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:

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Introductions

Miya Bernson-Leung, MD, EdM
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& 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:

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

by doing these activities

learners will achieve these learning objectives

as demonstrated by this assessment strategy

in order to reach these educational outcomes

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

- As demonstrated by this assessment strategy
- Multiple choice quiz about immigration statistics
- In order to reach these educational outcomes
- Know how to provide appropriate care for a newly immigrated child at BCH
Backward Design

Learners will achieve these learning objectives as demonstrated by this assessment strategy in order to reach these educational outcomes.

- Recognize the challenges faced by immigrants of one specific demographic.
- Talk through a realistic case with an experienced preceptor who uses a rubric to evaluate.
- Know how to provide appropriate care for a newly immigrated child at BCH.
by doing these activities

watching a video about immigrant health produced by an adult hospital in the UK

be able to identify multiple barriers to and resources for care for immigrant families

talk through a realistic case with an experienced preceptor who uses a rubric to evaluate

as demonstrated by this assessment strategy

know how to provide appropriate care for a newly immigrated child at BCH

learners will achieve these learning objectives

in order to reach these educational outcomes

Backward Design
by doing these activities
small group round table discussion with representatives from local community organizations

learners will achieve these learning objectives
be able to identify multiple barriers to and resources for care for immigrant families

as demonstrated by this assessment strategy
talk through a realistic case with an experienced preceptor who uses a rubric to evaluate

in order to reach these educational outcomes
know how to provide appropriate care for a newly immigrated child at BCH
It’s Not (Only) About the Tech

by doing these activities

Jeopardy? simulation? online polling? AR/VR?
Technology Selection

https://educationaltechnology.net/technological-pedagogical-content-knowledge-tpack-framework/
# Technology Selection

<table>
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<tr>
<th>Text</th>
<th>Still Images</th>
<th>Video</th>
<th>Podcast</th>
<th>Interactivity</th>
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<tbody>
<tr>
<td>Linear</td>
<td>Static</td>
<td>Temporal</td>
<td>Non-visual</td>
<td>Simulation</td>
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<td>Explicit</td>
<td>Immediate</td>
<td>Experiential</td>
<td>Immediate</td>
<td>Assessment/Reinforcement</td>
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<td>Sequential</td>
<td>Wholistic</td>
<td>Emotional</td>
<td>Textual</td>
<td>Case Study</td>
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<td>Precise</td>
<td>Narrative</td>
<td>Mobile</td>
<td>Games</td>
<td>Creation</td>
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## Tools

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<th>Graphics</th>
<th>Audio, Video, Animation</th>
<th>Engagement</th>
<th>Knowledge Application</th>
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<tbody>
<tr>
<td>miro</td>
<td>Canva</td>
<td>POWTOON</td>
<td>zoom</td>
<td>Qstream</td>
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<td>bio</td>
<td>visme</td>
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<td>RENDER</td>
<td>descript</td>
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## CEEI Platform Logistics

Academy Members can request access from cmedepartment@childrens.harvard.edu.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Description</th>
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| Qstream           | • Enterprise acct.  
                    • Multiple simultaneous users |
| Poll Everywhere   | • Single use only  
                    • Schedule in advance |
| Mentimeter        | • Pro plan  
                    • 20 seat limit |
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
<table>
<thead>
<tr>
<th>Passive</th>
<th>Interactive</th>
<th>Creative</th>
<th>Teacher's Use of Tech</th>
<th>Traditional Practice</th>
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<tr>
<td>PR</td>
<td>IR</td>
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**Teacher's Use of Tech**: Replaces, Amplifies, Transforms

**Students' Relationship to Tech**: Passive, Interactive, Creative
Return to the Opening Exercise

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What was the role of this technology in this session?