Design Document

Art & Science of Learning

SMART
SOLUTIONS FOR LEARNING
at
RWLtech
read · write · learn · tech

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SMART SOLUTIONS FOR LEARNING

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Design Meeting

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Problem Statement

To date, corporate learning has been a series of one-time events designed to provide learners with information that is deemed meaningful to help employees do their jobs more proficiently. The problem with this type of approach is that rarely changes the behavior of the employee, nor does it enable them to perform better on the job, primarily because 'learning' has not taken place. At best, the employee walks away with a better awareness of what should be done but are not give the information and tools to transfer what they have learned in to real world experience.

Value Proposition derived from the Needs Analysis

In addressing the problem of information acquisition vs. learning that drives behavior change, we enable organizations to develop talent that will be better equipped to achieve the overall organizational goals designed to make the company successful.

At best, our brain retains about 10% of what we learn in any one sitting. Many organizations spend thousands of dollars to build training programs. Is the ROI worth the time and effort to build these programs when very little of it is remembered or used on the job?

Audience Analysis

The audience for this learning solution covers all demographics. All people benefit from learning experiences that use the art of engagement and the science of repetition and memory reactivation in order to master the knowledge, skills and attitudes required for successful performance.

Job Task Analysis

Task	Frequency	Difficulty	Importance

Task	Gap Defined	No Gap	Importance

Learning Objectives

Business Objective(s)/Terminal Objective

To create a culture of learning at organizations that drives higher performance through activities that promote the art and science of learning concepts and techniques.

Performance Objectives

By the end of the learning program, the participants will:

- design a simple learning program that incorporates the art and science of learning concepts that precipitate behavior change

Enabling Objectives

By the end of the learning program, the participants will:

- understand the concepts of neuroscience that enable learners to retain information
  - repetition + reinforcement + recall/reactivation = retention (learning is a process not an event)
  - key messages + value of 3's
  - cognitive overload
  - boredom + frustration
  - learners don't like to fail
  - put learners in charge of their own learning +give them ways to collect information

- understand the artistic concepts that motivate learners to engage with learning experiences
  - give them a "why?" (connect emotionally—power of a story)
  - focus on relevance and only test on the relevant or critical aspects of the course
  - use multimedia to enhance the learning experience + make it visually appealing

Assessment(s)

No formal assessment will be used for this course. Participants who complete the course will be marked as "passed".

Level of Engagement

To engage the learners various activities that incorporate the art and science of learning will be completed.

In order for people to be actively engaged in learning they need to connect emotionally with the material.

Once you use artistic concepts to create the connection then various concepts of neuroscience can be incorporated to enable better retention.

This needs to be a long term learning solution and not a one-time event. Pre-work and additional follow up learning activities and accountability standards need to be implemented throughout the overall course of the learning program in order for true behavior change to take place.

Content Outline(s)
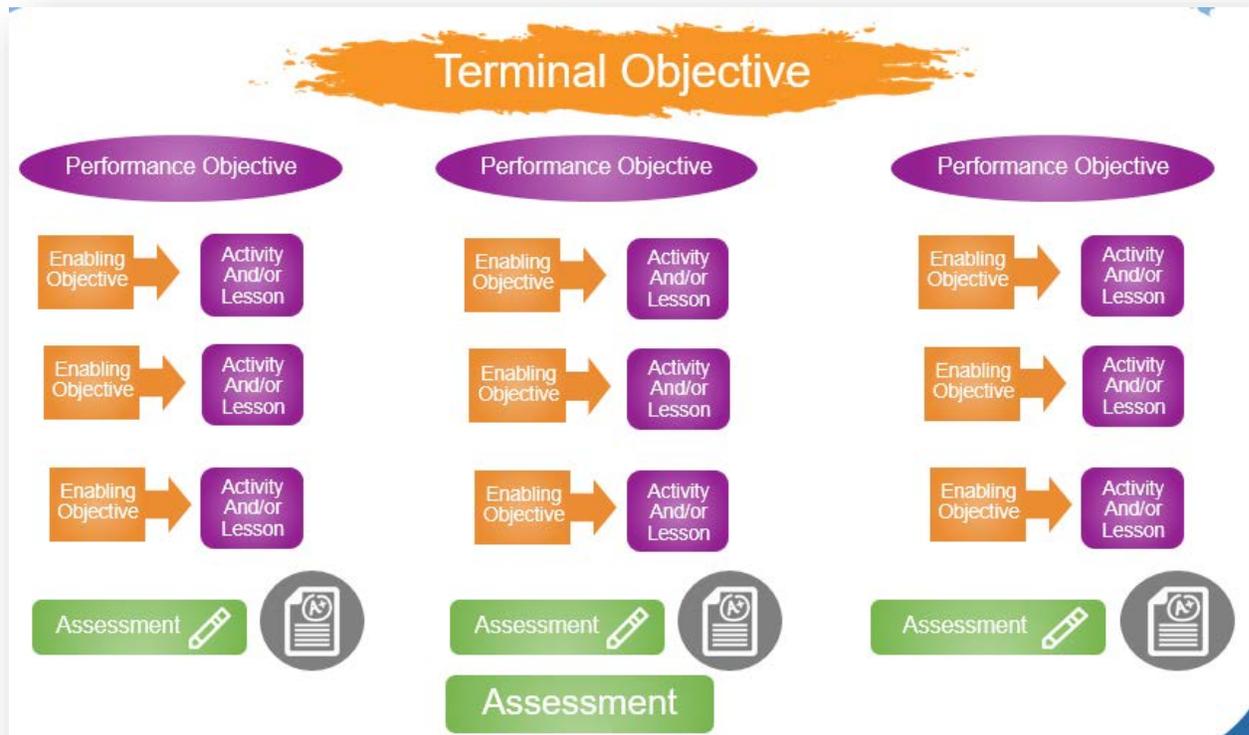
Memory Reactivation is Key

The reason the BrainX group had much better results than the LMS group is that they used the BrainX Study Session system to reactivate their memories of the lecture on three different days—Day 2, Day 7 and Day 14 following the initial instruction. The study sessions achieved two things. First, they solve the problem of forgetting. Second, they prompt the brain to write new skill programming so the learners can effectively recall and use the information. Neuroscience still cannot fully explain the miraculous way the brain is able to write sophisticated "new skill" programming. We do know what triggers the brain to write the programming: it is Memory Reactivation. In summary, the three keys to effective memory reactivation are:

1. Practice should happen on different days, with sleep between study sessions.
2. As a learner gets closer to mastery, there should be more days between study sessions.
3. Reactivation must be active, such that learners are doing something with the information.

Research has shown that passive practice, like re-listening to a lesson or re-reading a product manual, is not as effective as active practice.

Action Mapping

Organizational Objective	Assessment	Objective (Skills-Behaviors-Habits)	(Practice) Activity	Essential Content
	Checklist	Understand how and why the brain engages with learning	Webinar Magic - Prework Review and Evaluate	
	None	Understand the value of repetition in learning	Taylor Swift Flirts Review and Evaluate	Shake it Off Don't Put Another Dime in the Juke Box
	Salsa Dance	Understand the value of progressions learning	Zumba Demo Review and Evaluate	Salsa Dace on Zumba
		Understand the value of repetitions and progressions in learning	Hymn	
	Cats in the Cradle	Understand the value of storytelling in learning	Review and Evaluate	Cat's in the Cradle
	Brain Video	Understand how the brain processes information and deals with boredom and surprise + the importance of connecting emotionally		
	Content Outlines	Review content outlines that support these ideas		
	Name that attribute	Identify how the concepts of art and science are used in various learning programs	Game	Cheryl – Firefighters KPMG Sodexo Brenda – Performance Management Employee Orientation Regine
	Build a Learning Program	Build a Learning Program that uses the art and science of learning	Build a Learning Program that uses the art and science of learning	Leadership Onboarding
	Survey at three days	Understand the value of memory reactivation	Survey	
	Survey at one month	Understand the value of memory reactivation	Survey	
	Handouts	Onboarding Design Doc Delivery Methods Art & Science Design Doc		

Delivery Method(s)

To address the following learning objectives, we will create an online learning modules that will be delivered as pre-work. This module will use the concepts of the art and science of learning along with a checklist to introduce the concepts prior to attending the course. It will be sent out to participants two weeks before the class date and must be completed prior to receiving authorization to attend class.

Pre-Work (online module)

- Webinar Magic
- Checklist to Evaluate the Course

Addresses the following objectives:

- understand the concepts of neuroscience that enable learners to retain information
    - repetition + reinforcement + recall/reactivation = retention (learning is a process not an event)
    - key messages + value of 3's
    - cognitive overload
    - boredom + frustration
    - learners don't like to fail
    - put learners in charge of their own learning +give them ways to collect information

- understand the artistic concepts that motivate learners to engage with learning experiences
    - give them a "why?" (connect emotionally—power of a story)
    - focus on relevance and only test on the relevant or critical aspects of the course
    - use multimedia to enhance the learning experience + make it visually appealing

To address the additional learning objectives, we will create a one day (6.5 hour) instructor led course. We will include physical activities that use the concepts presented in music to enable the learners to connect emotionally and retain the information.

- Webinar Magic Evaluations
    - Using repetition
- Taylor Swift and Flirts Music Demo
    - How music is constructed to repeat without being repetitive or being too repetitive
- Zumba Salsa
    - How dance is taught to enable mastery using repetition and progressions
- Hymn
    - How music is constructed to repeat without being repetitive and reinforce memory and how it uses progressions to build on existing knowledge.
- Cats in the Cradle
    - How storytelling in music and learning elicits strong emotions that connect learners to the message
- Brain Video – How the brain learns information
- Content Outlines
- Game – Post all the different attributes on the wall. As we demo or explain the courses, have the learners tag with a checkmark the attribute listed. The following learning objectives will be addressed primarily in this instructor led course:

- understand the concepts of neuroscience that enable learners to retain information
    - repetition + reinforcement + recall/reactivation = retention (learning is a process not an event)
    - key messages + value of 3's
    - cognitive overload
    - boredom + frustration
    - learners don't like to fail
    - put learners in charge of their own learning +give them ways to collect information

- understand the artistic concepts that motivate learners to engage with learning experiences
    - give them a "why?" (connect emotionally—power of a story)
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    - use multimedia to enhance the learning experience + make it visually appealing

There will be follow up with a formal coaching and/or mentoring program. Each participant will be paired with a coach that will privately discuss the current work environment. Prior to the discussion each participant will anonymously fill out a questionnaire that rates the current work environment, based on what they have learned.

Development Process(es)

Storyline will be used to develop the online learning module.

Taylor Swift and Flirts song uses MAMPlayer

For the Instructor Led session the following materials will need to be developed:

- Instructor Guide
- Participant Guide (workbook)
- Rules of Engagement Cards
- PowerPoint Presentation
- Job Aid (in the workbook)
- Video Clips
- Evaluation Forms

- Coaching materials will be created and published in the Participant Guide (workbook).

Technical Specifications

The online module needs to be viewable on mobile devices, thus will need to be published in HTML5.

Music clips will need to play with the MAMPlayer
Video clips need to be in an mp4 format with a 3:2 aspect ratio.

SCORM 1.2 and xAPI to track.

Screen size will be 1024x768

Instructor and Participant guides will be printed. Print ready files will be produced from the InDesign files used to create the guides, posters, job aid, and complaint form.

All materials developed will follow the standard graphic design specifications outlined in the style guide.

Material(s) Required

Captivate will be used to develop the online learning module. Short video clips will be developed by the marketing department using their own video equipment.

For the Instructor Led session the following materials will need to be developed:

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- Video Clips
- Evaluation Forms

- Coaching materials will be created and published in the Participant Guide (workbook).

Supplies required:

- Large Post-It Paper
- Markers
- Computer (laptop)
- Microphone
- Music for course introduction and breaks
- MAMPlayer
- Pens for participants
- Projector and Screen
- Leadership Course Blueprint
- Design Document for Onboarding
- Video Clips
- Hymn Score
- Speaker and connections
- Candy

Implementation Plan

Pre-work will be delivered via email to each participant. They will be asked to watch the Webinar Magic video and complete the checklist. The course will be piloted at the ATD Mentoring session in September, 2016. Feedback will be solicited via the evaluation process.

Modifications will be made, based on the feedback during the evaluation period.

Evaluation

Level I surveys will be provided to the participants at the end of the instructor led course.

Level III surveys will be provided as memory reactivation activities at the three day mark and the one month mark after the course.

Modifications to the course will be made at that time, based on the feedback in the surveys.