

Using Analytics To Deliver Engaging Courses

Stewart Rogers
VP, Products
Lambda Solutions





Stewart Rogers
VP, Products

ZOLA
ANALYTICS





Stewart Rogers
VP, Products

ZOLA
ANALYTICS





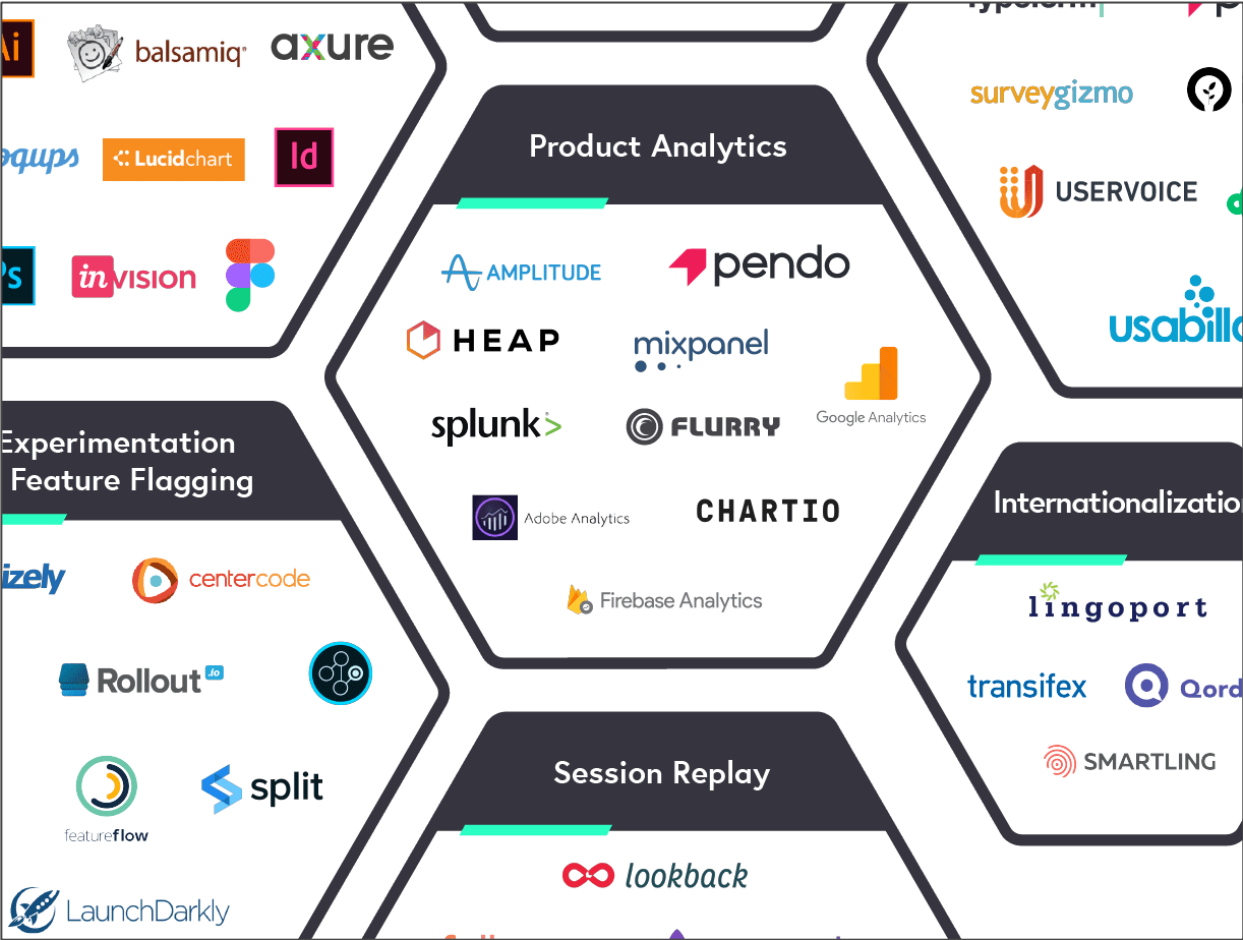
Stewart Rogers
DX Technologist

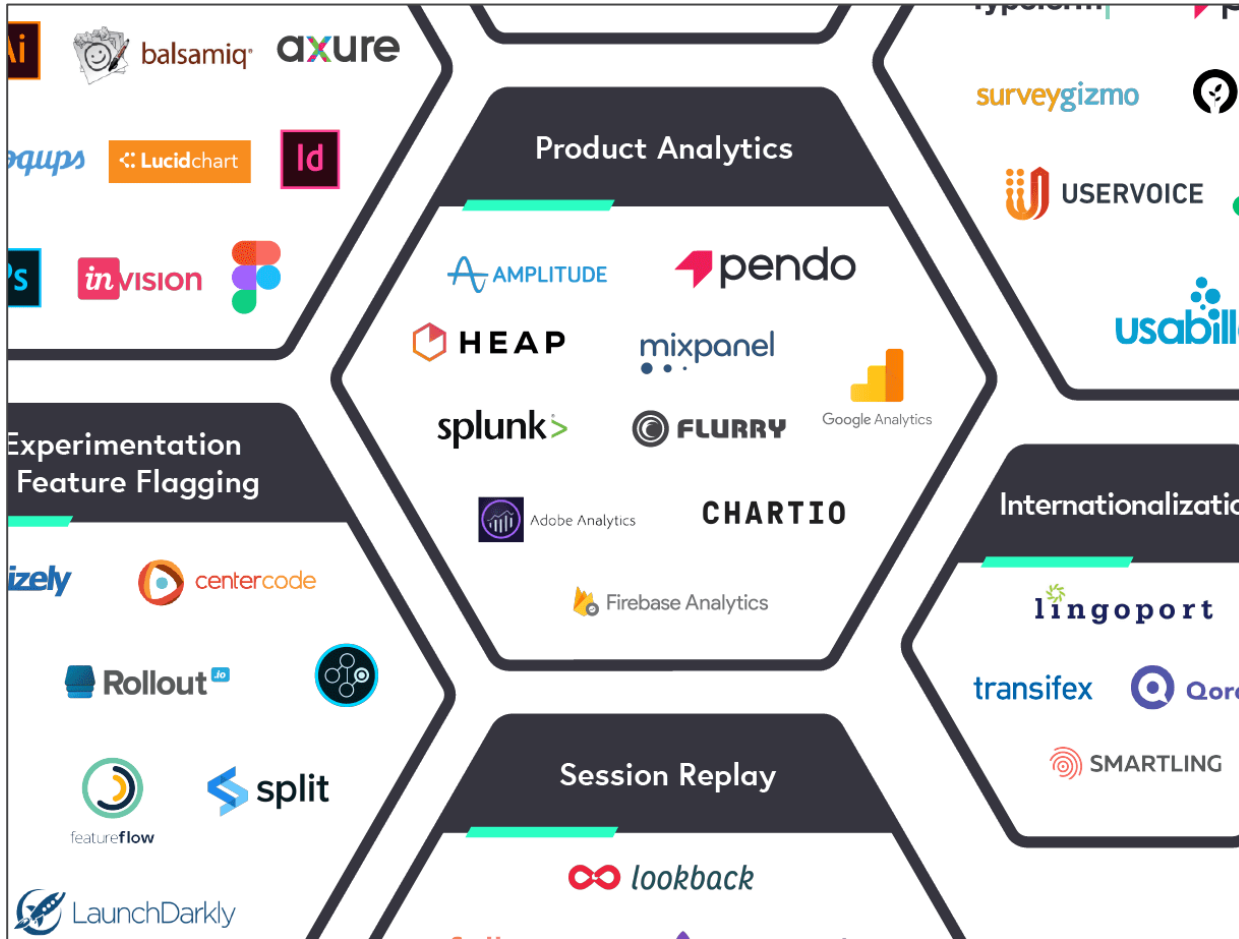
Data eXperience

ZOOOLA
ANALYTICS



my world





my world



using analytics to deliver engaging courses

agenda

- What is Course Engagement?
- Why is Course Engagement Important?
- How do you measure Course Engagement?

CALVIN AND HOBBS

by Bill Watterson



which lms are you using? (poll)

- Moodle
- Totara
- Cornerstone OnDemand
- SumTotal Systems
- Other



are you measuring engagement? (poll)

- Yes
- No



are you measuring engagement? (poll)

- Yes
- No



What indicators do you believe best measure course engagement?



what blocks you from measuring engagement?

24% Access to data

34% Insufficient analytical skills

30% Inadequate reporting and analytics software

12% Nothing



measuring customer feedback

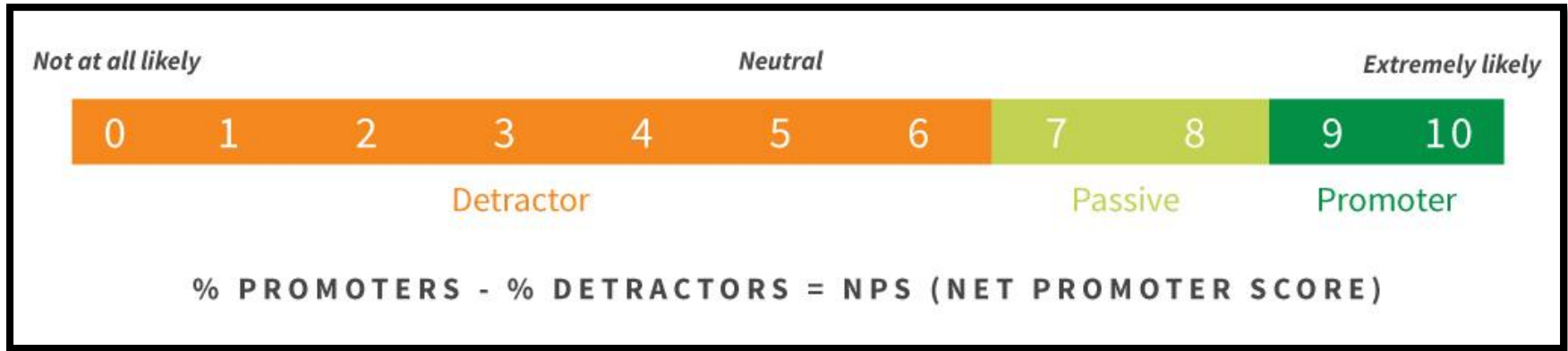
engagement: collecting feedback

- **Reaction** - The degree to which participants find the training favorable, engaging and relevant to their jobs.
- **Strategies** - Something measurable and something actionable.
- **Measurable** - Scales, ratings, emojis, NPS
- **Actionable** - Open-ended text to written feedback



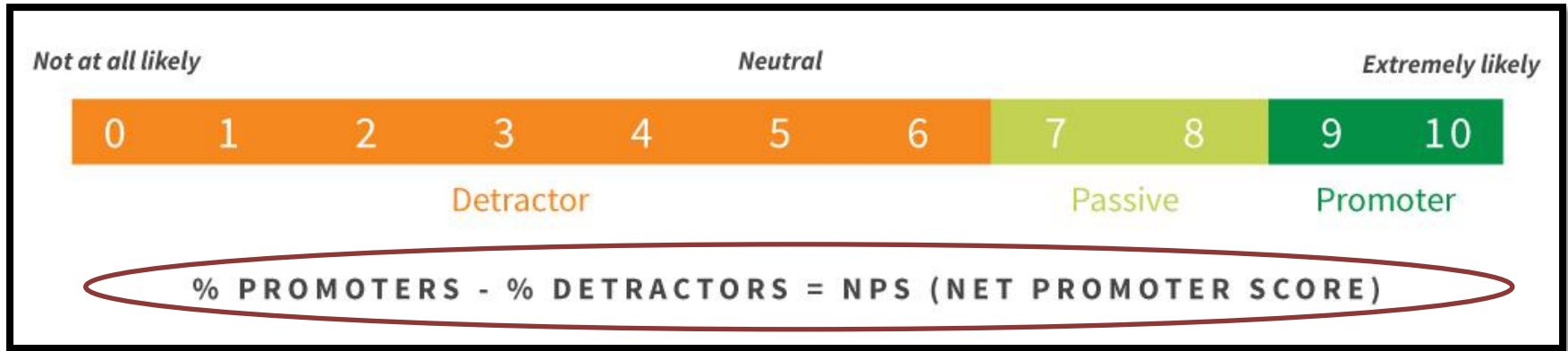
engagement: net promoter score (nps)

How likely is it that you would recommend this course to a colleague?



engagement: net promoter score (nps)

How likely is it that you would recommend this course to a colleague?



engagement: net promoter score (nps)

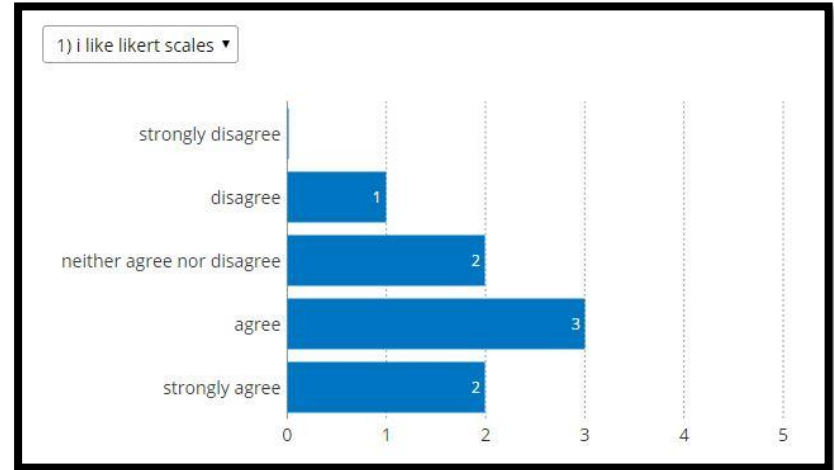
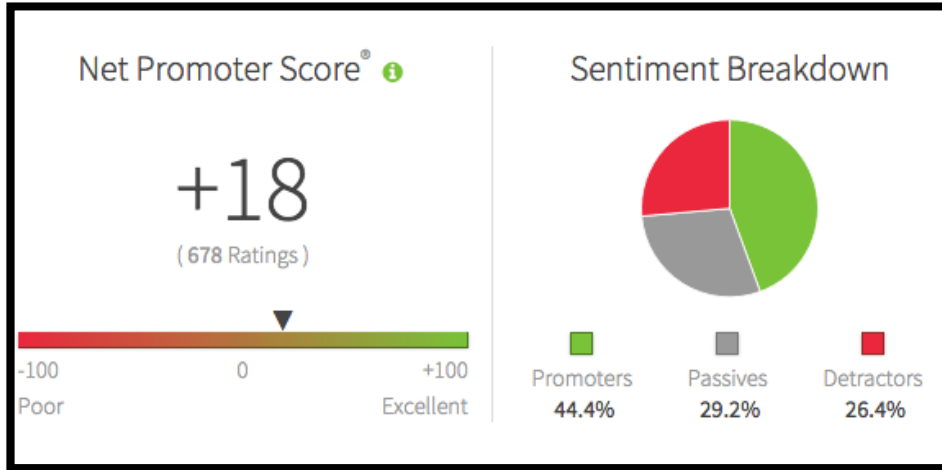
How likely is it that you would recommend this course to a colleague?

- Score of 8 or lower: *Thanks! What can I improve to score a 9 or 10?*
- Score of 9 or 10: Thanks! What would you tell your colleague?
- Is there anything else you would like to tell me?



using analytics to measure reaction

- External Online Surveys
- Paper-based feedback
- Excel - pivot tables & charts
- Survey reports



engagement: measuring feedback (Thalheimer)

However...



engagement: measuring feedback (Thalheimer)

- “*Getting Radically Improved Data from Learner Evaluations*”
by Will Thalheimer, PhD → worklearning.com
- His research shows that “Smile Sheets” are weak indicators
- Likert-like Scales provide poor Data

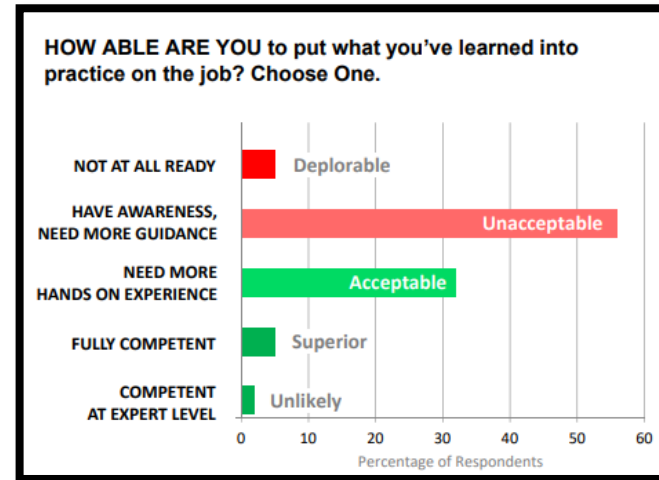
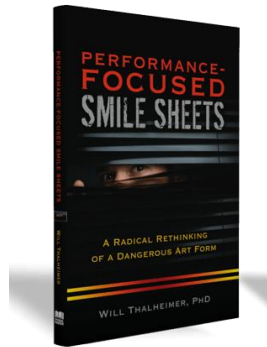
Source → worklearning.com/add/stuff-from-will



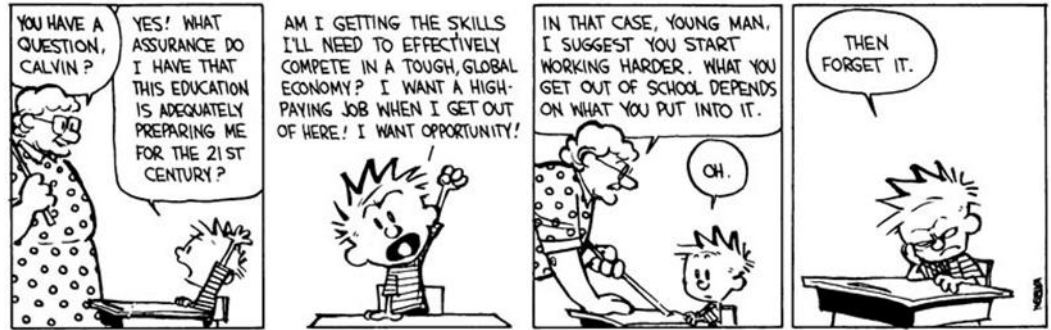
#ATD2018

engagement: measuring feedback (cont'd)

- Avoid using Likert-scales and average scores
- Use textual scales and show counts/percentages of respondents



measuring customer engagement



why is course engagement important

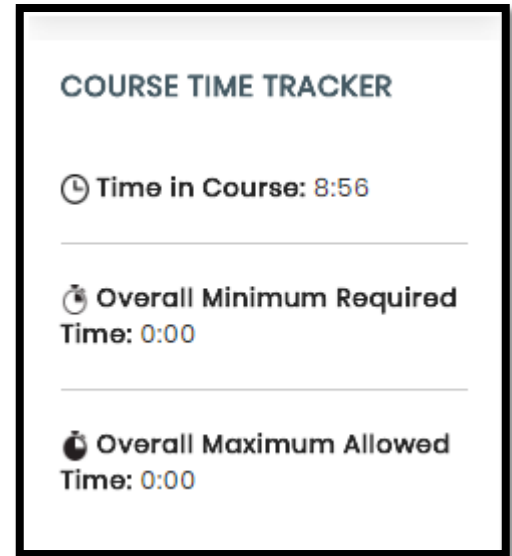
Helps you...

- understand Learner needs and expectations
- identify 'at risk' Learners
- build changes to prevent Learner 'failure'
- increase retention and identify future courses
- identify user experience (UX) problems
- identify where to invest in the future

! Not to be
confused with
Employee
Engagement.

what should I measure - the basics

- Page or Resource Views
- Submissions
- Time Spent



COURSE TIME TRACKER

🕒 **Time in Course:** 8:56

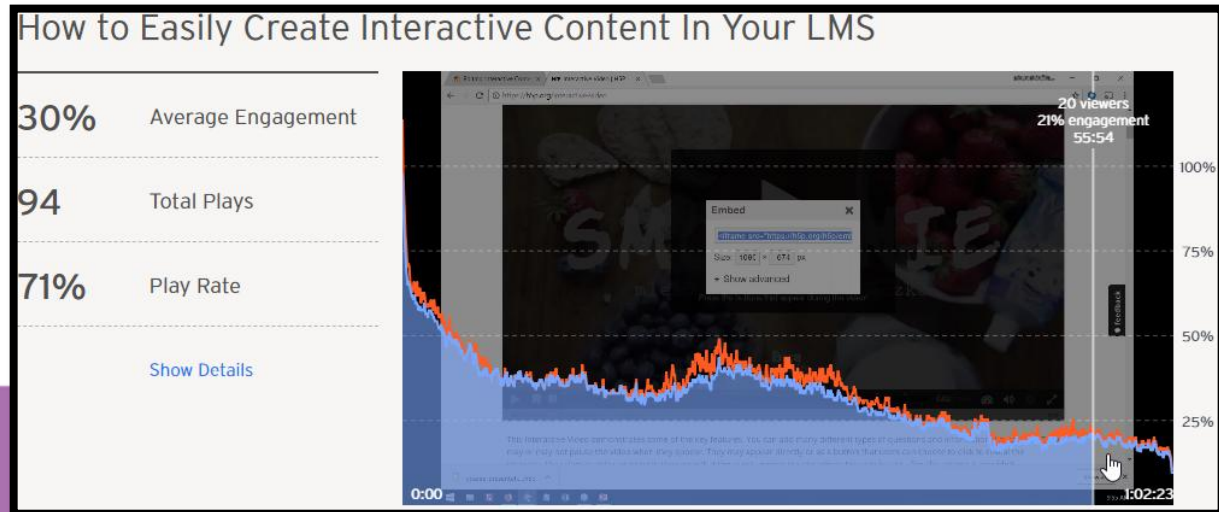
🕒 **Overall Minimum Required Time:** 0:00

🕒 **Overall Maximum Allowed Time:** 0:00



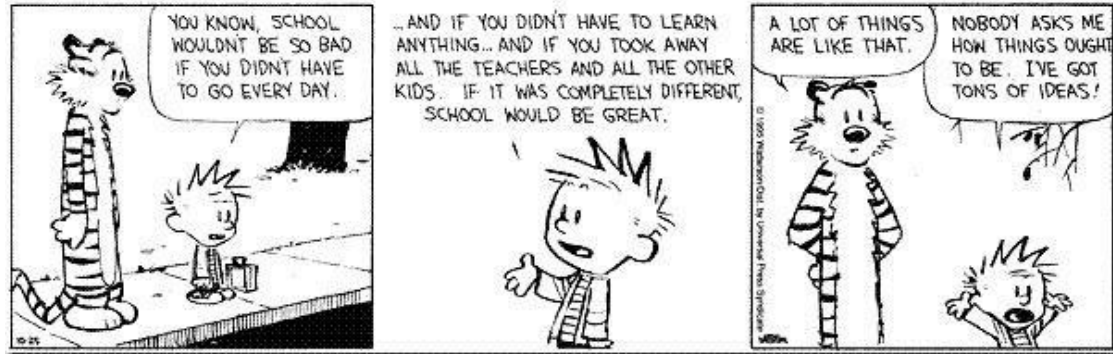
what should I measure - the intermediates

- Video analytics
- Forum analysis



how do you measure course engagement

- Google Analytics
- LMS Reporting
- Exports for Excel
- General BI Solutions



what data should I ask for

- User profile
- Course or Activity attributes
- Dates
- Log / Event based data

- Filtering
- Segmenting
- Summarizing



what data should I ask for

- User profile
- Course or Activity attributes
- Dates
- Log / Event based data

- Filtering
- Segmenting
- Summarizing



what data should I ask for

- User profile
- Course or Activity attributes
- Dates
- Log / Event based data

- Filtering
- Segmenting
- Summarizing

User ID	Name	Course	Course ID	Activity	Activity ID	Log ID	Event	Log Date
1234	Steve	History	976	Quiz	345	123,123	Viewed	05-Feb-18

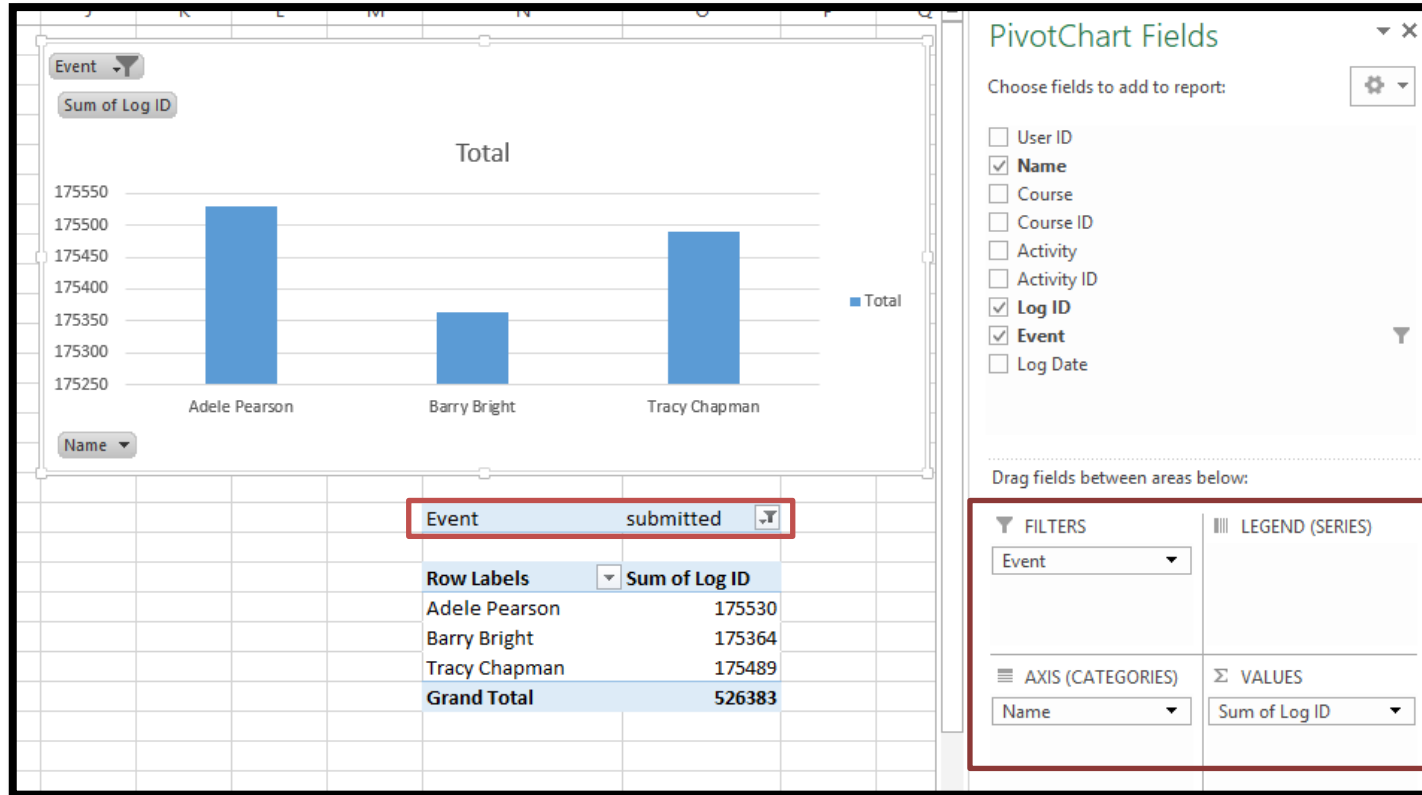


what data should I ask for - as a pivot table

The screenshot displays an Excel PivotTable and its corresponding PivotTable Fields task pane. The PivotTable has 'Event' as the row labels and 'Count of Log ID' as the values. The PivotTable Fields task pane shows 'Event' in the Filters area and 'Course' in the Rows area, with 'Count of Log ID' in the Values area. A red box highlights the 'viewed' filter in the PivotTable and the Filters, Rows, and Values areas of the task pane.

Event	Count of Log ID
Applied Analysis	51
Calculus Survey	22
Company Orientation	25
Complex Analysis	7
Engineering Analysis	7
General Discussion	4
H&S in the Workplace Refresher	12
H5P & xAPI	1
History of First Nations and Self-Government	1
Mathematical Biology	31
Micro Workplace Health and Safety	108
Moodle Primer	52
Multi-language Sample Course	6
Onboarding	12
Our Company Culture	9
Product Suite Overview	215
Ready, Set, Report	62
Refresher Workplace Health and Safety	274
Risia	5
SCORM Quiz vs Survey	14
SCORM Test course	8
Time Spent Learning	2
Training Service Offering	22
Troubleshooting Range	42

what data should I ask for - as a pivot chart



some Zoola examples

Engagement Dashboard

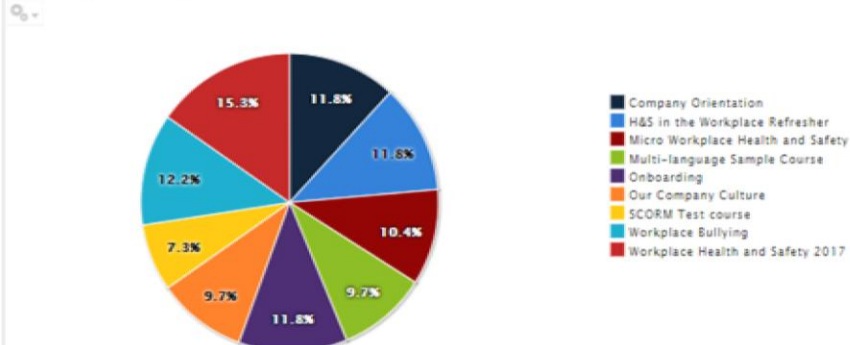
Top 10 Most Engaged Courses Report

Course	Views	Forum Posts	Submits	Time
Refresher Workplace Health and Safety	1,242	4	21	85:29:57
Workplace Bullying	1,208	7	26	78:35:30
Micro Workplace Health and Safety	837	2	16	58:04:13
Product Suite Overview	482	15	66	28:59:45
Workplace Health and Safety 2017	434	0	7	33:31:32
Moodle Primer	316	1	17	21:00:48
H&S in the Workplace Refresher	301	0	0	25:39:40
Ready, Set, Report	201	0	52	22:47:53
Training Service Offering	191	0	2	04:23:06
Troubleshooting Range	185	1	3	07:47:02

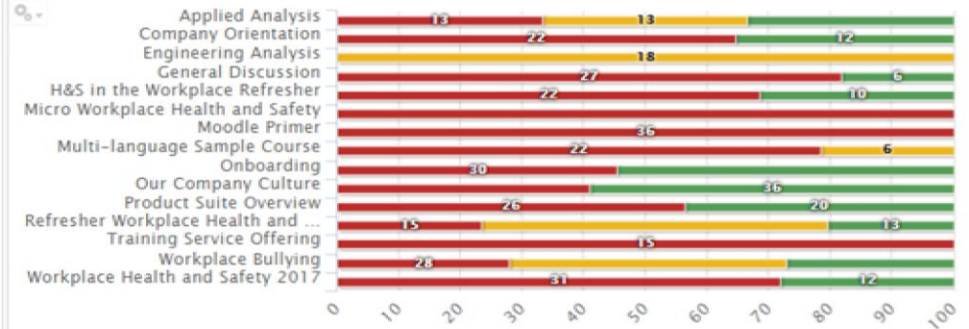
of Course Views by Month



Enrollments Per Course



Student Progress



some Zoola examples

Top 10 Most Engaged Courses Report

Course	Views	Forum Posts	Submits	Time
Refresher Workplace Health and Safety	1,242	4	21	85:29:57
Workplace Bullying	1,208	7	26	78:35:30
Micro Workplace Health and Safety	837	2	16	58:04:13
Product Suite Overview	482	15	66	28:59:45
Workplace Health and Safety 2017	434	0	7	33:31:32
Moodle Primer	316	1	17	21:00:48
H&S in the Workplace Refresher	301	0	0	25:39:40
Ready, Set, Report	201	0	52	22:47:53
Training Service Offering	191	0	2	04:23:06
Troubleshooting Range	185	1	3	07:47:02

avoiding vanity analytics

what are analytics

“ *Analytics is the discovery, interpretation, and communication of meaningful patterns in data.* ”

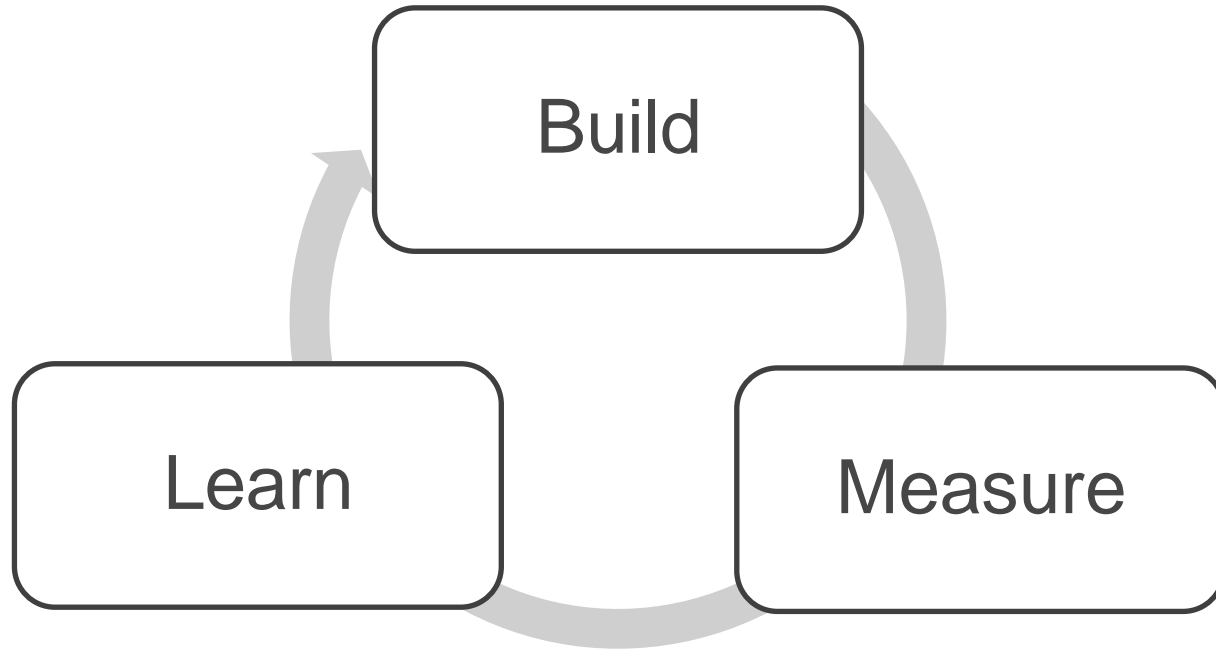
<https://en.wikipedia.org/wiki/Analytics>

“ *Learning analytics is the measurement, collection, analysis and reporting of data about learners and their contexts, **for purposes of understanding and optimizing learning** and the environments in which it occurs.* ”

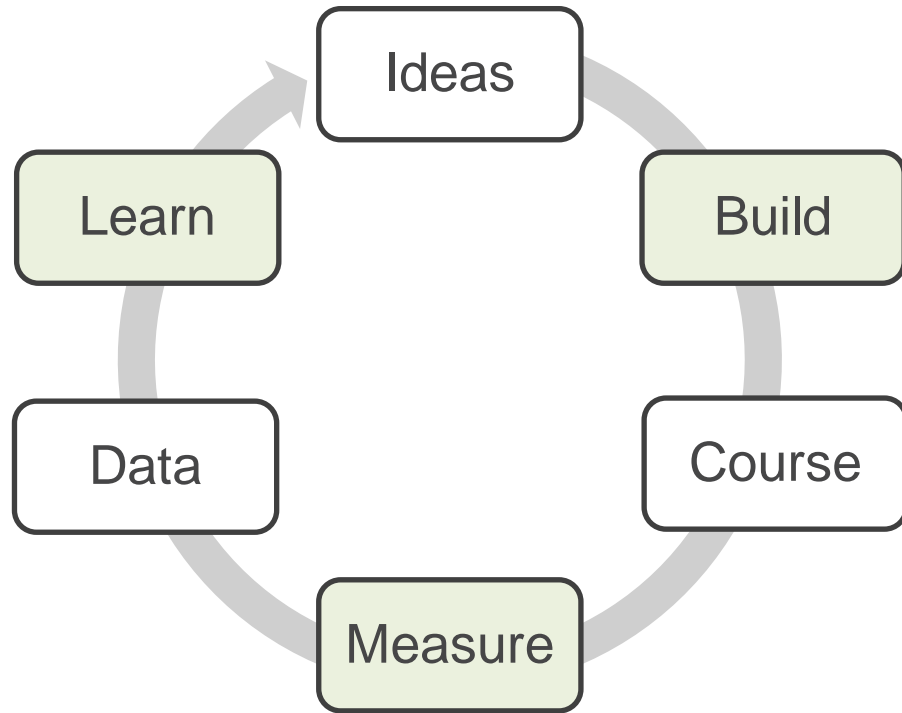
https://en.wikipedia.org/wiki/Learning_analytics



lean startup methodology - the feedback loop



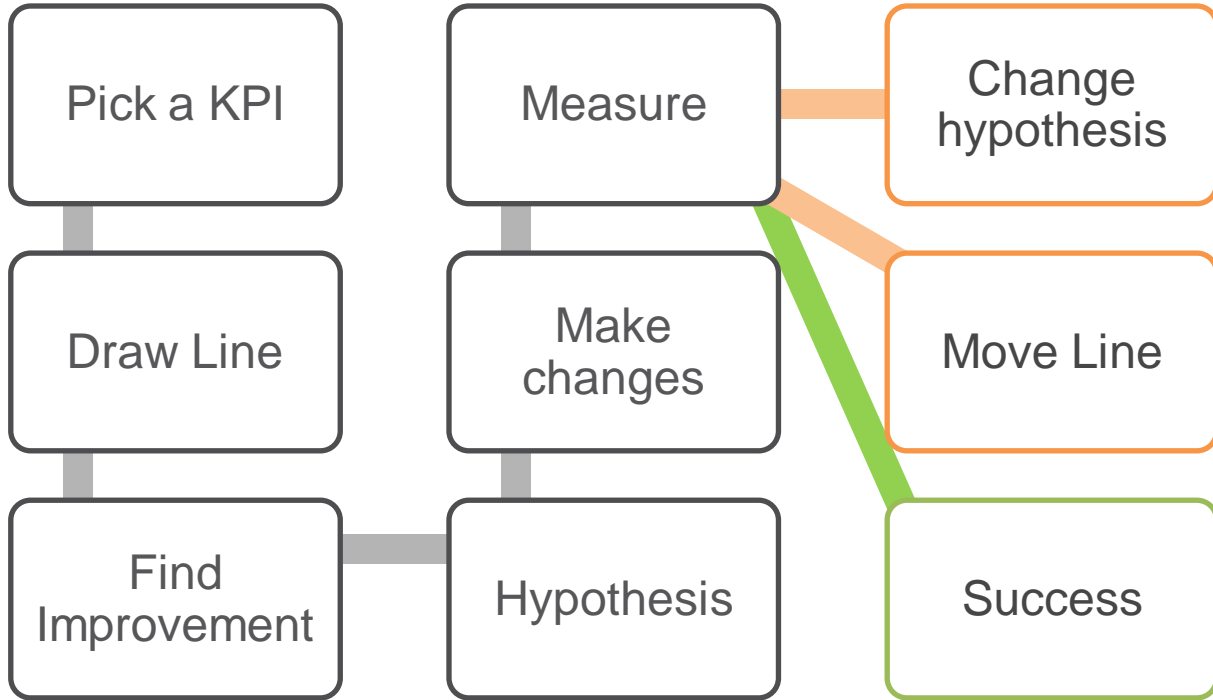
lean learning analytics



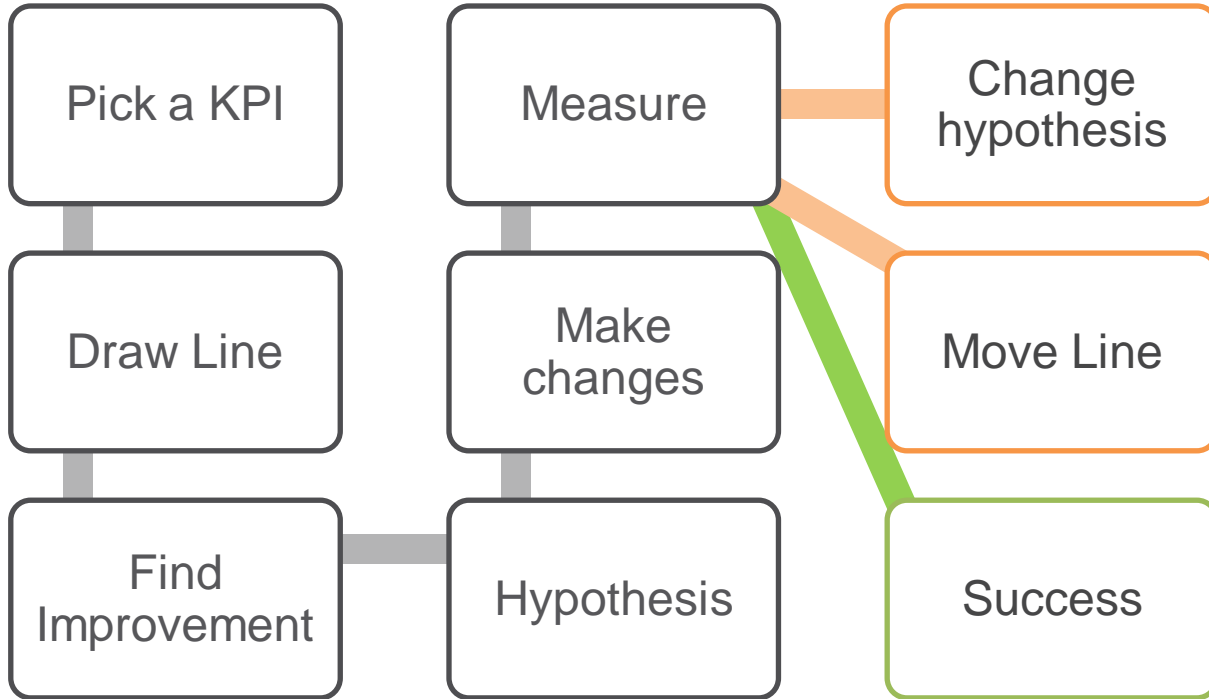
- Develop hypothesis (**ideas**)
- **Build** (or update) courses
- Release (**course**)
- **Measure** (collect) results
- Analyze **data**
- **Learn** and make evidence-based decisions ; iterate



lean learning analytics process



lean learning analytics process



For example...

- Views (KPI)
- 100 a month
- Poor description
- Improved description will increase views
- Improve description
- Export 30 days of data and analyze data
- Learn and make evidence-based decisions ; iterate



to recap

- Qualitative measure
 - Measure **Reaction** with a measurable and actionable oriented survey
 - Summarize your results and action the feedback
- Quantitative measure
 - Pick a KPI and draw a line
 - Determine hypothesis (by changing Y, it will impact N)
 - Apply your analytics (acquire data, analyze data, review results)
 - Learn (Success, Iterate, Cancel)



about lambda solutions

Lambda Solutions is a full service agency focused on reducing the cost of your training. Lambda offers open source learning management systems - Totara & Moodle. By managing your system in the most powerful and secure cloud hosting environment, Lambda reduces your IT operating costs by more than 40% and with expertise from over 600 implementations, our HelpDesk ensures efficient setup so your time to use is within weeks not months. Perform Learning Analytics to prove the impact and ROI of your training with award winning Zoola Analytics, a reporting and analytics solution for Totara, Moodle & xAPI conformant systems.



ZOOOLA
ANALYTICS



**using Moodle, Totara, or are you interested in xAPI
course engagement analytics?**

visit → www.zoola.io



ZOOOLA

ANALYTICS

TOLL FREE
EMAIL
WWW

+1.877.700.1118
sales@zoola.io
zoola.io



any questions



Thank you



Stewart Rogers, VP, Products
Stewart.Rogers@lambdasolutions.net

