

Embedding Pedagogy in a Virtual Classroom: A Retrospect

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eLearnit *MENU*



Appetizer

- *Word Cloud Activity*



Main Course

- Responding and Managing Interaction, Collaboration & Feedback in a Virtual Classroom
- Embedding the Learning Elements & Edtech in the Learning Design



Dessert

- *Personal Take-aways*



What word or phrase comes to mind when you hear the term "PEDAGOGY"?


Scan the QR Code

or



- 1.) Go to [menti.com](https://www.menti.com)
- 2.) Use the code (as shown on screen)
- 3.) Type in your answers.





Navigating in
uncharted
territory
requires a
reliable compass



Let our virtual classroom
PEDAGOGY be our compass

THIS IS THE NEW NORMAL

- 1.) Physical/social distancing
 - 2.) Contactless transactions
 - 3.) No face-to-face meetings
 - 4.) Work/learn from home
 - 5.) Only essential movements are allowed
- (*"Transition to new normal"*
Retrieved 28 May 2020, from
<http://www.euro.who.int>)



What does it mean to the
business of education?

How have we responded?

“Hybrid Flipped Classroom”
using: Moodle,
Big Blue Button
(BBB) and
OneDrive

Synchronous



Students learn at the same time.

Communication happens in real time.

Possibly more engaging and effective.

Allows for instant feedback and clarification.



Examples

Video conferencing, live chat,
live streamed videos.

Asynchronous



Students learn at different times.

Communication is not live.

Possibly more convenient and flexible.

Allows students to work at their own pace.

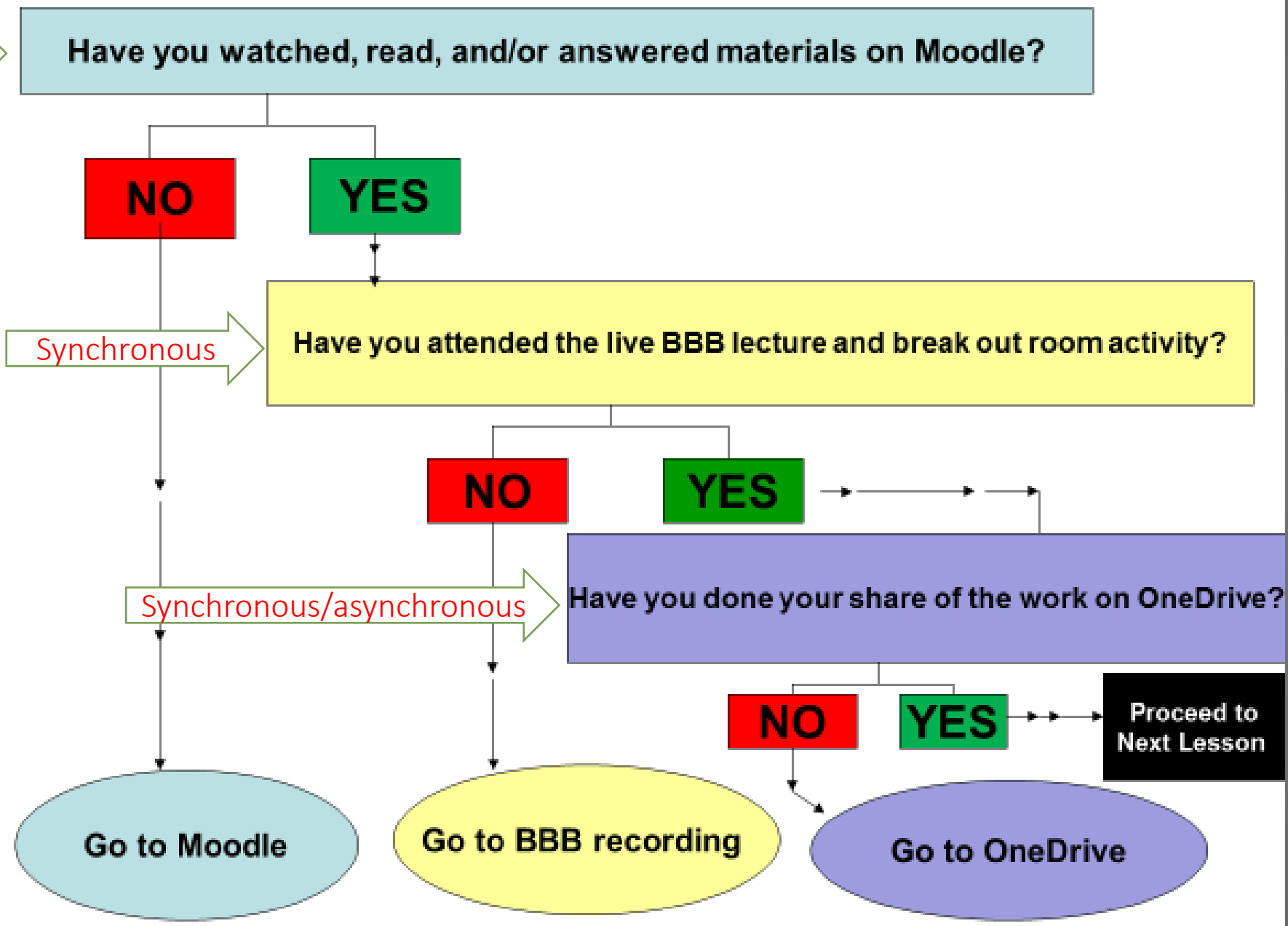


Examples

Email, screencasts, Flipgrid
videos, blog posts/comments.

How have we delivered virtual teaching?

Asynchronous



Which pedagogical element would you need the most in your virtual classroom?

Scan the QR Code

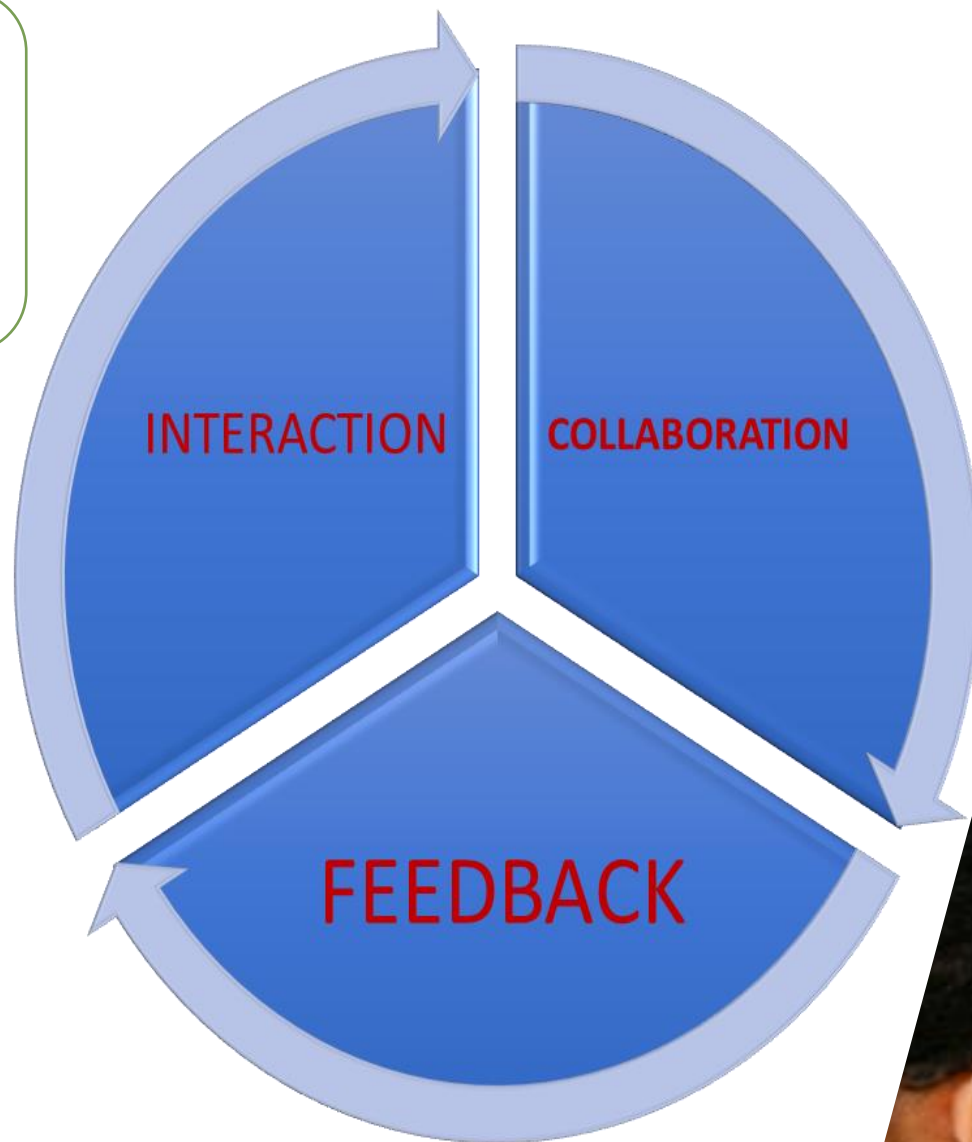
or



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Learning
Elements of
Effective
Pedagogy
(Pelz, 2009)



- Strong Positive Linear Correlation
- Variables have SIGNIFICANT RELATIONSHIP



Managing INTERACTION

(Moore, 1989)

- Facilitates communication and social skills
- Stimulates motivation and engagement
- Layers of interaction:

learner-learner(s)
learner-teacher
learner- content



INTERACTION



- Produce PPT presentation with audio narration following appropriate instructional design (e.g.: Gagne's Model)
- Create Moodle QUIZ to provide interaction with content.
- Activate Moodle FORUM with clear guidelines on its usage and decorum.



- Enable public chat, shared microphone, shared videocam, raise hand feature with clear guidelines on its usage and decorum.
- Use "online poll" to activate prior knowledge and experience; to encourage individual participation and engagement.



Managing
COLLABORATION
(Vygotsky as cited
by Gerlach, 1994)

A photograph of three students in school uniforms (blue blazers, light blue shirts, and ties) working together on a classroom project. They are gathered around a table, looking at a model of a DNA double helix. The model is constructed from black plastic bands and colorful lettered blocks (A, T, C, G). The student on the left, a boy with glasses, is pointing at the model. The student in the middle, a boy, is holding a piece of the model. The student on the right, a girl, is looking at the model. In the background, other students are visible, slightly out of focus.

Collaboration facilitates
team work

Learners collaborate to:
complete a task, solve a
problem and/or create a
product

COLLABORATION



- Use the “break out rooms” for group works involving simple tasks.
- Ensure that the task is SMART; provide a checklist to avoid COGNITIVE OVERLOAD.
- Monitor each group actively; call out students who are disengaged.
- Provide a space in the “main room” to show case or report/share the group work.
- Involve other students in other groups to share their ideas about the shared group work.



- Use OneDrive for group works involving complex tasks.
- Ensure that the task is FLEXIBLE and provide checklist for each member’s responsibilities/ accountabilities to avoid COGNITIVE OVERLOAD.
- Monitor each group actively; call out groups with backlogs and members who are disengaged.
- Celebrate (commend/recognize) milestone achievements.





COGNITIVE OVERLOAD (de Jong, 2010): How to reduce?

- Cut related tasks into smaller chunks for easy “digestion”.
- Provide “scaffolding” support for each task/problem/project.
- Create opportunities for students to collaborate in a mixed-ability group to share cognitive load.



- Empowers learners to become autonomous
- Develops capacity to evaluate, monitor and regulate learning

3-level Feedback Loop:

Self-regulation level

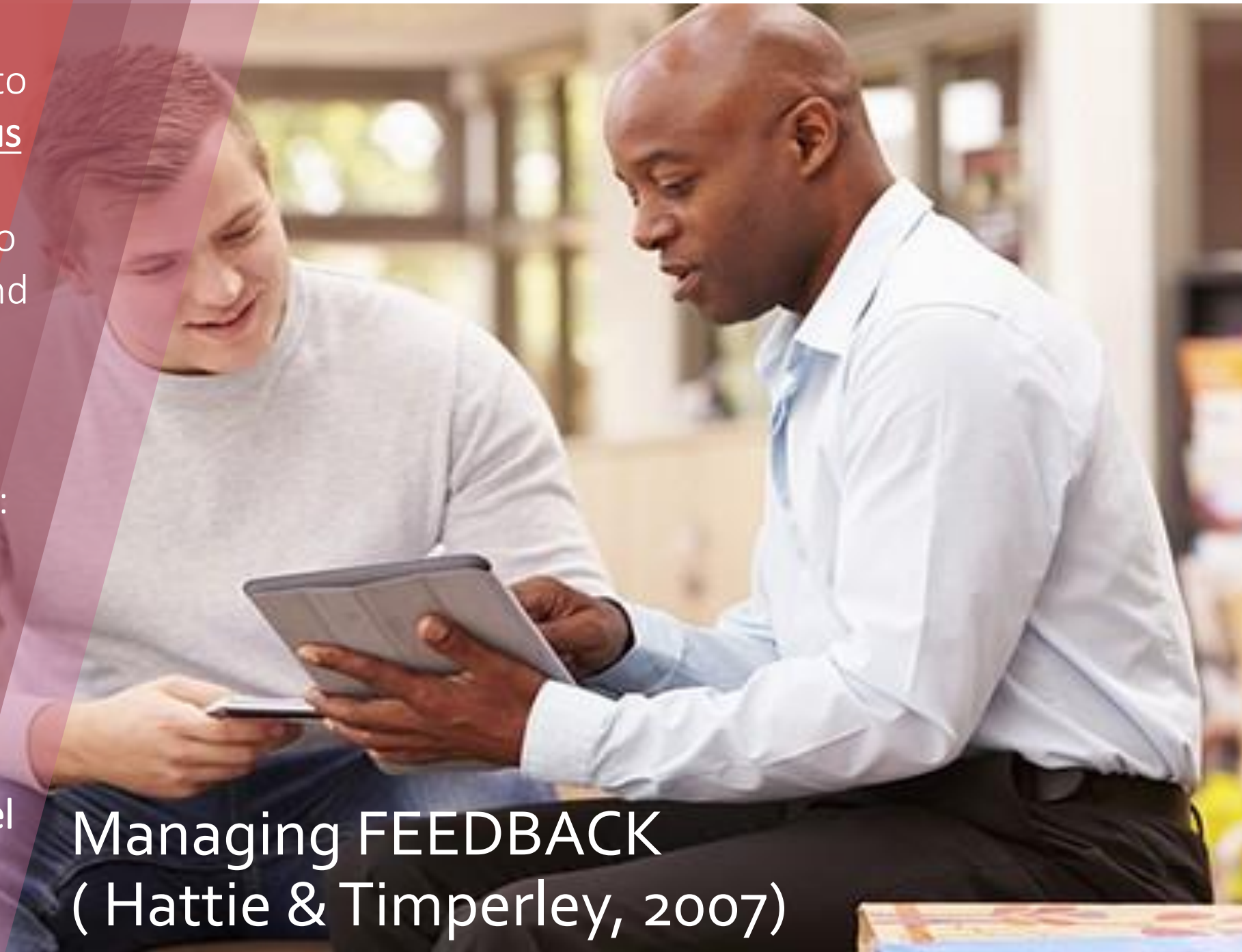


Process-level



Task/performance-level

Managing FEEDBACK
(Hattie & Timperley, 2007)



FEEDBACK



- Use “Break out Rooms” to give timely and meaningful feedback.
- Use “online poll” to give interactive feedback.



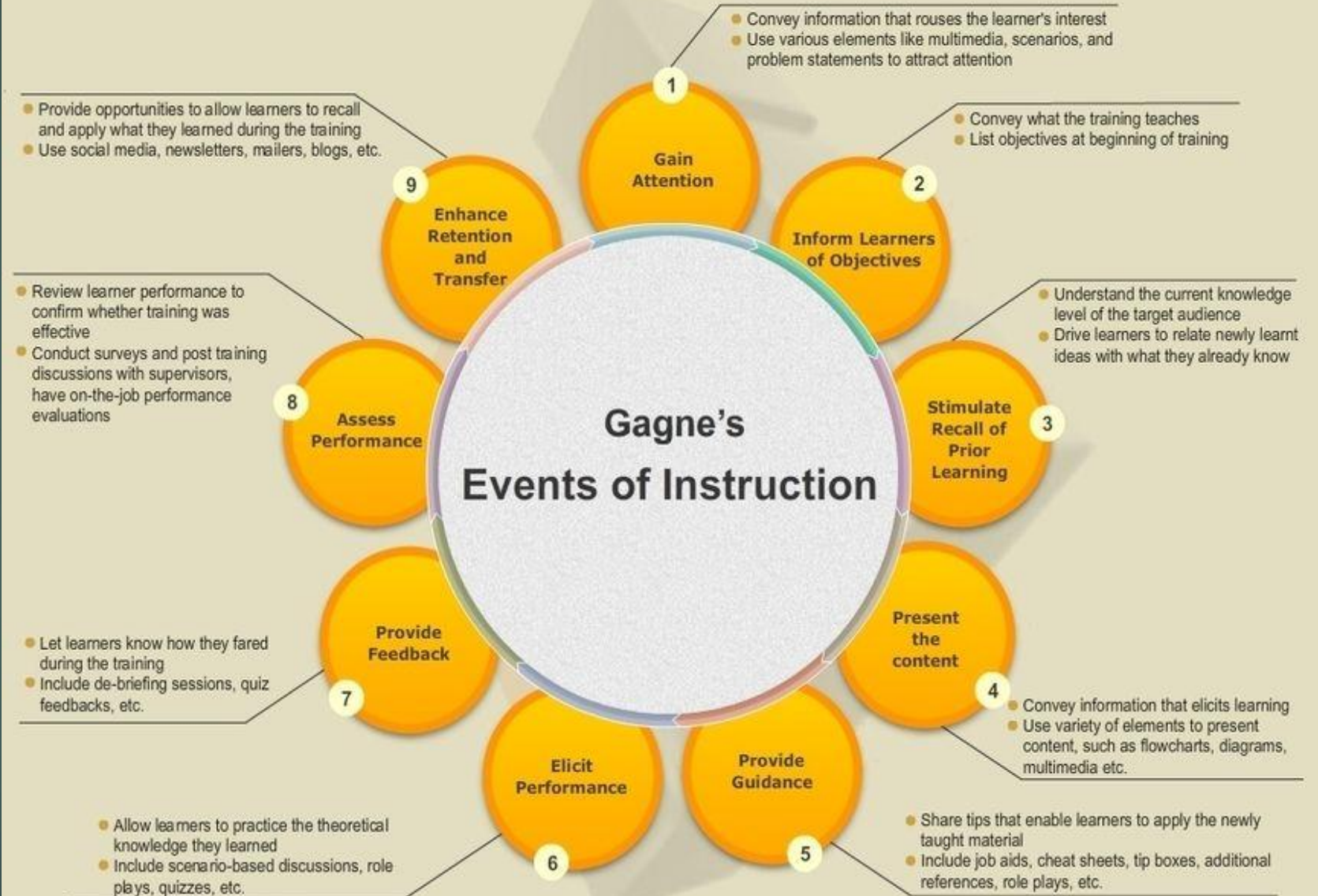
- Use OneDrive to give constructive feedback.
- Use OneDrive to provide opportunity to monitor and self-regulate learning.



Embedding Learning Elements of Pedagogy into the Learning Design





The Framework:

Gagne's
Instructional
Design Model



Embedding Learning Elements of Pedagogy into the Learning Design 1

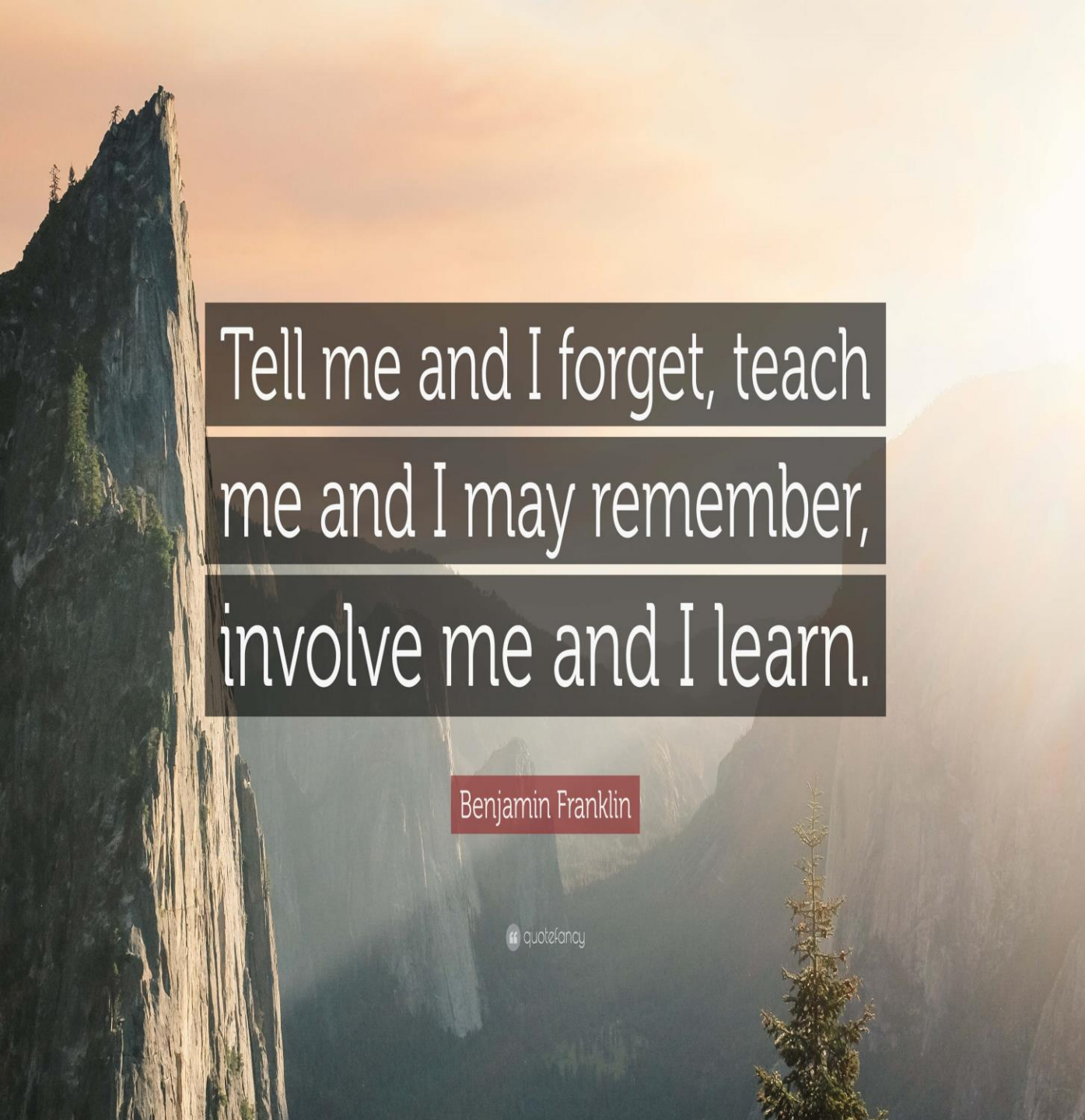
Call to action 1:
Revisit modalities of virtual delivery and check if they have an established instructional design.

Learning Activities/Events (Gagne, 1998)	Learning Elements of Pedagogy	ASYNCHRONOUS (PRE-SESSION)	SYNCHRONOUS (LIVE SESSION)	MIXED (POST-SESSION)
Gain Attention	interaction			
Inform Learners of Objectives	interaction			
Engage/activate Prior Learning	interaction			
Present Content	interaction			
Provide Guidance	Interaction feedback			
Practice Skill	Interaction collaboration			
Provide Feedback	Interaction feedback			
Assess Performance	Interaction collaboration			
Extend Application	Interaction collaboration			

Embedding Learning Elements of Pedagogy into the Learning Design 2


Call to action 2 :
Review edtech in terms of their efficacy in providing interactive, collaborative solution to a specific learning event.

Learning Activities/Events (Gagne, 1998)	Learning Elements of Pedagogy	Current Learning Platforms	Current Complementary Edtech Applications	Prospective Edtech Applications
Gain Attention	interaction	Big Blue Button MS Teams GoogleMeetUp/Zoom	Videoclips; podcasts	EdPuzzle
Inform Learners of Objectives	interaction	Big Blue Button MS Teams GoogleMeetUp/Zoom		Articulate Rise
Engage/activate Prior Learning	interaction	Big Blue Button (Poll)	Mentimeter Kahoot Padlet	EdPuzzle
Present Content	interaction	Big Blue Button (PPT) MS Teams GoogleMeetUp/Zoom		
Provide Guidance	Interaction feedback	Big Blue Button Moodle	Google Forms Wheeldecide	Socrative
Practice Skill	Interaction collaboration	Big Blue Button (Break Out Room) Moodle Quiz OneDrive	Kahoot Padlet Google Docs	Socrative
Provide Feedback	Interaction feedback	Moodle Workshop Moodle (screencast) Big Blue Button		Socrative
Assess Performance	Interaction collaboration	Moodle (Turnitin) OneDrive	Google Docs	Voice Thread
Extend Application	Interaction collaboration	Moodle	Blogsites Social Media apps	Voice Thread



Tell me and I forget, teach
me and I may remember,
involve me and I learn.

Benjamin Franklin

 quote fancy

The right
PEDAGOGY will
take us to our
destination



Let our virtual classroom
PEDAGOGY be our compass

KEY TAKEAWAYS



- There is NO technology that FITS ALL. A choice should be based NOT only of one organizational context BUT also on how it FITS or matches a specific learning event in the instructional design loop.
- Whatever is the chosen platform or edtech, it STILL requires a sound PEDAGOGY.
- Interaction, collaboration and feedback should be EMBEDDED in a virtual classroom pedagogy.

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THANK YOU for your attention.

Q&A, anyone?

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