The Changing Landscape for Education Research

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Agenda

• Changing Opportunities for Education Research
• EdLab Approach
• Data Depository
A New Era for Education Research
The Challenge of Reshaping Ed Research
Ed Research is Oriented to the Past

- Limited automation
- Discrete activity
- Labor Intensive
- De-centralized
- Non-cumulative
Now is the Time to Re-imagine Education Research
Changing Conditions for Learning Create New Opportunities
Brief History of Data in Education
Early 20th Century

- Administrative Progressives
- Taylorist Orientation
- School District Studies
- Vocational Guidance Studies
- Intelligence Testing
Mid 20th Century

- Sputnik Era
- Intensified examinations of classroom processes
- Interaction analysis
- Micro teaching
- EEO
- Scientific approach
Late 20th Century

• A Nation at Risk
• Teacher testing/Student standardized testing
• School information systems
• State level data systems
• School profiles
• National data sets
Networked Data Systems and Learning Applications
Common Core Provides a Common Target
Vendors and Developers in a New Marketplace
Challenges Moving Forward
Limitations of Assessment
Data Quality Problems
Data Sharing Issues
Tracking Issues
Design

FINAL DEATHSTAR DESIGN MEETING
WE'RE GOING TO MISS IT...

EdLab
Develop
New Learning Times
An Ecology for Inquiry
APIs
On the Fly

Pluggable

into any browser-based application
No Performance Hit

No interference

data should be sent asynchronously
Generic Tracking

Generic tracking

Cola

Cola

do not impose structure on the data

EdLab
design | develop | discover
Longitudinal (Persistent Identity)

Time

Persistent identity

allow for longitudinal analysis
Technologies

Database

Back-end

Front-end

JavaScript
Data Flow
How To Track Example

What we are tracking

Vialogues
Research Broker
Survey Sidekick
New Learning Times
Authenticate

1. Authenticate

use EdLab account for identity
Choose

2 Choose element for tracking

timestamp clicks
Write Script

3. Write the script

1. Include tracking script
   
   `<script type='text/javascript' src='https://datadashboard.tc.columbia.edu/ddapi/dd.js'></script>`

2. Set the user
   
   `ddSetUser(VG.user.username);`

3. Set the type of event to listen for
   
   `ddListen("click");`

4. Register the event with the Depository
   
   `ddRegister("timeCode", "timecode", ddExtractors.text());`
Display
Privacy Concerns

data anonymized for researchers
Coming soon

Build out APIs

on demand access to anonymized data for research
Coming soon

Adding WYSIWYG tracking builder

- click and choose what to track
- no code for broader access

EdLab

Monday, October 21, 13
Follow-up

For more information:  gjn6@columbia.edu

See upcoming events and our blog: http://edlab.tc.columbia.edu/

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