Google Scholar: What is it and why should I care?

By Eoin Jordan & Peter McConnell

Technology, as used for English language education in a Chinese context, has received attention in past issues of English Teaching in China (ETiC) through research reports (Crofts & Kaczor, 2012; Jordan & Crofts, 2012), reflective articles (Pierrel, 2013), and regular website reviews. Here, we continue with the theme of technology, but this time from the perspective of China-based English language teachers' professional development. More specifically, this article is concerned with an academic search engine called Google Scholar (GS) (Google Inc., 2013a). Academic articles from ETiC have recently become searchable on GS, so it seems timely to provide readers with more information about this tool, as well as to highlight its possible usefulness for teachers' professional development and for development of journals such as this one. The first two sections below provide an overview of what GS is and how it works, while the final section puts forward three reasons why GS may be of interest to readers of both ETiC and other journals.

What is Google Scholar?

GS is a search engine that can be used to search the full text of academic articles from all over the web. It searches a large number of journal and article repositories, including individual author websites, independent

journal websites such as ETiC, subscriptionbased journal aggregators such as JSTOR, and a growing number of university libraries. The publications indexed by GS span virtually every academic and scientific discipline and include most major world languages, with Englishlanguage journals such as Nature and The Lancet being the most frequently cited (Google Inc., 2013b). With a basic understanding of how GS works, students, teachers, academics, and research professionals alike may find it to be an invaluable research tool. Indeed, recent research suggests that it is now widely used at academic institutions (Wang & Howard, 2012), and that its coverage is sufficient for systematic reviews of medical literature (Gehanno, Rollin, & Darmoni, 2013).

How does Google Scholar find articles?

GS indexes articles from around the web with the use of automatic software. This software, often referred to as a "crawler", "robot" or "bot", begins by looking for a specific file type, such as .HTML or .PDF (Google Inc., 2013c). The crawler will then parse the information in that document in order to determine whether or not it is a scholarly publication. For example, it will look for a title in large type followed by author names in smaller type at the top of the first page, as well as a full citation for the article in the header or footer of that first page.

The search bot will also examine the end of the article for a heading such as 'References' or 'Bibliography' and a numbered reference list in one of the major referencing styles (Google Inc., 2013c).

Parsing a publication's reference list for bibliographic data is another important aspect of GS's functionality, as the bots will use the information in each article's reference list for ranking its search results. In other words, if an article has been frequently or recently cited by other authors in Google's index, that article will be ranked as more relevant in search results (Google Inc., 2013a). Articles for the first three issues of ETiC can be found on GS using the search term "XJTLU ETiC", although they do not rank highly in other searches at present, owing to their current lack of citations.

Why should I care?

We believe there are three main reasons why readers of, and contributors to, ETiC (and other journals) should be interested in GS and ETiC's recent presence on it:

1. Firstly, as GS is a freely available search engine with extensive registered content, teachers may find it a useful tool for researching the efficacy of different teaching approaches, as well as for finding resources for teaching, such as word lists. For instance, if considering whether or not to use a jigsaw reading activity in class, teachers could search on GS using the term "jigsaw reading" to see information on studies using this While technique. some of the information linked may require institutional login to access the full text, abstracts are usually freely available, and there are a significant number of resources that are free to download in their entirety. As mentioned in the previous section, the ranking of articles is based in part on the number of times they have been cited, so the hits near the top of the page are likely to be considered reliable sources within the scholarly community. GS also has options to search only for papers published in the last few years, which can help teachers to ensure that they are looking at recent research.

- 2. A second benefit of GS to researchactive teachers is that it allows authors to share their work quickly and easily. As noted in the previous section, articles are located by GS through an automated process, rather than through peer review by experts in a field. Therefore, if a teacher uploads an academic research paper they have completed to their institutional web page or repository, this will likely become searchable on GS a few weeks after its upload (Google Inc, 2013c). While concerns about quality have been raised regarding GS's inclusion of non-peer reviewed material (Aguillo, 2012), this system does also provide greater opportunity for new or minor areas of research to be shared easily and quickly. If the paper is then cited by others on GS, it will likely feature more prominently in search results. Authors of papers are also able to check online to see how many times their paper has been cited, as well as who has cited it.
- 3. The final benefit we will discuss here is the potential for GS to raise the profile of new journals such as ETiC. With minimal effort. an independent publication can provide GS-searchable content online, resulting in its articles becoming more accessible to other professionals around the world. If these articles are cited, their prominence in search results will be improved. With this in mind, journals may increase their visibility by encouraging authors to build on articles from previous issues, which will help to raise the prominence of those articles within GS search results, as well as provide continuity in the areas covered by the journal. If ETiC, for example, becomes more visible on GS, this seems likely to result in increased numbers of submissions, and therefore a wider range of voices being heard regarding issues relevant to English teaching in China. Indeed, readers may have noticed that this article builds on the technology theme in previous articles, and cites three previous contributions to ETiC.

Conclusion

We hope that the discussion in this article has provided readers with some new insights about GS and its possible uses. It is also hoped that future contributors to ETiC will consider building on work published in previous issues, for the reasons outlined above.

References

Aguillo, I.F. (2012). Is Google Scholar useful for bibliometrics? A webometric analysis. *Scientometrics*, *91*(2), 343-351.

Crofts, S., & Kaczor, A. (2012). Podcast in process: Assessing the success of a university podcast as a non-compulsory listening resource. *English Teaching in China*, *1*, 13-17.

Gehanno, J., Rollin, L., & Darmoni, S. (2013). Is the coverage of Google Scholar enough to be used alone for systematic reviews. *BMC medical informatics and decision making*, 13(1), 7.

Google Inc. (2013a). *About Google Scholar*. Retrieved from http://scholar.google.com/intl/en/scholar/about.html

Google Inc. (2013b). *Google Scholar Metrics*. Retrieved from http://scholar.google.com/citations?view op=top venues&hl=en&vq=en.

Google Inc. (2013c). *Google Scholar Help*. Retrieved from http://scholar.google.com/intl/en/scholar/inclusion.html

Jordan, E., & Crofts, S. (2012). ARS clicker technology: A useful tool for language teaching with large groups? *English Teaching in China*, 1, 1-6.

Pierrel, J. (2013). On the use of PowerPoint in the EFL classroom. *English Teaching in China, 3,* 32-35.

Wang, Y., & Howard, P. (2012). Google Scholar usage: An academic library's experience. *Journal of Web Librarianship*, 6(2), 94-108.

Eoin Jordan currently holds the position of Year 1 Manager in XJTLU's Language Centre. His research interests include CALL, blended learning, World Englishes, and vocabulary acquisition and testing.

eoin.jordan@xjtlu.edu.cn



Peter McConnell has been a tutor in the Language Centre at XJTLU since 2010. His interests include CALL, design, and the relationship between technology and learner autonomy.

peter.mcconnell@xjtlu.edu.cr

