Click2SciencePD.org User-Centric Redesign

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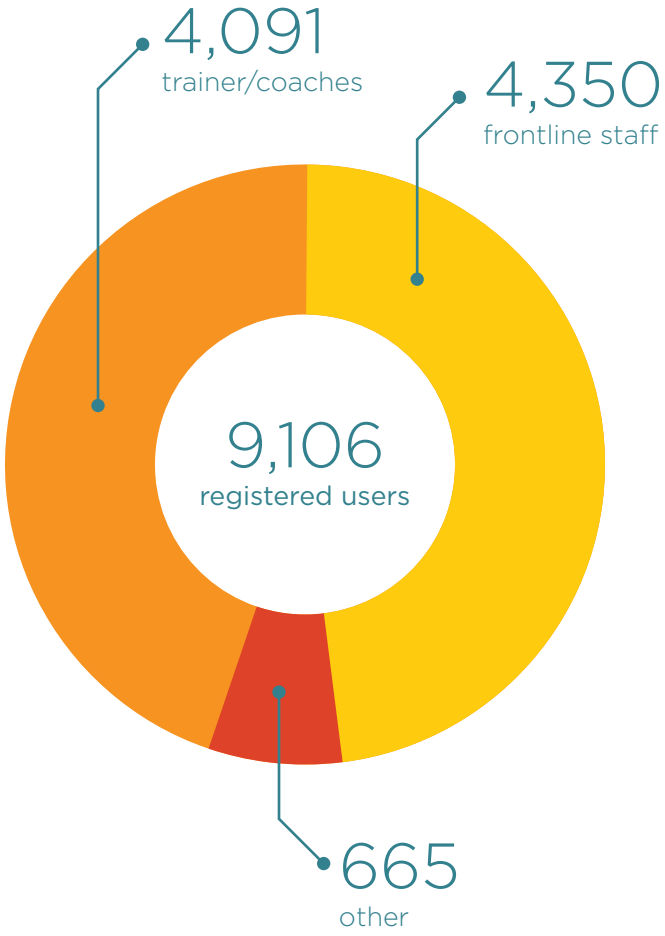
Click2SciencePD

Click2SciencePD, developed by Nebraska Extension with funding from the Noyce Foundation, provides online STEM professional development resources for out-of-school time professionals.

Click2Science's primary target audience is trainers and coaches in these programs. These individuals are responsible for providing professional development to frontline staff or volunteers who work directly with youth. Click2Science's secondary audience includes those frontline staff and volunteers.

Click2Science offers a variety of resources on its website, including staff development guides with video-based learning modules, webinars, and a professional development blog. Click2Science also offers self-directed web lessons which are housed on Penn State Extension Better Kid Care. The web lessons are one of the few revenue generators for Click2Science. All other resources are available free of charge. However, users must create a free account on Click2SciencePD.org for full access to the free professional development resources.



Purposes

UPDATE CONTENT

2017 was a year of change for Click2Science. All of the staff development guides were re-written, video-based learning modules underwent a thorough quality review resulting in many videos being edited, and the "20 Skills that Make STEM Click" were reworked into a framework of 16 skills within 3 strategies. These changes resulted in the need for significant updates to the website and web content.

IMPROVE USER EXPERIENCE

Since its official launch in January of 2015, Click2Science had been made aware of its cumbersome web experience. Evaluation studies designed to test the impact of the professional development resources constantly brought up the user's challenges in navigating the site and understanding the purpose and intent of Click2Science and its resources. Feedback from these professional development evaluations provided a starting point and motivation for improving the online user experience.

Objectives

INCREASE WEB LESSON SALES

A measurable objective of the redesign project was to increase web lesson sales. The previous website contained little information regarding web lessons, and what information was offered was difficult to find. Additionally, throughout the user-centric redesign process, it became apparent that existing users were generally unaware of Click2Science's web lesson.

MAINTAIN REGISTRATION CONVERSION RATES

Increasing the number of registered users is an overall program objective and key performance indicator for Click2Science as a whole. While increasing registrations was not a specified goal of the redesign project, the website redesign had to at a minimum maintaining past registration conversion rates.

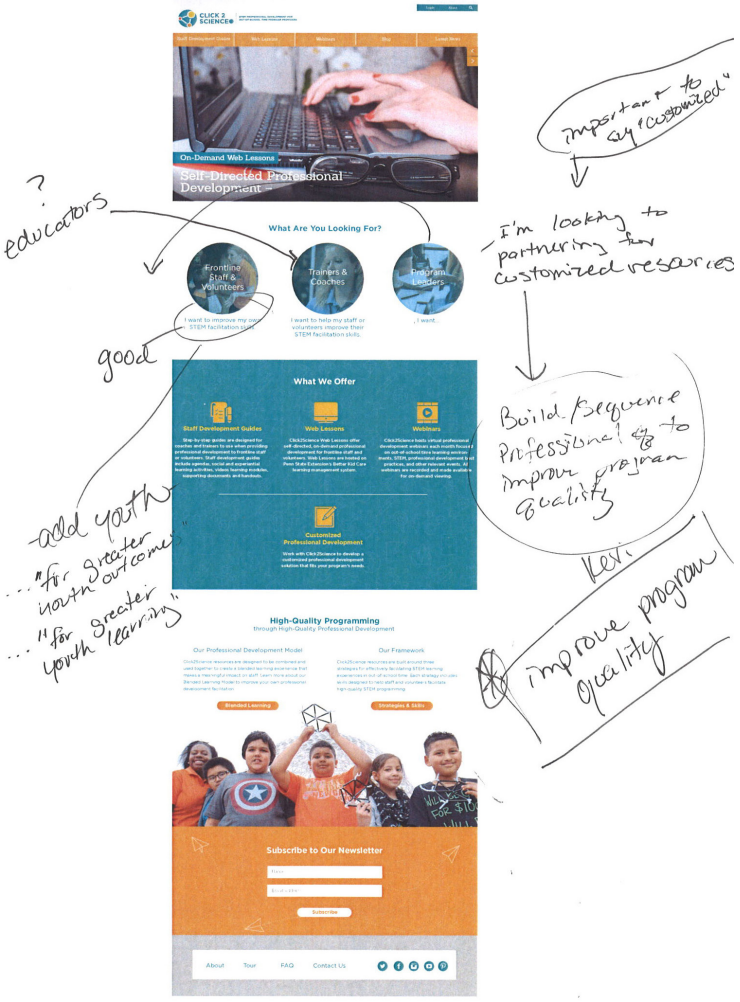
"The website is very deep and very rich... but hard to navigate."

-Evaluation Study Participant

Process

A user-centric design process was utilized to gain a deeper understanding of the user and develop solutions to fit user's needs (usability.gov, 2018).

1. SPECIFY CONTEXT OF USE: User interviews were conducted early in the process in order to identify pain points for users on the current site, understand how users are utilizing resources, and generally understand the user persona.
2. SPECIFY REQUIREMENTS: Based on user interviews goals and strategies were identified, including increasing awareness of web lessons, improving the online customer experience, helping users understand how to effectively utilize the resources, and connecting users with appropriate resources.
3. CREATE DESIGN SOLUTIONS: Wireframes and mockups were created based on feedback gathered during user interviews and incorporating the identified strategies. Secondary research was utilized in order to incorporate research-based user experience and user interface design techniques. Additionally, a competitor website analysis was conducted and used to inform design decisions.
4. EVALUATE DESIGNS: Focus group sessions were conducted to review design mockups and wireframes in order to gather early feedback and test solutions.



Results

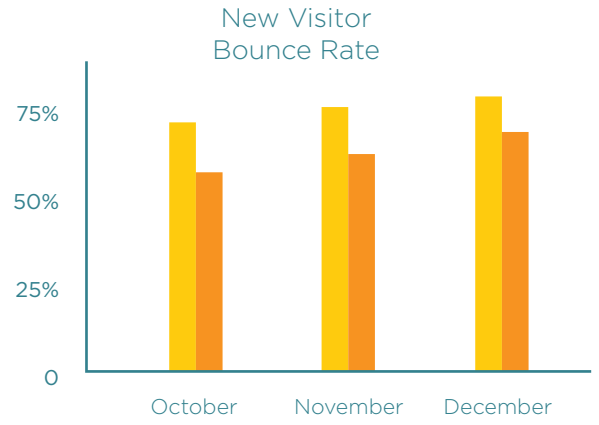
The relaunch occurred at the end of September 2017. Therefore, this analysis compares key metric trends over time by comparing the fourth quarter of 2017 to the fourth quarter of 2016. This comparison takes seasonal trends into account.

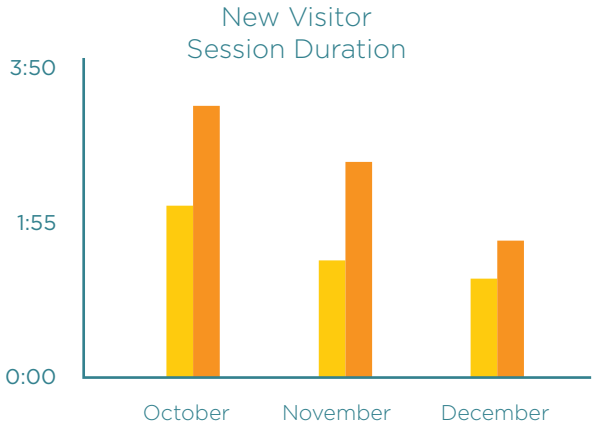
NEW VISITOR BEHAVIOR

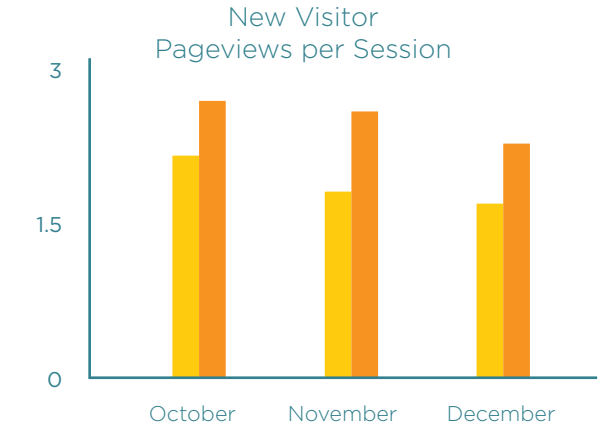
One of the most valuable customer behavior metrics includes bounce rate which indicates the percent of session with only one pageview (p. 51, Kaushik). The Click2Science site had an alarmingly high bounce rate prior to the redesign project. The 2016 final quarter average bounce rate among new visitors was 76%. Since the relaunch, the overall bounce rate among new visitors has decreased by 17% bringing the 2017 fourth quarter average to 63%.

Length of visit indicates the quality of the visit in terms of session duration (p. 165, Kaushik). The 2016 final quarter average session duration among new visitors was 1:36. Following the relaunch, that average increased to 2:37 second, a 64% increase.

Depth of visit measures the quality of the visit in terms of pageviews per session (p. 165, Kaushik). The 2016 fourth quarter average pageviews per session for new visitors was 1.89 pages. The site saw a 34% increase in this metric following the relaunch resulting in an average of 2.53 pageviews per session for new visitors.



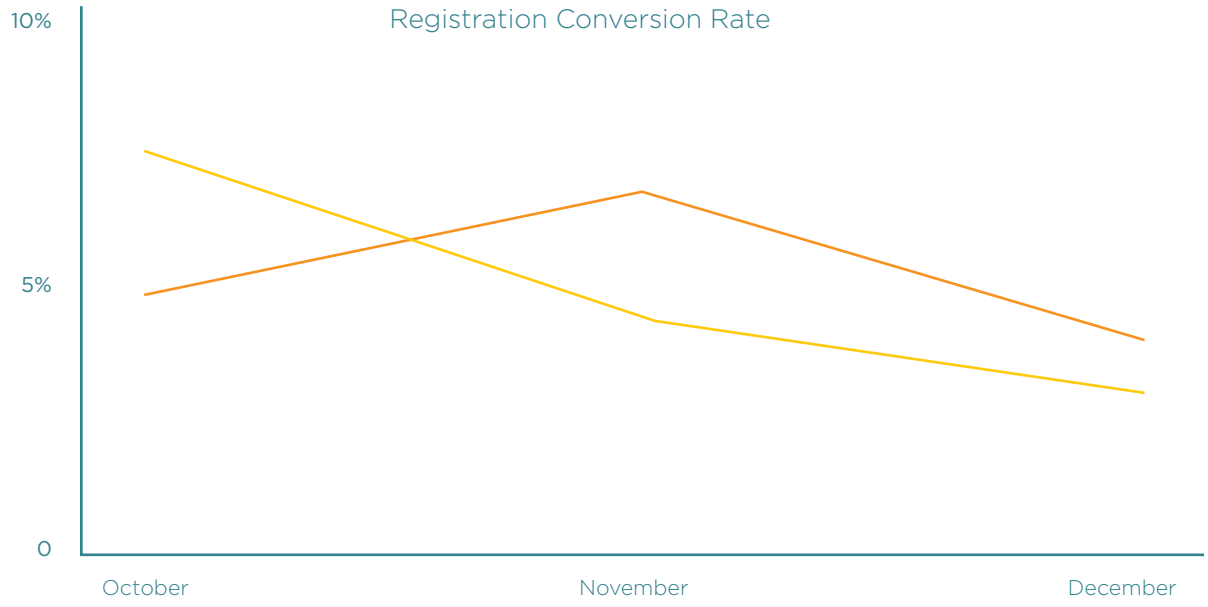




REGISTRATION CONVERSION RATE

Conversion rate is defined as the percent of visitors who complete a desired goal (wordstream.com, 2018). However, on Click2SciencePD.org visitors can only complete registration once. Therefore, conversions rate is calculated as a percent of new visitors who complete the registration process.

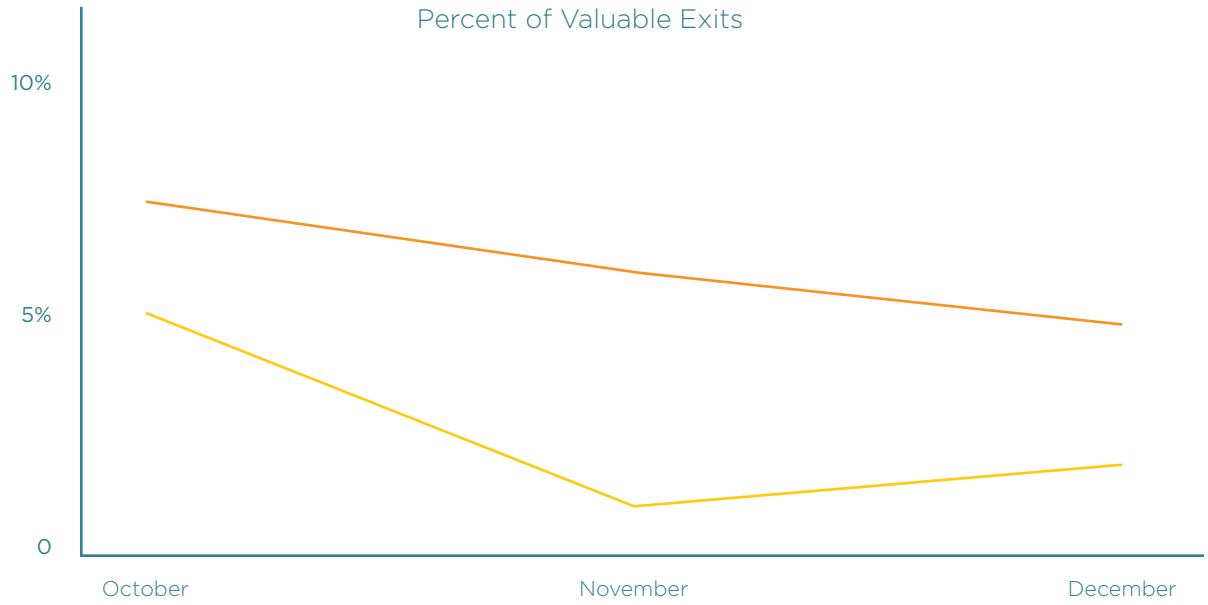
Following the relaunch the site has seen a 7.3% increase in registration conversions among new visitors.



WEB LESSON SALES

Web lesson data provided by Better Kid Care is limited and offers no insight into the source of customer traffic. However, using event tracking Click2Science can calculate the percent of valuable exits. Percent of valuable exits is the percentage of visitors who leave the website by clicking something of value to the organization (p. 151, Kaushik). For Click2Science this means the percent of all visitors who click on a link to go to Better Kid Care.

Data shows a 134% increase in the percent of valuable exits. This increase in valuable exits correlates with a 22% increase in web lesson sales.



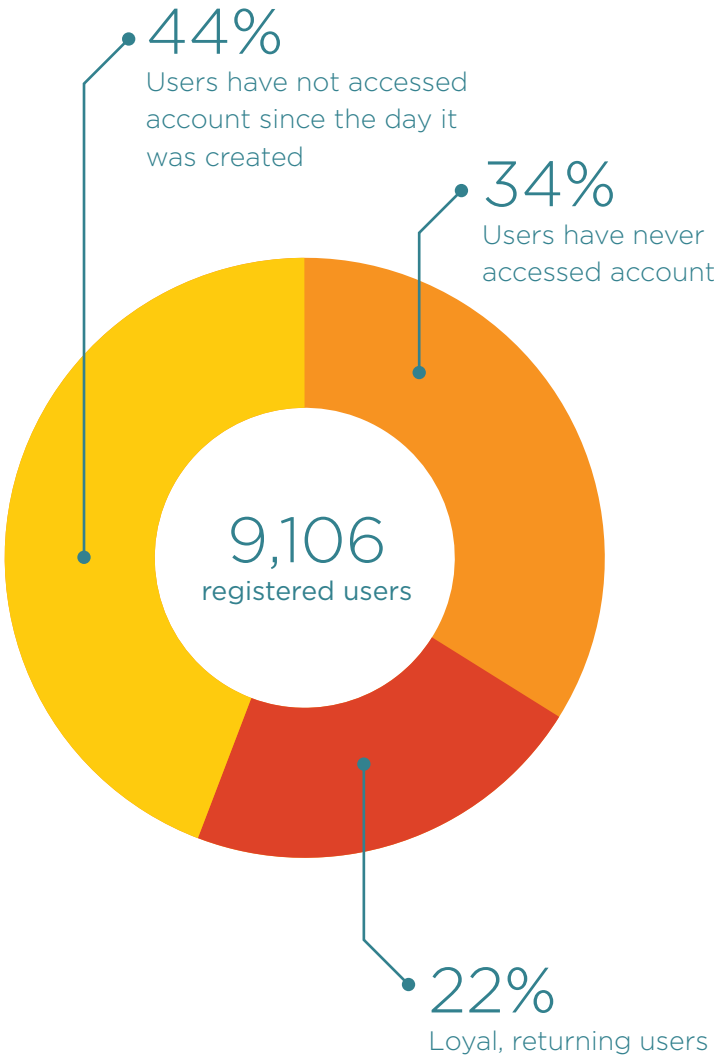
Next Steps

REGISTERED USER RECENCY

Previously Click2Science placed significant emphasis on increasing the number of registered users. However, no attention has been given to the recency of those users after they register. Visitor recency is a valuable customer behavior metric which represents how long it has been since a visitor last came to the site (p. 164, Kaushik). Registered user data was analyzed to gauge the recency of existing registered users finding that of the over 9,000 registered users:

- 44% have not accessed their account since the day it was created
- 34% have never accessed their account
- 22% are loyal, returning users

As a follow-up to the site relaunch Click2Science will initiate a re-engagement campaign. The campaign will target users who have not accessed their account in the 6 months since the site was relaunched. The campaign will include an email inviting users to explore the new and revamped resources, as well as the redesigned website.



BOUNCE RATE

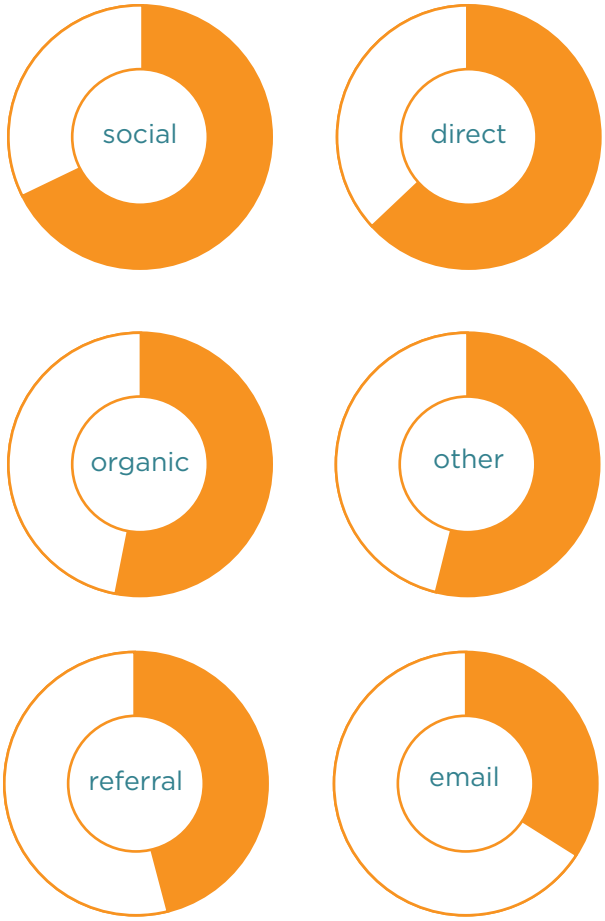
While the bounce rate among new visitors has decreased by 17%, the resulting average bounce rate of 63% is still high. Ideally, Click2Science would like to see less than 50% of new visitors bounce from the site immediately.

Comparing average overall bounce rates among acquisition channels during the fourth quarter of 2017 provides insight into the sources of high bouncing traffic.

- Social: 68%
- Direct: 63%
- Organic: 53%
- Other: 53%
- Referral: 46%
- Email: 34%

Additionally, social acquisitions saw a 42% increase in bounce rate from the fourth quarter of 2016 to the fourth quarter of 2017. This indicates that recent social media strategies may be less effective in driving high-quality traffic to Click2SciencePD.org. An additional social media analysis is required to identify specific causes and solutions for the high bouncing traffic.

2017 4th Quarter Bounce Rates



CUSTOMER FEEDBACK

Additional follow-up work is being planned in response to user-feedback and data indicated issues.

- The user-segmented pages have seen low traffic since the relaunch in comparison to all site traffic. User feedback has indicated a design flaw with the links to the user-segmented pages on the homepage suggesting the links are not obvious links to all users.
- User feedback has indicated mobile viewing issues in various locations across the website. Additional attention will be contributed to improving the overall mobile responsiveness of the site.

I want to improve my own STEM facilitation skills.

I want to improve my own STEM facilitation skills.

I want to help my staff or volunteers improve their STEM facilitation skills.

I want to improve my overall program quality.

SURVEY

A site-level survey will be administered to registered users during the 2nd quarter of 2018 in order to identify additional areas in need of attention, as well as to gauge user's qualitative reactions to the new website.

Resources

Kaushik, A. (2010). Web Analytics 2.0: The Art of Online Accountability & Science of Customer Centricity. Indianapolis. IN: Wiley.

Usability.gov (2018). User-Centered Design Basics | Usability.gov. [online] Available at: https://usability.gov/what-and-why/user-centered-design.html [Accessed 18 Feb 2018].

WordStream.com (2018). Conversion Rate: What Is a Conversion Rate? | WordStream. [online] Wordstream.com. Available at: https://www.wordstream.com/conversion-rate [Accessed 25 Feb. 2018].