

Construct

Higher Education in a Post-COVID World

VIRTUAL CONFERENCE



Academic Communities of Engagement with Blended Learning



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Slides at:
<https://bit.ly/Graham-ConstructEd-2020>



Engagement Dilemma

Engagement is positively correlated with many desired outcomes: student satisfaction, achievement, persistence, sense of community, etc.



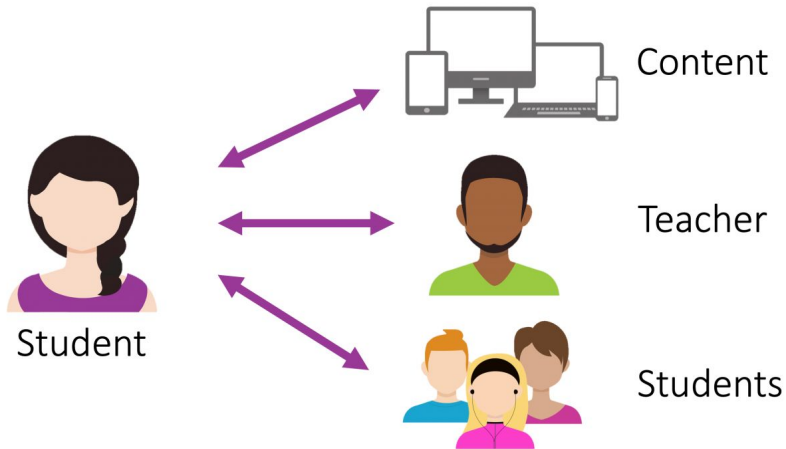
Many students struggle to engage in online learning environments.



How do we better encourage and support learner engagement?

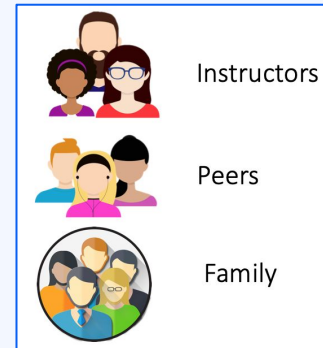
Academic Communities of Engagement (ACE)

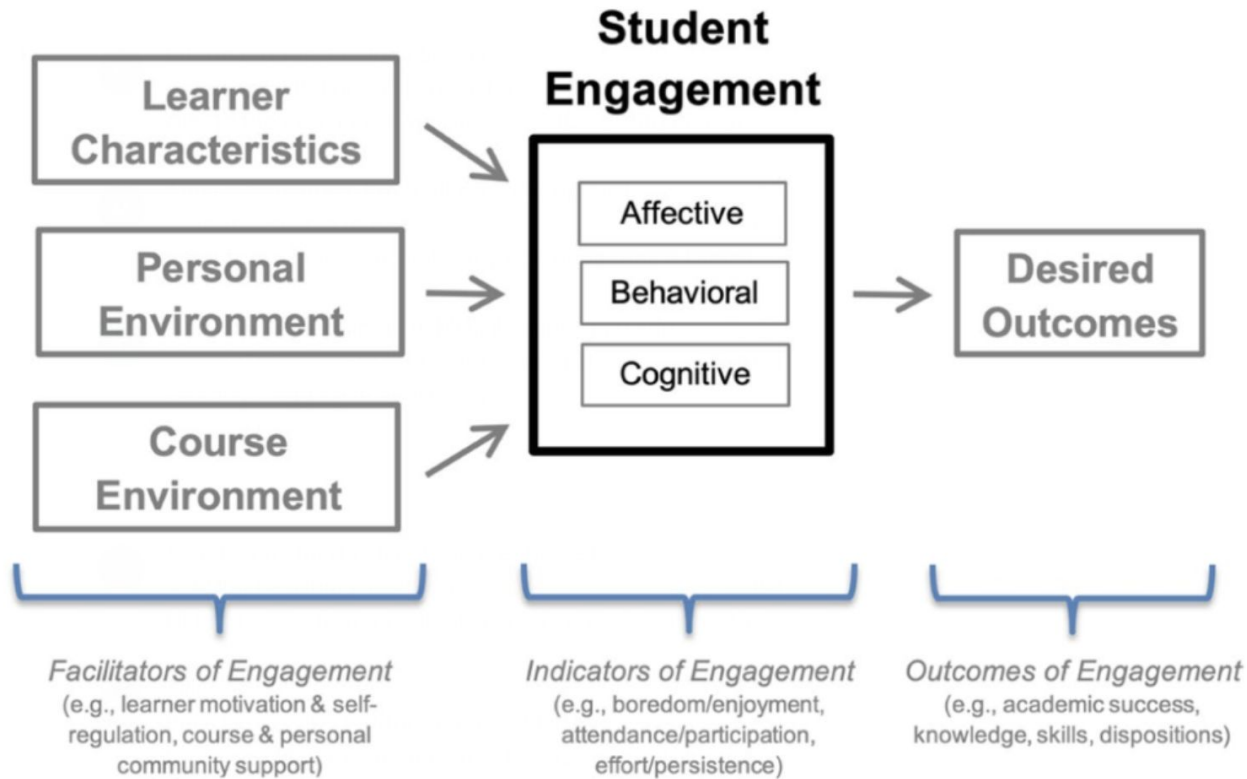
Three Types of Interaction

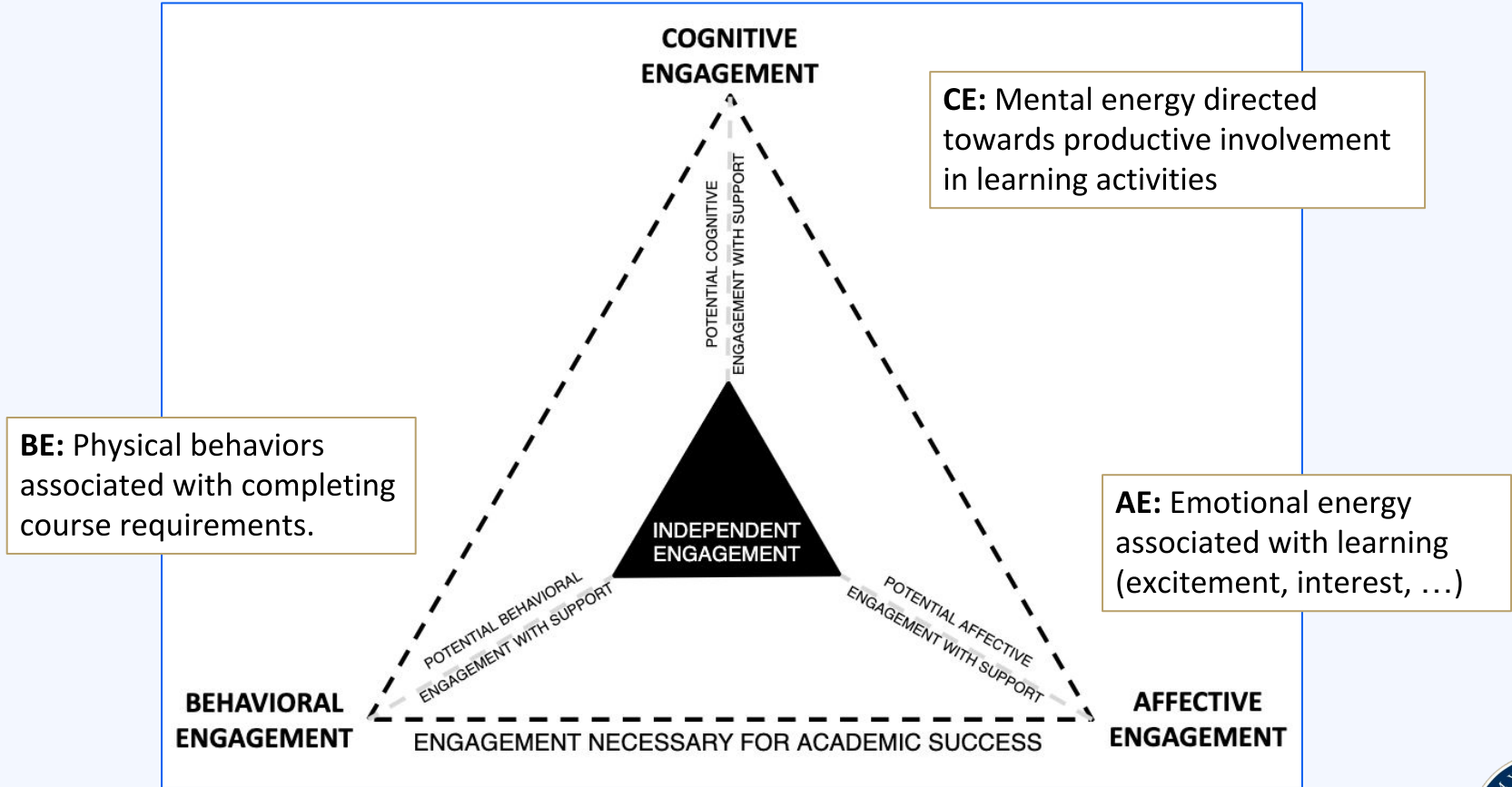


Historically too much dependence on learner-content interaction alone.

ACE focuses on communities (human relationships) that support learner engagement.







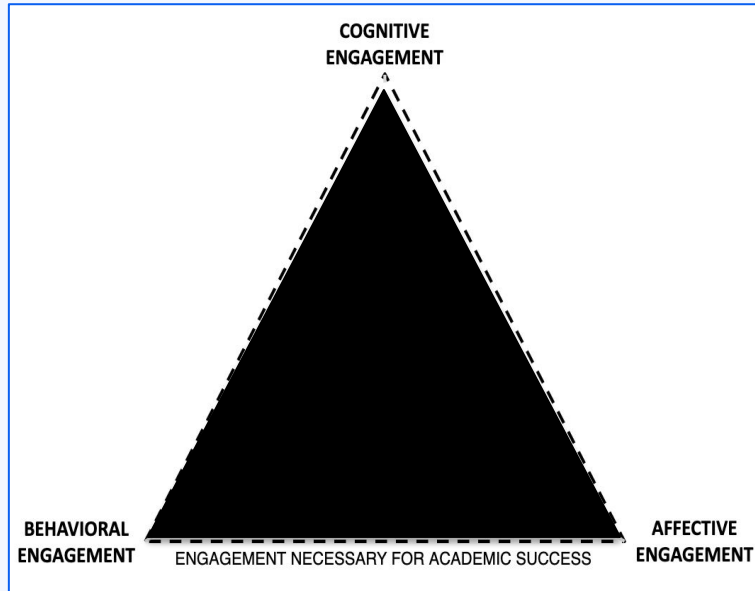
Source: Borup, Graham, et al., (2020)

Principle 1

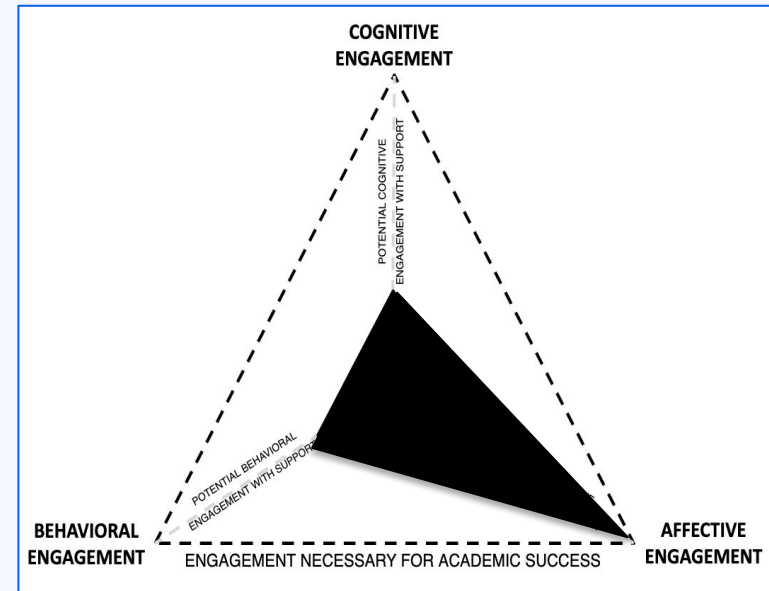
Students need
different levels of
engagement support.



What is the difference?

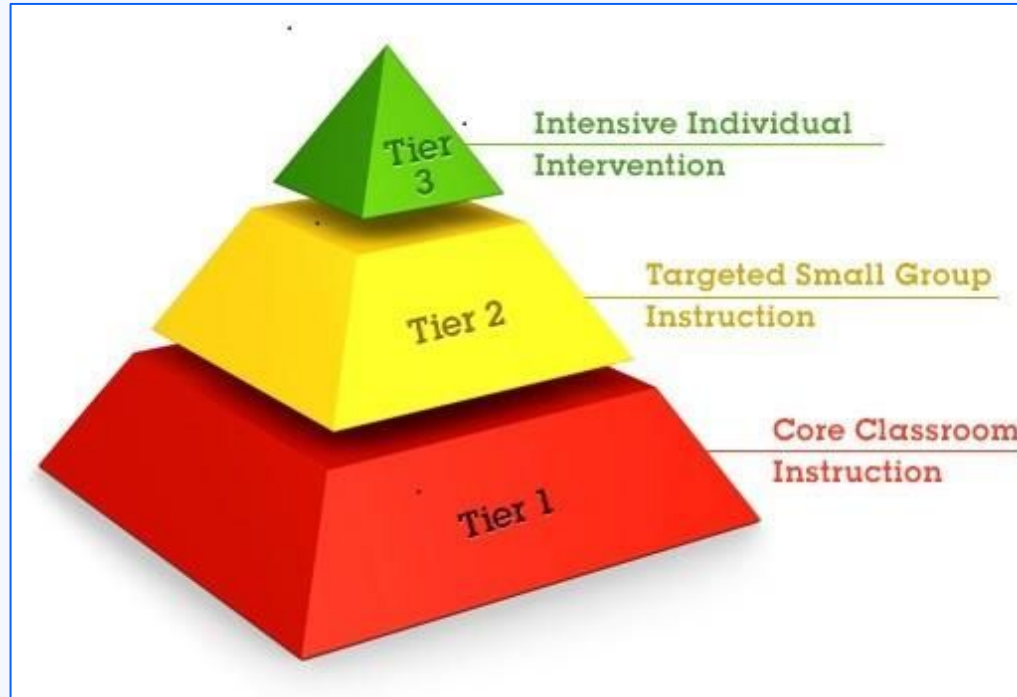


Student 1



Student 2

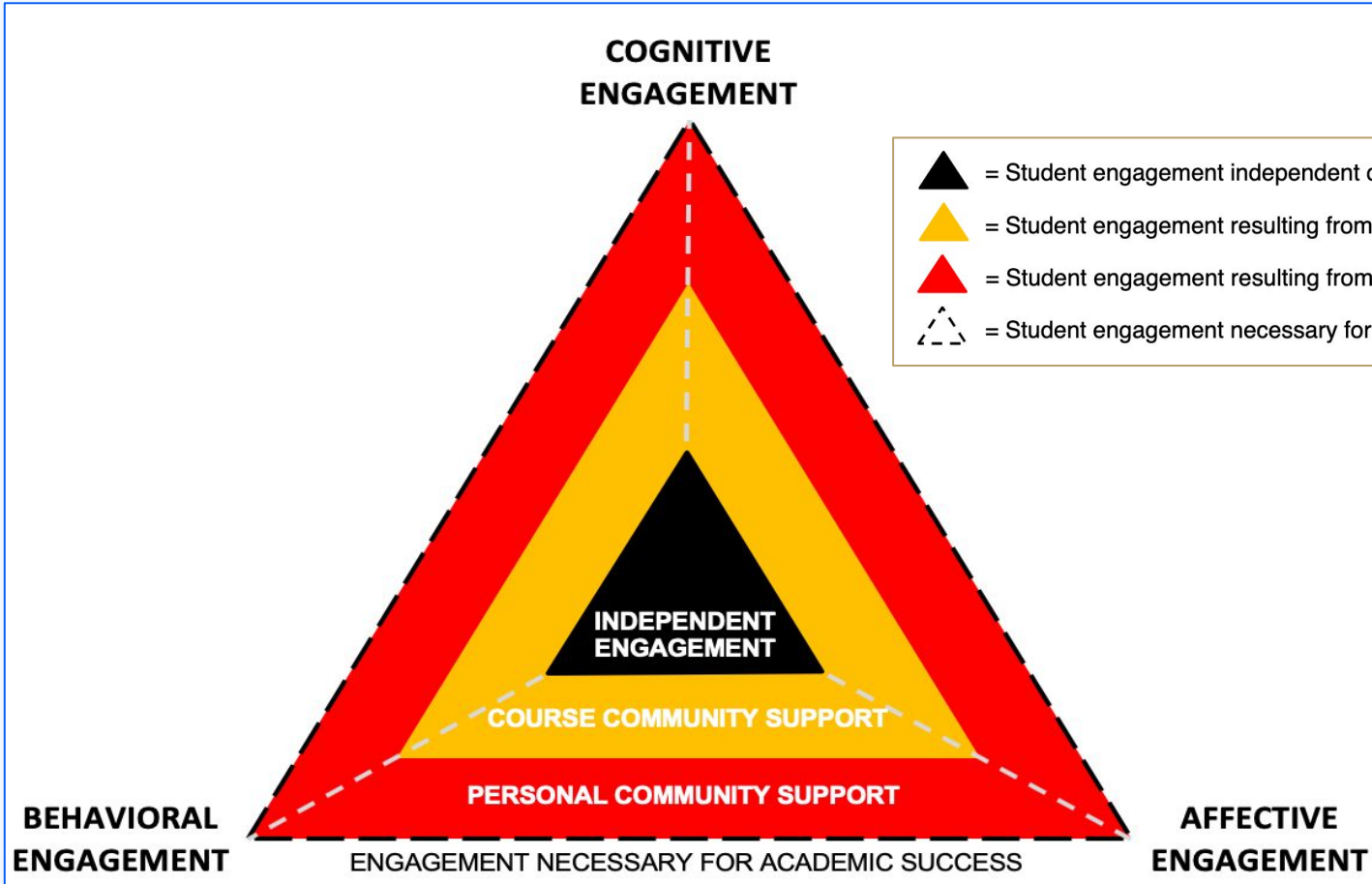
Example - K-12 Multi-Tiered Systems of Support



Principle 2

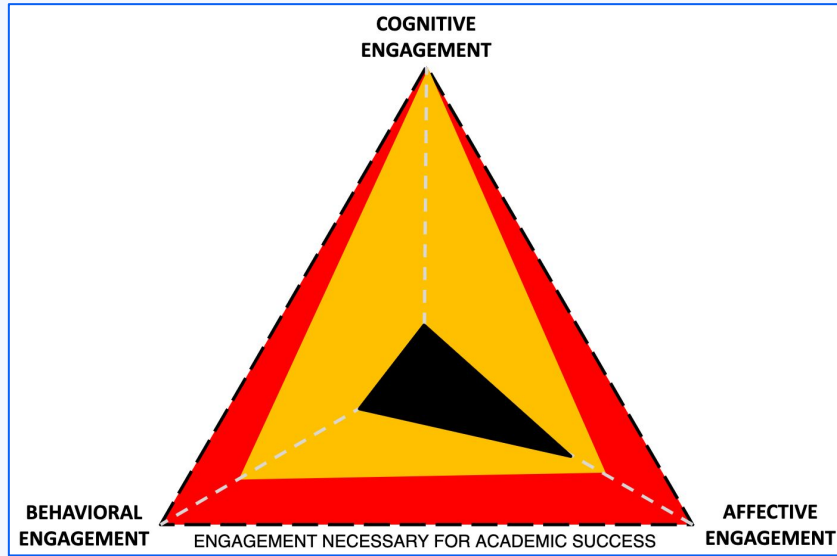
Course and personal
communities work
together to support
engagement.



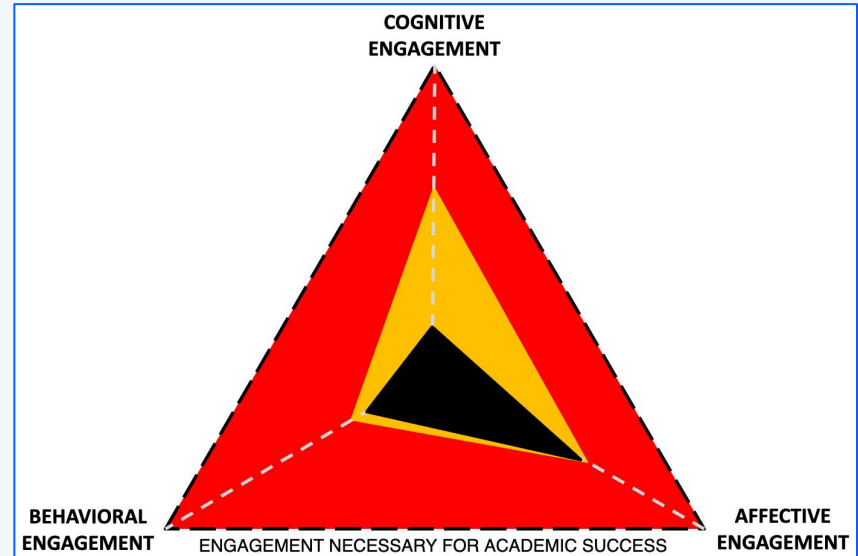


- ▲ = Student engagement independent of support from others
- ▲ = Student engagement resulting from course community support
- ▲ = Student engagement resulting from personal community support
- △ = Student engagement necessary for academic success

What is the difference?

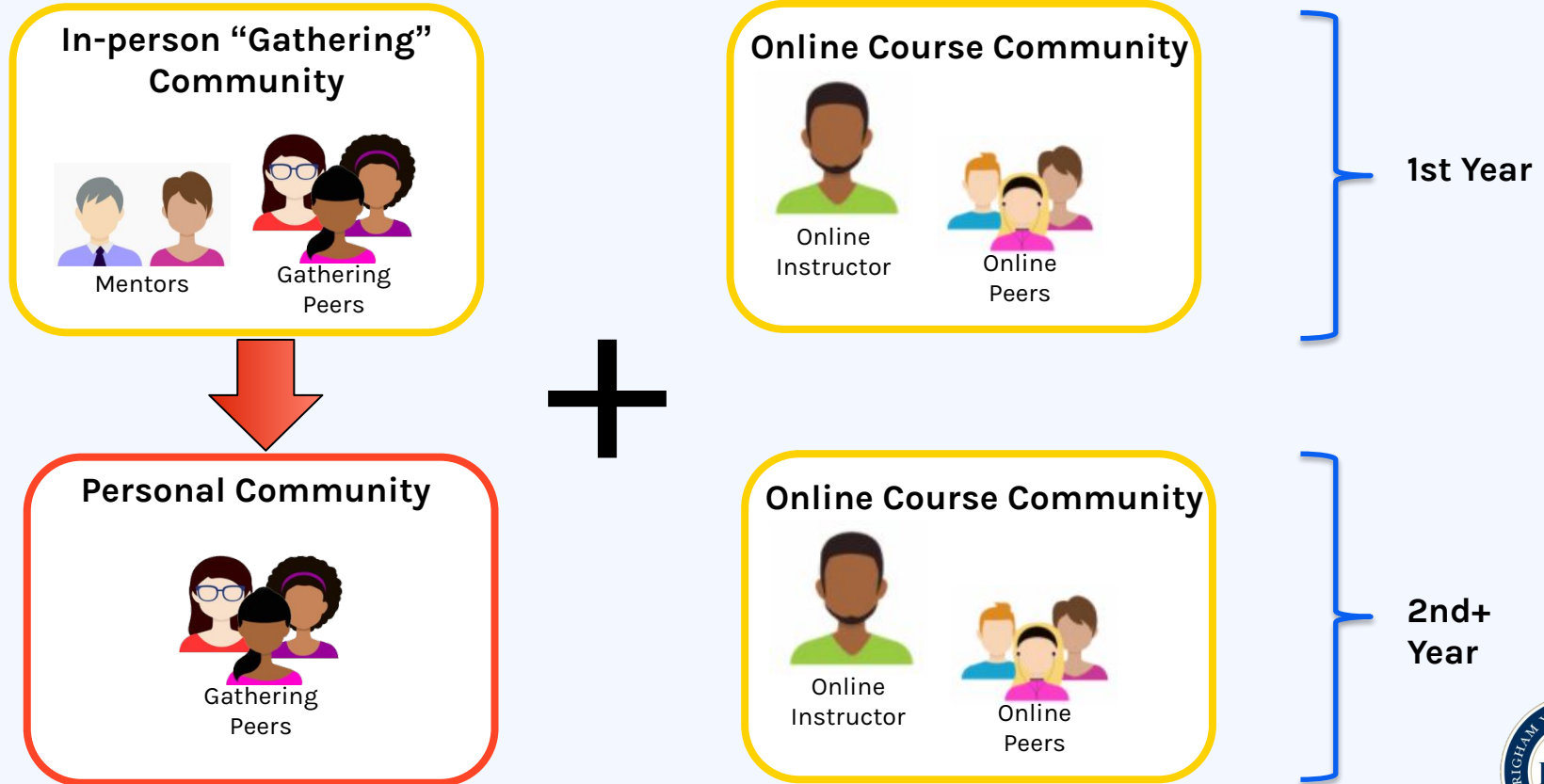


Teacher-led Model



Independent Study/Correspondence

Example - BYU Pathway Worldwide



Principle 3

Ensuring support elements are provided is more important than who provides the support.



Support Elements

- Instructing
- Collaborating

COGNITIVE ENGAGEMENT

Support Elements

- Troubleshooting and orienting
- Organizing and managing
- Monitoring and encouraging progress

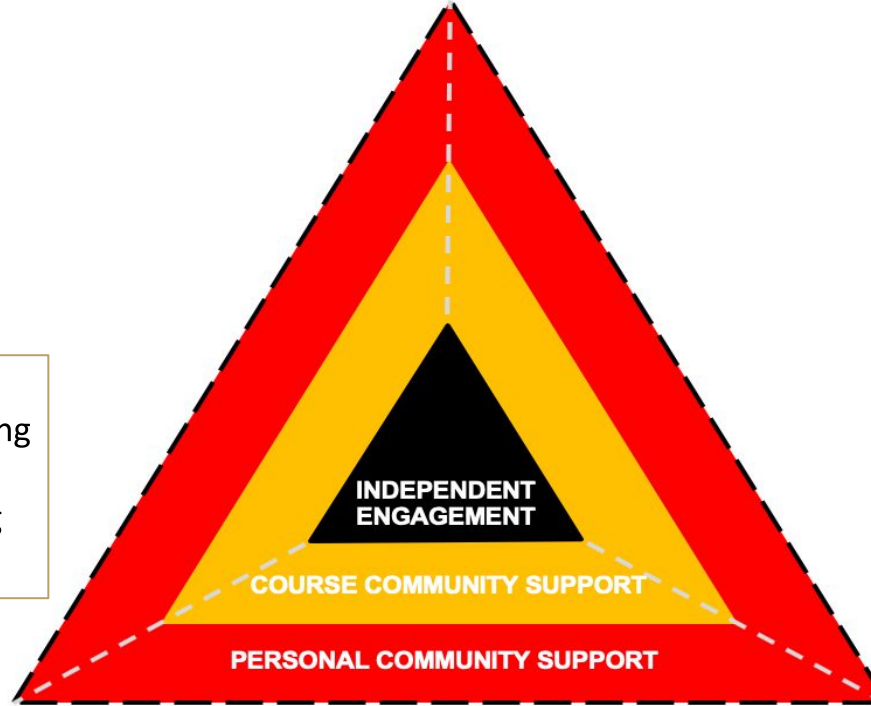
BEHAVIORAL ENGAGEMENT

Support Elements

- Facilitating communication
- Developing relationships
- Instilling excitement for learning

AFFECTIVE ENGAGEMENT

ENGAGEMENT NECESSARY FOR ACADEMIC SUCCESS



Example - Western Governors University



Evaluator

- Evaluate student performance
- Provide feedback



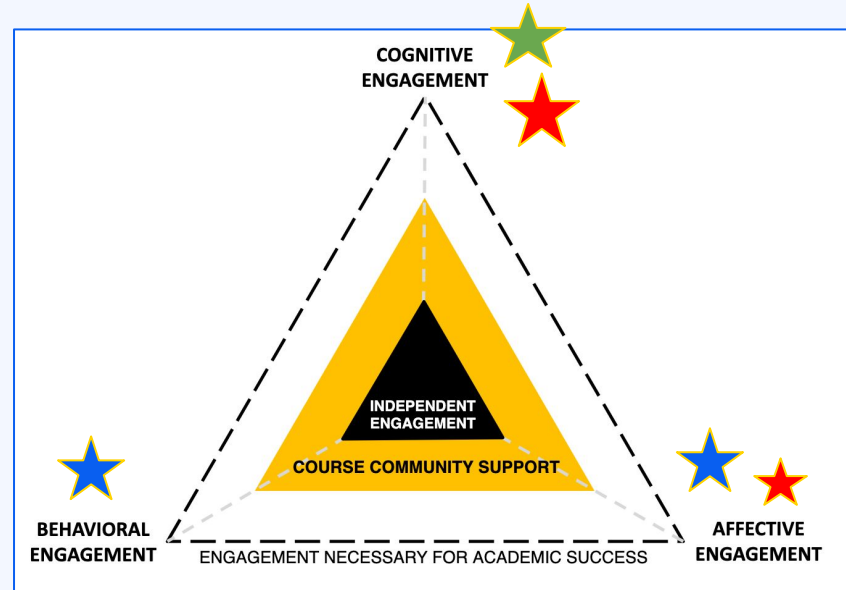
Course Instructor

- Provide instruction
- Content expertise
- Passion for subject

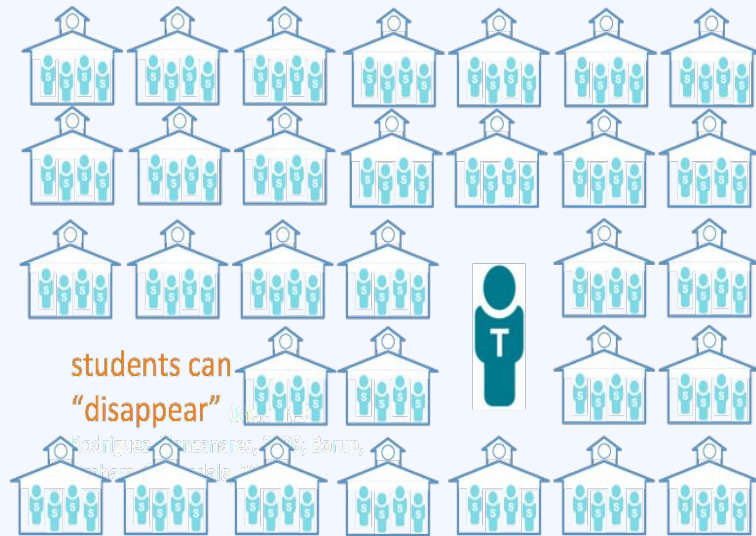


Program Mentor

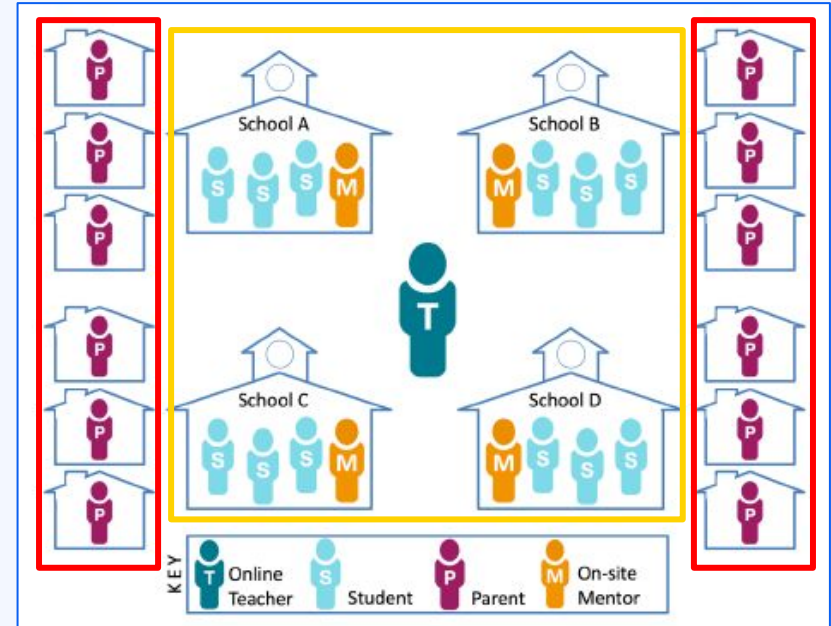
- Help w term plan
- Help w study plan
- Procedural help
- Encouragement



Example - K-12 Model



Rodriguez, Encarnacion, J. (2019). Donato, J. (2019). Brigham Young University.



Online Teaching
Teaching online is
complex and engaging
students may look
different than in-person .



Cognitive

Universities good at doing this on-campus.

- Walk in labs
- Personalized feedback
- Office hour help
- TA tutorial sessions

How will these cognitive supports be replicated online?

Behavioral

Universities often do very little of this and expect adult learners have high levels of independent behavioral engagement.

- Success Coaches (e.g., ASU)
- Freshman Mentoring
- Clubs and other organizations that build personal communities of support

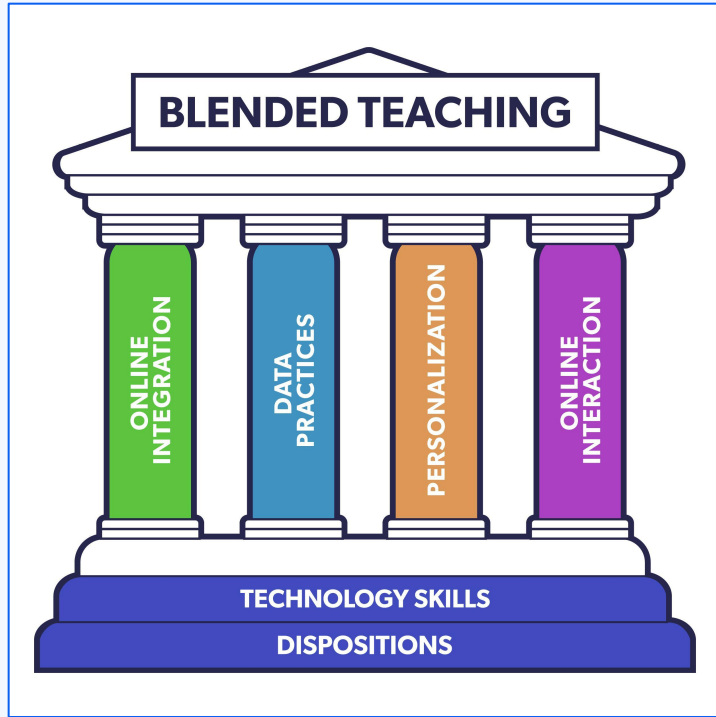
How will elements that support behavioral and affective engagement be replicated online?

Affective

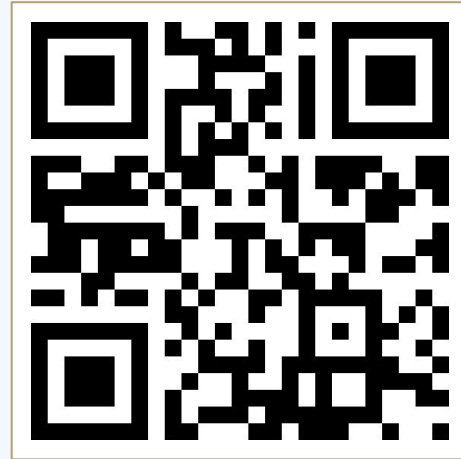


Engagement at a Course Level





You can check your own blended teaching readiness and get a personalized report.



<http://bit.ly/K12-BTR>

7 Challenges to Engagement

1. Pacing

2. Preparation

**3. Participation
(active learning)**

**4. Personal
Interaction**

5. Personalization

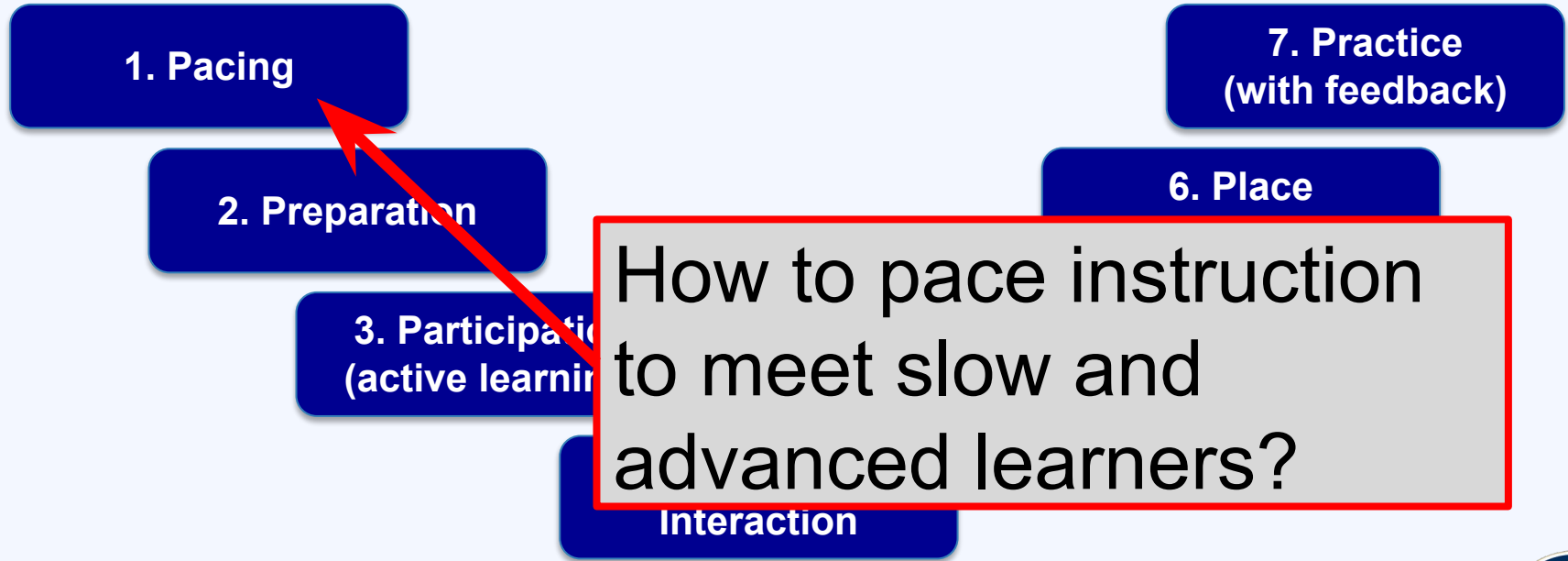
**6. Place
(Authenticity)**

**7. Practice
(with feedback)**

(Stein & Graham, 2014)



7 Challenges to Engagement



(Stein & Graham, 2014)



7 Challenges to Engagement

1. Pacing

2. Preparation

3. Participation
(active learning)

4. Personal
Interaction

7. Practice

How to help students prepare for class? How to modify instruction based on student needs?

(Stein & Graham, 2014)



7 Challenges to Engagement

1. Pacing

2. Preparation

3. Participation
(active learning)

4. Personal
Interactions

How to provide ALL students with meaningful opportunities for participation?

(Stein & Graham, 2014)



7 Challenges to Engagement

1. Pacing

2. Preparation

3. Participation
(active learning)

4. Personal
Interaction

How to create opportunities for one-on-one interaction with students?

(Stein & Graham, 2014)



7 Challenges to Engagement

How to customize instruction for students based on individual needs?

3. Participation
(active learning)

4. Personal
Interaction

5. Personalization

6. Place
(Authenticity)

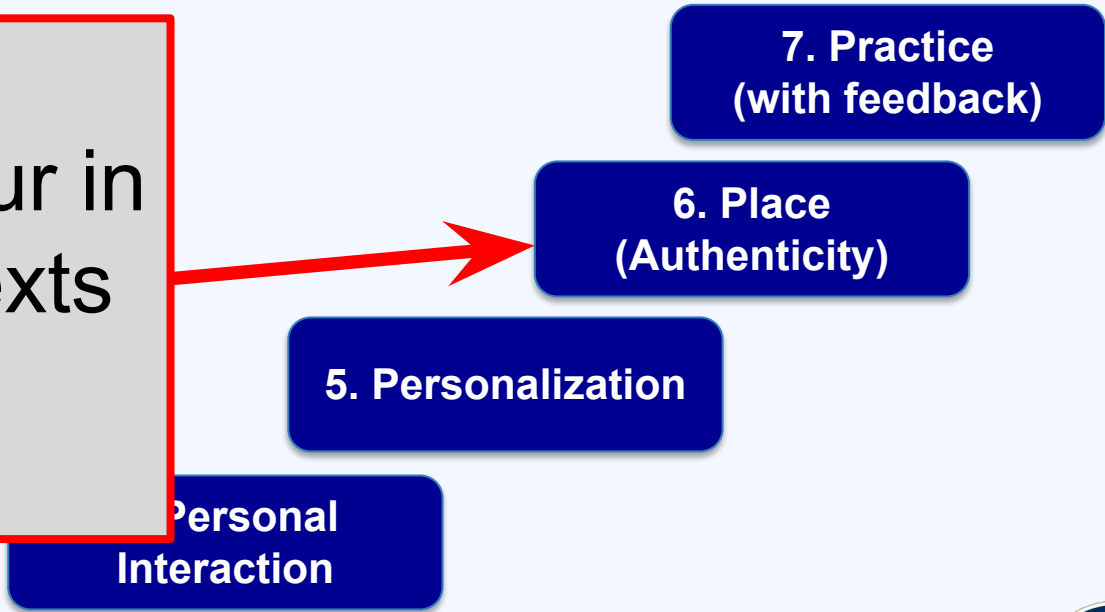
7. Practice
(with feedback)

(Stein & Graham, 2014)



7 Challenges to Engagement

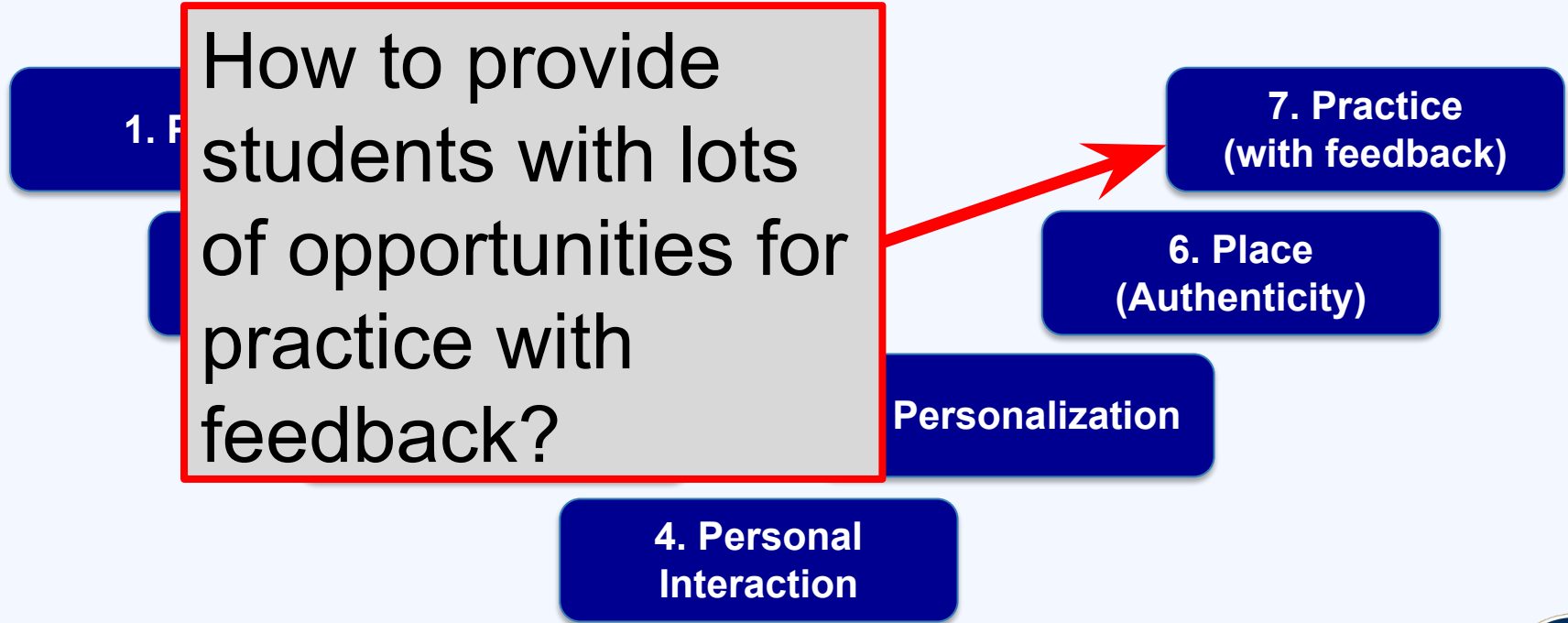
How to enable learning to occur in authentic contexts outside the classroom?



(Stein & Graham, 2014)



7 Challenges to Engagement



(Stein & Graham, 2014)



BL Can Address Engagement Challenges



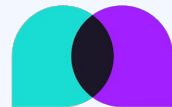
HOW not WHETHER

Future learning systems may not be differentiated as much based on ***whether*** they blend but rather by ***how*** they blend.

Ross, B., & Gage, K. (2006). Global perspectives on blended learning. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 155-168). San Francisco, CA: Pfeiffer Publishing.



Questions?

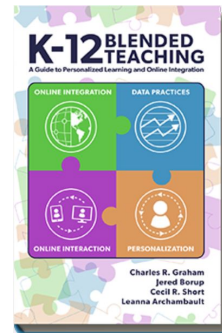


Contact:

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<http://edtechbooks.org/k12blended>

Free Blended Teaching Book

Research:

- Research papers on blended teaching and engagement
- <https://byu.academia.edu/CharlesRGraham/1-Blended-Learning-Research>



Construct

More Active Learning (via Flipping Class)



[Mastery & Personalizing - Video Link](#)



[Personal Interaction for struggling students](#)



[Problem solving in class - Video Link](#)



[Student Perspectives - Video Link](#)

Learner Preparation (via online quizzes)

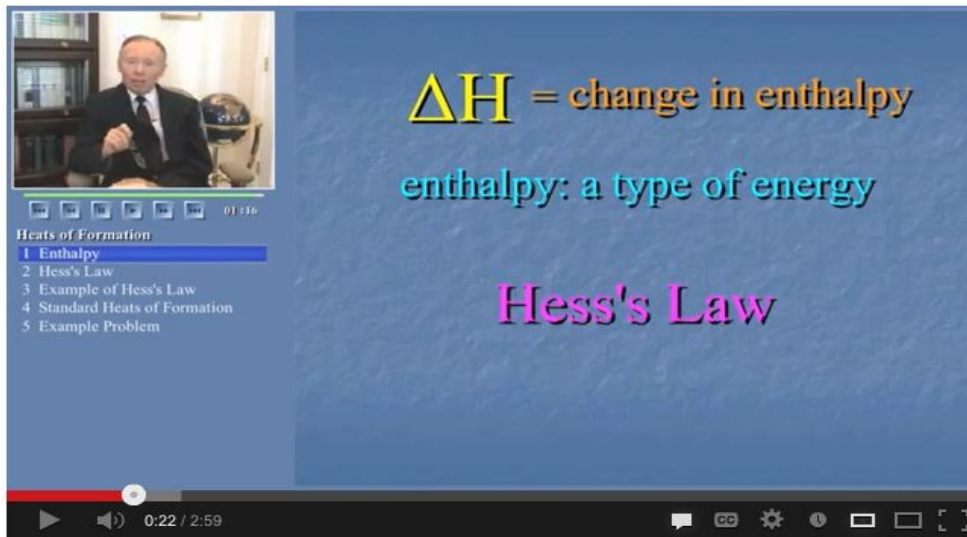
Online assessment can be used to help students better prepare for learning in the classroom.



Online quizzes – flipping classroom – Accounting ([watch](#))

Pacing and Practice in Large Class

Each student's ability to understand and apply the material varies. The more students in a class, the more difficult it becomes to scaffold individual student learning.



The screenshot shows a video player interface. In the top-left corner, there is a small video of a male professor in a suit. The main area of the player shows a presentation slide with a blue background. The slide contains the following text: ΔH = change in enthalpy (in yellow and orange), enthalpy: a type of energy (in cyan), and Hess's Law (in pink). On the left side of the slide, there is a table of contents titled "Heats of Formation" with a list: 1 Enthalpy, 2 Hess's Law, 3 Example of Hess's Law, 4 Standard Heats of Formation, and 5 Example Problem. The "1 Enthalpy" item is highlighted with a blue bar. At the bottom of the video player, there is a progress bar showing 0:22 / 2:59 and various control icons.

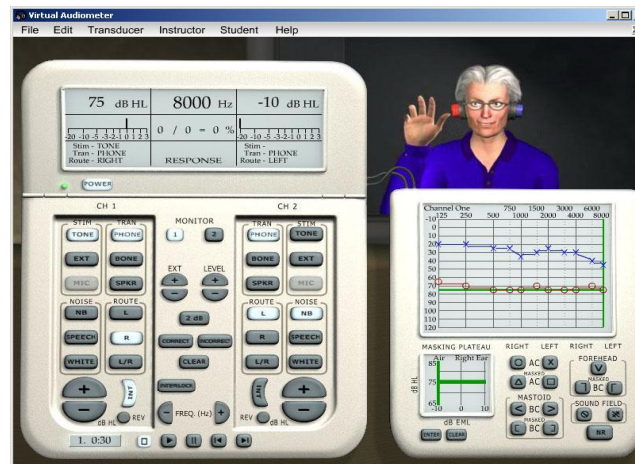
Pre-class self-paced instruction with feedback – Chem Tutor
([watch video](#))([link to Chem Tutor](#))([example module with practice/feedback](#))

Authenticity & Access

Simulated environments can provide access learning experiences that are more authentic than lecture-based instruction.



Above: BYU's Virtual ChemLab
([link to video](#))



Above: BYU's Virtual Audiometer
([link to video](#)) ([link to CTL demo](#))

Personal Interaction

Even in smaller traditional classes, it can be difficult for the instructor to set aside time for personal one-on-one interaction and feedback with students.



Personalized Video Feedback - Animation Class ([watch](#))

Participation (via online discussions)

TABLE 1.2. STRENGTHS AND WEAKNESSES OF CONDUCTING DISCUSSIONS IN FACE-TO-FACE AND COMPUTER-MEDIATED LEARNING ENVIRONMENTS.

	Computer-Mediated Environment (Asynchronous Text-Based Discussion)	Face-to-Face Environment (In-Class Discussion)
Strengths	<p><i>Flexibility:</i> Students can contribute to the discussion at the time and place that is most convenient to them.</p> <p><i>Participation:</i> All students can participate because time and place constraints are removed.</p> <p><i>Depth of reflection:</i> Learners have time to more carefully consider and provide evidence for their claims and provide deeper, more thoughtful reflections (Mikulecky, 1998; Benbunan-Fich & Hiltz, 1999).</p>	<p><i>Human connection:</i> It is easier to bond and develop a social presence in a face-to-face environment. This makes it easier to develop trust.</p> <p><i>Spontaneity:</i> Allows the generation of rapid chains of associated ideas and serendipitous discoveries (Mikulecky, 1998).</p>
Weaknesses	<p><i>Spontaneity:</i> Does not encourage the generation of rapid chains of associated ideas and serendipitous discoveries (Mikulecky, 1998).</p> <p><i>Procrastination:</i> There may be a tendency toward procrastination (Benbunan-Fich & Hiltz, 1999).</p> <p><i>Human connection:</i> The medium is considered to be impersonal by many (Benbunan-Fich & Hiltz, 1999), which may cause a lower satisfaction level with the process (Haytko, 2001).</p>	<p><i>Participation:</i> Cannot always have everyone participate, especially if there are dominating personalities.</p> <p><i>Flexibility:</i> Limited time, which means that you may not be able to reach the discussion depth that you would like.</p>

Time constraints in a physical classroom may make it difficult for everyone to participate meaningfully or contribute to a discussion.

Pacing (via self-paced instruction)

Especially in larger traditional classes, it is often difficult to match your instructional pace with your individual students' ability to learn the material.



Student self-pacing – Intro to Accounting ([watch](#))

Personal Interaction and Feedback

Effective collaboration can be a catalyst for learning in a course. Sometimes instructors avoid collaboration because it is difficult to manage this when schedules conflict.



Group Feedback - Psychology Class ([watch](#))