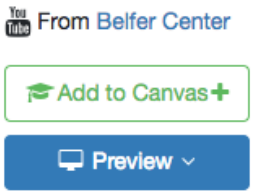
Harvard-Developed Tools to Advance Teaching and Learning

Harvard-developed teaching and learning tools will be showcased in an afternoon breakout session. Please see below for a brief overview of each tool. To explore more Harvard-grown teaching and learning ideas and tools, please visit hilt.harvard.edu/ideas-and-tools.

DART (DIGITAL ASSETS FOR REUSE IN TEACHING)

Summary: DART enables videos, audio recordings, problem sets, and other digital assets to be searched and reused in a learning management system (e.g., Canvas).



Goal: Optimize discovery and reuse of digital learning resources at Harvard.

Key Feature: Search across HarvardX, YouTube, and SoundCloud with the ability to scan media-rich search results.

Requires HarvardKey **https://dart.harvard.edu**

FLIPPING KIT

Summary: The Flipping Kit provides detailed instructions, planning documents, and other resources for instructors to use when flipping a class.

Goal: Provide a pedagogical framework and practical advice for flipping a class.

Key Feature: Five detailed steps: plan, create, gather learning data, engage in active learning, and reflect, take users from start to finish through the flipping process.

Open to the public **projects.iq.harvard.edu/flippingkit**

INSTRUCTIONAL MOVES

Summary: Instructional Moves spotlights Harvard instructors using high-leverage teaching strategies applicable to multiple settings and grounded in teaching and learning research.

Goal: Help instructors incorporate and refine high-leverage teaching practices tailored to the higher education context.

Key Feature: Three foundational modules showcasing over 55 moves through videos, research, and related resources.

Open to the public **instructionalmoves.gse.harvard.edu**

See reverse for more

Harvard-Developed Tools to Advance Teaching and Learning

ITERO

Summary: Itero captures the character-level history of a document and provides writing analytics for teachers.

Goal: Enable better student writing by giving teachers insight into the writing process.

Key Feature: Playback, fast-forward, and rewind through the life of a document for every character addition and subtraction.

Open to the public **https://itero.vpal.io/**

TEACHLY

Summary: Teachly is based on the premise that faculty can improve their pedagogy by getting to know their students and teaching practices better.

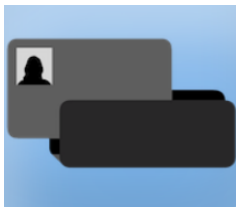
Goal: Create a more effective and inclusive classroom.

Key Feature: Individualized and searchable student profiles, thematic dashboards that identify participation patterns, and dynamic seating charts.

Currently piloted in select classrooms **http://teachly.me/**

INCLASS APP STORE

Summary: The Inclass App Store will be a place to find and learn about Canvas apps and other educational technology.



Goal: Provide a simple and secure way for educators to discover and install home-grown and licensed educational technology.

Key Feature: The App Store will allow courses to install apps in a single click.

For more information, get in touch with **gabe_abrams@harvard.edu**

Know of an idea or tool that should be on the HILT website? Let us know at: HILT@harvard.edu

DART

Streamlined reuse of digital learning assets

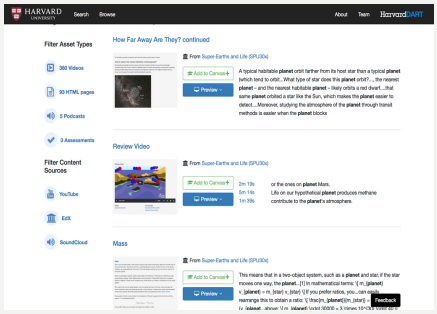
HARVARD
Office of the Vice Provost for Advances in Learning

Presenter: Daniel Seaton (VPAL)
Product Owner

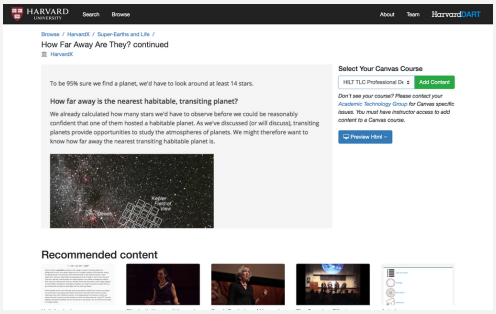
Summary: DART enables videos, audio recordings, problem sets, and other digital assets to be searched and reused in a learning management system (e.g., Canvas).

Goal: Optimize discovery and reuse of digital learning resources at Harvard.

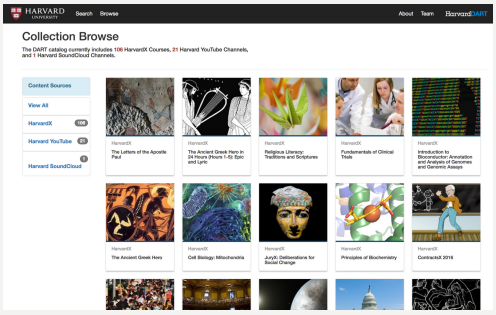
Key Features



Search across HarvardX, YouTube, and SoundCloud with the ability to scan media-rich search results.



Preview and add content directly to the modules section of a Canvas course.



Browse content by content source and ("coming-soon") generate and access user curated playlists of content.

Who It's For

- Leverage high production animations and visualizations.
- Give students more opportunities to self-test by reusing problem sets from other courses.
- Introduce concepts directly from leading scholars through video and audio assets.
- Create playlists of pre-matriculation and prerequisite content for courses.
- Unlock MOOC content by searching and reusing useful segments of a course without needing to enroll.
- Diversify the rich media sources integrated into a Canvas course.

How We Did It

docker elastic OPENedX

Powered by a combination of Docker, Elasticsearch, and Open edX.

Quick Facts

- DART stands for "digital assets for reuse in teaching."
- DART enabled direct import of digital assets into Harvard Canvas courses in fall 2017.
- DART currently supports searching over 36,000 digital learning assets.

Access

Requires HarvardKey
https://dart.harvard.edu

Contact

Daniel Seaton
Product Owner
daniel_seaton@harvard.edu

Watch

http://bit.ly/2vB9IyN

Flipping Kit

A step-by-step DIY guide to help you flip a class

HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

Presenters: Mae Klinger (HKS)
Digital Learning Designer

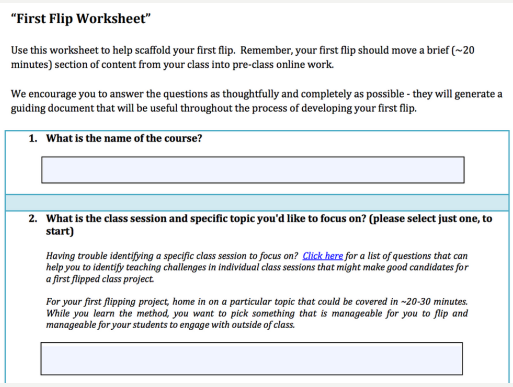
Janina Matuszeski (HKS)
Lecturer in Public Policy

Summary: The Flipping Kit provides detailed instructions, planning documents, and other resources for instructors to use when flipping a class.

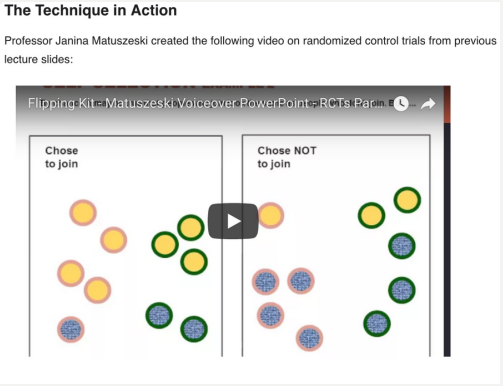
Goal: Provide a pedagogical framework and practical advice for flipping a class.

Key Features

Five detailed steps: plan, create, gather learning data, engage in active learning, and reflect.



Access downloadable feedback forms and other templates that scaffold the flipping process.



View real examples of teaching techniques from faculty and explore curated resources for classroom activities.

Who It's For

- First-time flippers who want to figure out if they should attempt a flip.
- Experienced flippers who are looking for new ideas on how to deliver content between classes.
- Teaching and learning staff who are assisting instructors with flipping.
- Instructional designers developing different models of blended learning.

How We Did It

The Open Scholar platform supports a combination of modes and media, from graphics and links to documents, surveys and videos.

Integrating different modes for specific purposes helps the Flipping Kit model the power of flipped learning.

Quick Facts

- The Flipping Kit was awarded a spark grant in spring 2016 from the Harvard Initiative for Learning and Teaching.
- In April 2017, Professors Janina Matuszeski and Theodore Svoronos led an HKS teaching seminar on their experiences flipping the classroom that featured the Flipping Kit.
- In September 2017, the Flipping Kit was presented by the SLATE team to the ABCD TIE group.

Access

Open to the public
projects.iq.harvard.edu/flippingkit

Contact

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Digital Learning Designer
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Watch

http://bit.ly/2voE8F3

Instructional Moves

Great teaching can be learned

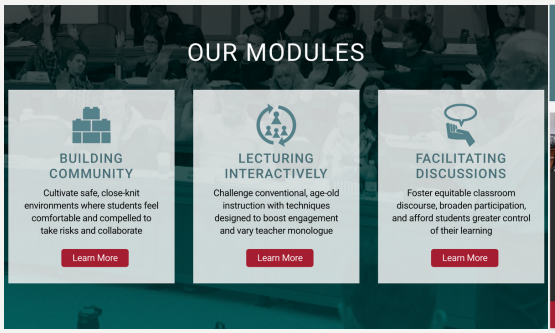
HARVARD GRADUATE SCHOOL OF EDUCATION

Summary: Instructional Moves spotlights Harvard instructors using high-leverage teaching strategies applicable to multiple settings and grounded in teaching and learning research.

Goal: Help instructors incorporate and refine high-leverage teaching practices tailored to the higher education context.

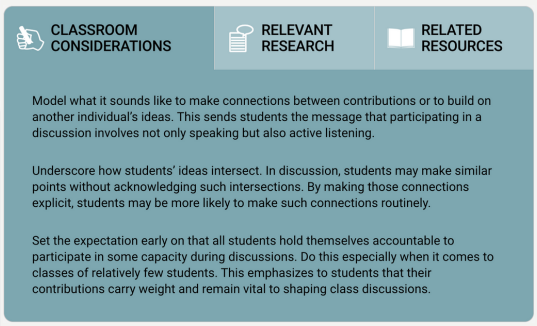
Presenter: Andrea LaRocca (HGSE) Project Lead

Key Features



Three foundational modules showcasing over 55 moves.

Each video combines classroom footage with reflections from instructors and students.



Videos are supplemented by relevant research on the move's efficacy, tips for enacting the move, and related resources.

Who It's For

- Future faculty members looking to establish their teaching style.
- Early-stage instructors interested in expanding their pedagogical repertoire.
- Veteran faculty members intending to hone a particular teaching practice
- Department heads looking for materials to launch a group conversation on teaching.
- Instructional coaches interested in using video as a common text for communal learning.
- Instructional coaches desiring follow-up resources to compliment consultations.

How We Did It

teaching&learning lab | HARVARD GRADUATE SCHOOL OF EDUCATION

The core Instructional Moves (IM) project team consists of HGSE faculty member Meira Levinson as the principal investigator and HGSE's Teaching and Learning Lab (TLL) as the design and development engine.

Quick Facts

- IM is an HGSE Decanal Initiative made possible by funding from the Harvard Initiative for Learning and Teaching.
- IM is designing a facilitated learning experience which will launch in October and is currently accepting registration.
- The IM team is currently deepening existing modules and will be launching a new module on Teaching Through Problems.

Access

Open to the public
instructionalmoves.gse.harvard.edu

Contact

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Assistant Director, Instructional Support and Development
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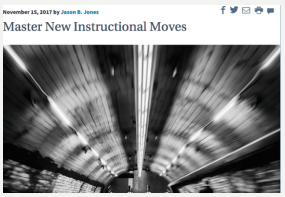
Press



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Itero

Discover insight to the writing process

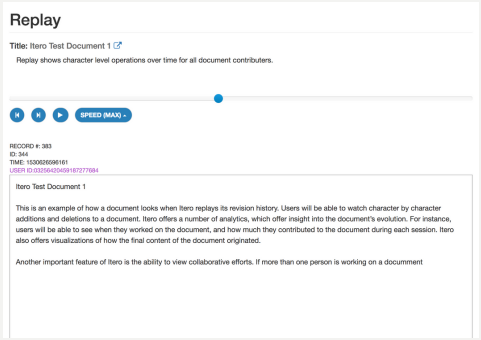
HARVARD
Office of the Vice Provost for Advances in Learning

Presenter: Vittorio Bucchieri (HUIT)
Senior User Experience Lead

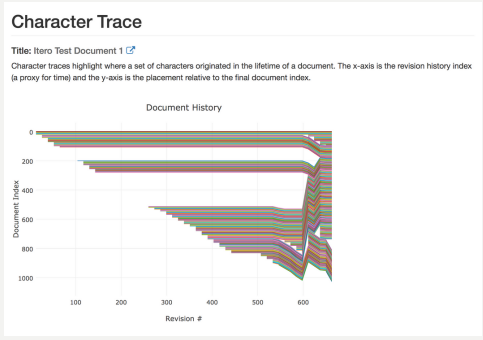
Summary: Itero captures the character-level history of a document and provides writing analytics for teachers.

Goal: Enable better student writing by giving teachers insight into the writing process.

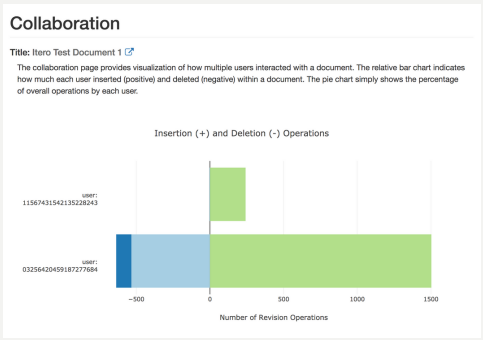
Key Features



Playback, fast-forward, and rewind through the life of a document for every character addition and subtraction.



Trace back to when and where every element of the final document originated.



View how much collaborators contributed to a document.

Who It's For

- Visualize for students the depth and breadth of a good revision process.
- Create model examples of different revision strategies.
- Better identify intervention opportunities for students struggling with time management.
- Change revision habits by walking students through their revision history.
- Conduct research on writing habits correlated to successful writing outcomes.
- Get an enhanced understanding of how groups collaborate on a document.

How We Did It

Google Cloud Platform

Google Docs

Google's Cloud Platform and the Google Docs API allow for the extraction of highly-detailed revision histories. The VPAL-Research team developed "gdocrevisions" - an Open Source Python library for extracting Google Doc revision histories via Google's Drive API.

Quick Facts

- In Latin, "Itero" means "to repeat; say again; iterate."
- Itero was awarded a spark grant in Fall 2016 from the Harvard Initiative for Learning and Teaching.
- Itero, while powered by Google Docs, was designed so that it does not require students to have a Google account.

Access

Open to the public
https://itero.vpal.io/

Contact

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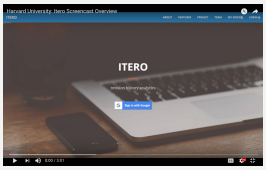
Watch



http://bit.ly/2LOfO9N

Teachly

Get to know your students. Get to know your teaching.

HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

Presenters: Dan Levy (HKS)
Senior Lecturer in Public Policy

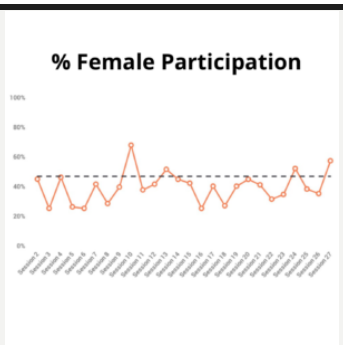
Teddy Svoronos (HKS)
Lecturer in Public Policy

Summary: Teachly is based on the premise that faculty can improve their pedagogy by getting to know their students and teaching practices better.

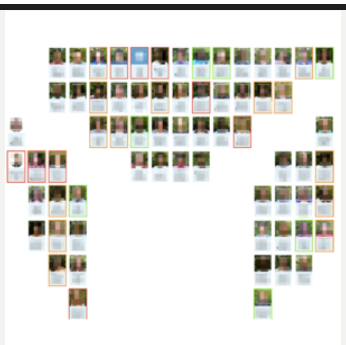
Goal: Create a more effective and inclusive classroom.

Key Features

Individualized and searchable student profiles about student backgrounds, interests, and goals.



Thematic dashboards that identify participation patterns in the classroom (race, gender, primary language).



Dynamic seating charts that track attendance and participation.

Who It's For

- Use individualized student profiles to facilitate engaging in more personalized interactions.
- Use dashboards to identify patterns and help to flag students that may be falling through the cracks.
- Visualize data to focus attention on spatial blind spots, as well as on individual students that may need support.
- Be more systematic about who is called on in class - both to cut back on calling on frequent hand-raisers and to encourage the quiet students to talk more.

How We Did It

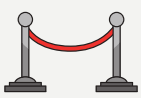
Teachly started in 2015 as a proof-of-concept for use by a single faculty member in order to make data about his students more accessible.

The goal was to transform data into actionable insights. In 2017, Teachly began to scale and was able to prove its efficacy on a small scale, piloting across classrooms at the Harvard Kennedy School.

Quick Facts

- Teachly was developed in 2015 and has since been used in 44 classrooms by 33 faculty members comprised of 1,335 students at the Harvard Kennedy School.
- Initial findings show faculty use Teachly data to reduce equity gaps in their classrooms.
- In August 2017, Teachly received a startup grant from HKS. In 2018, Teachly has received additional funding from HKS and HILT.

Access



Currently piloted in select classrooms
http://teachly.me/

Contact

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Listen

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