Google Analytics 101
UNC Webmasters, April 7, 2016
Rachell Underhill, Web & Information Manager,
The Graduate School at UNC-CH
What will be covered today

• Should I use Google Analytics?
  • Yes!

• What are some things I can do with Google Analytics?
Google Analytics at The Graduate School

My experience:

• I started using Google Analytics in 2007
• Only one user
• Various hurdles in achieving desired configuration
• Regularly tweaking strategy/configuration
Show of hands:

• Regular users?

• Have it installed, but rarely or never check?

• Don’t even know where to begin?

• WordPress? Other platform?
What questions can analytics answer?

- What…..?
- Which…..?
- Where…..?
- How many…..?
What questions can analytics answer?

- How many people are visiting our website?
- Which pages on the website are the most popular?
- What content should have more prominence on the site?
- Which of two design alternatives has better results?
- What is the best time of day for website outages?
What questions can analytics answer?

- Which browser/operating systems/mobile devices should be supported?
- How many visitors are international and what language do they speak?
- How many website visitors are using mobile devices?
- What other websites send traffic to our website?
- Which pages are the slowest to load and how can I speed them up?
What else can analytics do?

- Report 404 pages and broken internal and external links
- Report user’s search terms (internal and external)
- Track custom goal completions
- Measure campaign performance
- Generate and send automatic reports to your boss
What questions can analytics not answer?

- Why……?
- GA cannot provide precise data on every visitor
  - Noscript/js turned off
  - Cookies get deleted
  - Best for trends, not exact numbers
- Problems with usability or poor content
- GA is one source of data, but other methods may be more appropriate to directly answer these questions (user observations, usability testing, surveys, etc).
Installing Google Analytics

• Tied to an individual’s Google account
  • Make sure you have planned for long-term management of the account
  • Can grant edit or view permissions to other users
• Install using WordPress or insert directly into head of HTML pages
• Alternative: Use Google Tag Manager

• Google Tag Assistant (chrome extension) can help debug installation
Installing Google Analytics

- Make sure you are using Universal Analytics (analytics.js), not Classic Analytics (ga.js)
What does Google Analytics look like?

```html
<script>
(function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
(i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
}(window,document,'script','//www.google-analytics.com/analytics.js','ga'));

ga('create', 'UA-xxxxxxx-1', 'auto');
ga('send', 'pageview');
</script>
```
Is Google Analytics already installed?

- Open browser developer tools
  [CTRL + SHIFT + I] or [COMMAND + OPTION+ I]
- Go to Network tab and refresh page
- Look for `analytics.js` or `ga.js`
- If you see a `ga.js`, you should update your settings
Is Google Analytics Installed?
Is Google Analytics Installed?
Google Tag Assistant (chrome extension)

- Chrome extension that helps debug your tracking code
Is Google Analytics Installed?

If your site is part of sites.unc.edu or web.unc.edu, you might see two tracking codes:

1. Tracking code for entire network
   - UA-5142490-28 (web.unc.edu)
   - UA-32420241-1 (sites.unc.edu)

2. Tracking code for just your site (if installed)
Setup analytics account

• Account → Property → View

• Views
  • Views changes are permanent, duplicate view before changing
    • One master view with all data
    • One with **internal users filtered out**
    • Any other ways you want to break out data
Campaign Tagging
Google Analytics Campaign Tags

Trace the actual source of “Direct Traffic”

<table>
<thead>
<tr>
<th>Source Medium</th>
<th>Acquisition</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sessions</td>
<td>% New Sessions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% of Total</td>
</tr>
<tr>
<td>google / organic</td>
<td>29,686 (48.32%)</td>
<td>64.63%</td>
</tr>
<tr>
<td>unc.edu / referral</td>
<td>11,795 (19.08%)</td>
<td>65.65%</td>
</tr>
<tr>
<td>(direct) / (none)</td>
<td>6,592 (11.29%)</td>
<td>64.27%</td>
</tr>
<tr>
<td>admissions.unc.edu / referral</td>
<td>1,820 (2.94%)</td>
<td>68.30%</td>
</tr>
<tr>
<td>bing / organic</td>
<td>1,504 (2.43%)</td>
<td>74.00%</td>
</tr>
<tr>
<td>yahoo / organic</td>
<td>881 (1.44%)</td>
<td>74.23%</td>
</tr>
<tr>
<td>sph.unc.edu / referral</td>
<td>775 (1.29%)</td>
<td>39.55%</td>
</tr>
<tr>
<td>stat-e.unc.edu / referral</td>
<td>729 (1.18%)</td>
<td>25.10%</td>
</tr>
</tbody>
</table>
What is “Direct Traffic”?

- Typed URL into browser
- Bookmarks
- Links in PDF or Word Doc
- Links in desktop email programs
- Links from mobile social media apps
- Some URL shorteners
- HTTP to HTTPS links
Google Analytics Campaign Tags

Google Analytics URL Tagging

Create a URL with special tags for tracking purposes:
- Campaign Source
- Campaign Medium
- Campaign Name
Campaigns: URLs

http://gradschool.unc.edu/?utm_source=alumni&utm_medium=email&utm_campaign=news_fall16

http://gradschool.unc.edu/?utm_source=medschoolupdate&utm_medium=twitter&utm_campaign=socialmediaeffort
Campaigns: URL Builder

Tool: URL Builder

Google Analytics URL Builder

Use this tool to create URLs for your custom campaigns. Fill in the form information and click the Generate URL button below.

Step 1: Enter the URL of your website.

Website URL: * http://gradschool.unc.edu/
(e.g., http://www.urchin.com/download.html)

Step 2: Fill in the fields below. Campaign Source, Campaign Medium and Campaign Name should always be used.

Campaign Source: * alumni (referer: google, citysearch, newsletter4)
Campaign Medium: * email (marketing medium: cpc, banner, email)
Campaign Term: (identify the paid keywords)
Campaign Content: (use to differentiate ads)
Campaign Name*: news_fall11 (product, promo code, or slogan)

Step 3

Generate URL Clear

http://gradschool.unc.edu/?utm_source=alumni&utm_medium=email&utm_
Use URL shortener or 301 redirection

http://gradschool.unc.edu/?utm_source=alumni&utm_medium=email&utm_campaign=news_fall16

http://go.unc.edu/Ps79N

• Use this shortcut link in communications/social media/print advertising
Use embedded link

http://gradschool.unc.edu/?utm_source=alumni&utm_medium=email&utm_campaign=news_fall16

This is a link in social media or HTML email
Google Analytics Campaign Tags

Marketing/communications/advertising strategies

Money + Effort + Time = ?????
Google Analytics Campaign Tags

Case study: Measure and compare effectiveness of communication methods for academic program

Communication efforts:
• Marketing emails
• Paid advertising on Google and LinkedIn
• Display ads on CH-Transit and on campus digital display screens
# Google Analytics Campaign Tags

Measure effectiveness of campaigns/communications

<table>
<thead>
<tr>
<th>Medium</th>
<th>Sessions</th>
<th>Pages / Session</th>
<th>Avg. Session Duration</th>
<th>% New Sessions</th>
<th>Bounce Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>email</td>
<td>52 (1.1%)</td>
<td>3.01</td>
<td>00:02:28</td>
<td>69.63%</td>
<td>54.93%</td>
</tr>
<tr>
<td>organic</td>
<td>909 (10.02%)</td>
<td>3.15</td>
<td>00:03:07</td>
<td>53.36%</td>
<td>48.96%</td>
</tr>
<tr>
<td>referral</td>
<td>1,415 (30.96%)</td>
<td>3.73</td>
<td>00:03:02</td>
<td>73.71%</td>
<td>39.93%</td>
</tr>
<tr>
<td>(none)</td>
<td>1,299 (20.42%)</td>
<td>3.22</td>
<td>00:02:44</td>
<td>67.13%</td>
<td>56.81%</td>
</tr>
<tr>
<td>display</td>
<td>148 (3.24%)</td>
<td>1.91</td>
<td>00:01:05</td>
<td>73.66%</td>
<td>64.86%</td>
</tr>
<tr>
<td>cpc</td>
<td>748 (18.36%)</td>
<td>1.36</td>
<td>00:00:24</td>
<td>87.17%</td>
<td>86.10%</td>
</tr>
</tbody>
</table>

- email = emails sent to GRE search service
- display = physical ads, digital signage or bus ads
- cpc = paid ads in Google and LinkedIn
- organic = regular (unpaid) search traffic

Rows 1-6 of 6
Custom Segments
Custom audience segments

• Repeat visitors vs. first-timers
• Mobile vs. Desktop vs. Laptop
• Locations
• Technologies
• Types of visitors
• Visits from specific campaigns
  • Email vs. printed postcard
Custom audience segments
Custom audience segments

- Non-destructive filters
- Can be used to compare groups together
- Can combine criteria
  - On-campus visits from Android devices
  - Visits from China using IE9
Annotations
Annotations

Mark important events which can affect metrics
• Publications, communications, media mentions
• Changes to analytics code
• Campaign events
• Departmental or campus events
• Changes to technology (search provider, cms)
Annotations
Annotations
Annotations
Annotations
Annotations

- Apr 7, 2010: Installed new async code
- Apr 13, 2010: Update to GSA with new keytaches
- Apr 15, 2010: Added analytics to Woeae- interesting place pages
- May 14, 2010: Added GA code to more pages and removed old code
Tracking 404s
Tracking 404 Errors

- Helps identify broken links on OTHER websites that point to your site
Tracking 404 Errors
404 Dashboard Widget
My Dashboard Display

**Search Term**

<table>
<thead>
<tr>
<th>Search Term</th>
<th>Total Unique Searches</th>
<th>Results</th>
<th>Pages / Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>fiction</td>
<td>116</td>
<td>2.78</td>
<td></td>
</tr>
<tr>
<td>urban</td>
<td>79</td>
<td>2.08</td>
<td></td>
</tr>
<tr>
<td>physical</td>
<td>60</td>
<td>2.27</td>
<td></td>
</tr>
<tr>
<td>psychology</td>
<td>58</td>
<td>2.31</td>
<td></td>
</tr>
<tr>
<td>accounting</td>
<td>57</td>
<td>2.37</td>
<td></td>
</tr>
<tr>
<td>mba</td>
<td>44</td>
<td>2.48</td>
<td></td>
</tr>
<tr>
<td>chemistry</td>
<td>36</td>
<td>2.83</td>
<td></td>
</tr>
<tr>
<td>MBA</td>
<td>30</td>
<td>2.10</td>
<td></td>
</tr>
<tr>
<td>autiology</td>
<td>24</td>
<td>2.21</td>
<td></td>
</tr>
<tr>
<td>statistics</td>
<td>33</td>
<td>2.70</td>
<td></td>
</tr>
</tbody>
</table>

**Event Label**

<table>
<thead>
<tr>
<th>Event Action</th>
<th>Total Events</th>
<th>Unique Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology</td>
<td>3,087</td>
<td>3,026</td>
</tr>
<tr>
<td>Biological &amp; Biomedical Sciences</td>
<td>2,761</td>
<td>2,229</td>
</tr>
<tr>
<td>Business Administration</td>
<td>2,283</td>
<td>1,822</td>
</tr>
<tr>
<td>Speech &amp; Hearing Sciences</td>
<td>1,914</td>
<td>1,294</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1,709</td>
<td>1,954</td>
</tr>
<tr>
<td>Computer Sciences</td>
<td>1,493</td>
<td>1,211</td>
</tr>
<tr>
<td>History</td>
<td>1,418</td>
<td>1,172</td>
</tr>
<tr>
<td>Health Behavior</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

**Total Visitors**

- /programs/degrees/index.html: 38,067
- /index.html: 31,562
- /admissions/instructions.html: 21,849
- /programs/index.html: 12,254
- /admissions/index.html: 11,607
- /admissions/deadlines.html: 9,831
- Funding guide index.html: 6,344
- Admissions index.html: 6,211
- Student Salaries.html: 4,493
- Admissions Average scores.html: 4,203

**404 Pages**

<table>
<thead>
<tr>
<th>Page Path</th>
<th>Pages</th>
<th>Unique Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>programs/lastframe.html</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>admissions/instructions.html/001vURL/ShellCommand</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>/facultyprofile.html</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>deadlines.html</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>/programGuide_001.pdf</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Funding transportation.html</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>/researchcomm/0150559.pdf</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>contactdomain.html</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

**Visits**

- Total Visits: 130,818

**Goal Completions**

- Goal 1
- Goal 2

**Timeline**

- Timeline Data
Tips

• Beware of referral spam
  • Can be reduced with “valid hostname filter” and spam filter
  • See resource list at end of presentation

• Make sure analytics code is on EVERY page
Google Analytics 201.....

- Tracking on-page events
  - Slideshow usage
  - Did user watch entire video?
  - Did user download pdf?
  - Did user interact with footer links or sidebar?

- Create custom reports
- Custom dashboards
- Autotracker add-on
- Debugging analytics configuration
Google Analytics 201.....

- Setting and tracking goals in GA
- Internal site search analysis
  - Adjusting search results for key terms
  - Understanding the language of users
- Measuring SEO effectiveness
- Tracking form completions
- Tracking purchases/donations/registrations
  - Can connect revenue in GA
Resources

- Google Tag Assistant
- Google Analytics URL builder
- Definitive Guide To Campaign Tagging in Google Analytics (Annielytics)
- Definitive Guide to Removing Google Analytics Spam (Analytics Edge)
- Higher Ed Analytics Blog
- Occam’s Razor by Google's Avinash Kaushik
- Google Analytics Training from Lynda.com (free for UNC employees)
Questions? Comments?

What do you want to learn to do with Google Analytics data?

Contact me:
Rachell Underhill
runderhill@unc.edu
@rmunde