



**Boston  
Children's  
Hospital**

Center for Educational  
Excellence & Innovation

# **Instructional Design Excellence: Harnessing Technology for Educational Success**

**BCH Academy Seminar  
May 15, 2024**

# Disclosures

The speaker(s) do not have any financial relationships to disclose.

To receive credit for today's BCH Academy Seminar:

**Text 4757 → 617-648-7950**



# Introductions



**Miya Bernson-Leung, MD, EdM**

Associate Director of Continuing Education  
& Program Director of the Child Neurology  
Residency Training Program



**Dan Schwartz, EdM**

Director of Education Technology



# Learning Objectives

- Describe the roles and functions that educational technology can play and the **rationale for using technology** in enhancing teaching and learning.
- Utilize a **systematic learning design approach** for applying technology to your teaching and learning.
- Identify educational technology tools to help deliver engaging content and provide **learner-centered experiences** in various group teaching contexts.



# Opening Exercise

Please go to  
<https://padlet.com/bchacademy/ID> and EdTech  
or scan the QR code



Prompt:  
**What teaching challenges do  
you have that technology could  
help overcome?**

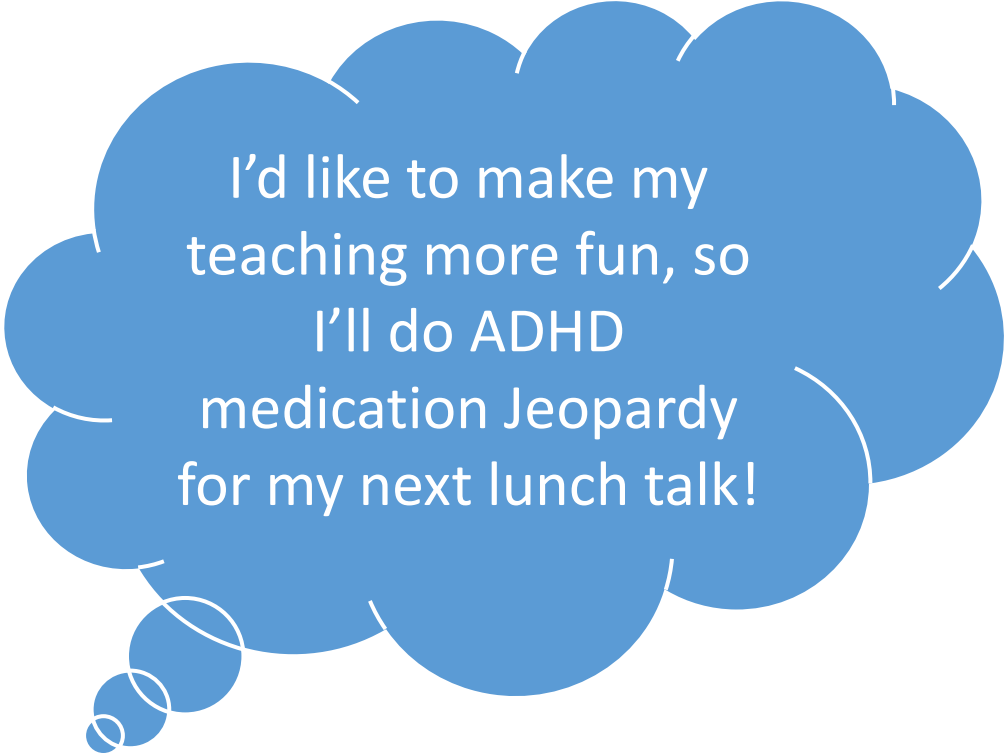


Scroll to see different teaching contexts.  
We encourage you to comment on each other's posts.



# The Role of Instructional Design

A frequent scenario:

A large blue thought bubble with a white outline, containing text. It has three smaller blue circles leading to it from the bottom-left.

I'd like to make my  
teaching more fun, so  
I'll do ADHD  
medication Jeopardy  
for my next lunch talk!

Potential gaps with this approach:

- What do my learners already know and what do they need to learn?
- What are the best learning activities and technologies to achieve my goals?
- How will I know whether they learned what I hoped?
- What theories might help me teach most effectively?



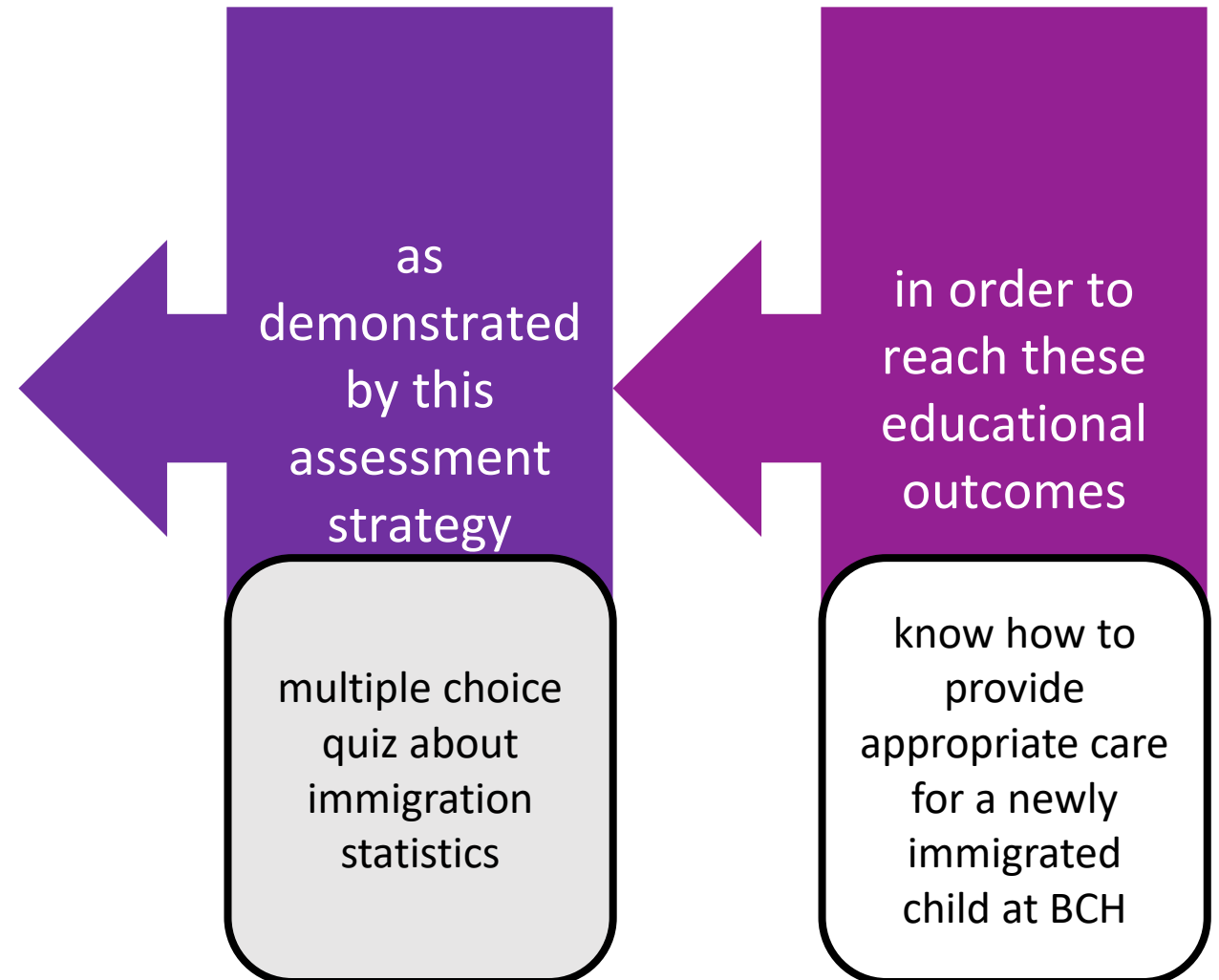
# Backward Design



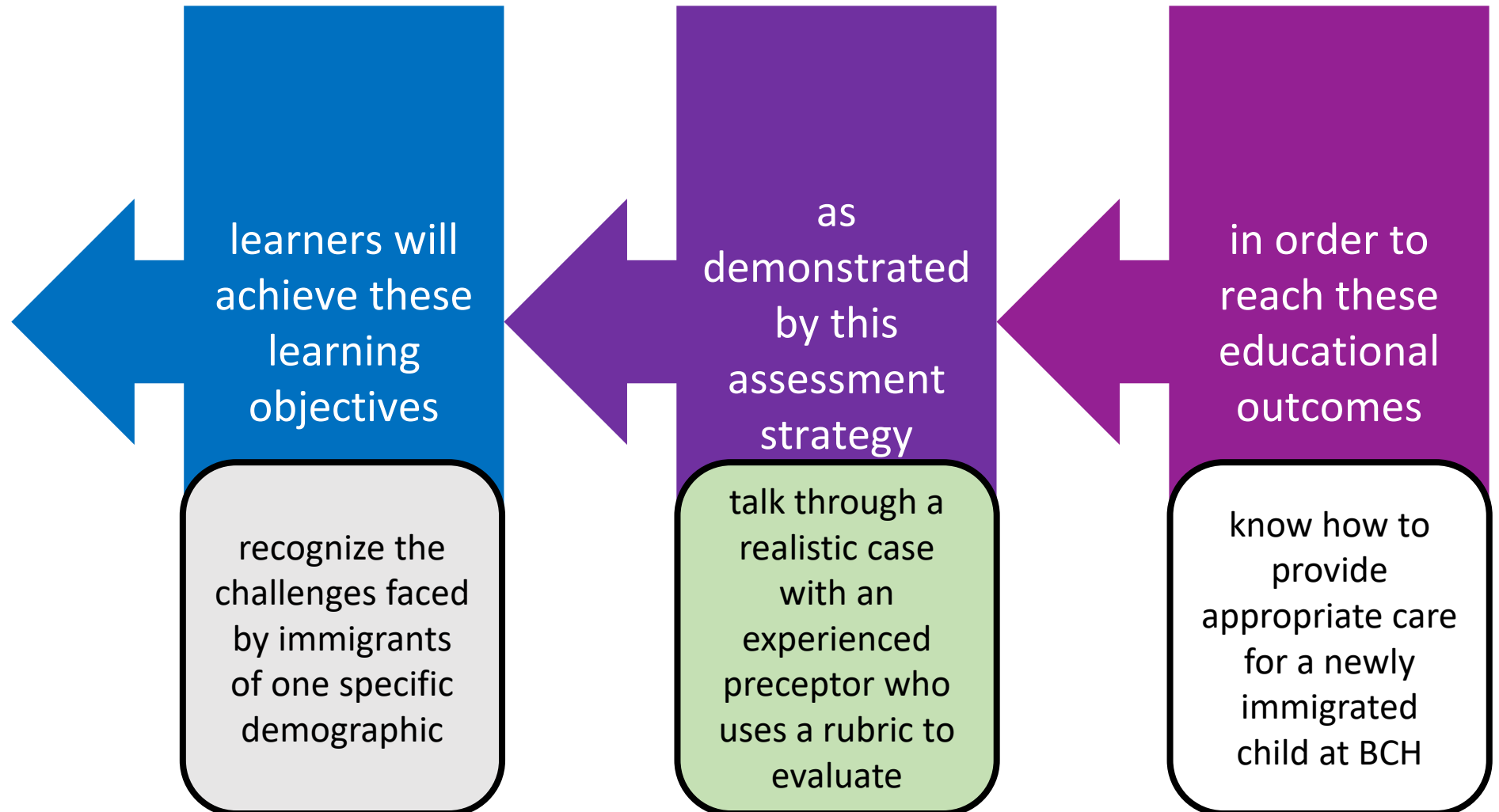
or (Wiggins and McTighe): identify desired results → determine acceptable evidence → plan learning experiences and instruction



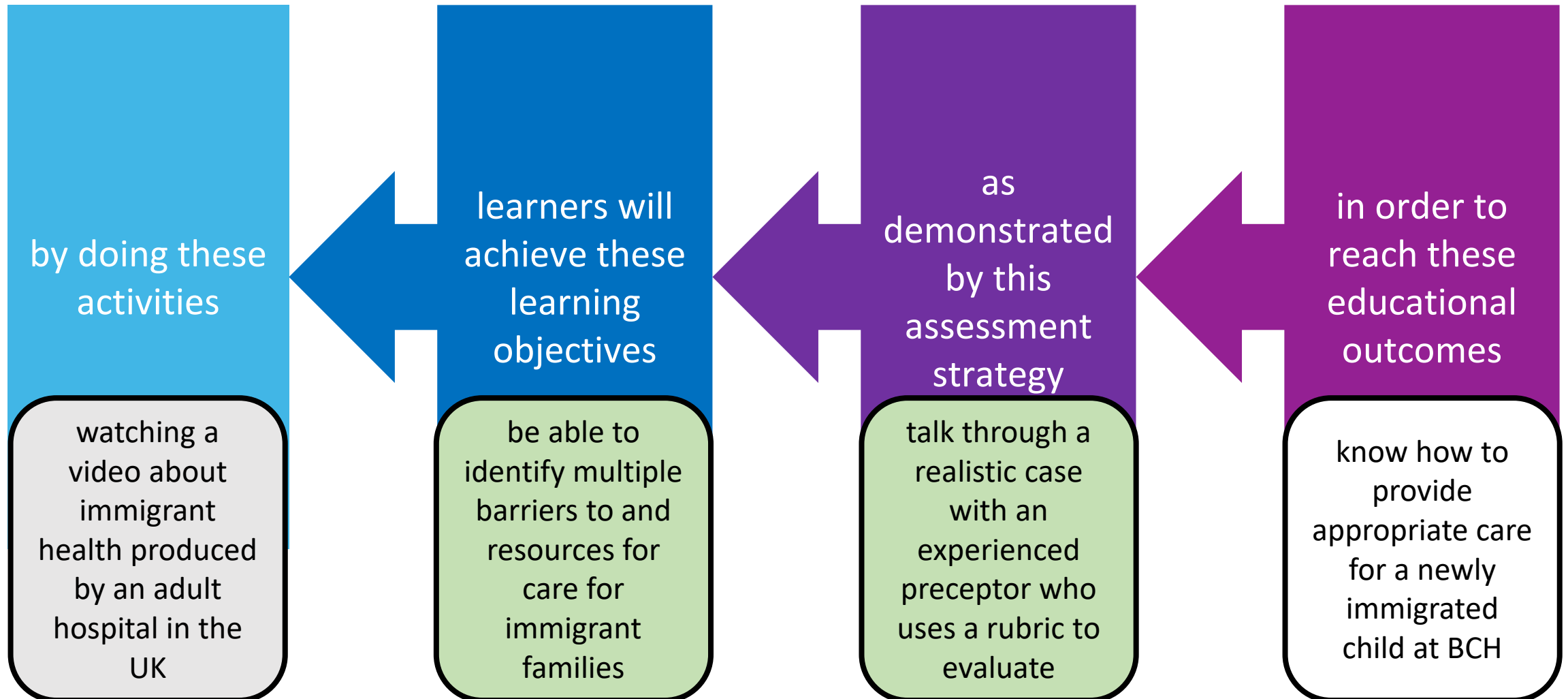
# Backward Design



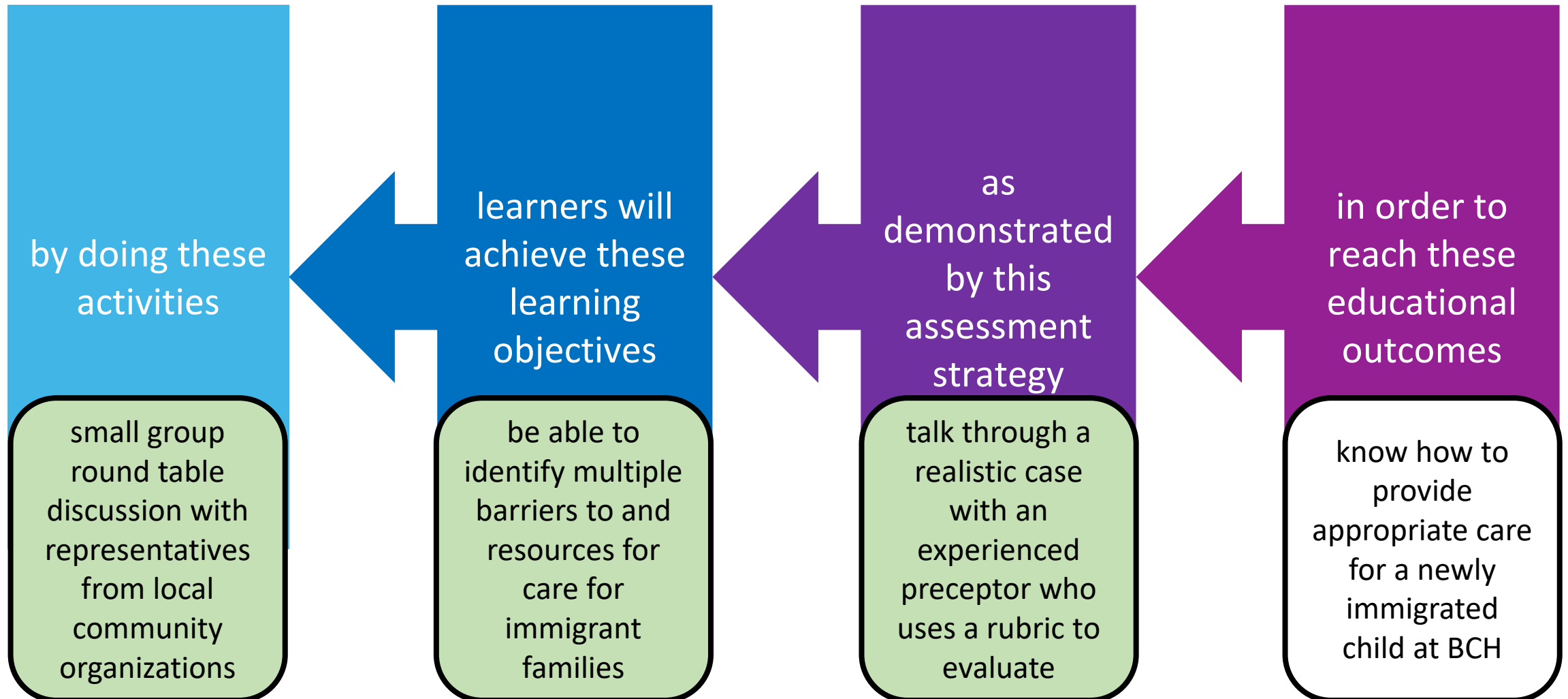
# Backward Design



# Backward Design



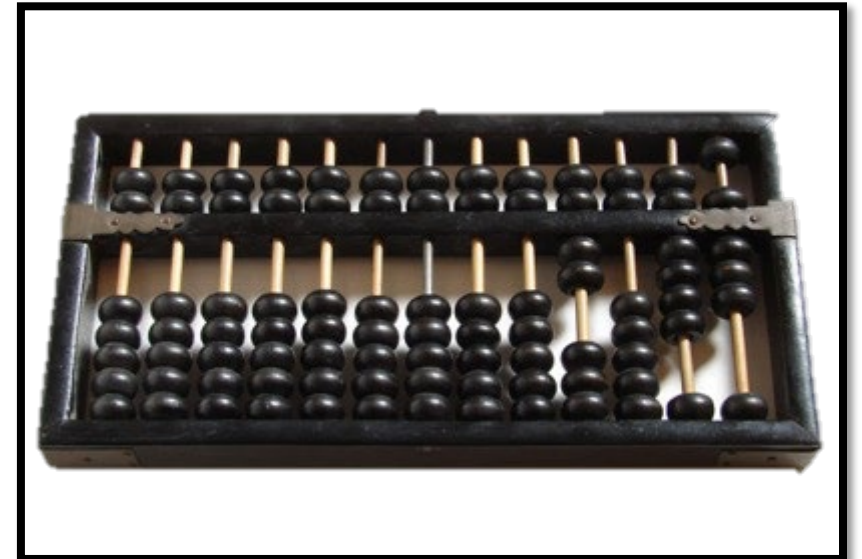
# Backward Design



# It's Not (Only) About the Tech

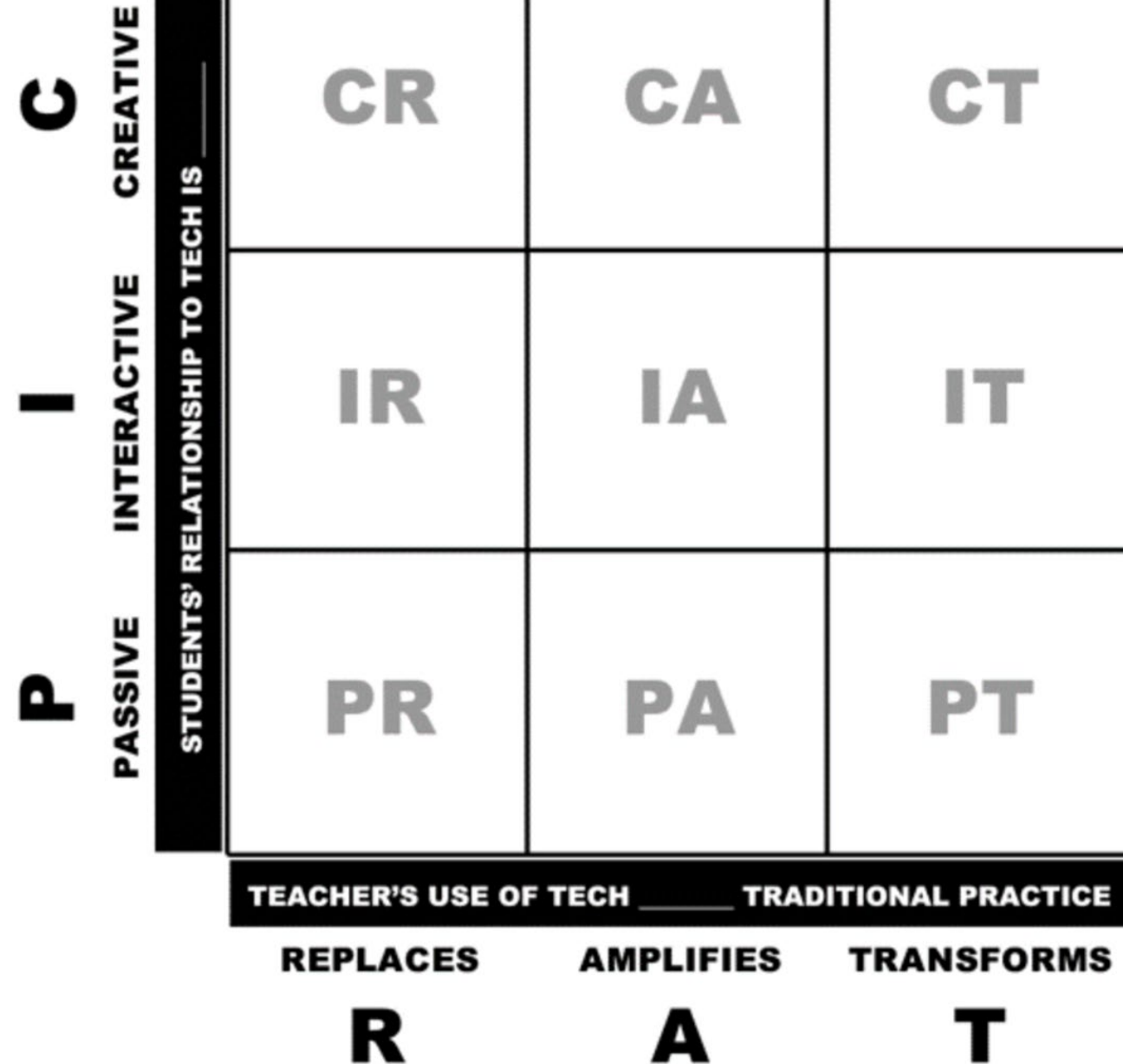
by doing these  
activities

Jeopardy?  
simulation?  
online polling?  
AR/VR?



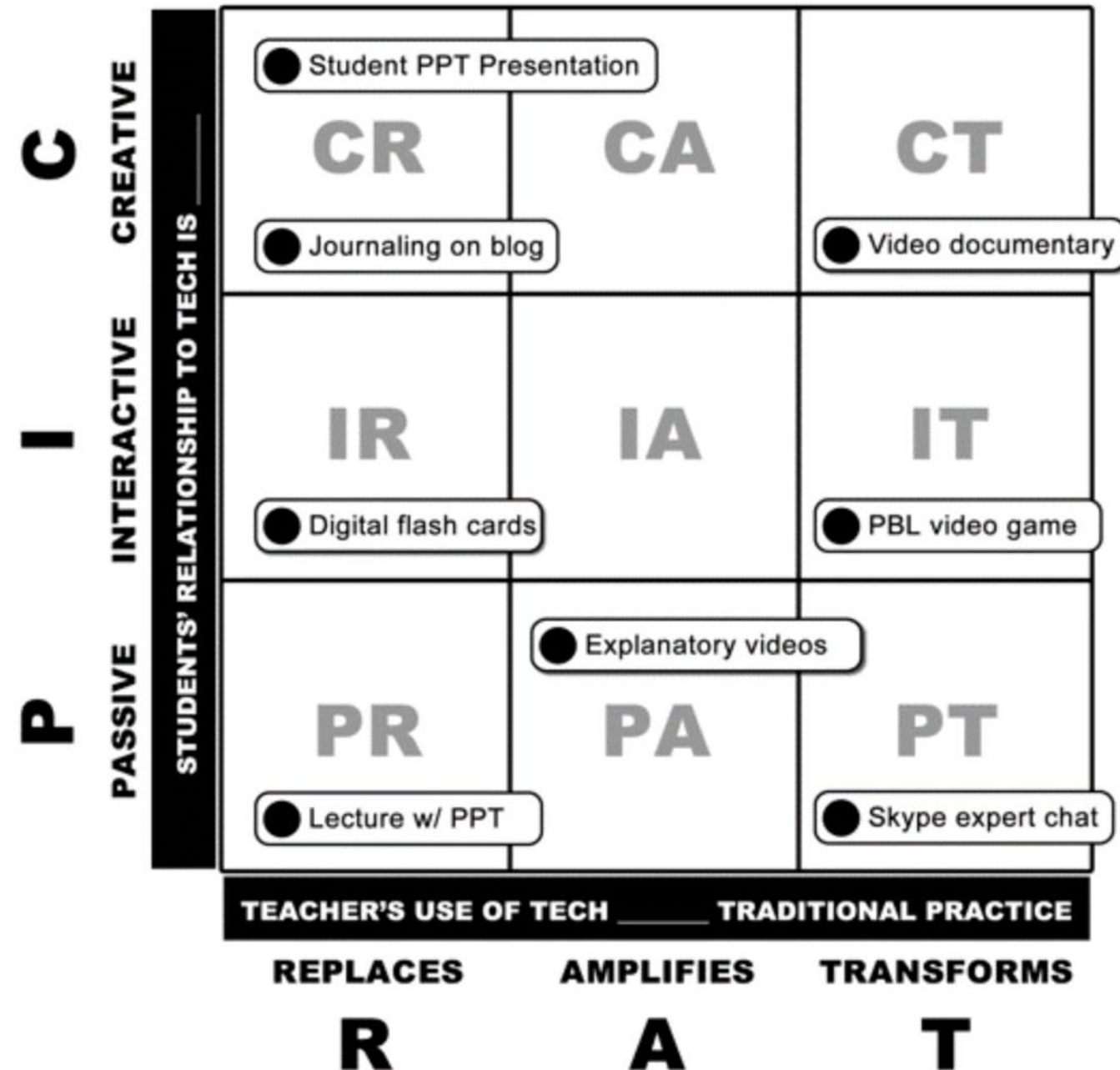


# PICRAT



Kimmons R, Graham CR, West RE. The PICRAT Model for Technology Integration in Teacher Preparation. *Contemporary Issues in Technology and Teacher Education*. 20(1):176-198

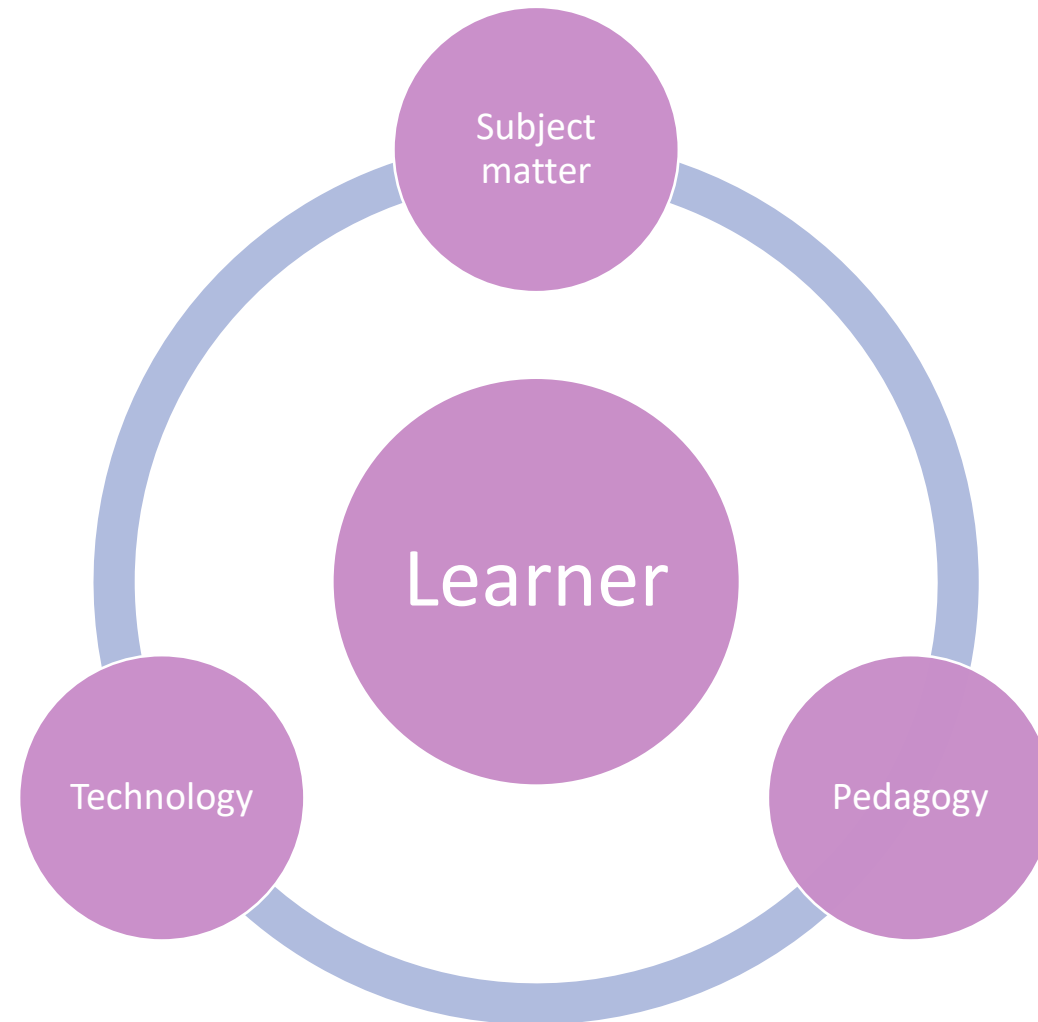
# PICRAT



Kimmons R, Graham CR, West RE. The PICRAT Model for Technology Integration in Teacher Preparation. *Contemporary Issues in Technology and Teacher Education*. 20(1):176-198



# Technology Selection

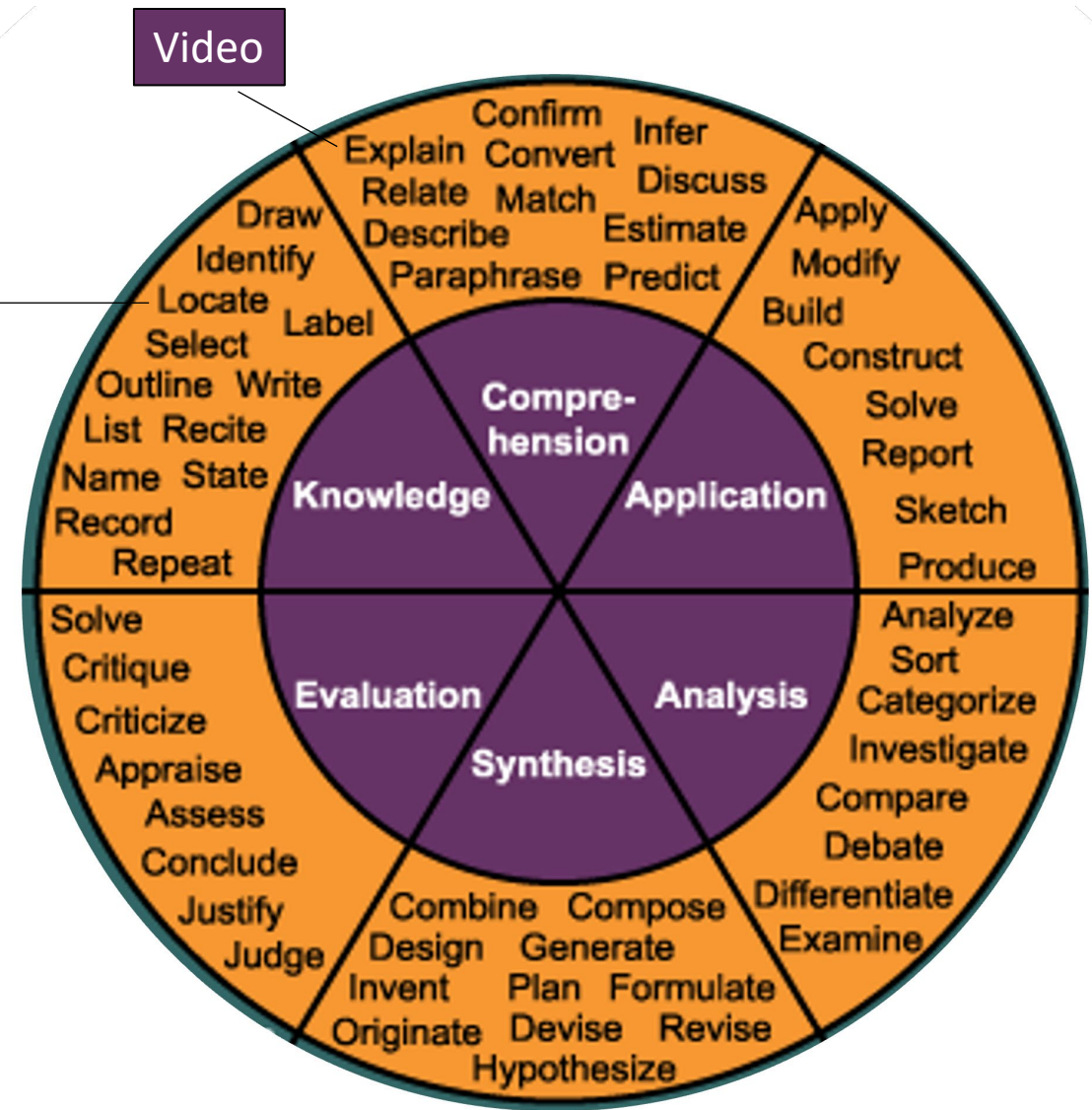






# Technology Selection

Image with Hotspot



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<https://www.flickr.com/photos/dougbelshaw/4100721032>



# Technology Selection

Text	Still Images	Video	Podcast	Interactivity
Linear	Static	Temporal	Non-visual	Simulation
Explicit	Immediate	Experiential	Immediate	Assessment/Reinforcement
Sequential	Wholistic	Emotional	Textual	Case Study
Precise		Narrative	Mobile	Games
				Creation



# Tools

Design	Graphics	Audio, Video, Animation	Engagement	Knowledge Application
	 	    	  	   



# CEEI Platform Logistics

Academy Members can request access from  
[cmedepartment@childrens.harvard.edu](mailto:cmedepartment@childrens.harvard.edu).

Qstream
<ul style="list-style-type: none"><li>• Enterprise acct.</li><li>• Multiple simultaneous users</li></ul>

Poll Everywhere
<ul style="list-style-type: none"><li>• Single use only</li><li>• Schedule in advance</li></ul>

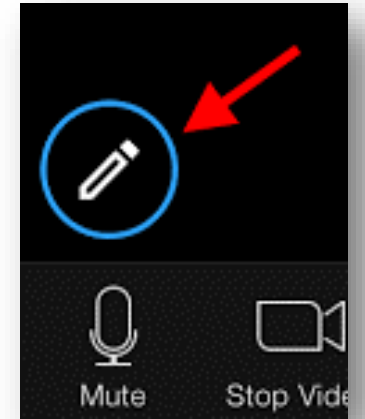
Mentimeter
<ul style="list-style-type: none"><li>• Pro plan</li><li>• 20 seat limit</li></ul>



# PICRAT Activity – Zoom Annotate

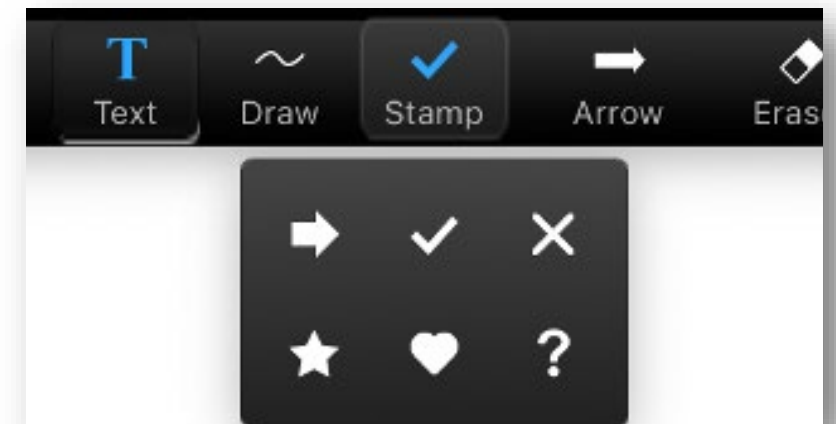
To open the Annotate toolbar:

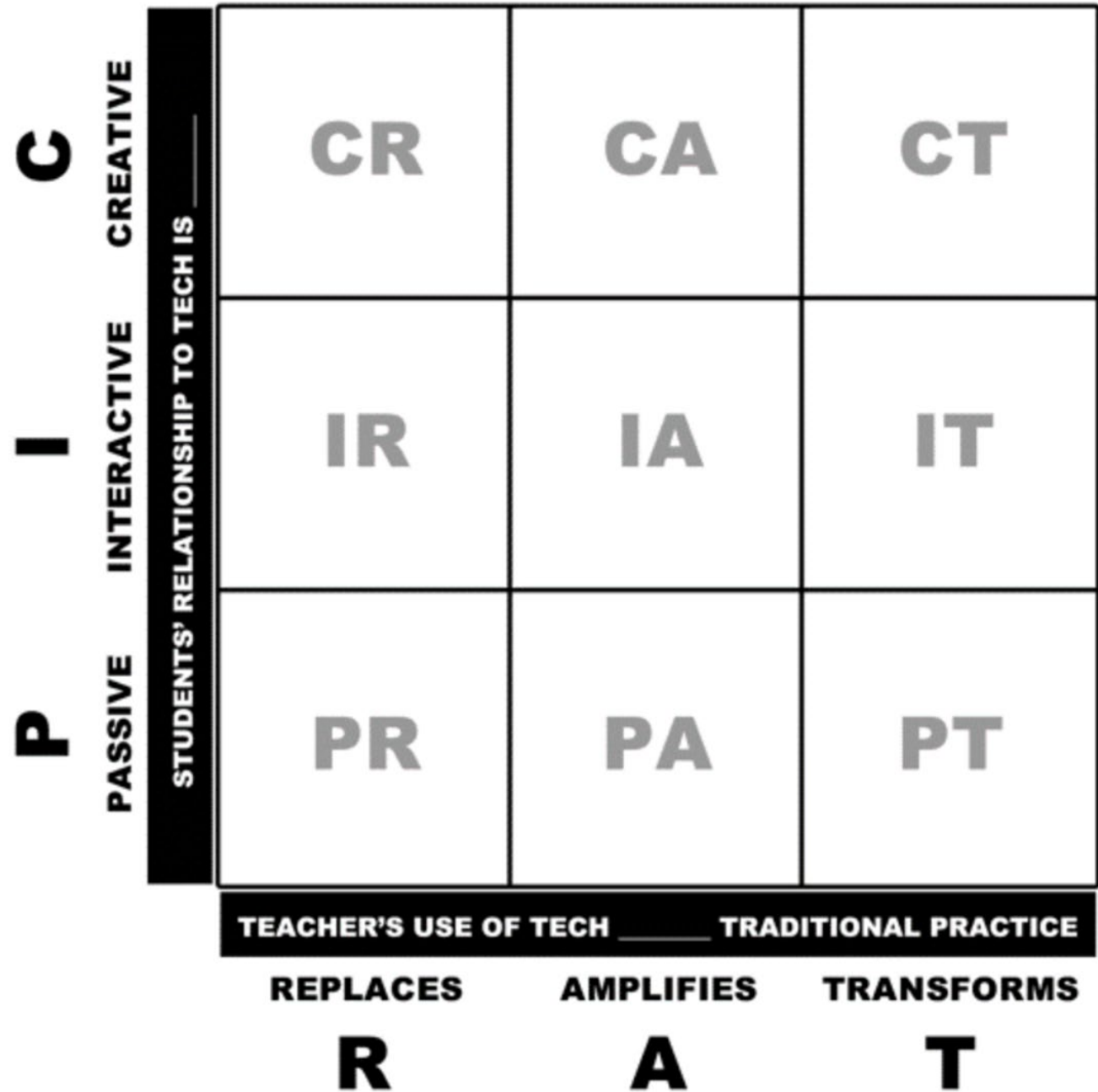
- Click the pencil in the lower left of your Zoom screen
- OR, at the top of your Zoom screen go to **View Options** or to the (...) next to **[Speaker]'s Screen**
- Select **Annotate**



When the Annotate toolbar appears, select a **Stamp**

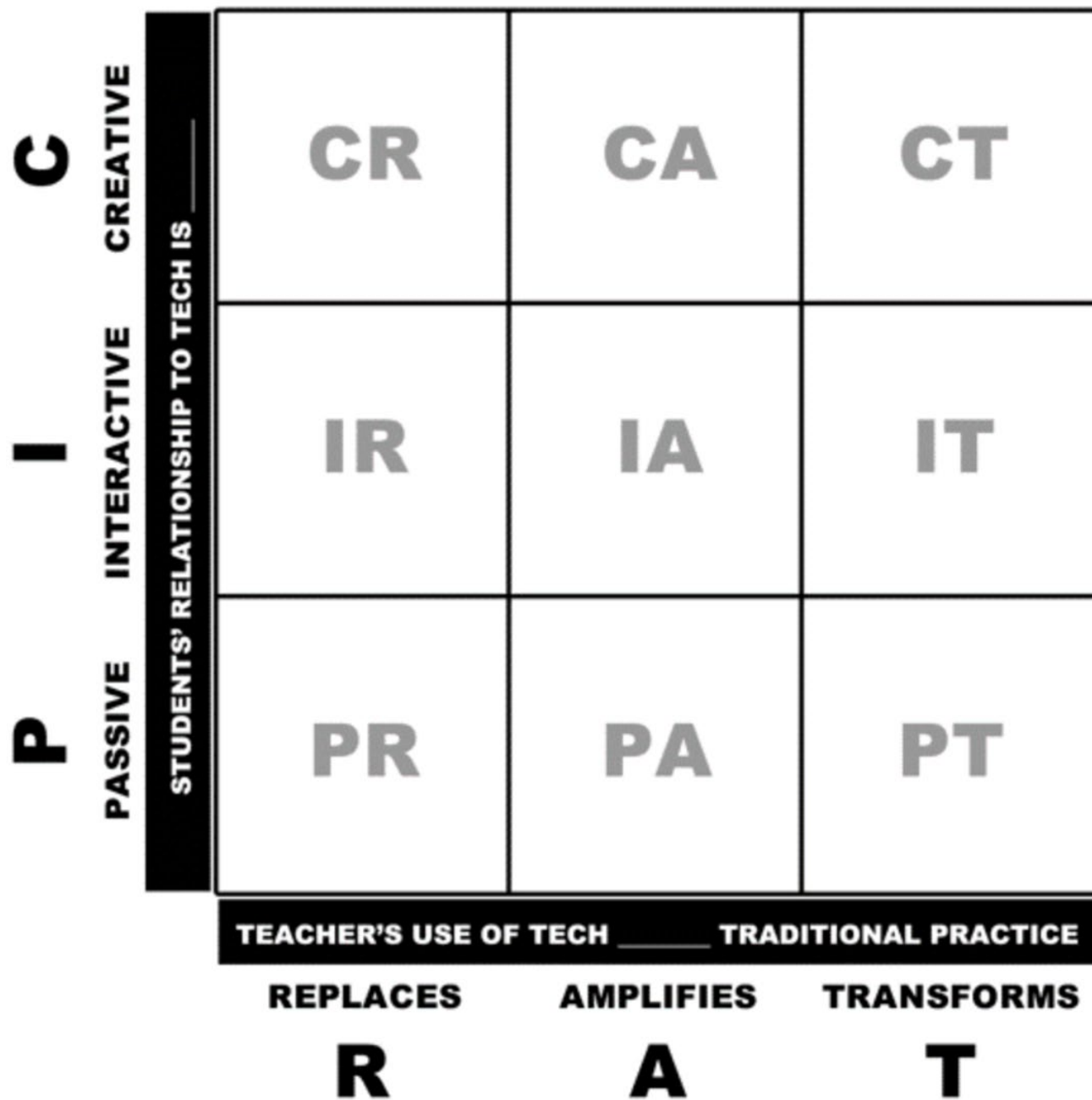
When prompted, consider the tool we are focusing on and place a stamp on the corresponding square of the PICRAT matrix

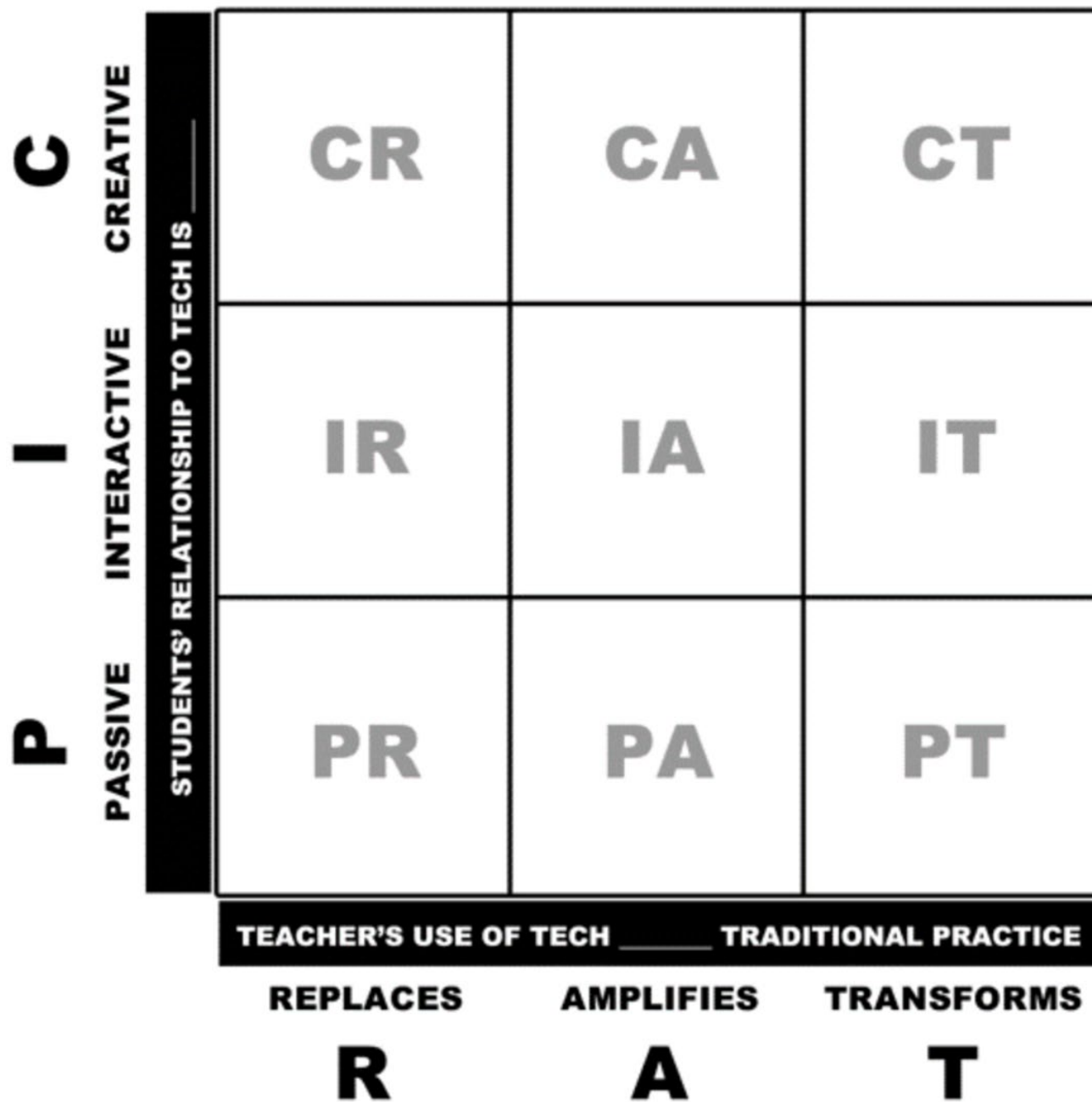






Padlet









# zoom

<b>C</b> <b>I</b> <b>P</b>	<b>STUDENTS' RELATIONSHIP TO TECH IS ____</b>		
	<b>PASSIVE</b>	<b>INTERACTIVE</b>	<b>CREATIVE</b>
	<b>CR</b>	<b>CA</b>	<b>CT</b>
<b>TEACHER'S USE OF TECH ____ TRADITIONAL PRACTICE</b>			
<b>REPLACES                  AMPLIFIES                  TRANSFORMS</b>			
<b>R                                  A                                  T</b>			



# Return to the Opening Exercise

Please go to

[https://padlet.com/bchacademy/ID\\_and\\_EdTech](https://padlet.com/bchacademy/ID_and_EdTech)

or scan the QR code



What was the role of  
this technology in  
this session?

