



INSTRUCTURE

Leveraging Data and Analytics to Support Continuous Improvements in Education

Sidharth Oberoi, Head of Global Product

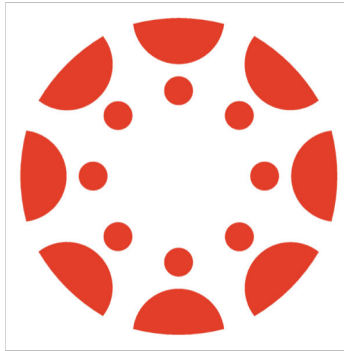
Agenda

- Approaches to Data & Analytics
- Data Access
- Live Events & Caliper
- Questions & Open Conversation
- Next Steps

Data & Analytics Products



Data Access
Platform



Updated Course
Analytics



“Dig” Learning
Analytics Platform

Data Tenets

- Awesomeness begins with access.
- Empower people, don't define them.
- Innovate in partnership.



Data Access

Canvas Data: Outcomes, Catalog

Account

Admin

Dashboard

Courses

Calendar

Inbox

Studio

Commons

Help

Demo University > Demo University

Courses

Canvas Data

Documentation

Courses

People

Statistics

Permissions

Outcomes

Rubrics

Grading

Question Banks

Sub-Accounts

Faculty Journal

Terms

Authentication

SIS Import

Themes

Developer Keys

Attendance

Canvas Data Portal

Dropout Detective

Hosted Data Management

quiz_id

user_id

bigint

bigint

listed.

Foreign key to the quiz the override is associated with. May be empty.

Foreign key to the user.

catalog_order_fact

Measures for catalog orders

Type: fact

Columns

| Name | Type | Description |
|-------------------|------------------|---|
| catalog_order_id | bigint | Foreign key to the catalog order dim |
| catalog_id | bigint | Foreign key to the catalog dim |
| parent_catalog_id | bigint | Foreign key to the catalog dim. References the parent of the catalog that this order belongs to |
| user_id | bigint | Foreign key to the user dim. Refers to the user associated with this order |
| total | double precision | Cost of the catalog order. Units are found in catalog_order_dim.currency |

catalog_order_item_fact



































Measures for catalog order items

Type: fact

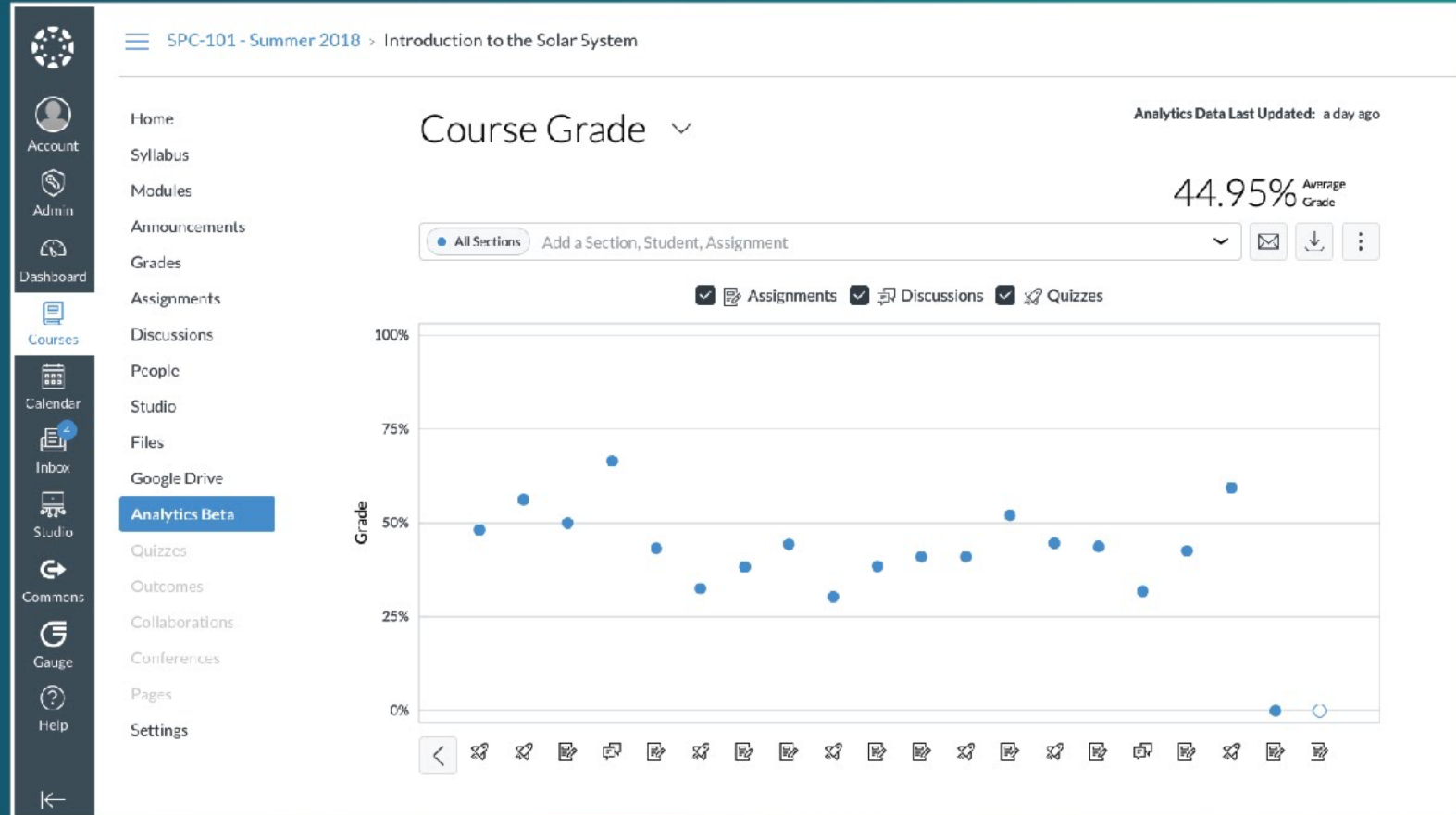
Columns

| Name | Type | Description |
|-----------------------|--------|--|
| catalog_order_item_id | bigint | Foreign key to the catalog order item dim |
| catalog_id | bigint | Foreign key to the catalog dim. Refers to the catalog this order item belongs to |
| parent_catalog_id | bigint | Foreign key to the catalog dim. References the parent of the catalog that this order item belongs to |
| catalog_order_id | bigint | Foreign key to the catalog order dim |
| catalog_product_id | bigint | Foreign key to the catalog product dim. Refers to the course or program |

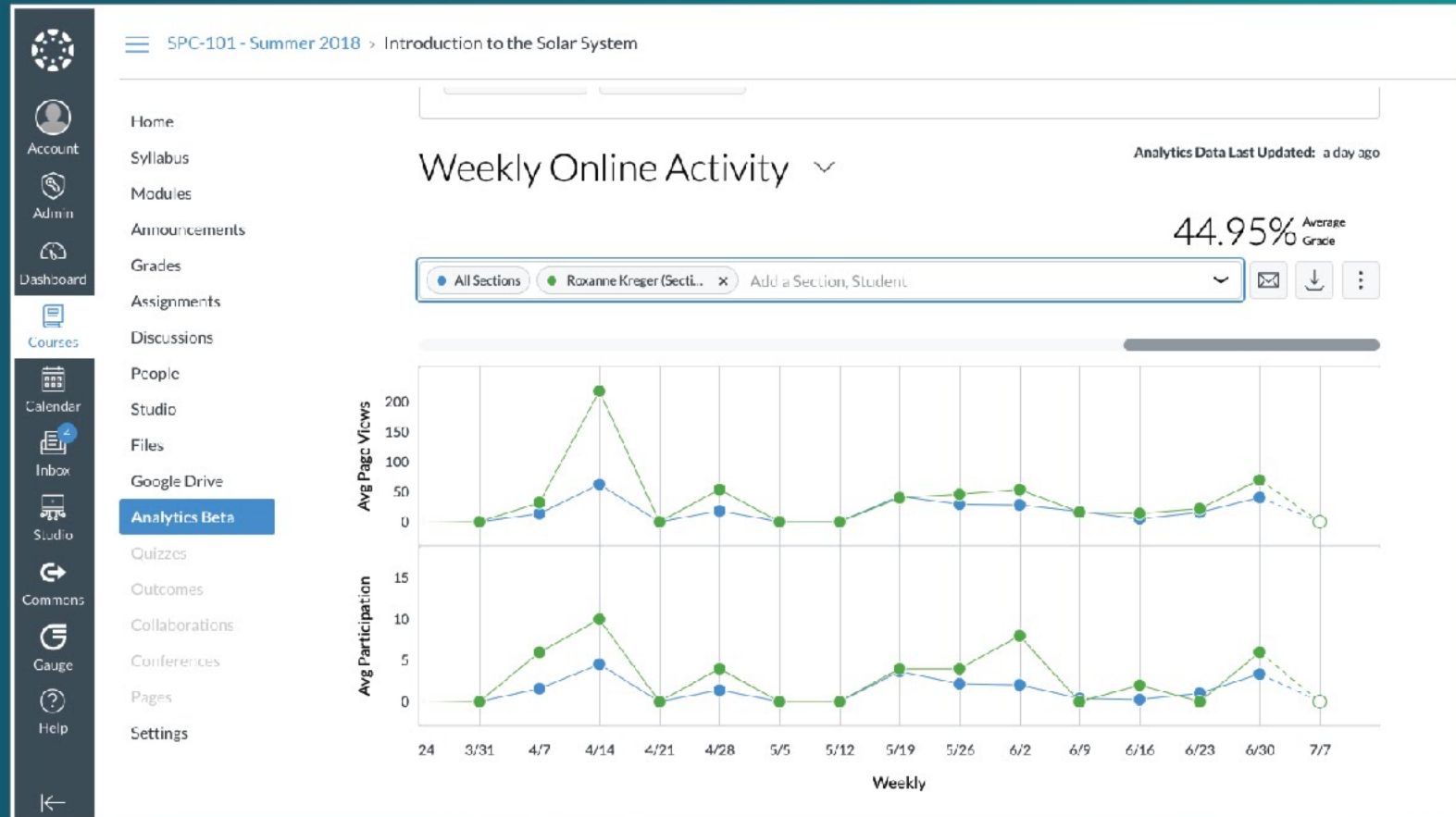
Live Events

| Event Type | Caliper v1.1 | Live Events Raw (Alpha) |
|---|---|---|
|  account_notification_created | |  |
|  asset_accessed |  |  |
|  assignment_created |  |  |
|  assignment_group_created | |  |
|  assignment_group_updated | |  |
|  assignment_updated |  |  |
|  attachment_created |  |  |
|  attachment_deleted |  |  |
|  attachment_updated |  |  |
|  content_migration_completed | |  |
|  course announcement (discussion_topic_created) |  |  |
|  course_completed (student module progression) | |  |
|  course_created |  |  |

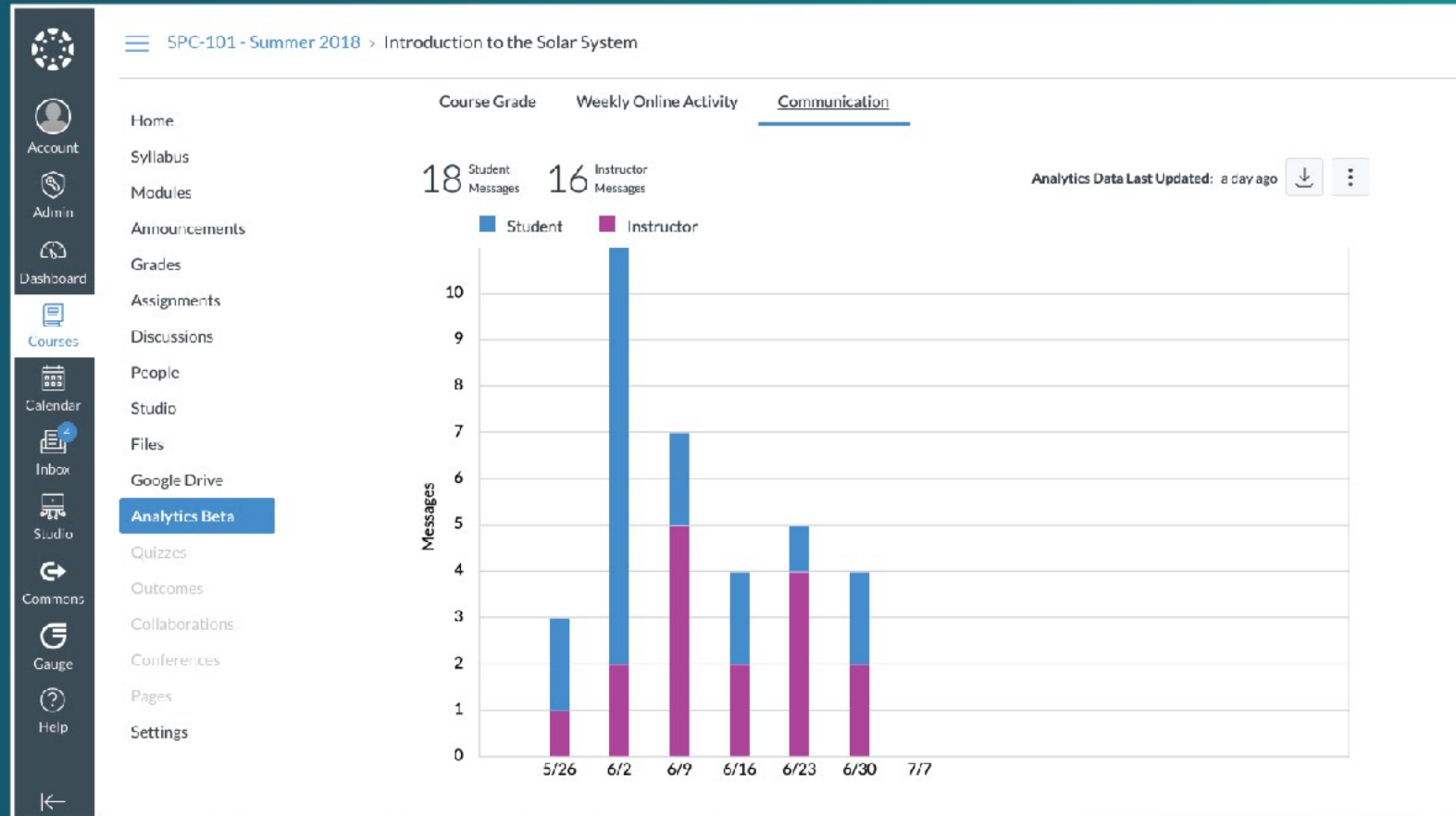
Course Grades



Weekly Online Activity



Student View



Data Access Platform Roadmap

- Self-service UI
- Data Pipeline and Freshness
- More integration options
- Additional Data
- New Events



Updated Course Analytics

Personas

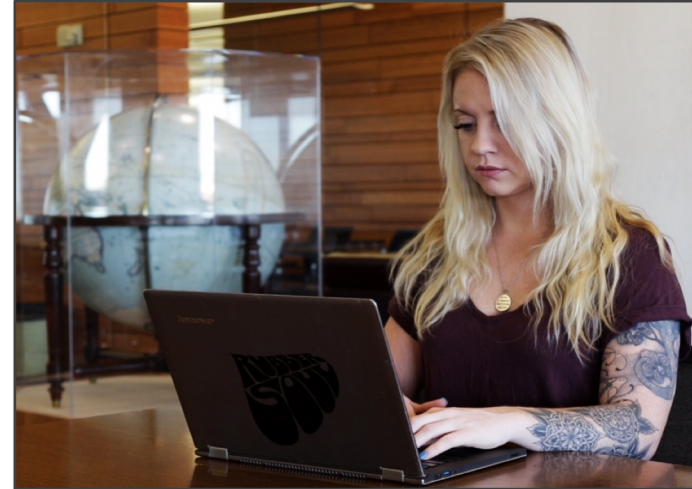
[New Analytics Demo](#)



Jill Tan

Assist. Professor, History

- Engage all students
- Improve course design
- Achieve learning outcomes



Sofia García

Student, Undergrad Degree

- Track performance
- Improve On Time Submissions

New Analytics Roadmap

- September 2019 — Canvas Beta
- October 2019 — Canvas Production (GA)
- March 2020 – Legacy Course Analytics Deprecated

Faculty Questions

- Are my students on track to success?
 - Are students on track to pass their courses?
 - What does attendance look like in my courses?
 - What type of activity happens in Canvas?
 - What's the usage of my LTI tools?
 - What is the risk assessment of active students?
 - How has risk for active students changed over time?
 - How many courses require attention?
 - What factors contribute to risk?
 - How did the risk status change over time?
 - How did my intervention affect risk?
1. Which of my students are at risk?
 2. Why are they at risk?
 3. What can I do about it?

Innovating in Partnership

Data & Analytics Community

Quarterly Meetups

- Knowledge sharing
- Success Stories
- Product Discussions

Other Opportunities to Collaborate

- Local Community Groups
- Global connections
- Learning Analytics collaboration space (TBD)

Thank you!



CANVAS