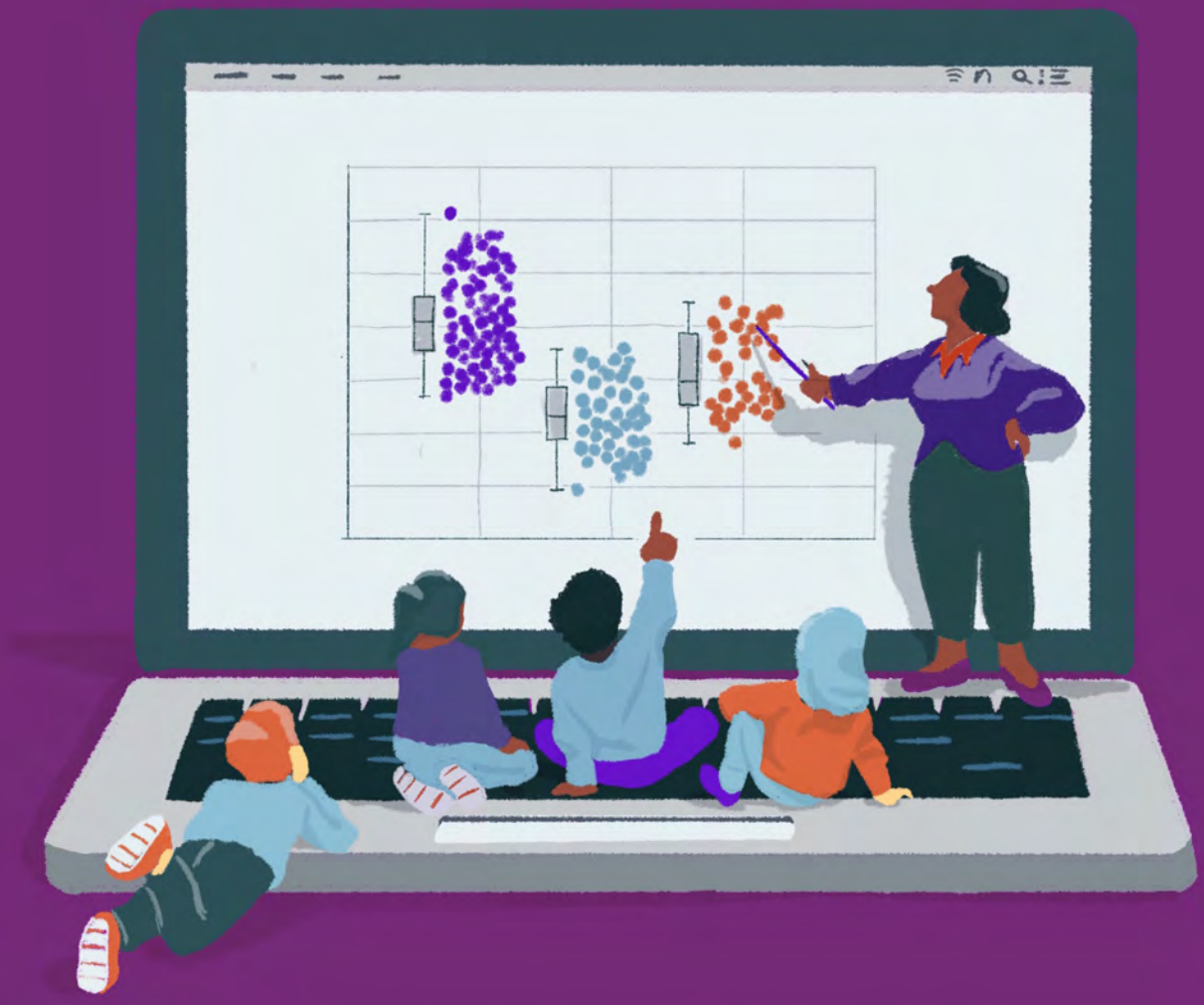
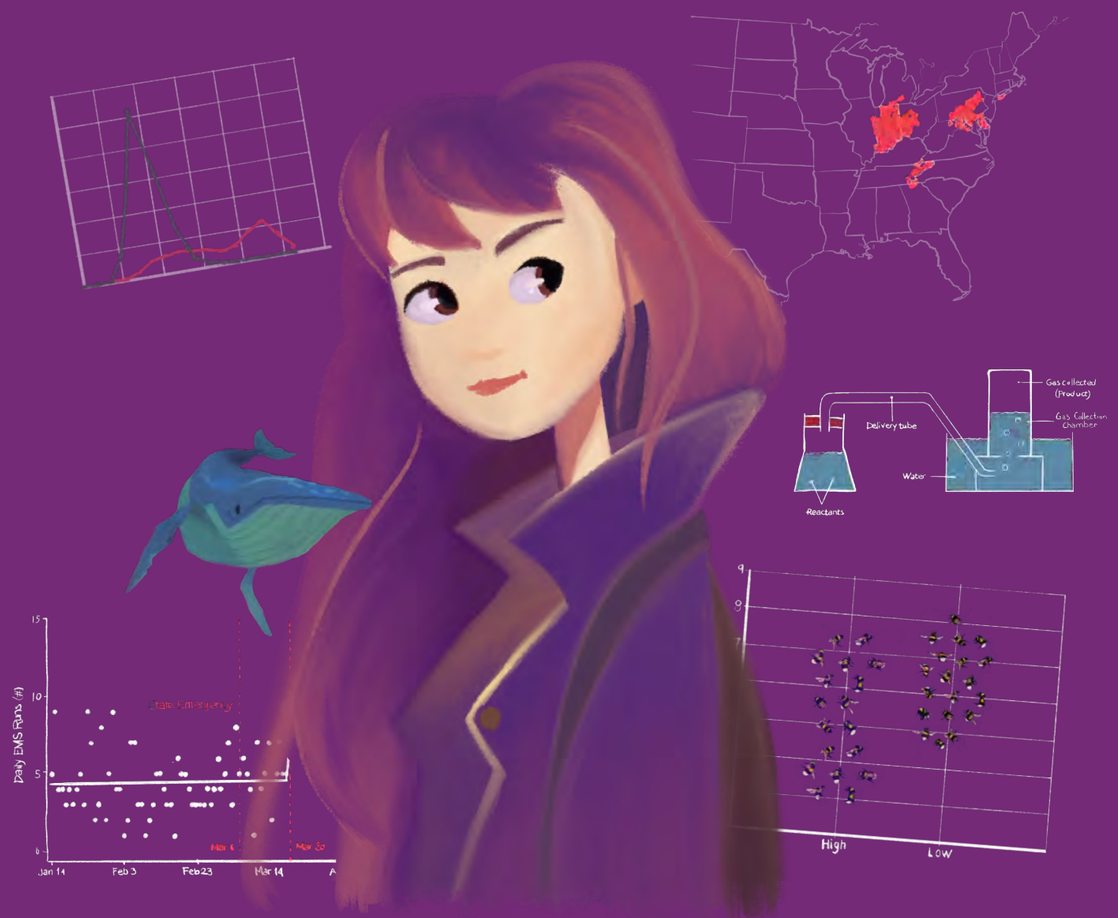
Data Classroom



Data will help solve the big problems of tomorrow...

Prepare your students today.

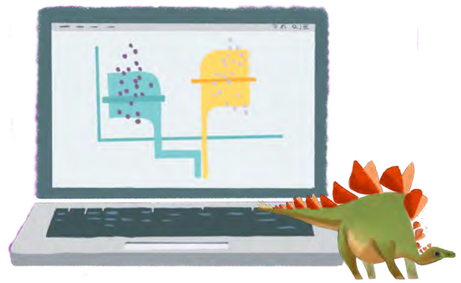
On A Mission To Teach Data Skills In Math And Science

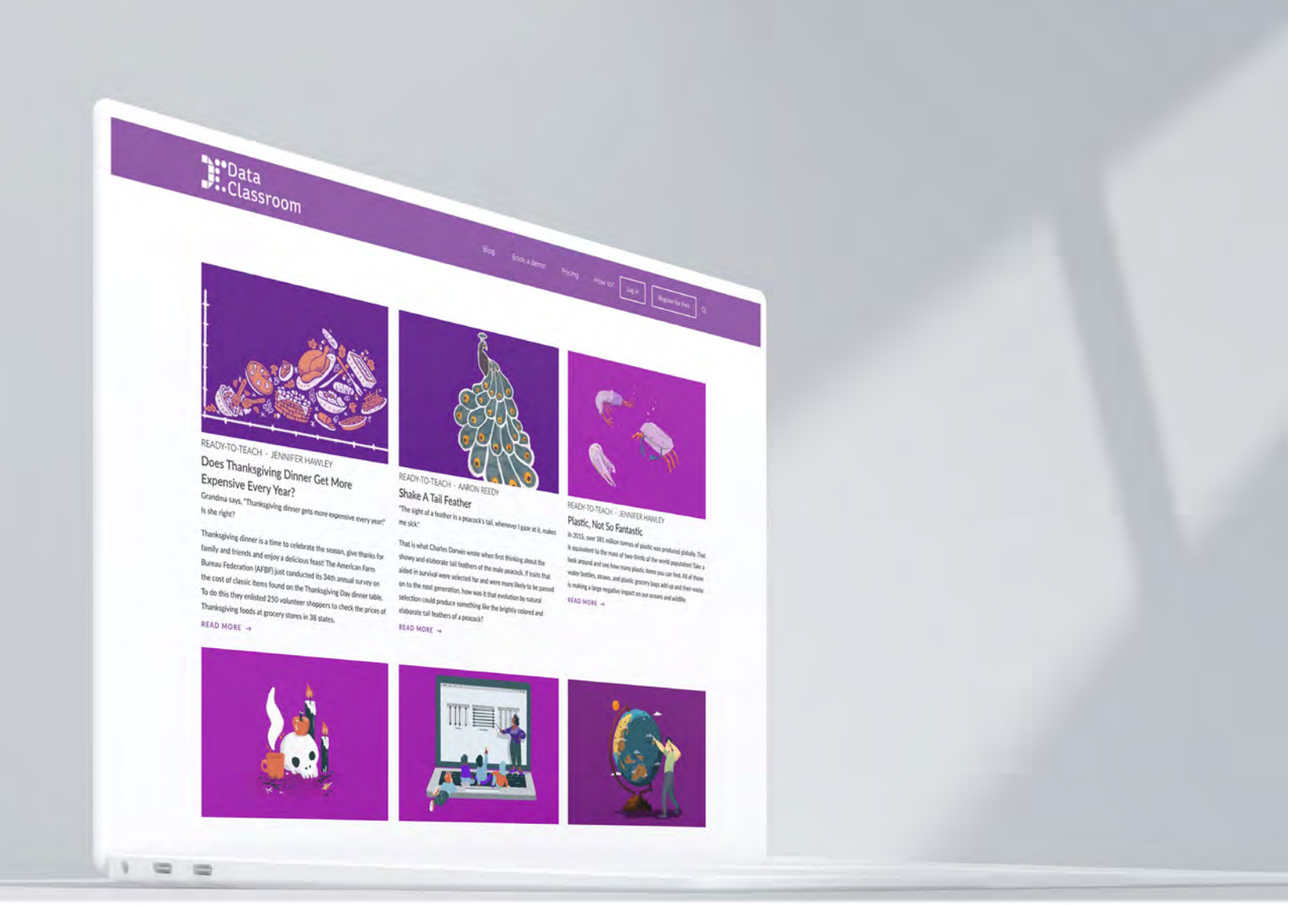


DataClassroom is designed by teachers for teachers with pedagogy in mind - plenty of built-in explanations and informative messaging to support the teacher and student in the learning process.

Data skills are key to solving the biggest problems of tomorrow.

DataClassroom is a web-app for graphing, statistics, and data analysis in the grade 6-12+ science and math classroom. The tool runs on any device that can access the internet. And it can integrate with learning management systems such as Schoology, Clever, and Google Classroom! The tool has been designed by teachers to provide the opportunity to integrate next-generation data skills seamlessly with the learning experiences they are already creating.





Ready-to-Teach Lesson Plans

Writing new lessons to bring data analysis skills into middle school and high school classrooms is time consuming and hard. Ready-to-Teach lessons make it easy for teachers to engage students in real world datasets to investigate the trends and insights data have to offer.

Datasets in the Resource Library include large datasets on current topics to small datasets from classic middle and high school lab activities. Each lesson plan is fully customizable and includes Background information, explanations of the Variables and the Dataset, and a detailed Activity section to make it easy for teachers to bring each lesson to their classroom with little to no prep.

Looking for a meaningful lesson for a hard to reach student? In need of material to strengthen a weak area? Our lesson library is searchable by grade, subject, skill, and topic so educators can quicky find exactly what they're looking for.

Title: Epidemic in a pandemic: What effect might COVID-19 be having on the opioid crisis in the US?

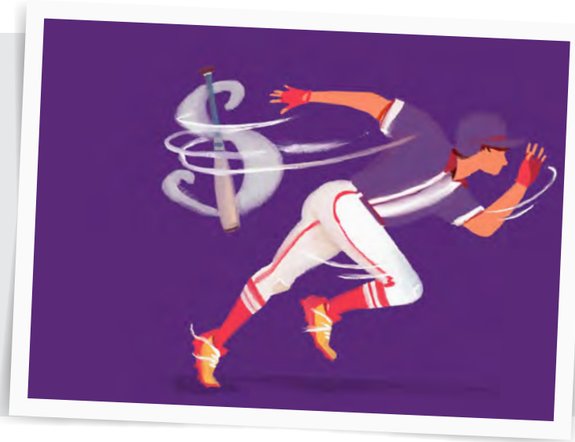
Dataset Source: Drug and Alcohol Dependence. September 2020.

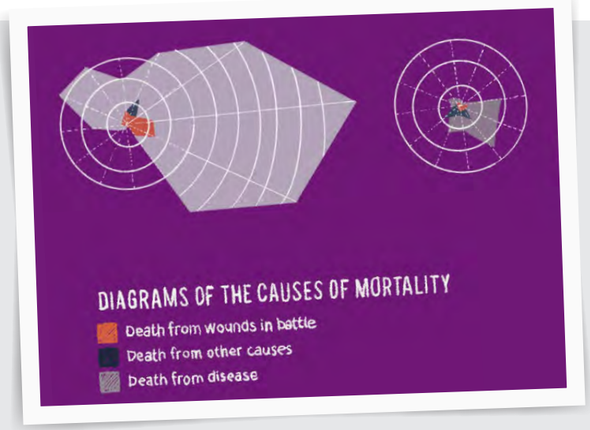
Skills: Graphing, Data Analysis, Line of Best Fit, Linear Regression

Title: Do you have to pay to be a winner? MLB payroll and performance data

Data Source: fueledbysports.com, usatoday.com

Skills: ANOVA, t-test, descriptive statistics





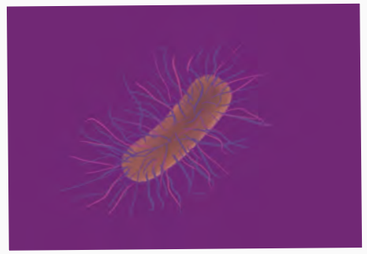
Title: Florence Nightingale: Data Visualization Pioneer

Data Source: Brittanica, American Statistical Association

Skills: box and whiskers, scatter plot, coxcomb plot, data visualization

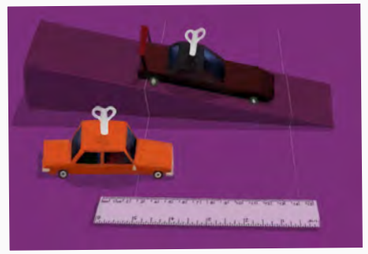
The Resource Library contains curated datasets and lesson plans for use in grades 6-12+ across physical, life, and social sciences as well as current events and additional content from our partners at Data Nuggets.

DATA Nuggets



Title: Antibiotic Use and Resistance
Skills: correlation, line of best fit, linear regression
Subject: Biology, Math

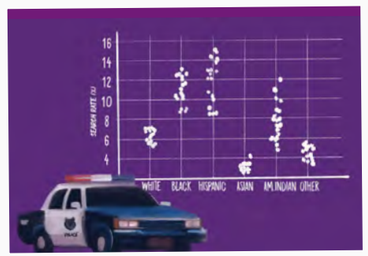
Title: Reaction Rate Lab
Skills: modeling, line graph
Subject: Chemistry



Title: Car and Ramp labs
Skills: line graph, scatter plot, acceleration, modeling
Subject: Physics

Title: Potato Osmosis Lab
Skills: anova, average, box and whiskers, box plot, line of best fit
Subject: Life Science, Biology, AP Biology

Title: A Cure for Covid? Testing Hydroxychloroquine
Skills: bubble plot, chi-square, frequency plot
Subject: Current Events, Statistics, Biology

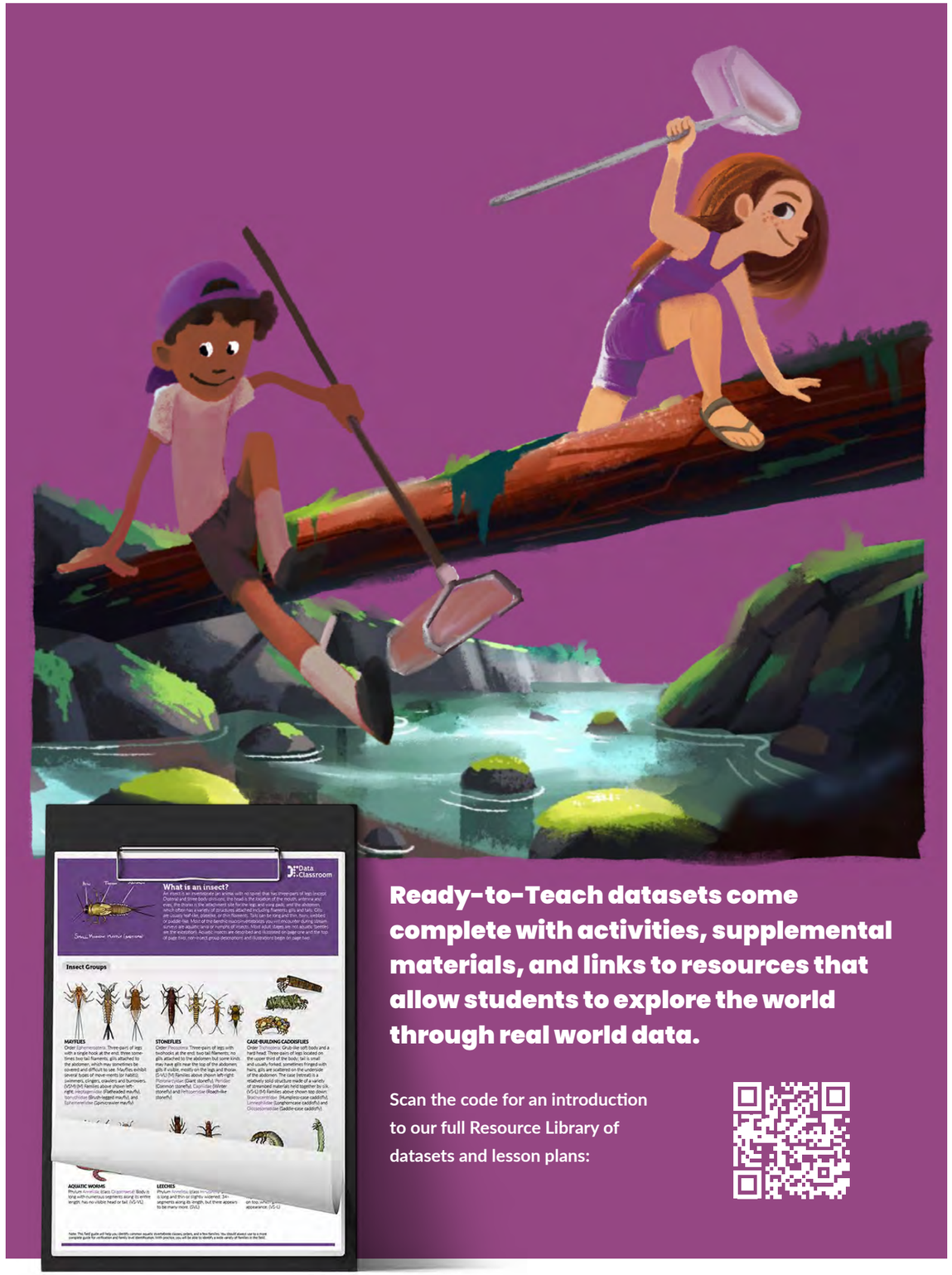


Title: Driving While Black or Brown
Skills: dot plot, line graph, scatterplot
Subject: Social Science, Current Events, Statistics

Title: Coin Flip Chi-Square
Skills: categorical bubble plot, chi-square, frequency plot, probability, statistics
Subject: Statistics, Math, AP Biology

Title: NBA Salary Data: Mean or Median?
Skills: box and whiskers, mean, median, scatter plot
Subject: Math, Current Events, Statistics

Title: Plastic. Not so fantastic
Skills: bubble plot, chi-square, frequency plot
Skills: Environmental Science, Social Science

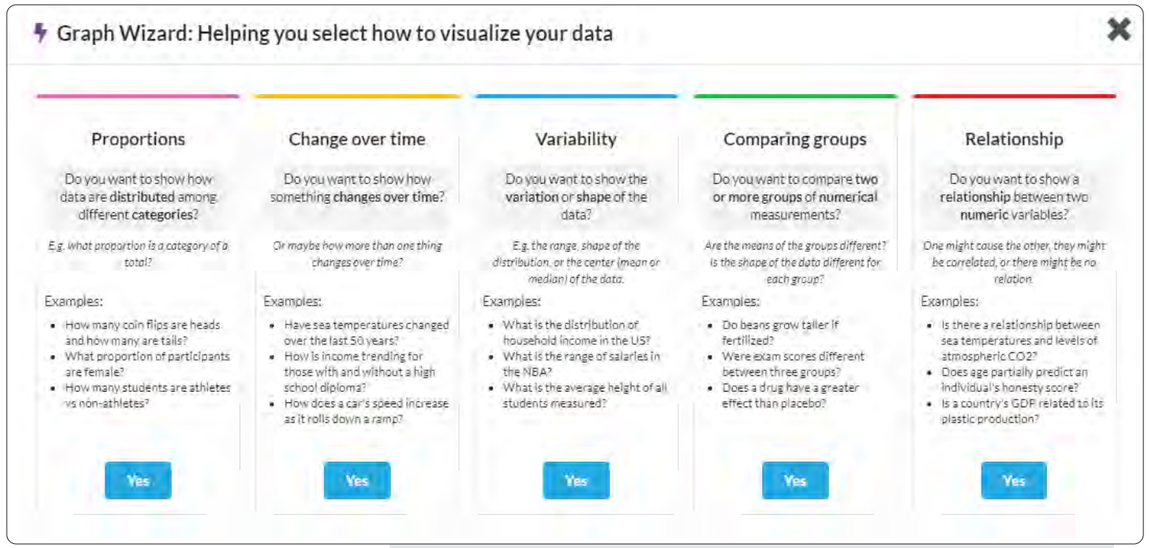


Ready-to-Teach datasets come complete with activities, supplemental materials, and links to resources that allow students to explore the world through real world data.

Scan the code for an introduction to our full Resource Library of datasets and lesson plans:

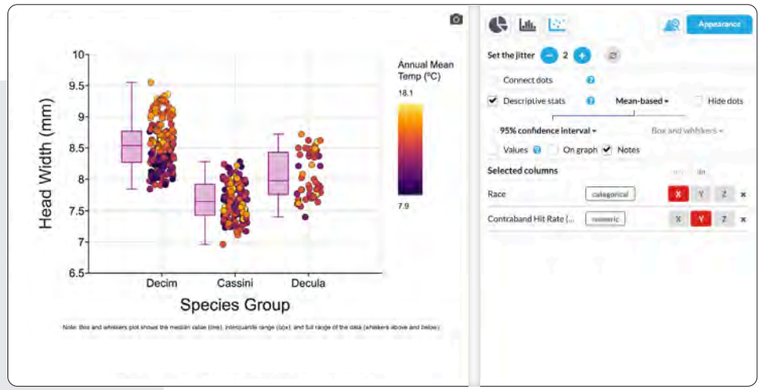
Graphing Made Easy

In any classroom, instructional time is a valuable resource. When students spend less time making graphs, they have more time to focus on the stories that data can tell. This leaves more time for the kinds of discussions that form lasting connections to the material. DataClassroom walks you through graph-making every step of the way so your students can focus on higher order thinking.



DataClassroom helps students understand the necessary conditions to use different types of graphs so they learn to communicate with data without wasting time decoding the features of a particular spreadsheet program or software that was not explicitly designed for learning.

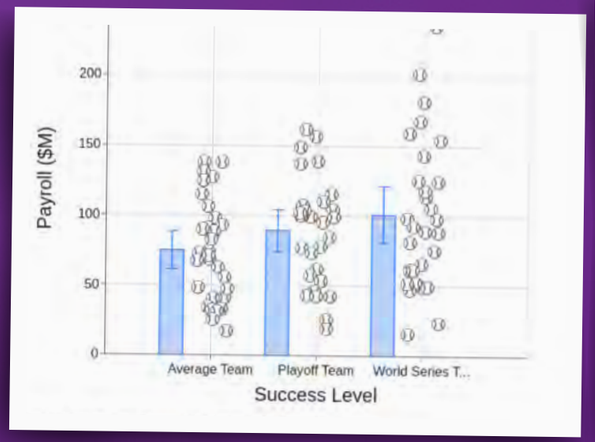
DataClassroom makes it easy to quickly create pro-quality graphs from a number of variables and customize them, as well as to explore and iterate through different types of data visualization.



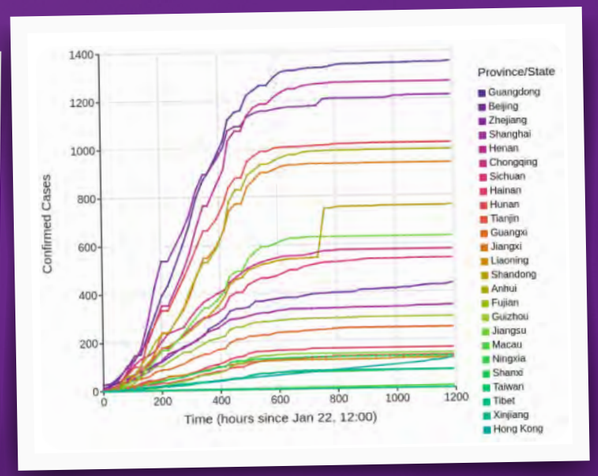
Graphing and data analysis become the focus with DataClassroom. The graph choice helper and built in statistical analysis allows my students to get to the trends quicker and spend more time on discussion.

Bob Kuhn, Science Teacher,
Centennial High School, Roswell Georgia

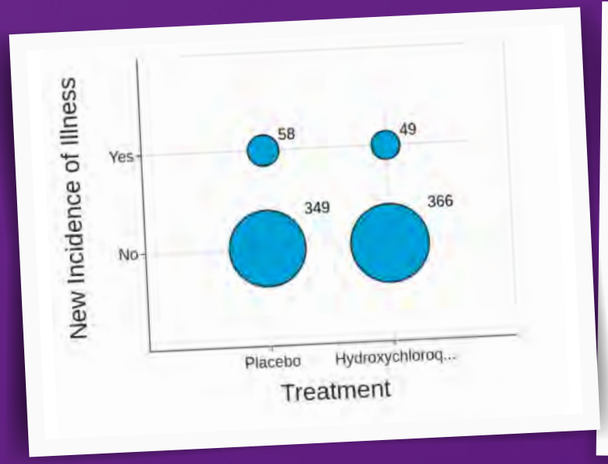
Here are a handful of graphs made using DataClassroom:



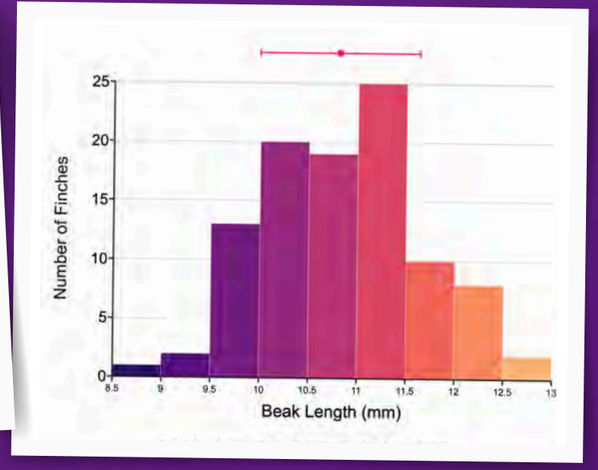
Scatter plot featuring Datamojis and box and whiskers plot



Line graph with 25 categorical values



Frequency plot/bubble plot

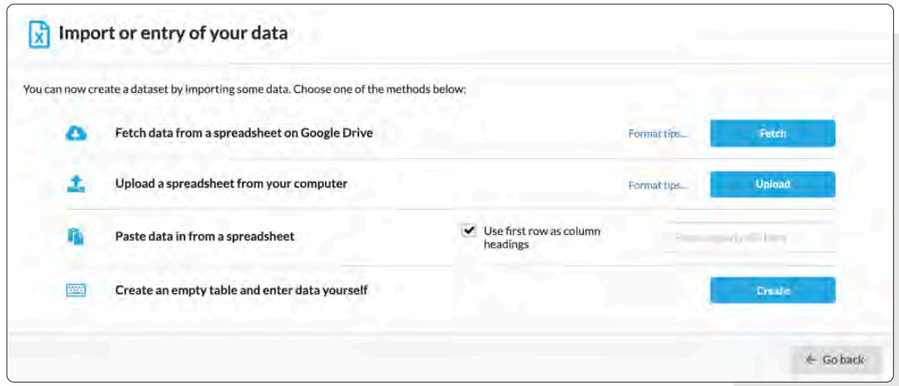


Histogram

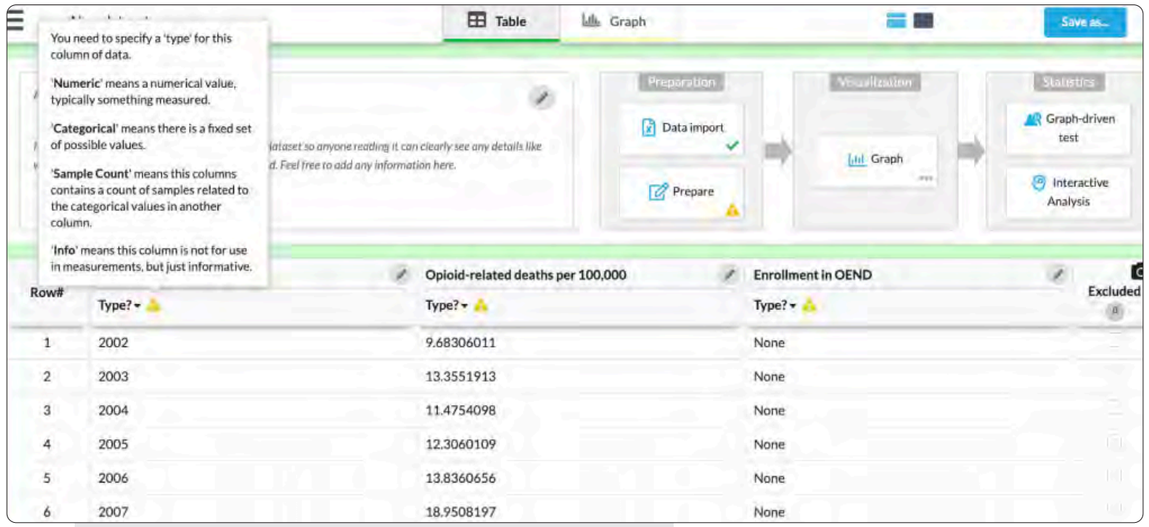
Schedule a demo on our website by scanning this bar code.

Upload and analyze your own data

A practices-based education requires students to explore new ideas and conduct science. Using DataClassroom, students can upload their own data and lead their own investigations.



DataClassroom can handle data from anywhere: Google Drive, spreadsheets on your computer, data that is copied-and-pasted, or even data that is manually entered!

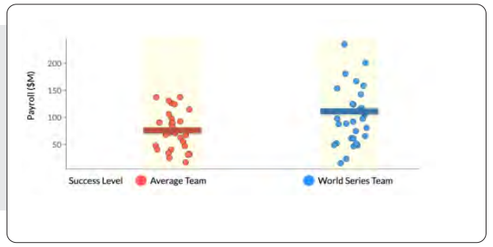


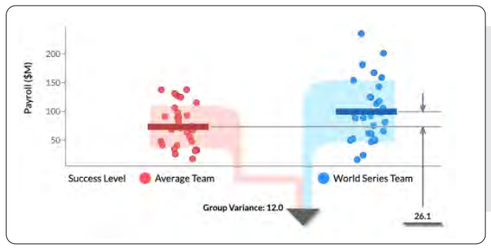
DataClassroom helps students understand the necessary conditions to use different types of graphs so they learn the important aspects of data visualization without having to decode the features of Excel or other graphing software.

The days of boring statistics are numbered. Literally.

DataClassroom can quickly help students select an appropriate statistical test with a Graph-driven Hypothesis test. Additionally, students can go deeper to understand the math with an Interactive Analysis. Here's an example of an interactive t-test.

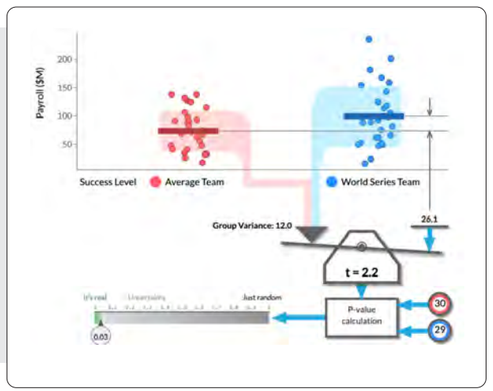
1 First, students estimate the mean and variance based on a visual representation of the data.

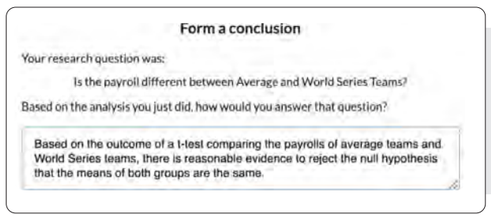




2 Next, DataClassroom animates the calculations of mean and variance so students can improve their data intuition.

3 With DataClassroom, students study and understand the math as it comes to life rather than just memorize formulas. Although the interactions are presented with plain language, the exportable Lab Notebook helps students use precise language to communicate their findings.





4 Finally, students interpret their results to conclude the analysis and can export their findings as a fully constructed report.

"I could see how easily my top performing students grasped stats concepts which previously took days of instruction to get across to them. At the same time, I noted my students who were struggling with stats concepts began to get much more comfortable and gained skills I am unsure would have been acquired otherwise."

Brandon Pope, IB Biology, Uplift Summit International Preparatory, Arlington, Texas

We want to help you meet your standards in science and math

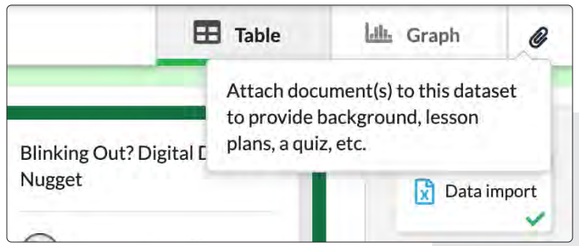
DataClassroom was designed to help teach science as a process with the Next Generation Science Standards in mind. It includes lessons across the Core Ideas and encourages students to develop their command of Science and Engineering Practices. Our Ready to Teach lessons include topics in Physical, and Life Sciences, as well as lessons focused on math, social sciences, and current events.

If you'd like a custom review of how DataClassroom aligns with your state's standards, send us an email (info@dataclassroom.com) with the subjects you'd like reviewed. We firmly believe that well designed graphing and interactive analysis tools help students to develop data intuition and their ability to argue from evidence - and we'd love to set up a demonstration to show you!

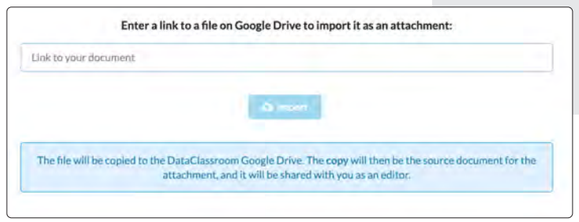
Nobody does it like you do.

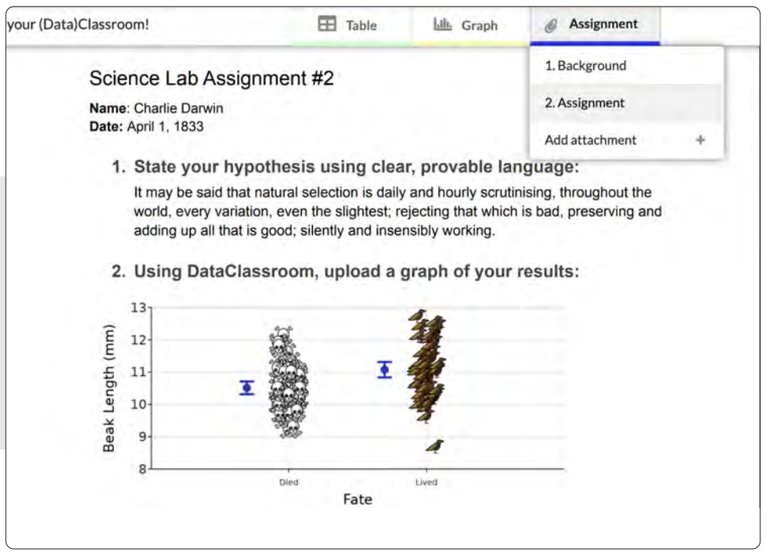
Nobody does it like you do. DataClassroom allows you to use tools like Google Docs, Sheets, and Slides to tailor lessons for your students. You can create assignments and assessments and attach them to your own datasets or existing Ready to Teach lessons within DataClassroom.

Bring in your best materials from Google Drive



Use or create teaching materials such as Docs, Slides, or PDFs to add assignments, assessments and more within DataClassroom.

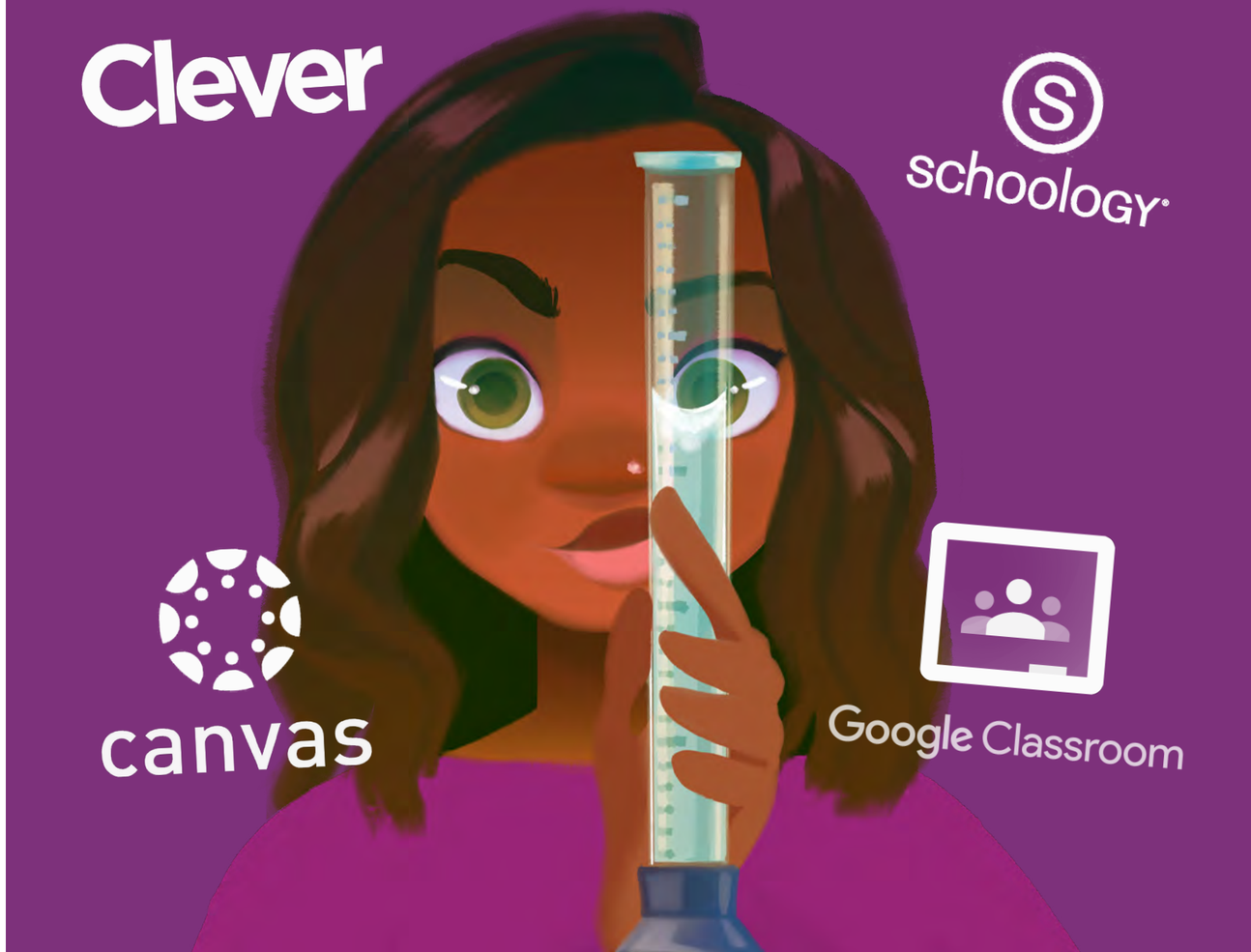




Students can complete objectives you set for them in DataClassroom, adding conclusions, notes, and graphs into a Google Doc.

And to help manage it all...

If you need to integrate with a learning management system, we've got you covered. DataClassroom works with the most popular learning management systems so you can focus on getting the most out of your classroom!



I've noticed a huge difference in the student's understanding and it has given them a lot more ownership over their work as they analyze their data.

Paul Rubeo, Science Research Teacher,
Yorktown High School, NY

Scan the code for an intro to how to use the customization tools in DataClassroom:

Glossary of Features

Basic graph types
- Scatter plots
- Dot plots
- Bar charts
- Histograms
- Frequency plots
- Pie charts
- Line graphs
- Categorical bubble plots
- Coming soon: violin plots

Graph features
- Error bars
- Mean and standard deviation
- 95% confidence interval
- Standard error (SEM)
- Median
- Box-and-Whiskers
- Regression lines (linear, quadratic, etc)
- Residuals
- Slope/tangent indicators
- Normal / Gaussian reference

Other graphing features
- Grouping by a third 'Z' variable for both bar- and dot- based charts
- Coloring by third 'Z' variable
- DataMojis - replace dots with emojis
- Customize fonts, colors, sizing
- Log or linear X/Y axes
- Easy export as images for including in assignments
- Automatic or manual axis scaling

Content
- Resource Library of example datasets
- Digital Data Nuggets activities
- Ready-to-Teach lesson plans and associated datasets
- Searchable online User Guide with detailed instructions for all features

Statistical Tests
- Independent Samples t-Test
- Chi-square Goodness of Fit
- Chi-square Test of Independence
- Linear Regression
- ANOVA
- 2-way ANOVA
- Shapiro-Wilk test of normality
- D'Agostino-Pearson test of normality
- Non-parametric tests
- Tukey HSD
- Kruskal-Wallis
- Mann-Whitney

Pedagogical features
- Graph-driven tests (assists choice of statistical tests)
- Graph Wizard (assists choice of graph type)
- Interactive Analyses (animated explanations of statistical tests)
- Integrated scaffolding for working with data (prepare, visualize, analyze)
- Customizable interface complexity (simple to advanced)
- Designed for classroom or online learning
- Built in student assistance / help and tips
- Integration with Google Docs and Slides for creating assignments and assessments

Data handling / processing
- Import from Google Drive / Sheets
- Upload as XLS, CSV
- In-app editing, copy, paste
- Exclude data rows
- Exclude rows by value
- Data transforms: arithmetic, log, square/square root, rank, exponential
- Integrated description for dataset and columns
- Assisted data typing per column
- Numeric data precision settings

IT and administration
- Web-app runs browser with no download or install
- Integrates with multiple LMS for rostering
- Google Classroom integration for assignments
- Clever integration
- Schoology integration
- Canvas integration
- Single Sign-On (SSO) with above
- Student / classes membership management
- Work sharing between students and teachers
- Data encryption compliant with secure PII regulations
- Built-in teacher training course
- Custom reports for district-level administrators

In the meantime, you can sign up for a free 90-day trial or schedule a demo on our website by scanning this bar code:

We would be lost without DataClassroom. It is an essential STEM tool for my science classes. DataClassroom is well worth the money and then some.

Christine Girtain, 2019 New Jersey STEM Teacher of the Year,
Toms River High Schools North and South, Toms River, New Jersey

DataClassroom is a clinic for students on how science itself works. My students have collected data from their neighborhoods and have used DataClassroom for visualization. It's been an essential component of the online world.

Dr. Paul Strode, 2017 NABT Outstanding Biology Teacher,
Fairview High School, Boulder, Colorado

Now that I have switched to DataClassroom, my students can spend their time and energy to figure out what the data are saying.

Trudy Pachon, Science and Art Teacher,
Mt. Everest Academy, San Diego, California