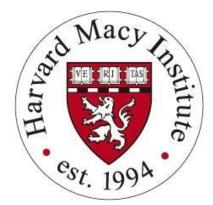
Teaching with the Brain in Mind

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Associate Professor, Emory University School of Medicine Co-Director, Harvard Macy Program for Educators 9.17.2020







Warm Up

Researchers have recently characterized ten learning techniques as to whether they provide high, moderate, or low utility, based on each technique's relative efficacy, ease of use, and applicability to a broad range of learning situations. Studies of successful learning strategies have shown which two are the most effective?

- a) Practice tests and spacing learning over time
- b) Self-explanation and mnemonics
- c) Highlighting and rereading
- d) Summarizing and debating

Group Challenge

Stephen is a faculty member at Local Medical University. He is giving a lecture next week on the topic of acid-base balance. This will be the second time he has given the lecture. Last year the students had significant difficulty understanding the concepts he lectured on and did poorly on the test questions he had written over the topic. On the end of course evaluation, many students commented that while they appreciated Stephen's enthusiasm for teaching, they were unable to follow his ideas and felt overwhelmed by the complexity of his diagrams and explanations.



Group Challenge

Wanda is also a faculty member at Local Medical University. She works with students on the hospital ward as an attending physician. She prefers to "cold call" students on rounds. She has noticed students frequently struggle to interpret blood chemistries and blood gases. When she gives students the option to "phone a friend" and ask another student on the team for help, they seem embarrassed and reluctant to do so. On the end of rotation evaluations, many students commented that while they felt Wanda was a stellar clinician, they were intimidated by her teaching style and overwhelmed by the complexity of the patients on the ward.





Group Challenge

- Discuss both Stephen and Wanda's challenges from the perspective of the six Science of Learning areas reviewed in the morning session.
- Come up with 3 concrete solutions from each of the 6 perspectives – one for Stephen, one for Wanda, and one for the Health Sciences curricular program as a whole.
- Ask your designated note taker to capture key ideas in the Google Doc





Cognitive Load

http://bit.ly/HMICLT

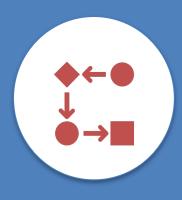




Desirable Difficulties

http://bit.ly/HMIDifficult





Transfer

http://bit.ly/HMITransfer





Expertise

http://bit.ly/HMIExpertise





Affective Learning

http://bit.ly/HMIEmotion





Social Learning

http://bit.ly/HMISocio



Which of these might be particularly helpful in solving your problem? Use the chat box to respond





Cognitive Load



Desirable Difficulty



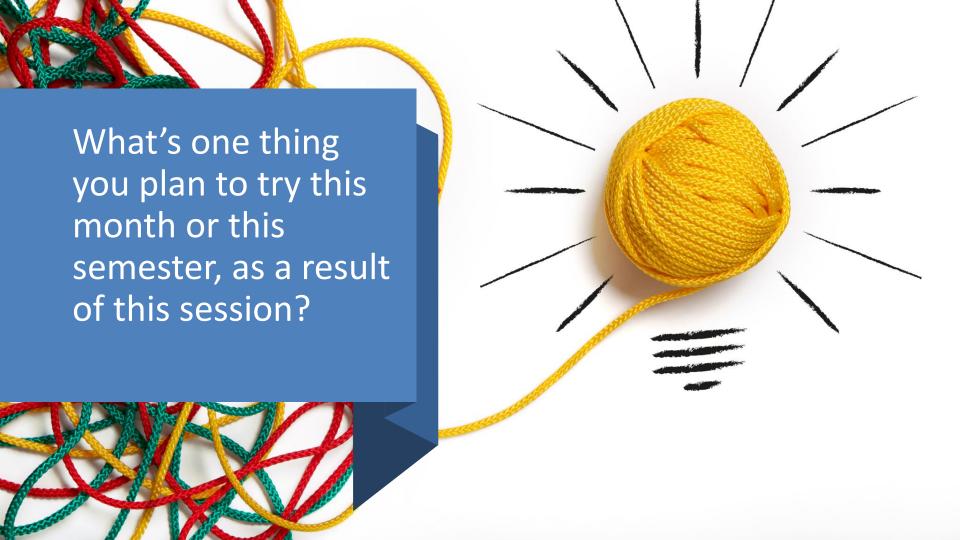
Teaching for Transfer



Deliberate Practice



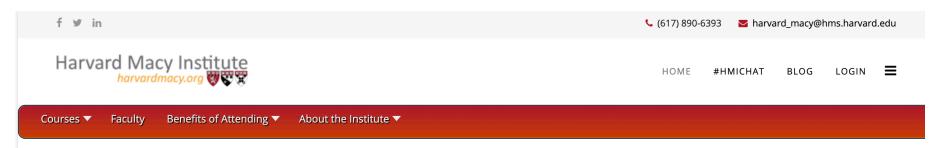




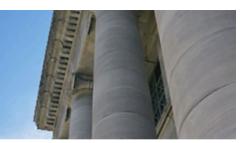
Panel:

Dr Kylie Watts Dr Rich Hartman Dr Ken Wright Dr Arthur Marshak





Committed to creating a global community of medical educators and leaders dedicated to transforming health care delivery and education.



THANK YOU!

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