

by elearning jockey 2 minutes ago

Day 1: Advancing Data-Intensive Research in Education

Day #1 of an NSF-funded Computer Research Association workshop in Rosslyn VA



craig wiggins
@oxala75

Quote from some pre-conference meeting reading material: "[t]he rise of machines is. ..inevitable and just as indifferent to your hatred."

 2 DAYS AGO



craig wiggins
@oxala75

I'm attending the [@CRAtweets](#) Workshop on Advancing [#Data](#)-Intensive Research in Education. I'm hereby making up the hashtag [#CRADATA](#) [#first](#)

 2 DAYS AGO



craig wiggins
@oxala75

....so I'll be posting things from the event fairly regularly today & tomorrow. If you're not interested in [#bigdata](#) in education....sorry?

 2 DAYS AGO



craig wiggins
@oxala75

here's the agenda for [#CRADATA](#): cra.org/events/big-dat...

 2 DAYS AGO



craig wiggins
@oxala75

This is actually the second [@NSF-funded](#) [@CRAtweets](#) workshop [#CRADATA](#)

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The first one was focused on case studies of effective partnerships outside of education between big data producers and consumers [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

Today and tomorrow is about case studies of big data usage in education, building on insights from the first workshop [#CRADATA](#)

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craig wiggins
@oxala75

no mistake - this is a lot about data being used to improve outcomes in [#STEM](#) education initiatives. But there's more [#CRADATA](#)

2 DAYS AGO



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@oxala75

also, just to let you know, we all read a 130-page briefing book before attending the event. Not gonna lie: was very helpful [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

I'll see if I can share the [#data](#) workshop briefing book with you all later - some good stuff in there [#CRADATA](#)

2 DAYS AGO

0830-0850: **Welcome**



.@JoanFerriniMund kicks us off #cradata pic.twitter.com/du7aimi54l

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



C. Laubenthal
@Phbob

Joan: Sharing data sets & creating data sets designed for sharing. Need to help communities and leaders prepare for that movement. #CRADATA

 2 DAYS AGO



C. Laubenthal
@Phbob

Joan: Constantly focus on scaling stat methods, developing new stat methods, and, in general ,pushing to find new ways to learn. #CRADATA

 2 DAYS AGO



C. Laubenthal

@Phbob

Joan: @NSF works on all levels & in all topics in education (ie museum experts). Need to think deeper abt data science across area. #CRADATA

 2 DAYS AGO



George Siemens

@gsiemens

spending next few days at NSF workshop on "Advancing Data-Intensive Research in Education" in Washington #cradata many open questions

 2 DAYS AGO



C. Laubenthal

@Phbob

Joan:[Doing an excellent job articulating the depth, breadth of NSF and data science, calling crowd out for innovation and growth.] #CRADATA


 2 DAYS AGO



Alejandro Piscitelli

@piscitelli

RT @gsiemens spending few days at NSF workshop on "Advancing Data-Intensive Research in Education" Washington #cradata many open questions

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Cátedra Datos

@DatosUBA

RT @gsiemens spending few days at NSF workshop on "Advancing Data-Intensive Research in Education" Washington #cradata many open questions

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0850-0900: Purposes and Processes of the Workshop



C. Laubenthal

@Phbob

Chris Dede is next to speak, he is the face of the workshop, its organizer (among other important roles). Recognizes team effort. [#CRADATA](#)


 2 DAYS AGO



C. Laubenthal

@Phbob

Dede: Each of us have a piece or two of the "elephant." We have very diff pieces, but none in this room knows what the elephant is [#CRADATA](#)


 2 DAYS AGO



Andrew Ho

@AndrewDeanHo

STEM is not just a big data domain, it is a diverse data domain. [@JoanFerriniMund](#) at [#CRADATA](#). Hope we include qual: insidehighered.com/blogs/higher-e...

 2 DAYS AGO



.@chrs_dede, #CRADATA organizer, sets the tone. Interestingly, we're here to talk to each other, not make presos pic.twitter.com/aHigi7r1YM

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



C. Laubenthal

@Phbob

Dede: "Reason for putting the elephant together...Where are we going?...Beyond [this]...To provide field advice [on what works]." #CRADATA

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C. Laubenthal

@Phbob

Dede: "Each form of data imposes its own structure as to what's possible and not possible."
#CRADATA

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Chris Dede [@Harvard](#)-goal 2 guide [@NSF](#) on paths & investments 4 big & diverse data analysis 4 learning [#cradata](#) [@NSTA](#) pic.twitter.com/OnSFOE7DaN

 AL [@ALSBYERS](#) · 2 DAYS AGO

0900-1000: NSF's Role in Advancing Data Science



craig wiggins
[@oxala75](#)


now up: Taylor Martin presenting [#Data](#) Science for Social Good [#CRADATA](#)

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[@Phbob](#)

Taylor Martin, Data Science for Social Good cases for use. 1st is poverty alleviation in rural sub-Saharan Africa & [@Give_Directly](#) [#CRADATA](#)

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Right into it - talking about data science to ameliorate conditions in sub-Saharan Africa
[#CRADATA](#)

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@oxala75

[#data](#) collection is thin, unobtrusive (discovering what is potentially personal from what is non-personal data) [#CRADATA](#)

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C. Laubenthal
@Phbob

Use targets & maps of highest dens of metal roofs per village Data collect thin, but unobtrusive (personal not from personal data) [#CRADATA](#)

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@oxala75

Algorithms for moving us from more structured situations to more personalized learning and effective ed interventions [#CRADATA](#)

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@oxala75

interesting terminology for courses that are not online: "on the ground" [#CRADATA](#) My [#ISD](#) people: we should adopt this.

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@oxala75

ooh ooh new acronym [#OTG](#) [#CRADATA](#)


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C. Laubenthal

@Phbob

Another example, @SummitPS, doing a great job integrating data into its institution decision-making including college persistence. #CRADATA

 2 DAYS AGO



George Siemens

@gsiemens

mentioned at #cradata: Stealth Assessment myweb.fsu.edu/vshute/pdf/Ste...

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Hobsons

@Hobsons

Excited to be at #CRADATA today. @dyaskin will be speaking today at 10:15 with @edwsonoma. ow.ly/NHV3I @PARFramework @Starfish360

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C. Laubenthal

@Phbob

[Taylor reintroduces the idea that there needs to be meta models, so that a new theory does not need to be generated each tool.] #CRADATA

 2 DAYS AGO

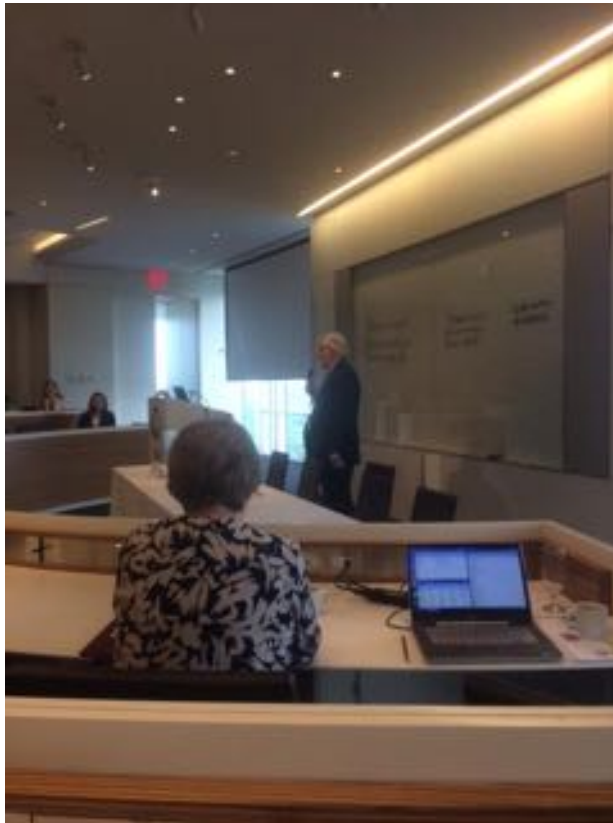


craig wiggins

@oxala75

data tools (from Wisconsin): adageapi.org/applications.h... #CRADATA #unity3d

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Big data mtg launched by [@chrs_dede](#) after EHR head [@JoanFerriniMund](#), in foreground, welcomed us from [#NSF](#). [#CRADATA](#) pic.twitter.com/eCx6b9dQJM

 SUDDS [@SUDDS_GROUP](#) · 2 DAYS AGO



[craig wiggins](#)
[@oxala75](#)


hm... [@TuvaLabs](#) [#datavisualization](#) tuvalabs.com [#CRADATA](#)

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[C. Laubenthal](#)
[@Phbob](#)

Biggest challenges: few integrated data sources, not enough knowledge sharing abt data sources, teachers being human AI. [#CRADATA](#)

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craig wiggins
@oxala75

Taylor Martin says that when she talks to [#edtech](#) folks about [#dataviz](#), they're like "why do i have to be a human AI?" [#CRADATA](#)

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Computing Research
@CRAtweets

"Think about the new questions that could be pursued" -Joan Ferrini-Mundy at the start of the CRA [@NSF_EHR](#) Advancing Data Workshop. [#CRADATA](#)

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@oxala75

"..i mean, does this [#datavisualization](#) tell my why this student is behaving this way:? What about options?" [#CRADATA](#)

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Jim Harris
@JimDHarris

[@oxala75](#) Craig - any chance of some photo/ screenshots from the event please?

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craig wiggins
@oxala75

[@JimDHarris](#) I'll ask, Jim. I don't want the [@NSF](#) or [@CRAtweets](#) to red card me :) [#CRADATA](#)

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C. Laubenthal
@Phbob

Culture change is req, but difficult in ed and data. There is a pressing desire to accomplish this now, but it needs to be right. [#CRADATA](#)

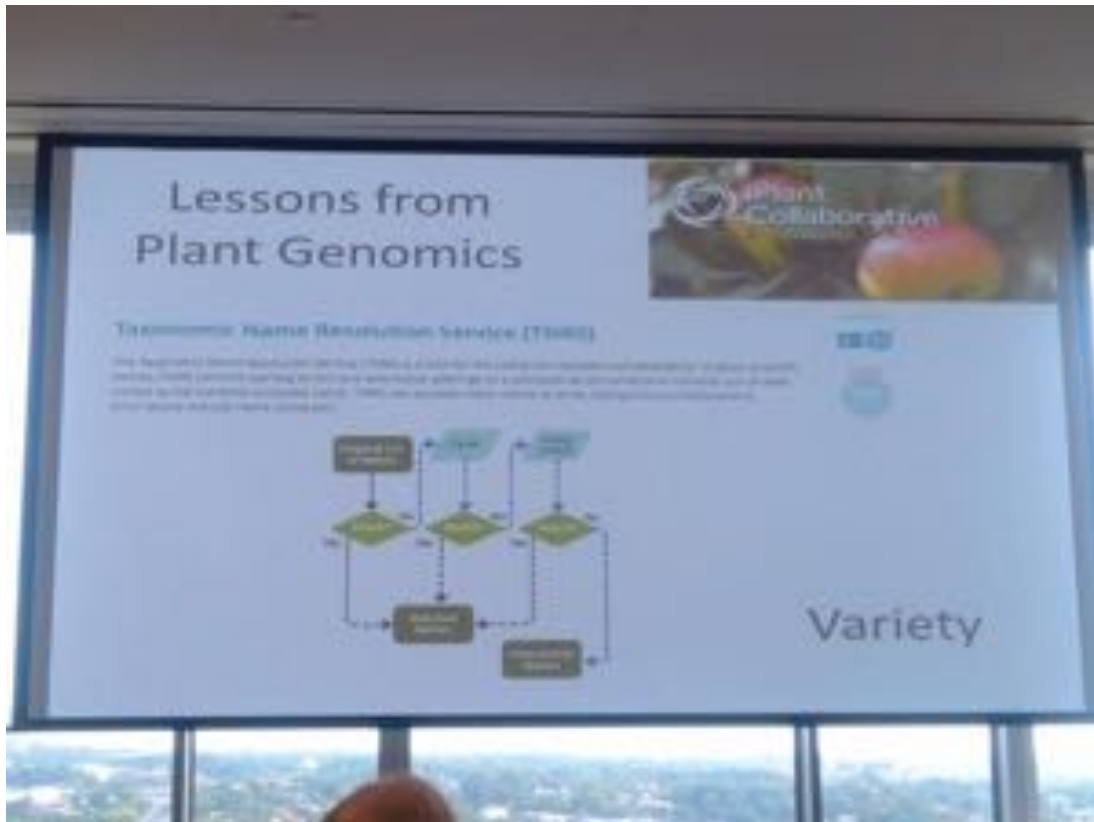
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Computing Research
@CRAtweets

"We are building a new field, it is going to take awhile"- Taylor Martin @NSF_EHR #CRADATA

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#CRADATA pic.twitter.com/npDWEQLfhN

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craig wiggins
@oxala75

Plant genomics data issues: Multi-decade plans, developed & actualized across the entire scholarly community #CRADATA

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@Phbob

Singer illustrating variety of big data use plant genomics & difficulty of ontology. "How do we get a Ed common lingo to do this?" #CRADATA

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Susan Singer @NSF Importance of #bigdata topology-Volume Velocity Variety Veracity & Visualizations 4 #STEM #CRADATA pic.twitter.com/w5ejZ93Fpm

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@oxala75

Plant genomics problem number 2: lots of different names for the same plants. Complicates relationship mapping & data entry #CRADATA

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in plant genomics, evolution of data interoperability and standards were crucial to success
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@oxala75

equiv in ed? massive amounts of learning data that could be collected from MOOCs, intelligent tutoring systems & digital platforms [#CRADATA](#)

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@oxala75

issues in data collection and management = the 4 Vs: veracity, volume, velocity & variety
[#CRADATA](#)

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C. Laubenthal
@Phbob

The challenge of variety is its reach, million details & slight changes. This is over come w/use of shared space & common terms. [#CRADATA](#)

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fun fact: the @NSF's iPlant Collaborative (iplantcollaborative.org) has a storage capacity of 427 terabytes [#CRADATA](#)

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@oxala75

that's a lot of genetic data strings [#CRADATA](#)

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C. Laubenthal

@Phbob

How big is big data? #CRADATA

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C. Laubenthal

@Phbob

"Efficiency in scientific discovery through curation, analyses and interpretation of massive datasets. But what is massive?" #CRADATA


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@oxala75

whoops - we're on to Gul Kremer, who's talking about something that I've been thinking, esp in regards to ed: "how big is #bigdata" #CRADATA

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@oxala75

(cuz honestly, as @MMTorrance reminded me last week, #bigdata in learning and education at the corporate level is really "big-ish") #CRADATA

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@oxala75

"Big data consists of extensive datasets primarily in the characteristics of volume, variety, velocity, variability" #CRADATA

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C. Laubenthal

@Phbob

"Big data consists of extensive datasets primarily in the characteristics of volume, variety, velocity, and/or variability ..." #CRADATA

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C. Laubenthal

@Phbob

...that require a stable architecture for efficient storage, manipulation, and analysis."

#CRADATA

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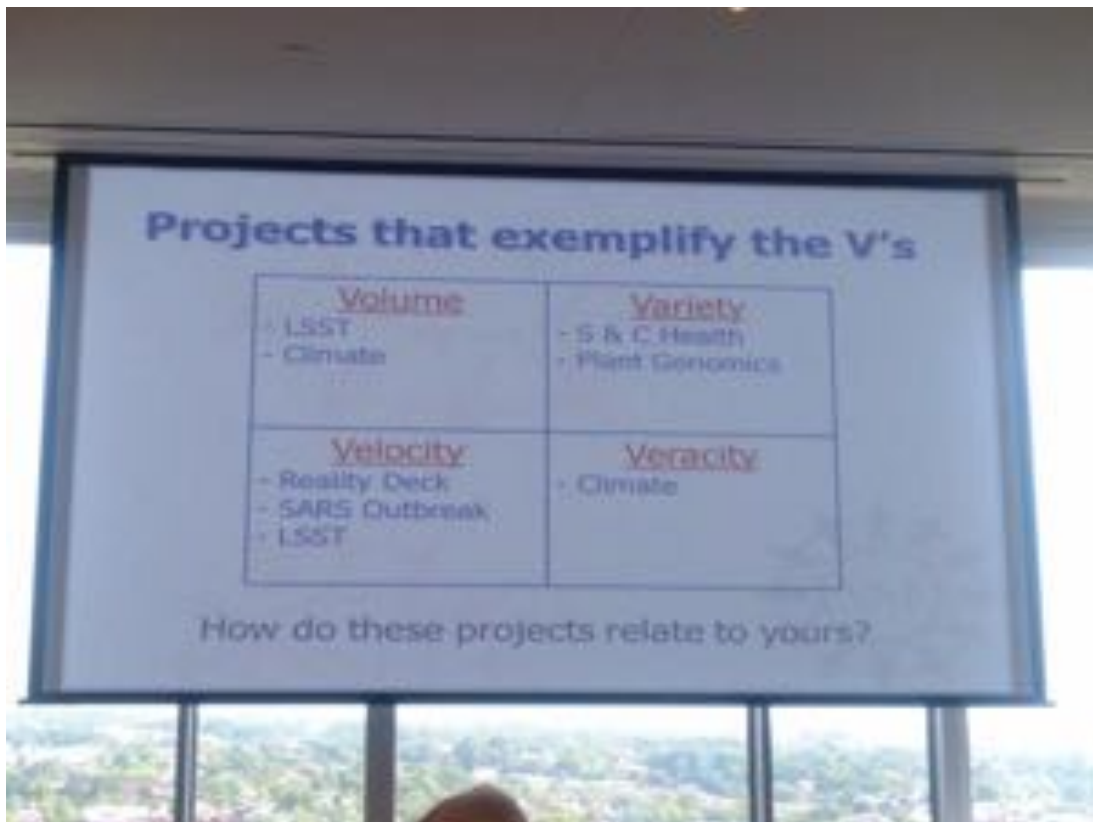


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@oxala75

we are currently considering cases from earth science, biology, health, astronomy & computer science #CRADATA

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#CRADATA pic.twitter.com/DuBmWvA0Us

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C. Laubenthal

@Phbob

[Http://www~1.ibm.com/software/data/...](http://www~1.ibm.com/software/data/...) #CRADATA

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@oxala75

LSST -> large synoptic survey telescope (the astronomy case study) #CRADATA. 20-40 petabyte (!) img archive #CRADATA

 2 DAYS AGO



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@oxala75

big issue in climate modeling: data pushing both computational & storage limits. We need waaaay more resolution (1.5 petaflops!) #CRADATA

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@oxala75

back to astronomy: one 6 gigabyte img every 20 seconds. you know what offsets the huge need to eyeballs on data? citizen scientists #CRADATA

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C. Laubenthal

@Phbob

Someone just mentioned a petabyte of data. Looked it up, "10¹⁵ bytes of data, 1,000 terabytes (TB) or 1,000,000 gigabytes (GB)." #CRADATA

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craig wiggins

@oxala75

another place where we need a lot more processing and manip: infectious disease tracking and #dataviz #CRADATA


 2 DAYS AGO



C. Laubenthal

@Phbob

At a loss for words to describe the coolness of super large, data projects. #wow #justwow
#CRADATA

 2 DAYS AGO



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@oxala75

Don't even get me started on the kind of data that topography pours in. #CRADATA

 2 DAYS AGO



Computing Research

@CRAtweets

See the four Vs of Big Data! #CRADATA ibmbigdatahub.com/infographic/fo...

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craig wiggins

@oxala75

of course, thinking of healthcare data, one of the things sort of holding back wholesale manip of
data are privacy laws/concerns #CRADATA

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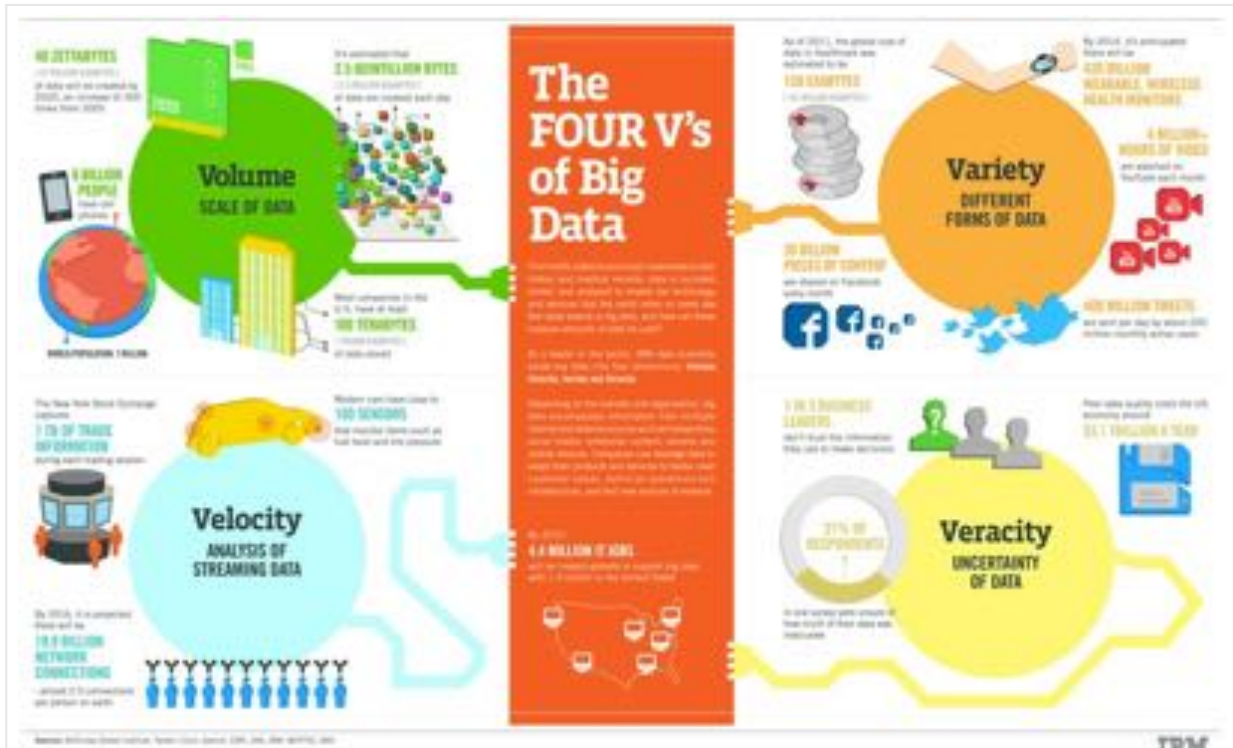


Ellen Wagner

@edwsonoma

lots of reference to your work in our first session at #CRAdat today, @KirkDBorne.

 2 DAYS AGO



Trying to resend the IBM chart on big data from before: [www-01.ibm.com/software/data/...](http://www-01.ibm.com/software/data/)
 #CRADATA

C. LAUBENTHAL @PHBOB · 2 DAYS AGO

craig wiggins
 @oxala75

hey, check this out: cpc.ncep.noaa.gov/products/NMME/ #CRADATA #NMME
 #datavisualization

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 @oxala75

.@AndrewDeanHo the ultimate goal in working w #bigdata is generalizability #CRADATA

2 DAYS AGO

craig wiggins
 @oxala75

Elizabeth Burrows (to @AndrewDeanHo): "yeah - no need for #bigdata for big data's sake. Really." #CRADATA


2 DAYS AGO



C. Laubenthal

@Phbob

Q: Can you incentivize bigness WHILE incentivizing reason? A: It's a process, there always has to be reason, but it takes resource. #CRADATA

 2 DAYS AGO



C. Laubenthal

@Phbob

This was one of the very cool projects mentioned in the presentation: bit.ly/1PZDNhW. #CRADATA


 2 DAYS AGO



C. Laubenthal

@Phbob

Q: Ed terminology presents unique challenges (Math in CA seems to be diff than math in AL)? A: Tech isn't there, working on it. #CRADATA

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C. Laubenthal

@Phbob

Another article on petabyte: computerweekly.com/feature/What-d... #CRADATA

 2 DAYS AGO



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@oxala75

someone asks if there's a Learner Genome project...so yeah, learner profiles. I bring up #xAPI, naturally #CRADATA


 2 DAYS AGO



craig wiggins

@oxala75

I warn that big data is going to come from ed when we focus on performance, not learning #xAPI #CRADATA

 2 DAYS AGO



Ellen Wagner
@edwsonoma

@oxala75 good to see you across the room at #cradata :-)

 2 DAYS AGO



.@edwsonoma #CRADATA pic.twitter.com/BfPzTrBA2q

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



C. Laubenthal
@Phbob

Audience: Need cognitive task analysis, need to avoid the idea that there is an elixir from an education genomic project. #CRADATA

 2 DAYS AGO



Andrew Ho
@AndrewDeanHo

In psychometrics, the ultimate "V" is "Validity," of the uses and interpretations of metrics (Kane, 2013) onlinelibrary.wiley.com/doi/10.1111/je... #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Susan Singer had a really good analogy about genes and soybeans and the equiv in education...man, u had to be here [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

"design your [#data](#) sets w/data collection in mind" i mean, that sounds so simple and smart. No wonder we don't do it in ed :) [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

science in data "went down the reductionist rabbit hole": data first, questions later. Education needs questions first [#science](#) [#CRADATA](#)

2 DAYS AGO



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@oxala75

that last bit came from an exchange between [@NSF's Susan Singer](#) & [@NCState's @JereConfrey](#) [#CRADATA](#)

2 DAYS AGO



C. Laubenthal
@Phbob

Q: Analyze by question or evol of questions? A: Currently, not considered, but happy to revisit. Let's go data, theory, then app. [#CRADATA](#)

2 DAYS AGO



Starfish Solutions
@Starfish360

At [#CRADATA](#) today, [@dyaskin](#) will be speaking on Predictive Models in [#highered](#) today at 10:15 with [@edwsonoma](#)! [@PARFramework](#) [@Hobsons](#)


2 DAYS AGO



C. Laubenthal

@Phbob

Audience: This discussion is fantastic, but psychology, politics, and culture are important to any big data implementation. #CRADATA

 2 DAYS AGO



C. Laubenthal

@Phbob

Audience: The more data you have the more quickly your model will crash and fail. #CRADATA

 2 DAYS AGO



craig wiggins

@oxala75

guys, the #bigdata cred in this room... well, I don't have my its_huge.gif ready,. But trust me. #CRADATA

 2 DAYS AGO



Our current #cradata panel pic.twitter.com/W7MfQO3zdb

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO

1015-1115: Predictive Models based on Behavioral Patterns in Higher Education



C. Laubenthal
@Phbob

Chris: Less ambiguity of grain size when dealing with predictive models, the outcomes are more clearly defined, diagnostics easier. #CRADATA

 2 DAYS AGO



C. Laubenthal
@Phbob

Ellen Wagner is up talking about the PAR framework on predictive modeling in behavioral patterns. #CRADATA

 2 DAYS AGO



.@edwsonoma talks predictive models based on behavioral patterns in higher ed #cradata
pic.twitter.com/JaoK8fnXak

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



Natalie Harr
@nharr23

Excited to be at CRA's 2 day workshop on Data-Intensive Research in Education in Arlington. So many dynamic presenters! #CRADATA @NSF_EHR

 2 DAYS AGO



C. Laubenthal
@Phbob

Ellen: the score card push, illuminated the need for data that describe all of the college (drop outs, military, part time). #CRADATA

 2 DAYS AGO



#cradata pic.twitter.com/qJffEPcOqd

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craig wiggins
@oxala75

you know [@edwsonoma](#), right? parframework.org #CRADATA

 2 DAYS AGO



Getting ready for our [#CRADATA](#) discussion: "Predictive Models Based on Behavioral Patterns in [#HigherEd](#)" [@dyaskin pic.twitter.com/4IBakBSpD3](#)

 **HOBSONS** [@HOBSONS](#) · 2 DAYS AGO



C. Laubenthal

[@Phbob](#)

Ellen: a technology trigger or a novel solution to wicked problem? [#CRADATA](#)

 2 DAYS AGO



craig wiggins

[@oxala75](#)

so yeah, the US has moved from 12th to 11th place education-wise. Meanwhile US ed tech companies are eating well [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

disclaimer: i am one of those well-fed folks :) #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

oh hey, i met @gsiemens in person finally. Managed not to fanboy out #CRADATA #goals

 2 DAYS AGO



craig wiggins
@oxala75

the PAR framework uses (only!) 77 distinct variables. Why? Everybody has to be able to input the same data #CRADATA

 2 DAYS AGO



C. Laubenthal
@Phbob

PAR only uses 77 variables, but they selected only those variable that every of their 351 campuses could get for every student. #CRADATA

 2 DAYS AGO



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@oxala75

the PAR game changer: common #data definitions #CRADATA

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@oxala75

PAR formative data was not pulled from LMSes. Why? Those of you who work with an #LMS know why #data #interoperability #CRADATA

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craig wiggins
@oxala75

there are too many interesting things happening in DC today! :-/ #CRADATA #CIC15
#GCTC2015 [twitter.com/michebox/statu...](https://twitter.com/michebox/status...)

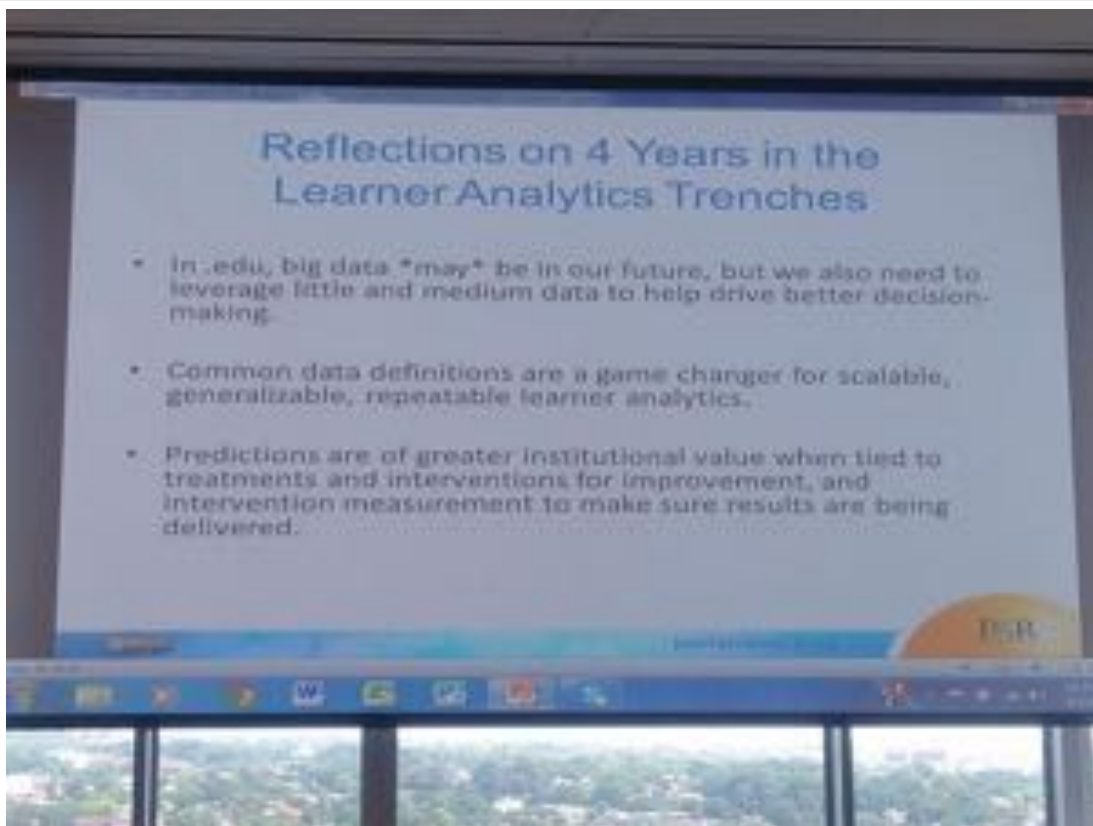
2 DAYS AGO



George Siemens
@gsiemens

[@oxala75](https://twitter.com/oxala75) haha. was good to finally meet in person! #cradata

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#cradata pic.twitter.com/6rRzgBoRWV

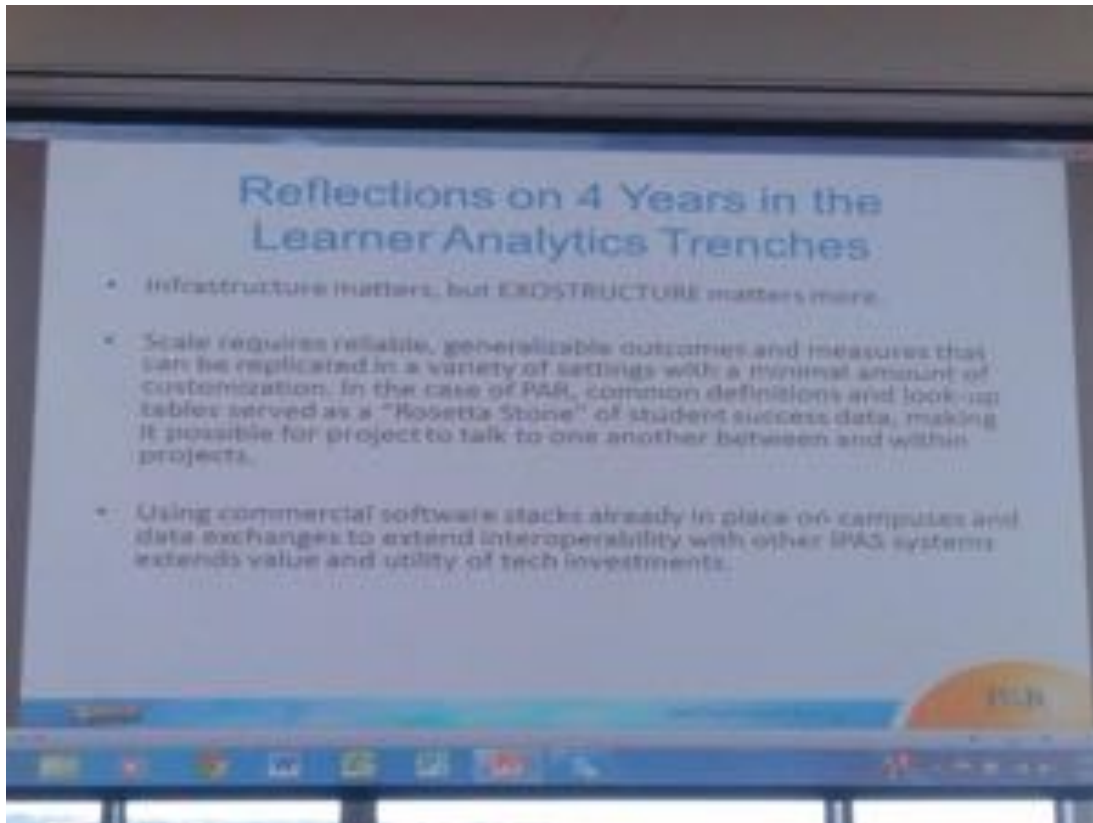
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craig wiggins
@oxala75

.@edwsonoma "prediction w/o action...is [bad]" #CRADATA

2 DAYS AGO



Part 2 [#cradata pic.twitter.com/todbyi893v](https://pic.twitter.com/todbyi893v)

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[craig wiggins](#)
@oxala75

"Infrastructure matters, but EXOSTRUCTURE matters more." - [@edwsonoma](#) [#CRADATA](#)

 2 DAYS AGO



[C. Laubenthal](#)
@Phbob

David Yaskin: Half the students who start college do not finish. [#CRADATA](#)

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[craig wiggins](#)
@oxala75

sorry forgot to mention: this panel is composed of [@edwsonoma](#) + [@dyaskin](#). David is from [starfish360](#). You better ask somebody [#CRADATA](#)

 2 DAYS AGO



George Siemens

@gsiemens

I think we have entered the infomercial portion of the agenda. #cradata

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craig wiggins

@oxala75

first-gen college entrants really need help with student services, and they have few templates or understanding their value #CRADATA

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craig wiggins

@oxala75

was good to talk to @dyaskin about #xAPI prior to now hearing his remarks about @Starfish360 (so that I dont have to pelt him w/?s) #CRADATA

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#cradata pic.twitter.com/7xcNkkNpg8

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

both [@edwsonoma](#) + [@dyaskin](#) have me musing on some things regarding predictive [#analytics](#)
[#CRADATA](#)

 2 DAYS AGO



George Siemens
@gsiemens

the issue I have with [#learninganalytics](#) is that the conversation is almost exclusively about solutions to ill-defined problems. [#cradata](#)

 2 DAYS AGO



Jane Bozarth
@JaneBozarth

@gsiemens and too often examination by autopsy #cradata

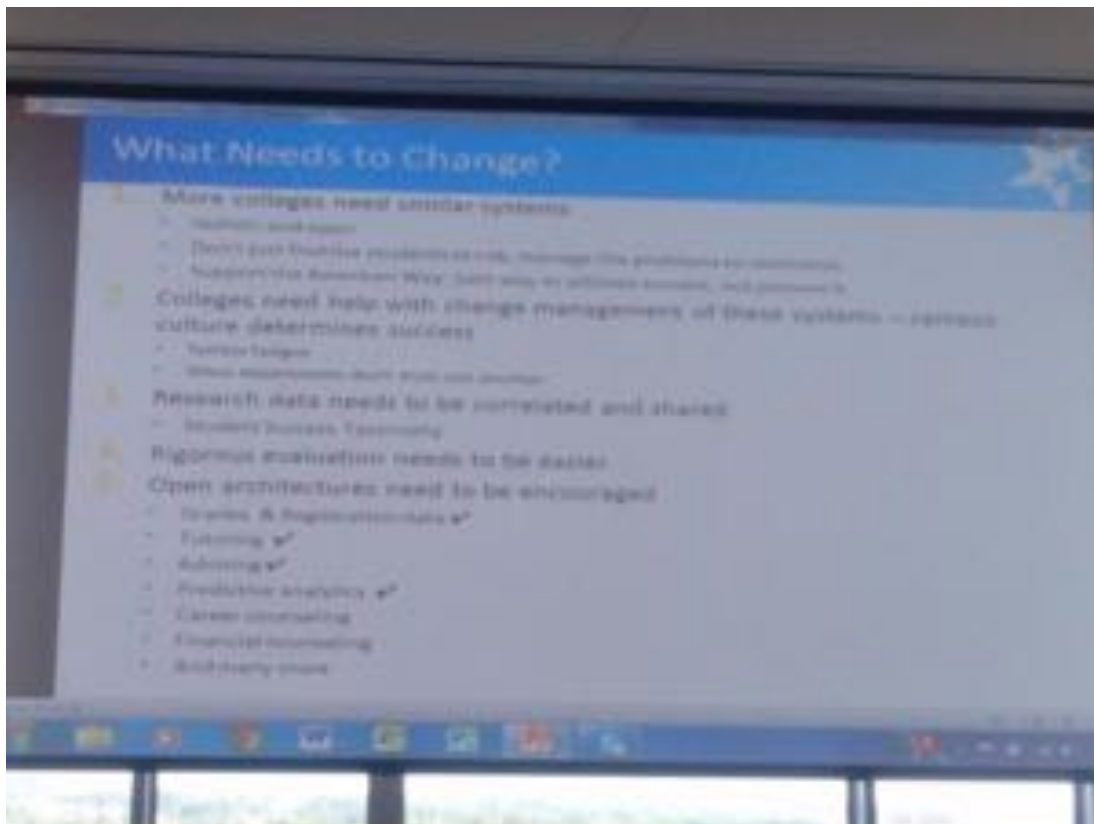
2 DAYS AGO



George Siemens
@gsiemens

the focus is on "now you know who leaves early" ok. Great. now what? That's BI, not #learninganalytics #cradata.

2 DAYS AGO



#cradata pic.twitter.com/dsYcQKK9hb


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C. Laubenthal
@Phbob

David: on challenges, more colleges need similar systems that are holistic and open.

#CRADATA

 2 DAYS AGO



@JaneBozarth @edwsonoma @dyaskin #CRADATA pic.twitter.com/uNnZ4hCOQl

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO




"This is where predictive analytics come in: you need heuristics to know what to pay attention to."
#CRADATA pic.twitter.com/OkhFzRwycr

 HOBSONS @HOBSONS · 2 DAYS AGO



craig wiggins
@oxala75

.@LinkedIn + something like PAR, maybe? #CRADATA

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craig wiggins
@oxala75


the PAR = "adaptive learning for institutions" - @edwsonoma #CRADATA

 2 DAYS AGO



Kirk Borne
@KirkDBorne

@edwsonoma Really?!? I would love to know more. How on earth did I miss this #CRAdata event? :(

 2 DAYS AGO



Kirk Borne
@KirkDBorne

@oxala75 Can you share that briefing book? or is it confidential??? #CRAdata (Wish I was there!!!)

 2 DAYS AGO



craig wiggins
@oxala75

@KirkDBorne it's publicly available via a link on this page: cra.org/events/big-dat...
#CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

tweeting text from my Chromebook and tweeting pics from my phone at the same time #logjam
#CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

what's working? "coaching" says @dyaskin - getting a student to someone that can figure them out + who knows what school can do #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

in effect, things like @Starfish360 or the PAR work to get institutions to know what to do, which is often be more effing human #CRADATA

 2 DAYS AGO



L2R Ellen Wagner-David Yaskin-Chris Dede Ellen-PAR predictive analysis, David-Starfish Retention 2
intervene [#CRADATA](https://twitter.com/CRADATA) pic.twitter.com/LrjBLxGnPM

 AL @ALSBYERS · 2 DAYS AGO



What needs to change? #CRADATA @dyaskin pic.twitter.com/IYb9QIDVLO

 HOBSONS @HOBSONS · 2 DAYS AGO



craig wiggins
@oxala75

i mean, the whole process of successfully transferring a student? needs guard rails and better care #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75


i like this focus on educational services vs. pedagogy #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

performance <-- helping people reach their goals <-- what exactly are your goals, btw? Dexter Fletcher, basically #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

funny that no one has called out trade schools, certifications or competency frameworks after Dexter's comment #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75


"models go to institutional research to die" - people need to be able to use data; needs to be demystified (via @edwsonoma) #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

.@edwsonoma says that we - education - didn't really start talking about #bigdata until 2009 #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

im sure y'all knew about this www2.ed.gov/about/offices/... #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

aargh i can't tweet fast enough to catch the exchange on A/B testing that just happened :-/
#cradata

 2 DAYS AGO



craig wiggins
@oxala75

hey, [@PalantirTech](#) is here at [#cradata](#)

2 DAYS AGO



craig wiggins
@oxala75

"today sees explosion of data sources, not just data records" - dude from [@PalantirTech](#)
[#cradata](#) [#xAPI](#) folks, that's activity providers

2 DAYS AGO



craig wiggins
@oxala75

Una-May O'Reilly (MIT): is this really predictive analytics? [#cradata](#)

2 DAYS AGO



craig wiggins
@oxala75

sorry, that's [@UnaMayMIT](#) [#cradata](#)

2 DAYS AGO

1115-1230: Dialogue on Privacy, Security, and Ethics



craig wiggins
@oxala75

up next: the privacy panel ::rolls up sleeves:: [#CRADATA](#)

2 DAYS AGO



E. Ariño de la Rubia
@earino

[@oxala75](#) hey, what is [#cradata](#) this looks like a super relevant and interesting event...

2 DAYS AGO



craig wiggins
@oxala75

@earino it's this: cra.org/events/big-dat... - an @NSF + @CRAtweets event re #bigdata in education #cradata

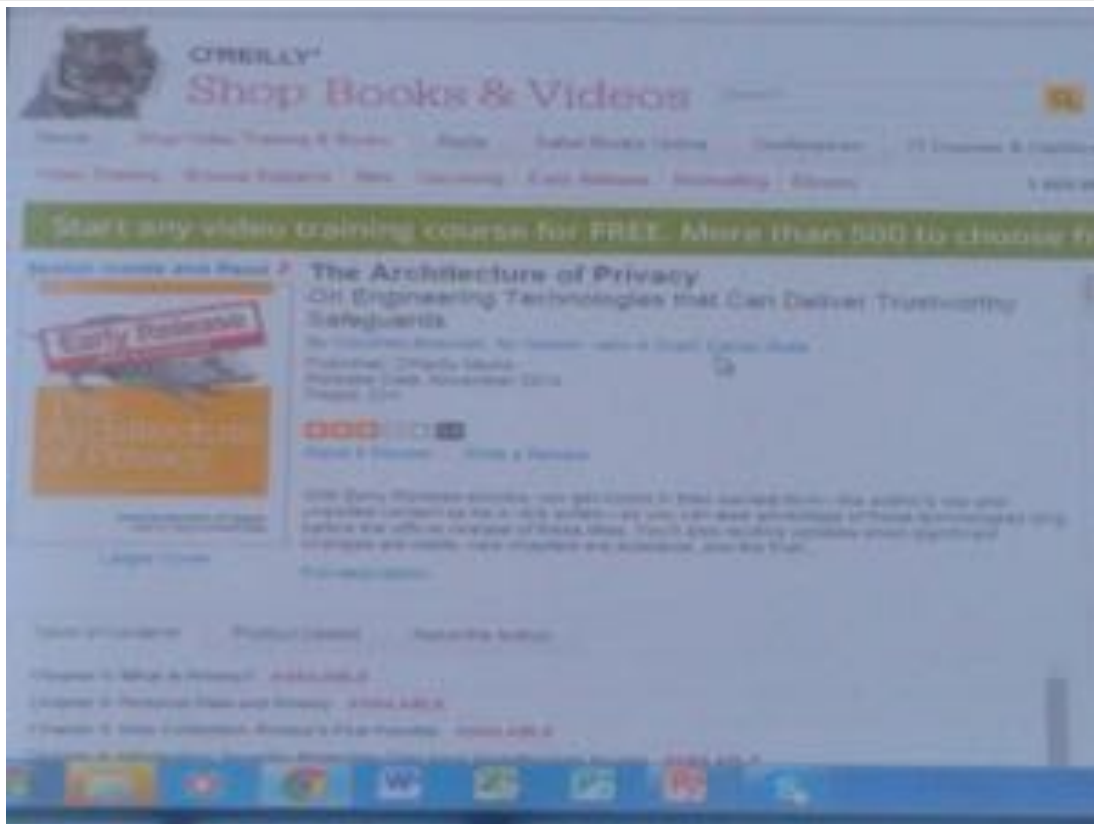
2 DAYS AGO



George Siemens
@gsiemens

Just mentioned: The architecture of privacy shop.oreilly.com/product/063692... #cradata

2 DAYS AGO




Book coming from @alephbass #cradata pic.twitter.com/XRMHVUjbnP

CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

#CRADATA privacy panel: @UnaMayMIT, @alephbass (aka dude from @PalantirTech), @pkhammar and @stout_ethics (Elizabeth Buchanan)

 2 DAYS AGO



craig wiggins
@oxala75

.@alephbass: "ppl argue very passionately about their kids' privacy data being used by ed software. They argue via Facebook..." #cradata

 2 DAYS AGO



craig wiggins
@oxala75

you're gonna need a bigger boat #xAPI #CRADATA twitter.com/edpublishers/s...

 2 DAYS AGO



craig wiggins
@oxala75

potential harm vs probability of harm (of data privacy). Guess which one we write think pieces about :-/ #cradata

 2 DAYS AGO



craig wiggins
@oxala75

legislation is being written by people who don't know what this data is for, what is likely to happen, etc. - @alephbass #CRADATA

 2 DAYS AGO



Britt Lundgren
@BrittLundgren

Predictive analytics panel discussion at #cradata: First term GPA is a strong predictor of college completion; SAT scores, not so much.

 2 DAYS AGO



craig wiggins
@oxala75

just...you know that tech has outstripped legislation, right? just think of ALPR (automatic license plate readers) [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

when we thought only human police would be able to check license plates, the manpower restrictions on collecting data was the check [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

but now that we can see it all, all the time, now our legislation seems anemic to defend us [#CRADATA](#)

2 DAYS AGO



George Siemens
@gsiemens

Listening to a talk by [@PalantirTech](#) on privacy and ethics. Most people have no idea how much data is being collected. [#cradata](#)

2 DAYS AGO



craig wiggins
@oxala75

the smart: don't give people data - invite them to play in your data playground. They can play, but not take the data away [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

data privacy standards - we need them in order to get to sharing data. How do we do that? [#CRADATA](#)

2 DAYS AGO



craig wiggins

@oxala75

up now: [@UnaMayMIT](#) with "educational big data and the digital learner" [#CRADATA](#)

 2 DAYS AGO



George Siemens

@gsiemens

up next: Una May O'Reilly on Privacy and Access Considerations in Educational Big Data. She's Canadian (at [@MIT](#)) and highly awesome [#cradata](#)

 2 DAYS AGO

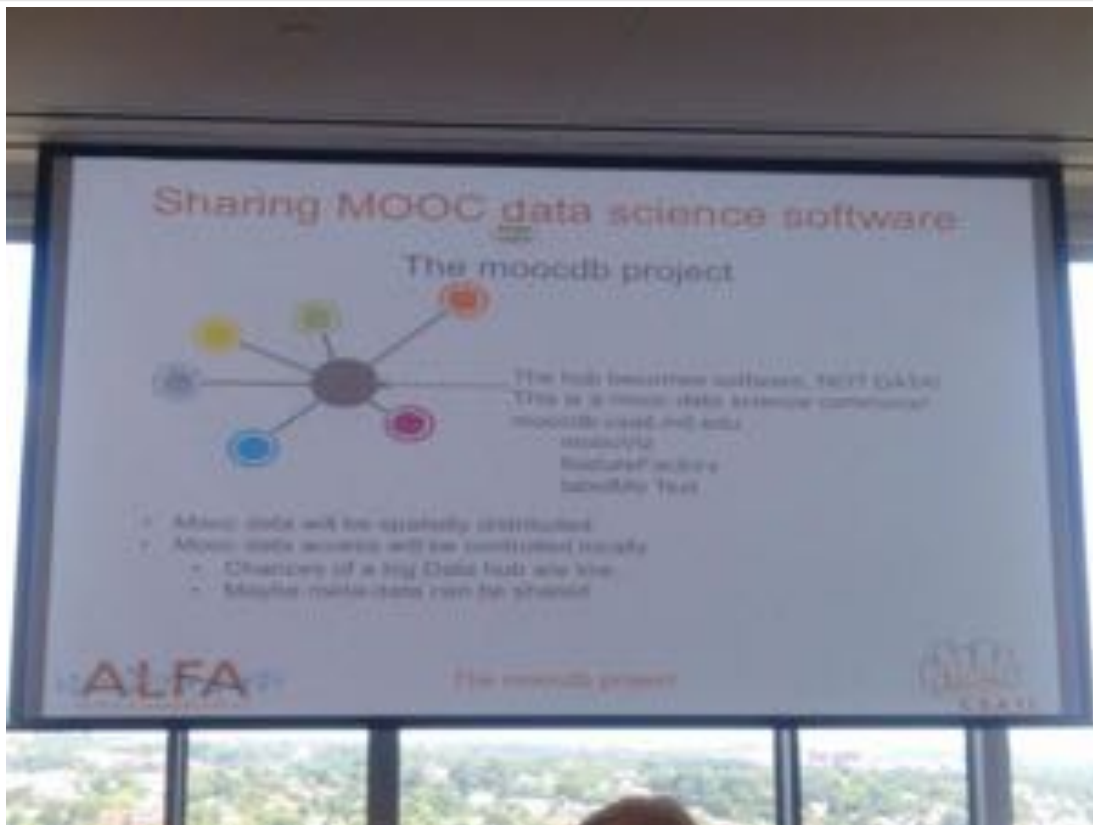


craig wiggins

@oxala75

[.@UnaMayMIT](#) works with the ALFA MOOCdb project: [groups.csail.mit.edu/EVO-DesignOpt/...](http://groups.csail.mit.edu/EVO-DesignOpt/) [#CRADATA](#)

 2 DAYS AGO



#cradata pic.twitter.com/NkrUy8smfo

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



Shaun Kellogg
@sbkellogg

MOOCdb Project @mjsamberg #CRADATA moodb.csail.mit.edu

 2 DAYS AGO



craig wiggins
@oxala75

so, @UnaMayMIT has been working to get #MOOC data. First hurdle: getting people to freaking share (privacy concerns) #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

student (the prime stakeholder!) gives data (via the privacy policy) to MOOCdb, gets learning services back #CRADATA

 2 DAYS AGO



Andrew Ho
@AndrewDeanHo

Do "predictive analytics" even need to be accurate to have effects? Or are predictions just a hook to inspire effective treatments? #CRADATA

 2 DAYS AGO



George Siemens
@gsiemens

If you're interested in the education big data workshop, follow [@oxala75](#) . He's doing a stellar job live tweeting resources/topics. #cradata

 2 DAYS AGO



[@gsiemens](#) #CRADATA pic.twitter.com/CKTiHZxKic

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

right now, in sharing data + sharing privacy: 1) highly-vetted rich, raw data vs 2) open, used simple data #CRADATA

 2 DAYS AGO



Penn State Outreach
@PSUOutreach

Interesting discussion re. [#predictiveanalytics](#) going on now at [#cradata](#)

 2 DAYS AGO



Britt Lundgren
@BrittLundgren

MOOCdb shares MOOC user/outcome data across institutions without compromising student privacy [#cradata](#)

 2 DAYS AGO



craig wiggins
@oxala75

extremes: [#data](#) protection law in Singapore vs European data protection design [#CRADATA](#)
(note to self: read these reports)

 2 DAYS AGO



craig wiggins
@oxala75

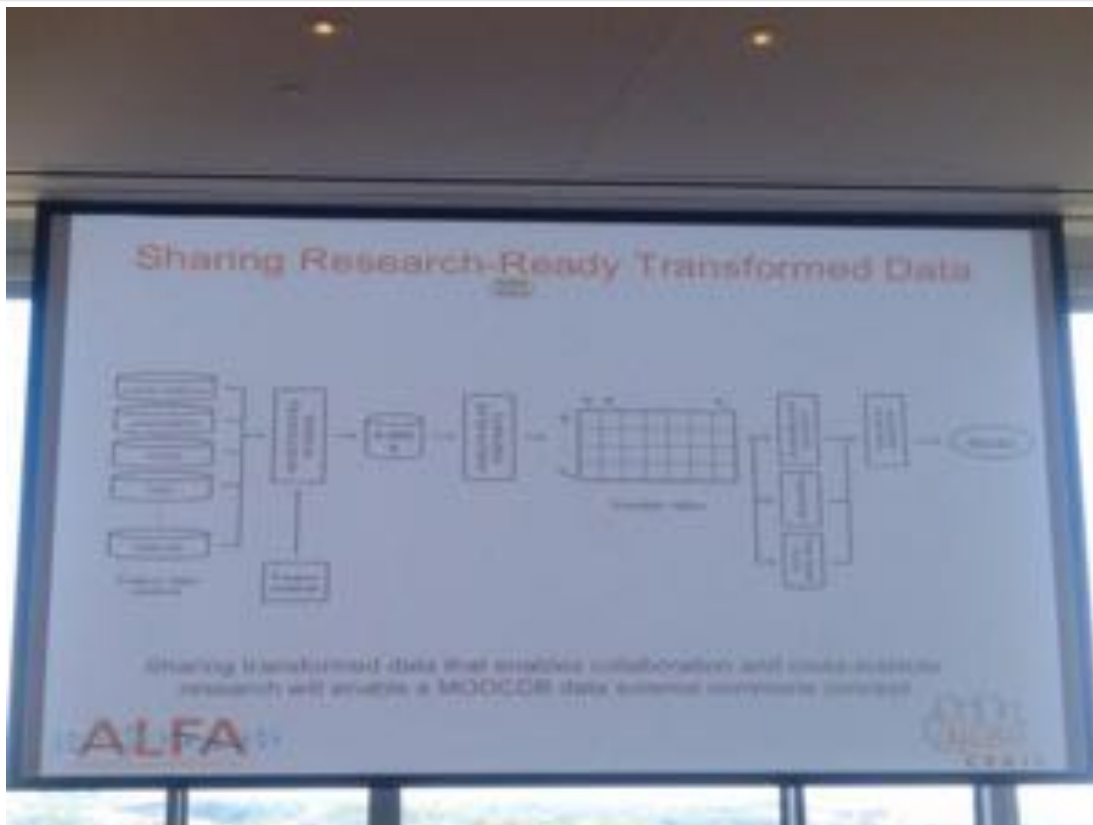
.@UnaMayMIT shouts out the CSAIL initiative: bigdata.csail.mit.edu [#CRADATA](#)

 2 DAYS AGO



Thus seems simple enough, of course :) [#cradata pic.twitter.com/RzLSckCptl](https://twitter.com/RzLSckCptl)

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO




Sorry for the bad photo quality [#cradata pic.twitter.com/L13rFsXNrU](https://twitter.com/L13rFsXNrU)

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



[craig wiggins](https://twitter.com/craigwiggins)
@oxala75

I've got like 4 tweets backed up in Twitter right now. My phone :-/ [#CRADATA](https://twitter.com/craigwiggins)

 2 DAYS AGO



[Ellen Wagner](https://twitter.com/edwsonoma)
@edwsonoma

.@oxala75 to be clear, IR doesn't kill big data projects. but insight tools push boundaries of inst. research & reporting capacity [#CRADATA](https://twitter.com/craigwiggins)

 2 DAYS AGO



craig wiggins
@oxala75

assessment? 1) gap btwn practitioners needs & tech maturity 2) policy 3) controllers (MIT registrar 'challenge', for example) #CRADATA

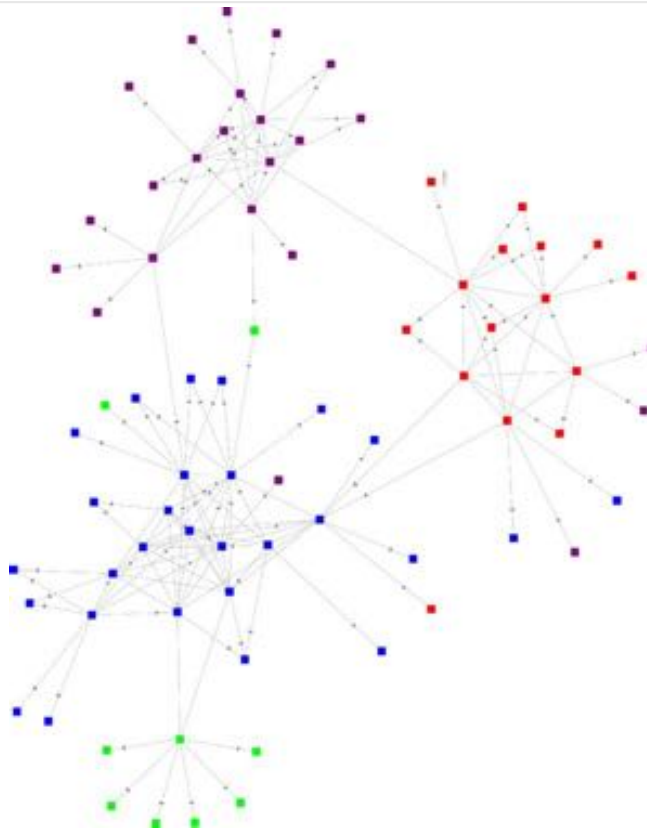
2 DAYS AGO



craig wiggins
@oxala75

next up: @pkhammar. She is a provacy lawyer with whom I had a bkfst chat this morn @ #CRADATA

2 DAYS AGO




@gsiemens social network drawn from mobile phone meta data... #CRADATA
pic.twitter.com/1emKIUCgxc

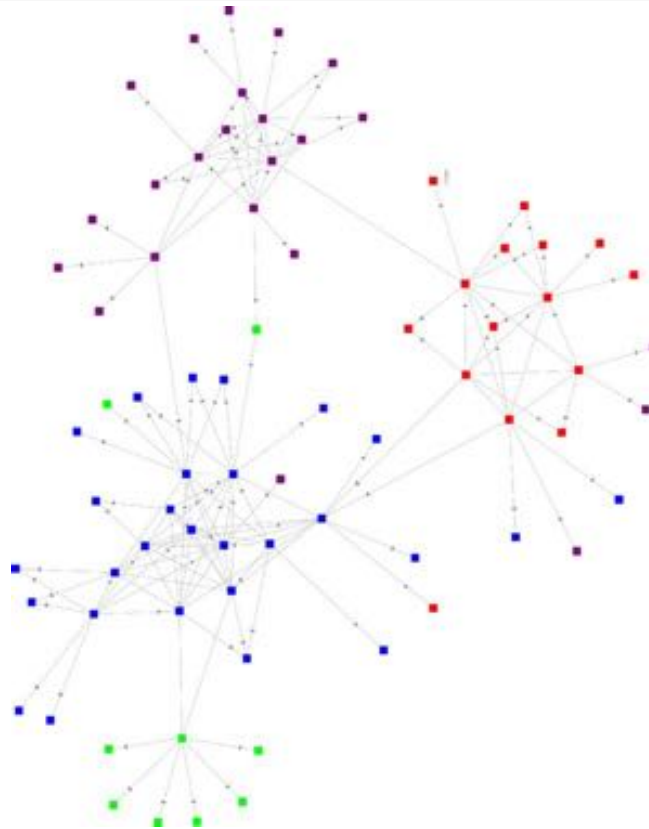
VALDIS KREBS @VALDISKREBS · 2 DAYS AGO



craig wiggins
@oxala75

.@pkhammar moved from working w/law enforcement (you kinda know what's gonna happen w/privacy breaches) to health & ed (wide open) #CRADATA

 2 DAYS AGO



RT @ValdisKrebs: @gsiemens social network drawn from mobile phone meta data... #CRADATA
pic.twitter.com/woAeujVGfi

 MOBILE QR @MOBILEQRM · 2 DAYS AGO



craig wiggins
@oxala75

.@pkhammar: privacy data act of 1974 says u can't give data... ..yeah, but what does 'give' mean today? #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

fun fact: [@pkhammar](#) is mathematician-turned-lawyer. how often does that happen?
[#CRADATA](#)

2 DAYS AGO



George Siemens
@gsiemens

haha. Data miner activism "What laws are standing in our way and how can we change them"
[#cradata](#)

2 DAYS AGO



craig wiggins
@oxala75

.[@pkhammar](#): people are working on tech - this is not the problem. Policies won't change until we understand more [#CRADATA](#)

2 DAYS AGO



George Veletsianos
@veletsianos

Diverse methods are essential to understand/improve edu. Background to qual piece:
veletsianos.com/?p=2348 twitter.com/AndrewDeanHo/s...

2 DAYS AGO



craig wiggins
@oxala75

"I don't like that commercial entities can have 'the good data' to do research, when academia is blocked by IRBs" - [@pkhammar](#) [#CRADATA](#)

2 DAYS AGO



academic research bodies be like [#CRADATA](#) pic.twitter.com/MAXFppV1Wl

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



[craig wiggins](#)
@oxala75

"ppl make really bad decisions when they're asked to make decisions they don't understand. This is where IRBs are now." - [@pkhammar](#) [#CRADATA](#)

 2 DAYS AGO



[craig wiggins](#)
@oxala75

"is 'found data' valid data?" [#CRADATA](#)

 2 DAYS AGO



[Britt Lundgren](#)
@BrittLundgren

Current IRB privacy restrictions mean commercial enterprises can do better research than academic institutions. Time for new policy? [#cradata](#)

 2 DAYS AGO



[craig wiggins](#)
@oxala75

if you are like me: "what is found data?" blogs.sas.com/content/datama... [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

next up: Elizabeth Buchanan (aka [@stout_ethics](#)) with a bit of a dialogue on provacy + ethics
[#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

here's a term for the day" 'algorithmic harms' [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

let's put it this way: you remember those [@GooglePlus](#) + [@facebook](#) "here's your year in pictures set to music that u didnt ask for" [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

...what if your year was really crappy? divorce, child died, personal injury [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

How are you gonna feel when you get the extended remix reminder of all that? [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

If a person did that to you, you'd smack them dead in the face [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

But surprise! It's not a person. It's an algorithm. You're welcome :-/ [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

.@stout_ethics: is privacy really the big problem with [#bigdata](#)? [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

that's crazy, brah [#CRADATA](#) twitter.com/iPlantCollab/s...

2 DAYS AGO



craig wiggins
@oxala75

'algorithmic cruelties' = theatlantic.com/technology/arc... [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

.@stout_ethics: "can all schools afford predictive [#analytics](#)? who's left out?" [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

privacy is a right privacy is contextual privacy is hella subjective -@stout_ethics, basically [#CRADATA](#)

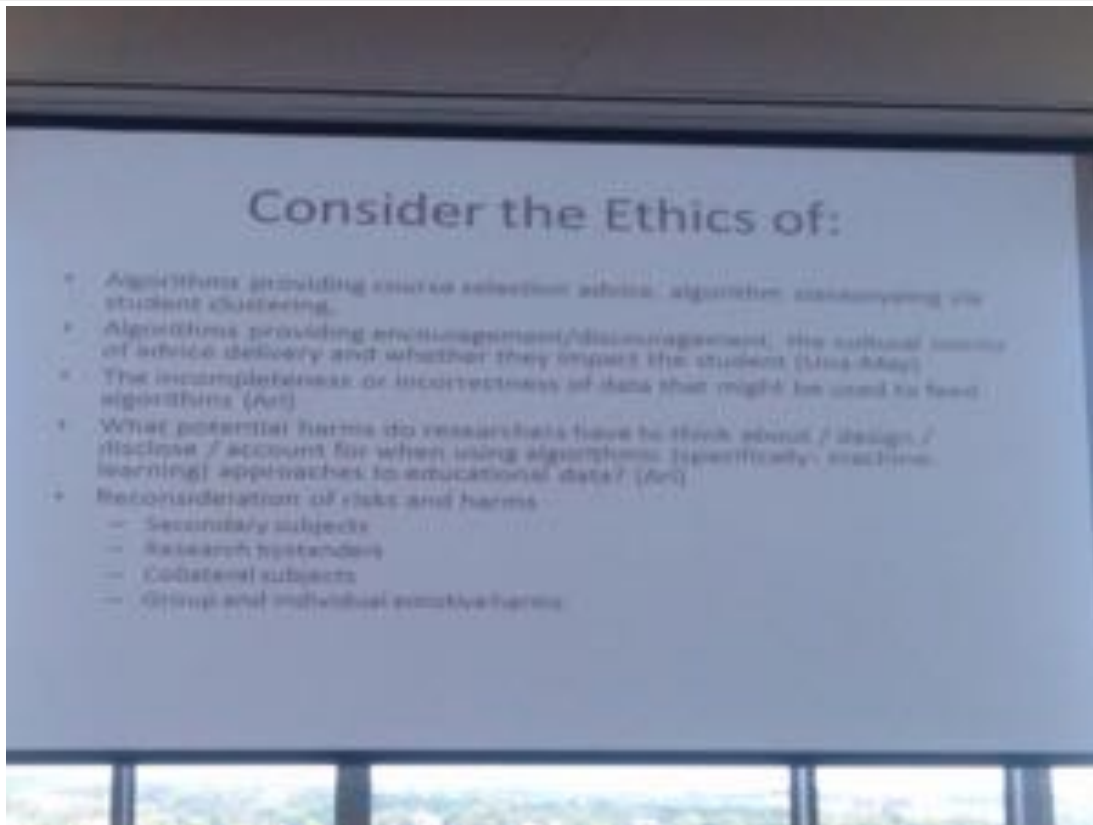
2 DAYS AGO



craig wiggins
@oxala75

"There are very few Moby Dicks. Most of us are sardines. Fisherman doesn't want THE sardine. It is the shoal that needs protecting" #CRADATA

2 DAYS AGO



#cradata pic.twitter.com/FQ9xsyMGIL

CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

yo, this dude is really asking a question about mitigating the damage caused by captured racially or sexually-aggressive acts #cradata

2 DAYS AGO



craig wiggins
@oxala75

being me, I gotta say that those means of recording infamous acts are increasingly one of the sole protections i might have [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

big ups to Anthony Kelly (@NSF) for moderating this panel [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

now, we're talking about 'the right to be forgotten' (Europe) and 'the right to opt out' (Long Island?) [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

speaking of the 'right to opt out', @chrs_dede reminds us that we can eat lunch on our own, or eat lunch and continue to talk shop [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

'birds of a feather' sessions - i like this term. I'mma steal it. [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

Shuangbao Wang: how much encryption is enough? @alephbass: Simple answer: it depends. [#cradata](#)

 2 DAYS AGO



craig wiggins
@oxala75

When ppl design safes, they make the cost of breaking into it more costly than whatever the safe could hold. #chewonthat #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

haha we are being held back from flooding to lunch, but no one curr. We just wanna talk privacy #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

.@stout_ethics says re privacy data "we have a right to opt out" - but admits that she'd never say that about, say, vaccines #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

.@alephbass picks up on the vaccine thread and says "if you dont want data to be collected, maybe u choose another school?" #CRADATA #whoa

 2 DAYS AGO

1230-1330: Working Lunch



craig wiggins
@oxala75

and just as i am about to leave to eat, @vkumar comes up and gets me wise to OSIDs (osid.org) #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

.@vkumar + I talk #xAPI, OSIDs, and #IMS #Caliper in the same exchange of air. Basically the conversation that cannot be captured #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

ok ok i am really going to go eat now. #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

OH: "most high school transcripts are PDFs" #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

hey, ppl following these #CRADATA tweets: anything you want me to ask of the panelists?

 2 DAYS AGO

1330-1445: Integrating Data Repositories



craig wiggins
@oxala75


next panel is on integrating #data repositories, featuring LearnLab DataShop, Databrary + Kauffman Foundation reps #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

ok y'all - back from lunch. next up: integrating #data repositories #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

panel is chaired by Gul Kremer first up is Edith Gummer (@KauffmanFDN) #CRADATA

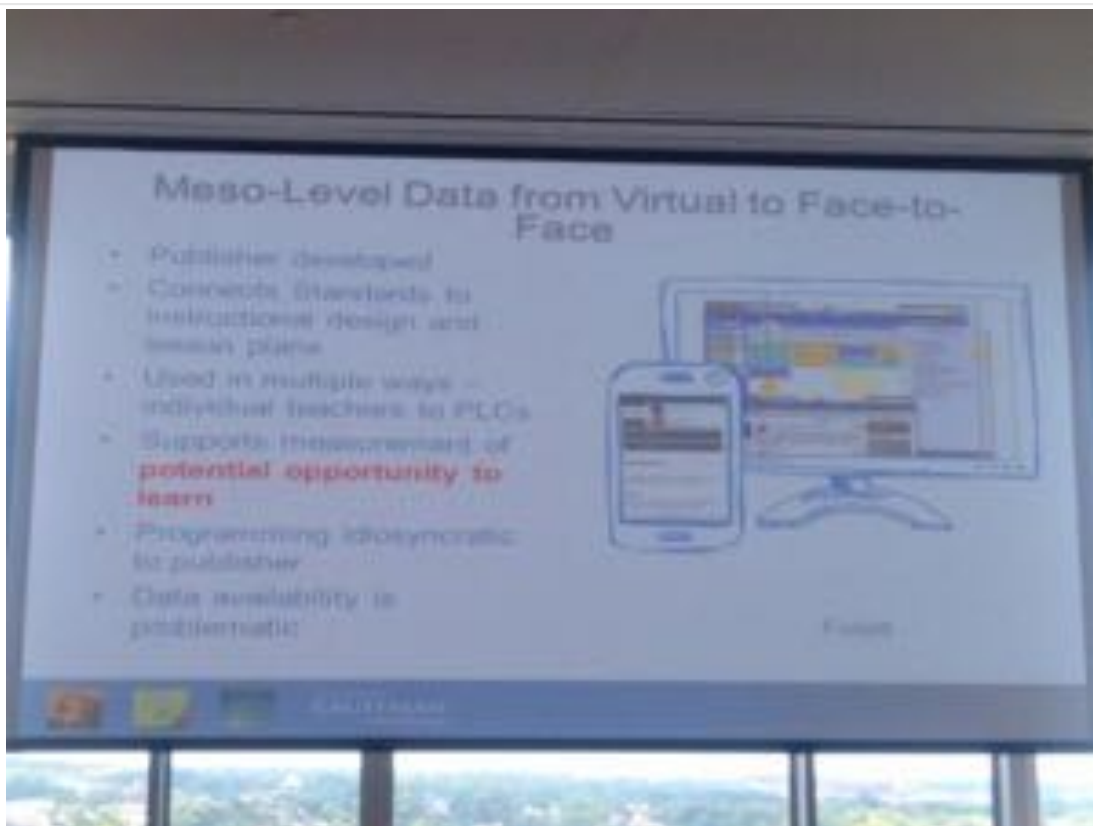
🐦 2 DAYS AGO



craig wiggins
@oxala75

scales & scopes for #data repositories: micro, meso, macro. We're on meso right now in this conversation #CRADATA

🐦 2 DAYS AGO



Meso-level #data #cradata pic.twitter.com/08b3qa7bEB

🐦 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO

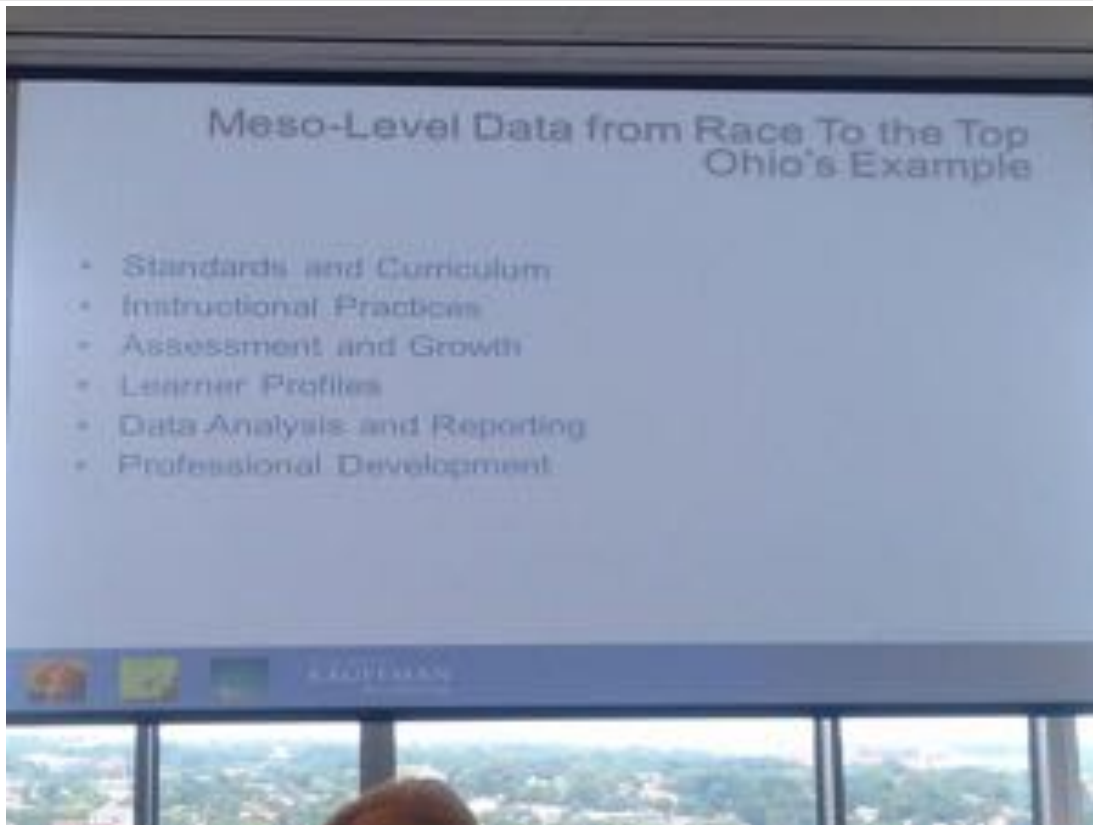


Andrew Ho

@AndrewDeanHo

Timely tweet from @dataverseorg for #cradata. Who has the authoritative annotated list of these repositories? twitter.com/dataverseorg/s...

 2 DAYS AGO



#cradata pic.twitter.com/cokQEPn9KP

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins

@oxala75

..buuuut the company that did the Ohio instructional improvement system went out of business *this week*, so.... #CRADATA

 2 DAYS AGO



#cradata pic.twitter.com/PDhrRDzZeR

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

Interoperability for data at macro level beginning to be addressed (ceds.ed.gov, nces.ed.gov)
#CRADATA

 2 DAYS AGO



To ppl in the room, this is not big data. To your average school administrator, however... [#cradata](https://twitter.com/gVvrjuq6j7) pic.twitter.com/gVvrjuq6j7

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



[craig wiggins](#)
@oxala75

two tools that are being released: one for mapping, and one for drill down to Missouri schools by variable [#CRADATA](#)

 2 DAYS AGO



[craig wiggins](#)
@oxala75

now up: [@rogilmore](#) from Penn State to show us the [@databrary](#) [#CRADATA](#)

 2 DAYS AGO



craig wiggins
@oxala75

(nyu.databrary.org = Databrary) #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

i feel like the people at the @databrary and the folks at @narrativeclip should maybe chat #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

access to @databrary is only given by permission; have to sign an agreement to respect participants wishes, treat data well. #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Institutions have to sign their own agreement #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

researchers who share data are not rewarded, so @databrary at least tries to make the process easier #CRADATA

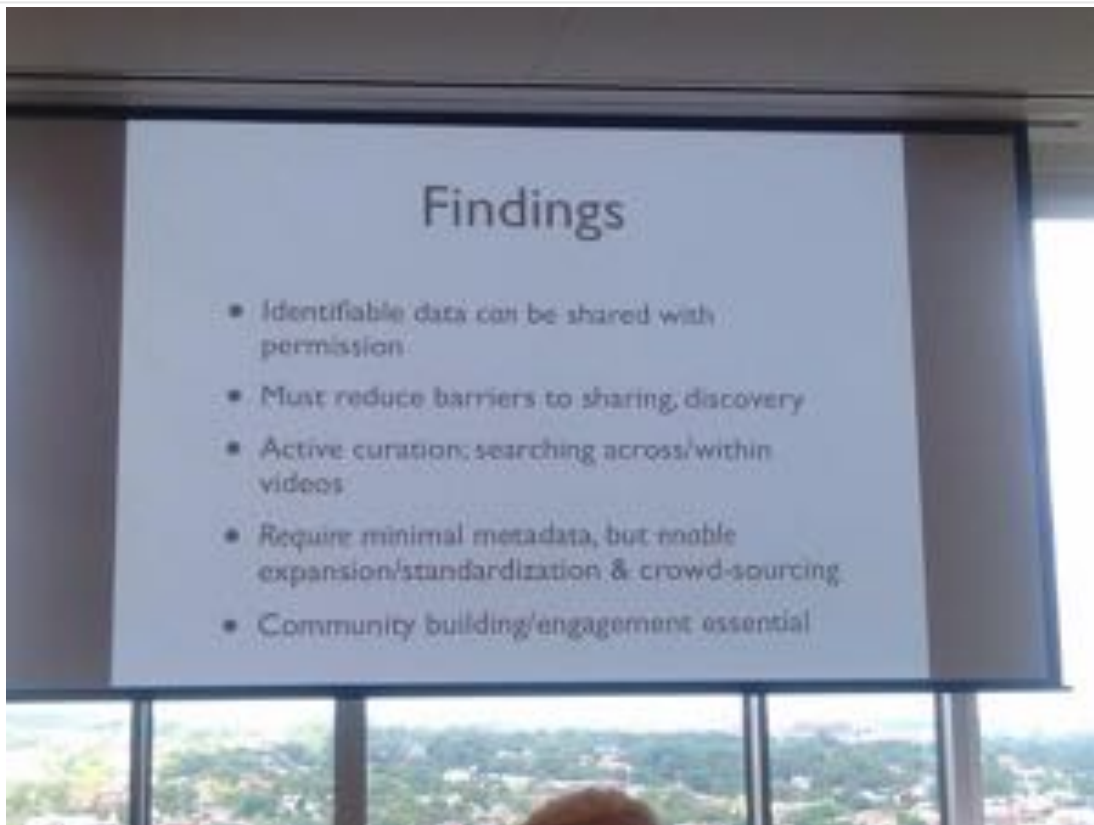
 2 DAYS AGO



craig wiggins
@oxala75

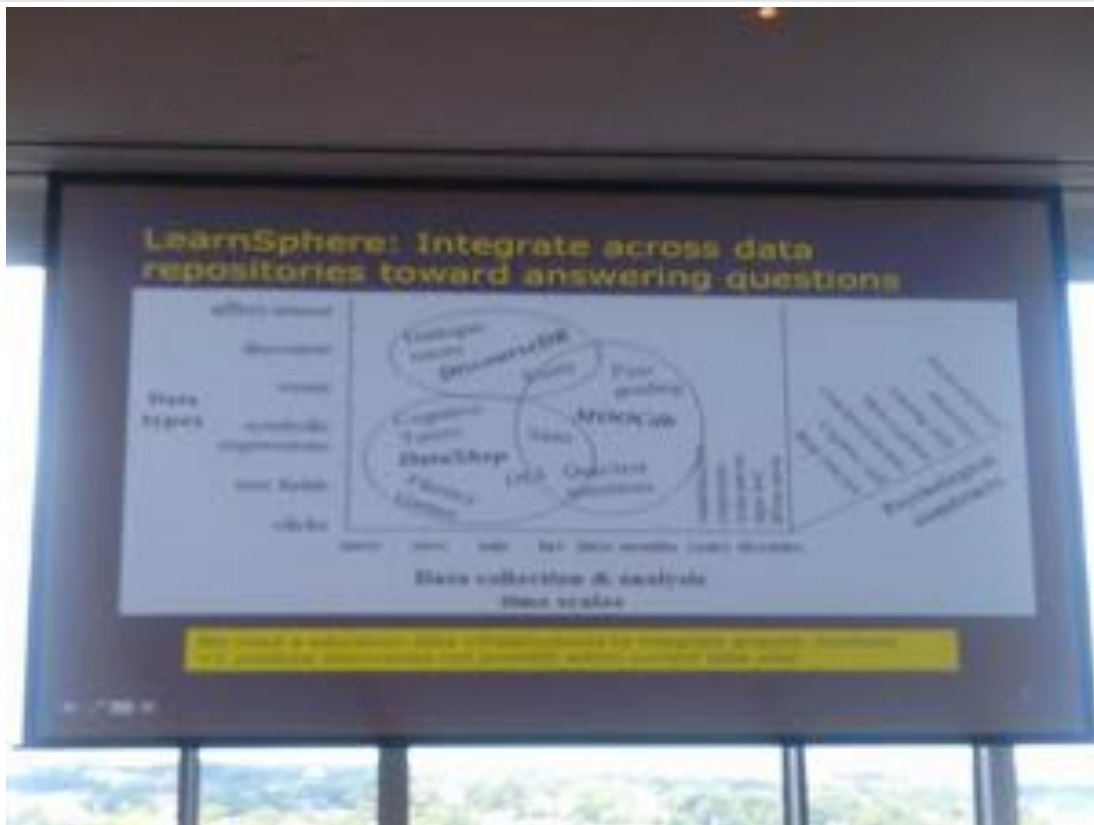
not gonna lie: I kind of want to go play with @databrary for the rest of the day #CRADATA

 2 DAYS AGO



[.@databrary](#) findings so far [#cradata](#) pic.twitter.com/4HeAdx1JTx

 CRAIG WIGGINS [@OXALA75](#) · 2 DAYS AGO



#cradata pic.twitter.com/s1a38Fw811

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

it's @koedinger to talk about LearnLab DataShop: learnlabs.org/technologies/d... #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

looking at DataShop, I'm realizing that I have seen this before - @ADL_Initiative? #CRADATA

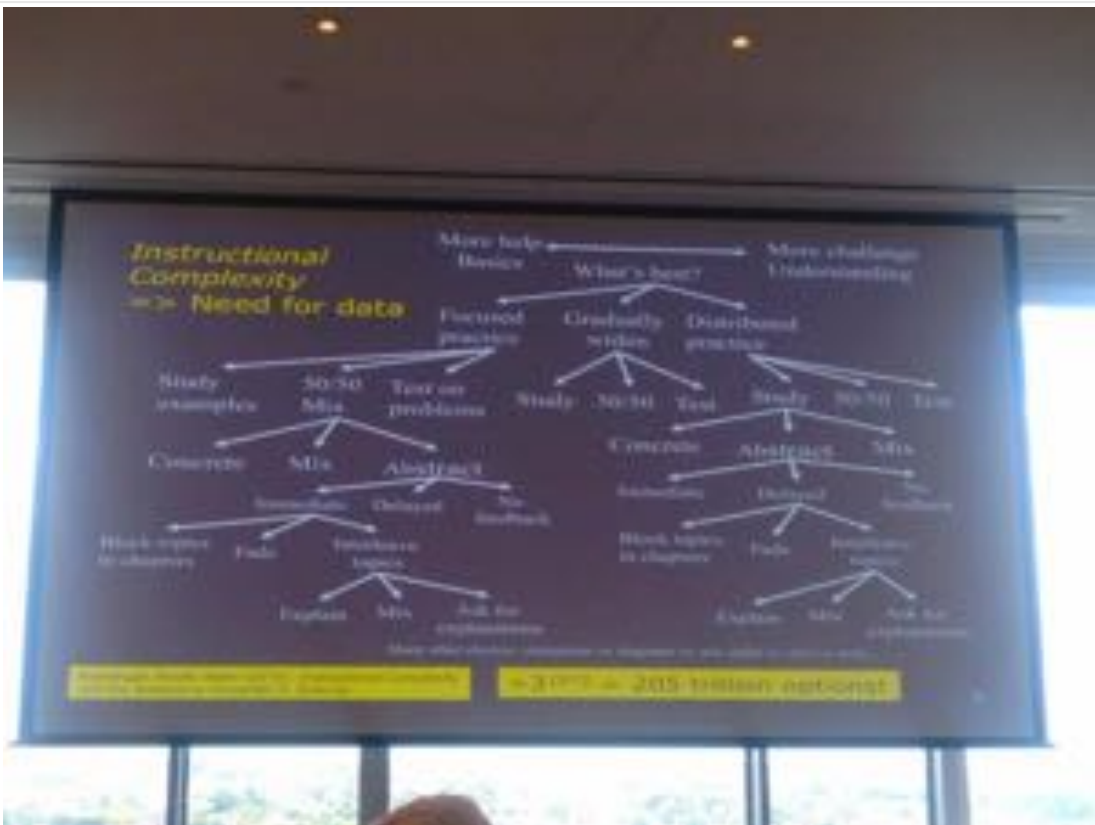
 2 DAYS AGO



craig wiggins
@oxala75

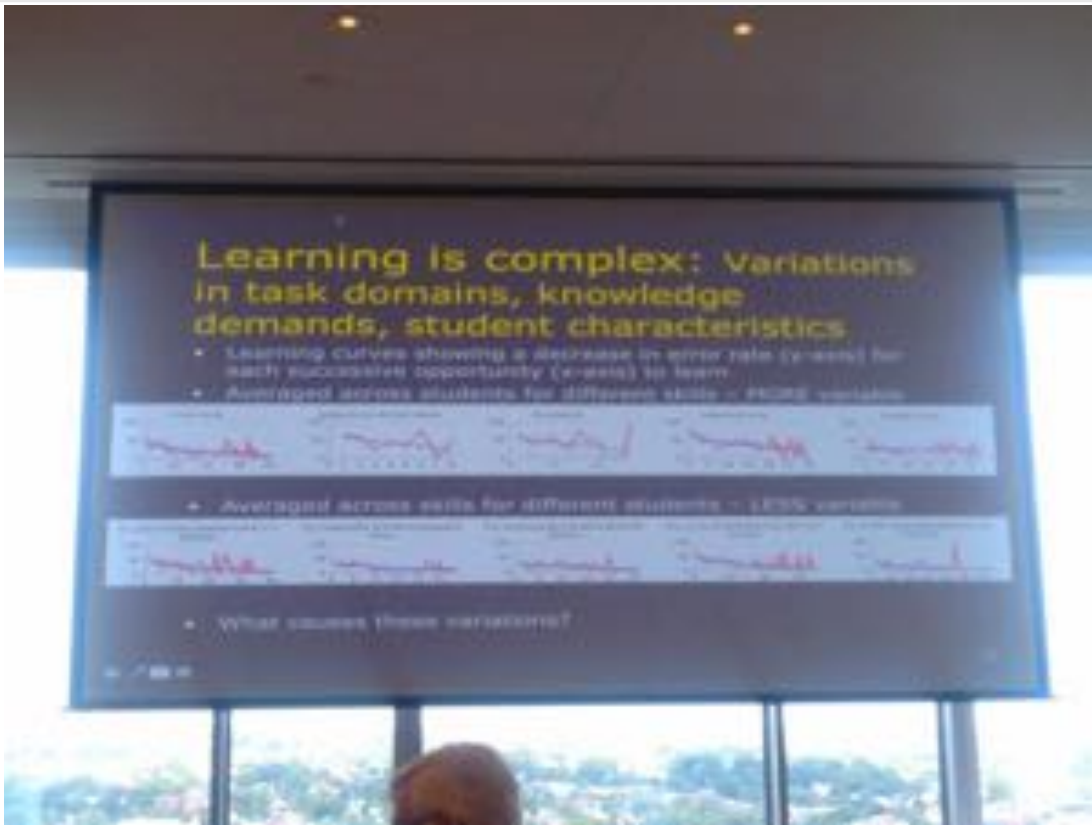
.@koedinger more learning variation across skills than across students #CRADATA

 2 DAYS AGO



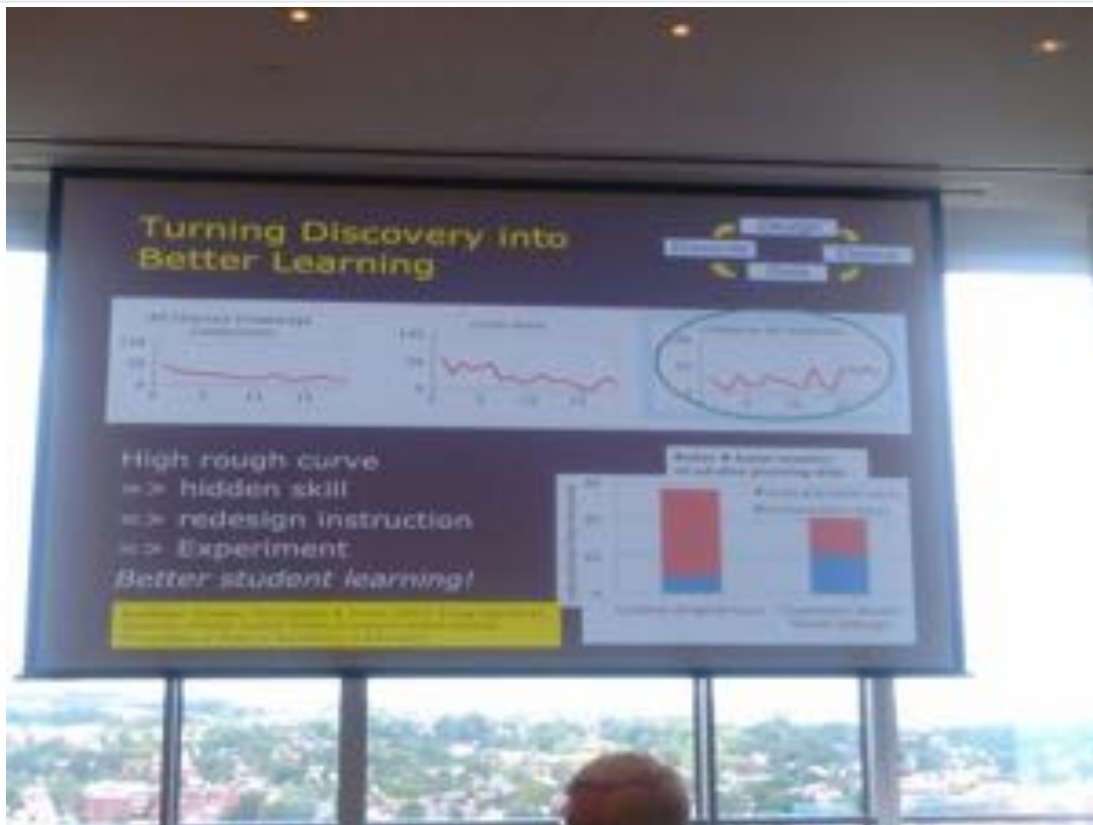
#cradata pic.twitter.com/vsQeqxKpuV

CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



#cradata pic.twitter.com/DriMnS1ML2

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



#cradata pic.twitter.com/rk6wUhqRtl

 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



[craig wiggins](#)
@oxala75

there is a place called Oceans of Data (oceansofdata.org) #TIL #CRADATA

 2 DAYS AGO



[craig wiggins](#)
@oxala75


question from woman from Oceans of #Data: fact that instructors have to enter their data into repos slow repo development? #CRADATA

 2 DAYS AGO



Kirk Borne
@KirkDBorne

Towards Big Steps Enabled by #BigData Science: cra.org/events/big-dat... #CRAdat #STEM #Education #DataScience #DataLiteracy | @CRAtweets

 2 DAYS AGO



craig wiggins
@oxala75

Henry Kelly of @ENERGY: "seems like ed data repos are considered in a vacuum" #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Question from @JereConfrey "what about weak student outcome measures?" #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

we are kind of talking about successes, but there are "huge measurement challenges...learning can be sort of slow" #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75


Gul Kremer asks a good question: "Ok, so you have a data repo up. Now what?" That is, how do you keep going, funding-wise? #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

so, @rogilmore notes that his repo is part of a consortium of repos that get funding. Some repos offer services for \$. What's best? #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

so, [@rogilmore](#) notes that his repo is part of a consortium of repos that get funding. Some repos offer services for \$. What's best? [#CRADATA](#)

2 DAYS AGO



Kirk Borne
@KirkDBorne

[@edwsonoma](#) If you're willing, plz share with me your [#CRAdata](#) deck "Predictive Models Based on Behavioral Patterns in .edu" Thanx! [#BigData](#)

2 DAYS AGO



Kirk Borne
@KirkDBorne

[@edwsonoma](#) If you're willing, plz share with me your [#CRAdata](#) deck "Predictive Models Based on Behavioral Patterns in .edu" Thanx! [#BigData](#)

2 DAYS AGO



craig wiggins
@oxala75

[.@koedinger](#) mentions that [@EarthCube](#) has longterm [@NSF](#) funding, so it's got that going for it, which is nice [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

[.@koedinger](#) mentions that [@EarthCube](#) has longterm [@NSF](#) funding, so it's got that going for it, which is nice [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

makes me think about [@ADL_Initiative](#) 3D repository [3dr.adlnet.gov](#) [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

makes me think about [@ADL_Initiative](#) 3D repository [3dr.adlnet.gov](#) [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

not that 3D repo is hurting for \$ or is a data store, but there is the question of sustainability: will ppl put stuff in otherwise? [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

not that 3D repo is hurting for \$ or is a data store, but there is the question of sustainability: will ppl put stuff in otherwise? [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

.[@chrs_dede](#) says that in the last workshop, was mentioned that a key to repository success are data tools for users [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

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2 DAYS AGO



craig wiggins
@oxala75

.[@KauffmanFDN](#) has a publicly-available database and is finding out about issues involved in user access [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

.@KauffmanFDN has a publicly-available database and is finding out about issues involved in user access #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

Edith Gummer: how willing are you to release datasets if you just *know* that correlation/causation will be confused? #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

Edith Gummer: how willing are you to release datasets if you just *know* that correlation/causation will be confused? #CRADATA

2 DAYS AGO



CtrforApplied Ethics
@stout_ethics

Companies like Facebook are making incursions into academic research. And that's a big problem. #CRADATA slate.com/articles/techn... via @Slate

2 DAYS AGO



CtrforApplied Ethics
@stout_ethics

Companies like Facebook are making incursions into academic research. And that's a big problem. #CRADATA slate.com/articles/techn... via @Slate

2 DAYS AGO



craig wiggins
@oxala75

Krishna Madhavan gets us up on @nanohub nanohub.org #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

Krishna Madhavan gets us up on [@nanohub nanohub.org](https://nanohub.org) #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

also, Krishna: if your data will get correlation/causation screwed, maybe your model isn't right?
#CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

also, Krishna: if your data will get correlation/causation screwed, maybe your model isn't right?
#CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

i really am interested in this idea of data markets - not just them existing, but the ideas of impetus, desire, ownership, etc. #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Gul Kremer: "anything can be hacked. who should be designing #data repository security?"
#CRADATA

 2 DAYS AGO



Shaun Kellogg
@sbkellogg

[@mjsamberg](https://twitter.com/mjsamberg) believe it's just getting started. Great examples of data repositories being shared here at #CRADATA will post

 2 DAYS AGO



craig wiggins
@oxala75

looking forward to the next panel about [#MOOC](#) - [@educause](#)'s Diana Oblinger, [@edXOnline](#)'s Piotr Mitros, and [@Harvard](#)'s [@AndrewDeanHo](#) [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

i should say that tho these sessions have been great, they are still rather preso-heavy. That said, i didn't do birds-of-a-feather [#cradata](#)

2 DAYS AGO



craig wiggins
@oxala75

Diana Oblinger from [@educause](#): students aren't as familiar with [#MOOC](#) as you might think [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

basically, 1) data collection on [#MOOC](#) is emergent, and 2) we're not talking about courses - we're talking contexts [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

maybe too much focus on [#MOOC](#) to 'extend the university's brand' [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75


also, a [#MOOC](#) isn't necessarily a standalone environment. (I say it shouldn't be, if best leveraged.) [#CRADATA](#)

2 DAYS AGO



craig wiggins
@oxala75

also, Oblinger counsels us not to sleep on the link between #MOOC and certification....and where learning is supposed to be #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

also, Oblinger says something interesting (well, to me): what measurable part does tenacity play in #MOOC acceptance and results? #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Oblinger: "#MOOCs have long-term value" as one node in an "integrative system." #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

new term for me to look up: integrative competency management system #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

@EmicAcademic not as of yet - but we've yet another day :) #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Piotr Mitros (@edXOnline) now on #bigdata and the assessment of complex skills #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

#CRADATA twitter.com/EmicAcademic/s...

 2 DAYS AGO



craig wiggins
@oxala75

#CRADATA twitter.com/EmicAcademic/s...

 2 DAYS AGO



craig wiggins
@oxala75

.@AndrewDeanHo - a stistician with a #MOOC hobby #cradata

 2 DAYS AGO



craig wiggins
@oxala75

.@AndrewDeanHo - #MOOC is a new learnign context, via openness, heterogeneity & synchronicity #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

.@andredeanho breaks down the stats for the average #MOOC. I don't think that we really consider these stats when we design #MOOCs #CRADATA

 2 DAYS AGO



Rachel Barnum
@OhThatRachel

[@oxala75](https://twitter.com/oxala75) I'd LOVE to see these @andredeanho

 2 DAYS AGO



[craig wiggins](#)
@oxala75

i mean: gender, race, age, professional background #MOOC are particular #CRADATA

2 DAYS AGO



[craig wiggins](#)
@oxala75

don't get him started on #MOOC completion rates (actually, do) #CRADATA

2 DAYS AGO



[craig wiggins](#)
@oxala75

many #MOOC students: "i feel guilty if i drop out" @AndrewDeanHo: why waste that guilt?
(answer: residential institution spillover) #CRADATA

2 DAYS AGO



[craig wiggins](#)
@oxala75

Mitros and @AndrewDeanHo helpfully jousting about accountability + #MOOC #CRADATA

2 DAYS AGO



[craig wiggins](#)
@oxala75

"any institution that doesn't set its own accountability metrics will have those metrics set for them" - @AndrewDeanHo #CRADATA

2 DAYS AGO



[craig wiggins](#)
@oxala75

Oblinger returns us to the idea of #MOOC for just-in-time learning #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

Oblinger mentions @LinkedIn and @degreed #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

i can't help but think of the #LEARNxAPI #MOOC while listening to this exchange here at #cradata #xAPI

2 DAYS AGO



The #cradata #mooc panel pic.twitter.com/BcPZpqugH7

CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

.@AndrewDeanHo says that without making accountability present, are #MOOC any better than, say, @crashcourse? (no offense) #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

.@UnaMayMIT + @vkumar have an exciting little bit about incentivizing #MOOC dedication #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

Someone should scream out "recommender engine" right now. Wait, is that my job? #MOOC #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

Mitros just appeased the learning gods and respectfully directed the idea of learning styles to the dustbin #MOOC #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

.@AndrewDeanHo: "even if learning styles don't exist...well, ppl think they do. Think of the marketing!" #MOOC #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

.@AndrewDeanHo shouts out justiceharvard.org #MOOC #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

...as something that ppl like to have on in the background #MOOC #CRADATA

2 DAYS AGO



Ellen Wagner
@edwsonoma

.@KirkDBorne sure happy to share. #CRADATA

2 DAYS AGO



Oblinger says that we come with what we want to team, not with what they need to learn/do
#CRADATA pic.twitter.com/ozpgS0oGEh

CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

.@chrs_dede: phenomenon of finding other students who share your learner profile. Shouldn't that happen more w/#MOOCs? #CRADATA

2 DAYS AGO



craig wiggins

@oxala75

.@chrs_dede if we don't know how to design these, maybe we look at what works and reverse engineer it #MOOC #CRADATA

 2 DAYS AGO



craig wiggins

@oxala75

.@AndrewDeanHo: so, if 'grit' is a success vector, I can fake grit. Mitros: isn't that basically grit? #MOOC #CRADATA

 2 DAYS AGO



craig wiggins

@oxala75

I think Mitros and .@AndrewDeanHo should have a road show #CRADATA

 2 DAYS AGO



craig wiggins

@oxala75

listening to this conversation, two thoughts: 1) we have a lot to discover about #MOOC 2) #xAPI needs to be exploited more here #CRADATA

 2 DAYS AGO



craig wiggins

@oxala75

.@UnaMayMIT teases out some of the problems of research when concerning #MOOC #CRADATA

 2 DAYS AGO



craig wiggins

@oxala75

Oblinger notes that we are able to resurface "things that we already knew" research-wise while investigating #MOOC #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

...like how incredibly hard it can be to design a learning experience #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

and how much of an investment in time and money #CRADATA

2 DAYS AGO



craig wiggins
@oxala75

2 good points from the dude from @ENERGY: 1) synchronicity is stifling & 2) we need to focus on what can be done, not known #MOOC #CRADATA

2 DAYS AGO




RT leonelsouza3 > Big Steps Enabled by #BigData Science: twitter.com/leonelsouza3/s...
#DataScience #CRAdat pic.twitter.com/VcJvqfXP0H

ANALYTICS @ANALYTICSFORU · 2 DAYS AGO



craig wiggins
@oxala75

.@dyaskin hears not about completion rate problems, but that people don't return for another course #MOOC #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

constructive struggling #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Oblinger notes that #MOOC maybe aren't made to be understood in the same way (e.g., 101, 102) that on-the-ground courses are #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

I mention @vihartvihart moving deliberately to the @khanacademy #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

.@AndrewDeanHo: "I think #MOOC are floundering. They don't know what they are or what they are trying to be." #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75


.@UnaMayMIT: we need many more #MOOC experiments #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

Krishna Madhavan: "as a #data scientist, I too am disappointed in #MOOC. Their architecture reflects a very linear experience" #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

.@alephbass: "you know who's asking the interesting questions that #MOOC should be asking? Massively open online games." #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

credentialing is key for #MOOCs (says dude in the back). Dude in the back is right #CRADATA

 2 DAYS AGO



Computing Research
@CRAtweets

Andrew Ho: MOOCs are going through an identity crisis. They don't know who they are and they don't know who they are trying to meet #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75


side note: i wish everyone at an event had a Twitter handle. Makes things easier #CRADATA

 2 DAYS AGO



craig wiggins
@oxala75

...for me. #CRADATA

 2 DAYS AGO

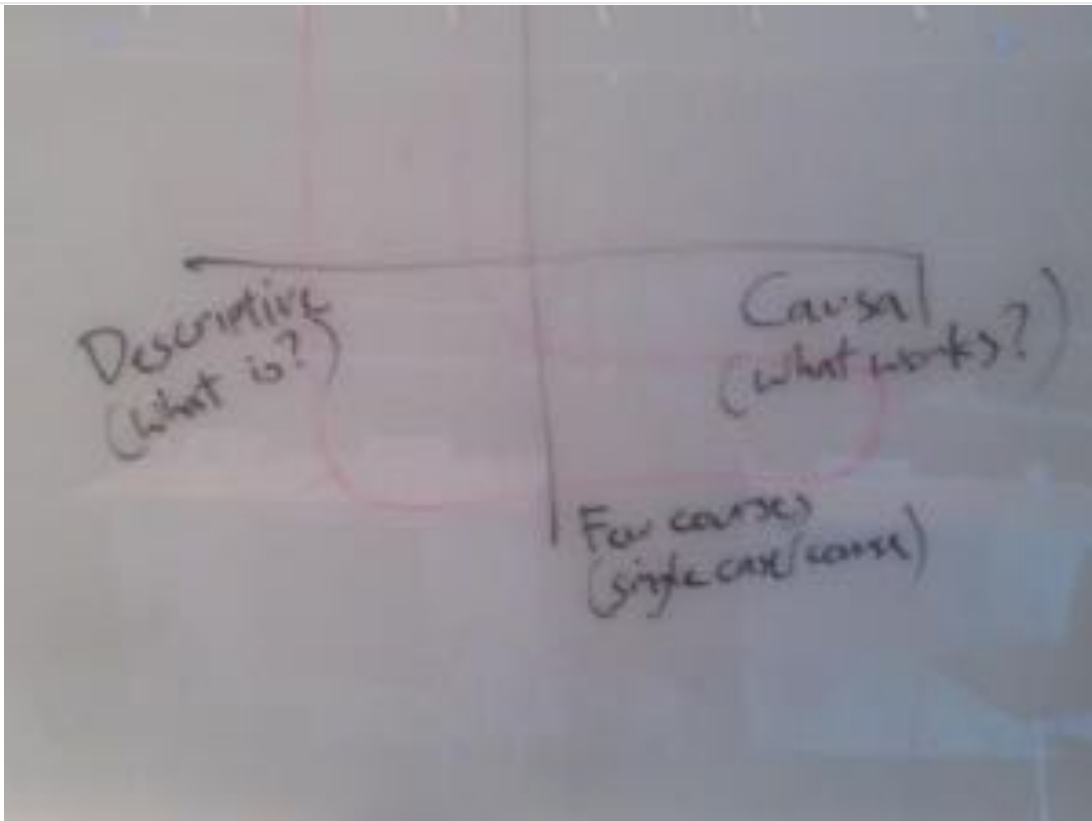


craig wiggins
@oxala75

ok, we're breaking up into, uh, breakout groups. I'll let you know where i land #CRADATA

🐦 2 DAYS AGO

...but I didn't actually do that. Mostly just talked to people.



What @AndrewDeanHo drew #MOOC mooch#CRADATA pic.twitter.com/zMQzmtr8ua

🐦 CRAIG WIGGINS @OXALA75 · 2 DAYS AGO



craig wiggins
@oxala75

[#MOOC #cradata twitter.com/EmicAcademic/s...](https://twitter.com/EmicAcademic/s...)

🐦 2 DAYS AGO



craig wiggins
@oxala75

Excellent first day @ #cradata. Thx to whomever invited me :)

2 DAYS AGO



@oxala75 @alephbass but we'd confuse all the keyboard players if we start throwing around the term #MOOG #CRADATA pic.twitter.com/tRsEPVAZV4

TOM EVANS @TAEVANS · 2 DAYS AGO



From [#CRADATA](#) meeting in Arlington, beautiful rainbow to end the day!
pic.twitter.com/K5nqMfhIGP

 CTRFORAPPLIED ETHICS @STOUT_ETHICS · 2 DAYS AGO

And that's a wrap on day 1! I'm tired...



...see you in the morning!

by elearning jockey 11 hours ago

Day 2: Advancing Data-Intensive Research in Education

Day #2 of an NSF-funded Computer Research Association workshop in Rosslyn VA



RT @coenenjh RT @leonelsouza3; Big Steps Enabled by #BigData Science:
twitter.com/leonelsouza3/s... #DataScience #CRAdata pic.twitter.com/WtiCvpKrp0

HAROLD SINNOTT @HAROLD_SINNOTT · A DAY AGO

craig wiggins
@oxala75

psyched to hear @matthewberland talk later about creative learning data scientists. Also, dude quoted @zephoria in his paper #legit #CRADATA

A DAY AGO

0830-0845: Summary of yesterday; framing of today



craig wiggins

@oxala75

Day 2 of #CRADATA has kicked off! @chrs_dede talking about our progress thus far. Elephants and rabbits. I wish you could be here for it :)

 A DAY AGO



The #CRADATA panel that is coming up: 'Games & simulations for training, informal post-secondary learning' #data pic.twitter.com/1NcPhXtwfj

 CRAIG WIGGINS @OXALA75 · A DAY AGO



Alex J Bowers

@Alex_J_Bowers

Check out Matthew Berland's big data and educational gaming at the Play Data Consortium @learnplaydata #CRADATA playdataconsortium.org

 A DAY AGO



craig wiggins

@oxala75

Hey, just a reminder that I'll be tweeting frantically about #bigdata & #education today. #cradata #sorrynotsorry

 A DAY AGO



.@chrs_dede and @NSF's Susan Singer kick us off #cradata pic.twitter.com/qUX2F1mlLu

 CRAIG WIGGINS @OXALA75 · A DAY AGO



Chris Dede @Harvard & Susan Singer @NSF Transforming Ed is hard work & how to build workforce 4
#STEM #CRADATA @NSTA pic.twitter.com/Y65zWWVJZX

 AL @ALSBYERS · A DAY AGO

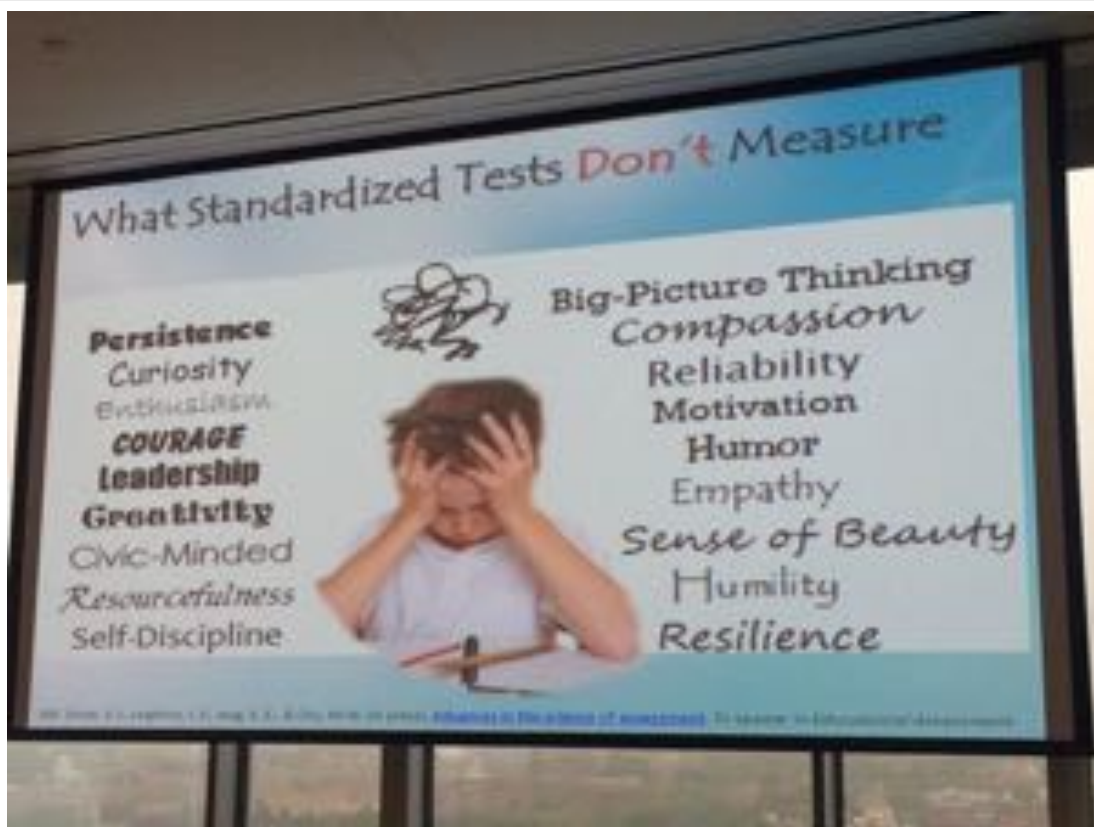
0845-1000: Games and simulations for training, informal post-secondary learning



craig wiggins
@oxala75

Dexter Fletcher heads the Institute for Defense Analyses gets the game + #data panel started.
First up: @valshute #CRADATA

 A DAY AGO



What standardized tests don't measure, #CRADATA pic.twitter.com/F8LMWJayge

 CTRFORAPPLIED ETHICS @STOUT_ETHICS · A DAY AGO



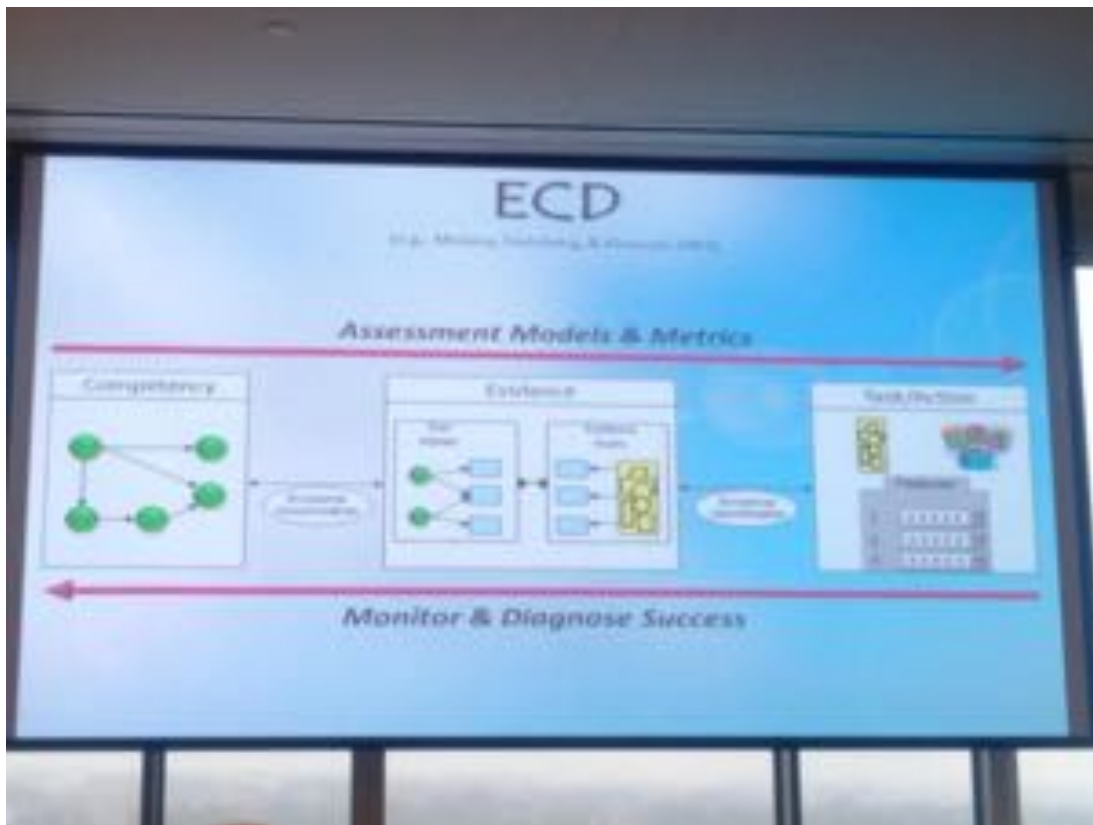
#cradata pic.twitter.com/k0eDdvD6vB

 CRAIG WIGGINS @OXALA75 · A DAY AGO



[#cradata pic.twitter.com/LxCmgDSETU](https://twitter.com/LxCmgDSETU)

 CRAIG WIGGINS @OXALA75 · A DAY AGO



#cradata pic.twitter.com/enAqA5TIW7

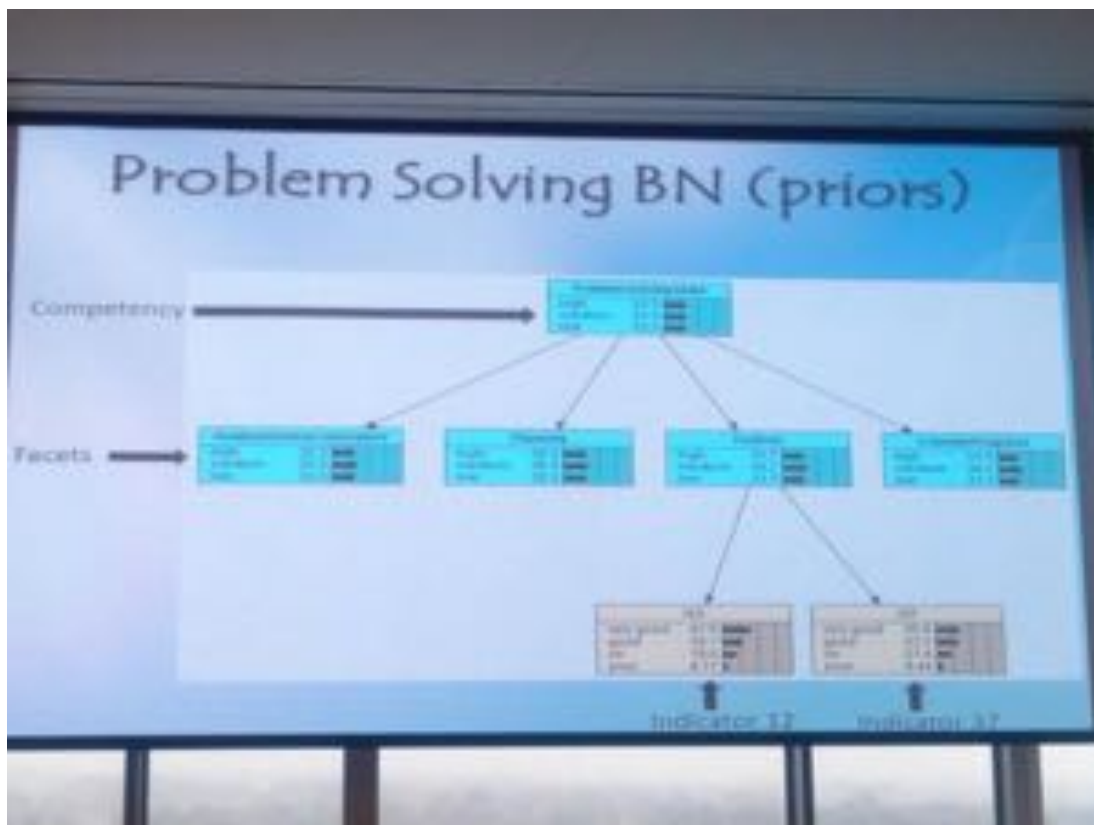
 CRAIG WIGGINS @OXALA75 · A DAY AGO



craig wiggins
@oxala75

.@valshute talks about her hot-off-the-press data involving Plants vs. Zombies 2 & stealth assessment. Apparently @EA gave up data! #CRADATA

 A DAY AGO



#cradata pic.twitter.com/Fd2ydXxDAQ

 CRAIG WIGGINS @OXALA75 · A DAY AGO



[craig wiggins](#)
@oxala75

that last image had a precedent with a competency framework, but I was too slow #CRADATA #actuallysorry

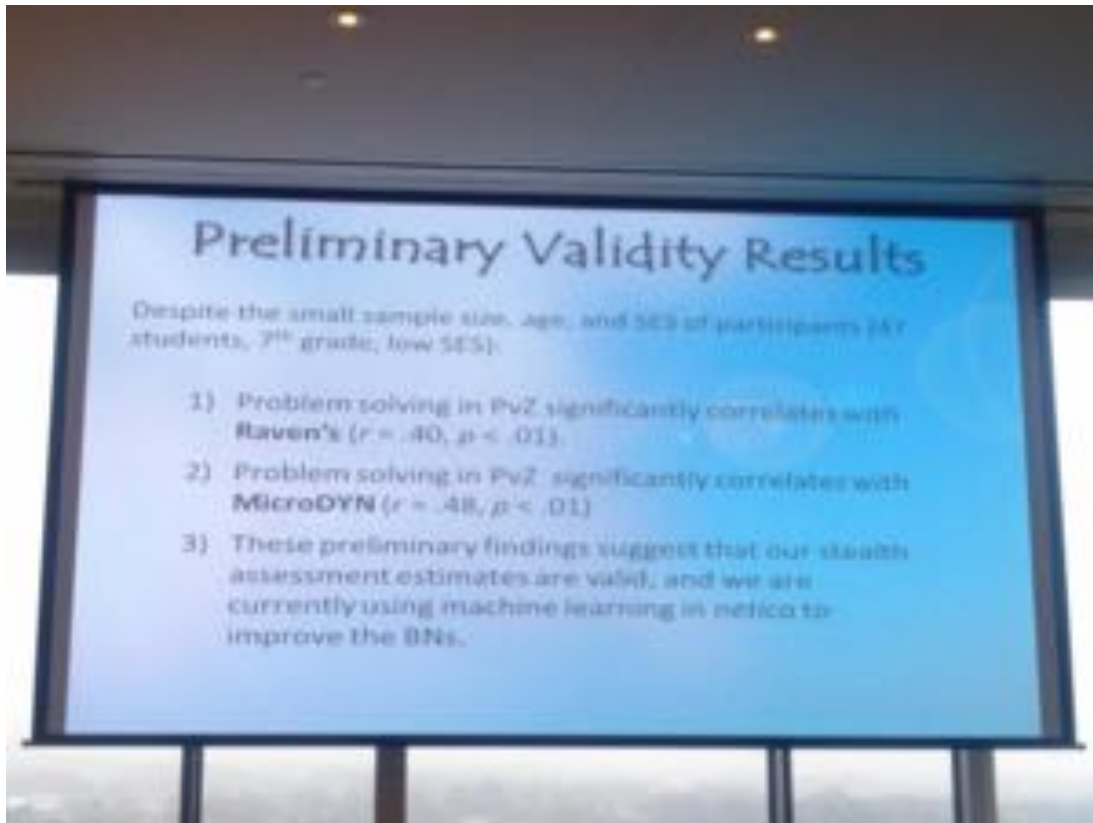
 A DAY AGO



[craig wiggins](#)
@oxala75

.@valshute tested Illinois 3rd graders playing @PlantsvsZombies. REsults coming up... #CRADATA

 A DAY AGO



[#cradata pic.twitter.com/PovFYd6pk0](#)

 CRAIG WIGGINS @OXALA75 · A DAY AGO



Britt Lundgren
@BrittLundgren

Day 2 of [#cradata](#) kicks off with a talk on the stealth assessment of 7th grader problem-solving skills using gameplay in Plants vs. Zombies

 A DAY AGO



Alex J Bowers
@Alex_J_Bowers

Measuring student problem solving with Plants vs Zombies 2 [@valshute](#) [#CRADATA](#)

 A DAY AGO



craig wiggins
@oxala75

[.@ekloper](#) now talking about a game-based learning [#CRADATA](#)

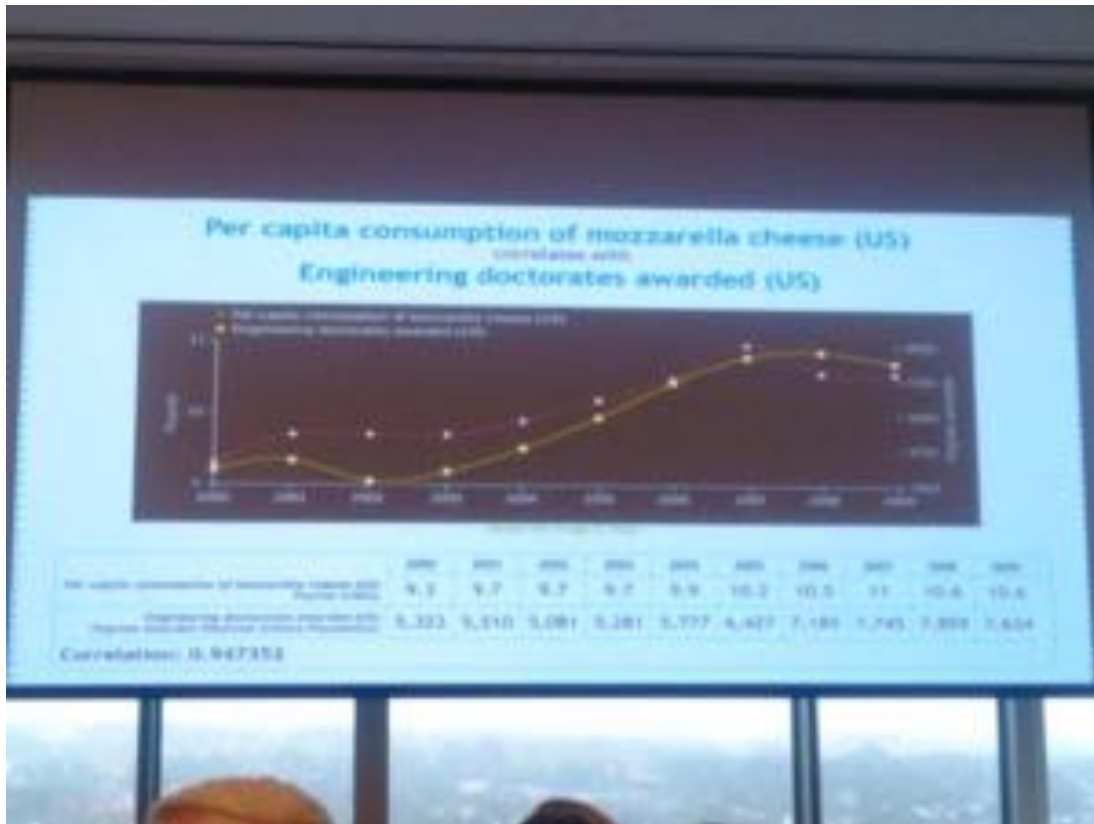
 A DAY AGO



craig wiggins
@oxala75

.@ekloper shares the everloving gem that is tylervigen.com/spurious-corre... #CRADATA

A DAY AGO



serious correlation, m8 #cradata pic.twitter.com/b5AOD0w6LK

CRAIG WIGGINS @OXALA75 · A DAY AGO



craig wiggins
@oxala75

"the game is not where learning happens. the game is part of the larger learning experience...including reflection." - @ekloper #CRADATA

A DAY AGO



craig wiggins
@oxala75

"data useful to students yes, but quite useful to teachers." this is the future #CRADATA

A DAY AGO



craig wiggins
@oxala75

.@ekloper used the game radixendeavor.org #CRADATA

A DAY AGO



Andrew Ho
@AndrewDeanHo

#Games are caught in a validity trap: They want to be target outcomes, but they are accountable to correlations with test scores. #CRADATA

A DAY AGO



#cradata pic.twitter.com/44zyb6zdMz

CRAIG WIGGINS @OXALA75 · A DAY AGO



P. Shane Gallagher
@psgallagher

managed to attend day 2 #cradata. Construct validation using both Raven's and MicroDYN interesting for Prob solving skills.

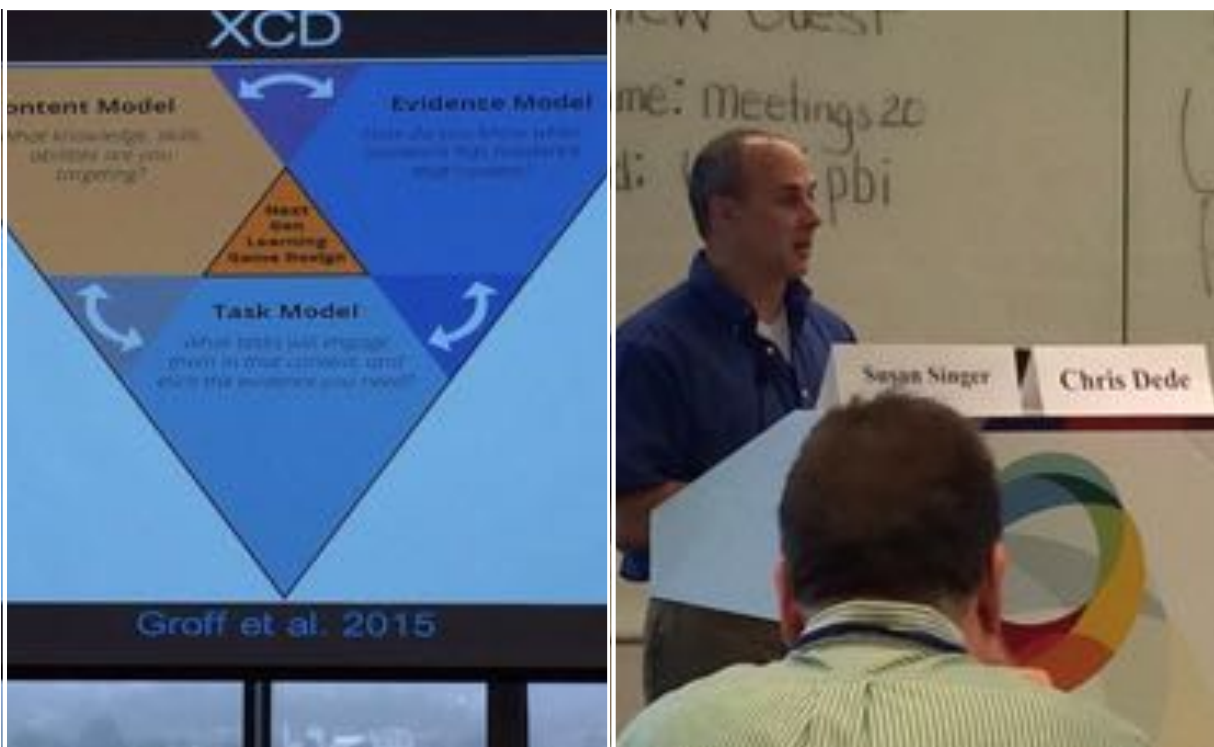
A DAY AGO



craig wiggins
@oxala75

now up: @matthewberland - #data, assessment, #games, creativity #CRADATA

A DAY AGO



Eric Klopfer @MIT shares theory-driven learning power 4 #k12 #games used w/ #teachers pre-during-post @NSTA #CRADATA pic.twitter.com/R9JxVPnzNy

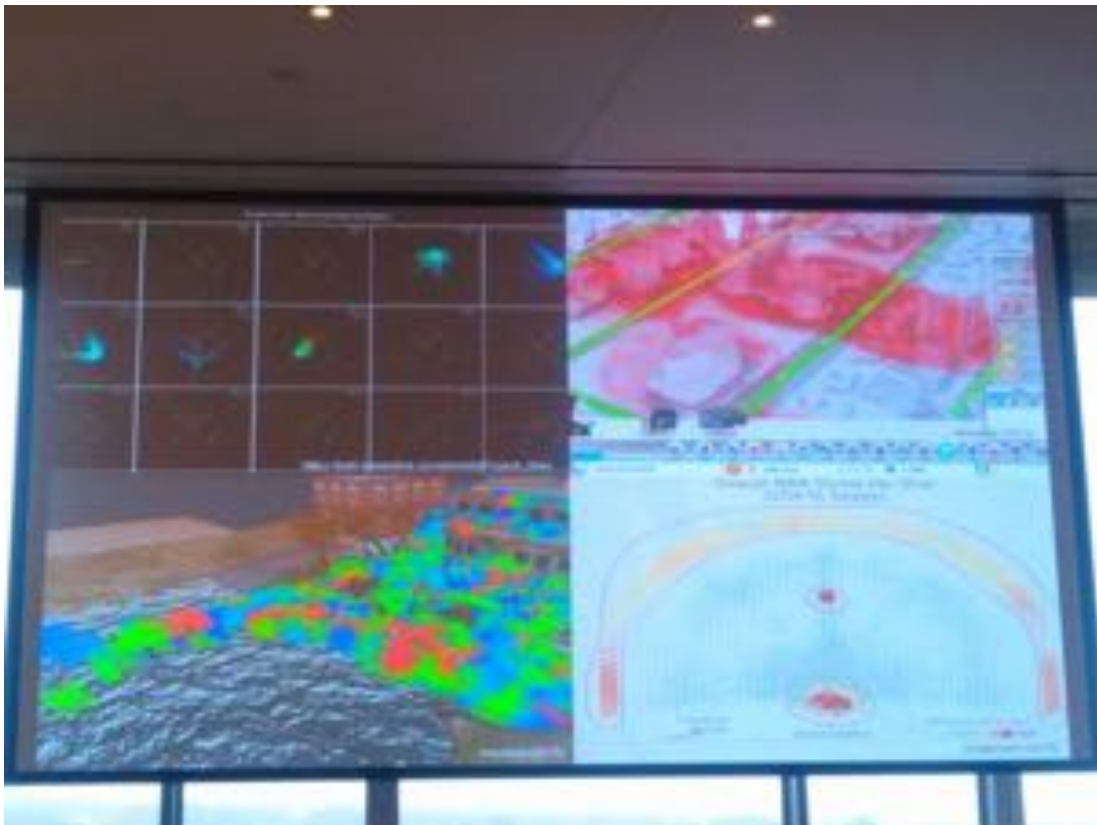
AL @ALSBYERS · A DAY AGO



craig wiggins
@oxala75

ugh, had to step out of the room for a second. now @matthewberland is talking @EveOnline :-/ #CRADATA

A DAY AGO



#dataviz in several games #cradata pic.twitter.com/Jb9rN7B9px

 CRAIG WIGGINS @OXALA75 · A DAY AGO



Potential game research dashboard #cradata pic.twitter.com/17CazRPxru

 CRAIG WIGGINS @OXALA75 · A DAY AGO



craig wiggins
@oxala75

playdataconsortium.org + adageapi.org #CRADATA

 A DAY AGO



craig wiggins
@oxala75

question for @valshute: "is this the end for specific testing?" #CRADATA

 A DAY AGO



Katrina Stevens
@KatrinaStevens1

Learning much about the playdataconsortium.org at #cradata this morning from @matthewberland.

 A DAY AGO



[craig wiggins](#)
@oxala75

question for [@eklopf](#): how do the teachers who get [#data](#) use the feedback? [#CRADATA](#)

A DAY AGO



[craig wiggins](#)
@oxala75

question for [@matthewberland](#): what kind of [#data](#) is useful to instructors + how do they use it?
[#CRADATA](#)

A DAY AGO



[craig wiggins](#)
@oxala75

question from [@NSF](#)'s Susan Singer for the [#games](#) panel: how do you handle/decide investments of time/\$? [#CRADATA](#)

A DAY AGO



[craig wiggins](#)
@oxala75

answer to Singer from [@eklopf](#): really gotta mesh, be relevant to instructor goals. Just because u can do it... [#CRADATA](#)

A DAY AGO



[craig wiggins](#)
@oxala75

[.@eklopf](#) re [#simulations](#) vs [#games](#): structure of games. Games can feel open-ended, but are inherently more structured (& useful) [#CRADATA](#)

A DAY AGO



[craig wiggins](#)
@oxala75

[.@matthewberland](#) to Singer: i'm interested in creating games to create experiences to transfer skills [#CRADATA](#)

A DAY AGO



craig wiggins

@oxala75

.@valshute to Singer: interested in the support of 21st century competencies + creativity + persistence. #Games are where it's at #CRADATA

 A DAY AGO



Katrina Stevens

@KatrinaStevens1

@eklofer: simulations vs games: simulations are structured to be more open-ended than games. #cradata

 A DAY AGO



craig wiggins

@oxala75

.@valshute other types of assessments are flawed in many ways when regarding these competencies; #games work well in these areas #CRADATA

 A DAY AGO



craig wiggins

@oxala75

.@eklofer: it's good that btwn our 3 presos, we showed a lot of types of #games. Many types for many goals + criteria #CRADATA

 A DAY AGO



craig wiggins

@oxala75

dude in the back from @Columbia: "#games = assessments that are 'fun', but plz talk abt whether fun assessments yield sparse data" #CRADATA

 A DAY AGO



The unsinkable [@valshute](#) #cradata pic.twitter.com/OevzN1S1VX

 CRAIG WIGGINS [@OXALA75](#) · A DAY AGO



[craig wiggins](#)
[@oxala75](#)

.[@valshute](#): game-derived assessment data may yield more 'valid' data #CRADATA

 A DAY AGO



[craig wiggins](#)
[@oxala75](#)

.[@ekloper](#) on deriving meaning from #game activities - "why'd u stop in game world to pick up a flower? Got bored or like flowers?" #CRADATA

 A DAY AGO



[Uniquely Philly](#)
[@uniquelyphilly](#)

#CRADATA is trending on Twitter in #philly

 A DAY AGO



craig wiggins

@oxala75

.@matthewberland (in response to @ekloper): actually, tinkering 'aimlessly' is really productive
#CRADATA

 A DAY AGO



Aditya Johri

@ajohri

"The only thing watching TV teaches you is how to watch more TV" - Neil Postman. Are games similarly doomed? #CRADATA

 A DAY AGO



craig wiggins

@oxala75

.@matthewberland: maybe folks at @zynga focused 2much on optimizing \$-making opportunities, not enuff on things we play games for #CRADATA

 A DAY AGO



P. Shane Gallagher

@psgallagher

I think I'm moving on from VW data capture for assessment to real world. Assessing through cyberphysical has much more potential. #CRADATA

 A DAY AGO



Alex J Bowers

@Alex_J_Bowers

At #CRADATA are games as assessments providing different big data challenges because the assessments can be fun?

 A DAY AGO



craig wiggins

@oxala75

dude from @VanderbiltU to panel: "have u thought abt taking this #data and drawing conclusions about metacognition?" #goodquestion #CRADATA

 A DAY AGO



craig wiggins
@oxala75

lightbulb: somebody at #CRADATA should be using @periscopeco

 A DAY AGO



Ellen Wagner
@edwsonoma

and here we have the rub...business value and pedagogical value are not necessarily on the same trajectory. #CRADATA

 A DAY AGO



craig wiggins
@oxala75

man, I want @valshute, @matthewberland + @eklopfer to talk to the #xAPI #simulation Community of Practice adlnet.gov/tla/experience... #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@matthewberland talks about conversation with folks in museum cafes: research, m8!
#CRADATA

 A DAY AGO



Shaun Kellogg
@sbkellogg

Does someone have handy Ken Koedinger's definition/features of Big Data? #cradata

 A DAY AGO



craig wiggins
@oxala75

Henry Kelly from @ENERGY: "what #data would move the community towards better ways of assessing competency?" #CRADATA

 A DAY AGO



craig wiggins

@oxala75

.@valshute answers @ENERGY's Henry Kelly by citing raventest.net #CRADATA

 A DAY AGO



craig wiggins

@oxala75

Gul Kremer as devil's advocate: worried abt speed of implementation of games for learning. Not all games are good #CRADATA

 A DAY AGO



craig wiggins

@oxala75

Gul Kremer: "what about the harm of games in real life?" #CRADATA

 A DAY AGO



Katrina Stevens

@KatrinaStevens1

Games are like any media form - full range of harmful to empowering, and appropriate in different settings. #cradata

 A DAY AGO



craig wiggins

@oxala75

.@matthewberland answers appropriately, but honestly best answer to Gul is Socrates vs writing wondermark.com/socrates-vs-wr... #CRADATA

 A DAY AGO



Alex J Bowers

@Alex_J_Bowers

We know that using computers for fun and video gaming is positive on student achievement @matthewberland #CRADATA hdl.handle.net/10022/AC:P:213...

 A DAY AGO



craig wiggins
@oxala75

.@valshute brings up and dispenses with myth that 'violent games make violent ppl'. Also, no1's advocating 4 #games to take over ed #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@valshute: "...but kids are being [standardized] tested to death, yo" (she didn't say 'yo', but i felt it in my soul) #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@ekloper: yeah, not all games are appropriate for kids...but the same for all media. Gotta choose, curate #CRADATA

 A DAY AGO



craig wiggins
@oxala75

Mitros: "are there subsets or ways to expand these studies at scale?" #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@matthewberland in reponse to Piotr Mitros: "No. Yes. No. Yes and no." #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@valshute clarifies: "there are some inroads. A lot of the work that goes into creating the evidence and competency models..." #CRADATA

 A DAY AGO



Aditya Johri
@ajohri

Rather than games, are we better of talking about "interaction design" e.g. Janet Murray
mitpress.mit.edu/books/inventin... #CRADATA

 A DAY AGO



craig wiggins
@oxala75

"...so the models can be transferred in the name of efficiency" #CRADATA

 A DAY AGO



craig wiggins
@oxala75

we're talking #firstpersonshooters now #CRADATA

 A DAY AGO



craig wiggins
@oxala75

"are we throwing away the data - especially the visual, video data - when tracking other data?"
#CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@valshute: "actually, we're not tossing that visual info" #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@matthewberland: "...of course, that's more important for some games than others."
#CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@JereConfrey asks "what does it means to look at #data sets across games - e.g., proficiency? What about in Adage API?" #CRADATA

 A DAY AGO



Britt Lundgren
@BrittLundgren

Open source analytics for learning via game play available at adageapi.org via @GLScenter at @UWMadison #cradata

 A DAY AGO



craig wiggins
@oxala75

.@matthewberland + @valshute answer. Matthew shouts out #xAPI #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@valshute talks about certifications/proficiency, and how that transfers from types of games (open to linear) #CRADATA

 A DAY AGO

ADAGE Open Source

Home Publications Examples About

Data Specification [View on GitHub](#)

The base of the ADAGE platform is the data specification. The specification provides base structure for how ADAGE client games should log data to an ADAGE server. This gives a consistent structure to the data that allows generic analysis tools and cross game comparisons of data. ADAGE client games can extend this base specification to record data that is entirely specific to the game.

ADAGE Unity Client [Download](#) [View on GitHub](#)

The ADAGE client for Unity 3D is a package that can be dropped into your Unity projects to quickly start logging data to an ADAGE server. The current ADAGE Unity client is downloadable from [GitHub](#). To be notified about new releases of the ADAGE Unity Client please join our mailing list or follow the repo on [GitHub](#).

Server [Download](#) [View on GitHub](#)

The ADAGE server is a Ruby on Rails application that provides support for logging, retrieving and analyzing data from ADAGE clients.

Open source game data collection utilities for [#EdGame](#) [#DataScience](#) [@matthewberland](#) [#CRADATA](#) [adageapi.org](#) [pic.twitter.com/Wmp9fTaJwF](#)

ALEX J BOWERS [@ALEX_J_BOWERS](#) · A DAY AGO

craig wiggins
[@oxala75](#)

.[@valshute](#) non-linear games seemed to help students understand physics (angular, xfrable momentum) better than linear game version [#CRADATA](#)

A DAY AGO

craig wiggins
[@oxala75](#)

Steve Miller ([@IBM](#)) "employers have low opinions of 21st century skills; [American] students have high opinions of those skills" [#CRADATA](#)

A DAY AGO

craig wiggins
[@oxala75](#)

.[@valshute](#): "games show that students who might not otherwise show skill/knowledge persistence actually possess it" [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

.@valshute: "these visual successes reverse the downward performance/evidence trends"
#CRADATA

A DAY AGO



craig wiggins
@oxala75

.@valshute calls out Eisenberger and learned industriousness
homepages.se.edu/cvonbergen/fil... #CRADATA

A DAY AGO



craig wiggins
@oxala75

Steve Miller: "measuring creativity?" @valshute: "would love to." #CRADATA

A DAY AGO



craig wiggins
@oxala75

.@AndrewDeanHo makes three points, but he's talking a bit faster than i managed to type :-/
#CRADATA

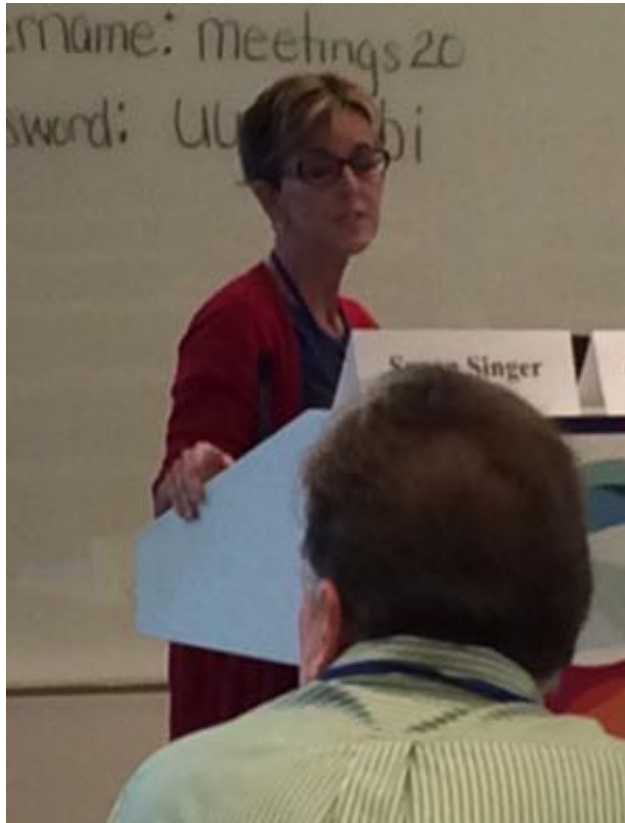
A DAY AGO



craig wiggins
@oxala75

omg, @AndrewDeanHo is making 5 points in a row. This was a question-turned-commentary - a ruse! #CRADATA

A DAY AGO



Val Shute @fsu -game research data have shown 2 facilitate increased persistence 4 inner city at-risk youth #CRADATA pic.twitter.com/NvukPOXTFO

 AL @ALSBYERS · A DAY AGO



Katrina Stevens
@KatrinaStevens1

Need researchers to design rapid cycle #edtech evals: Add name to receive more info:
fbo.gov/index?s=opport... #cradata

 A DAY AGO



craig wiggins
@oxala75

.@matthewberland: "playing with computers for fun increases interested in math and science. Period." #CRADATA

 A DAY AGO



craig wiggins
@oxala75

Dexter Fletcher: "but can games get them to learn what we want them to learn?" #CRADATA

 A DAY AGO



craig wiggins
@oxala75

in response to Dexter Fletcher, @ekloper says "uh, design principles, m8." #CRADATA

 A DAY AGO



Office of Ed Tech
@OfficeofEdTech

Need researchers to design rapid cycle #edtech evals: Add name to receive more info:
fbo.gov/index?s=opport... #cradata

 A DAY AGO



Alex J Bowers
@Alex_J_Bowers

Standardized tests should measure games rather than the other way around @AndrewDeanHo
#CRADATA games matter on their own

 A DAY AGO



craig wiggins
@oxala75

.@AndrewDeanHo with a (great) last word: "#Games kind of matter on their own!" #CRADATA

 A DAY AGO



craig wiggins
@oxala75

ok, the #games panel has ended. Good stuff, everyone! #CRADATA

 A DAY AGO



craig wiggins
@oxala75

about to go into breakout groups. I may be tweeting a lot more slowly for the next hour or so, since we'll go to lunch after that [#CRADATA](#)

 A DAY AGO

Yeah, that tweet slowdown didn't really happen.

In the meantime, here's HarvardX's Andrew Ho with some marching orders.



Andrew Ho
@AndrewDeanHo

My [#NSF](#) agenda for games research (1/4): Can [#games](#) predict outcomes we care about? othertests/college/graduation/employment/salary [#CRADATA](#)

 A DAY AGO



Andrew Ho
@AndrewDeanHo

My [#NSF](#) agenda for games research (2/4): If we randomly assign a games curriculum, will that have a positive impact on outcomes? [#CRADATA](#)

 A DAY AGO



Andrew Ho
@AndrewDeanHo

[#NSF](#) agenda for games research (3/4): Argue that games are important in their own right, tests should try to predict games, not vv. [#CRADATA](#)

 A DAY AGO



Andrew Ho
@AndrewDeanHo

[#NSF](#) agenda for games research (4/4): Show that games are a model for understanding and designing learning environments that matter [#CRADATA](#)

 A DAY AGO

1030-1200: **Breakout Groups**



craig wiggins
@oxala75

Teaching a #MOOC is kind of like being on the lower rung of celebrity (via @BakerEDMLab)
#cradata

A DAY AGO



craig wiggins
@oxala75

i am in the Building human Capacity subgroup now at #CRADATA. 7 of us - possibly the smallest group?

A DAY AGO



craig wiggins
@oxala75

sorry, 8 of us in the Building Human Capacity group. @UnaMayMIT just walked in #CRADATA

A DAY AGO



craig wiggins
@oxala75

.@oceansofdata, @Columbia, @NIH, @NSF, @MIT, @ADL_Initiative represented here
#CRADATA

A DAY AGO



craig wiggins
@oxala75

i mean, you all know about this I;m sure, but it just got mentioned, so...
nsf.gov/cise/news/bigd... #CRADATA

A DAY AGO



craig wiggins
@oxala75

tbh, i feel like i need to read a lot of what @UnaMayMIT has written. Wonder if I can do that before next week? #CRADATA

A DAY AGO



craig wiggins
@oxala75

"don't really want learning scientists to have to go from pipes to epiphany" - @UnaMayMIT
#CRADATA

 A DAY AGO



craig wiggins
@oxala75

there is a data science camp at @MIT for their undergrads! This post was written by the team who does that: r-bloggers.com/how-to-become-... #CRADATA

 A DAY AGO



craig wiggins
@oxala75

"ppl tend to compartmentalize #data science. interesting thing is what tools ppl develop to gather what they need." #CRADATA

 A DAY AGO



craig wiggins
@oxala75

Ruth Krumhansl: "look at these amazing scientific #data sets...that are not really available to students" #CRADATA

 A DAY AGO



craig wiggins
@oxala75

Ruth Krumhansl: "also, students are often times working with #data that they collected. This is an opportunity." #CRADATA

 A DAY AGO



craig wiggins
@oxala75

Lori Bland of @GeorgeMasonU has joined us #CRADATA

 A DAY AGO



craig wiggins
@oxala75

This 'Building Human Capacity' group is about a few things, but 1 thing is talking abt tools that are needed to get ppl to [#data](#) [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

Industry, academy, practice, govt, philanthropy: the stakeholding groups interested in capacity building via [#data](#) research [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

.@BakerEDMLab: "there's a lot to support ppl working w/[#data](#) sets + building capacity 2 use in research+practice, but fragmented" [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

.@BakerEDMLab: "universities are doing it on their own, w/o support". Lori Bland concurs; local school systems like ideas... [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

... but can't sustain funding in the face of other traditional needs [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

training of masters level students (in [#data](#) science) is the most developed - especially in the biomedical sphere (e.g., via [@NIH](#)) [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

training in [#data](#) science restricted to methods - they have a job to do bcuz they have data in front of them. Really job-driven [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

lot of talk about [#data](#) literacy right now - for whom, what kind, in what context (higher ed, commercial, secondary) [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

there is a push from employers to get [#data](#) literacy, but as was said, it is task-oriented. [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

What are some core competencies that we need to develop across the board? [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

I mean, there are the [#MOOC](#) on [#data](#) science, which are totes helpful, but what about everyone else? [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

can we teach the kindergartners the concepts of ([#data](#)) science without shoveling the calculus on them? [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

yo, bookmark this: Profile of a Big-Data-Enabled Specialist (from @oceansofdata)
oceansofdata.org/our-work/profi... #CRADATA

 A DAY AGO



craig wiggins
@oxala75

#data should certainly not be regarded as something understood by "someone else" #CRADATA

 A DAY AGO



craig wiggins
@oxala75

story of latimes.com/local/educatio... as substitute for Algebra 2 in LA school district
#CRADATA (!)

 A DAY AGO



craig wiggins
@oxala75

study indicated that equal % of community college students + Scripps folks see facility for #data science to be a better citizen #CRADATA

 A DAY AGO



craig wiggins
@oxala75

but hey, @UnaMayMIT warns us that math is a must - otherwise #data science will be wrong
#CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@BakerEDMLab notes that the the idea of #data science is problematic due to domain specificity of practice + skills #CRADATA

 A DAY AGO



craig wiggins
@oxala75

By giving students the [#data](#) in order to solve problems, maybe we're missing an opportunity to teach skills [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

also to be stressed: the teamwork aspect of [#data](#) science [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

...tho this makes me think of all the roles involed in [#data](#) science - not everyone does everything (e.g., devs, researchers, etc.) [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

which makes me think of the pie of [#instructionaldesign](#) - no one does everything kineo.com/us/resources/t... [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

one more time: download this and let's talk oceansofdata.org/our-work/profi... (via [@oceansofdata](https://twitter.com/oceansofdata)) [#CRADATA](#)

A DAY AGO



craig wiggins
@oxala75

latimes.com/local/educatio... [#CRADATA](#) twitter.com/earino/status/...

A DAY AGO



craig wiggins
@oxala75

currently talking methods for getting #data science skills to folks. #MOOC, yes, but what else?
#CRADATA

 A DAY AGO



craig wiggins
@oxala75

i mean, the US federal govt, for example, is not going to pay for every worker to go back to school
#CRADATA

 A DAY AGO



craig wiggins
@oxala75

we need validated assessments of a broad range of #data science skills. US federal government
should support this! #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@UnaMayMIT: hey, we still need teachers to have these #data skills. They have to teach
everyone else! #CRADATA

 A DAY AGO



craig wiggins
@oxala75

so hey, the federal govt is already on it! @NSF's Advanced Technological Education (ATE):
[nsf.gov/funding/pgm_su...](https://www.nsf.gov/funding/pgm_su...) #CRADATA

 A DAY AGO



craig wiggins
@oxala75

quick talk abt some old #datavisualization techniques that're still being given country when
teaching potential #data scientists #CRADATA

 A DAY AGO



craig wiggins
@oxala75

.@UnaMayMIT says that research tools associated with #data repositories need to be specialized for educational specialists. #CRADATA

 A DAY AGO



craig wiggins
@oxala75

tools are too general - there needs to be specificity, and a mission. This implies goals and hypotheses, yes? #CRADATA

 A DAY AGO



craig wiggins
@oxala75

...that said, novice-friendly #data research tool interfaces should be considered broadly, as tools often get repurposed #CRADATA

 A DAY AGO



craig wiggins
@oxala75

we need greater collaboration between industry + academy: best ideas in academy should find homes in industry & vice-versa #CRADATA

 A DAY AGO



craig wiggins
@oxala75

that industry+academy collaboration can be incentivized by the federal govt, yes? #CRADATA

 A DAY AGO



craig wiggins
@oxala75

escience.washington.edu is mentioned #cradata

 A DAY AGO



craig wiggins
@oxala75

.@NSF is also doing that incentivizing of industry+academy collaboration in #data science via its regional hubs #CRADATA

A DAY AGO



craig wiggins
@oxala75

Some of these last few point came from @NSF's Lida Ann Beninson:
sciencepolicy.colorado.edu/stcert/student... #CRADATA

A DAY AGO



craig wiggins
@oxala75

also from @NSF (mentioned by @dyna_chem_net): Industry & University Cooperative Research Program (I/UCRC) nsf.gov/eng/iip/iucrc/ #CRADATA

21 HOURS AGO



craig wiggins
@oxala75

BTW, Michelle Dunn from @NIH is leading the 'Building Human Capacity' breakout group #CRADATA

21 HOURS AGO



craig wiggins
@oxala75

#fedgovt really trying to attract the ppl with skills, but they are getting leap-frogged (pay, opportunity) by industry #CRADATA

21 HOURS AGO



craig wiggins
@oxala75

Lida Beninson notes that \$ is a problem. Same problem in #computerscience - less \$ to teach teachers abt computer science! #CRADATA

21 HOURS AGO



craig wiggins
@oxala75

(...than to pull computer scientists who want to teach) #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

Lida Beninson notes that diversity is terrible in #computerscience; could we not make the same mistake in #datascience? #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

Fun fact: recently, more kids sat for the AP Italian exam than the AP Computer Science exam #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

this gem from the sage @EdDieterle #CRADATA twitter.com/oxala75/status...

 21 HOURS AGO



craig wiggins
@oxala75

@earino i know, right? #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

.@BakerEDMLab: yeah, our #data science students are getting snapped up even before they leave school #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

.@UnaMayMIT + Lida Beninson note that minority #computerscience students are getting snapped up even before graduating #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

two things: 1) how can u counsel a 1st gen college student to finish school if she's getting a huge offer from industry right now? #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

2) what happens to #computerscience students who don't finish school and get higher on in career? does it hurt prospoeets? #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

you tell me! :) #CRADATA [twitter.com/aa_altieri/sta...](https://twitter.com/aa_altieri/status/1234567890)

 21 HOURS AGO



Katrina Stevens
@KatrinaStevens1

@OfficeofEdTech guide to Expanding Evidence: tech.ed.gov/expanding-evid... #cradata

 21 HOURS AGO



craig wiggins
@oxala75

Michelle Dunn: only a 100 minority PhDs in anything related to #data science are created each year #CRADATA

 21 HOURS AGO



Katrina Stevens
@KatrinaStevens1

@OfficeofEdTech shares 10 opportunities in education in #EdTech Developer's Guide: tech.ed.gov/developers-gui... #cradata

 21 HOURS AGO



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@oxala75

#CRADATA twitter.com/aa_altieri/sta...

 21 HOURS AGO



craig wiggins
@oxala75

.@UnaMayMIT, Michelle Dunn + Lida Beninson talk about potential role of fed govt in upping diversity #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

Talking about women leaving toxic environment of industry, heading into the dense, 'safe' thicket federal govt #CRADATA

 21 HOURS AGO



Katrina Stevens
@KatrinaStevens1

Yes! @ekloper: WHY it works is more important than WHAT works. #cradata

 21 HOURS AGO



craig wiggins
@oxala75

ruth krumhansl, @UnaMayMIT, @EdDieterle, @ekloper: #data science as a profession needs a publicist #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

Some interesting talk now about how boys + girls approach maker activities. Boys' robots always end up battling each other [#CRADATA](#)

21 HOURS AGO



craig wiggins
@oxala75

...and girls focus on building 'pretty' rockets. Once they get over that, though, they routinely outperform the boys [#CRADATA](#)

21 HOURS AGO



craig wiggins
@oxala75

man, i have a lot more to type and we all have more to day but it is lunchtime [#CRADATA](#)

21 HOURS AGO



craig wiggins
@oxala75

Lida Beninson + [@ekloper](#) have digital notes of takeaways from 'Building Human Capacity'; [#CRADATA](#) folk, catch them at lunch for more!

21 HOURS AGO



craig wiggins
@oxala75

.[@DavidDLaCroix](#): was just an anecdotal story here abt [#data](#) science grad students afraid to even talk about industry options... [#CRADATA](#)

21 HOURS AGO



craig wiggins
@oxala75

...for fear of being viewed as not taking their field seriously [#CRADATA](#)

21 HOURS AGO



Al
@alsbyers

Chris Dede in #bigdata @NSF Symp-consumers want to use #bigdata 2 do things better & producers want 2 use BD to do better things. #cradata

 21 HOURS AGO



craig wiggins
@oxala75

Lida Beninson agrees & notes that not a many academic #data scientists don't stay in the academy. Need to know how to talk industry #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

Thanks to Michelle Dunn for moderating! #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

OH: conversation about how many women instructors are reticent to teach #MOOC due to harrassment #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

there are just so many smart people here. I'm kind of choking on it, srsly #CRADATA

 21 HOURS AGO



craig wiggins
@oxala75

just referenced [youtube.com/user/schoolofl...](https://www.youtube.com/user/schoolofl...) to talk about the decline of regard for academics #CRADATA

 21 HOURS AGO



craig wiggins

@oxala75

now talking about the concept of [#MOOC](#) trolls - like, 'famous' ones [#CRADATA](#)



21 HOURS AGO



craig wiggins

@oxala75

needs to be research, concern + awareness of this danger. This is frankly keeping many instructors from creating [#MOOC](#) [#CRADATA](#)



21 HOURS AGO



craig wiggins

@oxala75

[#MOOC](#) platforms really need to get on this. Some are more attentive to this than others; should be a purchase factor at unis [#CRADATA](#)



21 HOURS AGO



Talking about the problem of unis giving up their intellectual property to [#MOOC](#) platforms [#CRADATA](#) pic.twitter.com/ckNsd0MgBq

 CRAIG WIGGINS @OXALA75 · 21 HOURS AGO



[craig wiggins](#)
@oxala75

so wait - are instructors not getting paid extra for designing/teaching [#MOOC](#), but unis are using it as marketing??? [#CRADATA](#)

 21 HOURS AGO



[craig wiggins](#)
@oxala75

[@EmicAcademic](#) yes, but I'm not sure I can repeat everything. ask Ruth Krumhansl, Lida Beninson, [@UnaMayMIT](#) [#CRADATA](#)

 21 HOURS AGO



craig wiggins
@oxala75

really interested in [@NSF](#)'s focus on diversity; further interested in how the needle is supposed to move [#CRADATA](#)

 21 HOURS AGO



craig wiggins
@oxala75

[@EmicAcademic](#) also, Michelle Dunn! [#CRADATA](#)

 21 HOURS AGO

1300-1415: The Way Forward: Integrating Insights



craig wiggins
@oxala75

back from lunch (btw, thx to [@edwsonoma](#) for great post-nosh discussion). Now to integrate insights - [@JereConfrey](#) kicks us off [#cradata](#)

 20 HOURS AGO



craig wiggins
@oxala75

"learning is not a spectator sport" - gotta include everything that is done and does (including teachers!) [#cradata](#)

 20 HOURS AGO



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@oxala75

a warning from [@JereConfrey](#): computer algorithms are not going to solve our problems [#CRADATA](#)

 20 HOURS AGO



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@oxala75

not for nothing, but IRBs are getting beat with sticks here at [#CRADATA](#) :)

 20 HOURS AGO



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@oxala75

good question for researchers: "how do u resolve differences in results and conclusions in a public space" #CRADATA

 20 HOURS AGO



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#CRADATA twitter.com/EmicAcademic/s...

 20 HOURS AGO



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@oxala75

you guys, @EmicAcademic is like a virtual #CRADATA MVP.

 20 HOURS AGO



craig wiggins
@oxala75

i think @chrs_dede would have a lot of things to say about @ADL_Initiative's Virtual World Sandbox sandbox.adlnet.gov #CRADATA

 20 HOURS AGO



Erin
@EmicAcademic

@oxala75 Hahaha, thanks but I'm clearly just really, really jealous to not be there, and I'm trying to live it through the hashtag. #cradata

 20 HOURS AGO



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@oxala75

.@chrs_dede "i suspect that there are learning trajectories for some of the things we're trying to teach - complex causality, etc" #CRADATA

 20 HOURS AGO



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@oxala75

.@chrs_dede: "what's the learning trajectory for conflict resolution?" #CRADATA

🐦 20 HOURS AGO



CtrforApplied Ethics
@stout_ethics

#CRADATA: On IRB review of big data: hhs.gov/ohrp/sachrp/co...

🐦 20 HOURS AGO



The 'integrating insights' panel #cradata pic.twitter.com/GdKaH0Y5Db

🐦 CRAIG WIGGINS @OXALA75 · 20 HOURS AGO



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@oxala75

digital teaching platforms - teacher is still center of classroom, but surrounded by learning systems/tools to complement them #CRADATA

🐦 20 HOURS AGO



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@oxala75

weakest part of digital teaching systems that [@chrs_dede](#) + colleagues came up with was the [#data](#) research aspect. This is changing! [#CRADATA](#)

 20 HOURS AGO



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@oxala75

.[@chrs_dede](#): "Plato's cave - [#bigdata](#) is the shadows on the cave. We're trying to understand something deeper." [#CRADATA](#)

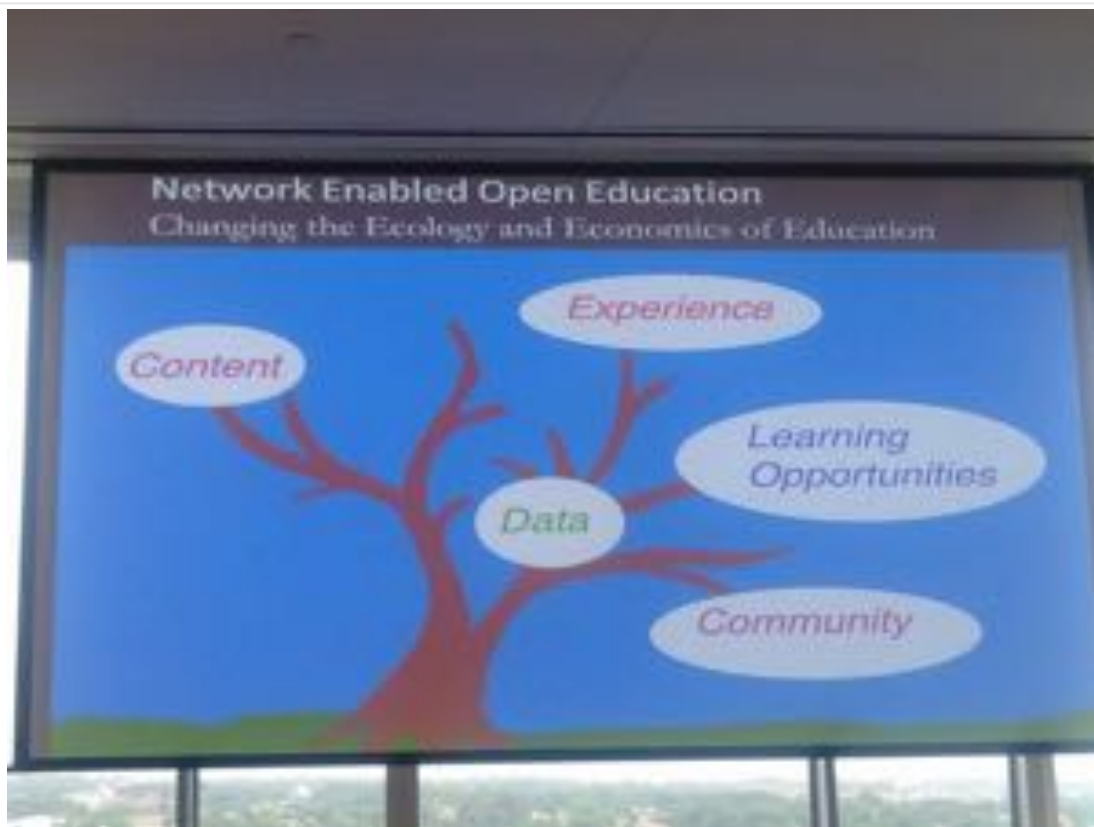
 20 HOURS AGO



craig wiggins
@oxala75

.[@chrs_dede](#) likes [@alephbass](#)'s idea of a data vault (i'll need to follow up on that) [#CRADATA](#)

 20 HOURS AGO



.@vkumar #cradata pic.twitter.com/Gt6gFKAlr8

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Initiative that @vkumar + @ekloper were working with in India #cradata
pic.twitter.com/pjBUAlqPOH

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[#data](#) research and use design considerations [#cradata](#) pic.twitter.com/Y7N2hXagZc

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[craig wiggins](#)
@oxala75

.[@vkumar](#) adds that in India, scale is in fact an input in design considerations, not something arbitrary [#CRADATA](#) twitter.com/oxala75/status...

 20 HOURS AGO



[craig wiggins](#)
@oxala75

.[@vkumar](#): "we need digital learning assessment banks and repositories...and recommender engines (based on good [#data](#) analysis)!" [#CRADATA](#)

 20 HOURS AGO



Ellen Wagner

@edwsonoma

VJ Kumar talking abt networked enabled open education: Data, content, experience, learning opportunities, community #CRADATA

 20 HOURS AGO



craig wiggins

@oxala75

.@vkumar: "we need more work on mapping btwn educational courses and job skills"
#CRADATA

 20 HOURS AGO



Ari Gesher

@alephbass

@oxala75 @chrs_dede ari.gesher.net/nsf-big-data-i... See the section entitled "Managed Cloud Environments for Data Analysis" (last section) #CRADATA

 19 HOURS AGO



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@oxala75

@alephbass thx, m8! #CRADATA

 20 HOURS AGO



Vijay Kumar @MIT shares #bigdata @NSF Summit 2 improve recommender systems 4 Networked Enabled Open Ed #CRADATA @NSTA pic.twitter.com/7XMy2RIPYi

 AL @ALSBYERS · 19 HOURS AGO



Andrew Ho

@AndrewDeanHo

.@vkumar proposes digital assessment item banks, then proposes maps from #MOOCs to jobs. Why not from assessments to jobs and vv? #CRADATA

 19 HOURS AGO



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@oxala75

.@vkumar: "create automatic scaffolding strategies for a wide variety of 'network learners' to better support autonomous learning?" #CRADATA

 19 HOURS AGO



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@oxala75

and yeah, [@vkumar](#) is all about making lower thresholds for providing and using [#data](#), echoing the 'Building Human Capacity' session [#CRADATA](#)

 19 HOURS AGO



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@oxala75

.[@gsiemens](#): y'all need [@SoLAResearch](#) + the International Educational Data Mining Society [#CRADATA](#)

 19 HOURS AGO



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@oxala75

.[@gsiemens](#) notes that, historically, when we get way too much data, we start abstracting - think encyclopedias, etc. Not new [#CRADATA](#)

 19 HOURS AGO



[craig wiggins](#)
@oxala75

we focused on [#data](#) science are "helicopter parents", says [@gsiemens](#). We should be a bit less expectant [#CRADATA](#)

 19 HOURS AGO



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actually, he says that "we need to unclench a little bit" [#CRADATA](#) :)

 19 HOURS AGO



[craig wiggins](#)
@oxala75

that said, are we kind of late to the part in the educational context? Think freaking [#LMS](#) [#CRADATA](#)

 19 HOURS AGO



man, [@gsiemens](#) bringing us to church on [#LMS](#) + the problems of [#data](#) in ed context [#CRADATA](#)
pic.twitter.com/PuBrXmpVaW

 CRAIG WIGGINS [@OXALA75](#) · 19 HOURS AGO



[craig wiggins](#)

[@oxala75](#)

"we need to move from a 4-yr relationship w/our students to a 40-yr one, to help them be who they think they should be" - [@gsiemens](#) [#CRADATA](#)

 19 HOURS AGO



[craig wiggins](#)

[@oxala75](#)

.[@gsiemens](#): "we need to develop tools, methods + ppl in the [#learninganalytics](#) space"
[#CRADATA](#)

 19 HOURS AGO



[craig wiggins](#)

[@oxala75](#)

.[@gsiemens](#): are we sliding back into "beautiful Skinnerian days" w/all this data talk?
[#datascience](#) isnt necessarily behaviorism [#CRADATA](#)

 19 HOURS AGO

We have reason to fear that the multitude of books which grows every day in a prodigious fashion will make the following centuries fall into a state as barbarous as that of the centuries that followed the fall of the Roman Empire. Unless we try to prevent this danger by separating those books which we must throw out or leave in oblivion from those which one should save and within the latter between what is useful and what is not.²

Since 1550 there have been issues of big data & info overload [@gsiemens](#) [#CRADATA](#) Blair (2003) dash.harvard.edu/handle/1/32283... pic.twitter.com/xS6uFWpMoc

 ALEX J BOWERS [@ALEX_J_BOWERS](#) · 19 HOURS AGO



[craig wiggins](#)
[@oxala75](#)

.[@gsiemens](#): "we need an [@TheASF](#) or a [@WordPress](#) for [#learninganalytics](#)" [#opensource](#) [#CRADATA](#)

 19 HOURS AGO



[craig wiggins](#)
[@oxala75](#)

ok, here's our chance for us to comment on everything over the last 2 days (!). [@UnaMayMIT](#) steps up to the plate [#CRADATA](#)

 19 HOURS AGO



[craig wiggins](#)
[@oxala75](#)

.[@UnaMayMIT](#) calls out the good example of the PAR project and [@Starfish360](#), but not accessible everywhere [#CRADATA](#)

 19 HOURS AGO



[George Siemens](#)
[@gsiemens](#)

[@oxala75](#) [@SoLAResearch](#) preach it brother [#cradata](#)

 19 HOURS AGO



C. Laubenthal
@Phbob

Google Ngram Viewer: '[big data]', 1800-2008 in English. books.google.com/ngrams/graph?c...
#cradata

 19 HOURS AGO



craig wiggins
@oxala75

here's an interesting thing that I'd like to talk about more (that @UnaMayMIT just brought up):
#data has diff sensors #CRADATA

 19 HOURS AGO



craig wiggins
@oxala75

I think @UnaMayMIT is on point number 4 - *almost* at @AndrewDeanHo-level chain
punching #CRADATA

 19 HOURS AGO



craig wiggins
@oxala75

.@chs_dede picks up the sensors thread and mentions #IoT. I bring jup #xAPI + #IoT and
yesterday's #GCTCExp015 project #CRADATA

 19 HOURS AGO



George Siemens
@gsiemens

"We live in an era of priority paralysis" #cradata

 19 HOURS AGO



craig wiggins
@oxala75

.@stout_ethics counters @UnaMayMIT's pro #data segmentation stance #CRADATA

 19 HOURS AGO



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@oxala75

parents want kids to be engineers, but dunno what engineers do. Solution for engineer societies: educate public #Data science? #CRADATA

 19 HOURS AGO



craig wiggins
@oxala75

.@psgallagher brings up idea of expanding into the cyberphysical environment #CRADATA

 19 HOURS AGO



Rob Robertson
@RobRobertson

. @oxala75 thanks for keeping the tweets coming #cradata

 19 HOURS AGO



craig wiggins
@oxala75

.@gsiemens: afraid we'll spend next 5 yrs talking tools + stuff, rather than research. This is why we need open, common platform #CRADATA

 19 HOURS AGO



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@oxala75

@RobRobertson my pleasure! #CRADATA

 19 HOURS AGO



craig wiggins
@oxala75

.@gsiemens + @psgallagher talk about idea of common #learninganalytics #data platform #CRADATA

 19 HOURS AGO



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@oxala75

Piotr Mitros with a good point: maybe writing a paper after research shouldn't be the end result
[#CRADATA](#)

19 HOURS AGO



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@oxala75

Henry Kelly (from [@ENERGY](#)): "is there a better way to extract data about what ppl are actually doing?" I wanted to scream. [#CRADATA](#)

19 HOURS AGO



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@oxala75

...but [@valshute](#) brought up an interesting automated task analysis tool (called DNA) that she worked on, but that didn't take off [#CRADATA](#)

19 HOURS AGO



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@oxala75

Piotr Mitros: we should be sharing code via [@github](#), rather than sending around papers
[#CRADATA](#)

19 HOURS AGO



craig wiggins
@oxala75

i...i think someone just called [#SCORM](#) a mastodon [#CRADATA](#)

19 HOURS AGO



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@oxala75

[.@gsiemens](#): the open [#data](#) tools gets us out of the sinkhole of having to muck about w/standards [#CRADATA](#)

19 HOURS AGO



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@oxala75

.@dyaskin counters @gsiemens with: yeah, but Apache - it took years and many other efforts failing for it to be The One #CRADATA

 19 HOURS AGO



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@oxala75

#CRADATA [twitter.com/Alex_J_Bowers/...](https://twitter.com/Alex_J_Bowers/)

 19 HOURS AGO

1415-1430: Funding Opportunities



so, the final panel: the funding opportunities panel #CRADATA pic.twitter.com/51wsYqD9AU

 CRAIG WIGGINS @OXALA75 · 19 HOURS AGO



Zach A. Pardos
@zpardos

#CRADATA data model neutral open learning analytics framework for sharing analyses
twitter.com/dapostrophe/st...

 19 HOURS AGO



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@oxala75

First up in the funding oppty: Education Research & Development Center Program: Virtual Learning (ies.ed.gov/funding/ncer_r...) #CRADATA

 19 HOURS AGO



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want to know more about that opportunity? ask [@IESResearch](#)'s Dr Erin Higgins #CRADATA

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Up now: Michelle Dunn from [@NIH](#) to talk about a funding opportunity: datascience.nih.gov/bd2k #CRADATA

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@oxala75

#CRADATA twitter.com/xpconcept/stat...

 19 HOURS AGO



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@oxala75

anyway, this [@NIH #datascience](#) finding opportunity sounds hot. Wait, it's two opportunities, really. Ok. Get on this, ppl #CRADATA

 19 HOURS AGO



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@oxala75

Taylor Martin ([@NSF](#)) up to talk about funding opps. Deadline has passed, bit good to get up in it #CRADATA

 19 HOURS AGO



craig wiggins
@oxala75

what was that citizen [#data](#) science program that Taylor Martin just talked about? [#CRADATA](#)

 19 HOURS AGO



Andrew Ho
@AndrewDeanHo

Funding [#CRADATA](#): IES: ies.ed.gov/funding/pdf/20... NIH: datascience.nih.gov/bd2k NSF: nsf.gov/funding/pgm_su... nsf.gov/pubs/2015/nsfi... (and all over)

 19 HOURS AGO



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@oxala75

i didn't even know about this: circlcenter.org/stemc [#CRADATA](#)

 19 HOURS AGO



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@oxala75

also! Building Community and Capacity for [#Data-Intensive Research...](#)
nsf.gov/funding/pgm_su... [#CRADATA](#)

 19 HOURS AGO



craig wiggins
@oxala75

word on the street is that the next big event is educationaldatamining.org/EDM2015, but it is in Madrid [#CRADATA](#)

 19 HOURS AGO

1430-1500: Plenary Discussion: Closing Thoughts and Next Steps



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@oxala75

Susan Singer brings us back to the genomic metaphor [#CRADATA](#)

 18 HOURS AGO



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@oxala75

Singer: what things do you want us at funding agencies to think hard abt in terms of ways we can help u push fwd emerging visions? #CRADATA

 18 HOURS AGO



craig wiggins
@oxala75

.@edwsonoma hints that maybe it would be good to figure out a way to continue conversation, keep in touch #CRADATA

 18 HOURS AGO



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@oxala75

which is a good question. what happens after this? i mean, i know collabs will happen and project will get funded, but what else? #CRADATA

 18 HOURS AGO



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@oxala75

i mean, i know what i want: @gsiemens' idea of common tools for #learninganalytics, but #dasjustmedoe #CRADATA

 18 HOURS AGO



craig wiggins
@oxala75

Steve Miller (@IBM) mentions a follow on (#datascience?) project - let him know if you want in! #CRADATA

 18 HOURS AGO



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@oxala75

Someone on far side of room brings up mentions #bigdata hubs. @NSF? #CRADATA

 18 HOURS AGO



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@oxala75

Diana Oblinger (@educause) mentions whes.org as a place to look into [#CRADATA](https://twitter.com/CRADATA)

 18 HOURS AGO



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@oxala75

Susan Singer: [@CRAtweets](https://twitter.com/CRAtweets) will be sending us a survey to rate this conferenece. Looking forward to it [#CRADATA](https://twitter.com/CRADATA)

 18 HOURS AGO



craig wiggins
@oxala75

[#CRADATA](https://twitter.com/CRADATA) is now over! Thanks to [@chrs_dede](https://twitter.com/chrs_dede) (and whoever invited me to the conf!)

 18 HOURS AGO