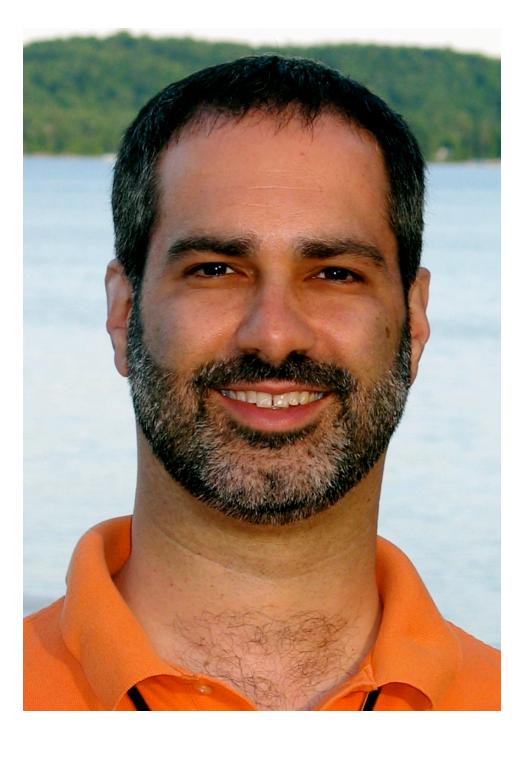


University of Michigan **Provost's Teaching** Innovation Prize

2010 WINNER



BARRY J. FISHMAN Associate Professor Learning Technologies School of Education School of Information fishman@umich.edu

Sponsors:

Office of the Provost

Center for Research on Learning and Teaching (CRLT)

The University Library

Using Collaboration and Communication Technologies to Transform Large Lectures into Small Seminars

Innovation Description

Large classes feel more like a small community learners when students possess multiple avenu for active participation. Each of the four following technologies can stand alone, allowing faculty to experiment with discrete components as time and interest permit. Deployed in combination, these tools support a powerful set of pedagogic practices that leverage the devices students already have with them -- cell phones and lapto computers.

Types of tools and specific examples:

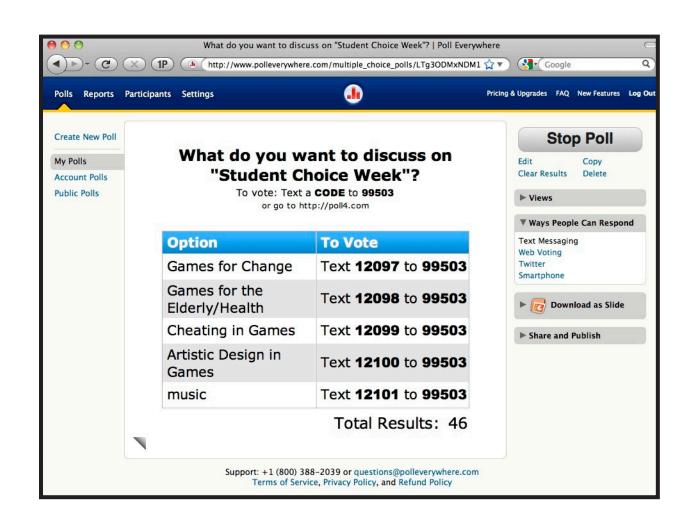
POLLING: Poll Everywhere is a web-based tool replicates "clicker" functionality via cell phone 1 messages or laptop browsers. Faculty can try n pedagogies without increasing costs to student

BACK CHANNELING: Live Question Tool provid a web-based "back channel" that invites, ranks, and refines questions from students.

VIDEOCONFERENCING: Elluminate, DimDim, a Timbuktu make videoconferences more interact by allowing students to annotate speakers' slide

WIKIS: The Wikispaces wiki has graphical editir capabilities and flexible discussion tools for collaborative knowledge building and sharing.

Examples of Teaching Innovation

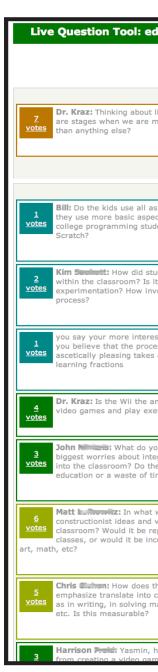


Poll Everywhere is a tool that can be used in place of proprietary "clicker" hardware. Using either cell phone-based text messages or their web browsers, students can vote on questions to engage more actively in class discussion and decision making.

	Comments
y of ues ing ne	"The Wiki page allows students to offer additional information with no risk and t reward: that of appreciation and interes up unnecessary class time, yet still stim to research outside of the classroom." (
ical	"Reading responses are posted to the c CTools. As students enter the physical of the physical of the physical of the physical for the physical
op ol that text	selected responses are posted for them use their cell phones to vote on the "be This technique provides incentive for co responses on time, enables students to reading just before class, and focuses s the topic of the day in a positive and int (faculty colleague)
new hts. ides s, and ctive des.	"Nearly every week we have video conf give us insight into the minds and findir the world's leading experts I had a qu professor from the University of Wiscon we were video chatting. She immediate question and looked me in the eye while types of personal communications mak intriguing, interactive, and ultimately me (former student)
ing	

● ● ● ● ● ● ● ● ● ● ● ●	× 1P ()	What subject should we design a game around? Poll Everyw http://www.polleverywhere.com/multiple_choice_polls/LTIwOTgwN	
Polls Reports	Participants Setting	s 🔒	Pricing & Upgrades FAQ New Features Log Out
Create New Poll			Stop Poll
My Polls	What subject should we design a		
Account Polls		game around?	Clear Results Delete
Public Polls		To vote: Text a CODE to 99503	Views
	Math	or go to http://poll4.com	Live Chart Summary Table Response History Static Chart
	Science	17% 17230	Ways People Can Respond Ways Download as Slide
	History	17231 39%	Share and Publish
	Literature	12% 17235	
		0 2 4 6 8 10 12 14	16
		Support: +1 (800) 388–2039 or questions@polleverywhere.c Terms of Service, Privacy Policy, and Refund Policy	om

In this Poll Everywhere poll, students are selecting a topic for an in-class activity. The results graph updates live as students enter their responses.



er opinions and tremendous est. It does not take mulates students (former student)

class wiki in classroom, m to reread; they est" response. completing to review the day's students on nteractive way."

nferences that lings of some of question for a onsin with whom tely answered my ile doing so. These ake learning more nore beneficial."

duc222week12					
Please put your question	ns for Yasmin Kafai here!				
Post a question :: Choose a different instance :: Archived questions :: 🔯					
Active Questions					
t life in stages, do you think there more influenced by video games 10:53 am EDT, 23 Mar :: <u>Reply</u>	6 yotes Daniel : In class, we are currently designing our own games. I am wondering, if you believe that creating and designing a shooter game could pass along negative messages and negative learning to the designer about killing and harming others?				
	10:46 am EDT, 23 Mar :: <u>Reply</u>				
Most Recently Su	bmitted Questions				
aspects of "Scratch" or "Logo" or do bects of them. For example, would a udent be able to do more with	2 votes Brian: How much and what type of classroom preparation was given to these students (in terms of the academic content they implemented into their games) before they went off and designed their games? Anonymous: you actually just mentioned that the kids were				
11:52 am EDT, 23 Mar :: <u>Reply</u> tudents learn Logo or Scratch	aked to make games for 3rd graders, so i guess the children were already pretty much masters of the academic content that they implemented into these games?				
it a trial and error nvolved is the teacher in this	11:46 am EDT, 23 Mar :: <u>Reply</u>				
11:33 am EDT, 23 Mar :: Reply	Allie Murun: Do you have any idea how much or how often the students work on/experiment with their games outside of the classroom?				
rested in the process howevere do cess of making the game as away from the real goal of	11:39 am EDT, 23 Mar :: <u>Reply</u>				
11:11 am EDT, 23 Mar :: <u>Reply</u> answer to get little kids to play	4 votes When designing an educational game, do you feel it's better to be an expert on the subject or to be fairly new to the material, so you have room to grow and learn with your project and incorporate all that you learn? Artun:forgot my name				
xercise at the same time?	11:27 am EDT, 23 Mar :: <u>Reply</u>				
10:57 am EDT, 23 Mar :: <u>Reply</u> you think are parents and teachers tegrating video game construction they see it as valuable part of time?	The LOGO-based games seem to teach the student- programmers how to program, but in terms of teaching fractions to others it really doesn't seem to *teach* It's almost as if gamers know the answers or don'twhere's the instruction?				
10:39 am EDT, 23 Mar :: <u>Reply</u>	11:19 am EDT, 23 Mar :: <u>Reply</u>				
t way do you envision d video games being used in the replacing a different part of ncorporated into other subjects like	2 votes Dr. Kraz: The most important lesson we need to teach children is that voting can change the world. Our generation hopefully got it right, so how do we teach the next generation to get it right?				
10:34 am EDT, 23 Mar :: <u>Reply</u>	10:55 am EDT, 23 Mar :: <u>Reply</u>				
the creativity that these games o creativity in the classroom, such math problems, in study habits,	Ariana filtermen: The notebook entries produced by the children making the videogames reminded me a lot of creating a picture book. What would be the major differences in thought processes for creating a storybook vs, a videogame?				
10:51 pm EDT, 22 Mar :: <u>Reply</u>	10:44 am EDT, 23 Mar :: <u>Reply</u>				
, how is the knowledge learned	3 Dillon Sector: As school becomes more mundane and				

The Live Question Tool (developed at Harvard Law School) allows students to post questions, vote on others' questions, and even respond directly to others' questions. Questions can be addressed when they best fit the conversation.