

# Undergraduate Medical Education

## Teaching and Learning Methodologies Policy

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### 1.0 Preamble:

In each of the Terms in the Undergraduate Medical Education program, learning opportunities will be designed and implemented to enable students to achieve the competencies and objectives outlined in the UGME Competency Framework: Curricular Goals & Competency-Based Objectives.

### 2.0 Statement of Purpose:

The purpose of this policy is to provide guidance to Year and Course Directors for the coordination of Terms and the design of Courses by providing guidance regarding balance of types of teaching and learning methodologies in each phase of the Curriculum. The ultimate intent is to allow students to achieve the competencies and objectives outlined in the UGME Competency Framework: Curricular Goals & Competency-Based Objectives while progressively increasing learner independence and developing the skills and attitudes necessary for successful Lifelong Learning.

### 3.0 Types of Learning Events and Opportunities:

Based on a recommendation from the Teaching, Learning and Integration Committee (TLIC) the Curriculum Committee approved a standard list of learning event types based on the terminology and definitions established by the Medbiquitous Consortium (<https://medbiq.org/curriculum/vocabularies.pdf>.) Scheduled formal, non-clinical course learning events or teacher-directed independent learning are identified using these tags on Elentra (the Learning Management System). For the most part, experiential learning opportunities (observerships, First Patient Project, electives, day-to-day clerkship rotation activities, service learning, academic enrichment certificates) are not tracked in the Elentra database, but these should be taken into account vis-à-vis students' time commitments when considering the scheduling of a term or course.

Learning event nomenclature and definitions are summarized in Appendix A and include:

- i. Career counselling
- ii. Clerkship seminars
- iii. Debrief
- iv. Demonstration
- v. Directed independent learning (DIL)
- vi. Facilitated small group learning (FSGL)
- vii. Games
- viii. Laboratory
- ix. Lecture
- x. Other – curricular (not a Medbiquitous term)
- xi. Other – non-curricular (not a Medbiquitous term)
- xii. Patient or panel presentation (PPP)
- xiii. Peer teaching
- xiv. Self-directed learning
- xv. Simulation
- xvi. Small group learning (SGL)

With the exception of the “other” categories, these learning event types can be divided into two categories: (1) content delivery; and (2) content application. For all learning event types, the goal is to provide engaging, stimulating learning opportunities.

#### **4.0 Life-long and self-regulated learning:**

One goal of the UGME curriculum is the development of the skills and attitudes required for lifelong, self-regulated learning. The curricular design promotes developing learner independence by using both teacher-directed learning and student-directed learning opportunities over the course of the four-year medical program. Through the curriculum, active participation in learning is encouraged using structured instructional activities such as FSGL, SGL, laboratories and simulations. As well, students are provided with opportunities to set and carry-out independent learning activities where they are tasked with both setting goals and reflection post-activity. These may include both mandatory and optional learning activities such as (but not limited to) observerships, electives, service learning, community-based projects, academic enrichment certificates, clerkship advocacy reports.

Table 1 can be used to guide educational leaders in selecting appropriate forms of instruction in order to create a curricular environment that promotes a level of independence that is appropriate to the stage of the students in a particular phase of the curricular.

<b><i>*Usually implies active learning activities</i></b>	Knowledge delivery (Teacher-directed learning)	Knowledge application (Teacher as expert and coach)	Self-regulated learning (student-directed)
Career counselling/ Observerships*/ Electives*		X	X (observerships; community week; electives)
Clerkship seminars	X	X	
Debrief	X	X	
Demonstration	X		
Directed independent learning	X	X (depending on design of activity)	
FSGL*		X	X (depending on activity)
Games*	X	X	
Laboratory*		X	
Lecture	X		
PPP		X	
Peer teaching		X	X
Self-directed learning			X
Simulation*		X	
Small group learning*	X	X	X (depending on activity)

## 5.0 Balance of Types of Teaching and Learning Methodologies across the Curriculum:

Working cooperatively, the Year Directors, Course Directors, and teaching faculty, in consultation with the Education Team, will ensure a balance of learning event types and opportunities that reflect sound pedagogical choices.

5.1 The balance of types of teaching and learning methodologies is considered on a per-course and per-term basis and monitored by the Year Directors working in consultation with the Course Directors and Education Team. Recognizing that lectures are, traditionally, the least active-learning method, this balance is based on the following principles:

- Each term and course shall have a variety of learning event types and opportunities as determined to be appropriate for the curricular content.
- No term shall have content delivered as greater than 50% lecture
- Each term shall include self-regulated learning opportunities, as described above
- Each course and unit shall have an a balance of learning event types and opportunities, developed in consultation between the Year Director, Course Director, and Educational Developer and following these threshold guidelines:
  - Ordinarily each course's scheduled learning events will be < 50% lecture
  - The Assistant Dean Curriculum, in consultation with the Course Director, Year Director and Educational Developer may approve a Course Director's request to schedule between 50 – 55% lecture learning events in extenuating circumstances.
  - If a Course Director would like to schedule greater than 55% lecture learning events, a request including rationale for the pedagogical choices must be presented to the Curriculum Committee. Approval by the Curriculum Committee must be provided prior to the start of the term in which the course is delivered.

**6.0 Standard:**

- 6.1. It is the expectation of the Queen's Undergraduate medical Education program that the use of active learning strategies be maximized throughout the curriculum. Student engagement in active learning (knowledge application) tasks promotes deeper learning, allowing them to connect what they are learning with what they already know and to transfer those deeper understandings to new contexts<sup>2-3</sup>. To be actively involved, students must engage in higher-order thinking tasks, such as analysis, synthesis, and evaluation. Students' active participation in the learning process facilitates retention and supports their ability to transfer through the construction of new ideas and/or ways of thinking<sup>4-6</sup>.
- 6.2. It is the expectation of the Queen's Undergraduate Medical Education program that the opportunities for student self-regulated learning be incorporated throughout the curriculum. Self-regulated learning includes the process by which students independently or collaboratively identify their learning objectives, seek the most appropriate resources necessary to meet the objectives, apply those resources to meet their learning objectives and/or contribute to the learning of others<sup>7-10</sup>. Active learning assists in fostering lifelong learning skills and behaviours<sup>11-12</sup>.
- 6.3. **To meet this standard, it is the policy of the Queen's Undergraduate Medical Education Program that the overall design for each term should correspond with the guidelines for scheduling of learning event types, including active and self-regulated learning, outlined in Section 5.**

**7.0 Procedure:**

- 7.1. Directed by the overarching program and curricular objectives assigned to each course, as described in the UGME Competency Based Framework document, Course Directors, Year Directors and teaching faculty will design specific learning and assessment events for students, taking into account the placement in the curriculum and developmental stage of the learner.
- 7.2. Teaching methodologies (outlined in Table 1) will then be selected in keeping with the objectives of the course and/or session.
- 7.3. The relevant Year Director will be responsible for ensuring that the composite plan for all courses in a given term matches principles in Section 5.

**8.0 Oversight:**

- 8.1. The UGME Teaching and Learning Committee oversees the collection of data to determine that the teaching methodologies and learning event types in each course are

appropriately balanced, in keeping with the above noted standard.

- 8.2. Course Directors and Year Directors determine the learning event type for each session.
- 8.3. The learning event type is entered into the Elentra database by the designated Curricular Coordinators.
- 8.4. Student feedback about learning event delivery is collected through: (a) meetings with the student curricular representatives; (b) course evaluation surveys; (c) specific learning event feedback solicited by Course Directors, e.g. Clinical Skills event surveys; and (d) confidential feedback on specific learning event types through online surveys as may be deemed by the Assistant Dean-Curriculum to be useful from time to time (e.g. DIL event report project).
- 8.5. Based on student feedback and the event types entered the Elentra, the Education Team prepares a summary report for TLIC.
- 8.6. The Chair of the TLIC (or designate) sends a report summarizing the learning event types for a course to each Year Director at the end of each term. Any noted discrepancy between student feedback and stated learning event type is sent out at the same time asking for feedback. A resolution is discussed where necessary.

#### **9.0 Reporting & Follow-up:**

- 9.1. The TLIC reviews the reports and provides feedback to the Year Director regarding the balance among the variety of teaching methods employed in each Term.
- 9.2. It is the responsibility of the Year Director to meet with each Term's Course Directors to ensure appropriate follow-up and to describe solutions required to address any issues.
- 9.3. The TLIC will report at least on an annual basis or as required to the Curriculum Committee on the current state and proposed developments in the appropriate balance of teaching and learning event types for all courses in pre-clerkship and clerkship classroom-based units. This data will also be sent to the Course and Faculty Review Committee, to be considered in their annual course review processes.
- 9.4. Targets for the balance of learning event types will be reviewed and determined by the UG Teaching, Learning, and Integration Committee at least every two years for approval and implementation by the UG Curriculum Committee. The TLIC will also report on the student feedback processes at that time, that is, review the policy and revise as appropriate.

## References

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