ONLINE LEARNING AND BLOOM’S TAXONOMY

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OVERVIEW

Focus
- How to design online learning activities that help students meet learning outcomes.

Topics covered
- Online learning concerns
- Learner interactions
- Bloom’s Taxonomy
- Online learning activity design
ONLINE LEARNING CONCERNS

• How do I handle **transactional distance**?
• How do I identify and address my **learning outcomes**?
• What **pedagogical strategies** or activities should I use?
TRANSACTIONAL DISTANCE

The BIG CHALLENGE that people discuss when shifting to online learning.

- Technology broadens distance
- Interaction techniques can lesson it

WHAT KINDS OF ACTIVITIES DO YOU TYPICALLY DO IN YOUR FACE-TO-FACE CLASSES?

Take 60 seconds to think about this and share your answer in the chat.

I ask my students to …
LEARNER INTERACTIONS
LEARNING TOOLS

- Content linking/hosting
- Quiz / test
- Discussion boards
- Synchronous video discussion (e.g., Zoom)
- Asynchronous video discussion (e.g., FlipGrid)
TYPES OF LEARNING ACTIVITIES

- **Individual**
- **Synchronous**
  - Whole class
  - Small group
- **Asynchronous**
  - Whole class
  - Small group
ANOTHER CONSIDERATION: DALE’S CONE OF EXPERIENCE

• How concrete must the learning experience be?
• How abstract can it be?
• How do we provide sufficiently concrete experiences online?
SO MANY OPTIONS, HOW DO WE CHOOSE?

LEARNING INTERACTIONS + LEARNING TOOLS = ???
BLOOM'S TAXONOMY & ACTIVITIES

Evaluation
Make and defend judgments based on internal evidence or external criteria.

Synthesis
Compile component ideas into a new whole or propose alternative solutions.

Analysis
Break down objects or ideas into simpler parts and find evidence to support generalizations.

Application
Apply knowledge to actual situations.

Higher Order Thinking Skills

YOU HAVE TO WALK BEFORE YOU CAN RUN.
SIDE NOTE: THE TAXONOMY HAS BEEN REVISED
WHY BLOOM’S TAXONOMY

- Break down instruction into component parts
- Gain clarity on what learners need to do
- Ensure instructional alignment

objectives → activities → assessment
BLOOM’S TAXONOMY: LOWER ORDER SKILLS

REMEMBER
Recognize or recall facts
• Identify
• List
• Select
• State

UNDERSTAND
Understanding facts and ideas
• Classify
• Compare
• Explain
• Paraphrase
BLOOM’S TAXONOMY: MIDDLE ORDER SKILLS

APPLY
Use knowledge and skills in a new situation
- Demonstrate
- Implement
- Practice
- Use

ANALYZE
Engage in detailed exploration
- Deconstruct
- Investigate
- Organize
- Test
BLOOM’S TAXONOMY: HIGHER ORDER SKILLS

EVALUATE
Make informed judgements based on information and criteria

• Decide
• Justify
• Rate

CREATE
To modify something or make something new

• Construct
• Design
• Plan
LEVELS OF OBJECTIVES

Course level objectives

Enabling objectives

Pre-requisites

Taught in course
TRANSLATING OBJECTIVES INTO ACTIVITIES

Objective: What is the verb?
Activity: How can students practice?
RATIONALE FOR ACTIVITIES:
COGNITIVE APPRENTICESHIP MODEL

Modeling
• Expert demo

Coaching
• Expert guidance

Scaffolding
• Support

Articulation
• Explain knowledge

Reflection
• Analyze knowledge

Metacognition

Exploration
• Own and extend

Transfer

Reception Learning
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<th>DIRECT</th>
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<tr>
<td>• Practice</td>
<td>• Performances</td>
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<td>• Exploration</td>
<td>• Critiques</td>
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<td></td>
<td>• Debriefs</td>
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PRACTICE:

- What order skills do you teach?
- What kinds of learning interactions will your students engage in?
- What learning tools will you use?
RETURN TO BLOOM:  WHAT WOULD YOU DO IN AN ONLINE CLASS?  LOWER ORDER SKILLS

REMEMBER
Recognize or recall facts
• Identify
• List
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• State

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Questions? Let’s discuss!