LEVERAGING Microlearning
COEH webinar
September 2, 2020

PRESENTED BY
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- Heather Davis-Russell

OVERVIEW
What is microlearning why is it important?

HOW TO...
do stuff

EXAMPLES
eLearning, videos, ILT

RESOURCES
Free tools to create impactful trainings

ACTIVITY
polling
Overview

Microlearning
SMALL UNITS OF LEARNING
Training that delivers short bursts of content for learners to digest. Efforts to convey one topic at a time (as part of a larger learning program).

Benefits
1. **Reduce cognitive overload**
   short-term memory is limited, therefore need to simplify so it’s easily processed and retained
2. **Focus on skills**
   vs. memorization
3. **Adapt adult learning principles**
   making use of existing experience/skills, motivation, and readiness
The average human attention span is around 7 min.

Challenges WITH TRADITIONAL APPROACHES
Content and clock focused

Ebbinghaus’ Forgetting Curve

Percentage retained

Retention interval

After two weeks

CONE OF EXPERIENCE
EDGAR DALE

YOU REMEMBER
YOU ARE ABLE TO

PASSIVE LEARNING

ACTIVE LEARNING

10% of what you read
20% of what you hear
30% of what you see
50% of what you see and hear
70% of what you say and write
90% of what you do

READ
HEAR
VIEW IMAGES
WATCH VIDEOS
EXHIBITIONS
WATCH A DEMONSTRATION
PARTICIPATE IN HANDS-ON WORKSHOPS
DESIGN COLLABORATIVE LESSONS
SIMULATE A MODEL OR EXPERIENCE A PHENOMENON
DESIGN/PERFORM A PRESENTATION/EXPERIMENT

DEFINE
LIST
DESCRIBE
EXPLAIN
DEMONSTRATE
APPLY
PRACTICE
ANALYZE
DEFINE
CREATE
EVALUATE
How to...

**TIME + ACTIVITY**

**Step 1**
Break into smaller units of time
"CHUNK"

**Step 2**
Integrate activities (active learning)
"PRACTICE"

Lessons 1 through 5

1 hour

Lesson 1: 15 min
Lesson 2: 10 min
Lesson 3: 10 min
Lesson 4: 10 min
Lesson 5: 15 min
### DO

- **1 concept every 10 min**
  - Deliver in small packages

- **Facilitate activities**
  - Scenarios, roleplays, simulations

- **Give breaks**

- **Repeat to reinforce**
  - Use practice, videos, infographics, quizzes

- **Evaluate to improve retention**
  - Pre- and post- tests are preferable

### DON’T

- **10 concepts in 1 hour**

- **Lecture**

- **Cover topic after topic**

- **Force memorization**

- **Assume learning took place**

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**Agenda**

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>9:00 am - 9:15 am</td>
<td>Welcome (15 min)</td>
<td>Vivi Chen, vice pres.</td>
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<tr>
<td>9:15 am - 10:15 am</td>
<td>Understanding (16 min)</td>
<td>Janet Devine, EID, etc.</td>
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<tr>
<td>10:15 am - 10:30 am</td>
<td>Review (15 min)</td>
<td>Christine Pander, etc.</td>
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<tr>
<td>10:30 am - 10:45 am</td>
<td>Core Competencies, Presentation (15 min)</td>
<td>Robert Spray, et al.</td>
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<td>10:45 am - 11:45 am</td>
<td>Customer Experience (60 min)</td>
<td>Crystal Pullen, etc.</td>
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<td>11:45 am - 12:00 pm</td>
<td>Influence &amp; Negotiation (15 min)</td>
<td>Cassondra Greenworth, M.S.</td>
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<tr>
<td>12:00 pm - 12:15 pm</td>
<td>Lunch</td>
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<tr>
<td>12:15 pm - 1:00 pm</td>
<td>Technical overview (15 min)</td>
<td>Janet Devine, EID, etc.</td>
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<tr>
<td>1:00 pm - 1:15 pm</td>
<td>Technical topics (1 hr 15 min)</td>
<td>Felipe Pende, etc.</td>
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<td>1:15 pm - 1:30 pm</td>
<td>Industrial Hygiene (30 min)</td>
<td>Jeff Chang, etc.</td>
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<tr>
<td>1:30 pm - 2:30 pm</td>
<td>Emergency Management (45 min)</td>
<td>James Dunbar, etc.</td>
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<td>2:30 pm - 3:30 pm</td>
<td>Environmental Health (1 hr 15 min)</td>
<td>Mei Wang, etc.</td>
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<td>3:30 pm - 3:45 pm</td>
<td>Break</td>
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<td>3:45 pm - 4:30 pm</td>
<td>Pandemic outlook</td>
<td>James Cauwe, etc.</td>
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<td>4:30 pm - 5:15 pm</td>
<td>Group practice (15 min)</td>
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<td>5:15 pm - 6:00 pm</td>
<td>Networking</td>
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<tr>
<td>6:00 pm - 6:15 pm</td>
<td>Networking</td>
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<tr>
<td>6:15 pm - 7:30 pm</td>
<td>Teamwork (1 hr 15 min)</td>
<td>Janet Devine, EID, etc.</td>
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<tr>
<td>7:30 pm - 8:00 pm</td>
<td>Reflection, graduation, reflection group discussions</td>
<td>Janet Devine, EID, etc.</td>
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Problem

Imagine you walked into a conference session that sounded interesting. After 5 minutes you wanted to leave. There is another meeting you want to go to, but you’re sitting in the front row. What would you do?
Four Corners

Place questions on flipcharts in each corner. Break up into 4 groups. Assign each group to answer one of the questions.

1. Place questions on flipcharts
2. In each corner of the room
3. Break up into 4 groups
4. Assign each group to answer one of the questions
Compare & Contrast enables critical thinking and builds memory
Simulations

1. Incident Name: Emergency Comm.
2. Date: 09/24/12
3. Time: 1:00 pm

INCIDENT BRIEFING

4. Map Sketch

On Wednesday, March 21, 2012 at approximately 1:00 pm, Dr. De La Rosa called to notify you of a hazardous materials spill in the EHS building due to a spill. The spill occurred in the back parking lot of the EHS building.

The spill contained a mixture of hazardous materials, including hydrochloric acid and sodium hydroxide (NaOH).

Gamification

- Use interactive games and toys.
- Build in competition and rewards

Legos | Emergency Comm.
Legos | HAZWOPER
Jeopardy | Emergency & Fire Safety
Jenga | Accident Investigations
Pools | Decontamination
Audience Response Systems

Gamification

Encourage people to be the producers of knowledge, not just the consumers.
Examples

Classroom | EXAMPLES

Close your eyes and follow directions

Customer Complaints Roleplay
Small group discussion

Topics
- Priorities
- Credibility
- Demonstrate effectiveness
Small group DISCUSSION
What are common characteristics of each team?

Group activity
- Handwashing (hygiene)
- Avoid a pandemic outbreak
Resources

Video
- Pexels | free video files
- Vyond | animation services

Audio
- Audacity | audio editor
- Bensound | royalty free music

Images
- Canva | graphic design tool
- Flaticon | free icons

Assessments
- Kahoot | game-based platform
- Mentimeter | audience survey tool

Collaboration
- Note.ly | corkboard & stickies
- Realtime Board | whiteboard & stickies

http://training.ucr.edu/references/resources
Activity

Go to www.menti.com and use the code 56 67 78 9

What is your name?

Please enter the code

Submit

Find nearby presentations
Microlearning helps to:

- Make people memorize
- Demotivate people
- Reduce cognitive overload
- Deliver large units of learning

To integrate microlearning, reduce __ and integrate activities ("practice").
Go to www.menti.com and use the code 56 67 78 9

Results

2813 p  Jonathan
2785 p  Sabrina
2738 p  Jessica
2738 p  Jonathan J
2723 p  Jenny
2718 p  Karen
2695 p  Eileen
2684 p  MC
2665 p  Alex
2641 p  Andrew

Do you have any questions?

- thanks!
- i appreciate your expertise
- Will share the slides and links
- Do you have recommendations of how to develop online simulations?
- Good information
- Activities in virtual workshops ideas please?
- How many sessions are the best for one day
- How do motivate large health systems to use these techniques?
- How big of a group do you recommend for this level of training and how long of the sessions do you recommend?
- Can anyone use menti?
- Is there a preference for small standalone courses vs more comprehensive courses with micro topics?
- Does your website show examples?
QUESTIONS?

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