CONNECTING YOUTH

digital learning research project

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Research Questions

1) Across multiple contexts, how do educators understand and implement Connected Learning? How can researchers operationalize the concept? And how does it vary by social background and network position?

2) To what extent is Connected Learning associated with educational outcomes?

3) What are the barriers and obstacles to Connected Learning program implementation and sustainability?

Data Summary

Years 1-5 (2011-Spring 2016)	Adult Interviews	Youth Interviews	Surveys (pre-, post-, and one-day)	Observations (hours)
Hive Networks (New York and Chicago)	243	134	2672	58.5
YOUmedia Sites (Chicago, New York, and D.C.)	52	112	660	273.25
Learning Labs	202	-	-	-
Journey Schools (New York and Chicago)	319	346	3818	306

Connected Learning

Image Credit: http://clalliance.org/

Connected Learning: Across Contexts

Image Credit: The Sprout Fund

Connected Learning: Informal Education

Image Credit: DreamYard Fashion Tumblr

Connected Learning: Formal Education

Connected Learning Index

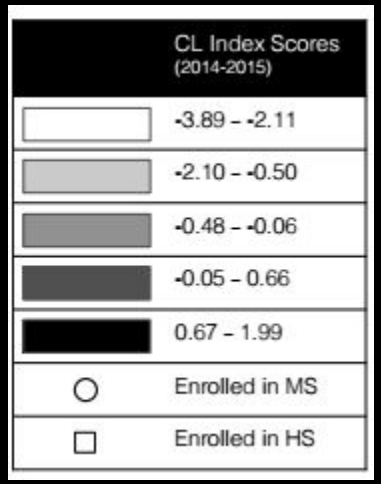
Interest-Powered Index	Measures the extent to which the student reports creating things with digital technology, teaching themselves things with digital technology, will explore a new interest based on things they learned in the program, and reported learning things that would help them go deeper into an interest they already had before the school or program.
Peer-Supported Index	Measures the extent to which the student reports learning a lot from their teachers or mentors, learning a lot from other youth, and working with other youth to create something.
Opportunity-Oriented Index	Measures the extent to which students report learning things they could use in a job one day, learning things they could use in college one day, and that teachers and/or mentors helped them understand how activities they did at the school or program can be used in other parts of their lives.
Share and Encouragement from Family Index	Measures higher reports of sharing work with, and receiving encouragement from, family members for the youth's favorite activity or interest at the site.
Share and Encouragement from None-Home Adults	Measures higher reports of sharing work with, and receiving encouragement from, non-home adults (adults at school or mentors outside of the family) for the youth's favorite activity or interest at the site.

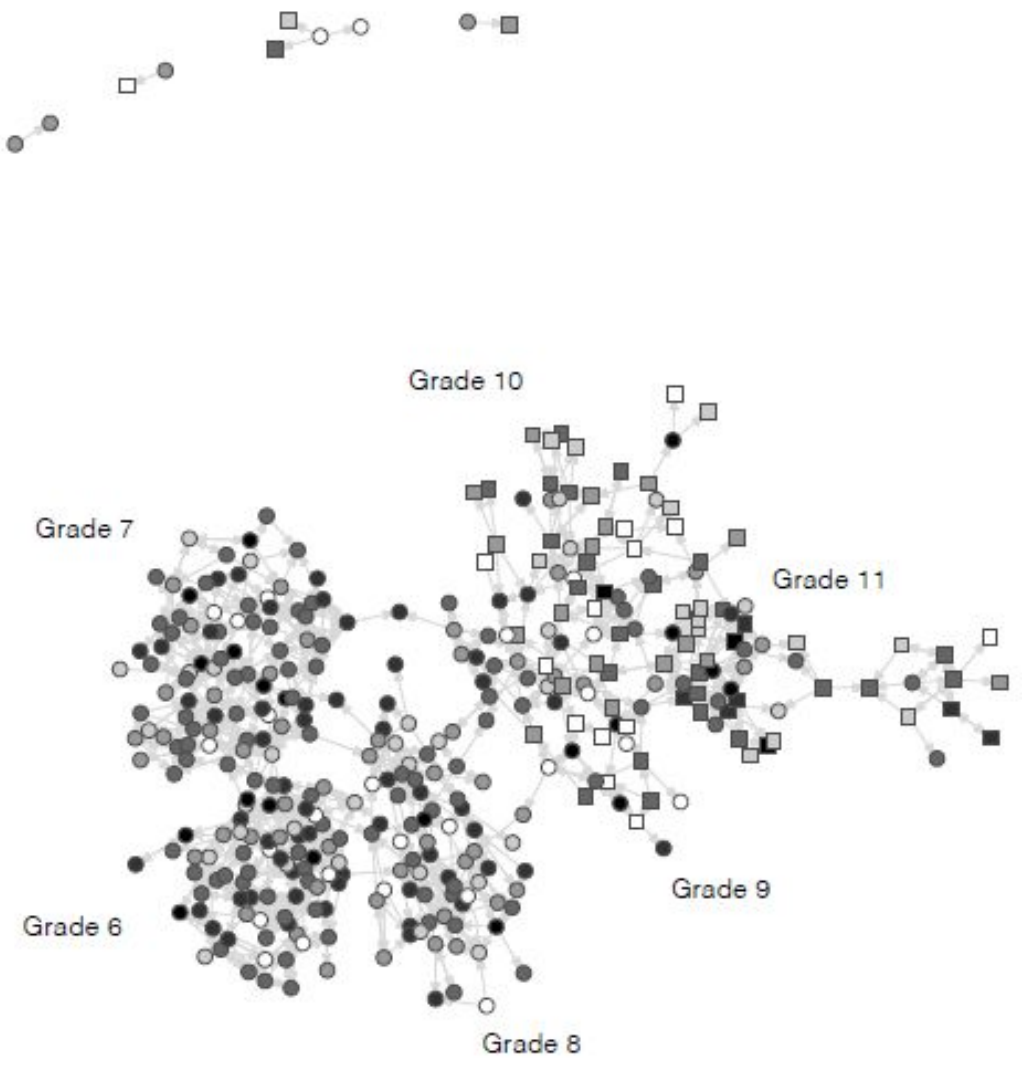
Connected Learning Index Means

	Hive Students, Fall '12 to Summer '14 (Chicago and NYC)		YouMedia Students, Fall 2014 (Chicago)[1]		Journey Students, AY 2014-2015 (Chicago and NYC)	
	Mean	N	Mean	N	Mean	N
Gender						
Female	0.238	337	0.059	52	-0.010	133
Male	0.203	232	0.036	73	0.021	283
Race						
White	0.199	72	-0.435	8	-0.015	136
Black	0.199	215	-0.056	71	-0.001	93
Hispanic	0.264	137	0.243	23	-0.003	133
Other	0.238	144	0.241	25	0.100	51
Parent's Education						
Parent <BA	0.289	166	0.152	48	-0.130	73
Parent BA	0.123	119	-0.016	33	-0.153	82
Parent Grad	0.210	173	0.019	35	0.184 **	114
Poverty rate: Chicago						
Low	0.225	67	-0.040	32	-0.385	11
Moderate	0.128	111	0.007	60	0.133	28
High	0.442	32	0.325	27	0.041	11
Poverty rate: NY						
Low	0.448	11	-	-	0.018	68
Moderate	0.293	184	-	-	0.109	124
High	0.125	112	-	-	-0.048	52
Homicide rate: Chicago						
Low	0.068	48	-0.011	32	-0.294	9
Moderate	0.202	124	0.037	55	0.064	31
High	0.400	38	0.196	32	0.059	10

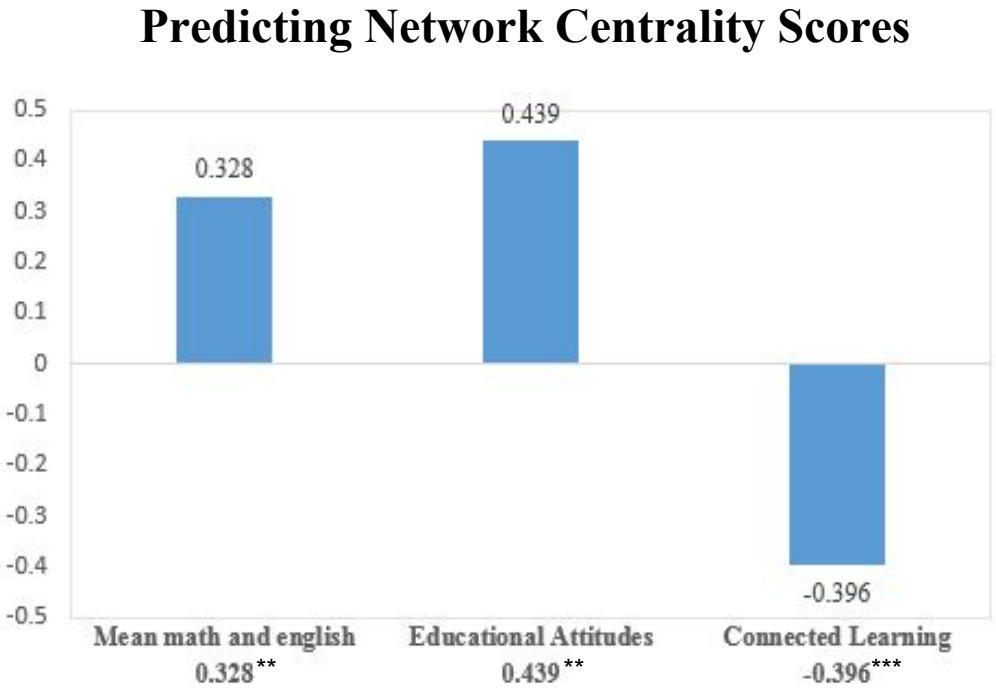
Notes: Significance tests use alpha levels: *p<.05; **p<.01; ***p<.001. Reference categories are in italics: Male, Black race; Parent<BA; Low Poverty rate and Low Homicide Rate. Poverty and Homicide rates are with respect to city distributions. Low is the 25th percentile, Moderate is the middle 2 quartiles and High is the 75th percentile.

School Social Network Map with CL Index of Individuals, by Grade





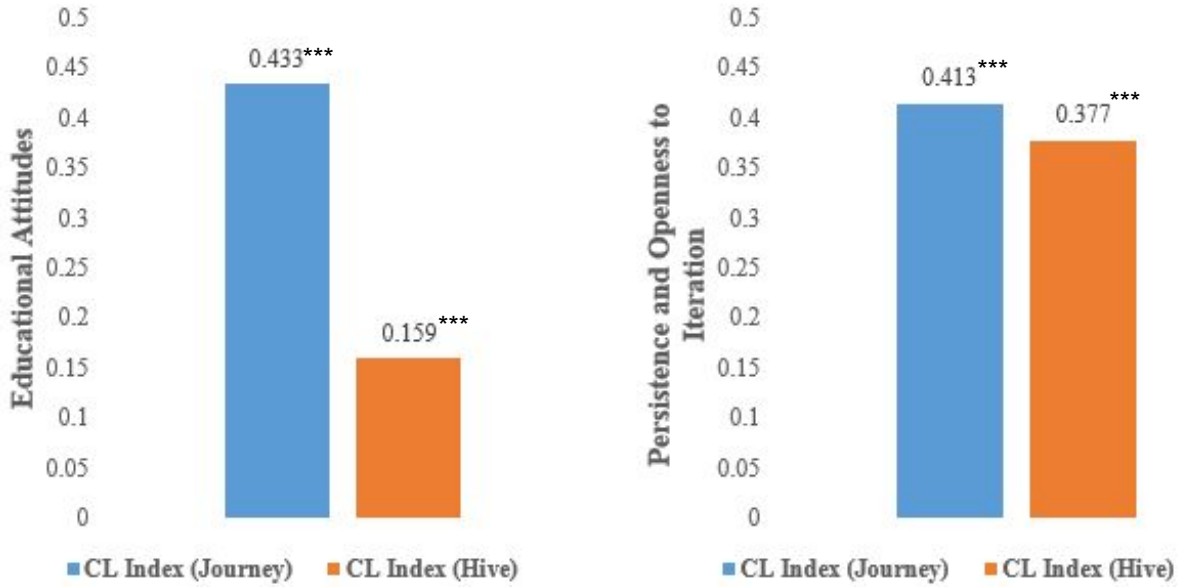
Network Centrality



Notes: Results correspond to a regression model that regresses Mean math and english, Educational Attitudes, and Connected Learning Index scores on Network Centrality scores for Journey Chicago students in academic year 2014-2015. The model also controls for gender, race, and free/reduced lunch.
Significance levels: *** p<.001 **p<.01

Value Added

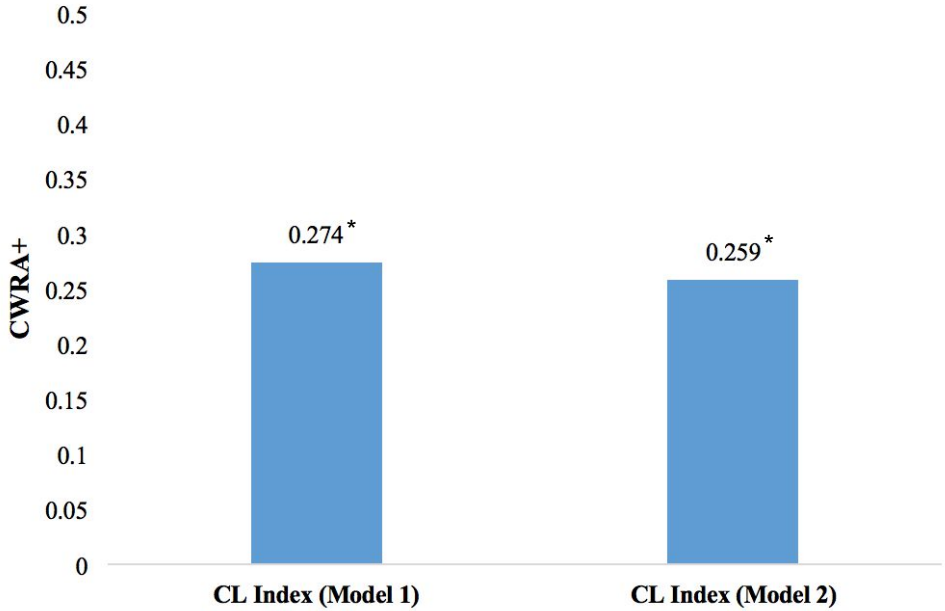
Associations between Connected Learning and Value-Added Educational Attitudes and Persistence and Openness to Iteration



Notes: Two regression models predicting value-added Educational Attitudes (left of graph) and 2 predicting value-added Persistence and Openness to Iteration (right of graph) from Connected Learning Index scores in the 2014-15 academic year at Journey and Hive also control for gender, race, parental education, grade/age, location, and perception of rules. Significance levels: *** p<.001

Value Added

Associations between Connected Learning and Value-Added CWRA+ Scores



Notes Results correspond to two regression models predicting value-added CWRA+ scores for Journey-NYC students in 2014-2015. Both models control for gender, race, parental education, free/reduced lunch, and grade. Model 2 also controls for educational attitudes, persistence and openness to iteration, and perception of rules.
Significance levels: *p<.05

Youth: Potential Trajectories

Trajectories: David

Reflecting on his program experience, David said:

> DreamYard was a ray of hope for me because before coming here, obviously, coming from a non-supportive background, it's very difficult to want to be an artist when everyone's just constantly telling you, "You can't do it. You're not going to make money"...Then, just coming here and having people tell you or show you that it's possible, that they can do it, that you can do it. It's just so inspiring and it's been really important to me. Coming here has just been one of the best experiences of my life.

Trajectories: Zaya

Zaya’s progression from knowing nothing about photography to honing marketable talent was a gradual process.

> “I've seen my work over the years and some of my pictures look kind of bad and now they look kind of better and I just learn every single day in ARTLAB+.”

Through persistence, Zaya accomplished more than she had previously thought possible.

> It really changed me, like I really thought that I couldn't learn, like, difficult things, but I've learned a lot and I really - I've really been able to intake things that’s really difficult pretty fast.

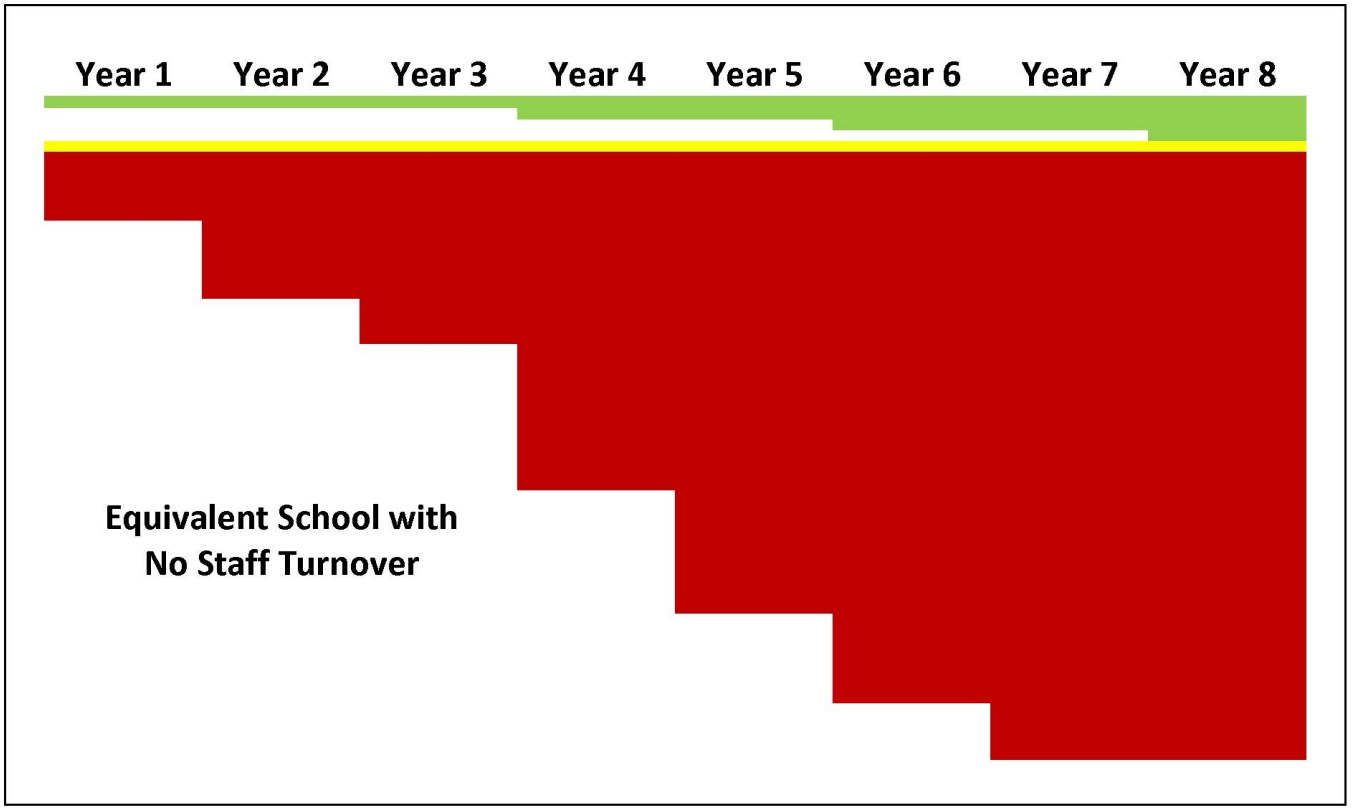
Trajectories: Zaya

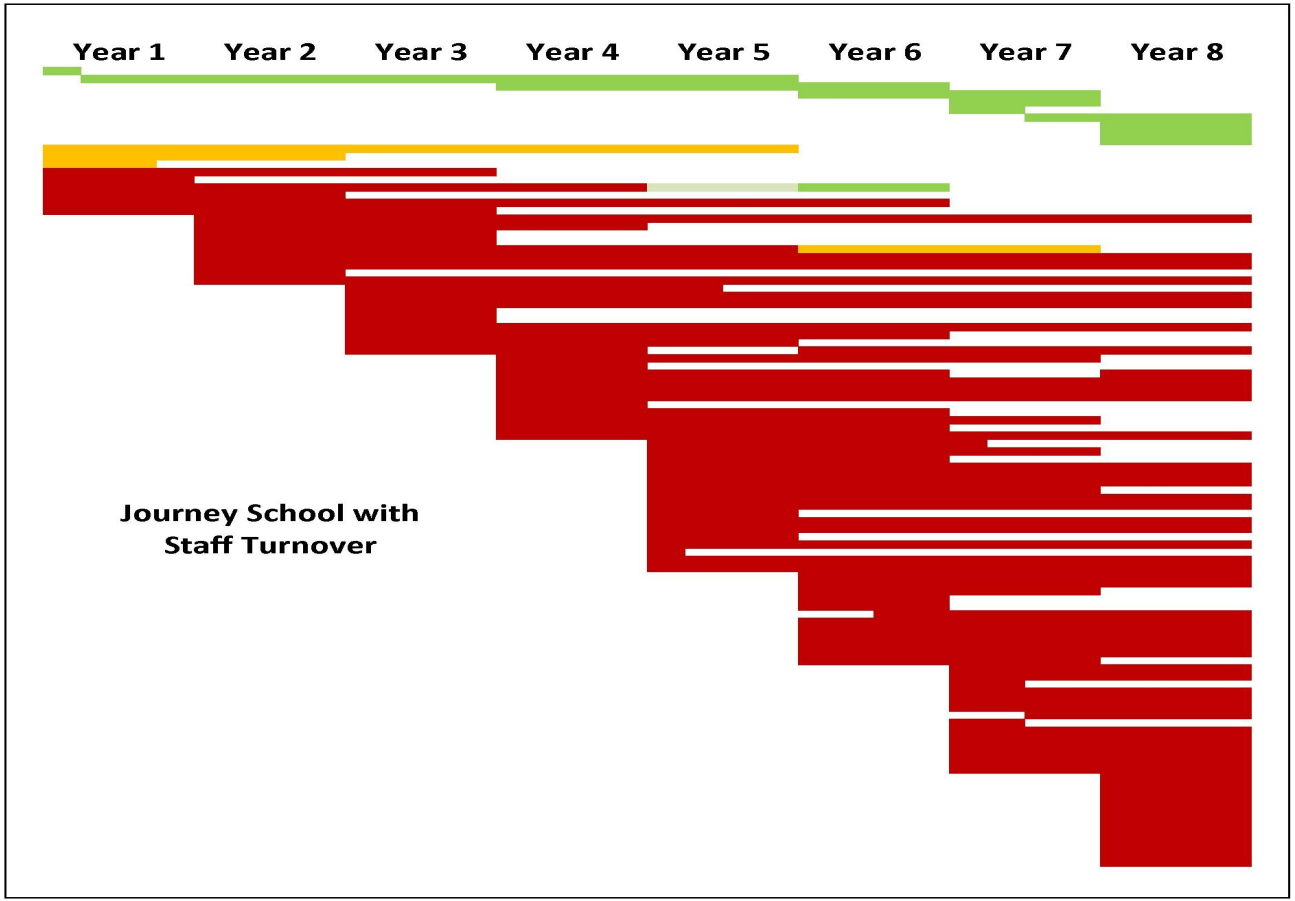
Despite her success in photography, Zaya did not plan to pursue photography as her main career but she did see her passion and talent for photography as a valuable part of her future aspirations.

> When I go to college, I've got this scholarship to go for four years free to school. And with the scholarship money I got from my photography, which is around about $15,000, I'll use that to help me get my books. And I'll still keep doing photography. I'm trying to start a business now. When I get to graduate school, medical school, I'll keep doing photography then to help me pay for medical school.

Barriers to Implementation: Across Sites

Image Credit: CNN


Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Equivalent School with
No Staff Turnover


Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Journey School with
Staff Turnover

Take Aways

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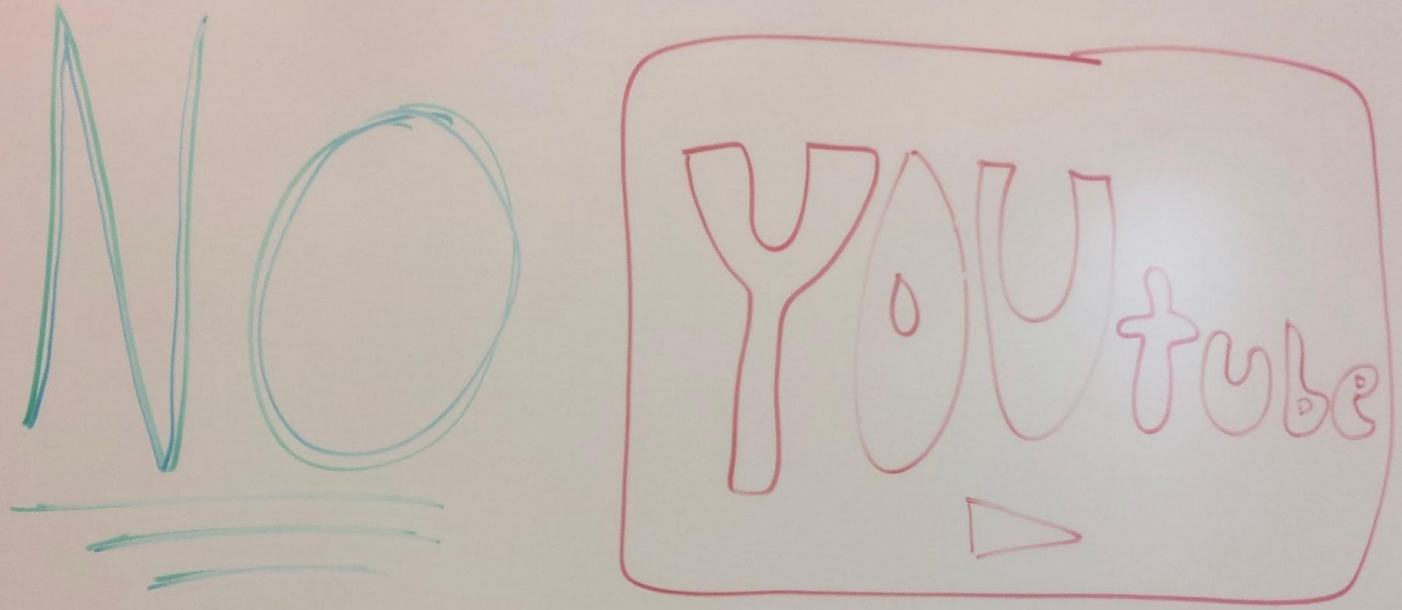

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games, music, or media)