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CME: How to learn faster and remember more

Written by Bernard Marlow on May 9, 2013 for [The Medical Post](#)
The science behind accelerated learning says active participation is a key facet



Time is a precious commodity for all health professionals. There are techniques that can help make time spent on lifelong learning more efficient and productive. Elementary schools and the business world have been using accelerated learning science for several decades but little mention is given to this subject with regard to CME. Accelerated learning uses physical activity, colour, images, music, creativity and other methods to get people more involved in their learning.

People learn best when their physical environment is both relaxed and stimulating. Their physical needs must first be met: food and fluid, room temperature, bathroom breaks, fresh air, comfortable seating and safety. Regardless of the quality of the CME, post-event evaluations frequently comment on these aspects above all else.

Accelerated learning involves active participation by learners. The presenter should not be a “sage on the stage” presenting to passive spectators but rather a “guide on the side” leading a series of activities that assists the learner to create knowledge.

Learning ideally should be social and collaborative, not solitary, and e-learning developers are working to create this type of environment online through virtual communities of practice. There should be a variety of learning methods to appeal to individual styles and the best learning is

done when in context—in the workplace, through simulation and using realistic case-based discussion.

Types of memory

There are basically two types of memory. Working memory engages in information in the short term, helping us to process information as it comes. It is stored in the hippocampus and emotions generated in the adjacent amygdala increase likelihood of retention.

Working memory can hold seven chunks of information at a time but by grouping in chunks, the total amount of information to be processed can be increased. Maximal attention usually lasts about 10 minutes and so to minimize working memory fatigue, facts should be processed for no more than 10 minutes at a time.

Long-term memory is the storehouse of your memories of yourself and the world, and includes procedural or skill memory, where remembered movements and actions are stored.

The brain will retain information if it is consistent with other retained memories and if it is deemed relevant. Long-term memories require the generation of new synapses and these occur during REM sleep and slow-wave sleep. Numerous human and animal studies have confirmed that sleep deprivation and poor sleep quality impair both memory and the learning of new information and procedures.

The Mozart effect

“The Mozart effect” refers to research that showed that listening to Mozart may induce improvement in spatio-temporal learning. Baroque classical music and music at 60 beats per minute will induce the brain to a “bright and breezy” state of mind which is receptive for learning.

Concertos for recorder, Telemann and Vivaldi (particularly The Four Seasons) are recommended. If classical music is not your thing, then ambient music (waterfalls, seashore, etc.) can relax the mind and increase concentration. Try Brian Eno’s Music for Airports for your next learning session.

What effect does exercise have on learning? Animal and human studies in applied physiology have shown that exercise is an effective enhancer of neurocognitive functioning in both young

Accelerated learning techniques

- Avoid cramming and long sessions. Learn in small bits.
- Your learning environment should provide comfort and colour.
- Be well-rested before and get sufficient sleep after the session.
- Use music before and during the session (baroque or ambient).
- Schedule short exercise breaks or even learn while moving.
- Look for learning interventions that are interactive and collaborative.

and old animals. Several studies have shown that incorporating daily exercise into a school curriculum improves students' learning and performance.

Dr. Kim Bercovitz (PhD), a medical sociologist in Toronto, is committed to changing the way people think about exercise and learning through "byte-size" fitness. Dr. Bercovitz says a major problem at meetings and conferences is what she calls sitting fatigue and learning fatigue.

Attendees are generally inactive throughout the conference, affecting the body and mind. The more sessions that are packed into a conference, and the longer they are, the more an energy booster is needed to keep attendees awake and alert.

Dr. Bercovitz's company, Exercise Bytes Inc., provides video-delivered, six-minute, sweat-free fitness breaks for conference and meeting organizers looking for new ways to keep attendees entertained, alert and energized at learning events.

Bernard Marlow is the director of CME for the Medical Post and CanadianHealthcareNetwork.ca.