Technology-Enhanced Task Engagement

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A Question

How might instructors best use technology to help learners achieve?

An Answer

Make sure that technology use supports engaged learning.
Task Engagement

Task engagement is deep multidimensional involvement in an activity that has
- a clear beginning and end,
- specific goals, and
- a process for meeting those goals that leads to increased achievement.
Comprehensive Model of Task Engagement

A Task
Including task elements such as:
- Topic
- Goals/Objectives
- Instructional groupings
- Process
- Time/Pacing
- Tools
- Strategies
- Learning support
- Assessment
- Product

designed with
leads to
that predict

Task Engagement Facilitators
Students perceive that the task supports:
- Authenticity
  - Relevance
  - Meaningfulness
  - Familiarity
- Social interaction
  - Negotiation of meaning
  - Collaboration
  - Reciprocity
- Interest
  - Curiosity
  - Appeal
  - Connections
- Feedback
  - Specificity
  - Timeliness
  - Usefulness
  - Constructiveness
- Autonomy/structure balance
  - Choice
  - Control
- Challenge-skill balance
  - Identification of task difficulty
  - Recognition of student competencies
  - Opportunities for productive failure
  - Achievability

Task Engagement Indicators
Student task engagement demonstrated through:
- Behavioral
  - Planning
  - Participation
  - Involvement
  - Attention
  - Persistence
  - Self-correction
- Cognitive
  - Caring about quality of work
  - Mental effort
  - Intentional strategy use
  - Monitoring
  - Noticing
  - Willing uptake
  - Flexibility
- Emotional
  - Eagerness/enthusiasm
  - Positive affect
  - Confidence
  - Eustress
- Agentic
  - Self-reflection
  - Ownership
  - Proactiveness
  - Self-evaluation
- Social
  - Initiation of interaction
  - Willingness to communicate/interact
  - Sense of cohesion

Task Outcomes
Outcomes may include some or all of:
- Increased language/ Skills
  - Knowledge
- Increased content
  - Skills
  - Knowledge
- High task performance
  - Quality
  - Quantity
- Positive attitudes/well-being
- New metacognitive strategies
- Increased self-efficacy

Egbert et al., 2022
Simplified Model of Student Task Engagement

The design of a task integrated with leads to

Task Engagement Facilitators
1. Authenticity
2. Social interaction
3. Interest
4. Feedback
5. Autonomy/structure balance
6. Challenge-skill balance

Task Engagement Indicators
- Behavioral
- Cognitive
- Emotional
- Agentic
- Social

Task Outcomes

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Task Engagement Facilitators

Students perceive that the task supports:

1. **Authenticity**
   - Relevance
   - Meaningfulness
   - Familiarity

2. **Social interaction**
   - Negotiation of meaning
   - Collaboration
   - Reciprocity

3. **Interest**
   - Curiosity
   - Appeal
   - Connections

4. **Feedback**
   - Specificity
   - Timeliness
   - Usefulness
   - Constructiveness

5. **Autonomy/structure balance**
   - Choice
   - Control

6. **Challenge-skill balance**
   - Identification of task difficulty
   - Recognition of student competencies
   - Opportunities for productive failure
   - Achievability
Ask yourself…

1. Does the way I currently use technology in my instruction support student engagement?

Examples:

**Kahoot**
- New kahoot
- Kahoot! for formative assessment
- Spark discussions with polls
- Teach with slides
- Practice spelling and adjectives with Puzzle
- Introduce new topics with a "Blind" kahoot

**Voicethread**
Ask yourself...

2. What are some simple ways I can use technology to engage students?

Example:
Perusall
Assumptions

Techs are taught and modeled. Reasons why are explained clearly.
Simple Examples

Building community/supporting authenticity with Pixton
Introducing a topic with memesmonkey.com

TRACKING MY COOKIES?

YOU WILL NEVER GET MY RECIPE INTERNET!
Facilitating social interaction with Padlet or Jamboard
Generating interest with photo-editing apps
Providing challenge through augmented reality
Creating challenge with black lights
Allowing for choice/autonomy with digital escape rooms/quizzes/puzzles
Ideas for Discussion Session

- Stop motion/green screen/TikToks to deliver an idea
- TEDx transcripts as multimodal readings
- Action maze creation
- Random team generators
- Rubistar and other rubric makers
Thank you!