Medical Educator Tutor Training (METT): An Online Approach To Tutor Training

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▶ INTRODUCTION

Problem: Many peer tutoring programs serve students who are "at-risk,"[1] but provide little training for tutors in *how* to teach these students. Tutor training is difficult to provide due to lack of time and resources.

Solution: Provide an online tutor training program that focuses on helping tutors understand educational theory and pedagogy.

▶ CONTEXT

Michigan State University College of Human Medicine

- Peer tutor and tutee work one-on-one for up to two hours per week to improve tutee content and study skills knowledge.

- Integrated curriculum: early clinical experiences, small group instruction, necessary science content integrated with clinical application requires students to be self-directed.

- Previous tutor training focused on logistics.

▶ METHODS/ PROGRAM OVERVIEW

METT Program Objectives:

Core Medical Education Skills for Peer Tutors. Tutors will…	Core Medical Education Knowledge for Peer Tutors. Tutors will…
❑ Build rapport and create an open learning environment for their tutee.	❖ Design learning activities that promote understanding and the formation of long-term memory.
❑ Assist tutees with the development and accomplishment of iSMART learning goals.	❖ Understand the self-regulated learning[2] framework and how to promote it in work with students.
❑ Assess student progress.	❖ Understand the relationship between assessment (both formative and summative) and instruction.
❑ Promote independence in tutees.	❖ Be able to use guided release of responsibility[3] as a framework for individual sessions and as a guiding principle in working with students.

METT Program Structure:

	Orientation	Online Zoom Meetings	Online Modules	Online Modules:
				Modules 1 + 2: Introductory - preparing for a tutoring session
				Module 3: Note-Making Structures
				Module 4: Using questions as learning tools - retrieval and practice
				Module 5: Tutoring remotely - using Zoom and other technology to tutor
Peer Tutor Requirements	~ Attend peer tutor orientation in person ~ Orientation focused on the logistics of how to track hours, set up tutoring	~ Attend 3 of the 8 offered Zoom meetings ~ Zoom meetings are casual conversations with a medical education learning specialist that are focused on solving challenging learning issues posed by the peer tutors	~ Complete the two introductory modules ~ Complete one additional module of your choosing ~ Each module contains articles to read, videos to watch and activities to complete	
Expected Time Commitment	2 hours	3 hours total during the year - each meeting is one hour	1.5 hours total - each module is about 30 mins	

Total time commitment beyond regular tutoring responsibilities: 6.5 hours throughout the year.

▶ RESULTS

At the end of the introductory module, tutors were asked to brainstorm activities to do with their tutees that promoted various types of thinking: recall, application and synthesis[4]. The sample of tutor work below demonstrates the tutor's ability to move students through different levels of learning:

Recall
- **Subject:** Neuro - Anatomy
- **Activity:** Have the student draw the cranial nerves and where they travel in the brain.
- **Rationale:** Aids the students ability to recall the location of cranial nerves – a first step in understanding their function.

Apply
- **Subject:** Neuro - Anatomy
- **Activity:** Compare motor versus sensory cranial nerves in regards to location and action.
- **Rationale:** Aids student in applying information regarding motor and sensory origins within the brainstem to understand nerve function.

Synthesize
- **Subject:** Neuro- Anatomy
- **Activity:** Give the student a list of neurologic symptoms arising from a spinal cord/brain lesion and have them identify the location of the lesion and its impact.
- **Rationale:** Encourages higher level thinking.

After completing each module, the tutors rated how useful they found the module, and gave examples of how they planned to use what they learned in future interactions with their tutees:

Module #	% Rated module "Very valuable"/ "Valuable"	% Rated platform easy to use "strongly agree"/"agree"	Quotes from tutors about plans for future tutoring interactions:
Module 1 + 2: Intro	81.0%	93.3%	"I anticipate implementing Bloom's taxonomy depending on where my tutee is at in the curriculum because I think this can really enhance one's learning in an efficient way…Having this taxonomy will help me assess the best method for teaching a concept."
Module 3: Note-Making	60.0%		"I think concept maps will be important in the future, especially in topics that require a particular logic (ex. heart failure -> backup -> edema)"
Module 4: Questions as learning tools	86.7%		"Emphasize doing practice questions and systematically going through right/wrong answers and explanations to solidify concepts and improve long term retention"
Module 5: Remote Tutoring	60.0%		"Using screen sharing and shared white board to use more active learning strategies"

▶ DISCUSSION/ IMPLICATIONS

➤ Tutors found the online platform easy to use, which means that online learning is a viable way to help students learn about tutoring.

➤ Tutors found the content most valuable when it contained references to learning frameworks (e.g., Bloom's taxonomy, gradual release of responsibility, self-regulated learning).

➤ Tutors reported using more active learning strategies with their tutees as a result of working through the METT program.

▶ REFERENCES

1. Santee J, Garavalia L. Peer Tutoring Programs in Health Professions Schools. American Journal of Pharmaceutical Education; Alexandria. 2006;70(3):70.
2. Panadero E. A Review of Self-regulated Learning: Six Models and Four Directions for Research. Front Psychol. 2017;8.
3. Pearson and Gallagher. The Gradual Release of Responsibility Model of Instruction. Contemporary Educational Psychology. 1983.
4. Krathwohl DR. A Revision of Bloom's Taxonomy: An Overview. Theory Into Practice. 2002;41(4):212–8.