Higher Education in a Post-COVID World

VIRTUAL CONFERENCE
Academic Communities of Engagement with Blended Learning

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Slides at:
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

- Student
- Teacher
- Students

Content

Historically too much dependence on learner-content interaction alone.

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

Learner Characteristics

Personal Environment

Course Environment

Facilitators of Engagement (e.g., learner motivation & self-regulation, course & personal community support)

Indicators of Engagement (e.g., boredom/enjoyment, attendance/participation, effort/persistence)

Desired Outcomes

Affective

Behavioral

Cognitive

Outcomes of Engagement (e.g., academic success, knowledge, skills, dispositions)

Source: Borup, Graham, et al., (2020)
**BE: Physical behaviors associated with completing course requirements.**

**CE: Mental energy directed towards productive involvement in learning activities.**

**AE: Emotional energy associated with learning (excitement, interest, …)**

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.
COGNITIVE ENGAGEMENT

- Black triangle = Student engagement independent of support from others
- Yellow triangle = Student engagement resulting from course community support
- Red triangle = Student engagement resulting from personal community support
- Grey triangle = Student engagement necessary for academic success

INDEPENDENT ENGAGEMENT

COURSE COMMUNITY SUPPORT

PERSONAL COMMUNITY SUPPORT

ENGAGEMENT NECESSARY FOR ACADEMIC SUCCESS

BEHAVIORAL ENGAGEMENT

AFFECTIVE ENGAGEMENT
What is the difference?

Teacher-led Model

Independent Study/Correspondence
Example - BYU Pathway Worldwide

In-person “Gathering” Community
- Mentors
- Gathering Peers

Personal Community
- Gathering Peers

Online Course Community
- Online Instructor
- Online Peers

1st Year

2nd+ Year
Principle 3
Ensuring support elements are provided is more important than who provides the support.
COGNITIVE ENGAGEMENT

Support Elements
- Instructing
- Collaborating

INDEPENDENT ENGAGEMENT

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

COURSE COMMUNITY SUPPORT

Support Elements
- Facilitating communication
- Developing relationships
- Instilling excitement for learning

PERSONAL COMMUNITY SUPPORT

BEHAVIORAL ENGAGEMENT

ENGAGEMENT NECESSARY FOR ACADEMIC SUCCESS

AFFECTIVE ENGAGEMENT
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

students can “disappear”
Online Teaching
Teaching online is complex and engaging students may look different than in-person.
<table>
<thead>
<tr>
<th>Cognitive</th>
<th>Behavioral</th>
<th>Affective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities good at doing this on-campus.</td>
<td>Universities often do very little of this and expect adult learners have high levels of independent behavioral engagement.</td>
<td></td>
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<tr>
<td>- Walk in labs</td>
<td>- Success Coaches (e.g., ASU)</td>
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<td>- Personalized feedback</td>
<td>- Freshman Mentoring</td>
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<tr>
<td>- Office hour help</td>
<td>- Clubs and other organizations that build personal communities of support</td>
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<td>- TA tutorial sessions</td>
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</tbody>
</table>

How will these cognitive supports be replicated online? How will elements that support behavioral and affective engagement be replicated online?
Engagement at a Course Level
You can check your own blended teaching readiness and get a personalized report.

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

1. Pacing
2. Preparation
3. Participation (active learning)
4. Personal Interaction
5. Personalization
6. Place
7. Practice (with feedback)

How to pace instruction to meet slow and advanced learners?

(Stein & Graham, 2014)
7 Challenges to Engagement

1. Pacing
2. Preparation
3. Participation (active learning)
4. Personal Interaction
5. Personalization
6. Place (authenticity)
7. Practice (with feedback)

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 Interaction
5. Personalization
6. Place (Authenticity)
7. Practice (with feedback)

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
5. Personalization
6. Place (Authenticity)
7. Practice (with feedback)

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)

5. Personalization

4. Personal Interaction

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

How to provide students with lots of opportunities for practice with feedback?

(Stein & Graham, 2014)
BL Can Address Engagement Challenges
Future learning systems may not be differentiated as much based on *whether* they blend but rather by *how* they blend.

Questions?

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Slides at:

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

http://edtechbooks.org/k12blended

Free Blended Teaching Book
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)
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.

Pre-class self-paced instruction with feedback – Chem Tutor
(watch video)(link to Chem Tutor)(example module with practice/feedback)
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)
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.
Participation (via online discussions)

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

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

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