

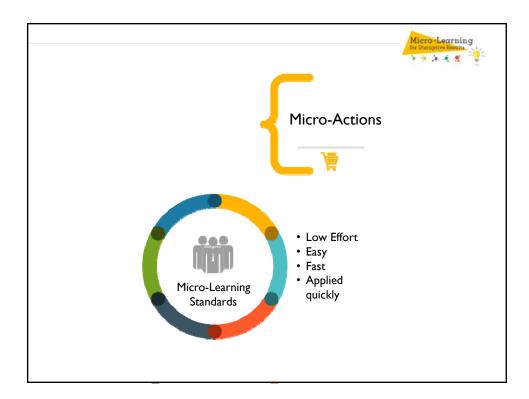
Micro-Learning Design and Development

Exercises and References



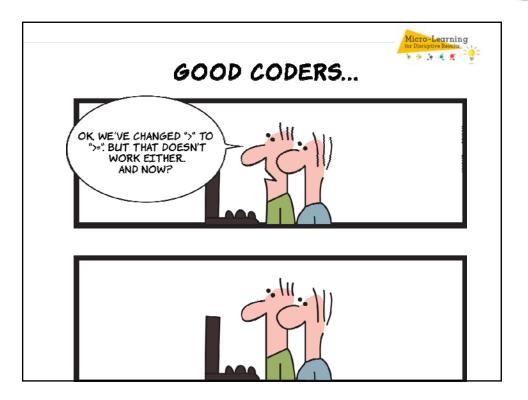
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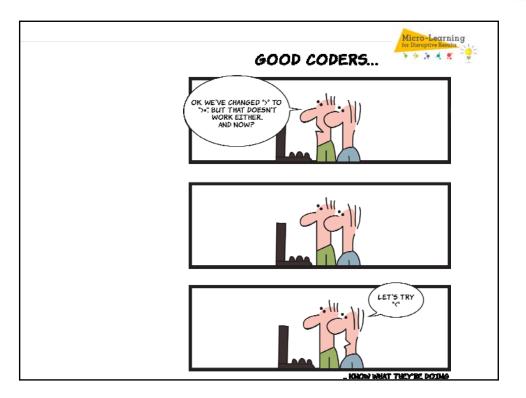
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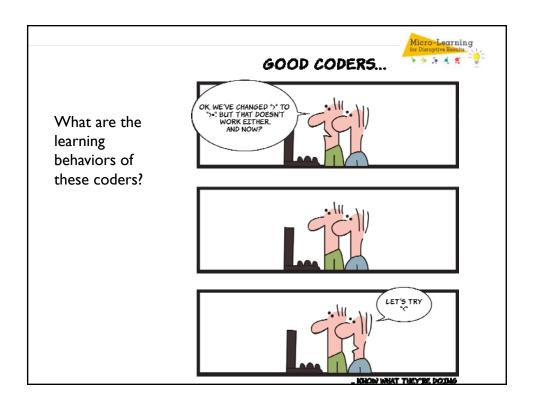












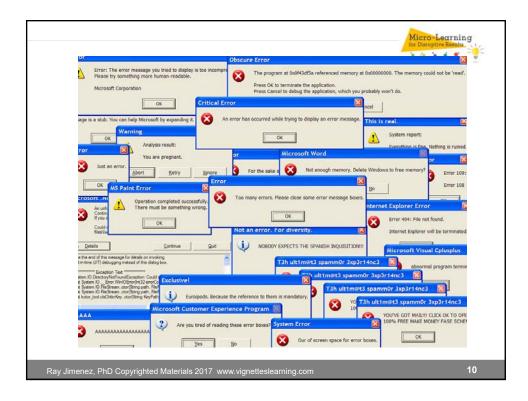














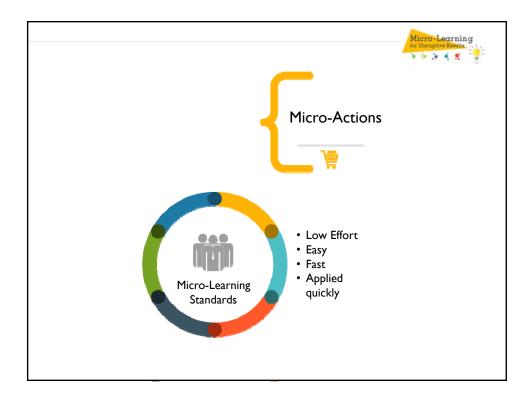




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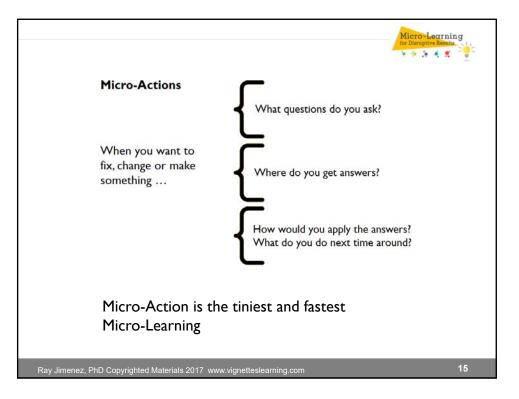






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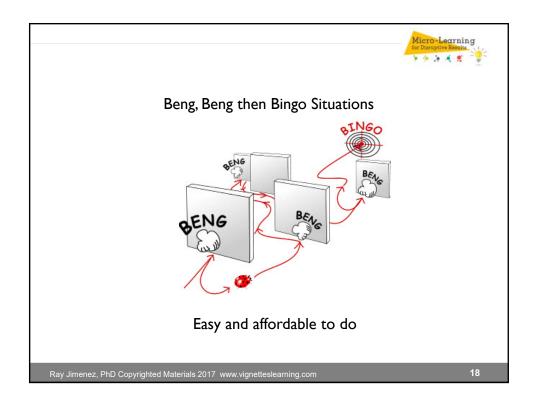






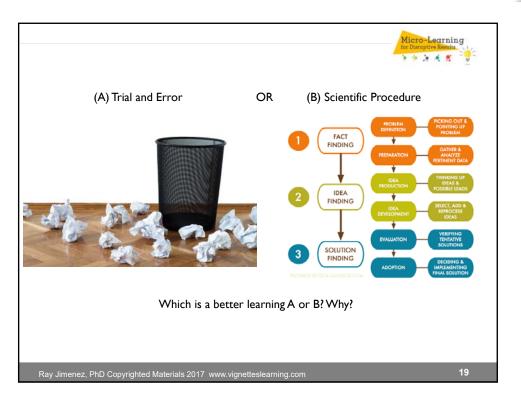


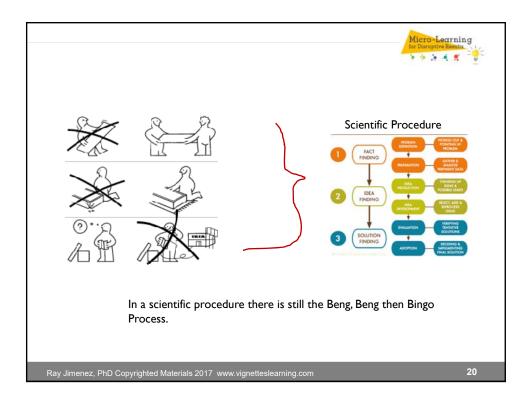




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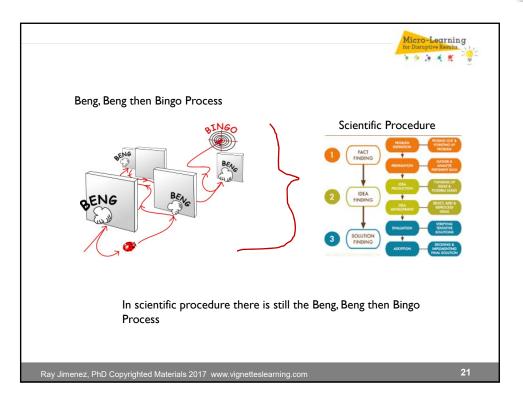


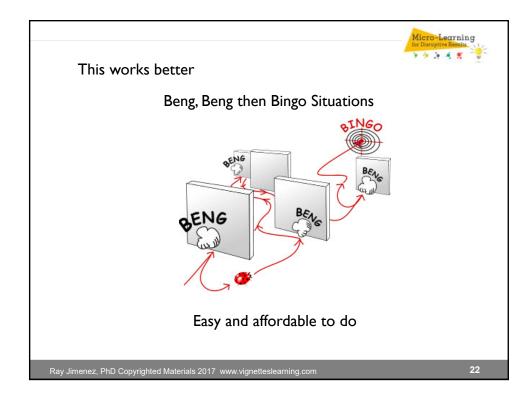




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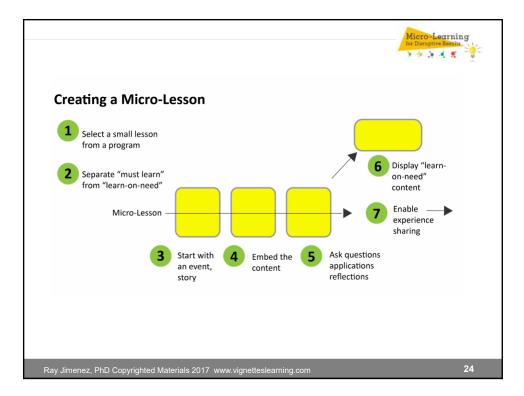




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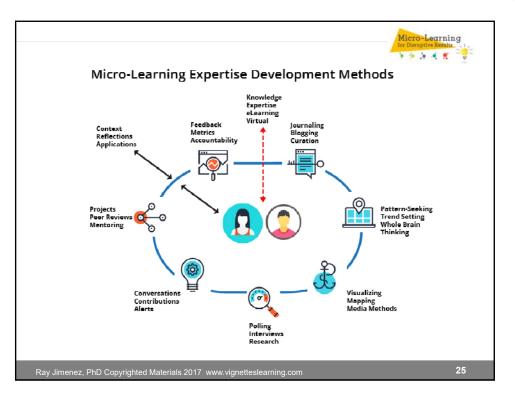


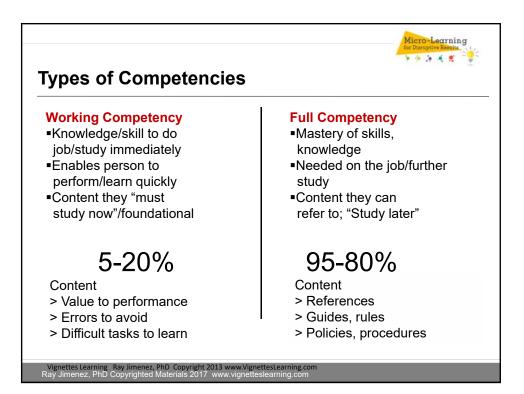




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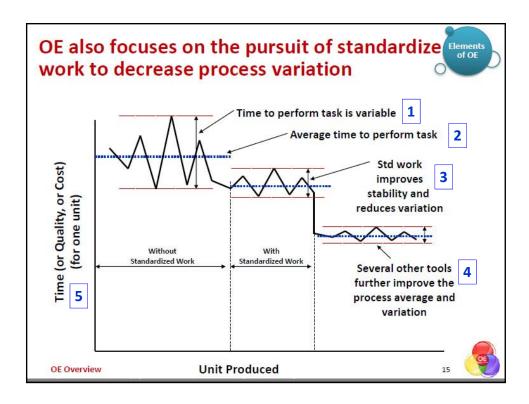




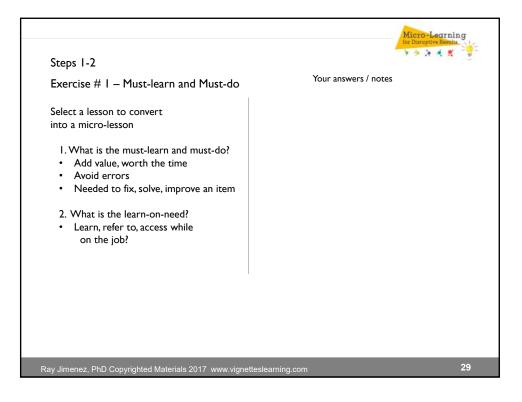


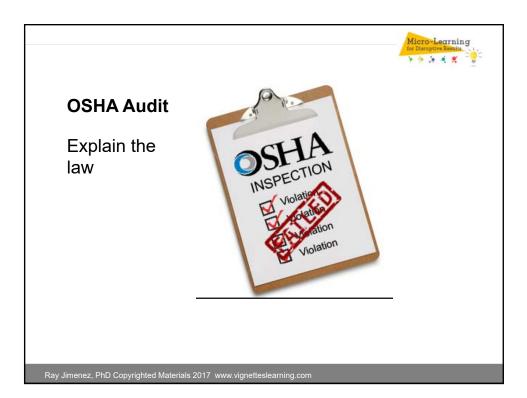


| | | Micro-Learning for Disruptive Relation | | | |
|--|-------------------------------------|---|--|--|--|
| | Data and content specifics | | | | |
| | Urgent | References | | | |
| What items are "must-learn" or "learn later" | High returns on time | Avoid errors | | | |
| content? | How to's | Steps / procedures | | | |
| | Policies | Prices list | | | |
| | Critical incidents | Software features | | | |
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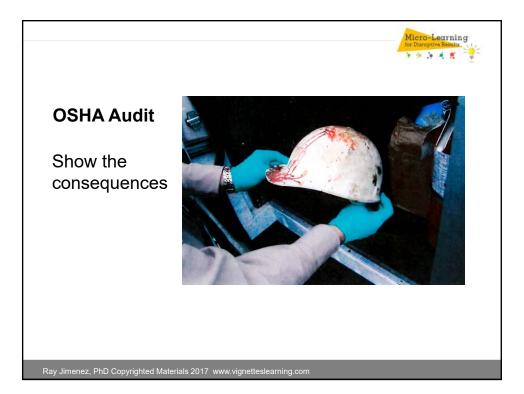




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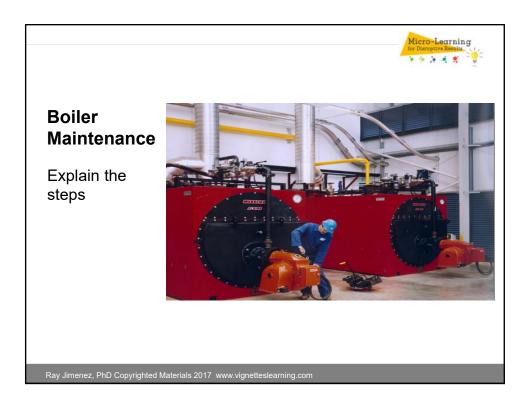




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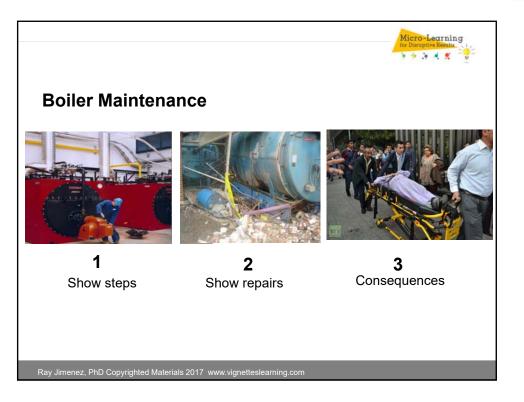






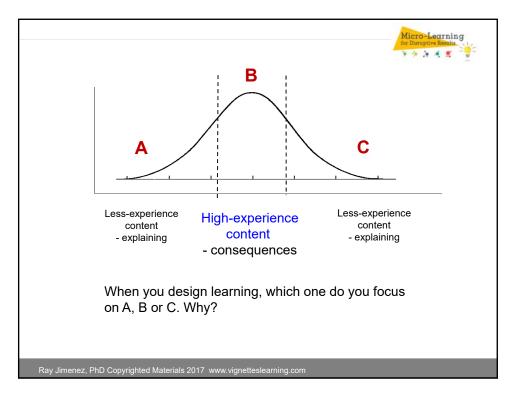


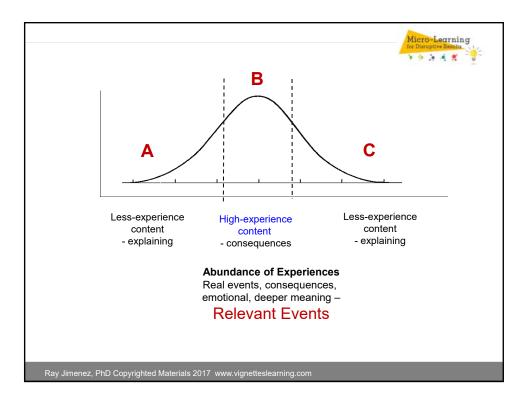




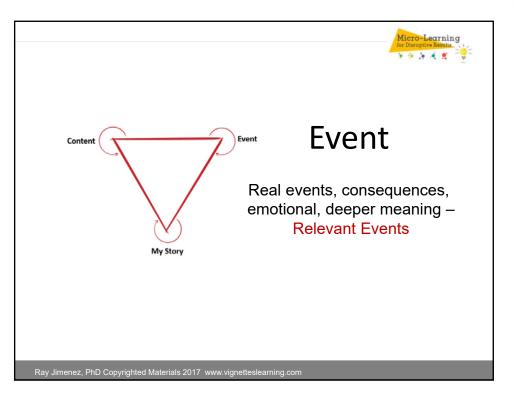


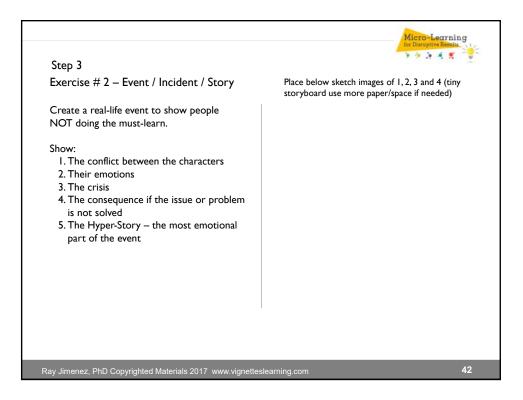




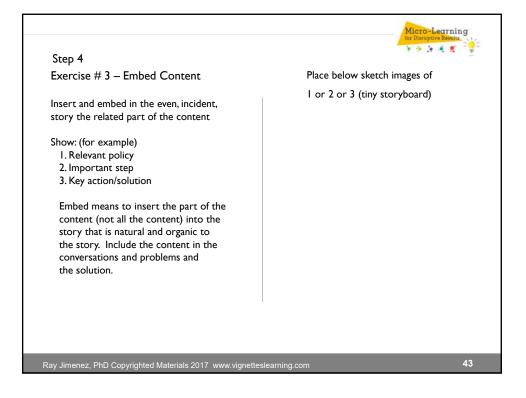






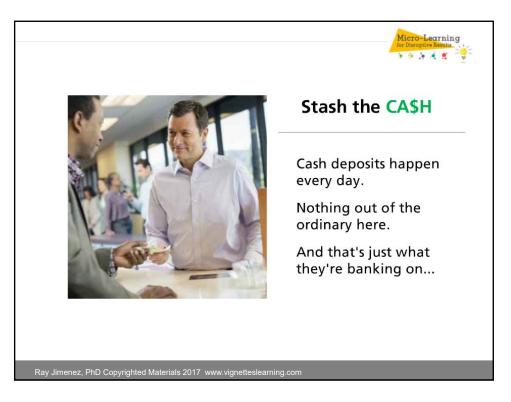














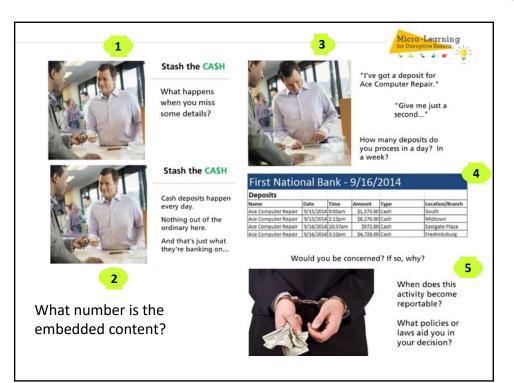
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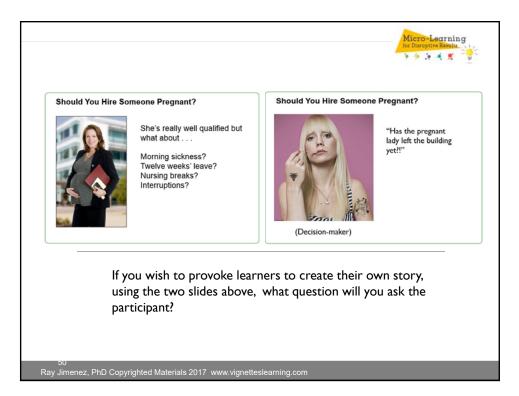


| Deposits | | | | | |
|---------------------|-----------|---------|------------|-------------|-----------------|
| Name | Date | Time | Amount | Туре | Location/Branch |
| Ace Computer Repair | 9/15/2014 | 9:05am | \$1,573.00 | Cash | South |
| Ace Computer Repair | 9/15/2014 | 2:13pm | \$8,276.00 | Cash | Midtown |
| Ace Computer Repair | 9/16/2014 | 10:37am | \$972.00 | Cash | Eastgate Plaza |
| Ace Computer Repair | 9/16/2014 | 3:12pm | \$4,728.00 | Cash | Fredricksburg |
| W | ould you | u be co | oncerned | l? If so, v | vhy? |



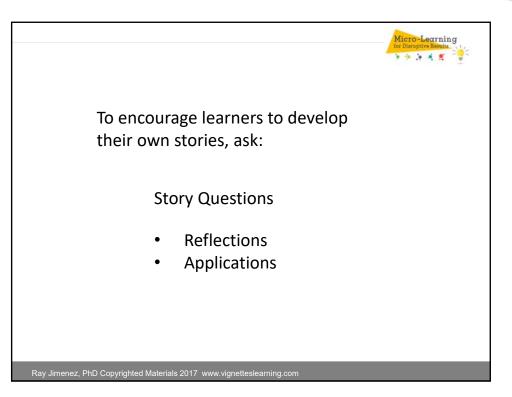


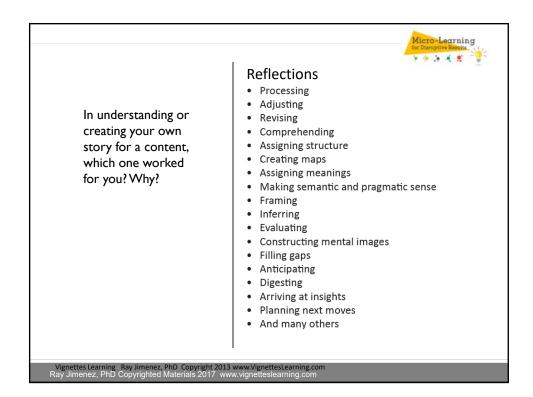




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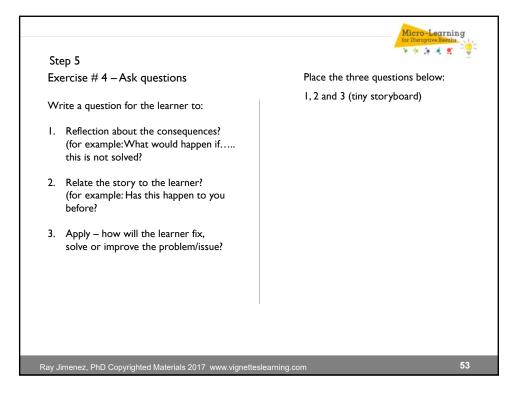


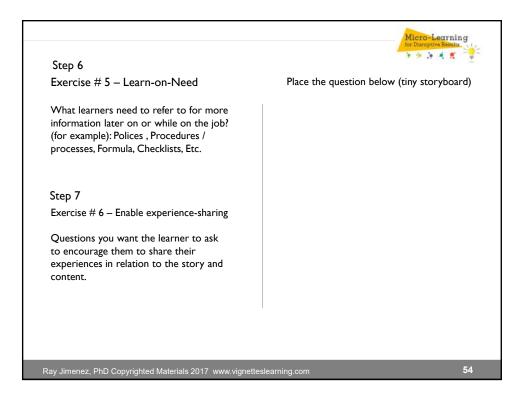




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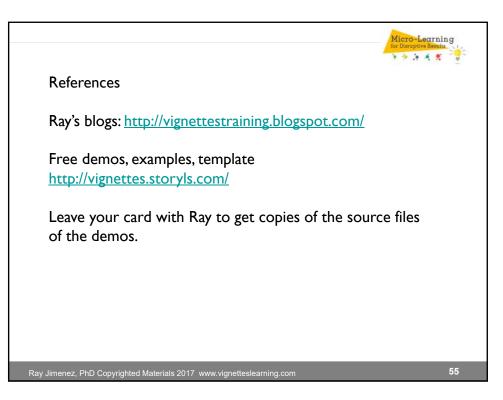






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Workshop Handout Part 4



The Seekers—"Get-It-Now, Do-It-Now" Learners Week 1 / Subject 1

Get-It-Now and Do-It-Now Workers and Learners

Ray Jimenez, PhD





Today's Learning Environment

- "Only **38%** of employees feel they have access to effective learning at work. (*Ellis and Kuznia, 2014*) The companies that fail on this front are missing a critical opportunity: over three-quarters of employees say learning is a key driver of employee engagement. Young employees particularly demand it, valuing the chance to develop professionally more than any other job perk (**60% more than** cash bonuses, in fact)." (*PricewaterhouseCoopers, 2011*)
- "1% of a typical work week is all that employees have to focus on training and development." (*Deloitte*)
- "Life in the digital age has driven workers' attention spans to all-time lows: in 2014, the **average attention span was 59.5 seconds** (*BBC, 2015*) and continues to decline. Most learners even consider a **2-minute video** too long to watch. (*Fishman, 2016*) Forty percent (40%) of users abandon web pages **within 3 seconds** if they load too slowly." (*Akamai, 2009*)
- "58% of employees say they'd use their company's learning software more if the content was broken up into shorter lessons." (*Brian Westfall, Software Advice*)
- "It takes **40 to 50 minutes** to re-learn every hour of material that is not reinforced with short, daily reviews." (University of Waterloo)
- In clinical studies, just-in-time learning has been found to be **up to 7 times more effective** than traditional, long-form training. (*Formica, et al., 2010*)

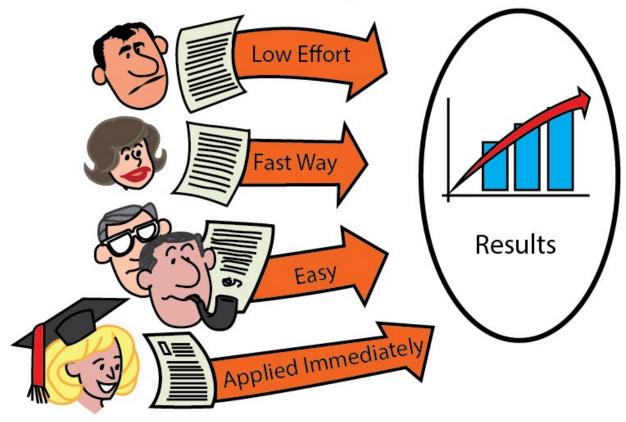


- **"4 out of 5** learning professionals say micro-learning is changing the knowledge acquisition process by effectively delivering it within the workflow." (Job and Ogalo, 2012)
- "Micro-learning produces **17% greater transfer**, is **30% cheaper** and delivers **almost twice the ROI** of a traditional approach." (*MindGym*)



The Seekers—"Skip Learning, Disruptive Results" Week 1 / Subject 2

Micro-Learning Standards





- Most designers and learning specialists start with the content rather than the needs of learners and workers or their situation; they don't ask the what, when, why, etc.
- There's a call for shifting the focus from production of too much content to smaller units of learning in order to fit the needs of the learner.
- Micro-learning avoids information dump.
- Micro-learning equips workers to quickly respond to problems.
- Micro-learning is learning that:

• Requires the lowest effort

The opposite of micro-learning is content that requires tedious reading, causes confusion and doesn't focus on providing immediate and valuable content.

• Shows the quickest way

The answers to problems don't always need to come in a formal course or elearning. The solution could come from an infographic, a flashcard, a guide, FAQs, or a comment from a peer. All of these also have to be searchable and findable; otherwise, they fail as micro-learning.

• Allows the fastest application

Quick access to knowledge and solutions allows learners to fix and change things. This means providing learners only step 8 instead of forcing them to learn all 10 steps when step 8 is all they need to succeed.



• Immediately useful

Content is updated, constantly rated as a good value and proven to work. For instance, tips, how to's and quick guides don't need to be memorized and applied later; they can be used to instantly solve a specific problem.

• Micro-learning always starts with the needs of the learners and workers. What do they want to fix and change now, immediately, not later? Any content that moves the learner away from this does not succeed as micro-learning.



ZAP[™] Micro-Learning Week 1 / Subject 3

Free Learners to Fix, Change and Make Things Immediately





ZAP[™] Micro-Learning Principles

Micro-Learning ZAP[™] Zoom In Access Perform



- 1. The ZAP[™] Micro-Learning Principles serves as our main learning framework for the workshop and development processes.
- 2. To help the worker and learner micro-focus, we follow the ZAP[™] Micro-Learning Principles.
- 3. The Principles focus on:
 - **Z**ooming in on the most useful and tiniest context and content;
 - Accessible and ultra light, 24/7 workflow and get-it-now, do-it-now environments; and
 - **P**erformance impacts, capturing analytics and feedback, and continuous and progressive rebuilding of micro-learning experiences.



- 4. Step 1 -- Fix It, Change It
 - a. The goal of micro-learning is to help learners and workers fix and change things.
 - b. In this step, learners ask the context questions "What" and "Why." Their answers help establish gaps and opportunities as well as personal aspirations for growth and rewards.
- 5. Step 2 -- Solutions
 - a. This step answers the questions "Where" and "How."
 - b. To find solutions to problems, learners consult at least four sources for answers: experience, knowledge, tools, and other people. These choices are abundant and may be used alone or in combination, depending on the nature of the problem, its complexity, and the demands of time.
- 6. Step 3 -- Standards

The effectiveness of micro-learning is measured by the immediate value it provides to the learners. To ensure success, micro-learning should be:

- Low effort
- Easy
- Fast
- Applied quickly
- Useful immediately

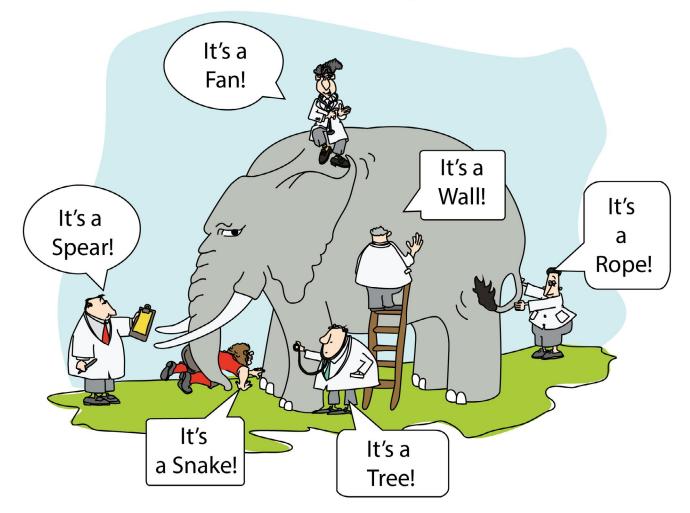


- 7. Step 4 -- ResultsMicro-learning positively impacts the company and organization by:
 - a. Adding value,
 - b. Reducing error,
 - c. Decreasing cost,
 - d. Diminishing difficulty, and
 - e. Providing faster solutions.
- 8. The ZAP[™] Micro-Learning Principles work for workers and learners as well as for the implementers (designers, trainers, developers and leaders).
- 9. Workers/learners can view their work using the ZAP[™] Micro-Learning Principles. This is explained more in "Learning How to Learn."
- 10. Implementers can refer to the ZAP[™] Micro-Learning Principles as an overriding flow in implementing micro-learning. The adoption of the Principles may vary widely, but the flow continues to be a good working model.
- 11. Although we freeze-frame the ZAP[™] Micro-Learning Principles to see the details of its parts, in actuality, the steps happen quickly -- in a matter of seconds and minutes. People behave accordingly as they follow the 4 steps.
- 12. The Principles reflect what learners or workers should do to be successful in their daily work.



Context-Setting Micro-Learning Week 1 / Subject 4

Who Decides the Right Context?





- Context refers to the meaning and application of an object, word, idea, situation, event, incident or items to be fixed and changed.
- Meaning comes from inherent objective information as well as the learners' interpretation.
- When workers or learners decide and take action to fix and change things, they always follow a context, whether fully understood or not.
- In Step 1, workers set the context from their personal understanding of the problem.
- There are two types of context setting: Intuitive and Deliberate.
 - Intuitive: When workers face an issue that is so small but the context is clear and obvious, they initially or most often use their intuition to solve the problem (side note: this type of intuition is referred to as "expert intuition"). They quickly take action and fix or apply the change. They go through the 4-step Micro-Principles so fast, almost without thought, just using their gut feel or intuition.
 - **Deliberate:** At times, workers exert a conscious and intentional effort depending on the demand of the tasks, their capacity, the issue's complexity, time requirement, and impacts. This usually happens where there are a lot of unknowns pertaining to the item to fix or change. Workers deliberately ask questions about sources of issues and potential benefits, and then evaluate decisions and actions based on constraints of time, complexity, outcomes and resource capacity.



- Workers can be intuitive or deliberate to a lesser or greater extent. Time, complexity, impacts, and capacities and skills dictate whether they approach the context intuitively or deliberately. They can also choose to approach an issue with a combination of both intuition and deliberate effort.
- When considering the context of an issue, there are two areas that learners must consider:
 - **Fix or Change**: errors, near misses, high scrap volume, high returns, low profits, penalties, inefficiencies, innovations
 - **Benefits**: self-discovery, recognition, freedom, trust, rewards, influence, advancement
- Workers collect information about an issue or item that needs to be fixed or changed. This information helps them establish the context.
- Context is usually set by factual or logical information such as records and history. However, the benefits or the emotional and motivational factors frequently drive context. Both factual and emotional context must be set in order to arrive at the right decision.
- Learning designers, developers and leaders should first focus their minds on setting the context of the learner and design the micro-learning based on that context. Additionally, learners and workers can benefit from acquiring skills on "learning to learn" methods, which starts with context setting.
- When context is clearly established, the actions and decisions of learners and workers are faster and more effective.



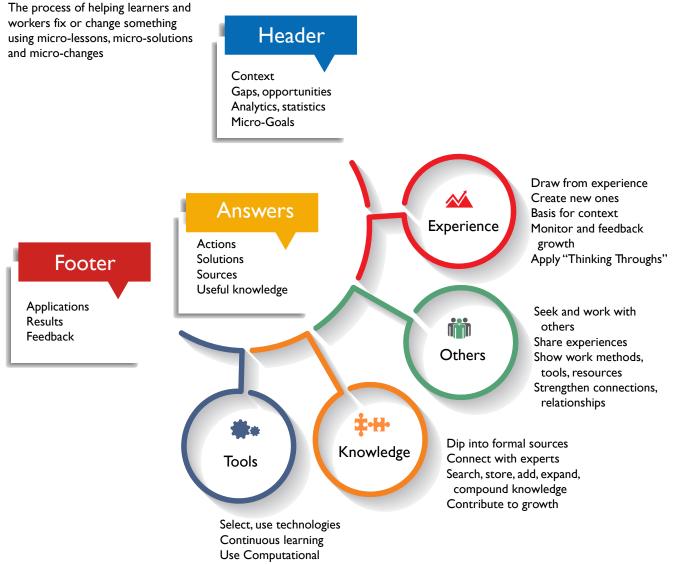
The Seekers—"Creating Micro-Actions" Week 1 / Subject 5

We Just Want to Fix, Change and Make Things Fast





ZAP[™] Micro-Actions



Thinking



• What is Micro-Action?

Micro-content is a small or short, stand-alone learning point that learners can apply or use immediately. Learning goes almost unnoticed. It is called Micro-Actions because of its intuitive way -casual, natural, easy -- and works in the same way we would do things.

• Types of Micro-Actions:

Micro-Actions can be a single word, an emoji, a sign, an image or a series of works and ideas. (*Hug, 2007*)

• How small should the Micro-Actions be?

The size of Micro-Actions is defined by the way learners consume content -- instant and quick.

• How do learners use Micro-Actions?

Learners use Micro-Actions while trying to complete a task.

- When completing a task ("My Tasks Now" mode), learners ask diagnostic questions. These are context questions (*Schank, 2011*) such as:
 - What's the outcome?
 - What do I know about this?
 - How should I proceed?
 - How will I know if it's done right?



• To be of maximum use, Micro-Actions must address four diagnostic questions:

Diagnostic headers (before the content)

- 1. What's the outcome?
- 2. What do I know about this?
- 3. How should I proceed?

Diagnostic footers (after the content)

- 4. How will I know if it's done right?
- 3 Elements of Micro-Actions:
 - Header questions (context)
 - Answers (context)
 - Footer questions (applications)
- Micro-Actions do not need to follow a specific sequence (such as header->content->footer). The sequence can be shuffled, especially when content is embedded in an incident and event.

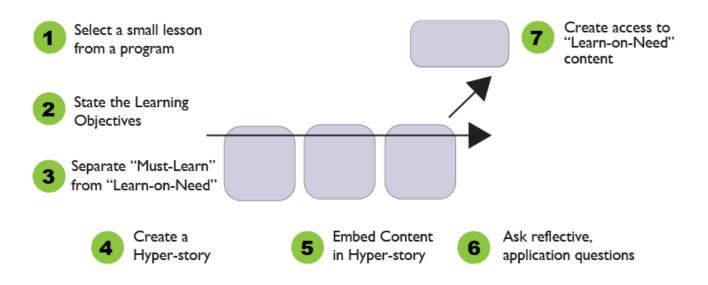


Creating Micro-Lessons Week 2 / Subject 6





Micro-Lesson Design and Development Guide



1. **Select a program that you are currently working with or intend to use.** This may be an existing or new program you wish to develop. Come up with a program title. Then focus on one lesson and provide the title as well. Select one small, short and substantive lesson only. Do not use an introduction, objective or reference. Match the lesson with something the learner wants to fix or change, or one you feel they must learn. **Alert**: If you find your lesson very long, you may need to divide it into several smaller ones -- a micro-lesson content that has a single idea and can stand alone.

2. State the learning objectives.

Present the learning objectives for your small lesson.



- 3. **Identify the "must-learn" and "learn-on-need" content.** Pinpoint the "must-learn" and "learn-on- need" content in the lesson. Check the incidents and events.
 - a. **Must-learn** -- also known as **Working Competencies**. It could be one or a combination of the following: 1) value (what is worth the time), 2) errors (what and how to avoid and prevent them), difficulty (what is difficult to learn and stops learners from fixing or changing things successfully)
 - Learn-on-need -- also referred to as Full Competencies.
 Select content that is appropriate for mastery learning, references, on-the-job tips, guides, FAQs, how to's, checklists and others.

There are certain reasons for selecting content. In traditional approaches, Subject Matter Experts (SMEs) provide most of the content. In micro-lessons, incidents, events and situations that need a fix or change are studied first. Then content is formulated. The approach focuses the micro-lesson to better meet the needs of learners and workers. The content also closely adheres to the Micro-Learning Standards of: Lowest effort, Fastest, Easiest and Applied immediately.

The incidents and events provide the factual context (data and information) and emotional context (anecdotes, narrative and stories). Do your own research. Ask workers and learners, and request information from partners, leaders, peers and SMEs.



Check out these sources of issues and needs: a) logs, records, statistics, metrics, b) Incident reports, c) customer complaints, d) reports on rejects, manufacturing defects, e) servicing and warranty costs, f) safety incidents, g) recorded call center client calls, h) profit/cost profiles, i) best solutions to known issues, j) workarounds, k) custom solutions, l) substitutions, m) near misses, n) delays in installations and deployment, o) repair costs, p) human errors, q) critical incidents, and others related to the "must-learn" content.

4. Select and magnify the hyper-story

From the incidents and events, state and amplify the emotional context through the selection of a hyper-story, narrative, anecdote and story to show the incidents and events.

5. **Presentation—Embed the factual content in your presentation of the hyper-story**

Present the hyper-story and the embedded factual content. Traditional lessons and writing focus only on presenting the facts. In micro-lessons, we show the hyper-story and include, integrate or combine (embed) the factual content in the hyper-story. These examples show the difference:

 Traditional writing: The allowed pressure is at 300 degrees.
 Micro-lesson: John burnt his hands since the pressure went beyond the allowed limits. He was in pain and landed in the hospital.

The following approaches may be used for your presentation which should illustrate the ideas used in decision-making and actions by the learner: a) applications (doing the work, fixing and changing); b) troubleshooting; c) problem-solving; d) cases and situations; e) small scenarios; f) simulations; g) anecdotes and narratives; h) metaphors, memes, and similes; i) experience sharing; j) small projects; k) demonstration; l) trial and testing; m) prototyping; n) preparation of proof-of-concept and others.



6. **Prepare Interactive Questions**

Interactive questions draw learners into the micro-lesson. There are two types of interactive questions: Reflection and Application. Examples of Reflection Questions are: What would happen? How do you see this? What are the consequences? Examples of Application Questions are: How would you solve this problem? What will you do? How would you apply this idea? Test the approach and share the outcomes.

7. Learn-on-need

References, on-the-job tips, guides, FAQs, how to's and checklists are considered learn-on-need. Identify which part of the reference is useful and related to the must-learn.



Micro-Learning for Disruptive Results

Exercise # 1 – Micro-Actions

Purpose –The goal of this exercise is to relate an experience where you applied Micro-Actions in a work situation. This also allows you to apply Micro-Actions in planning a simple design to assist workers and learners.

Submission – (1) Use this form to complete the right column. (2) Save the form as another document: **(Your Name) (Exercise # 1)**. (3) Create a Discussion and upload your document there. Review the PDF guide on submitting exercises, projects and discussions. (4) Preview three Exercise # 1 forms submitted by your peers and contribute by sharing a comment, suggestion or idea. This helps you learn from others and vice-versa. This last step is a good practice on developing expertise.

| Guide Questions | Enter Your Answers Below |
|---|--------------------------|
| Part 1 – Your Own Experience | |
| Task: What is one thing you had to fix or change something or make a new solution? | |
| Answer: How did you fix, change or make the solution work? What were the sources of your solutions and how did you go about it? | |
| Footer: What did you learn? What will you store or recall about what you learned? What will you do the next time around? | |



| Assessment: Reflect on what you would do differently now that you know the Micro-Learning Standards: low effort, fast, easy and immediately applied? | |
|--|--------------------------|
| Guide Questions Part 2 – Assisting a Learner and Worker | Enter Your Answers Below |
| You are designing an approach to help a learner or group of learners and workers. Select a topic, an issue or a concern that needs to be fixed, changed or require a new solution. What is the topic title? | |
| Header: What questions do you ask to help the person set the right context? | |
| Answer: What will you ask the learner and what will you provide in terms of knowledge source, experience or tools? | |
| Footer: What do you expect the learner to learn? How do you want the person to store or recall what he/she learned? In the future, what would you want the person to do given the same task? | |



| Assessment: Compare your approach against the Micro-Learning Standards: low effort, fast, easy and immediately applied. | |
|---|--|
| | |
| Your Insights | |
| What are your insights as a result of the exercise? | |



Micro-Lesson Development Exercise #2

About this Exercise

This exercise is an iterative process involving incremental development. Do as much as you can for each step. Your peers and mentors will provide feedback and suggestions along the way. You will continue working on this (you may have 3-4 iterations) until the end of the workshop. The overarching goal is that at the end of the workshop, you would have developed a good experience in designing and developing micro-lessons.

Purpose

The goal of this exercise is to help you apply the key ideas discussed in creating micro-lessons. Micro-lessons are created to help learners and workers learn through formal content but redesigned to meet Micro-Learning Standards: Low Effort, Easy, Fast, Applied Quickly, Useful Immediately. On the other hand, micro-actions are quick and instant fixing and changing of issues and items.

The scope of this exercise covers:

- 1. Selecting a small lesson
- 2. Stating learning objectives
- 3. Determining "must-learn" and "learn-on-need", and finding facts (the factual context)
- 4. Creating a hyper-story from events, incidents, and situations (the emotional context)
- 5. Presenting the embedded content (facts) within the incidents (emotional context)
- 6. Creating interactive questions
- 7. Identifying the "learn-on-need" references



7. Identifying the "learn-on-need" references

For this exercise, you are expected to write your ideas for each item in the form below.

Important: Use this form. Save your work using name "name" plus exercise #1 in the filename. See the PDF instructions on how to upload your projects.

Submission – (1) Use this form to complete the right column. (2) Save the form as another document: **(Your Name) (Exercise # 2)**. (3) Create a Discussion and upload your document there. Review the PDF guide on submitting exercises, projects and discussions. (4) Preview three Exercise # 2 forms submitted by your peers and contribute by sharing a comment, suggestion or idea. This helps you learn from others and vice-versa. This last step is a good practice on developing expertise.

| Exercise Guide | Exercise Entries |
|--|-------------------------------|
| | |
| 1. Select a program that you are currently working on or wish to use for this exercise. | 1. Select a program. |
| a. This might be an existing one or a new program you wish to develop. Provide the title. | a. Title of the program: |
| b. Focus on one lesson. Provide the title. Select only one lesson. This is one small lesson that is substantive. Do not use an introduction, objective or reference. | b. Title of the small lesson: |



| | <u>.</u> |
|--|-----------------------------------|
| Look for a lesson that matches some- thing a learner wants to fix or change, or a lesson you feel they must learn. Alert: Make your lesson short and small. If you find yourself covering a very long lesson, you may need to divide it into several smaller lessons. A micro-lesson's content is a single idea that can stand alone. | |
| 2. State the learning objectives. | 2. State the learning objectives: |
| State the learning objectives for this small lesson. | |
| 3. Identify "must-learn" and "learn-on- need" content. | 3. "Must-learn," "learn-on-need" |
| Identify the "must-learn" and "learn-on- need" content in the lesson. Check the incidents and events. | e. What is the "must-learn?" |
| c. Must-learn: Also known as Working Competencies . Pick one or a combination from below. | |
| i. Value (what is worth the time); ii. Errors (what and how to avoid and prevent errors); iii. Difficulty (what is difficult to learn that stops them from fixing or changing things successfully) | f. What is the "learn-on-need?" |
| c. Learn-on-need: Also known as Full Competencies . Pick which content is appropriate for mastery learning including, references, on-the-job tips, guides, FAQs, how to's, checklists and others. | |
| Incidents and Events: Reasons for Selecting Content | |



| In traditional approaches, most content is provided by Subject Matter Experts (SMEs). In micro-lessons, we first study the incidents, events and situations that need a fix or change. Then, we formulate the content. This approach better focuses the micro-lesson to meet the needs of learners and workers. The content also closely adheres to the Micro-Learning Standards of: Low Effort, Easy, Fast, Applied Quickly, Useful Immediately. | |
|--|--|
| Sources of Issues and Needs . The incidents and events provide factual context (data and information) and emotional context (anecdotes, narrative and stories). Do your own research. Ask your workers and learners, and request information from partners, leaders, peers, and SMEs. Use the sources from the list below. | |

Sources of Issues and Needs

- a. Logs, records, statistics, metrics
- b. Incident reports
- c. Customer complaints
- d. Reports on rejects
- e. Manufacturing defects
- f. Servicing and warranty costs
- g. Safety incidents
- h. Recorded call center client calls
- i. Profit/cost profiles
- j. Best solutions to known issues
- k. Workarounds
- I. Custom solutions
- m. Substitutions



| n. Near misses o. Delays in installations and deployment p. Repair costs q. Human errors r. Critical incidents s. Others related to the "must-learn" content | | |
|---|----|---|
| Select and magnify the hyper-story. From the incidents and events, state and magnify the emotional context by selecting a hyper-story, narrative, anecdote and story to show the incidents and events. | 4. | What is the hyper-story? Show and magnify the emotional context. Present the hyper-story: the most emotional part of the incident and event. |
| Presentation—Embed the factual content in your presentation of the hyper-story Present the hyper-story and the embed the factual content. In traditional lessons and writing, the presentation is focused on stating only the facts. In micro-lessons, we show the hyper-story and include, integrate or combine (embed) the factual content in the hyper-story. For example: Traditional writing: The allowed pressure is at 300 degrees. Micro-lesson: John burnt his hands since the pressure went beyond the allowed limits. He was in pain and landed in the hospital. | 5. | Present the embedded factual and emotional content through a story of the incident and event. |



| | Different methods of presentations You may use the following approaches to make the presentation. Your presentation should illustrate the ideas used in decision-making and actions by the learner. | |
|----|--|--|
| | a. Applications doing the work, fixing and changing b. Troubleshooting c. Problem-solving d. Cases and situations e. Small scenarios f. Simulations g. Anecdotes and narratives h. Metaphors, memes, and similes i. Experience sharing j. Small projects k. Demonstration l. Trial and testing m. Prototyping n. Preparation of proof-of-concept o. Others | |
| 6. | Prepare Interactive Questions Interactive questions invite learners into the micro-lesson. There are two types of interactive questions: Reflection and Application. For example: Reflection question examples: What would happen? How do you see this? What are the consequences? | 6. What interactive questions are you asking the learner to help them (a) reflect and then (b) apply the ideas? Start with a reflection question and follow up with an application question. |

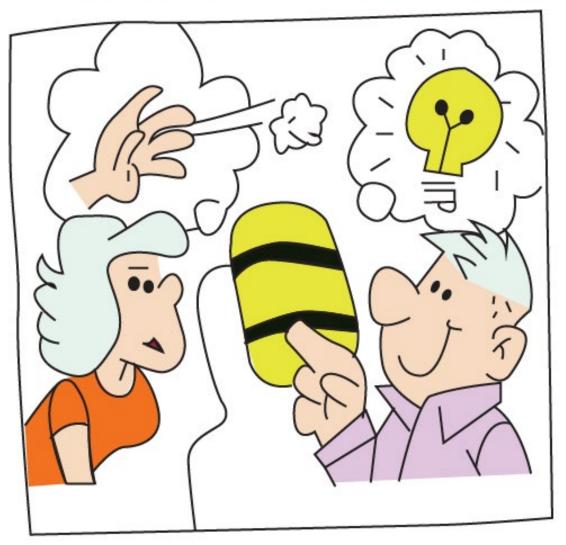


| | Application question examples: How would you solve this problem? What will you do? How would you apply this idea? Test the approach and share the outcomes. Hint: Use What, How and Where for crafting application questions; avoid Do and Can. | |
|----|---|---|
| 7. | Learn-on-need Provide the references, on-the-job tips, guides, FAQs, how to's, checklists, and others. Identify what part of the reference is useful and related to the "must-learn." | 7. What is the reference? What part of the reference is related to and useful in learning the "must-learn?" |



Designing High Impact Micro-Lessons

"Your ideas stink!" "I have this smart idea."





Emotional Impact and Vividness Tests

Synthesis:

The hyper-story is a potent tool to draw learners into a real-life situation that resonates with them. It helps them engage, reflect and retain the embedded context necessary for learning. However, it is necessary to subject it to certain tests such as the emotional impacts test and the vividness and simplicity tests to better support the authenticity and relatability of your hyper-story.

Now that you have developed your micro-lesson, how do you visualize it so it instantly grabs learners' attention?

A hyper-story carries with it the emotional and contextual aspect of your micro lesson. To support the emotional engagement of the learner, do the following in your storyboarding and in your final micro-lesson pages, slides or presentations.

1. Emotional Impacts Tests

a. **Tell the story as is it** - If the hyper-story is about an accident with someone bloody, show it as it is. If a manager is furious, show his/her furious face. If a character laughs, show him/her laughing. Show the real story as seen in real-life situations. Avoid sanitizing or cleaning up your story. Doing so loses its emotional impact on the learner.





 Keep characters in conversations - Use characters. Let them talk to each other. Learners identify and empathize with the characters. Conversations between characters allow you to embed content into their conversations naturally.





c. **Use the** *first voice* - In reference to the above, let your characters use their own words. Avoid the temptation to provide an interpretation of what they say. Using the first voice allows your characters to talk directly to your learners. As a result, the emotions continue to flow between learners and characters.



"I am fed up with your company's failed promises."



d. Let the learners fill in the gaps - The use of hyper-stories facilitates the setting of context between learners and the lesson content. Allow the learners to fill in the gaps of the story. Do not explain it to them. Let learners bring their own experiences into the story and lesson. The more you allow learners to fill in the gaps, the more they relate to it and make relevant connections.

It is enough to show the image below without explaining it, since learners can draw from their own experience of what it possibly means to them.



e. Allow curiosity, suspense, anticipation and surprises - The use of the hyper-story allows you the opportunity to build the emotional arc - the motion of moving learners from a low to a high emotional state. Take time to build suspense and anticipation. Avoid dumping all the elements of your hyper-story too quickly. Learners need a few seconds to become "emotionally engaged." The image below invites curiosity and anticipation in the learners.





2. Vividness and Simplicity Tests

- a. **Use simple visuals and text** Use realistic visuals simple, yet emotional photos of characters and settings
- b. **Avoid clutter** Having too many items in a slide diffuses the attention of the learner. Focus on the emotional aspects. It is better to have more pages or slides, rather than cramming everything into a few pages. The process may seem to take longer since learners click more pages, but the flow is smoother and easier for the learner to follow.
- c. **Allow plenty of white space** The more white spaces you have on the page, the more the page allows for the learner to ponder and reflect. Unadulterated space makes it easier for the learner to focus on the main item.

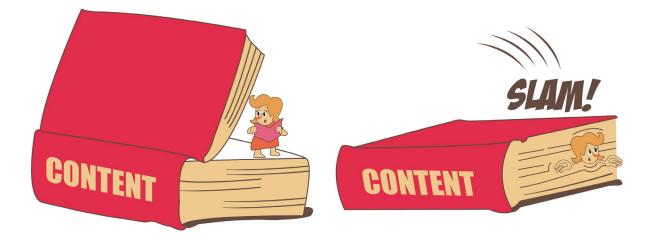


- d. Allow learners to contemplate each slide or page Sometimes, a hyper-story has many ideas and scenes, so use more slides as needed to make it easy for learners to reflect at a deeper level.
- e. **Use short, telegraphic writing** Use short, telegraphic writing with plenty of first voice elements. Avoid paragraphs and sentences.



Frictionless Questions for Reflection and Application

"I just want simple answers."



Synthesis:

Understanding the need for more"frictionless" learning means gaining a better perspective of what we, as learning professionals, must adapt to and be willing to learn or un-learn. We must find ways to pose questions unobtrusively and involve them in conversations that stir them into grasping the context of the lessons. The use of Story questions allows learners to think through a given situation and arrive at an understanding for on the job appliance compliance

The key ideas are these:

Many courses and elearning are designed to show proof of compliance. Tests may seem to be the ultimate way the learners' progress are tracked. However, when they have to take memory tests or knowledge checks, they become "speed bumps" in the learner's ability to learn following the Micro-Learning standards: low effort, easy, fast and apply ideas immediately.



A significant number of designers and learning specialists agree that there is a growing need for more **"frictionless"** learning - unimpeded and fast learning, with easy access to knowledge and information, while going through their workflow.

So how do we create tests questions that are relevant, useful, based on real life and applicable to the learners' work and not just "administrative, memorization and compliance questions"?

Important: These types of questions are only useful if you use the Micro-Lesson design approach. Micro-Lesson (Exercise #2) builds on real-life incidents and Hyper-stories. The questions below continue the flow from the Hyper-story of your lesson to application and reflections. We will discuss compliance related Micro-Learning in the following subjects.

Below are types of questions we can use to help the learners understand the content in real-life context.

- 1. Application Question: "What should John do?"
- 2. **Reflection Question:** "Should John return or accept the gift? What are the risks?"
- 3. **Interpretation Question:** "What parts of the policy allow accepting gifts and what aspects prohibit accepting gifts?"
- 4. **Interactive Question:** "Should John go and check his personal liability and that of the company in relation to this policy?" Or "What in the following provisions provide John the personal liability protection?" (You expect the learner to do something.)



- 5. **Process Question:** "At what point should John call the attention of his boss and report about the gifts?"
- 6. **Problem-solving Question:** "What should John do if Peter insists that he should keep the gifts?"
- 7. **Discovery Question:** "Conduct an informal interview from your peers. Ask them this question. What did you discover?" Or "Investigate the cup drill bit and determine if it needs replacement. What did you determine?"



Learn-On-Need and References

"Where are the details?"





Synthesis:

Learn-on-need and reference materials usually contain too much details. Hence, it is difficult to use. So, we add Simple Rules - rule of thumbs, common sense, educated guess, etc. - to help learners and workers. Simple Rules allow learners to take action quickly more permanent answers become available.

- Traditionally, references pertain to the details or further information about content, statistics or data. They are specific steps, procedures, policies, data, product specs, pricing, directions, legal and regulatory citations or laws, process flow, and many others. Most references are considered formal sources of knowledge. See examples of typical references. See in demo in the website - Sample Typical References
- 2. The challenge is that most references are patterned from the same linear and top-down content prepared by Subject Matter Experts (SMEs) and designers. They emphasize what they want learners and workers to learn.
- 3. It is noteworthy that many references now appear in simplified formats like job aids, tips, checklists, guides, alerts, and others. These are simplified, summarized and distilled reference materials. They are very useful on-thejob support information.

However, they continue to be extensions of linear content or knowledge in static form They are bulky and provide much more than needed. See examples of simplified references. See in demo in the website - Simplified References



- 4. With the aid of tools, technologies and different formats of content like eBooks, PDFs, mobile text, search engines and many others, it is now possible to scan quickly and find useful ideas within the reference content. However, the search process, although substantially faster than reading a paper-based reference material, may not instantly help learners find answers to their problems. It slows them down when they want to fix and change things. See illustrations. See in demo in the website Advance Magazines and eBooks
- 5. Micro-Learning Standards require that the learning experience must be low effort, easy, fast and applied ideas immediately.

To make Micro-Lessons and Micro-Actions meet the Standards, we need to look at the DIAGNOSTIC thinking that the learner and worker do in actual work situations.

The diagnostic process is a decision-making approach that consists of analyzing a something (header) to be fixed or changed and finding solutions (answers) and applying it (footer).

The learners and workers focus on real-life situations, impacts and results. They are less concerned with perfect content or even knowledge, until they need these in the form of answers. Since most references are statements of linear and static content, in most instances, the workers and learners are slowed down when looking for answers.

6. To help learners access and use knowledge and answers, there is a need to bring in the ideas about Simple Rules - tacit and real-life experiences that are almost common sense, abundant and part of day-to-day work decisions.

Simple Rules help workers focus on checking vital knowledge before taking actions.



Simple Rules are heuristics. Wikipedia defines it like this.

A **heuristic technique** (/hjəˈrɪstɨk/; Ancient Greek: εὑρίσκω, "find" or "discover"), often called simply a **heuristic**, is any approach to problem solving, learning, or discovery that employs a practical method not guaranteed to be optimal or perfect, but sufficient for the immediate goals. Where finding an optimal solution is impossible or impractical, heuristic methods can be used to speed up the process of finding a satisfactory solution. Heuristics can be mental shortcuts that ease the cognitive load of making a decision. Examples of this method include using a rule of thumb, an educated guess, an intuitive judgment, stereotyping, profiling, or common sense.

We must emphasize here that Simple Rules do not replace formal knowledge. They facilitate decisions and actions, when formal knowledge is not available, unclear, hard to find or use.

7. Six Simple Rules

- a. **Stopping Rule** When to stop and when to go ahead. "Shut off the valve when it reaches 250 Degrees."
- b. **Boundary Rule** Things only work within certain limits. "This part of the equipment only works in these conditions."
- c. **Process Rule** What are the steps and which one is key in the process to make it work? What step must precede or follow this particular step? "Step 5 is critical, but you need to do Step 2 before and Step 9 after it."
- d. **Priority Rule** This action or item absolutely must be done. Others don't have to be done or can be done later. A temporary solution is acceptable. "You can give the customer a discount, if he is very upset. But, it is key that the customer feels we are responsive."



- e. **Coordination Rule** Who should be involved in decision-making and action? "Has Ralph done a visual inspection with you, and confirmed side by side what you do?"
- f. **Timeline Rule** Sets the time when something has to be done. Otherwise, results will not be met. "This item or thing must be done at this time."

See examples of Simple Rules applied. See in demo in the website - Examples of Simple Rules Applied

- 8. Simple Rules can be positioned or listed on the top of the references or spread out and called out within the document.
- 9. Using Simple Rules is a good skill on which to train learners and workers. If these are not stated clearly, learners and workers can ask questions.

Simple Rules form a good basis for asking questions when seeking for answers. They are a natural part of Micro-Actions and the diagnostic process.

10. The origins of Simple Rules stem from experiences on the job. As these become codified and repeatedly used with some success, they need to be added as formal references and knowledge. However, there is a huge possibility that Simple Rules may change over time.

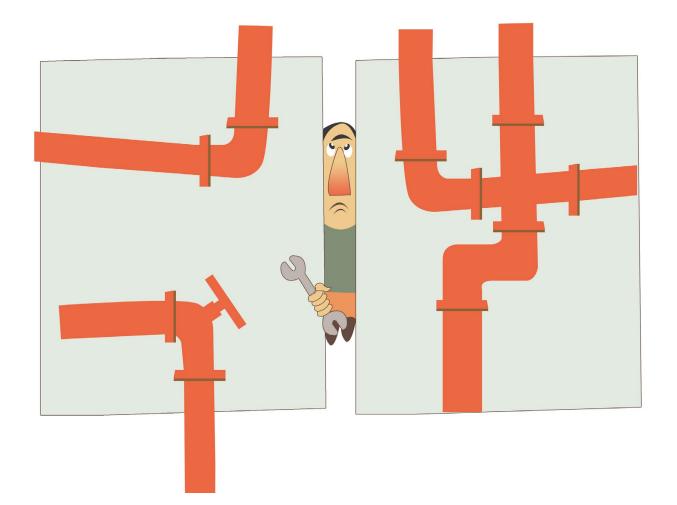
In Micro-Learning, Simple Rules are important in building expertise and when working with others. They are part of the informal learning process. On the flip side, references are typically part of formal learning processes.

There will be further discussion on how to make references searchable, finadable, easily accessed, etc. in the Tools section.



Applications of Emotional Impacts and Vividness Tests, Learn-On-Need References and Simple Rules - Exercise #3

"Confined. Squeezed. Goodbye family..."





About this Exercise

This exercise is the continuation of Exercise #2 on Creating Micro-Lessons.

Purpose

The goal of Exercise # 3 is to apply the ideas on Emotional Impact and Vividness Tests, Learn-on-Need and Simple Rules. You will have to prepare a STORYBOARDING ROUGH DRAFT to demonstrate your applications of ideas.

Steps

- 1. Use the small lesson you created from Exercise #2.
- 2. Create a small Storyboard/Script using PowerPoint or use the Word Document format below. To use the form below, please replace the content with your own storyboard or script. Do the same for your PowerPoint slides.
- 3. Ideas to apply:
 - a. Create the script and storyboard.
 - b. Use the lesson page layout form below.
 - c. Apply Emotional Impact and Vividness Tests in your small lesson.
 - d. Apply Simple Rules on Learn-on-Need content.
- Develop the storyboard depending on your skills, resources and content. We are not looking for perfect and well-polished final storyboards, although we welcome the best you can come up with.



- 5. Review at least one other storyboard submitted by your co-participant and post a comment or constructive critique.
- 6. We may ask some of you to share and present your storyboard during the webinar session.

Important: Use this form. Save your work using name "your name" plus exercise #3 in the filename. See the PDF instructions on how to upload your projects.

Submission – (1) Use this form to complete the right column or use your own PowerPoint. Make sure to follow the numbered outline. (2) Save the form as another document: **(Your Name) (Exercise # 3)**. (3) Create a Discussion and upload your document there. Review the PDF guide on submitting exercises, projects and discussions. (4) Preview one Exercise # 3 form submitted by your peers and contribute by sharing a comment, suggestion or idea. This helps you learn from others and vice-versa. This last step is good practice on developing expertise.

Timeline/Due Date: Exercise # 3 is due on or before November 1, 2016.

| Exercise Guide | Exercise Entries |
|----------------|--|
| | (You may reuse this form to submit your storyboard. Replace the sample entries provided below) |
| | Link to reference: http://vignettes.storyls.com/lessons/89853/ slides |



1. Micro-Lesson Impacts and Consequence Objectives

 a. Use your "must-learn" content. The slide or slides show and ask questions of the learner about the incidents, events and hyper-story. For example:

"What would happen if this were you in this situation?" (generic example).

"What would happen if the wrong SSS number is entered into the patient's record?" (specific example refers to the hyper-story).

b. The main purpose of Objectives on Impacts and Consequences is to translate the linear, static and formal learning objectives to more contextfocused learning objectives.

The learners care very little about the formal learning objectives. They pay attention to real-life impacts of the lesson.

To quickly help them connect your lesson to their context, the questions trigger the recall of their own real-life experiences (no matter how small, incorrect, irrelevant and distant they seem to appear from what you – the trainer and designer – think to be correct).



"This pattern from this account will cost your bank \$20,000 each penalty case." Auditor

"But, that does not happen often, right?" *Manager*

What is the consequence in your work if this happens?



| | <u> </u> |
|---|----------|
| c. The questions are always about the hyper-story since it is the most emotional part of the content. | |
| Other examples of questions: | |
| (Show the hyper-story incident, then ask) | |
| "What if ? - What would be the consequence to you (the team, people, company, your family, etc.)? | |
| "Imagine if this were to happen. What would you do?" | |
| "You are in this situation. What would you do?" | |
| "The doctor said you have to take drastic measures. What would you do?" | |
| d. Depending on your hyper-story, it is possible that the Objectives on Impacts and Consequences may contain one or more slides. | |
| Process Rule: Apply the Emotional Impacts and | |
| Vividness Tests in all your slides. (See the list | |
| below.) | |
| | |
| | |
| | |
| | |
| | |
| | |



- 2. Presentation—Embed the factual content in your presentation of the hyper-story using the Emotional Impacts and Vividness Tests
 - a. This part may take one or more slides depending on your content.

Here, you convert the embedded facts and hyper-story presentation using the following:

Emotional Impacts Test

- Tell the story as it is
- Keep characters in conversations
- Use of first voice let the characters talk (don't explain)
- Let learners fill in the gaps
- Allow curiosity, suspense, anticipation and surprises

Vividness Test

- Use simple visuals and text
- Avoid clutter
- Allow plenty of white space
- Allow learners to contemplate each slide or page
- Use short, telegraphic writing
- b. Present your factual content within the hyper-story.
 - Allow the events, incidents and characters to have conversations about the factual content. The specific factual content is presented only in the context of the story. For example, John says, "Look at the data entry screen. Make sure the fields accept the correct SSS number. Otherwise, there will be errors



Cash deposits happen every day.

Nothing out of the ordinary here.

And that's just what the crooks are banking on...

Have you observed this happening?



"I've got a deposit for Ace Computer Repair. Give me just a second..." *Customer*

"How many deposits do you process in a day? In a week?" *Teller* (Click here to see deposits)

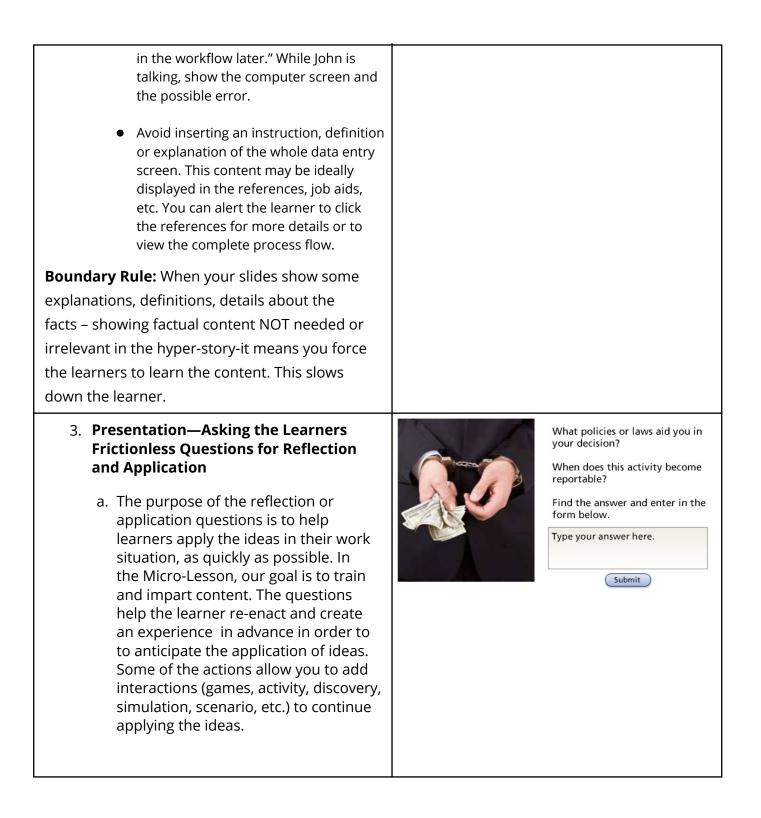
Did you notice anything unusual in the account activity?

First National Bank - 9/16/2014

| Deposits | | | | | |
|---------------------|-----------|----------|------------|------|-----------------|
| Name | Date | Time | Amount | Туре | Location/Branch |
| Ace Computer Repair | 9/15/2014 | 9:05 AM | \$1,573.00 | Cash | South |
| Ace Computer Repair | 9/15/2014 | 2:13 PM | \$8,276.00 | Cash | Midtown |
| Ace Computer Repair | 9/16/2014 | 10:37 AM | \$972.00 | Cash | Eastgate Plaza |
| Ace Computer Repair | 9/16/2014 | 3:12 PM | \$4,728.00 | Cash | Fredricksburg |
| Ace Computer Repair | 9/17/2014 | 11:03 AM | \$9,500.00 | Cash | Midtown |
| Ace Computer Repair | 9/22/2014 | 1:42 PM | \$9,500.00 | Cash | Midtown |
| Ace Computer Repair | 9/23/2014 | 2:08 PM | \$9,500.00 | Cash | Midtown |

What pattern do you see in the entries?







| IMPORTANT: Add interactions that | |
|---|--|
| continue the embedded content and | |
| hyper-story. Avoid asking learners to | |
| complete a memorization test. | |
| | |
| h. Those are example guestions. You may | |
| b. These are example questions. You may | |
| use one or more questions as needed | |
| and appropriate: | |
| Application Question: "What should | |
| John do?" or "What should you do?" | |
| John do! of what should you do! | |
| • Deflection Operations #Chauddlacks | |
| Reflection Question: "Should John | |
| return or accept the gift? What are the | |
| risks?" | |
| | |
| Interpretation Question: "What parts | |
| of the policy allow accepting gifts and | |
| what aspects prohibit accepting gifts?" | |
| | |
| Interactive Question: "Should John go | |
| and check his personal liability and | |
| that of the company in relation to this | |
| | |
| policy?" Or "What in the following | |
| provisions provide John the personal | |
| liability protection?" (You expect the | |
| learner to do something.) | |
| | |
| Process Question: "At what point | |
| should John call the attention of his | |
| boss and report about the gifts?" | |
| · | |
| Discovery Question: "Conduct an | |
| informal interview of your peers. | |
| Ask them this question. What did you | |
| discover?" Or "Investigate the cup drill | |
| bit and determine if it needs | |
| | |
| replacement. What did you determine?" | |
| | |
| | |



| Problem-solving Question: "What should John do if Peter insists that he should keep the gifts?" 4. Add Learning-on-Need and References to the Micro-Lesson. Add this in latter part of your slides or in this form. a. The purpose is to allow learners to study more details of the ideas covered in the embedded content and hyper-story. b. Refer to formal sources such as policies, procedures, steps, checklists, legal citations, pricing, etc. c. Select relevant Simple Rules to the references. There might only be one or maybe more. The Simple Rules are: Stopping Boundary Process Priority Coordination Timeline | <text><list-item><list-item><list-item><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></list-item></list-item></list-item></text> | |
|--|---|--|
| Position the Learning Objectives a. Copy the Micro-Lesson Learning | Objectives | |
| Objectives from Exercise #2. Add it at | The objective of this lesson is to help you confidently | |
| the latter part of the slides or | identify when potential money laundering activities | |
| document. | are taking place. | |



Posting in your discussion:

When you upload your exercise document, please post your answer to the following questions in the discussion:

- 1. What are your key learnings from this exercise?
- 2. What ideas can you apply immediately?
- 3. How will the use of the Micro-Lesson design impact your learners' learning?