Micro-Learning and Gamification: A Winning Combination for Real Learning Outcomes
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Featuring industry expert Karl Kapp and mLevel's Jordan Fladell and Colin Daymude

@kkapp @mlevellearning
learnbetter
Agenda

What is microlearning?
Why does it work?
How do you plan a roll out?
Learning from content accessed in short bursts, content which is relevant to the individual, and repeated over time to ensure retention and build conceptual understanding


A way of teaching and delivering content to learners in small, very specific bursts. The learners are in control of what and when they're learning.

--John Eades, President and CEO of LearnLoft
## Definitions:

<table>
<thead>
<tr>
<th>Microlearning</th>
<th>Macrolearning</th>
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<tr>
<td>• I need help now.</td>
<td>• I want to learn something new</td>
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<tr>
<td>• 2 minutes or less</td>
<td>• Several hours or days.</td>
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<tr>
<td>• Declarative, Conceptual Knowledge</td>
<td>• Problem-solving, procedures, interpersonal skills.</td>
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<td>• Search by asking a question</td>
<td>• Content guided by others.</td>
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<td>• Video or text</td>
<td>• People to talk with, learn from.</td>
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<tr>
<td>• Indexed and searchable</td>
<td>• Coaching and support needed.</td>
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<td>• Content rated for quality utility</td>
<td>• Content consumed when delivered.</td>
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<tr>
<td>• Is the content useful and accurate?</td>
<td>• Is instructor authoritative and educational?</td>
</tr>
<tr>
<td>Videos, articles, code samples, job aids</td>
<td>Courses, classes, MOOCs, Programs</td>
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Two inherent problems with mass practice (AKA Cramming)
- Learner fatigue
- Likelihood of interference with preceding & succeeding learning
Ebbinghaus Forgetting Curve

https://www.linkedin.com/pulse/disruption-digital-learning-ten-things-we-have-learned-josh-bersin/
A study using a randomized control group in a trial at ten sites in southeast India with over 500 subjects found remarkable results for distributed practice.

Working Indian men (aged 35—55 years) with impaired glucose tolerance were randomly assigned to either a mobile phone messaging intervention or standard care.

“Bike to work instead of drive.”
“Don’t eat while watching TV.”
Lowered risk of developing Type 2 diabetes by 36%.

Now let’s look at “Retrieval Practice.”

Basically, it is testing the learner. Turns out testing creates learning.

“Retrieval Practice” alone can provide improved recall performance by as much as 10-20%.
Combining Spaced Retrieval and Retrieval Practice are really powerful.

One study in the subject of Anatomy and Physiology revealed retention benefits of between 35% and 61% with average of 41%.

Checks their smartphone 9 times per hour.

Gives content less than 7 seconds to decide if it has their attention.

Uses 2+ devices per day.

https://blog.elucidat.com/mobile-learning-design-strategies/
70% use their own smartphone to learn.

67% of people learn on mobile devices.

https://blog.elucidat.com/mobile-learning-design-strategies/
Where are People Learning?

- 27% during the work commute
- 47% in the evenings and weekends
- 52% at the point of need
- 42% at work
- 30% when notified of an update

MICROLEARNING USE
Does your organization use microlearning?

- Yes, we currently use microlearning: 38%
- No, we don’t use microlearning, but we plan to start in the next 12 months: 41%
- No, we don’t use it nor do we plan on starting to use it in the next 12 months: 20%

2017 ATD Research Report: Microlearning: Delivering Bite-Sized Knowledge
The value of micro-learning is in the small, concentrated instruction that is provided. Rather than overwhelm a person with hours and hours of information, a microlearning experience only lasts a few minutes.
Value of Microlearning

- Short time bursts
- Delivered anywhere
- Less learning interference
- Narrow topic focus
- Personalized
- At the point of need
Microlearning Uses:

Types of Microlearning

- Refresher - Pull through from previous
- Targeted — New or advanced learning.
- Enhancement Training - Performance support or remediation.
Mistakes to Avoid

• Microlearning should not be considered “shrunken” head learning.
• Can’t simply “chop up” longer courses.
• Topic too broad.
• Lack of planning entire microlearning sequence.
Welcome to the iLookOut for Child Abuse project

Sponsored by the Penn State Center for the Protection of Children

At its heart, the iLookOut project provides mandated reporter training specifically designed for people who work or volunteer at child care programs.

Read more
# Planning Microlearning

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<tr>
<th>LOI 4: Understand &amp; recognize possible child abuse</th>
<th>LM 8: Various signs of abuse — multiple choice questions on bruises</th>
<th>Learning Module Script</th>
<th>Knowledge Test (KT) Questions</th>
<th>Reinforcement</th>
<th>Reinforcement Modality</th>
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<td>LM 24: Which bruises are suspicious for abuse — yes/no questions</td>
<td>Bruises are a huge red flag in any child who isn’t yet walking or cruising.</td>
<td>&quot;If you may learn something important by asking. But nothing her mom says will change the fact that a 5 month-old infant had a bruise.&quot;</td>
<td>KT 3.13: Any bruising on an infant who has not started falling to stand (Y/N/Unsure)</td>
<td>What can cause a child to sustain a bruise?</td>
<td>Case vignette + multiple response items</td>
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**Figure 4.** Example of Cognitive Map, showing relationship between pings and other iLookOut elements.
Planning Microlearning

Fig. 3. Badges
Microlearning provides short bursts of learning focused on one learning objective and lasting for a short period of time.
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