

Nudging players memories

I think if we can get our players to understand how memory works, it may help them understand how to *learn better*.

Here are 4 things that are worthwhile explaining

Learning is a process not an event

It should not be viewed as an event otherwise students may assume:

1. "I was taught this last lesson I should remember it."
2. "If I can't remember it I must be bad at ??????"

The benefits of seeing learning as a process means it is viewed long term:

1. "I should expect learning to take time"
2. "Just because I can do this thing now does not mean I should expect to be able to do it in future."

Performance NOW does not = learning.

Memories are reasonably fragile at first... and this is good!

Why?

Logically we don't store everything we encounter, otherwise our brains would become too cluttered with ideas and we wouldn't be able to retrieve the ones we want..

Think of a cupboard full of stuff, you can never find the thing you're looking for!

Our memories would be useless if we could never access useful knowledge when we needed it. Therefore...it makes sense that the brain triages memories and is willing to let them be forgotten if it doesn't think they are important.

It's minimising clutter and making the important stuff more accessible.

Therefore we have to tell our brains when memories aren't clutter and are important.

We tell them this when we **use** memories i.e. think hard about them (see point 4 below).

The way we initially learn can set memories on a more permanent path... or not!

Students can choose to let information wash over them passively...

1. **Coach:** "Today we are learning about transition..."
2. **Player:** [tumbleweed]

Or...

Players must understand their initial **role** in the learning process is to make connections between the new ideas and their existing knowledge this helps make learning productive.

We need players to be **cognitively active**.

We should help them make connections between the new ideas and their existing knowledge:

1. **Coach:** "Think back to when we did the regain possession game"
2. **Player:** [Thinks back and tries to reinstate the memory]

They engage in tasks that cause them to make connections between new ideas and their existing knowledge.

1. **Coach:** "Talk to your partner: given the explanation you've just heard, and remind us what we learned about regaining possession'?"
2. **Player:** "When we regain possession we should....."

Students need to be motivated to learn in this cognitively active way. An understanding of how this works would go a little way towards achieving this.

...and finally...

Forgetting is natural and can be counteracted... it takes *work* to keep memories accessible!

Don't expect to remember things you never return to.

Expect to remember things better when you effortfully think about them.

To stop memories being fragile we need to indicate 2 things:

- (a) This info is important: we will need it again and again.
- (b) This info it is not available in the environment: we must store it and maintain accessibility.

How do students do this?

1. **Re-read:** read it once? Read it again

We get more from a 2nd reading of a text. We grasped the main ideas upon first read. Re-reading can pick up on more subtle details we missed the first time that may make these big ideas more meaningful and easier to remember.

But, re-reading doesn't tell our brains 'this info is not available in the environment'. In fact, it tells our brains the information **is** still available. The brain as no impetus to store these ideas therefore we also need to...

2. **Retrieve:**

With as few cues from the environment as possible to be successful, retrieve answers from memory.

This tells the brain this info is important – *we will expend effort to recall it and this info is not available in the environment – store it!*

3. **Practice:**

retrieve and apply knowledge in response to different questions/prompts. This helps develop connections between ideas and makes them easier to access in

different situations.

We believe that players who understand how their memories work have a better recall.

This article is rewritten based on a series of tweets from Sarah Cottingham – @overpractised