

'Ask A Biologist' Youtilty¹ Model

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¹ Youtilty is a phrase coined by Jay Baer, marketing consultant and author, to describe the development of useful tools that also promote your product or brand. As he says, "if you sell something, you make a customer today; if you help someone, you make a customer for life."

Overview

The Ask A Biologist program (askabiologist.asu.edu) is a web-based science, technology, engineering and math or S.T.E.M learning program used by millions each year. It provides students, teachers and parents access to working scientists. The site contains articles, image gallery, puzzles, coloring pages and worksheets, interactive quizzes and games, profiles of scientists, and primer articles of primary research papers (PLOSables) developed in cooperation with the Public Library of Science (PLOS). As part of its mission, the website includes resources for teachers in the form of fun flexible data sets (in support of hands-on or virtual experiments), lesson activities and experiments, videos and more than 90 audio podcasts with leading scientists.

Our initial goal was to create an online resource for parents, students and teachers to access a wide range of the biological sciences and engage directly with research scientists. Overtime, as the Internet ecosystem has evolved (and misinformation has grown with it), Ask A Biologist has become an award-winning, widely recognized leader for accurate science information and cutting-edge educational offerings, locally, nationally and internationally.

More than 35 million visitors from every country in the world have visited the AAB website. The site combines an online format and interactive question and answer (Q&A) feature with downloadable materials that can be used by educators, from teachers in Colombia to home-schoolers in Arizona. In this way, the site has been firmly invested in democratized access to education, aligned with the university's mission and goals to demonstrate leadership in academic excellence and accessibility.

Inclusion has been a core objective. The website is an ADA compliant, mobile-friendly, child-safe online environment. It offers content with translations of a range of materials in 11 languages. In addition, science information is shared through visual, audio and print formats, and with learning tools (games, coloring pages, quizzes, podcasts, stories and other materials for many age levels). This multimedia/multiformat approach to learning provides the widest possible set of tools to enable individualized student success.

Beyond providing a portal for the community to better understand why Arizona State University has been ranked #1 in innovation, the benefits at the university-level have been multifaceted, including significant impacts in ASU web traffic, domain authority and backlinks. The search engine value of AAB traffic is \$83.8K per month, or a little more than \$1 million a year. This is the amount ASU would have to pay to generate the same amount of organic traffic to ASU.

The Q&A feature has also helped students and faculty volunteers connect directly with K-12 teachers and students. This direct engagement can build excitement about S.T.E.M. and expand their individual impact and relationships with communities, internationally.

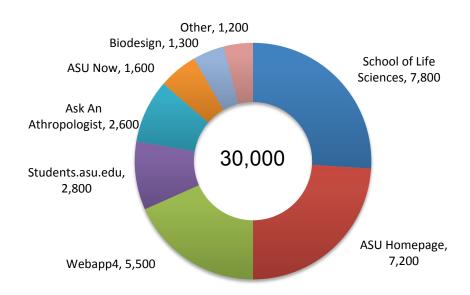
Ask A Biologist's creative offerings and interactive tools help visitors have the best learning experiences possible, while opening new doors to people of all ages to connect with latent or untapped talents and interests in S.T.E.M. and foster those interests. Most particularly, it's important to note that online access to learning through an ASU Ask A Biologist offers the public, young users, their parents and teachers to directly assess the value and quality they could expect in college-level online learning at ASU.

Ask a Biologist is a showcase for the importance of innovation, the excitement of discovery, and the impact of science. We put a face on who scientists are, as well as serving as a portal for the training of the next generation of young scientists, engineers, teachers and others working in their communities. Ask A Biologist has also served as a resource for multiple generations to come to imagine, experience, learn, enjoy and plan for their futures.

Ask A Biologist (AAB) Website Traffic and Its Impact on ASU

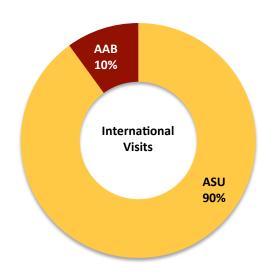
The following data were gathered with the help of the ASU Marketing Hub and ASU UTO. With more than 3.4 million Google tracked visits² in 2016, the website is ranked 4th in the entire ASU digital ecosystem behind MyASU, Students.asu.edu, and ASU Online. To put this in perspective, during the same period of time Pearson paid \$16.7 million for 2.5 million visits to ASU Online (This does not include display banners, streaming radio, paid social, etc.). Further analysis of AAB visit data revealed the following:

Visitors to AAB continued on to visit these other ASU websites:



Ask A Biologist International Visits and ASU

- 38% of all AAB traffic is international
- 10% of all ASU international traffic came to AAB



² Google only tracks page visits with the Google ID tag. Ask A Biologist has significantly more traffic to its content that cannot be tracked by Google. These are PDFs, Games (SWF), and Audio (MP3 Files). Using log analytic software to review the server logs shows the total number of visits to AAB in 2016 to be more than 11.2 million.

Ask A Biologist Keywords

AAB ranks for 94,405 keywords on organic search, just behind asu.edu with 97,600 keywords. Keywords are what drives user traffic to a specific website. The position ranking of the website using a keyword search is also critical. The goal: to rank on the first page of a Google or other search engine for the target keyword(s).

1,200 in first position

10,000+ first page

- 1.2K of AAB key words are in the 1st position
- More than 10K are on the first page of Google

Ask A Biologist's Impact on ASU Backlink Ranking

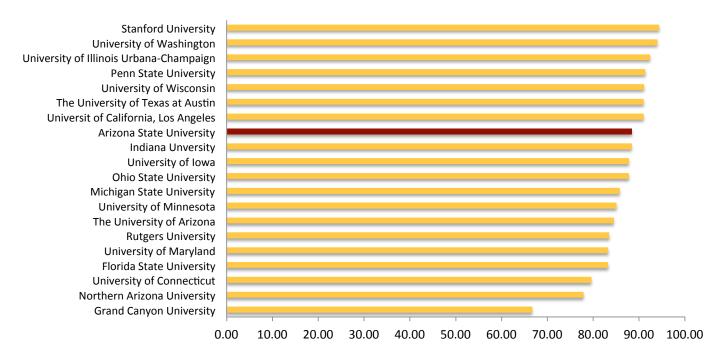
AAB has 27K domains linking to the website (backlinks). Because AAB contributes so many backlinks, it strengthens ASU's brand overall domain authority, helping overall search engine optimization (SEO). ASU's domain authority currently stands at an 88/100.

Ask A Biologist Search Engine Value

The search engine optimization (SEO) value of AAB traffic is \$83.8K per month, or a little more than \$1 million a year. This is the amount ASU would pay to generate the same amount of organic traffic to ASU.

Ask A Biologist's Impact on ASU Domain Authority

Domain Authority, developed by Moz, "is a score (on a 100-point scale) that predicts how well a website will rank on search engines." Domain Authority is used when comparing one site to another or tracking the 'strength' of your website over time. Domain Authority impacts search results and rankings. Backlinks are part of the formula, so are ranked keywords. Note that AAB has almost as many ranked keywords as asu.edu (94,627 vs. 98,022).

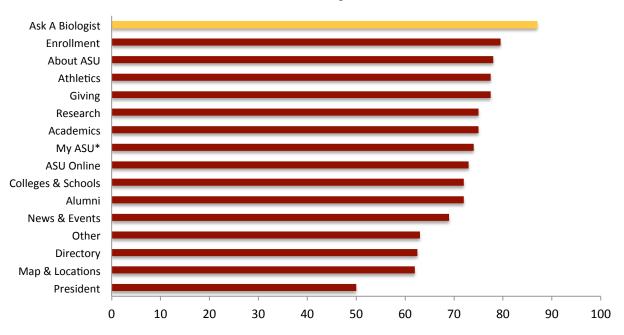


Domain Authority Ranking

Visitor Satisfaction

The university Marketing Hub implemented a visitor survey tool (ForeSee) for ASU websites. Data from October 7th, 2016 to February 13th, 2017 reveal the Ask A Biologist website is best in class not only for ASU, but also when compared to other websites.

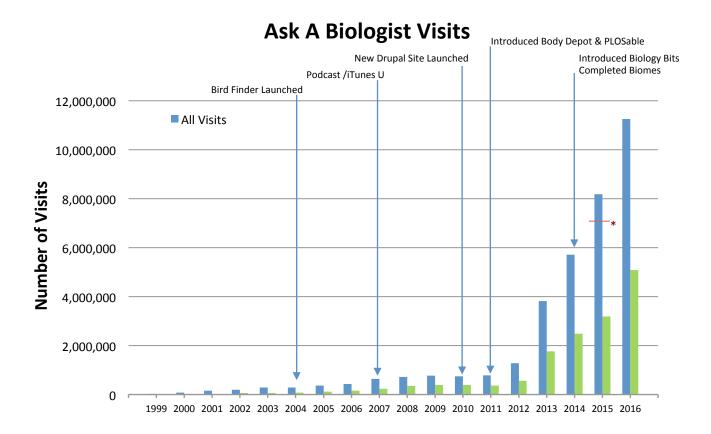




Total of respondents for survey = 2,500. Total respondents for Ask A Biologist =104. * My ASU has a lower ranking due to visitor perception that Blackboard performance is tied to MyASU.

Ask A Biologist's Annual Growth

Analyzing the web server traffic, using WebTrends and Weblog Pro, show growth of the website over time. The website has increased 10-fold since 2012.

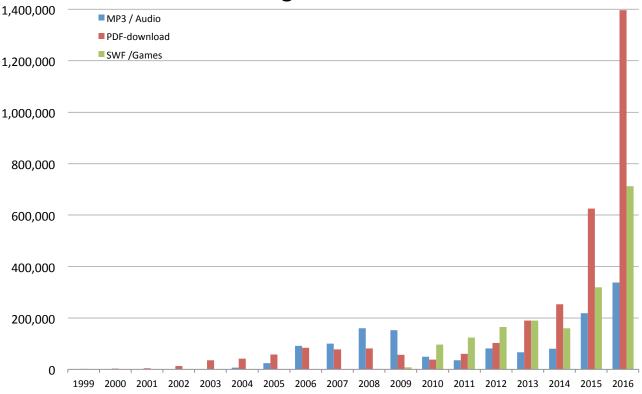


Data from server log files analyzed by WebTrend and Weblog Expert Pro. Log files were analyzed beginning July 1999. * In 2015, the migration of the website to a new server host resulted in the loss of two months (June and July) of log files. The red line shows the actual data captured for the year. The blue bar includes data from the same time period in 2014.

Content Use over Time

In addition to visits to the website and consumption of page content, there are also content types that are downloaded and used by teachers and students in an offline mode. These are primarily PDF's that can be printed for use at home or in the classroom. In addition, we offer games that teachers can link to from their school learning management system and embed them as part of lesson plans. Audio files are also used extensively on the site and there is a companion podcast with more than 90 episodes.





Keys to Success

Ask A Biologist has focused on fun, accurate storytelling. Critical components for telling these stories are quality graphics and illustrations. Combining these stories with other learning avenues (such as games, audio, video, and now virtual reality VR 360 content) has proven to be a key attraction for teachers and students. These added pieces provide an augmented reading component that helps reinforce learning objectives when partnered with more traditional learning materials and activities.

