CCNETWORK
Comprehensive Center Network

REGION 18
Commonwealth of the Northern Mariana Islands | Federated States of Micronesia | Guam Republic of Palau

REGION 19
American Samoa Hawaii | Republic of the Marshall Islands

Comprehensive Centers Regions 18 & 19

Distance Education with a Focus on the Pacific Context

Module III: Designing and Implementing Curriculum in Distance Education

May 28, 2021
1:00 PM HST

Agenda

Welcome

Sign In: SHEET

Getting to know everyone

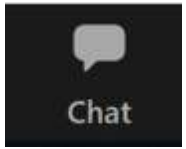
Overview

Designing and Implementing Curriculum

Questions and Answers

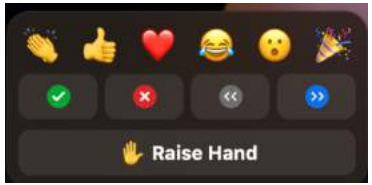
Housekeeping

Use the **chat box** for questions, comments, and to participate in activities.



Please remain on **mute** when you're not speaking. Click **unmute** when you want to speak.

Share your **Reactions throughout the presentation.**



Note: This session is being recorded. The recording and PowerPoint will be made available after the session.

Getting to know us

Mike Menchaca, Ed.D.

Dr. Mike Menchaca is a professor in the Department of Learning Design and Technology, University of Hawai‘i at Mānoa specializing in distance education. He conducts research on e-learning, technology integration, and social justice with technology. He has been teaching online since 1997. In his spare time, he likes to spend time with his family, travel, and play Scrabble.

Catherine Acera-Cabrera

Catherine Acera-Cabrera is an 8th Grade Math Teacher at Francisco M. Sablan Middle School, Saipan, CNMI. She has been an educator with the CNMI Public School System teaching for eighteen years and counting. Her experience includes teaching at the elementary, middle, and college level. She is an active member of the CNMI PSS Instructional Technology and Math Learning Community. Her experience in teaching online classes started in July 2014 at PSS Educational Technology the CNMI PSS and has been a trainer of new and aspiring distance education teachers. In addition, she was an adjunct instructor for four years for the Northern Marianas College, Saipan. She started in Fall 2014, taught the math methodology and the educational technology courses for NMC School of Education. She participated in the Project Lead the Way (PLTW) training for trainers. She is a mother, a daughter, a sister, a friend, and an avid learner. She has three beautiful kids Caleb, Calen, and Cayli, and a supportive and loving husband. In her spare time, she and her family enjoy going to the beach, paddling and traveling.

Michelle Taisacan

My name is Michelle Taisacan and I am a classroom teacher. I first went into teaching with the mindset that everyone can learn, and I still firmly believe that is true. Effort needs to be given on both ends--from the teacher and the student. I've taught mathematics at Marianas High School from 2007 until present. I started my first year teaching with all my classes as Algebra 1 but now I teach a variety of math subjects including Geometry, Algebra 2, AP Calculus AB and AP Statistics. My brain craves for a difference in teaching and learning topics throughout the day.

Education Background

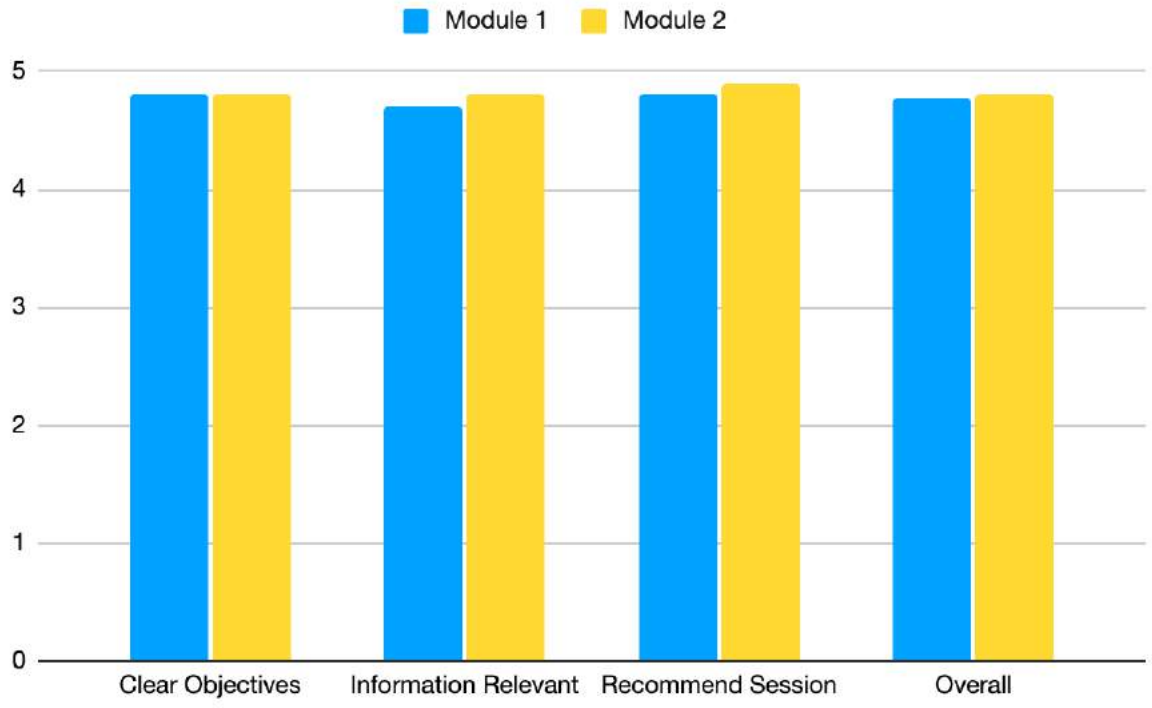
1998-2002	Graduated from Marianas High School
2002-2006	Received Bachelor's of Science in Mathematics at Eastern Oregon University
2006-2007	Received Master's in Teacher Education at Eastern Oregon University
2007-Present	Continuing to receive life-long educational experiences through my career and life.
2021-	State-Level Finalist for PAEMST

Getting to know you

Summary

- Slightly more first time attendees then returnees (52% vs. 48%)
- Mostly new to online teaching (nearly 70% at 0–1 years)
- Mostly K–12 teachers (just over 50%)
- Rest an even distribution of administrators, specialists, and higher education

First & Second Module Evaluations



Most Useful


Peer Review
Quizziz
Sharing Time
Guides
Apps
Wordclouds
Experience
Discussion
Thoughtfulness
Google Docs
Collaboration
Practice Time
Jamboard
Engagement
Flipgrid
Interactivity
Peer Deck
Variety
Local Examples
Strategies

Recommendations and Interests

- More time in breakout room
- Time for sharing ideas
- More tools and guides
- More examples and discussion
- Strategies for young learners
- Training and orientation for students
- Eventual list of tools and strategies
- Diverse learners

Chat Discussion

WHAT IS PACIFIC REGION-FOCUSED CURRICULUM?

Objectives: Participants will…

- Discuss designing and implementing curriculum
- Review frameworks that focus on culture and context
- Explore strategies that engage locally
- Review master teachers distance experiences
- Understand strategies for curriculum design
- Share personal experiences and strategies

Mike Menchaca
Connection to Culture

Distance Education is most effective when connected to culture and context

Culturally Relevant Education[1,2]

Focus on:

1. Developing students academically

Culturally Relevant Education[1,2]

Focus on:

1. Developing students academically
2. Nurturing and supporting cultural competence

Culturally Relevant Education[1,2]

Focus on:

1. Developing students academically
2. Nurturing and supporting cultural competence
3. Developing critical consciousness

Culturally Responsive Teaching[3]

Culturally Relevant Pedagogy[4]

Culturally Sustaining Pedagogy[5]

1. Emphasize value of multiethnic and multilingual present and future

Culturally Sustaining Pedagogy[5]

1. Emphasize value of multiethnic and multilingual present and future
2. Overtly sustain linguistic, literate, and cultural pluralism

Culturally Sustaining Pedagogy[5]

1. Emphasize value of multiethnic and multilingual present and future
2. Overtly sustain linguistic, literate, and cultural pluralism
3. Explicitly resist monoculturalism and monolingualism

Best Practices

Develop students academically

- educate and engage in social justice issues
- collaborative team projects with co-created artifacts
- high expectations with appropriate scaffolding

Nurture and support cultural competence

- assess transferable knowledge
- foster student and instructor relationships with icebreaker and interactive activities
- engage students in cultural based practices

Develop critical consciousness

- empower students by involving them in discussion choice
- use media to enrich relevancy and debate
- use a scaffolded process

Effect on Student Learners

1. Increased self-efficacy
2. Positive cultural identity
3. Academic performance

Examples: Guampedia Virtual Field Trips

All images used by permission from Guampedia

Guampedia: Heritage Sites

Guampedia: Women in Guam History

Guampedia: Women in Guam History

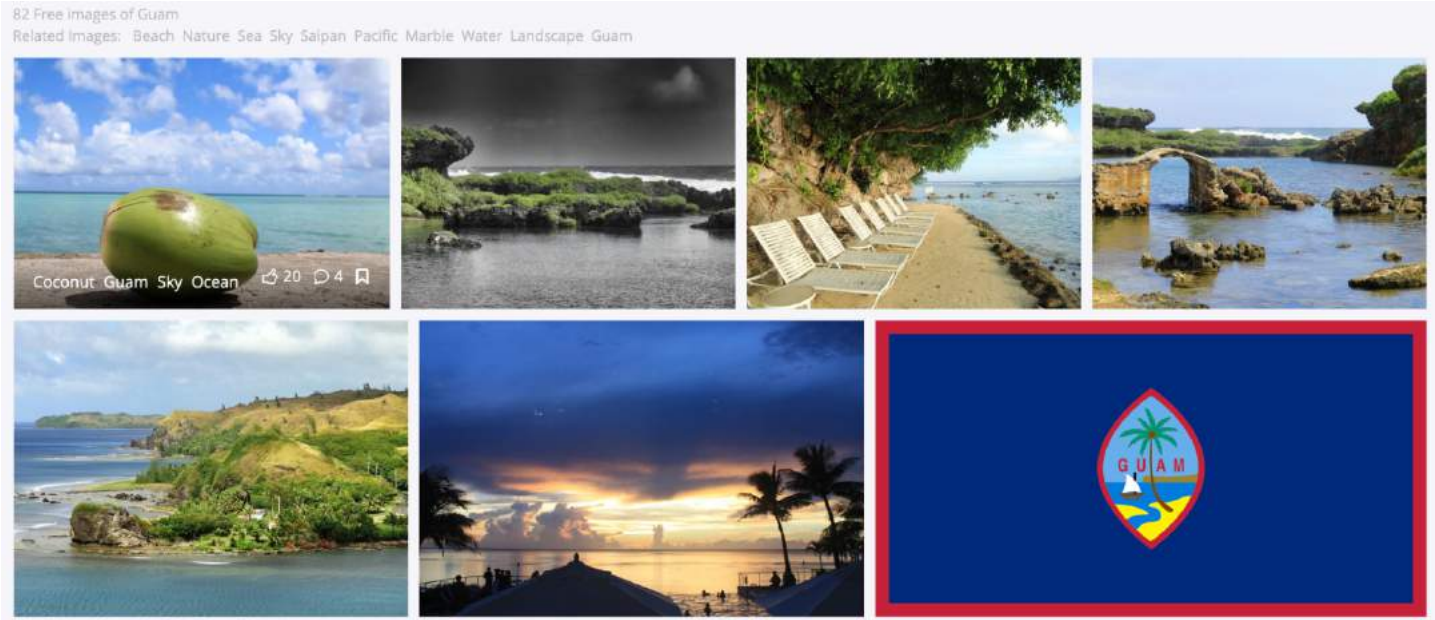
Guampedia: Archeology

Guampedia: Archeology

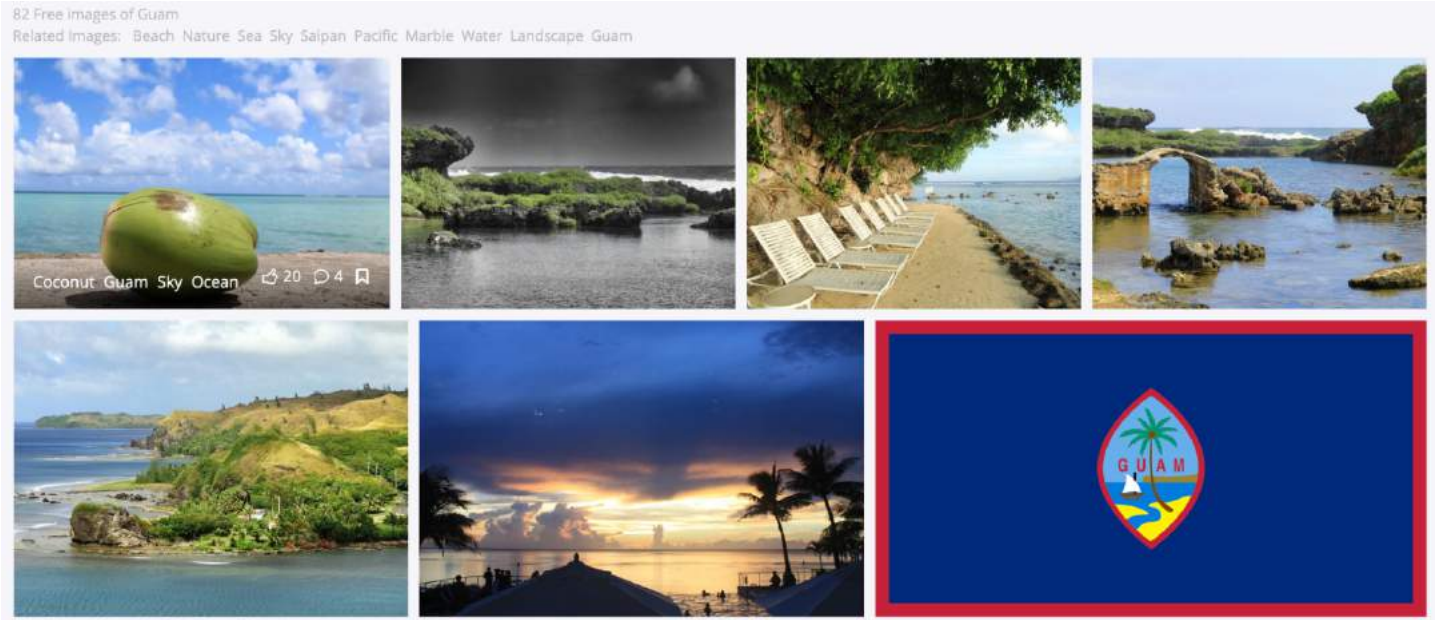
Guampedia: Educator’s Portal

Guampedia: Lesson Plans

Tool: Custom Media with Pixabay



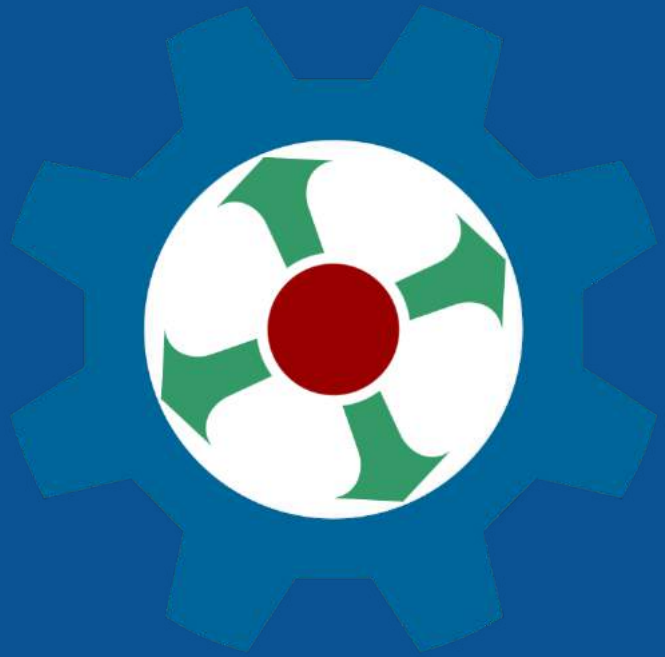
Tool: Custom Media with Pixabay



Has a safesearch mode that can be enabled network wide

Tools seem

- A. Fairly easy
- B. Kinda tough
- C. The usual
- D. Meh



Break

Strategies for Designing in a Distance Education Setting

Presenter: Catherine Acera-Cabrera

~~The capacity to learn is a gift; the ability to learn is a skill; the willingness to learn is a choice.~~
Brian Herbert

Strategies for Designing in a Distance Education Setting

1. Involve the learner
2. Collaborative work → Group work → Breakouts
3. Organize, clear, consistent outline → Lesson Plan
4. Reflect and Revise

Involve the Learner - Student Example

Rachel [redacted] - 8.NS.1 Worksheets

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Present Share

Background Layout Theme Transition

1

2

Name: Rachel Bocago Date: Oct 2020 Hour: _____

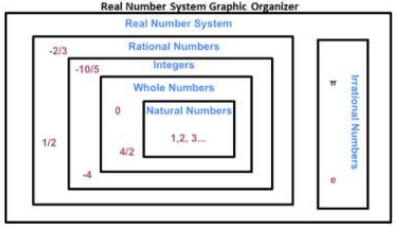
Number System – 8.NS.1

1. Mark the correct boxes to which the following numbers belong to.

Number	Natural	Whole	Integer	Rational	Irrational	Real
.0345	X	X	X	X		X
$2+\sqrt{7}$					X	X
$\sqrt{49}$	X	X	X	X		X
$\frac{5}{3}$				X		X
$\frac{8}{4}+\sqrt{16}$	X	X			X	X
π					X	X
$\sqrt{30}$		X	X		X	X

6. Fill out the graphic organizer with the correct labels and add two values to each set that meet the requirements of that set.

Real Number System Graphic Organizer



Involve the Learner - Student Example

Bfanny [redacted] - 2-4 Match the Solutions

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Present

Background Layout Theme Transition

1

2

2-4 Match the Solutions

Directions: Drag the solutions to the correct equation. Then match whether it is one solution, no solution, or infinitely many solutions.

Solve the Equation	Solution	One Solution, No Solution, or Infinitely Many Solutions?
$7x + 3 = 7x - 4$	$3 = -4$	no solution
$3(2x + 3) = 6x + 9$	$9 = 9$	infinitely many solutions
$6x + 3 = 2x + 15$		one solution
$5(10x + 6) = 50x - 4$	$30 = -4$	no solution
$5x - 9 = 4x + 3$	$x = 12$	one solution
$3x + x + 2 = 4x + 2$	$2 = 2$	infinitely many solutions

$x = 3$

12 pts.

MATH THINK-TAC-TOE

Name: _____ Date: _____

Directions: Complete Activity #5, and choose two other activities by making three-in-a-row horizontally, vertically, or diagonally.

Activity #1 **MODEL ALGEBRA** Create visual representations for equations using algebraic tiles and pictures.	Activity #2 **TOPIC 2 QUIZ/GAME** Create a 10-question quiz or game based on problems in Topic 2.	Activity #3 **SOLVING EQUATIONS FOLDABLE** Create a foldable for any section in Topic 2 (not including 2-4).
Activity #4 **TWO STEP EQUATIONS MAZE** Solve the two-step equations and escape from the maze.	Activity #5 **FLIPGRID** Film 3 short videos based on problems in 2-2, 2-3, and 2-4.	Activity #6 **WORD PROBLEMS POSTER** Design a poster explaining how to solve word problems in 2-5.
Activity #7 **CROSSWORD PUZZLE** Create a crossword puzzle using key terms in Topic 2.	Activity #8 **MULTISTEP EQUATIONS PIXEL ART** Solve the multi-step equations to create pixel art.	Activity #9 **5-1 DIGITS** Learn about the first section in Topic 5 and complete the digits lesson for 5-1.

Involve the Learner - Student Example

Eric[redacted] - Activity #4: Two-Step Equations Maze

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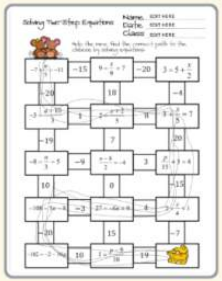
Present Share

Background Layout Theme Transition



Solving Two-Step Equations

Name EDIT HERE
Date EDIT HERE
Class EDIT HERE

Help the mice find the correct path to the cheese by solving equations.

$-7+\frac{n}{5}=-11$	-15	$9=\frac{x}{9}+7$	-20	$3=5+\frac{x}{2}$
-20		18		-4
$-3=\frac{a-10}{3}$	1	$2=\frac{x+2}{5}$	8	$3+\frac{x}{5}=7$
-19		7		20
$-8=\frac{n}{3}-5$	-9	$\frac{n-8}{2}=-4$	3	$\frac{p}{15}+5=4$
10		0		-15
$-108=5n-8$	-3	$27=-6n+9$	4	$2=\frac{x}{4}+1$
-20		15		-7
$-102=-2-10g$	10	$1=\frac{p-9}{10}$	19	

Involve the Learner - Activity Rubric

ACTIVITY #3

RUBRIC

CRITERIA	POINTS
Accuracy (information is correct)	40
Examples (2-3 examples are included)	20
Creativity and Foldability (work is original and foldable)	20
Neatness (work is clean and understandable)	20
TOTAL	100

TOPIC 2 LESSONS

2-1 Solving Two-Step Equations
2-2 Solving Equations with Variables on Both Sides
2-3 Solving Equations Using the Distributive Property
2-5 Problem Solving

ACTIVITY #4

RUBRIC

CRITERIA	POINTS
Completion (maze is solved correctly)	70
Show Work (work is shown on a notebook and attached to Google Classroom)	30
TOTAL	100

Involve the Learner - Student Video

Lesson Plan Example

Day 1(Online Class Session)

Day: March 29, 2021
Title: Think-Tac-Toe Work Session
Topic: Linear Equations in One Variable
Time Frame: 30 minutes

Goals, Objectives and Standards

Instructional Goals:

- *Students will understand that…*
  - They will be responsible for planning and monitoring their progress as they complete their Think-Tac-Toe Project/Exam.

Standards and Benchmarks:

Common Core Math:

- **8.EE.C.7b** Solve linear equations with rational number coefficients including equations whose solutions require expanding expressions using the distributive property and collecting like times.

Student Learning Outcomes:

- *Students will be able to…*
  - Complete several tasks for their Think-Tac-Toe Project/Exam.
  - List their completed tasks for the day on their project tracker.

Multiple Intelligences Met:

- Logical-Mathematical
- Linguistic
- Spatial
- Interpersonal

Bloom's Taxonomy Met:

- Remember
- Apply

Procedures

Vocabulary:

- coefficient, variable, constant, inverse operation, Distributive Property, like terms, no solution, infinitely many solutions.

Gain Attention/Review:

- Updates in Google Classroom
  - Teacher will show students any updates or changes in our Google Classroom.

Activity (Model and Demonstrate):

- Work Session
  - Students will work on their Think-Tac-Toe independently. They may use the materials in class to complete their activities.

Guided Practice

- Teacher may help students with their questions regarding the project/assignment.

Independent Practice:

- Students will work on their Think-Tac-Toe independently.

Closure/Wrap-Up:

- Assignment Tracker

- Students will list what they have completed during the class period for their Think-Tac-Toe.

Assignments and Reminders:

- Think-Tac-Toe Activities

Materials/Resources:

- Notebook
- Laptop/iPad
- Pen/Pencil
- Think-Tac-Toe

Assessment, Reflection, and Revision:

- Students will be assessed on their assignment tracker and on their activities from the Think-Tac-Toe.

Resources:

- Digits. (2014). Boston, MA: Pearson.
- https://info.flipgrid.com/
- https://tasks.illustrativemathematics.org/content-standards/8/EE/C/7/tasks/392
- https://www.kahoot.com/
- https://www.quizizz.com/
- https://www.playfactile.com/
- https://www.canva.com/
- https://piktochart.com/formats/posters/
- https://www.google.com/docs/about/
- https://crosswordlabs.com/
- https://puzzlemaker.discoveryeducation.com/criss-cross
- https://www.education.com/worksheet-generator/reading/crossword-puzzle/

Lesson Plan Example

Day 1 (Online Class Session)

Day: April 12, 2021
Title: Introduction to Slopes
Topic: Proportional Relationships, Lines, and Linear Equations
Time Frame: 30 minutes

Goals, Objectives and Standards

Instructional Goals:

- *Students will understand that…*
  - The slope of a line is the ratio of the vertical change to the horizontal change.
  - You can find a unit rate from a graph in the same way you find the slope.

Standards and Benchmarks:

Common Core Math:

- **8.EE.B.5** Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.
- **8.EE.B.6** Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation y = mx for a line through the origin and the equation y = mx + b for a line intercepting the vertical axis at b.

Student Learning Outcomes:

- *Students will be able to…*
  - Identify the two different ways to find the slope of a line.

Multiple Intelligences Met:

- Logical-Mathematical
- Spatial
- Interpersonal

Bloom's Taxonomy Met:

- Remember

Procedures

Vocabulary:

- linear equation, slope, slope of a line, x-axis, y-axis, positive slope, negative slope, zero slope, undefined slope

Gain Attention/Review:

- Announcements
  - Teacher will give out announcements for the students.

Activity (Model and Demonstrate):

- Slope Introduction
  - Teacher will give a brief introduction on how to find the slope of the line. One way to find the slope is rise over run and the other way is the ratio method. We will be covering and practicing these two methods in our face-to-face class sessions.

Guided Practice

Lesson Plan Example

- Teacher may answer questions regarding the lesson.

Independent Practice:

- Students will take their own notes during the short presentation.

Closure/Wrap-Up:

- Find the slope!
  - Teacher will show a graph on the screen and students must find the slope of the line either using rise over run or the ratio method.

Assignments and Reminders:

- None

Materials/Resources:

- Notebook
- Laptop/iPad
- Pen/Pencil
- Google Classroom

Assessment, Reflection, and Revision:

- Students are assessed on their participation during the lecture and wrap-up.

Resources:

- Digits. (2014). Boston, MA: Pearson.

Teacher Practices for Distance Education

1. Be present at your course
2. Set expectations or goals
3. Create a supportive online environment for both synchronous and asynchronous
4. Interactive and engaging activities that are accessible to the learners

Bringing the Curriculum to Life

Asynchronous vs. Synchronous

Presenter: Michelle Taisacan

It's the teacher that makes the difference, not the classroom.

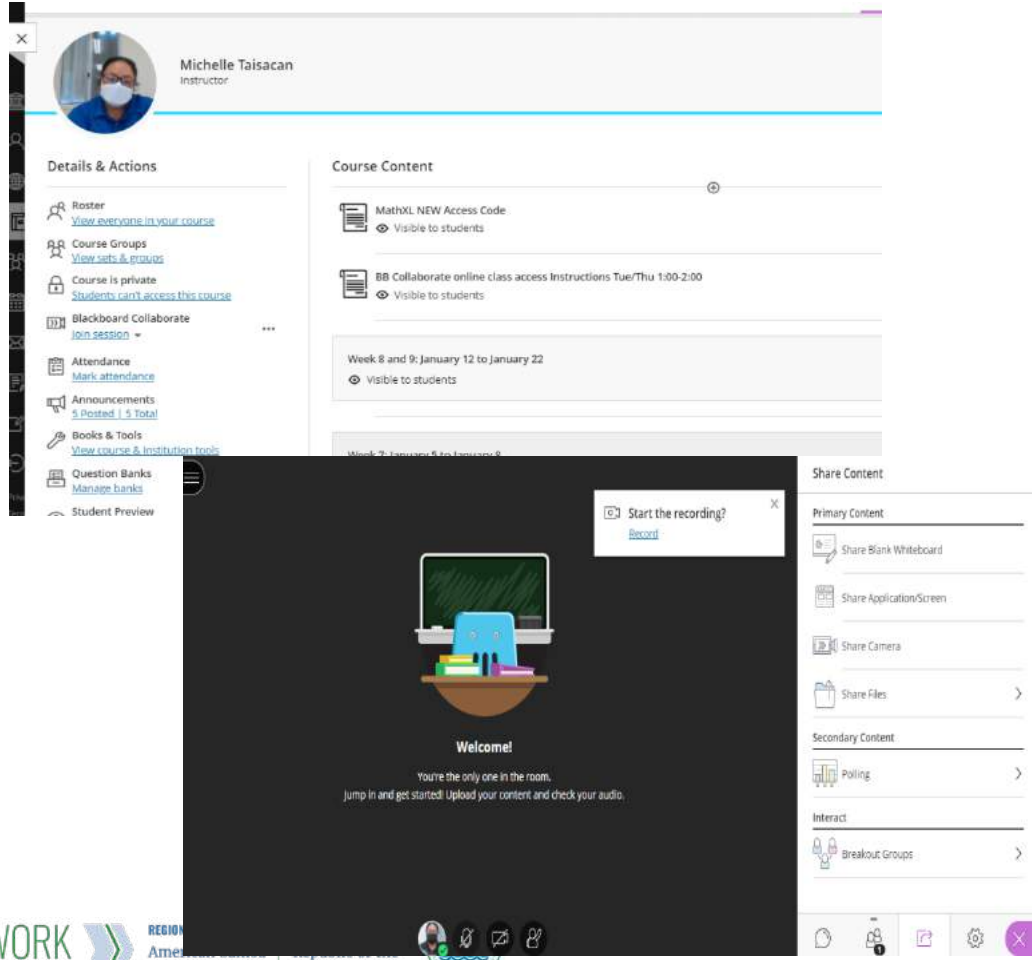
~Michael Morpurgo, Children's Book Author

Bringing the Curriculum to Life

1. Know your learning management system and video conferencing platform
   - CNMI:

     Blackboard Ultra;
     Blackboard Collaborate
   - Others:

     Moodle / Google Classroom / Edmodo; Zoom / GoToMeeting/ Google Meet
1. Collaborate with colleagues



Disclaimer: This is not a product placement

Adapting Lesson Plans to Online Format: Asynchronous Sample

Goals and Objectives | Main Resources to display/use | Assessment Applications

Objectives and Activities

Goals:

Big Ideas:

Students will be able to begin generalizing statistics gathered from samples to the general population of interest for any

Content Objectives:

1. Students will be able to create a sampling distribution model for proportions and means.
2. Students will focus on categorical data and create one-proportion z-intervals.

Language Objectives:

1. Students will read and write up descriptions of the correct interpretations of a one-proportion z-interval.

Key Vocabulary:

sampling distribution model, confidence interval, confidence level,

Activities:

1. Complete UNIT 5 PRE-Assessment. **DUE: Monday of this week by 11:55pm.**
2. Read through the assigned sections AND watch the videos on calculating confidence intervals and sampling distributic
3. Homework 1:download and complete Ch. 17 worksheet packet with full explanations/process **DUE: Tuesday of this**
4. Homework 2:download and complete Ch.18 worksheet packet with full explanations/process **DUE: Friday of this week**
5. Complete the Ch. 17 QUIZ on identifying the types of variables. **DUE: Saturday of this week by 11:55pm.**
6. Video Discussion: Make a short video using "jing" or "screencast-o-matic" or "educreations.com" or any other recordin associated with the video. View two other people's videos and comment. **DUE: Saturday of this week by 11:55pm.**

Reading Assignment

Attached Files: Stats Chapter 18.pdf (6.628 MB)
Stats Chapter 19.pdf (5.094 MB)

Reading Assignment Part 1: Chapter 17 Sampling Distribution Model Pearson 4th Edition

Please CLICK HERE to get directed to the Pearson Powerpoint that was provided through CNMI PSS for Chapter 17.

Reading Assignment Part 2: Chapter 18 Confidence Intervals Pearson 4th Edition

CLICK HERE to get directed to the Pearson Powerpoint that was provided through CNMI PSS for Chapter 18.

Here are some of the things you should gain from the reading:

1. A sample's distribution model is only for that sample's data but a sampling distribution model is a made based on the belief mean) and made a model from that.
2. Confidence intervals are only calculated from your sample statistics and never from a population's parameter. (Why would y

Additional Resource: 3rd ed. of Stats textbook.

SEE ATTACHMENT up top. This textbook is a chapter advanced than the powerpoints in alignment. That is, Chapter 1 of the pov download and read through as this is a really good book to prepare you for the AP Exam which you will be mandated to take.

JING VIDEO created by teacher:

Click on the following link. to a watch a short overview of Chapter 17: Sampling Distribution Models

Click on the following link to watch a short overview of Chapter 18: Confidence Intervals for Proportions PART1:confidence inter

Week Two Activities
Hidden from students

Add a description

Objectives and Activities
Visible to students

Reading Assignment
Visible to students

WK2Unit5Pre-A:DUE Monday of this week
Due date: 2/15/21, 11:59 PM
Visible to students
CLICK HERE to get redirected to the pre-Assessment. Although the assignment is not graded for correctness, you must complete it a the survey. This will notify me to enter a gra...

WK2HW1: DUE Tuesday of this week
Due date: 2/16/21, 11:59 PM
Visible to students

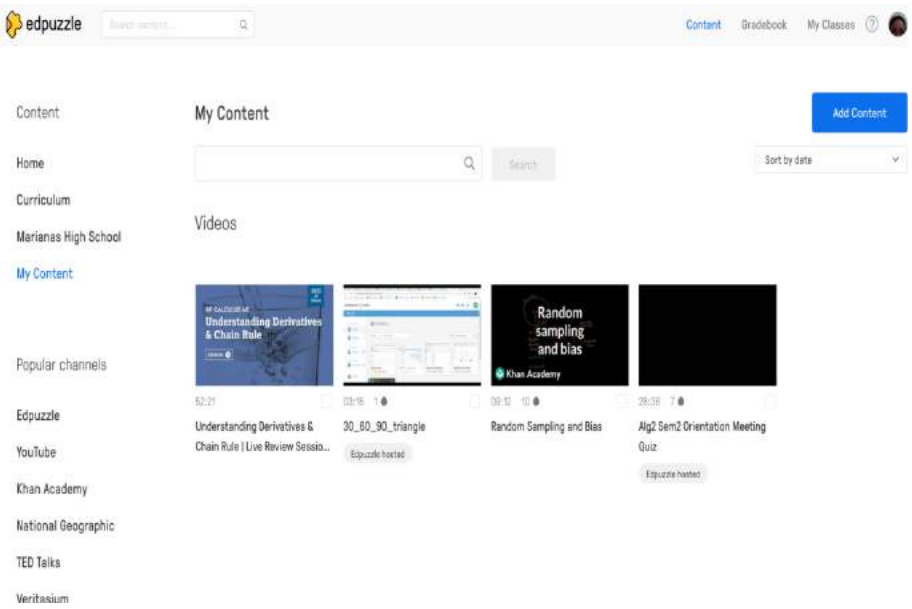
WK2HW2: DUE Friday of this week
Due date: 2/19/21, 11:59 PM
Visible to students

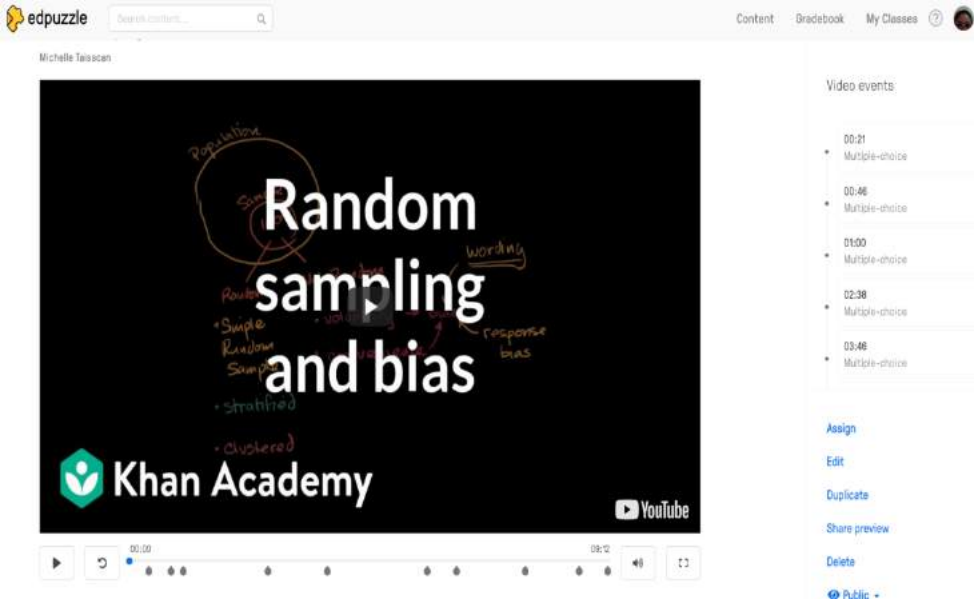
WK2: Ch. 17/18 Quiz
Due date: 2/20/21, 11:59 PM
Visible to students

WK2 Sampling Distribution
Due date: 2/20/21, 11:59 PM
Hidden from students
You can work with partners; just include each other's names in your post. 1 Gather at least 20 data values and calculate proportions wearing eyeglasses in your classes (do ...

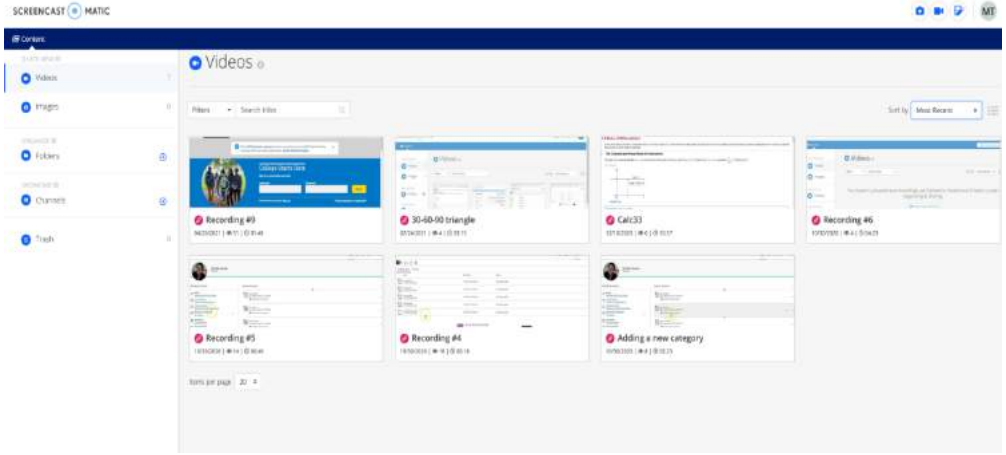
Changes and adaptations:
LMS Format and Discontinued use of Javascript

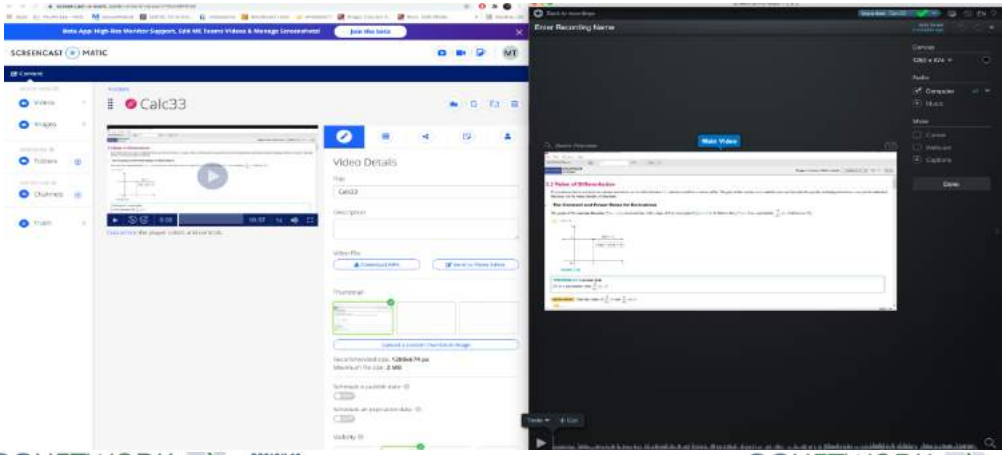
Adapting Lesson Plans: Asynchronous Tool edpuzzle.com





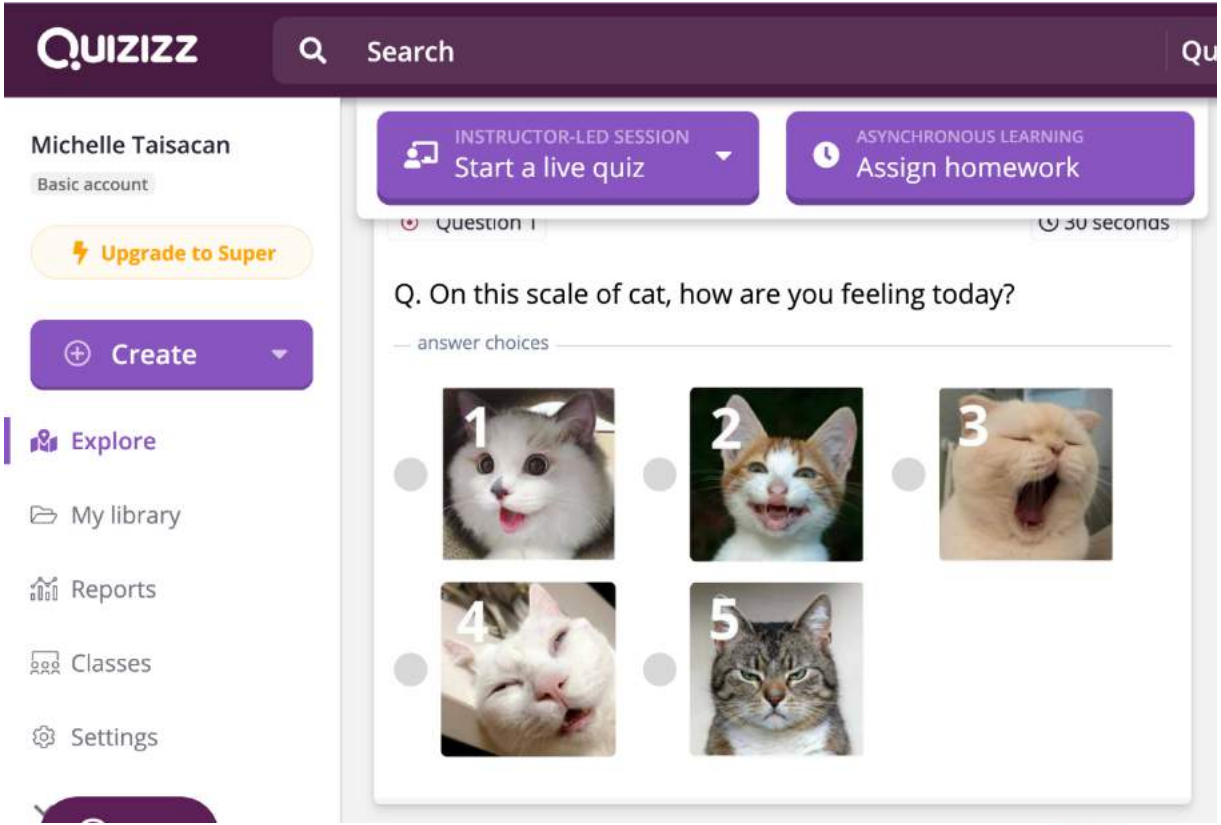
Adapting Lesson Plans: Asynchronous Tool screencast-o-matic.com





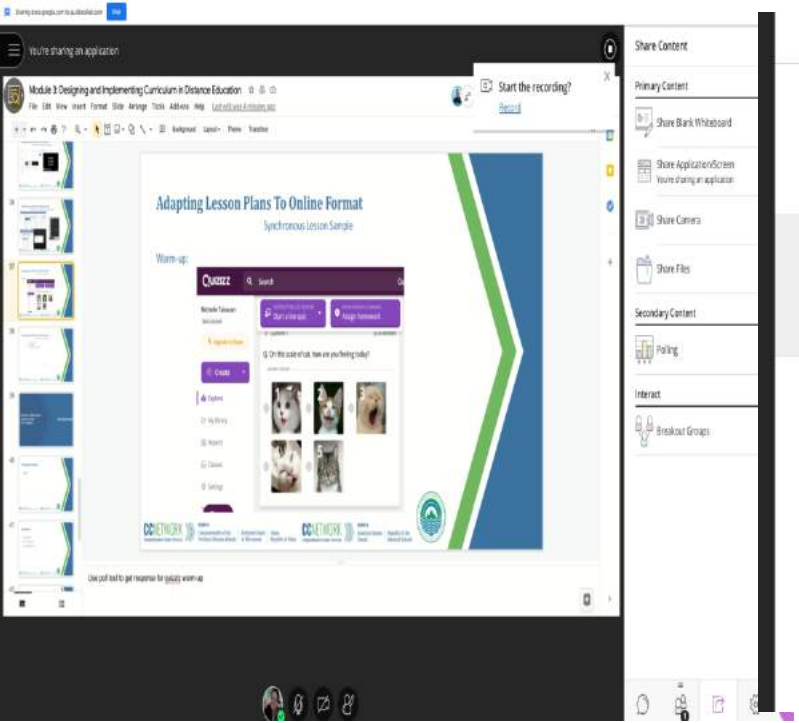
Adapting Lesson Plans to Online Format: Synchronous Sample

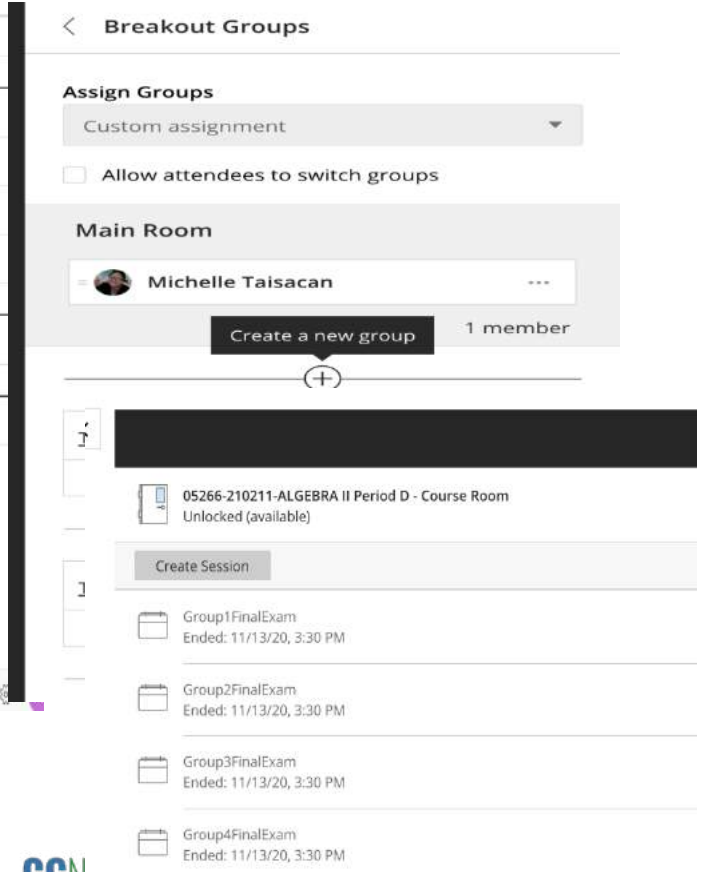
Warm-up:



Adapting Lesson Plans to Online Format: Synchronous Sample

Screen-sharing | Grouping | Active Feedback





Real-time Collaboration:
Breakout Rooms
20 minutes in breakout plus
20 mins to share with everyone
(elect a speaker)

How did you make the switch to online learning?
What worked?
What didn't work?
Share a lesson plan or talk story about what you've done

Wrapping Thoughts

- There are lots of strategies for successful distance education
- Connecting to culture is critical
- Providing voice and interactivity is also important
- Adopt and adapt

Questions

- What is one thing you might put to practice right away?
- What things will take longer?
- What do you want to ask us?

Resources

Evidence-based practices

- Culturally Relevant Education (link)
- Culturally Responsive Teaching (link)
- Culturally Relevant Pedagogy (link)
- Culturally Sustaining Pedagogy (link)
- Guampedia (link)

Images

- Unless otherwise specified, all images are creative commons zero (CC0), no attributes required including presenter provided photos

In-presentation References

1Aronson, B., & Laughter, J. (2016). The theory and practice of culturally relevant education: A synthesis of research across content areas. *Review of Educational Research, 86*(1). 163–206. DOI: 10.3102/0034654315582066 Link

2Nakano, E. (2020). *Supporting students taking dual credit distance learning courses in a rural environment.* [Doctoral dissertation, University of Hawai'i at Mānoa]. ScholarSpace. Dissertation

3Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press. Multicultural Education Series

4White, R., Cooper, K., & Mackey, W. (2014). Culturally relevant education and critical pedagogy: Devolution of hierarchies of power. *Revista Internacional de Educación para la Justicia Social (RIEJS), 3*(2), 123–140. Link

5Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher, 41*(3), 93–97. DOI: 10.3102/0013189X12441244. Link

Participant Feedback Form

Help us improve our practice by providing us with some feedback.

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Thank you!