



## Don't just say 'I see tea': An efficient, meaningful use of web applications in vocabulary teaching.

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### Abstract

*In this article, we investigate the efficient, meaningful use of web applications in vocabulary teaching. We start by raising a few questions regarding the difficult job of guiding our students in their vocabulary learning process. To operate with reasonable independence learners need at least 3,000 (some sources go up to 5,000) words. Obviously, this is a huge task, and one that students should not be left to deal with on their own. It is the language teacher's job to continuously look for (better) answers to the question: what is the most efficient way to help my students learn vocabulary?*

*Two major problems are addressed: the first is the selection of words to be learned and the problem of how to ensure contact with these words. Lextutor, a web application specially designed to help us with this task, is introduced as an example.*

*The second problem is to do with efficient ways of learning the selected words beyond the level of recognition and understanding. We are convinced that ICT and more particularly, web tools, can help us provide solutions but only if we use them right. So far, the embedding of ICT remains largely within the boundaries of the classroom (or LMS) and tools are often only used to support the phases of presentation and closed practice of vocabulary learning. We make a case to go beyond those boundaries and use web tools in such a way that our learners really 'work' with the vocabulary. Seeing the enormous number of tools available on the web, we suggest to use Bloom's digital taxonomy as a guide to select and implement the tools efficiently.*

### 1. The challenge: questions and difficulties

According to Mondria [1], the most important element in vocabulary learning is not how the words are presented (meaning-inferred or meaning-given) but whether this first stage is followed by verification and memorization stages. He stresses the importance of repeated confrontation with the words at hand. So, how can we make sure this happens? And can we give our students some tools to do this for themselves?

In addition to identifying and understanding words in context, learners need strategies for vocabulary learning so they can consolidate the vocabulary they have learned. Once we move towards independence we are talking about large numbers of words and phrases. Clearly, not all 3,000 words mentioned above can be learned inside the classroom. We will need to stimulate contact with the 'outside world', more particularly the language community of the target language. But how can we do that seeing that community may be thousands of miles away (except in L2-situations)?

Also, when students reach a higher level, we need to start selecting words that they consider useful (depending on their needs and wants). The problem is that higher level-words tend to be much less frequent, so if we don't give them a boost, our learners will have to wait a whole year to come across a particular higher level word in a natural context. The question we will address is: how can we make use of the internet and web 2.0 applications to stimulate this?

## 2. So how can ICT help?

From what we said above, we can conclude that learners need repeated exposure to the words they need to learn, i.e. the words that correspond to their level and their requirements or wants. But exposure is not enough: learners need to 'work' with these words: they need to analyse, connect and actively experiment with the words in context. Finally, they need to reach the level of meaningful and authentic communication (including speaking and writing) using the words as building blocks.

In many classrooms, however, ICT is still mainly used to support the presentation stage of vocabulary acquisition. Teachers show a youtube video, an article, a powerpoint, a news broadcast and the learners receive input in a meaningful context. There's nothing wrong with that, quite on the contrary: the context is authentic and the medium attractive. But the selection was still made by the teacher and ICT is not used to give the students an opportunity to really 'work' with the vocabulary presented. Of course, a good teacher will supplement his presentation with practice in the classroom but in that case, the limits of learning remain confined within the walls of the classroom and that is exactly one of the questions we asked ourselves: how can we help learners to find their way to the outside world?

Admittedly, an increasing number of language schools use some sort of Learning Management System, providing information and practice online. Students can log in and work in their own time, which is a great advantage over classroom sessions. They can read some texts, watch a video, read about grammar and often they can practice by doing small quizzes (hot potatoes), matching exercises or filling in a cloze-test, thus consolidating what they learned in the classroom or on the LMS.

But do they really communicate? Do they experiment with the language learned? Do they have a chance to pursue their own interests and needs? The problem is that if we use ICT only in this way, we leave out a vast number of possibilities that are waiting on the internet. In other words, we need to go beyond the boundaries and move to the land of ict-opportunity. But how do we get there?

## 3. Don't just say ICT: Bloom's digital taxonomy

It is clear that we need a guide to explore the opportunities of the web and web-related ICT-applications. The good news is: that guide exists and (where else) can be found on the internet itself.

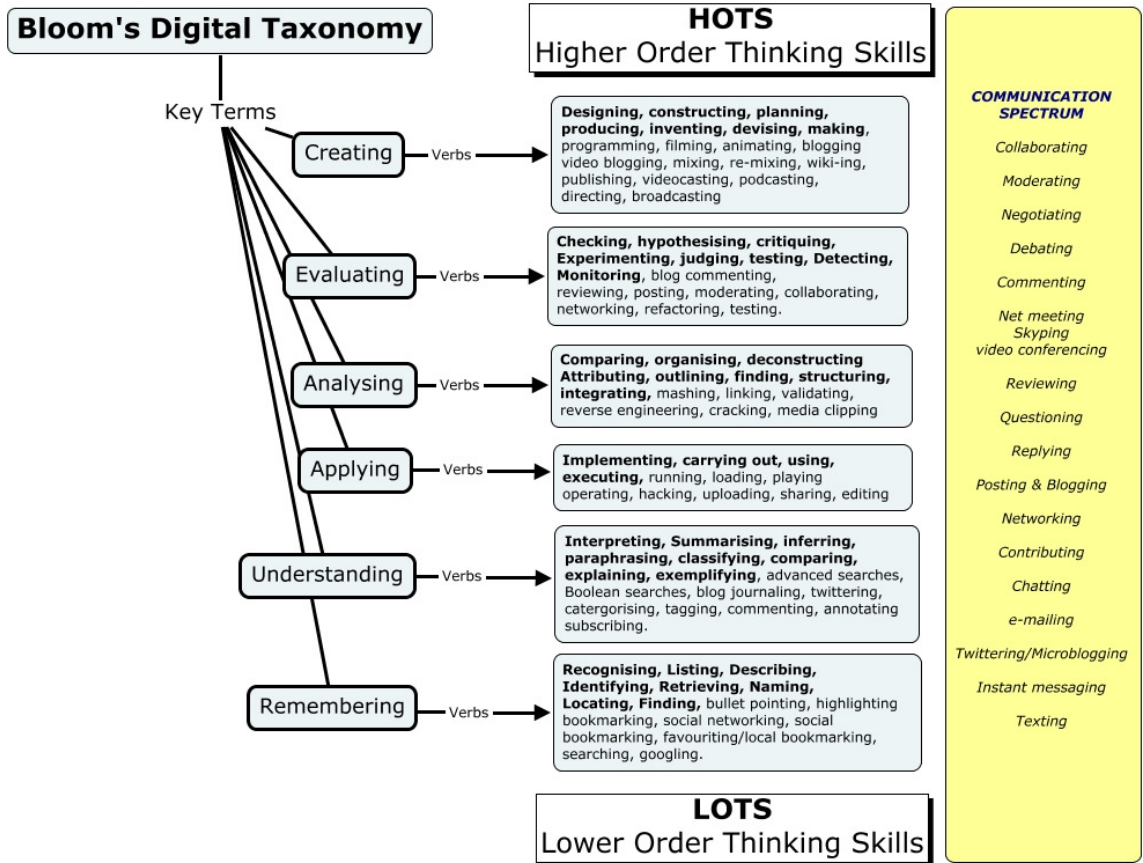
Bloom's Taxonomy is a system for the classification of learning objectives in which different levels of learning are specified and listed in order of increasing complexity. The original taxonomy was written in 1956, but it was revised by Anderson and Krathwohl in 2001 [2]. The newer version considered creativity to be of a higher cognitive ranking than evaluation and, more importantly, formulated the actions connected with each taxonomic level as verbs describing concrete activities and processes.

One could imagine the taxonomy as a staircase. Each step brings the learning process to a higher and more complex level, and always includes the lower steps.

- 1.Remembering: recalling, retrieving, recognizing ideas, concepts, procedures
- 2.Understanding: exemplifying, inferring, interpreting, translating to similar situations
- 3.Applying: implementing, carrying out, applying to specific situations
- 4.Analysing: breaking a complex idea into its constituent parts, determining the relationships
- 5.Evaluating: making judgments based on criteria and standards
- 6.Creating: putting together and reorganizing elements to form a new and coherent pattern

The descriptions above are mainly related to activities and objectives in face-to-face teaching, but they don't account for some of the more recent developments and strategies used in blended and distance

learning. In order to address these shortcomings, Andrew Churches revised the taxonomy again and digitized it. These efforts resulted in Bloom's Digital Taxonomy, a description of which can be found on his excellent prize-winning wiki Edorigami [3]. In this new digital taxonomy the concrete verbs connected with each level of learning objectives are 'translated' into verbs describing activities that can be done on the web. Another major contribution is the addition of a new spectrum, named



communication (or collaboration) and as language teachers, we can only be thankful for that:

(fig 1: Bloom's digital taxonomy)

How can this taxonomy guide us in our quest for meaningful vocabulary learning on the internet? The ICT-activities we described above as being used in our classrooms today (powerpoint, video, article..) are mainly situated on the first two levels of remembering and understanding. Closed exercises on an LMS (quiz, cloze-test, matching) may reach the level of applying, but we fail to go higher. One could wonder, of course, whether it is possible to do that? The answer is very simple: of course it is. If you go to Andrew's wiki, you will see a large number of potential web activities for each level (including the higher order ones and the added communication spectrum). On top of that, the wiki started listing different webtools that can be used to carry out those activities.

Let us give an example: applying (level 3) is described by the following key verbs: implementing, carrying out, using, executing, running, loading, playing, operating, hacking, uploading, sharing, editing... These are then linked with a number of possible activities such as 'presentation' and 'interview'. Finally, tools are suggested for each of the activities:



- Presentation: impress, Simple DTP product, powerpoint, google presentation, Zoho, skype, interactive whiteboard collaboration using etools, audio and video conferencing
- Interview: Word Processing, mind mapper, podcast, vodcast, audacity, sound recorder, collaboration using etools, skype

Admittedly, these suggestions need to be evaluated and fine-tuned, based on usability criteria for language education, but Andrew's work is undoubtedly a treasure to depart from.

#### 4. Types of tools

There are thousands of tools on the web, and we would like to use a rough classification to provide a better insight in how to select them and evaluate their usefulness for our purposes.

Some tools are very straightforward: you can use skype to call, a blog to introduce yourself, a chatroom to communicate. The question remains whether this straightforward use guarantees good language learning. The efficient embedding of these tools in the curriculum is precisely the task of the language teacher. A doodle poll in which learners are asked to vote on a number of interesting statements, could serve as the basis for a discussion on a digital forum. The communication becomes very authentic because the students will be discussing the results of their own poll and if the right words are inserted in the original doodle, the discussion brings vocabulary practice to the levels of evaluating and communication. We should always bear in mind that tools are what they are: tools. They are (generally) not designed with educational purposes in mind: It is our job to set those goals and to use the tools accordingly.

The point is not to take the value of the tool itself for granted, but to see it as a medium that we can use or adapt to get what we want: efficient learning. This is even more clearly illustrated with the second type of tools: tools with an original function that is not particularly useful for our purposes, but that we can use differently to meet our requirements. A good example is Jing, a web application originally designed to capture or film anything on your screen (and comment on it, using a microphone). For our purposes, however, Jing is a fantastic instrument for immediate feedback. Our students upload a text they've written (or an audio/video file), we play it on our computer and we film our screen, including the movements we make with the cursor to highlight certain elements. Simultaneously, we provide spoken feedback (using a simple headset) explaining why we think a certain part is good or needs working on. When we're done, we send this video to our students and they receive personal, immediate oral feedback whenever they are ready for it.

So far so good: the first type is straightforward, the second requires some creativity but they are readily available on the web and often free. You can visit websites such as [cooltoolsforschools](#) [4] for a good survey of available tools. The tools are there, and if we know where we are heading, we can select the ones that can help us with our learning plan. If we do this right, we already make a gigantic leap forward and some of the questions on good vocabulary learning can be solved this way. But other problems still remain and they require a third type of tool: tools specially designed for educational (in our case vocabulary learning) purposes. If we succeed in taking our activities to the higher levels in Bloom's digital taxonomy, we create a strong learning environment to acquire vocabulary, but as such there's no guarantee that those words are the right words to learn at that particular time for that particular learner. That too is our job and it's not an easy one. Questions such as what words to select, how to ensure contact with less frequent words and how to guide or learners in their search for useful words require expertise.

A good example of such a tool is Lextutor, an online vocabulary trainer designed by Tom Cobb [5]. The possibilities are numerous (for English, but French, German and recently Spanish have some applications too): you can take any text and have it scanned for the proportionate presence of lower



and higher frequency words. You can then ask the tool to leave out all (or half, or 15%) of the words belonging to frequency 4 or 5 and transform the text into a cloze-test. Even more interesting is the use of TTS (text to speech) technology in RA (resource assisted) reading: a student can read a story and if he selects a word or sentence, this is pronounced by a native voice. The student can also drag the words he doesn't understand to a kind of basket and find its explanation in a dictionary. When the basket is full, the system can make a concordance exercise with those selected words by just one click.

## 5. Sample tools at the conference

At the conference ICT for Language Learning (3d edition, Florence (IT), 11-12 November 2010), we will give a short demonstration of some of the tools and activities we have described above. We will also select one or two applications and brainstorm with the participants on how we could use them as tools for activities on each of the levels in the digital taxonomy.

## References

- [1] Mondria, J.-A. (2003).•The effects of inferring, verifying, and memorizing on the retention of L2 word meanings: An experimental comparison of the 'meaning-inferred method' and the 'meaning-given method'. *Studies in Second Language Acquisition* 25, 4, pp. 473-499.
- [2] Anderson, L.W., and D. Krathwohl (Eds.) (2001). *A Taxonomy for Learning, Teaching and Assessing: a Revision of Bloom's Taxonomy of Educational Objectives*. Longman, New York.
- [3] Churches A (2009) Bloom's Digital Taxonomy.  
<http://edorigami.wikispaces.com/file/view/bloom%27s+Digital+taxonomy+v3.01.pdf>
- [4] <http://cooltoolsforschools.wikispaces.com/>
- [5] <http://www.lex tutor.ca/>