Creating Escape Room Activities For Traditional and Online Learning

Dr. Valerie Nelson, Jalisa Monroe, Jason Crea
Online Learning Consortium Accelerate Conference
November 20, 2019
Evaluate Sessions and Win!

- Download and open OLC Conferences mobile app
- Navigate to specific session to evaluate
- Select “Evaluate Session” on session details screen (located under session type and track)
- Complete session evaluation*

*Each session evaluation completed (limited to one per session) = one contest entry

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Workshop Objectives

1. Participate in a short escape room activity.

2. Review a framework that can be used when designing an instructional escape room activity.

3. Examine online implementation options and advantages for instructional escape rooms.

4. Discuss benefits of instructional escape rooms for learners and instructors.

5. Work in small groups to design an in-class escape room activity to reinforce course content mastery.
Agenda

Group Activity

Design Framework

Online Implementation

Benefits

Design Challenge
ESCAPE ROOM ACTIVITY!
Team OLC received a message that Dean X has sent his instructors an encoded number while in captivity. Can you analyze the documentation obtained to recover the number?
WHAT JUST HAPPENED?

➢ Content Manipulation
➢ Content Recall and Connections
➢ Team/Group Dynamics
➢ Gamification
➢ Critical Thinking
➢ Problem Solving
1. 1, 2
2. 1, 2
3. 5
4. 1
5. 5
6. 2
7. 4


Social

RC

Esteem

OD

X + 3 = 11
3X - 2 = 1
2X + 1 = 65
3X = 18
4X - 20 = 20

Safety

LO
Self-Actualization

ED

Boron, Lanthanum, Carbon, Potassium, Chromium, Osmium, Sulfur

Phosphorus, Iodine, Nitrogen, Potassium, Helium, Argon, Tennessine

Physiological

1. Create
2. Kinesthetic
3. Visual
4. Apply
5. Constructivist
6. Auditory

### What Is It?

<table>
<thead>
<tr>
<th></th>
<th>Education Theory</th>
<th>Learning Style</th>
<th>Bloom’s Taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>E</td>
<td>M</td>
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<td>O</td>
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<td>5</td>
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<td>S</td>
<td>E</td>
</tr>
<tr>
<td>6</td>
<td>T</td>
<td>W</td>
<td>N</td>
</tr>
</tbody>
</table>

1. Create- (Bloom’s- M)
2. Kinesthetic- (Style- A)
3. Visual- (Style- S)
4. Apply- (Bloom’s- L)
5. Constructivist- (Theory- O)
6. Auditory- (Style- W)
Name That State!

POSITION

1. 1, 2 (OR)
2. 1, 2 (DE)
3. 5 (R)
4. 1 (T)
5. 5 (H)
6. 2 (E)
7. 4 (M)
Physiological

Safety

Social

Esteem

Self Actualization

CO

LO

RC

OD

ED
<table>
<thead>
<tr>
<th>Element</th>
<th>Symbol</th>
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<tbody>
<tr>
<td>Boron</td>
<td>B</td>
</tr>
<tr>
<td>Lanthanum</td>
<td>La</td>
</tr>
<tr>
<td>Carbon</td>
<td>C</td>
</tr>
<tr>
<td>Potassium</td>
<td>K</td>
</tr>
<tr>
<td>Chromium</td>
<td>Cr</td>
</tr>
<tr>
<td>Osmium</td>
<td>Os</td>
</tr>
<tr>
<td>Sulfur</td>
<td>S</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>P</td>
</tr>
<tr>
<td>Iodine</td>
<td>I</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>N</td>
</tr>
<tr>
<td>Potassium</td>
<td>K</td>
</tr>
<tr>
<td>Helium</td>
<td>He</td>
</tr>
<tr>
<td>Argon</td>
<td>Ar</td>
</tr>
<tr>
<td>Tennessine</td>
<td>Ts</td>
</tr>
</tbody>
</table>

- B, La, C, K, Cr, Os, S = Boron, Lanthanum, Carbon, Potassium, Chromium, Osmium, Sulfur
- P, I, N, K, He, Ar, Ts = Phosphorus, Iodine, Nitrogen, Potassium, Helium, Argon, Tennessine
### Polybius Checkerboard

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
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<td>2</td>
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<td>H</td>
<td>I</td>
<td>J</td>
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<tr>
<td>4</td>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td>5</td>
<td>U</td>
<td>V</td>
<td>W</td>
<td>X</td>
<td>Y/Z</td>
</tr>
</tbody>
</table>

- **“WHITE TRIANGLE”**

- **“BLUE SQUARE”**

- **“GREEN CIRCLE”**
\[
\begin{align*}
X + 3 &= 11 \\
3X - 2 &= 1 \\
2X + 1 &= 65 \\
3X &= 18 \\
4X - 20 &= 20
\end{align*}
\]

\[
\begin{align*}
\text{CROSS} \\
\text{CIRCLE} \\
\text{TRIANGLE} \\
\text{HEART} \\
\text{SQUARE}
\end{align*}
\]

\[
\begin{align*}
8 \\
1 \\
32 \\
6 \\
10
\end{align*}
\]

\[
\frac{\left[ (\times \times \bigcirc \bigtriangleup) - \bigtriangleup \right]}{\left( \bigcirc \times \heartsuit \right)} = \frac{80 - 32}{6} = \frac{48}{6} = 8
\]
DESIGN FRAMEWORK
Design Thought Process

Theme
- Scenario
- Peak Interest
- Goals

Environment
- Location
- Group/Individual
- Materials

Activities
- Content
- Clues
- Connections
Design Strategy

1. Determine end goal(s) (key terms - word, phrase, number, etc.).
2. Identify types of activities to include.
3. Decide how many activities to include.
4. Determine what types of reference information to include.
5. For each activity, identify key terms and ordering.
6. Determine how many questions/parts of activity are needed to derive key terms.
7. Determine what type of access to activities will be given (open, conditional, etc.).
8. Consider room (or online) set-up.
Implementation Example - Psychology

1. Determine end goal(s) (key terms - word, phrase, number, etc.).
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1. KEYWORD = “ESCAPE”
2. Test Vocabulary (multiple choice) and Maslow’s Hierarchy of Needs (diagram)
4. Include Table on Psychological Responses as Reference
5. Key terms: Multiple Choice- “UNSCRAMBLE IT”; Diagram- “ESCAPE”
6. 6 Multiple Choice Questions, 6 Colored-Coded Letters in 5-level Diagram
7. Access to Diagram conditioned upon 100% correct completion of Multiple Choice
8. In-person activity (or Online)
<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repression</td>
<td>Repression is an unconscious mechanism employed by the ego to keep disturbing or threatening thoughts from becoming conscious.</td>
<td>During the Oedipus complex aggressive thoughts about the same sex parents are repressed.</td>
</tr>
<tr>
<td>Denial</td>
<td>Denial involves blocking external events from awareness. If some situation is just too much to handle, the person just refuses to experience it.</td>
<td>For example, smokers may refuse to admit to themselves that smoking is bad for their health.</td>
</tr>
<tr>
<td>Projection</td>
<td>This involves individuals attributing their own unacceptable thoughts, feeling and motives to another person.</td>
<td>You might hate someone, but your superego tells you that such hatred is unacceptable. You can 'solve' the problem by believing that they hate you.</td>
</tr>
<tr>
<td>Displacement</td>
<td>Satisfying an impulse (e.g. aggression) with a substitute object.</td>
<td>Someone who is frustrated by his or her boss at work may go home and kick the dog.</td>
</tr>
<tr>
<td>Regression</td>
<td>This is a movement back in psychological time when one is faced with stress.</td>
<td>A child may begin to suck their thumb again or wet the bed when they need to spend some time in the hospital.</td>
</tr>
<tr>
<td>Sublimation</td>
<td>Satisfying an impulse (e.g. aggression) with a substitute object. In a socially acceptable way.</td>
<td>Sport is an example of putting our emotions (e.g. aggression) into something constructive.</td>
</tr>
</tbody>
</table>
1. Another way to describe the “Social” level in Maslow’s Hierarchy of Needs is:
   • (ES) Psychological
   • (UN) Love/Belonging
   • (EV) Mental

2. “Blame shifting” or attributing one’s self-perceptions onto another is called:
   • (SC) projection
   • (ER) reflection
   • (CA) prejudgment

3. _____ is the act of satisfying an impulse with a substitute object in an acceptable way.
   • (YW) Regression
   • (PE) Avoidance
   • (RA) Sublimation

4. A movement back in psychological time when one is faced with stress is called:
   • (MB) Regression
   • (HE) Recall
   • (RO) Anxiety

5. When we want to avoid disturbing thoughts, we often _____ them.
   • (RE) deny
   • (LE) repress
   • (OM) ignore

6. Repression, denial, regression, sublimation, and projection are all forms of _____.
   • (IT) defense mechanisms
   • (EN) avoidance tactics
   • (SS) depression
Maslow’s Hierarchy of Needs

- **Physiological**: Basic needs – e.g. food, shelter
- **Safety**: Safe working environment; job security
- **Social**: Feeling wanted, sense of belonging, part of team
- **Esteem**: Self-respect, level of status
- **Self-Actualization**: Intellectual needs, fulfilling potential, achieving targets
ONLINE IMPLEMENTATION
Online Implementation

1. Create individual, separate items as point/score assignments.
2. Use set-up where student enters correct answers as assignment submission.
3. Decide time allotment (for each activity) as appropriate; could be untimed.
4. Set unlimited attempts for each activity.
5. Determine order of activities/items.
6. Set up conditional availability/adaptive release based on 100% score of previous item in sequential order.
Useful Analytics

- How many attempts until arriving at correct answer?
- What material needed to be reviewed?
- Which activities required more time? Less time?
- Were the incorrect answers pretty close or really far off?
- How far down the trajectory was traversed? What was the highest level achieved?
LEARNER AND INSTRUCTOR
Learner Benefits

- Manipulate Content
- Gamification - Fun!
- Learn by Trial & Error
- Learn from Peers
- Motivation to Understand
- Skill Level Identification
- Problem Solving
- Critical Thinking
- Exploration & Research
Instructor Benefits

- Learner Strengths
- Learner Weaknesses
- Assessment
- Intervention & Support
- Learner Confidence
- Class Strengths
- Class Weaknesses
Design Challenge!

- **OBJECTIVE:** Test understanding of plotting ordered pairs and related concepts

- **VOCABULARY:**
  - x/y - coordinate
  - x/y - axis
  - ordered pair
  - vertical/horizontal line

- **STEPS:**
  1. Look at the ordered pair.
  2. Find x-coordinate on x-axis.
  3. Proceed up/down to the y-coordinate along vertical line at this location.
  4. Plot the point here.

Keyword = ESCAPE

3 Activities

Vocabulary + Concepts
PLEASE COMPLETE OLC WORKSHOP EVALUATION

That's all Folks!
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