Quick Tips for Interactive Learning

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What is active or interactive learning?

Active or interactive learning: the active engagement of the learner in the learning process. This can mean engagement with others as in interactive activities or engagement with material as in reading, writing, formulating questions and responses to questions. Most educators agree that active learning is key to effective continuing education. Often an assumption is made that active learning therefore necessitates learning in small groups. Actually the key is in the word active; the size of the group is not as crucial as we might suppose for the purpose of knowledge gain and retention. It may have a greater impact on change in skill and attitude.

Why is this important?

“Education is the art of the utilization of knowledge. This is an art very difficult to impart.”
Alfred North Whitehead

What we know about learning is that:

“Learning is primarily the way in which people construct meaning in their personal and shared organizational lives.”
Victoria Marsick, 1987

We are constantly changing, adjusting and rearranging meaning. What we know now about learning is that no matter whether it is conducted alone or in groups, informally or formally, by reading, by listening, by discussing or practicing – it is an internal interactive event. It is never passive. New information does not reside in empty spaces in the brain but interacts with similar material that is already there.

It might be helpful to think of the mind is like an organism. As such, it constructs its own meaning through the creation of interconnections. The mind constantly constructs and reconstructs its own meaning and thus becomes more of a process than a thing. Learning therefore is active and implies change. The model learner becomes an active creator of new patterns and meaning. Perhaps Plutarch had it right all those years ago when he claimed, “The mind is a fire to be kindled, not a vessel to be filled”.
Given learning is not a passive activity, people learn in different ways and so being able to interact is more important to some than to others. However, research has shown that interaction with colleagues is an essential aspect of adopting new information into practice. Professionals rarely make any changes in practice without consulting with other professionals. Colleagues validate information presented through journals or CPD courses through talking about their own practice situations. Talking to colleagues stimulates thinking that does not normally occur when we are on our own in our own minds.

In order to receive accreditation from many CHE organizations the person responsible for educational planning must demonstrate the program requiring accreditation devotes at least 25% of the allotted time to interaction. This mandate is based on comprehension of how learning is solidified and carried to practice as well as knowledge of what is most likely to enhance both attention and retention.

We retain:

- 10% of what we read
- 20% of what we hear
- 30% of what we read and hear
- 50% of what we hear and see
- 70% of what we say ourselves
- 90% of what we do ourselves

Or as the ancient proverb states:

I hear...I forget
I see...and I remember
I do...and I understand

“Teaching without the accompanying experience is like filling a lamp with water – something has been poured in, but the result is not illuminating.”

William James

Learning can be categorized into different domains – the most easily understood and most commonly used, are the domains of Knowledge, Skill and Attitude. When choosing methods it is important to match the method to the relevant domain.
Quick Tips for Interactive Learning

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<thead>
<tr>
<th>WHAT IS IT?</th>
<th>METHODS ASSOCIATED</th>
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<tbody>
<tr>
<td>KNOWLEDGE</td>
<td>Lecture, mini-lecture</td>
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<tr>
<td>the need to internalize information, provide theory to help facilitate</td>
<td>Panel</td>
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<td>application of learning and to widen horizons.”I understand.”</td>
<td>Debate</td>
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<td>Books, journals, reading</td>
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<td>Case studies</td>
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<td>Self-learning modules</td>
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<td>Journal club</td>
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<td>SKILL</td>
<td>Demonstration, return demonstration</td>
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<td>the need to incorporate new ways of performing. “I can do something</td>
<td>Rehearsal</td>
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<td>differently.”</td>
<td>See one, do one, teach one</td>
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<td></td>
<td>Puzzles, games</td>
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<td>Simulation, role play</td>
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<td>ATTITUDE</td>
<td>Role play</td>
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<td>the need to adopt new, or change existing beliefs or values. “What I</td>
<td>Video feedback</td>
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<td>feel or believe about something.”</td>
<td>Small group discussion</td>
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<td></td>
<td>Case studies</td>
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<td>Problem-solving</td>
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<td>Reflective exercise such as sentence completion “An</td>
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<td>effective leader is a person who…”</td>
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**Active learning requires planning – it is important to ask:**

1. In choosing a technique – ask what do I want them to do?
2. What is the purpose of the chosen activity? Knowledge, skills, attitude or practice?
3. Given the domain, which method is most appropriate?
4. How much time do I have?
5. Getting down to brass tacks: What are the precise instructions I need to give to the learner?
6. What physical set up is required if any?
Techniques to promote interactive lecturing: practice change, you may choose to use verbs in the knowledge, skill, and/or attitude domains.

| Questioning the audience through: | Straightforward questions  
Rhetorical questions  
Brainstorming  
Surveying the audience/taking a vote  
Breaking the session into small groups  
Pop (meaning surprise) quiz |
|-------------------------------|-------------------------------------------------|
| Breaking the session into small groups: | Think. pair share  
Buzz groups  
Pyramid groups  
Helping trios |
| Using audience Responses: | For more detailed information see the Quick Tips on the use of ARS  
Quizzes  
Touch pad technology  
I-clickers  
Voting |
| Presenting a case: | Live interviews  
Written cases  
Videotaped vignettes  
Incremental cases  
Audience brings in own cases |
| Using written materials: | Handouts and lecture notes  
Diagrams and figures  
Study guides  
Selected readings |
| Writing: | One minute paper  
Pop quiz |
| Reading: | |
| Debate and panels: | |
| Role play and simulations: | |
| Break into "chunks": | E.g. Ten minute presentation/lecture followed by a question period. |
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Should you wish any further assistance or clarification, please do not hesitate to contact our educational consultant: Jane Tipping (jane.tipping@utoronto.ca)

Key References:


