Knowledge Sharing Forum by the Permanent Mission of Ireland to the UN Geneva, 19th November 2015



NeuroScience and Learning

- In our brain ~ 100 billion neurons
- Experience dependent neuroplasticity: is the continuing process of the creation and organization of neuron connections that occurs as a result of a person's life experiences
- Changes in London taxi drivers' brains driven by acquiring 'the Knowledge' about all the maps and streets of London: their hippocampus is 2x bigger!



>> <u>LEARNING IS PHYSICAL</u> <<

- Our attention and working memory capacity are limited
- Negative bias: we encode negative learning experiences deeper than positive
- We have to reset our learners brain EVERY 10 MINUTES

We can remember **4 things** for **10-20 seconds** unless we do something else.

How to improve information retention?

- <u>Chunking</u>
- Illustrating
- Elaboration
- <u>Asking questions</u>
 Deflection
- Reflection
- Practicing

Creating Learning Experiences

1. Create stories!

- Speak to people, because it engages them!
- "I could be that" >> this is how the learner is connected
- When creating a story, subject matter experts can give some concrete examples
- "Hero's Journey": to illustrate values with real life scenarios

2. Enhance experience!

- Let the learners take part, taste, and see
- There are some really great commercial examples!

3. Develop communities!

- They all have a common goal
- This is the key of motivation
- Check out <u>Nike Run</u> or <u>Starbucks blog</u>



4. Improve interactions!

- Bring personality
 With a Learning agent: either <u>avatar</u> or real person
 Tone of language: informal
 - Narration can enhance information retention