

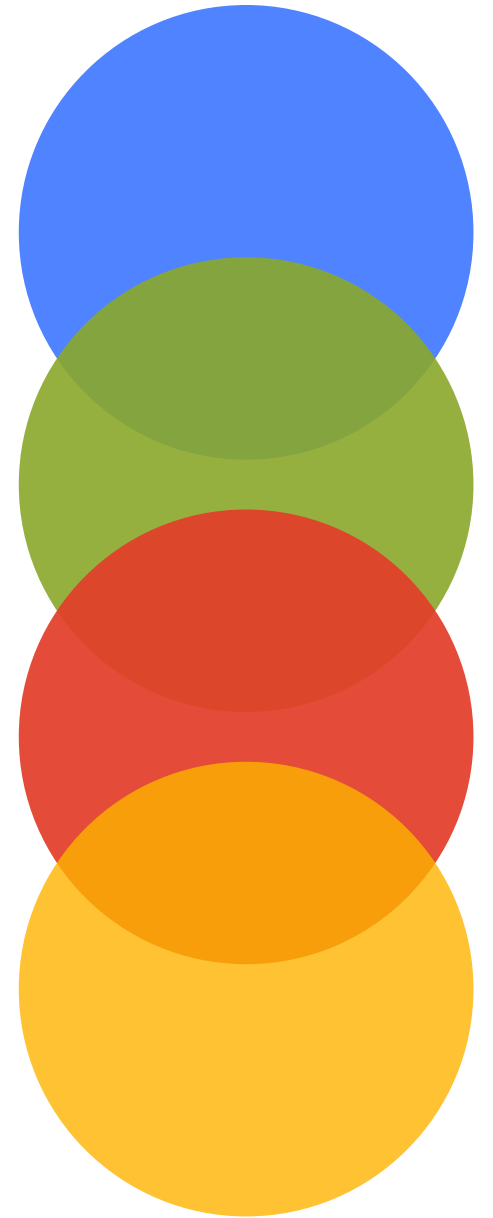
# Back & Forth

A close-up photograph of three young boys. The boy in the center is smiling broadly, showing his teeth. The boy on the left is leaning in and whispering into the center boy's ear. The boy on the right is also leaning in, with his hand near his mouth as if part of the conversation. The background is a soft, out-of-focus green, suggesting an outdoor setting.

Shifting from monologue to dialogue,  
and other key k-12 learning trends

# Course Description

The purpose of this CEU is to examine the **departure from direct instruction in K-12 education**. We will explore the way children learn and the approaches to learning that capitalize on these – mainly **social and active learning**. In addition, we will examine how the **rise of technology and EdTech as an industry** has transformed these processes. We will finish with a reflection on **the accelerating pace of change in education** and the increasing ability of students themselves to evolve the learning process.





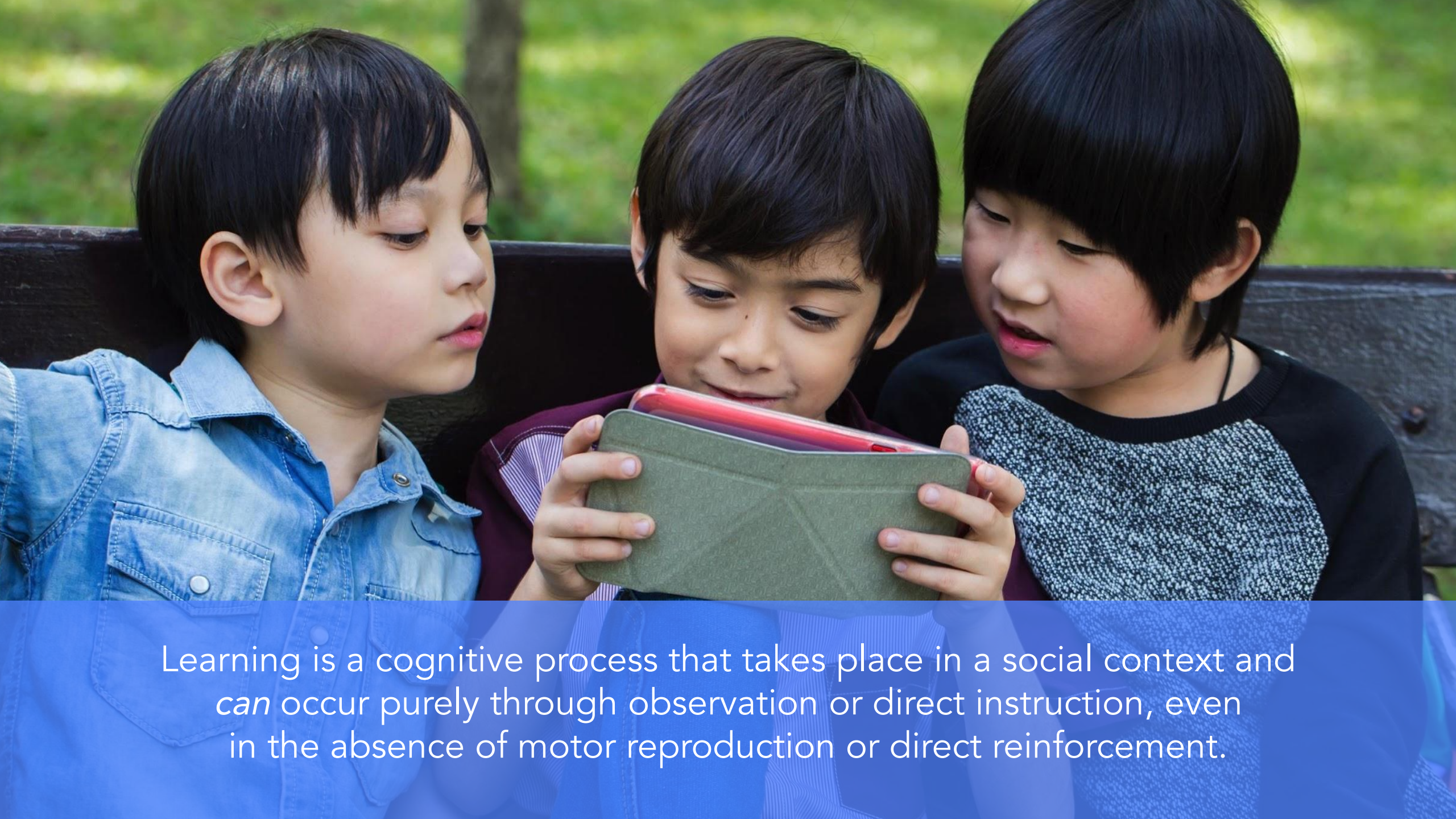


# Objective

# Social Learning

Examine the rise  
of SOCIAL LEARNING  
and the technologies  
and spaces that best  
accommodate it.





Learning is a cognitive process that takes place in a social context and *can* occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement.



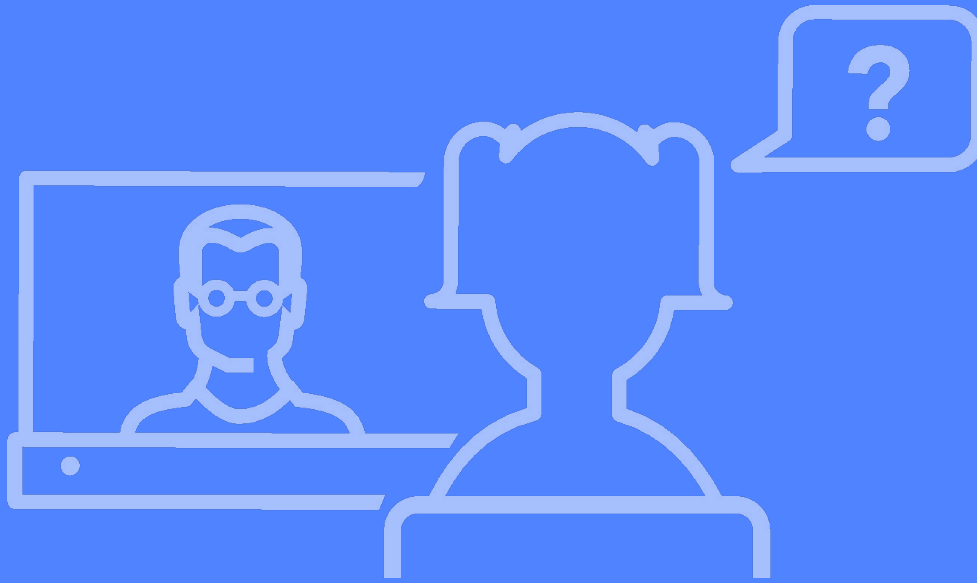
Lecture



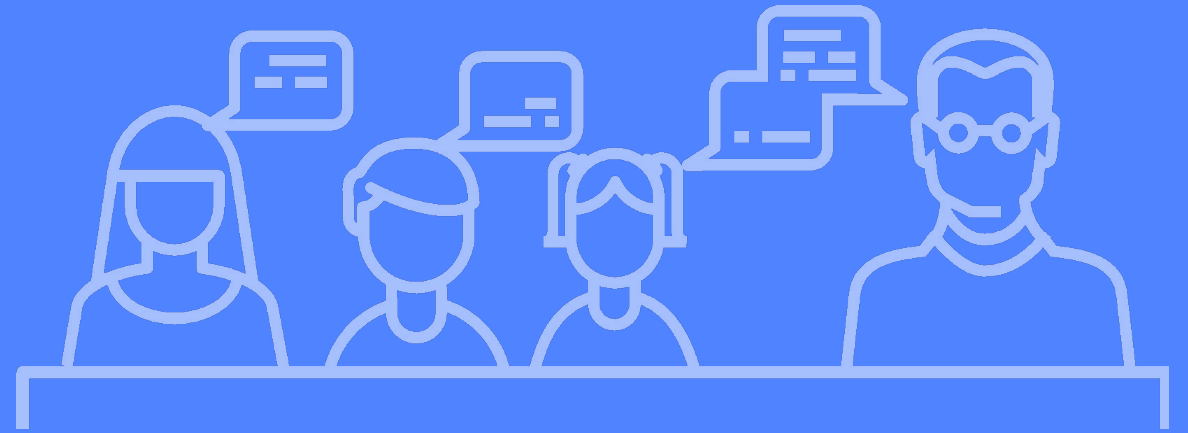
Practice

# Traditional Classroom

If there is a language barrier or this is missed, learning ends before practice.



Lecture online

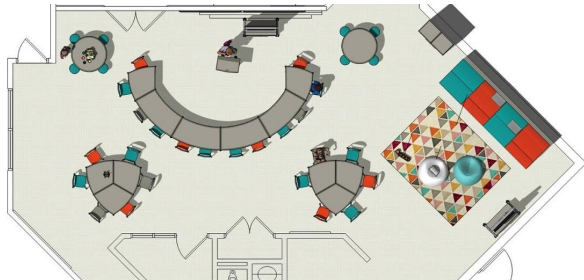
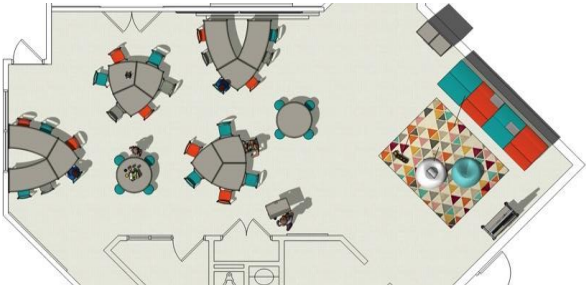
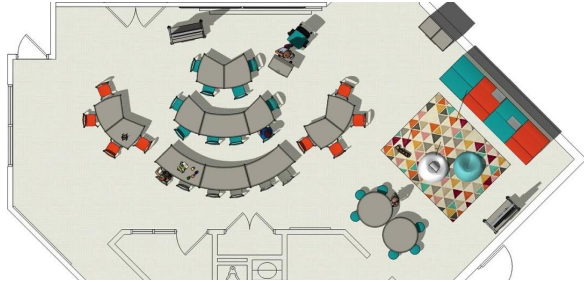


Practice in classroom

# Flipped Classroom

If there is problem with the tutorial, then student will discuss with teacher.





# Case Study

Ann Arbor Public Schools  
Proposed solution, results





# Case Study

Ann Arbor Public Schools  
Proposed solution, results



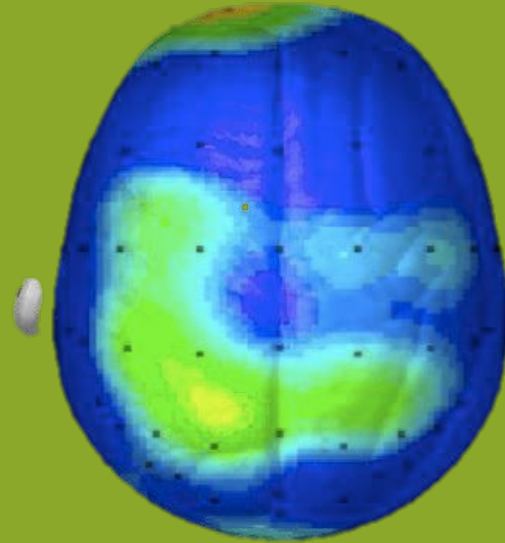
# Objective



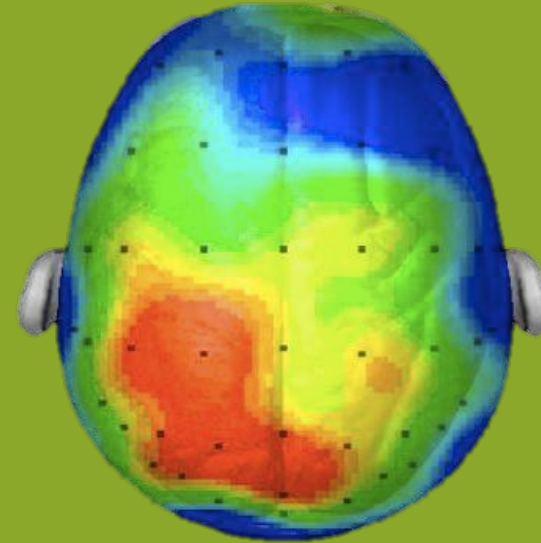
# Active Learning

Examine the rise  
of ACTIVE LEARNING and  
its effect on physical learning  
environments

Composite of 20 student brains taking the same test



After sitting quietly



After a 20 minute walk

# What is active learning?

"... brain imaging has shown that kids learn better after a break for physical activity and unstructured play." – Bob Murray, Ohio State University pediatrician



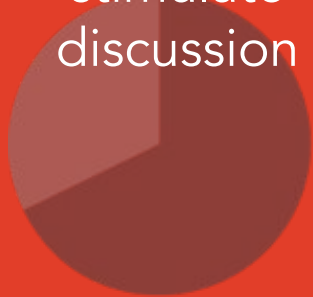


# Technology: what?

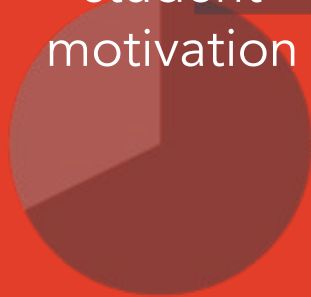
National Education Technology Plan calls for all K-12 schools to be equipped with Wi-Fi for always-on learning



68%  
teachers  
believed that  
using videos  
helped to  
stimulate  
discussion



66%  
teachers  
associated  
videos with  
increased  
student  
motivation



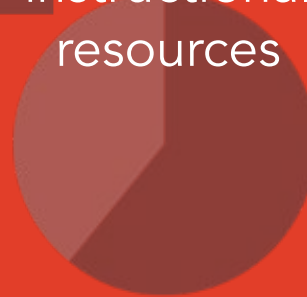
62%  
teachers  
said videos  
helped make  
them more  
effective



55%  
teachers said  
they were  
more creative  
when they  
used videos



61%  
also said  
students prefer  
videos over  
other types of  
instructional  
resources



47%  
said videos  
stimulated  
student  
creativity



# Use of video by teachers

A nationally representative survey of 1,401 pre-K-12 classroom teachers, PBS and Grunwald Associates found . . .





# How to integrate technology into classrooms

## Mobile Learning Pilot Project in K-12 Schools

- 4-month pilot project
- 1:1 learning with iPads
- 9th grade geography

### Findings:

use of iPad's increased active engagement, digital literacy & citizenship and time for





# Case Study

Milan Center for Innovative  
Studies (MCIS)  
Proposed solutions and results





# Objective

## Accelerating pace of change in education

Explore the ACCELERATING  
PACE OF CHANGE in education  
and the increasing ability of  
students themselves to evolve  
the learning process.



# Sweden Free School Organization

Sweden Free School Organization, Vitro doesn't have classrooms. Instead they offer "unique learning spaces".









Feed Me  
Bean Bags

Write On Me









# 4 big ideas

The educational environment is ever changing.

Learning processes are evolving by embracing social and active learning.

Technology is driving classroom change, urging students to take their learning to the next level, anytime/anywhere.

Students today are becoming their own teachers