

## **Search Education and Connecting Users to Your Content**

Presented by Julian Prentice at California Conference on Library Instruction, 2013

### **Search Education at Google**

Information literacy initiatives at Google center around teaching users about how to utilize the power of Google Search. The Search Education program spans a variety of modes, starting historically with in person classes taught by Dan Russell. These classes took place primarily at public libraries with content geared towards librarians. These first classes helped the Search Education team start to develop and refine the curriculum and resources.

In order to increase the reach of the curriculum, the course content moved onto the the Search Education website which includes webinars, lesson plans, and search challenges. Lesson plans are intended to be modular and easy to plug into existing classes. Many come with assignments, supplemental materials, and further readings to allow educators to easily integrate the content into their curricula. A Google a Day gamifies the search learning process with search challenges of varying complexity in various topics.

As the Search Education team promoted and taught these resources, we learned new and interesting ways of using Search from users. One example we came across in a library was the idea of color filtering in Google Image Search to find a book. The patron was looking for a book about Rosa Parks and knew the book cover was pink but could not remember anything else about the book. After conducting a query in Google Image Search, the patron was able to filter by color and could recognize an image of the cover of the book within a few seconds. During a class on assessing a website's credibility at another library, we discovered a bias some students had about top level domains. They had associations of credibility based on whether the web address ended in a .com instead of .org. Having uncovered this assumption, we updated the teaching materials to explain the process through which a website acquires a top level domain; specifically that there are very few tightly regulated top level domains (such as .gov and .edu) while other top level domains can be easily bought.

Power Searching with Google is the Search Education MOOC (massive open online course) aimed to scale the classroom instruction that started Search Education. Power Searching with Google's goal is to improve student's search skills with tips and tricks to become a fast and effective fact-finder. The course teaches skills such as searching by filetypes, interpreting search results, and using search operators. Advanced Power Searching is built for

students looking to deepen their understanding of solving complex research problems using more advanced Google search techniques.

Google ran the Power Searching with Google MOOC (massive open online course) in 2012, with over 155k registered students and 20k graduates. The goal of the first Power Searching MOOC was to help communicate what's possible with search so users could take full advantage of all the possibilities. Improvements in search skills were measured by a standard test given at the beginning and end of the course. In the two iterations of the Power Searching class, 40% of the students showed improved search skills after taking the course.

At the beginning of 2013 a more challenging, Advanced Power Searching was released. The course provided many optional challenges that allowed students to exercise the search skills taught in the first Power Searching class and the only required components were a set of two final search projects which, once completed, lead to a final exam. 38,000 people registered for the course with 42% showing up for the first course. The first course to completion rate was 11% and 99% of the students who completed the course and participated in the survey said they would recommend it to others.

Both Power Searching and Advanced Power Searching were built on an open source platform called Course Builder that's available to you all if you are interested in launching your own MOOCs. Anyone can take, modify, and run the course on AppEngine. You can find more information about the Course Builder platform at <https://code.google.com/p/course-builder/>.

You can find Google's Search Education resources below:

- Google Search Education – [g.co/searchedu](http://g.co/searchedu)
- [powersearchingwithgoogle.com](http://powersearchingwithgoogle.com)

## **Libraries and SEO**

As libraries put more content on the web, librarians should be thinking about making that content easy to find by users and search engines. Making a site search engine friendly can also be referred to as SEO (search engine optimization) which essentially boils down to helping search engines understand what your site is about.

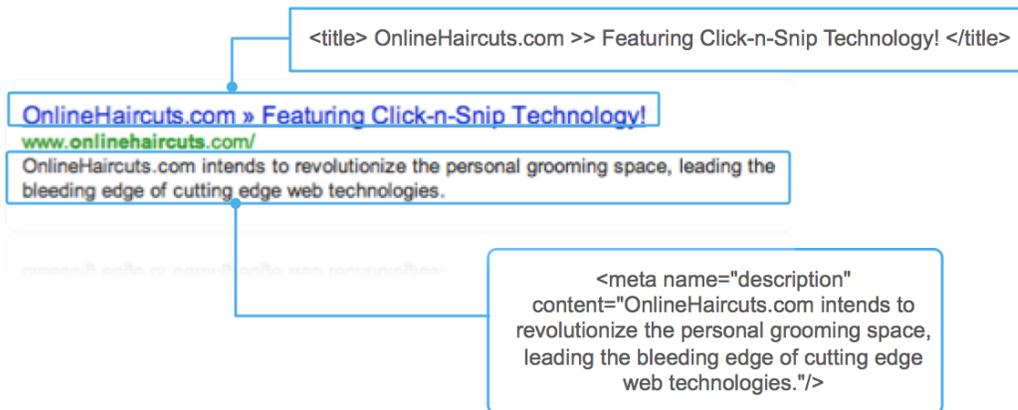
Libraries tend to have lots of content such as lists of local resources, book reviews, research guides, and much more. Having an understanding about how this content is understood by

search engines can help improve the visibility of these resources to your web patrons.

An important part of making a site search engine friendly is to provide a good user experience for your site users. Ultimately search engines and users want the same thing - to access the information users are looking for easily and efficiently. This includes creating an easily understood site structure, descriptive URLs that tell users what specific pages are about, and using descriptive title tags for each page.

For example, it's much easier for a user (and a search engine) to understand that your site is about with descriptive URLs such as <http://www.brandonsbaseballcards.com/articles/ten-rarest-baseball-cards.html> versus <http://www.brandonsbaseballcards.com/folder1/1089257/x1/0000023a.html>. Writing unique and descriptive tags for other elements of a web page can help users and search engines understand what each page is about.

Title tags and meta description tags can impact the way a site appears in the search results. In the image of a search result below, you can see the title in the search results reflects the title tag in the HTML.



Similarly, the meta description tag has been used as the snippet, or short bit of text listed under the site's title. The snippet is dynamically generated based on a user's query but often times the meta description tag are used.

It's also important to make sure your site is accessible by search engine crawlers as this is how search engines learn about changes to your site. You can control how your site gets crawled with a robots.txt file and Sitemaps. Submit Sitemaps and update your robots.txt with

Google's Webmaster Tools.

Webmaster Tools is a free resource for webmasters so you can easily access information about how your site is understood by Google. Webmaster Tools can also provide important notifications if your site is hacked or needs. Here are a few things you can learn about your site with Webmaster Tools:

- **Queries:** The total number of search queries that returned pages from your site over the given period.
- **Query list:** Specific user queries for which your site appeared in search results.
- **Impressions:** The number of times pages from your site appeared in search results.
- **Clicks:** The number of times a user clicked your site's listing in search results for a particular query.
- **CTR (clickthrough rate):** The percentage of impressions that resulted in a click to your site.
- **Average position:** The average top position of your site on the search results page for that query.

You can use Webmaster Tools to track the impact of changes you make to your site and to see how users are connecting to your site. You can find more information for Webmaster with these resources:

- Google Webmasters – [google.com/webmasters](https://google.com/webmasters)
- Google Webmaster Tools – [google.com/webmasters/tools](https://google.com/webmasters/tools)
- Google Webmaster Academy – [g.co/webmasteracademy](https://g.co/webmasteracademy)
- Webmaster Guidelines – [google.com/webmasters/guidelines.html](https://google.com/webmasters/guidelines.html)