

**SPEEDING UP THE WEB -
USING SLOW-CONNECTION INTERNET IN THE CLASSROOM**

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In my experiences with Internet-assisted language learning, I have encountered numerous problems: it was hard to schedule a computer lab for my English classes, I had too many students per each workstation, my students' level of English was too low to work on authentic websites. However, the most painful problem of my online classroom was a slow connection. I have decided to devote this month's "A Word from a Techie" to this problem, which is quite widespread in Poland, with still underresourced schools, a problem which can effectively destroy even the most brilliant and interesting Web-based lesson.

Thus, the question arises: what can we do if our Net works at a speed of a turtle rather than a hare? There are numerous solutions, both in terms of task formulation, requiring teacher's preparation or using dedicated software.

In case of a slow file transfer, the teacher should reformulate his ideas for the lesson and forget about using Internet search engines such as Yahoo or Altavista. Search engines, after having typed in a keyword to be found, browse millions of pages all over the world, which obviously lasts a lot of time, and therefore it will take long to get a search result. This can be a serious problem in case of a slow-connection classroom, as students, when having nothing to do, are likely to lose interest in the lesson or disrupt the class. In order to prevent that, the teacher might do the search before and save the site with results (either using "Save as" from the File menu or using the "save for offline viewing" option), so that students have the links to explore, without having to wait for the search result. In this way, the precious classroom time is not wasted for unnecessary waiting. Another option here would be to use the time when the search engine looks for sites with a given keyword for some other activities connected with the theme of the lesson, either computer tasks (composing the presentation, writing a story in a word-processor or writing an email letter) or language ones (speaking practice in pairs, whole-class vocabulary focus, grammar revision). However, since it is hard to predict how much time the search would take, the first solution (saving the results site) is recommended as more effective and time-saving.

The reformulation of the ideas for the lesson should not only concern the avoidance of using the search engine. Also, the teacher should try to make the lesson around one or two websites, exploiting their content in different ways, rather than ask students to make multiple searches and using a number of websites. In this way, once a website is loaded, it may be used without any further waste of time.

Another important problem in a slow connection classroom is that students choose to go to sites which load a long time. Of course, the loading time depends on a number of factors, with the most important being the Internet traffic, but this problem can be also tackled. Some solution would be for the teacher to preview the sites and give students only those which load fairly quickly, and in this way prevent students from wasting time exploring a number of sites before getting to the right one. It is not my intention to introduce teacher control here – students should be still given the choice of a few websites, but the teacher should make sure that students spend their time learning, and not waiting for a page to load with growing frustration. Teachers should remember that sites which load faster are those with more text and less graphics, banners, ads or pictures. Also, faster-to-load pages use less sophisticated interface, do not have Java applets or CGI scripts.

Another solution here would be turning off loading images, sounds and animations (for MS Internet Explorer, click on “Tools”, then “Options”, “Advanced” and unselect “Show images”, “Play animations”, “Play sounds”), and consequently students would get a desired website only with text, without the pictures, animated banners or accompanying sounds. Of course, this will surely help with the loading time, but on the other hand the attractiveness of Internet websites, meant as a complete whole integrating text, picture, video and sound, would lose a lot of its appeal. Thus, teachers should remember that when turning off loading of some elements of the website, they distort to some extent the picture of the Web.

Moreover, it has been noticed that the site’s domain is also connected with the loading time, and sites with .com ending (registered in the USA) are usually much slower to load than sites with some country ending, such as .uk, .it or .fr. Having this in mind, the teacher could try to find the equivalents of .com-only sites (as is the case with Web portals for instance, where <http://uk.yahoo.com> is the British version of www.yahoo.com, and the UK portal is much quicker to load than the other one).

Most computer labs have computers connected in a Local Area Network and are equipped in a proxy server, which stores the recently viewed sites on the server and once a page is requested by typing the URL in the browser, the proxy server retrieves the page from the server, checking only whether it has changed or not. Thus, the proxy server can be used to speed up

working with the Web – the teacher may come to the lab before the class, access a few sites that students will be working on, and when coming to class students will find it much quicker to get the requested sites. Of course, here some predicting on the part of the teacher is needed, as he or she must try to guess what subpages students might be interested in. Loading the sites before the lesson and using the proxy server to retrieve them quickly by all computers in the LAN proved to be one of the most effective techniques speeding up the Web in my case, and is recommended to teachers as easy and effective.

Finally, it may happen that the connection is so bad that waiting for websites to load takes ages, or that it is impossible to use the Internet because the school does not have money to pay for the connection time. In such a case, some solution would be to save some selected sites to disc before class and load them from disc for students to use in class. This can be done in various ways: using “Save as” option, saving a site for offline viewing (click on “Add to bookmarks” in “Bookmarks” menu, then select “Show in offline mode”) or using specialised offline viewers, which capture selected websites to the hard disc of the computer going as deep as it is specified. Of course, before doing that, the teacher should make sure that this does not break the copyright law of the websites chosen, and in case of doubt should email the webmaster/website owner to seek permission, stressing the purely educational, single-classroom and non-commercial purpose behind his/her request. However, it must be remembered that this solution should be used only as a last resort, as the main benefits of the Internet are variety and choice given to students, which is the main advantage of the Internet over the coursebook as the medium of instruction. When the teacher makes decisions for students on what is going to be viewed, students are no longer autonomous, and the whole idea of Web-based learning is completely misplaced.

To sum up, it can be seen that slow-connection Internet is no obstacle impossible to overcome for teachers wanting to provide their students with some experience of online learning. Definitely, working with slow file transfer is not easy, and sometimes demands clever tricks to make the lesson feasible. However, using the techniques discussed above the teacher may conduct interesting Web-based lessons using limited and outdated resources.