

The Hybrid Critical Care Ventilator Management Course

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Problem Identification

- The field of EMS education is transforming. As time goes by, it is becoming clear that the old method of delivering EMS education only via a conventional PowerPoint presentation is no longer efficient in instructing EMS providers.
- EMS educators must adapt their curriculums to online education in EMS, whether hybrid, asynchronous or synchronous.

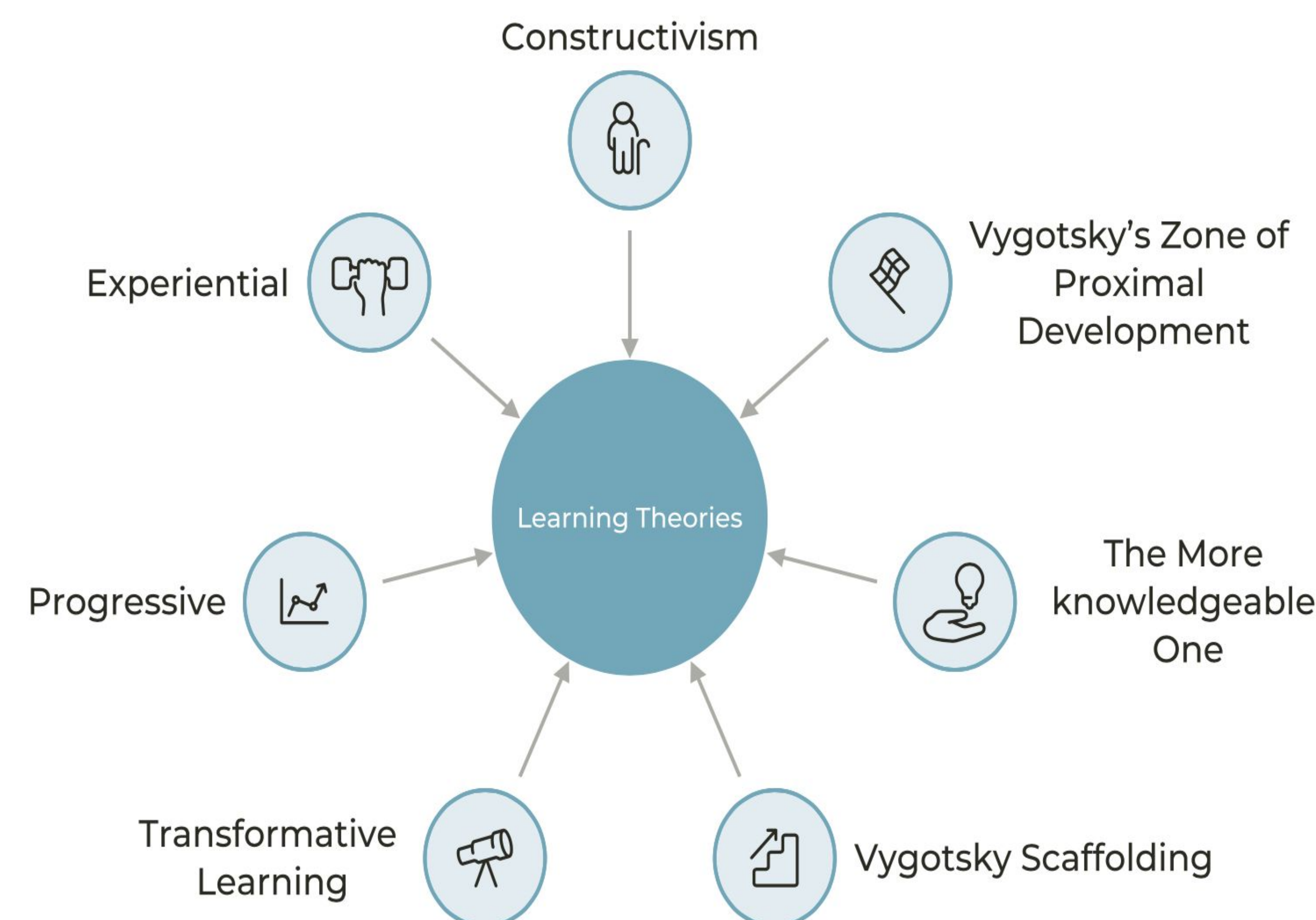
Needs Assessment

- I conducted a needs assessment through conversations with paramedics, paramedic students, and EMS administrators. I identified a need for asynchronous education and a more extended hands-on education session where providers could learn from experts and work closely with peers in real-world patient scenarios.

Goals and Objectives

- Upon completion of this training, the EMS provider should be able to:
- Articulate the function of the most used mechanical ventilation settings.
 - Describe the use and operation of the Non-Invasive Ventilation modes.
 - Develop a treatment plan and provide ventilatory support for critically ill patients.
 - Explain the common causes of Vent Alarms and develop a treatment option.
 - Perform and demonstrate competency in verifying ventilator operation in the transport setting.

Learning Theories



Educational Strategies

- Asynchronous Didactics via an LMS
 - Allows for learning of basic concepts at the student's pace.
 - Training available at all work locations.
- Simulation/Psychomotor
 - Realism adds excellent value to the learning experience.
 - As a technique for translating knowledge and theoretical information into a practical exercise, simulation also helps trainees strengthen their abilities in the absence of direct patient contact.

Charts

Test Question Analysis Report

Report Generated: Jul 01, 2022, 1:33 am ET

HealthStream.

Stony Brook University Medical Center
Attestation
Course: The Hybrid Critical Care Ventilator Management Course
Completion Date Range: Aug 02, 2021 through Aug 01, 2022
Data as of: Jul 01, 2022, 1:00 am ET
Report Generated: Jul 01, 2022, 1:33 am ET

Test Owner: SBUMC-Stony Brook University Medical Center
Last Updated By: Edder Peralta on Apr 08, 2022

Total Unique Students: 26
Total Test Completions: 26

Response Counts

Answer counts can vary among questions. This happens because:

- A question's text was edited,
- An answer's text was edited,
- The correct answer selection was changed,
- An answer choice was added to or removed from a question.

Question Group: Default Group
Description: [blank]
Questions in Group: 25
Mandatory Questions on Test: 25

Implementation

- Providers will be required to complete the didactic (asynchronous) lessons in an LMS before participating in the in-person simulation skill demonstration.
- The didactic work consists of 13 lessons and a one (1.5) hours simulation skills demonstration.
- Providers will be expected to manipulate the ventilator settings and adjust tidal volume, respiratory rate, inspiratory time, peep, oxygen concentration, compliance, and alarm settings.
- Simulation will follow four key components: Briefing, facilitate, debrief, and enduring material.

Evaluation

- The Learner's evaluations on lectures and simulation to assess learning levels of the Kirkpatrick model.
- LMS metrics Test Analysis Report
- Summative assessment at the completion of the asynchronous didactic work.
- Ventilator Management Skills assessed during simulation utilizing a standard skills sheet for all learners.
- Online Course evaluation based on NAEMSE Rubric for Quality Online Education.