Glossary

**Academic Indicators:** Grade point average, retention rates and graduation rates, for example.

**Active Learning:** Learning where the student is a participant rather than gaining information passively.

**Andragogy:** The teaching of adults.

**Asynchronous:** Ongoing discussions and self-directed learning where students and faculty are not in the online classroom at the same time.

**Apprenticeship:** Traditional method of training people into a profession that has powerful features for learning. Researchers such as Jean Lave, Allan Collins and John Seely Brown have identified effective learning and teaching techniques from apprenticeship learning and applied them to classroom learning.

**Authentic Learning Activities (Authentic Assessment):** Online or in-class activities that mimic real-world issues or situations. In the health sciences, this could be simulated patients, problem-based learning exercises or cases.

**Backwards Design:** A curriculum design process outlined by Wiggins and McTighe where course design begins with the end in mind and curriculum is based ultimately on what students will have to be able to know and perform.

**Behaviorism:** Learning epistemology where knowledge is gained through stimulus and response.

**Blended Learning:** A combination of e-learning and traditional, face-to-face teaching methods.

**Bloom’s Taxonomy:** A system of verbs that represent five different levels of learning (from the most simplistic to the most complex) designed by Benjamin Bloom in 1956.
Care Map: A document which outlines the care to be provided to a patient.

Clinical Reasoning: The ability to reason as a clinical situation changes.

Clinical Training: Training that occurs outside of the classroom in the health care setting.

Cognitive Apprenticeship: Extension of apprenticeship training techniques to the teaching of cognitive and metacognitive skills.

Cognitivism: Learning epistemology where facilitating learning is dependent on the understanding of the human mind.

Collaborative Curriculum Design: A curriculum design process where multiple faculty, instructional designers, technology experts and even students give input on the content and delivery of a course or program of study.

Competencies: Broad domains of knowledge, skill, and attitudes.

Competency Domain/Sub-Competency: A more refined subset of key knowledge, skills, and behaviors falling under a specific competency, which must be acquired by the learners.

Concept Mapping: A graphic tool used to organize material.

Conflict: Conflict refers to personal crisis or inner doubts for individuals. Critical conflicts can result in individuals’ lack of engagement in innovations or re-designs of curriculum and educational modes.

Constituent Skills: Subskills of a complex skill that are considered to be components of the skill as a whole.

Constructivism: Learning epistemology where knowledge is created through interaction between their experiences and ideas (or content).

Course Management System (CMS): CMS refers to a software system that provides a set of tools for teaching and learning. A CMS enables teachers to create and distribute course content, while students can participate in learning activities and access course content, regardless of time and space.
About the Contributors

**Critical Thinking:** The ability to analyze and evaluate an issue.

**Cultural-Historical Activity Theory (CHAT):** A deeply contextual and historically oriented theory originating from Vygotsky (1978), Leont’ev (1978), Engeström (1987, 1999), and others.

**Curriculum Strategies:** Models and methods of creating curriculum based on pedagogy, andragogy and heutergo.

**Disorienting Dilemma:** An event which causes a student to change or revise his/her point of view or meaning schemes.

**Distance Learning:** Delivery of information to learners at a remote location using e-learning, videoconferencing, or a variety of other available technologies.

**Dominant Learning Activity:** This refers to the theoretical framework of Cultural-Historical Activity Theory (CHAT). Within a program, some learning activities can be more dominant and historically rooted than others. Face-to-face learning can, for example, have historically rooted norms and routines for learning.

**E-Learning:** Use of the internet for learning.

**Epistemology:** A theory.

**Exacerbation:** To increase the severity of a medical condition or disease.

**Flipped Classrooms:** Students access course content through pre-recorded lectures or other online learning tools. Class time is used for problem solving activities and individual instruction. Focuses more on active than passive learning.

**Flow:** A condition of optimal challenge and skill set that provides a sense of well-being superseding the learning activity at hand.

**Health Care:** Administration: those who plan, direct, and coordinate medical and health services.

**Heutagogy:** Self-determined learning.

**Holistic Learning:** Encompassing all aspects of the learning experience; not just knowledge, but true learning and critical thinking.
**Hybrid Classrooms:** Sometimes referred to as blended. Combines face-to-face and online teaching modalities.

**Individual Learning Outcomes:** Specific measurements of what the individual learner can do (i.e. knowledge; skills) or believe (i.e. attitudes) at the end of training.

**Instructional Strategy:** The instructional strategy entails the medium that will be used to deliver instruction.

**Instructional Technology:** Technology that is used to enhance the educational process such as video lecture capture systems, educational games, augmented reality, etc.

**Interprofessional Competencies:** Competency domains, consisting of knowledge, skill, and attitudes, that transcend a single profession and are used across multiple professional roles.

**Interprofessional Education:** Two or more professions learn about, from, and with each other to enable effective collaboration.

**Interprofessional Teamwork:** Multi-professional team relationships characterized by cooperation, coordination and collaboration.

**Intransitive Thought:** Term coined by Paulo Freire where students feel their education is out of their control and up to fate.

**Intentional Design:** The practice of outlining a course or program to ensure all requirements (accreditation, programmatic accreditation, experts in the field, theoretical content) are included in a course or program from a student perspective. Intentional design ensures course objectives are linked to program outcomes and/or institutional goals.

**Linkage/Scaffolding:** The building of curriculum to ensure all course objectives are needed, to prevent duplication and to ensure that each part of the curriculum from assessments to course objectives to program outcomes to institutional goals build upon one another.

**Massively Open, Online Course (MOOC):** Online courses offered to hundreds or thousands of students, often for free. Topics are often of general interest to attract a large number of students.
Meaning Schemes: Truths students have learned over time.

Mental Model: A representation of how a task is organized.

Mertonian Criteria: Includes four criteria based on the work of Robert Merton. In education they are: high level of knowledge in the field, innovation, replication or elaboration of knowledge and significance of work.

Modeling: Demonstrating thought processes or tasks to a learner.

Nonacademic Indicators: Psychological, social and human capital that are wrapped around higher social issues and compassion for a greater good in the world. This is referred to in this manuscript as well-being.

Non-Dominant Learning Activity: This refers to the theoretical framework of Cultural-Historical Activity Theory. Within a learning practice, non-dominant learning activities refer to new and not-yet-established learning activities.

Online Classrooms: A learner-centered teaching and learning environment that is primarily Internet-based which can be synchronous or asynchronous. Sometimes referred to as e-learning.

Opticianry: A vision expert who is specially trained to supply, prepare, and dispense optical appliances through interpretation of written prescriptions.

Optometry: Physicians who examine the eyes and other parts of the visual system. They also diagnose, and treat visual problems, and manage diseases, injuries, and other disorders of the eyes.

Pedagogy: The teaching of children.


Point of View: How a student views a particular issue or thing.

Problem-Based Learning: Students are actively involved in the self-directed learning process. Learning activities are contextual, and collaborative. Also, a teaching method where students learn by being exposed to real-life problems they will face on the job.
Program Evaluation: In a curriculum sense, program evaluation is a curriculum mapping process that should occur periodically to ensure that over time, as revisions occur, to ensure the linkage or scaffolding of course items are not broken. In a more comprehensive program evaluation, the curriculum is mapped but other factors such as student graduate rates, student surveys, national certification exam pass rates, employer surveys, etc. are formally evaluated and reported to benchmark the efficacy of the program.

Program Outcomes: Data reflecting the effectiveness of the program (i.e. aggregate data of the impact of the program on learners or teams with regards to changes in knowledge, skills, or attitudes).

Reflection: Evaluating and examining content, personal actions or beliefs.

Regionalized Medical Program (RMP): This refers to the educational mode where medical students are distributed in different rural and remote hospitals while undertaking their clinical clerkship. Students’ theoretical studies are conducted in an online mode.

Scaffolding: Learning support that is provided during practice of learning tasks.

Self-Determined Learning: Self-regulated and self-directed learning; internal motivation to learn.

Sequencing: The ordering of instructional events.

Situated Learning: Learning a skill or developing knowledge in the situation those skills and knowledge are used. Also, called learning in context. Learning in a context where the knowledge and skills are used provides extra support for the skills being developed as the situation itself provides signs and support for the developing skill.

Socratic Reasoning: A method of teaching based on questioning.

Soul: Soul refers to the heartbeat of the class. A healthy soul is created when students and learners are excited to engage in the learning process and feel connected to the content, are committed to the advancement of their own learning; and feel a connection to a greater good.

Synchronous: Students and faculty are interacting online at the same time.
About the Contributors


Uniprofessional Competencies: Competencies that are specific to a designated professional group.