Analytics and Metrics in Teaching Technologies

October 14, 2021
Tips For This Training

• This training is being recorded.
• Adjust the auto-captions to suit your needs.
• Please mute yourself when not talking.
• Use the chat any time.
• Need more help? Contact the ITS Help Desk.
  • Email: its-helpdesk@uiowa.edu
  • Phone: (319) 384-HELP (4357)
Training Agenda

→ Part 1: Overview of Analytics & Metrics
→ Part 2: Data Types and where to find them
  • Performance Data
    • ICON Analytics
    • ICON Data Reports
    • Elements of Success
  • Self Reported Data
    • ACE
    • Qualtrics
    • Top Hat
  • Engagement Data
    • UICapture
    • Zoom
    • Unizin Engage
→ Part 3: Your Questions
Analytics & Metrics in Teaching Technologies

Ever increasing volume of student data generated in learning platforms
  • 2-8 million rows per day in ICON
  • Real-time (or near) insights into student learning behaviors and engagement possible

Be aware that course design decisions influence what data will be available.

Use learning analytics to analyze student data to inform, refine and/or customize teaching and learning.
Questions to go beyond clicks

• Who are your students?
  • What experiences, expectations, knowledge, skills, and attitudes are your students likely to have?

• Which students appear to be less engaged?
  • Ideally include as many sources as possible

• What course content do students appear to have the greatest difficulty with?

• What student actions are associated with better course outcomes?

• Are my formative and summative assessments correlated?
Data Types

- Demographics
- Prior Academic Outcomes
- Performance Data
- Self Reported Data
- Engagement Data
Data Types

- Demographics
- Prior Academic Outcomes
- Performance Data
- Self Reported Data
- Engagement Data
Part 1

Performance Data
Performance Data

ICON Analytics
New Analytics

• Allows instructors to track average course grades for student submissions using an interactive chart graph or table.

• In addition to “Filter by Assignment Type” the Filter field supports up to three filters (section, student, or assignment). The All Sections filter cannot be removed.
New Analytics Reports

Reports available include:

- Missing Assignments
- Late Assignments
- Excused Assignments
- Class Roster
- Course Activity
New Analytics limitations

→ Data refreshed every 24 hours (sometimes more)
→ Only includes active students
→ The limitation of Course Weight
  • A course weight is the number of students in the course x the number of assignments.
  • If your course weight is over 50,000 New Analytics is not available
What are ICON Data Reports?

ICON Data Reports is a tool developed by the University of Iowa that currently provides two functions: Discussion Reports and Grade Distributions. It also provides instructors with a way of sharing this data with students through ICON.

• Discussion Reports shows instructors data on students replies/posts.
• Grade Distributions allows instructors to generate histograms for multiple assignments/exams at a time.

NOTE: Statistics in these reports may be up to two days old.
Where are ICON Data Reports?

ICON Data Reports is within the Navigation tab of Course Settings.

1. In your ICON Course, click **Settings** in the course navigation menu.
2. Select the **Navigation** tab at the top of the screen.
3. Find and enable ICON Data Reports.
4. Click **Save**.
Discussion Reports

Discussion Reports displays the number of replies, posts, and total activity (replies + posts) per student.

These statistics can be from all discussions or specific discussions by using the "Filter By Topic" menu.
Grade Distribution

Grade distributions for single or multiple assignments create a histogram with an adjustable slider to result in a visual representation of student performance.

These histograms (with no identifying information included) can be saved and optionally shared with students.
Performance Data

Elements of Success
Elements of Success

• For courses larger than 25 students
• Course needs to include formative & summative assignments
• Empowers students to understand and improve their educational outcomes
Part 2

Self Reported Data
Self Reported Data

ACE
What is ACE?

ACE Online is the means by which course evaluations are delivered electronically for *nearly* all courses at the University of Iowa.
Course Reports - Closed evaluation terms

In closed evaluation terms information is listed with the following for each course:

• Response rate percentage
• Number of students who submitted evaluations out of the total number of potential evaluators
• Links to course reports—Ratings, Comments, Responses.

The reports available can be viewed within the browser or downloaded as .pdfs or Excel files.
Other Survey Tools
Other Survey Tools

Instructors at Iowa have additional options for collecting student feedback

→ **ACE evaluation surveys**
  - Completely anonymous
  - Gets students familiar with the platform prior to the end of the semester

→ **Qualtrics**
  - Can be anonymous
  - Has powerful branching options
  - Many different question types
Self Reported Data

Top Hat
What is Top Hat?

A student response system.

• Add interactive questions to lectures.
• Students answer with their own devices.
• Works well with on campus and online courses.
• Gradebook data passes to ICON
Participation and performance data

- Top Hat allows tracking and assessment of student performance, attendance and participation.
- All responses and participation grades are captured in Top Hat’s gradebook.
- Top Hat scores easily transfer to the ICON gradebook.
Part 3
Engagement Data
Folder statistics

UICapture statistics collect and display the views, minutes, and downloads of files (audio and video) stored in the platform.
Recording statistics

Statistics for individual recordings include the average completion rates and viewer engagement on the files stored in UICapture.
Also available in ICON

Access to UICapture statistics is also possible using the UICapture navigation link in ICON course sites.
Engagement Data

Zoom
Zoom Usage Reports

Information automatically collected by Zoom includes when meetings were held, meeting duration, and how many participants attended.
Requiring authentication

Can restrict only users logged in to Zoom access to a session.
  - Can further limit to only people logged in with HawkID.

→ Drawback – can complicate logging in first time.

→ Benefits
  - Security of sessions
  - Better attendance and reports
How to add authentication

• In Meeting Options, click Only authenticated users can join.
• Can select HawkID or Sign in to Zoom.

If a guest speaker with no HawkID is joining, be sure to adjust these settings for the session.
Checking Attendance from Zoom

→ Sign in to uiowa.zoom.us
  - Click Reports,
  - Click Usage
  - Click number to see report

  - Can then Click Export to export the data as a .CSV file
Checking Attendance from ICON

• Click Zoom in ICON Course navigation menu.
• Go to Previous Meetings tab.
• Select Report.

![Image showing Zoom meeting details and how to select a report](image-url)
Engagement Data

Unizin Engage
Engage Reader:

- Navigation tools
- Bookmarking
- Search function
- Print

- Highlight
- Notes
- Tagging
- Questions to Instructors (Student only)
- Analytics (Instructor only)
Engage reading analytics

Analytics provide instructors with a quick view on the online reading of students.
CAUTION: Printed-reading and offline-app-reading are not calculated.
Questions?
Interested in a course profile?

Collects tailored demographic information for University of Iowa courses.

- Contact ITS-RA@iowa.uiowa.edu
Reporting a Student Concern

https://uc.uiowa.edu/student-success/report-student-concern

→ **Student Care and Assistance in the Office of the Dean of Students** provides assistance to University of Iowa students experiencing crisis and emergency situations. These situations may include hospitalization, medical emergencies, mental health concerns or more. If a situation with a student arises or you have questions, concerns, or need more information, please do not hesitate to contact Student Care and Assistance at 319-335-1162 or by email.

→ **Academic Support & Retention** provides an array of assistance for students as well, with a central referral location, through Excelling@Iowa that helps connect faculty to various campus resources.
Need Help?

→ **Request a consultation**, with follow-up support as needed, to discuss course structure, communication strategies, course facilitation, and more.

→ Ask a SITA for Technical Consultations
  - SITA@uiowa.edu
  - https://tinyurl.com/bookasita

→ **Contact the ITS Help Desk** for technical troubleshooting or technology issues/questions.
Upcoming Events & Past Recordings

Many OTLT events coming up on the calendar!
https://teach.its.uiowa.edu/events/upcoming

Especially:
ICON Tricks and Treats: a spooktacular session on the features lurking in the shadows of ICON.
🎃 https://teach.its.uiowa.edu/events/icon-tricks-and-treats 🎃

Missed the live event? You may see it on our Recordings page:
https://teach.uiowa.edu/recorded-webinars
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