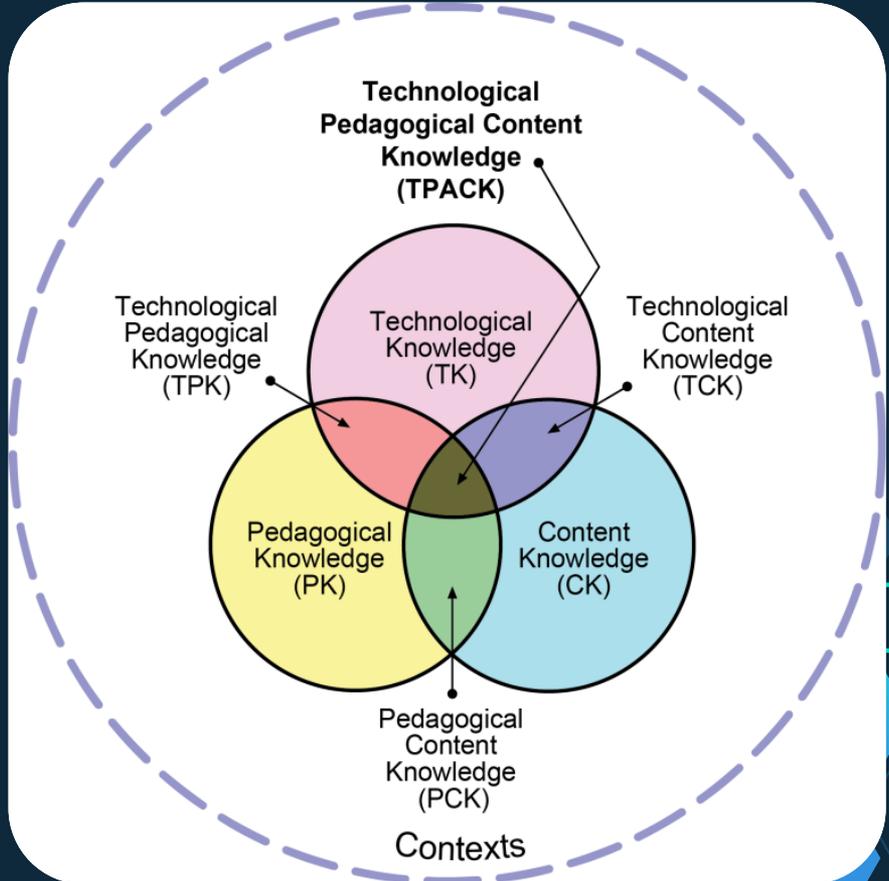




Rethinking Technology Integration in the Classroom



TPACK Model



TPACK Model

The main idea of TPACK is to understand how to use technology to teach concepts in a way that enhances student learning experiences.

It removes the idea of teaching with technology for technology's sake.



The "SAMR" Model

Hear from
Dr. Puentedura

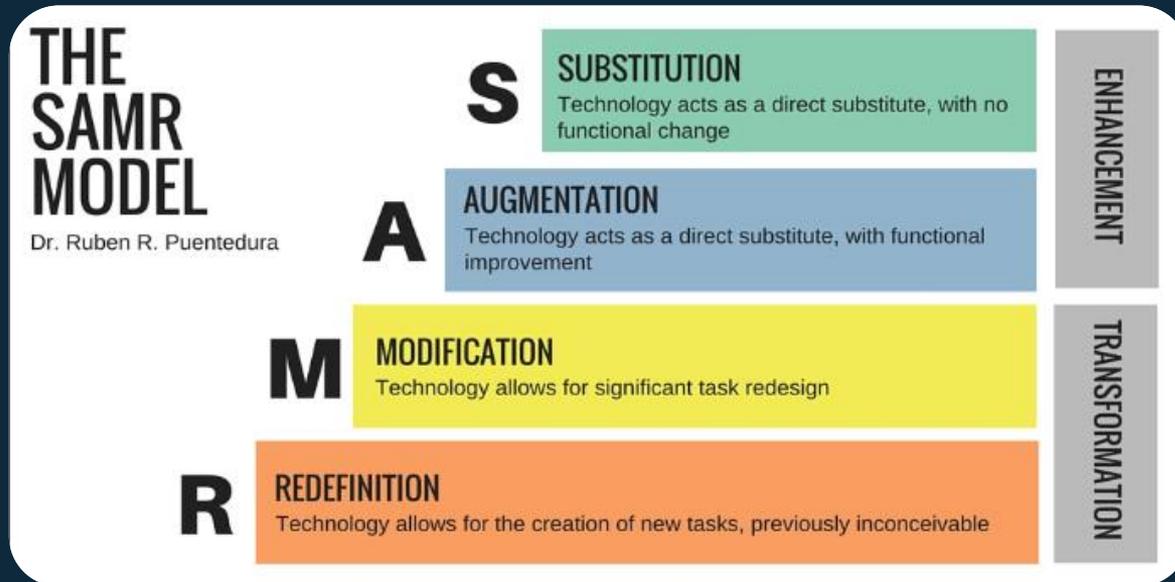
You **Tube**



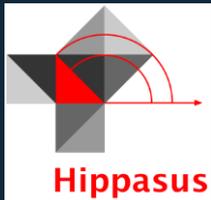
The “SAMR” Model

Technology integration within a classroom typically moves through 4 levels.

Teachers should attempt to use their instructional technology at the highest level possible in order to achieve the best educational benefit from their technology.



Read Dr. Puentedura's work



Substitution Example

Original Activity:

Students formulate various questions about landforms using images of landforms from regions of the United States.



Substitution:

Students formulate various questions in a Google Doc about landforms using a Google Tour Builder interactive tour of the regions of the United States.



Substitution Example

Tour Builder
Put your story on the map.

The screenshot shows the Google Tour Builder interface. At the top, it says "Tour Builder BETA a Google Earth experiment" and "Regions of the United States". There are buttons for "Share", "CREATE NEW TOUR", and "Sign in". The main content area is divided into a left sidebar and a main map area. The sidebar contains a list of regions: "Northeastern United States", "Maine", "Vermont", "Massachusetts", and "New Hampshire". The main map area shows a map of the Northeastern United States with red pins and yellow lines connecting them. A text box on the left of the map contains the question: "What do you observe about the landscape of the Northeast? What questions do you have about the landscape of the Northeast?".

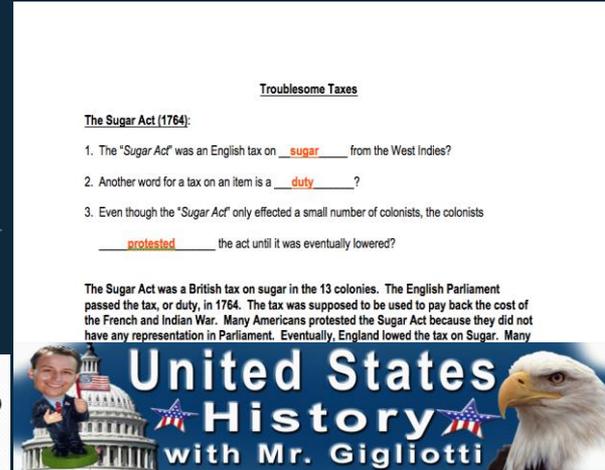
Substitution Example

Original Activity:

Students take notes using a pen and paper. They then are asked to compose a summary of their notes on the paper.

Substitution:

Students complete the same notes and summary activity in a digital format using Microsoft Word or Google Docs.



See an example from my classroom!

Augmentation Examples

Original Project:

Students create a business card and pitch presentation of a shoe design for a Parkour athlete.

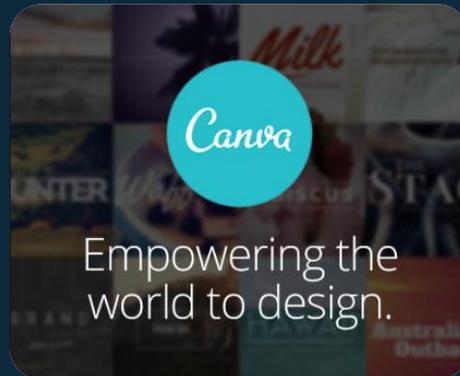
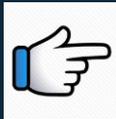


Augmentation:

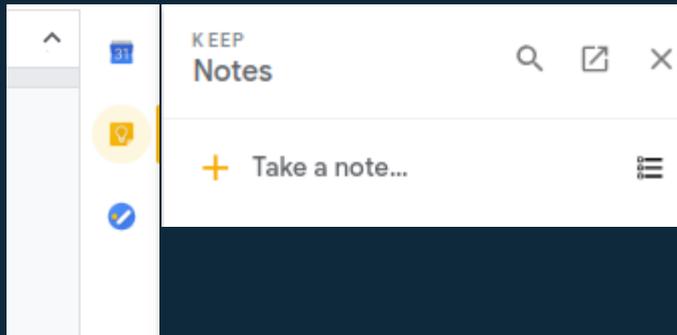
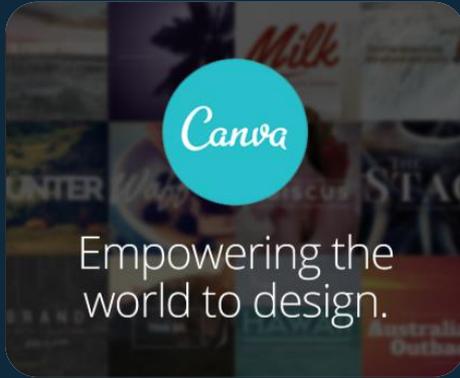
Students use programs such as Canva or Google Drawings to create a business card that links to a pitch presentation of their teams shoe design for a Parkour athlete.

Augmentation:

Students use Google Keep to plan their pitch presentation outline and work on their presentation through a shared Google Slide file.



Augmentation Examples



Augmentation Examples

Original Project:

Students are asked to determine the distance between Boston and London using an atlas following the events of the Boston Tea Party.

Augmentation:

Students use an online map resource to determine the distance between the two cities. The mapping application also allow extension activities such as satellite images.



Modification Examples

Original Lesson

Students in a business class watch various videos about the effects of counterfeit goods and have group discussions about the impacts of counterfeit goods.

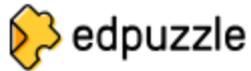


Modification:

The teacher “flips” the lesson, having the students watch at home as homework using EdPuzzle assigned through Google Classroom. The video stops at various points with questions inserted from the teacher that the students use to reflect on the video.

Modification:

Students use class time in a collaborative backchannel discussion through Padlet, Formative, GoSoapBox, or Google Classroom on the impacts of counterfeit goods. .



formative



GoSoapBox

Modification Examples

Crop Video Voiceover Audio Notes **Quizzes**



CHANNEL 2 INVESTIGATES
DANGEROUS COUNTERFEIT PRODUCTS ONLINE

93% REPORTING DECISION 2018 TX GOVERNOR - DEM. PRIMARY
L. VALDEZ 215,922 53%
A. WHITE 193,396 47%

You cannot answer while creating a lesson

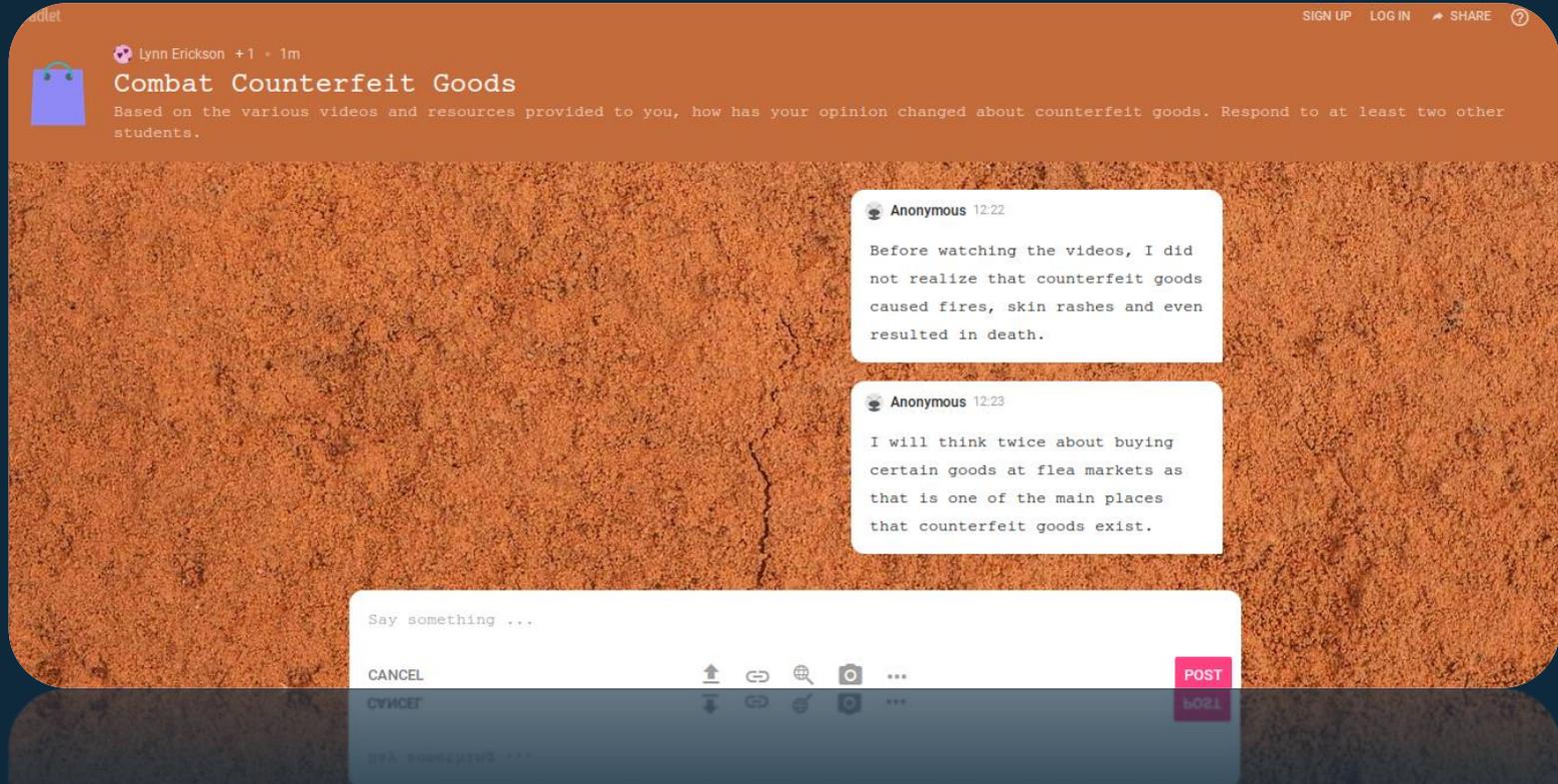
Provide various reasons why counterfeit goods should not be purchased.

Continue Edit

00:59 / 04:44

edpuzzle

Modification Examples



The screenshot shows a Padlet board with a brown, textured background. At the top left, the Padlet logo is visible. The board title is "Combat Counterfeit Goods" by Lynn Erickson, with "+1" and "1m" next to it. Below the title is a purple shopping bag icon and the text: "Based on the various videos and resources provided to you, how has your opinion changed about counterfeit goods. Respond to at least two other students." In the top right corner, there are links for "SIGN UP", "LOG IN", and "SHARE". Two anonymous comments are posted:

- Anonymous 12:22**
Before watching the videos, I did not realize that counterfeit goods caused fires, skin rashes and even resulted in death.
- Anonymous 12:23**
I will think twice about buying certain goods at flea markets as that is one of the main places that counterfeit goods exist.

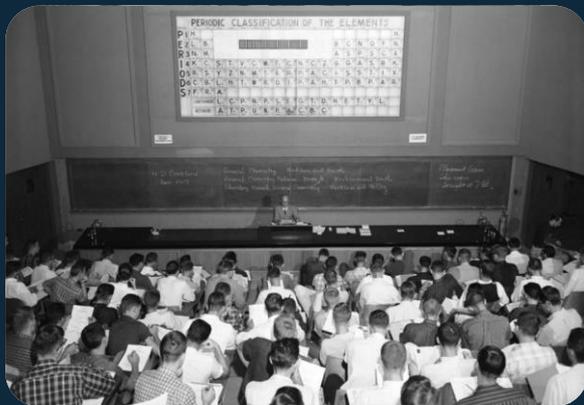
At the bottom, there is a text input field with the placeholder "Say something ...". Below the input field are buttons for "CANCEL", "POST", and a set of icons for uploading, linking, sharing, and adding media.



Modification Examples

Original Lesson

Students learn about chemical compounds by looking at a periodic table and writing down compounds using a pencil.



Modification:

The teacher utilizes instructional technology to engage hands on learning, facilitate collaboration, and assess student learning. Students utilize an interactive board or display to “touch and feel” each element in the compound. They also collaborate on mobile devices bring the content to life. The teacher can also assess student growth using this technology.



Redefinition Examples

Original Project

Students read the Town Mouse Country Mouse book. They compare/contrast city life to country life by communicating with another school via pen pal letters.



Redefinition:

Students connect with another class (country or city) through Google Hangouts, Zoom, or Skype to ask them various questions about their area. They present their area through a shared Google Presentation students worked on together.

Redefinition:

Students continue to connect and share information about their area by leaving videos for each other through a shared code using Flipgrid.



Redefinition Examples



h 27, 2018

Present Share

transition...

20

21

22

23

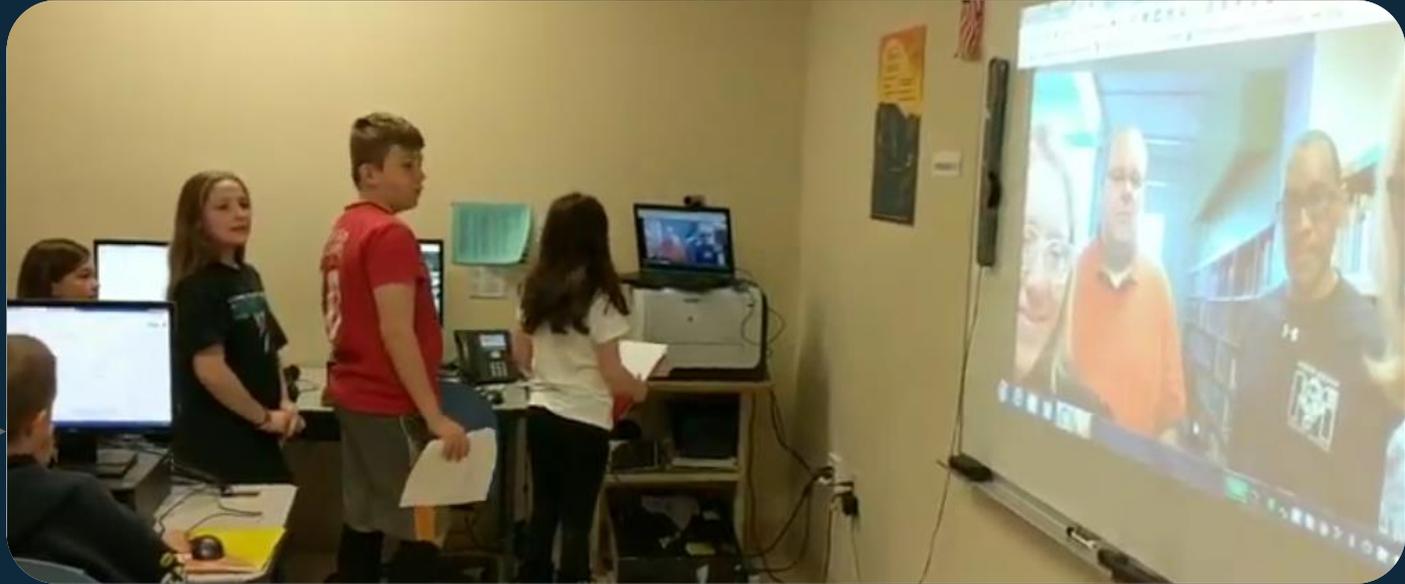
24

This museum has interesting things about Stafford in it.

Did you know our mineral springs made our town famous?

Click to add speaker notes

Redefinition Examples



Grade 4 students providing professional development to teachers from North Carolina. Students were teaching them how to facilitate a Guess the State Project as the students participated with the teachers.

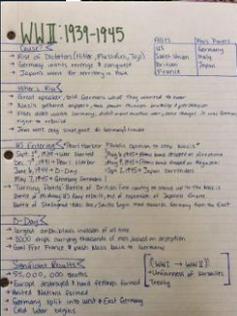
Redefinition Examples

Original Project

Students complete a series of traditional paper and pencil activities during a unit.

Redefinition:

Students work at their own pace using online resources and directions found on their teacher's website. Students discover and engage in content using interactive resources. Students create and share their own digital portfolios within the content to demonstrate what they have learned and teach others.



Monday, March 11, 2019
Topic: **Andrew Jackson As President** - Get to know "OLD HICKORY"!

Today's Goal: Happy Monday! Andrew Jackson looms as one of the largest characters in American history. Loved by some, hated by others, Jackson's time in the White House is legendary. Today we will begin our study of how Andrew Jackson served as president and examine many of his decisions and decisive actions.

Today's Assignments:

1. Be sure you have submitted the last assignment of the 3rd quarter below. I will be entering this assignment into iMAC on 3/12 as the last grade of the quarter.
2. Click on the link below to access today's assignment. Today you should complete Part 1 of the WHITE assignment. You should also begin working on Part 2 of the assignment.

Andrew Jackson As President (White All)
Learning Target: I can EVALUATE the success of Andrew Jackson's policies as president based on his decisions while in office.

George Washington Creates The Presidency

Part I: Everything You Always Wanted To Know About George Washington The Man!

In what year was George Washington born? Where was George Washington's born?
1732 in Virginia

What were the names of George Washington's parents? What happened to Washington's father?
Augustine and Mary Ball Washington. He died when George was 11 years old.

What was the name of George Washington's wife? How many children did he have? How many grandchildren did he have?
Martha Washington. Kids-2 children 4 grandchildren

What do we know about George Washington's teeth?
His first set was made of ivory
Why did George Washington feel that he could not be injured by bullets?

TPACK



Content
The “What”

Pedagogy
The “How”

How does
technology
support the
two?

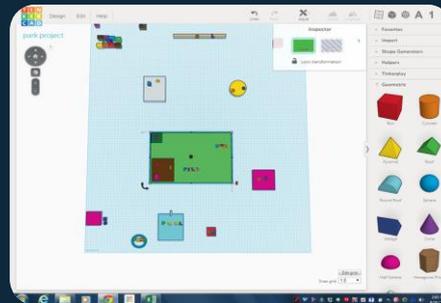
TPACK- Math Classroom

Design a Park Project

Content:
Area/Perimeter

Technology to Support:
Google Apps for Ed; Tinkercad

Pedagogy:
Project Based Learning (Inquiry)



TPACK – Science Classroom

How are Landforms Created?

Content:
How are
Landforms
Created?

**Technology to
Support:**
Mimio View
Document
Camera; video
program

Pedagogy:
Student Group
Work and
Collaboration



Before

After



Simple TPACK Resources

[TPACK.org](https://www.tpack.org)

Framework and other resources such as newsletters, TPACK at conferences, and TPACK tutorials.

[Using TPACK as a Framework for Technology Integration](#)

Webinar from Steven Anderson

[PBL Works](#)

Created by the Buck Institute for Education provides research and resources centered around project-based learning

[Boxlight.com](https://www.boxlight.com)

Best instructional technology products on the market



SAMR - How to Get Started



Take inventory of
your available
technology

Choose a
topic and
plan a
traditional
lesson

Find ways
to make
lesson
better
using
SAMR

Don't be
afraid to
try
something
new



Simple SAMR Resources

Blendspace

Give students resources to choose from
in order to discover and explore content



Livebinders

Students can create and share their own
content with others



Boxlight

Best instructional technology products
on the market



Google Classroom

Explore, create, and share content



Boxlight Webinar Series

Blogs <https://blog.mimio.com/>

SEE HOW SAMR WORKS IN REAL CLASSROOMS

Substitution, Augmentation, Modification,
and Redefinition

Enrich the
Learning Experience with

Cross-Curricular Projects



SPRING WEBINAR SERIES

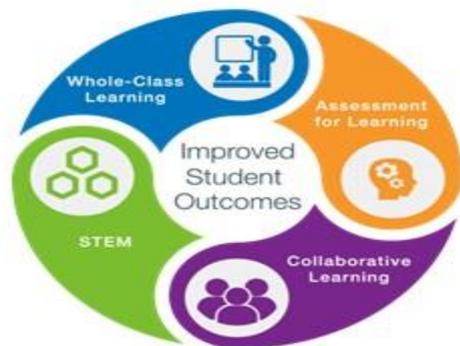
Transforming Learning in the Classroom



Boxlight Webinar Series

Thank You!

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Transforming Learning in the Classroom

