing.

Teachers can use Wordle to improve their instruction performances. The incorporation of wordle into classroom act as an instructional tool which help students using more varied vocabulary in new style which is new to them. The authors recommend using this new mixture of technology and teaching tool in English as foreign / second language classes. Some techniques are provided as follow:

For teaching word order and part of speech, scrambled questions and sentences are useful technique. Teacher can create a series of word clouds using individual questions or sentences. These word clouds can be printed or projected. The learners have to unscramble the words. Another use of word clouds is as simple vocabulary exercises. We can use word clouds for words that have to be joined together to form collocations.

Teachers can create a word cloud from a news article and use it to start a conversation. Students also may use visual word cloud to ask about new vocabulary which provides input to them. Before engaging students in speaking, by wordling key words teacher can increase the vocabulary knowledge of students about the conversation. In pre-reading stage, after teacher wordling key words of a reading text, students can talk about these new words and predict the content of reading. For teaching writing, brainstorming is one of the key techniques. Students can use word clouds to generate ideas for new writing topics and/or themes.

Baralt, Pennestri, and Selvandin (op cit) argued that word cloud also can be use as an assessment tool. They mentioned that "instructors can create word clouds from students' individual essays and use them for self-assessment purposes. Similar to the present study, the resulting word clouds as well as word frequency counts can show

students' individual progress towards improving their vocabulary. The source of text could derive from blog posts as opposed to essays; this could be especially relevant for online classes. (p. 21)"

5. Conclusions

With the widespread use of the Internet, many online tools are increasingly available for use in educational and non-educational settings. In view of the need for CALL researchers and practitioners to find, choose, use and evaluate educational tools for further development and implementation of CALL, it should be fruitful to introduce new and useful tools that can be used for language learning and teaching. For this reason the authors are decided to present Wordle.net as a useful web 2.0 tool for English for foreign or second language classes.

In this paper, the authors have introduced the wordle.net. Our teachers should be well-equipped with new technologies and update themselves with new tools in language teaching. The researcher concluded that using wordle is a necessity in teaching all four skills and also language components. Teachers and students are benefit from in many ways.

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