Brain Strain to Brain Gain

With Marc Ratcliffe and Jason Ash

Pre-session Opener

Session Overview

Brain Facts
Using Brain Science to help with Content

Using Props to Anchor a Message

Key Research to Support Application of Brain Science

Creating Learning That Sticks

Creating a Soundtrack for Learning
Opener: Brain Facts

Key research to support application of Brain Science

"The illiterate of the 21st Century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn."

- Alvin Toffler
Learning is an **ACTIVE** process.

**RE-ENGAGING** the brain is **NECESSARY** not optional.

When standing up your brain is fed at the **OPTIMAL** rate.
Reduce TENSION to increase RETENTION.

The SOCIAL component of learning brings us to a state of openness...

Participant-centred learning drives FOCUS.
Full **ATTENTION**... makes a difference.

Discussion:

What causes "Brain Strain"?

Creating Learning “Stickiness”
Creating learning “stickiness”

- Malcolm Gladwell in his book Tipping Point (2000) defined “stickiness” as “the specific content of a message that renders its impact memorable.”
- In the context of workplace training, stickiness tracks the level of learner engagement and knowledge retention.
- A “sticky” training course means that lessons taught in the course are well engrained in the learners’ memory and are likely to actually be applied on the job.

Activity:
What does stickiness mean to you?

Five ways to help make the learning stick!
1. Make it memorable.

2. Evoke curiosity.

3. Use Odd Times.
4. Provide choices.

5. Put the learner in the picture.

Using Brain Science to help with the content
Consider the **Forgetting** Curve.

Recognise the myth of **multi-tasking**.

Apply **sitting/standing** theory.
Remember the **brain** is social.

**Interaction**
**Connections**
**Yawning Effect**
(Mirror Neurons)

Acknowledge that brains have short **attention** spans.

Need repetition
Multiple channels for deeper learning
Curiosity and novelty gives us a dopamine hit!

Learning is enhanced by **emphasising** the big picture and allowing students to **discover** the details themselves.
Discussion:

What does this mean for us in our training and assessment roles?

Using Props to Anchor a Message

Using props to anchor a message

- The process of anchoring is an effective means to solidify and transfer learning experiences.
- In its simplest form, anchoring involves establishing an association between an external cue or stimulus and an internal experience or state, as in the example of Pavlov ringing the bell for his dogs.
- A lot of learning relates to conditioning, and conditioning relates to the kind of stimuli that become attached to reactions.
Using props to anchor a message

• An anchor is a stimulus that becomes associated with a learning experience.

• If you can anchor something in a classroom environment, using a prop for instance, you can then bring the anchor to the work environment as a powerful reminder of what was learned.

Here are six reasons why you would use props to anchor your message:

1. To make a specific point
2. To make the learning memorable
3. To help learners understand the message more effectively
4. To support humorous interaction
5. To maintain attention
6. As a reward.

Discussion:

How else could props be used in training?
Activity:
Using one of the props from the “props box” create an anchor to a topic, concept or learning outcome with which you are familiar.

Creating a Soundtrack to Learning

Why Music?
- Music is something all human cultures have.
- Music both pre-dates and informs language.
- Music helps to drive motor function.
- Music is even powerful in utero.
- Brains are wired for rhythm.
- We want to create learning harmony.
- We need to be in sync and in tune with learners!
Think about films, television programs or advertising – why is music used?

- Set the scene
- Create a mood
- Grab attention
- Build an emotion
- Complement the images
- As a transition.

How music effects learning

Music helps create learning states that assist in holding attention and increasing retention of information.
How music effects learning

Music stabilises mental, physical and emotional rhythms.

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How music effects learning

Music facilitates students' attaining a state of deep concentration and focus.

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How music effects learning

Songs, chants, poems, and raps will improve memory of content facts and provide a hook for retrieving information easily later.
Discussion:

How have we used music so far?

How to use music

• Background music as students enter, exit or take a break is used to provide a welcoming atmosphere and helps prepare and motivate students for learning tasks.
• Music provides a positive environment that enhances student interaction and helps develop a sense of community and cooperation.

Where to find appropriate music?

• iTunes – "royalty free music" or "background music"
• www.royaltyfreemusic.com
• www.royaltyfreeheaven.com
• www.stockmusic.net
Activity: Theme song for learning

Select a theme song for your table group and explain how this might be a metaphor for learning.

Thanks for playing!

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