Data Report 8
Review 2017

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SUMMARY

This report looks at the main data points of Saylor Academy in 2017. In particular, in this report, we investigate traffic, registrations, enrollments, and completions via inter- and intra-year comparisons.

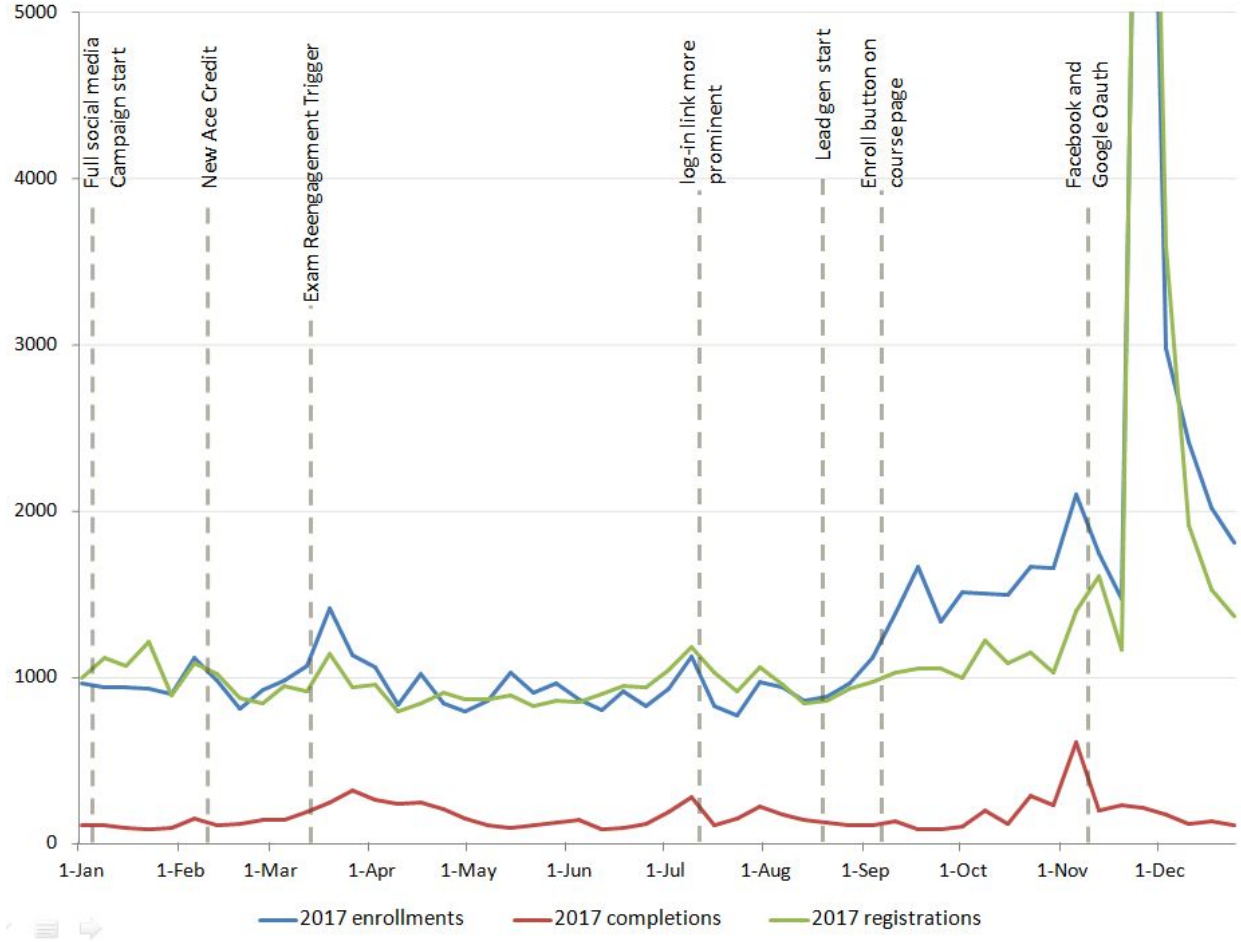
INTRODUCTION

Saylor has experienced tremendous growth in the last year. Compared to 2016, Saylor had the following numbers in 2017:

	Overall 2017	Per month 2017	Per month 2016
Registrations	64,576	5,381 (+35%)	3,990
Enrollments	70,744	5,895 (+46%)	4,041
Completions	8,625	719 (+41%)	509

*due to a large data dump at the beginning of 2016, we could not obtain numbers for the whole of 2016. The numbers are based on the 7-month period of June 2016 to December 2016

We can examine these numbers in greater detail to understand their source. To begin, let's look at these metrics in chart form and compare them to major events.



The first thing that is worth mentioning is the November super-spike. No one at Saylor was able to explain its cause, but it had a large effect on both registrations and enrollments. This event might make Q1 of 2018 compare unfavorably to Q4 2017. In addition to that spike, the two singular events that mark major changes in site activity, particularly compared to 2016, are changing the enroll button and providing oauth through Google and Facebook. We'll examine these two events later in greater detail.

TRAFFIC

We used a different id for tracking data on Google Analytics before March 2017. Therefore, to ensure consistency, we will compare numbers over the 5-month period from March to July 2017 to those over the 5-month period of August to December 2017.

Traffic Sources by Sessions

Traffic	March to July	August to December	% Change
Google / organic	316432	407399	28.7%
(direct) / (none)	312049	346984	11.2%
Facebook / social	82580	360129	336.1%
homepage / cta	98676	126254	27.9%
google / cpc	58677	63111	7.6%
lm.facebook.com / referral	29366	1873	-93.6%
m.facebook.com / referral	15806	15666	-0.9%
bing / organic	13486	14336	6.3%
yahoo / organic	7670	6998	-8.8%
accounts.google.com / referral	0	14,647	NA
facebook.com / referral	5445	7100	30.4%
moodle.straighterline.com / referral	8514	2941	-65.5%
l.facebook.com / referral	4975	6589	32.4%
sayloracademy.zendesk.com / referral	5646	3932	-30.4%
mail.google.com / referral	3373	4543	34.7%
Other	74414	83416	12.1%
Total	1037110	1465918	41.3%

Direct indicates visitors who visited the site by typing the URL directly into their browser. It can also refer to the visitors who clicked on the links from their bookmarks/favorites, untagged links within emails, or links from documents that don't include tracking variables (such as PDFs or Word documents). Referrals refer to visitors referred by links on other websites. Lastly, organic includes visitors referred by an unpaid search engine listing, e.g. a Google.com search. Our growth can be mainly attributed to our growth in Facebook outreach and our use of Facebook oauth, so we should try to mimic or build off the Facebook campaign choices we've made within the last 5 months. To a lesser extent, organic traffic, direct traffic, and referrals from accounts.google.com (likely related to Google oauth) constitute other contributors to growth.

Browsers by Sessions

Browser	March to July	August to December	% Change
Chrome	541,755	674,699	24.5%
Android Webview	109,243	327,752	200.0%
Safari	124,274	154,903	24.6%
Firefox	83,984	96,411	14.8%
Internet Explorer	43,456	39,451	-9.2%
Edge	22,417	37,021	65.1%
Opera Mini	38,802	33,864	-12.7%
Opera	16,217	20,692	27.6%
Safari (in-app)	6,178	17,706	186.6%

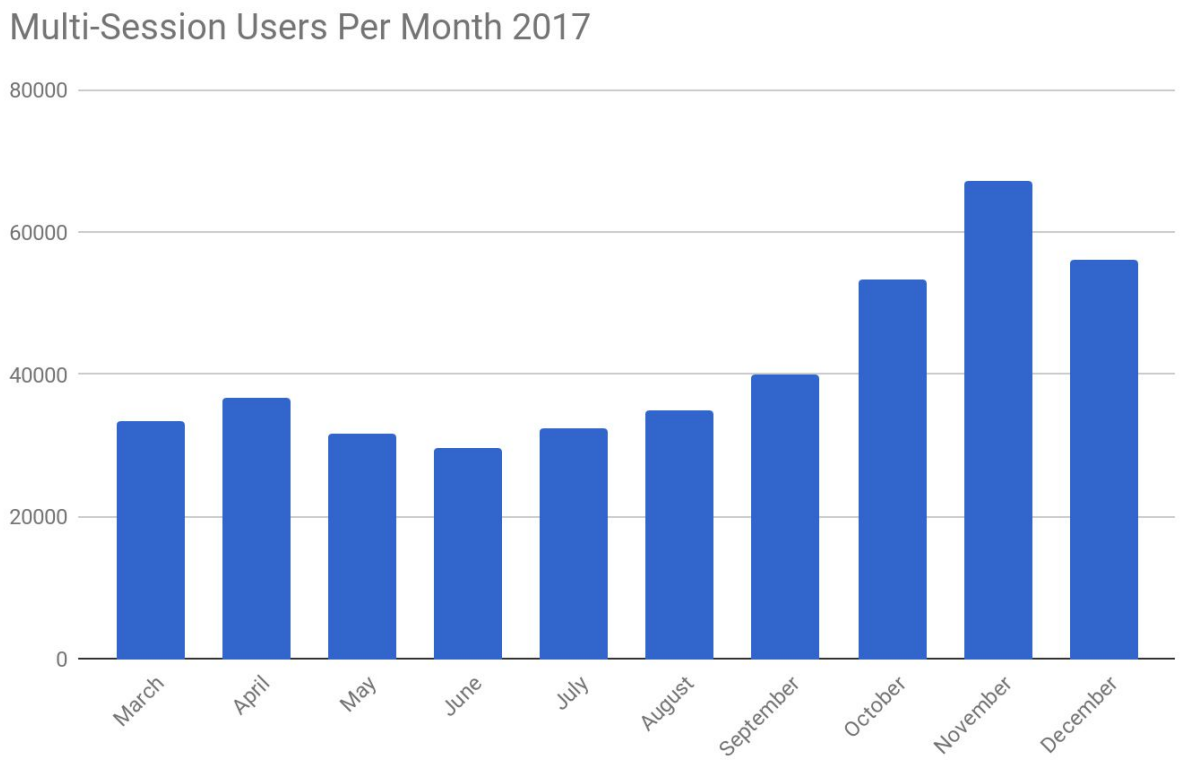
We've seen a large increase in browsers on mobile devices in the last 5 months, particularly Android Webview. Therefore, we should particularly focus on ensuring our mobile product is highly usable.

Country by Sessions

Location	March to July	August to December	% Change
United States	387,759	431,485	11.3%
Sri Lanka	5,630	198,802	3431.1%
India	87,430	113,926	30.3%
Bangladesh	67,069	52,166	-22.2%
Philippines	30,660	37,714	23.0%
Nigeria	33,815	36,482	7.9%
Morocco	4,928	50,664	928.1%
Pakistan	18,391	37,174	102.1%
Nepal	29,087	26,770	-8.0%
Egypt	24,403	27,466	12.6%

While the United States has seen steady growth, our greatest spikes occurred outside North America, particularly Sri Lanka, Morocco, and Pakistan.

In addition, as a preliminary indicator of user buy-in beyond our typical metics of registrations, enrollments, and completions, it is is worthwhile to look at multi-session users.



Over the 5-month period of March to July, we averaged 32,716 multi-session users, whereas from August to December, we averaged 50,224 multi-session users. That represents an increase of 54%, which is above and beyond our 41% increase in traffic overall. This finding indicates that in addition to the number of people visiting the site, we've also seen an increase in the amount of returning users. That is, both engagement and reach have increased. Note, however, that this increase in multi-session users is above the corresponding increases in registrations, enrollments, and completions, so we have yet to translate that increase in engagement into increases in our traditional metrics.

Lastly for traffic is a list of the top courses by sessions.[1]

Top 15 Courses

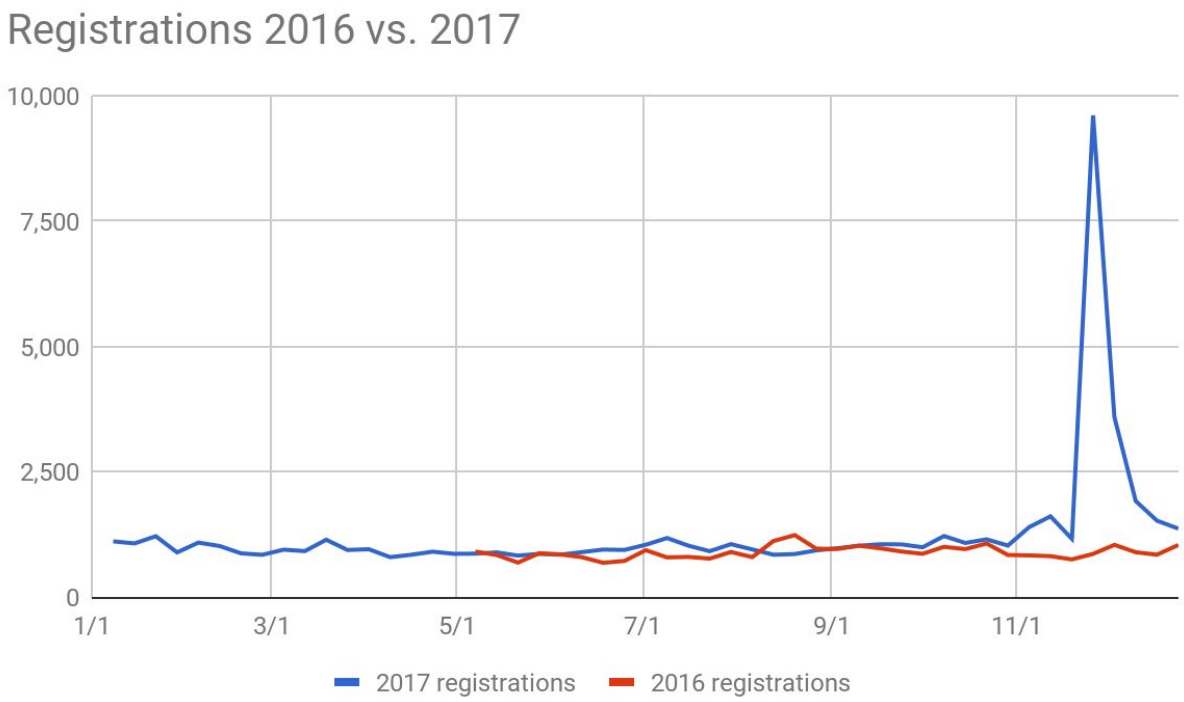
Course	Sessions
CS101	121,184
ENGL000	105,572
BUS203	88,447
BUS101	85,115
COMM001	83,589
BIO101	76,640
PSYCH101	73,862
ARTH101	71,771
CS305	68,684
BUS206	67,119
BIO307	65,534
ECON101	63,724
RWM103	63,595
POLSC101	62,444
PHYS102	56,979

Bottom 15 Courses

Course	Sessions
POLSC402	3855
CS408	4304
ECON202	4840
POLSC401	5393
PRSM107	5979
MA101	6147
ECON201	6570
SALES103	6654
POLSC201	7036
CS409	7235
PRDV251	7557
CS304	7711
K12MATH014	7803
MA111	7824
PHIL304	7843

[1] The following is the regular expression on GA used to select course pages: ^learn\.saylor\.org\/course\/view\.php\?id\=...$ | ^learn\.saylor\.org\/course\/view\.php\?id\=..$ | ^learn\.saylor\.org\/course\/view\.php\?id\=.$

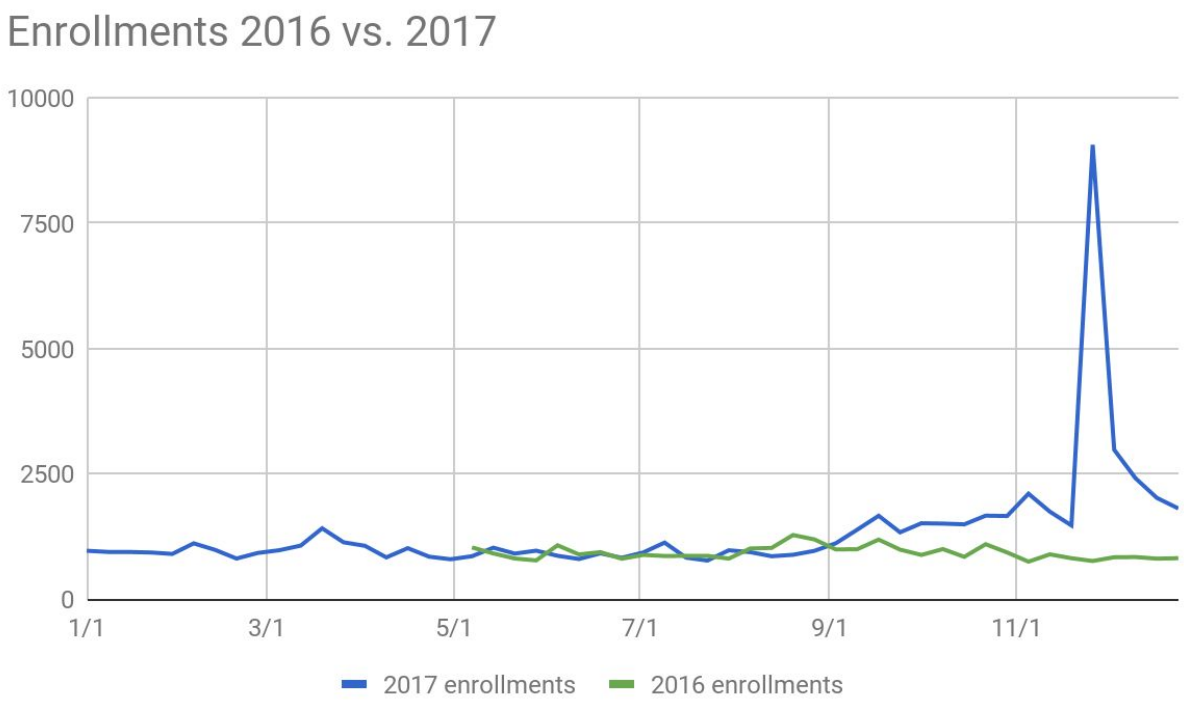
REGISTRATIONS



Registrations separated from the 2016 trend near the beginning of November. This coincides with the implementation of oauth for Facebook and Google. As mentioned earlier, registrations were highly affected by the November super-spike, but there is reason to believe that oauth has created a new ceiling for this number.

ENROLLMENTS

Overall



Again, enrollments were affected by the super-spike, but it is worth mentioning that enrollments have separated from 2016 numbers since September, which coincides with the addition of the enrollment button and the introduction of leadgen.

By Course

Top 15 Courses

Course	Enrollments
CS101: Introduction to Computer Science I	4440
ENGL000: Pre-College English	4403
BUS101: Introduction to Business	3125
PSYCH101: Introduction to Psychology	1893
MA001: College Algebra	1609
BUS206: Management Information Systems	1591

BIO101: Introduction to Mol. and Cell. Biology	1520
ENGL001: English Composition I	1354
CS305: Web Development	1350
ECON101: Principles of Microeconomics	1335
CHEM101: General Chemistry I	1327
BUS103: Introduction to Financial Accounting	1316
CS402: Comp. Comm. and Networks	1273
CS107: C++ Programming	1254
CS301: Computer Architecture	1216

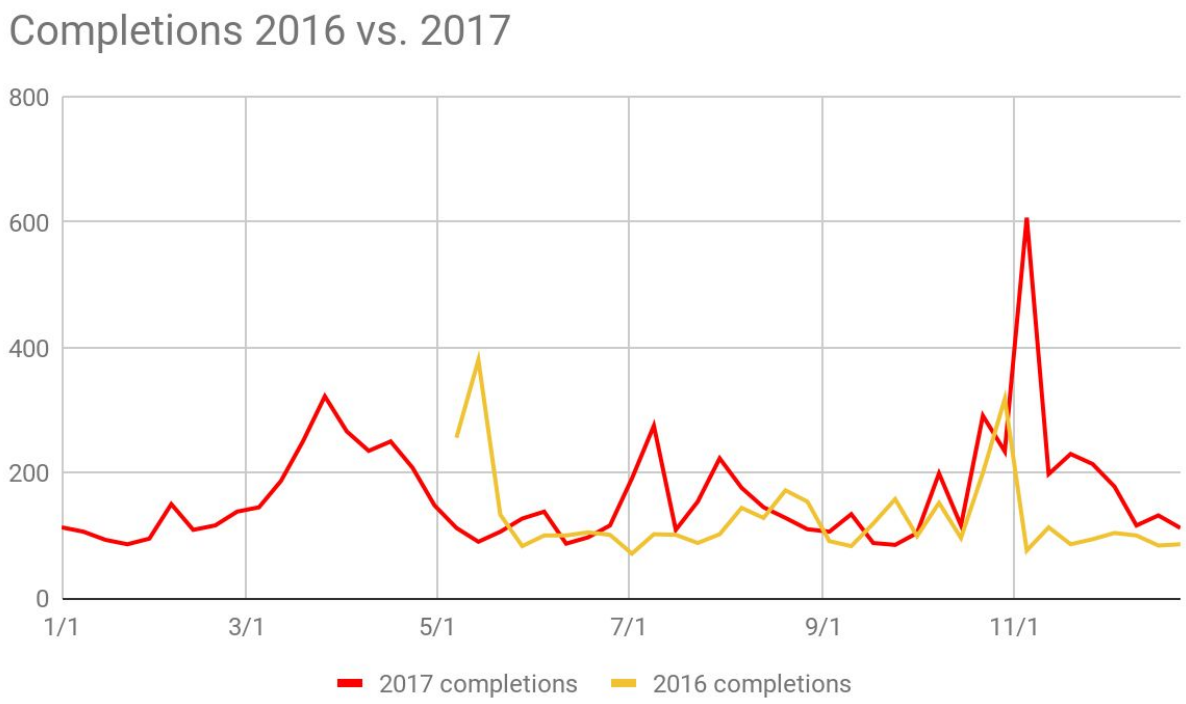
Bottom 15 Courses

Course	**Enrollments**
Saylor101: Saylor Course Development	72
HIST363: Global Persp. on Industrialization	98
ECON202: Intermediate Macroeconomics	108
POLSC402: Global Justice	145
ECON201: Intermediate Microeconomics	159
POLSC401: Ethics and Public Policy	166
SALES103: Public Speaking for Sales	177
PRSM107: Crisis Communication	179
MA101: Single-Variable Calculus I	180
CS408: Advanced Artificial Intelligence	189
MA111: Intro. to Mathematical Reasoning	195
HIST362: Modern Revolutions	198
ENGL405: The American Renaissance	200

K12MATH014: Advanced Statistics	233
PHIL304: Existentialism	237

COMPLETIONS

Overall



Unlike registrations and completions, there is not a clear point where we depart from 2016 numbers. There appeared to be something in the beginning of November (unrelated to and coming before the super-spike), but we' have more or less returned to the same trend since then. In 2018, we need to think of simple solutions for increasing completions equivalent to oauth for registrations and the enrollment button for enrollments, as well as more involved solutions.

By Course

Top 15 Courses

Course Name	Completions
BUS206: Management Information Systems	824
BUS303: Strategic Information Technology	493
PRDV104: Professional Etiquette	487
CS301: Computer Architecture	431
Saylor001: Intro. to Learning on SA	243
CS401: Operating Systems	232
CS101: Introduction to Computer Science I	230
CS403: Intro. to Modern Database Systems	229
MA001: College Algebra	224
PRDV103: Interviewing Skills	219
PRDV004: Spreadsheets	212
BUS203: Principles of Marketing	186
CUST105: Customer Service	179
BUS205: Business Law and Ethics	167
CS410: Advanced Databases	167

Bottom 15 Courses

Course Name	Completions
K12MATH013: Calculus AB	4
CS404: Programming Languages	4
MA101: Single-Variable Calculus I	5
MA111: Intro. to Mathematical Reasoning	7
ECON202: Intermediate Macroeconomics	7

K12MATH014: Advanced Statistics	9
SALES103: Public Speaking for Sales	9
ECON307: International Trade	9
PHYS102: Introduction to Electromagnetism	10
COMM101: Public Speaking	10
ENGL405: The American Renaissance	10
POLSC201: Intro. to West. Political Thought	10
CS408: Advanced Artificial Intelligence	12
ECON201: Intermediate Microeconomics	13
PHYS101: Introduction to Mechanics	14

MONETARY IMPACT

Based on my projections from Data Report 3, a Saylor course completion will net a student approximately $2,683.57 over ten years. That means 8,316 completions (all completions for 2017 less Try Saylor and Saylor 001) would translate into $22,316,568. This is likely a generous interpretation of our impact, and Devon has provided a more conservative estimate based solely on direct credit transfer (Saylor direct, FinishLine, and TECEP). His low- and high-end estimates put the savings at $649,418 and $813,238.00, respectively, for 2017.

CONCLUSIONS

1. Unlike registrations and enrollments, completions in 2017 were on trend with completions in 2016, so we should all consider strategies that will push students to the finish line.
2. The fact that two or three small changes (enrollment button, oauth, Facebook campaign) so drastically changed our site performance suggests that there is more low-hanging fruit out there and we should consider a strategy of implementing small (technical) changes that take little time (e.g., plug-ins that already exist), as opposed to large changes that take more time.
3. At this point, registrations and enrollments more or less coincide with traffic to the site overall, which suggests that we may have surpassed any bottlenecks relating specifically to those two metrics. Note that improving the website overall could still

improve all of those numbers, so we should essentially focus on improving the site overall and implementing changes to the post-enrollment course-taking experience.

4. We should try to replicate our most successful courses. The education team will know better than I do what makes these courses successful, but they appear to be technical, BUS or CS, mid-level, and/or PRDV related.
5. Although our target audience depends on how we define our niche as an organization, there is incredible opportunity for growth outside of the United States and on mobile devices.
6. We should continue to diversify our portfolio of Facebook outreach.