

Novel Design of an Austere Medicine Elective

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INTRODUCTION

Students who obtain the knowledge, skills and attitudes required to work in austere environments can better serve their patients regardless of practice setting. At VP&S few opportunities have traditionally existed for students to learn about wilderness and disaster medicine, or environmental illness. Health-related events related to climate change, disasters, and COVID-19 have reinforced the need for future physicians to have well developed tools for practicing in resource-limited settings.

OBJECTIVE

Our goal was to develop a medical student elective which delivered core content related to wilderness medicine, environmental illness and disaster preparedness and response, while introducing students to overarching skills including improvisation, teamwork, and resource allocation.

METHODS

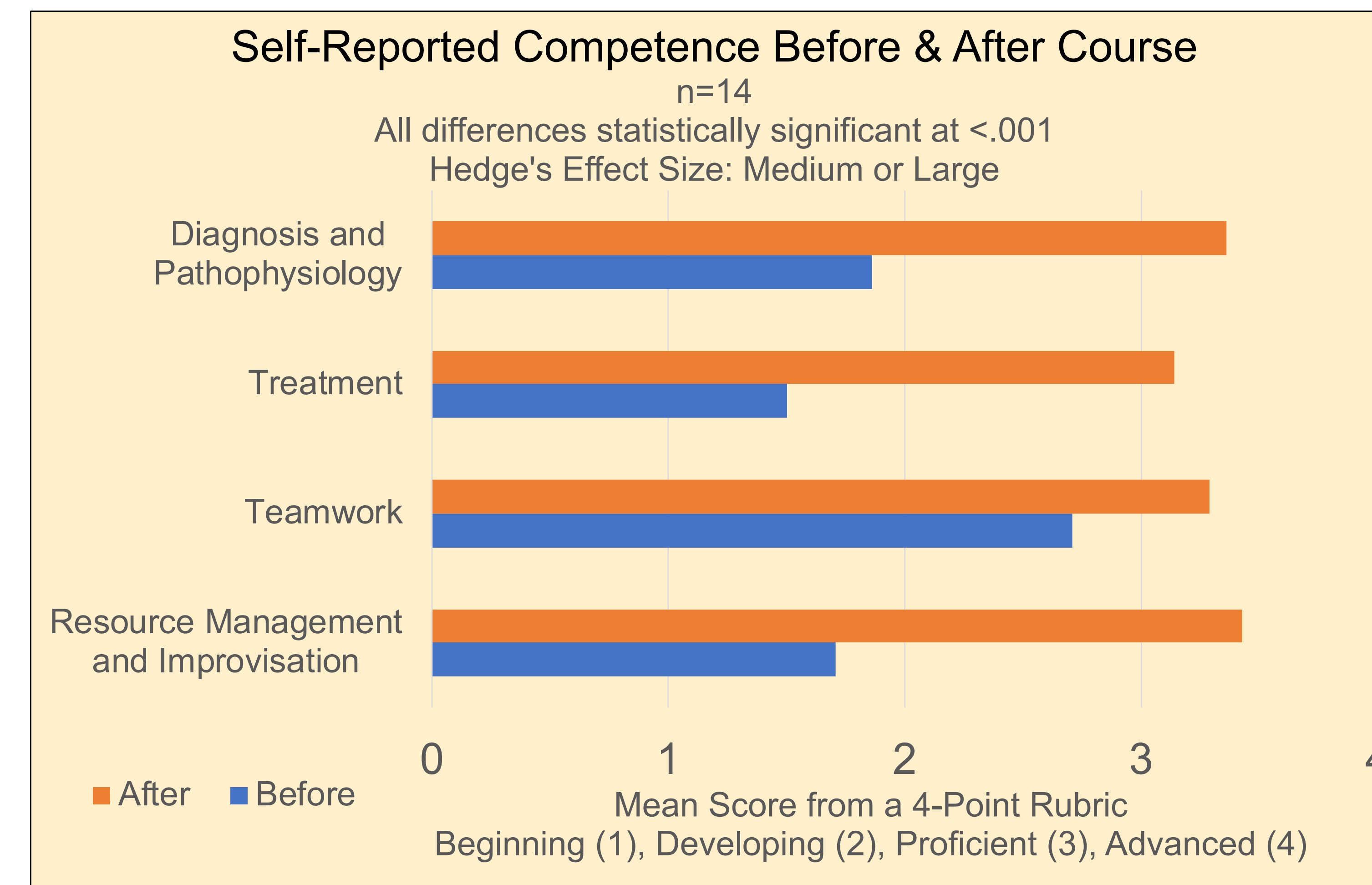
Content experts from the Department of Emergency Medicine partnered with the Center for Teaching and Learning, via a Provost's grant for Innovative Course Design, to create a new experience for medical students. We identified key impact areas using an analysis of courses offered at peer institutions, informal surveys of VP&S students, and literature on core curricula in the field. The development of learning objectives was informed by relevant skills and content, as well as the cross-cutting goal of teaching students to perform well in a variety of resource-limited settings.

We conceptualized a four-week full-time hybrid curriculum which includes in-person teaching including lectures, workshops and skills sessions, as well as synchronous and asynchronous online learning experiences. 15 final-year VP&S students participated in the course in May 2021. All students were asked to complete a post-course survey regarding the utility of various course elements, as well as overall teaching effectiveness.

RESULTS

Overall course satisfaction:

3.64 / 4.00

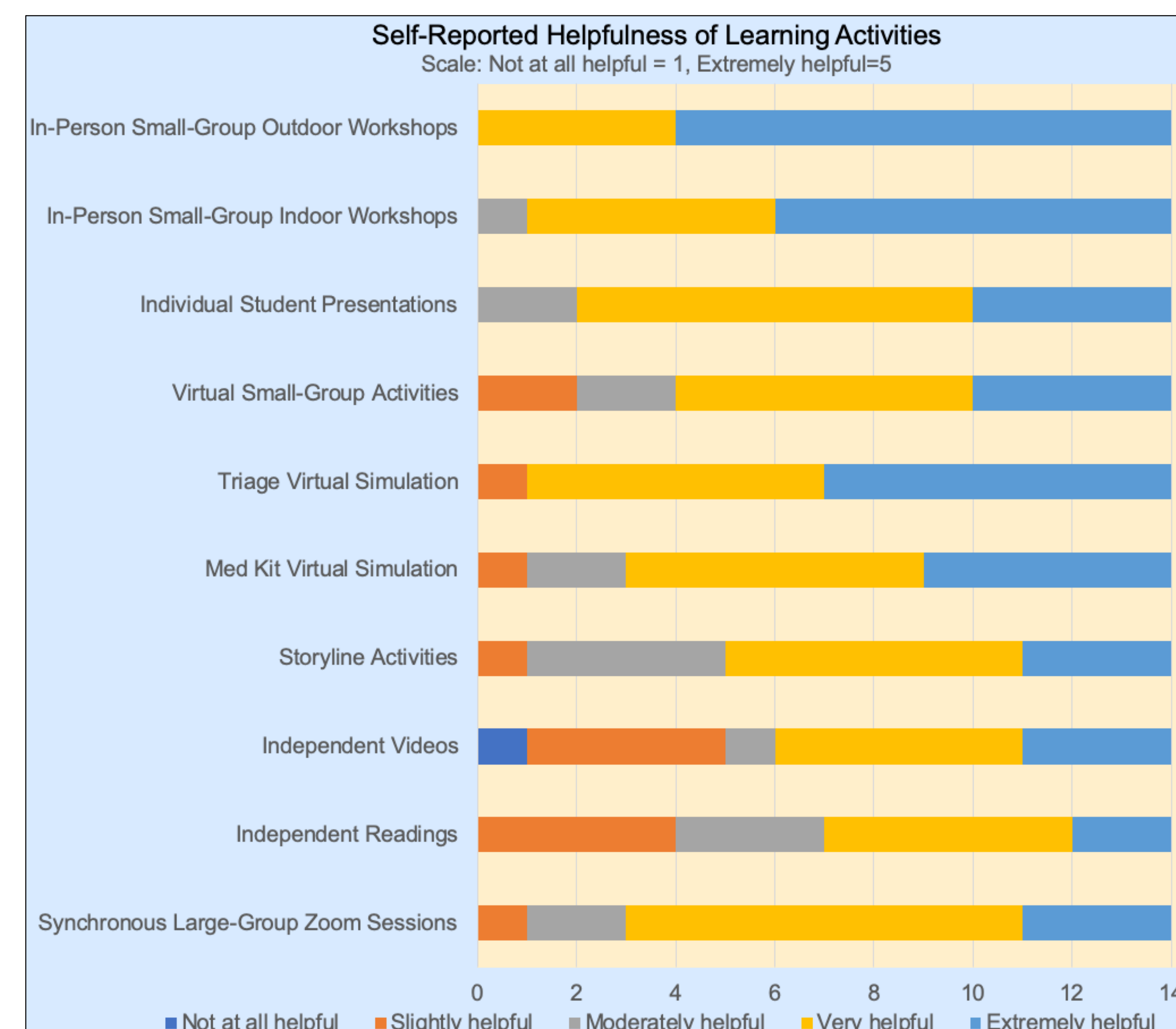


"A fascinating avenue of medicine that we are woefully underexposed to as medical students"

"Honestly, I wish we all had to learn these things. I feel much more useful in these settings now."

"I was very impressed with how well this course was put together....I think we'd all love to come back and help out if you need any senior student participation next year!"

—2021 course participants



DISCUSSION

Strengths:

- ❖ Interactive coursework emphasizing teamwork
- ❖ Free open-access online modules, available for dissemination to other learner groups
- ❖ Pre-course and mid-course surveys and rubric-based assessment structures reflecting course objectives and complexity of course material

Limitations:

- ❖ COVID-related restrictions led to increased virtual learning and elimination of back-country trip in 2021
- ❖ Limited objective measurement of knowledge/skills

Next steps:

- ❖ Increase in-person learning while keeping some content virtual, depending on specifics of each learning activity
- ❖ 5-day back-country canoeing/camping trip, incorporating several live simulations of back-country emergencies
- ❖ Development of objective measures of knowledge/skills
- ❖ Integration with medical student capstone projects
- ❖ Dissemination of online modules to other learner groups