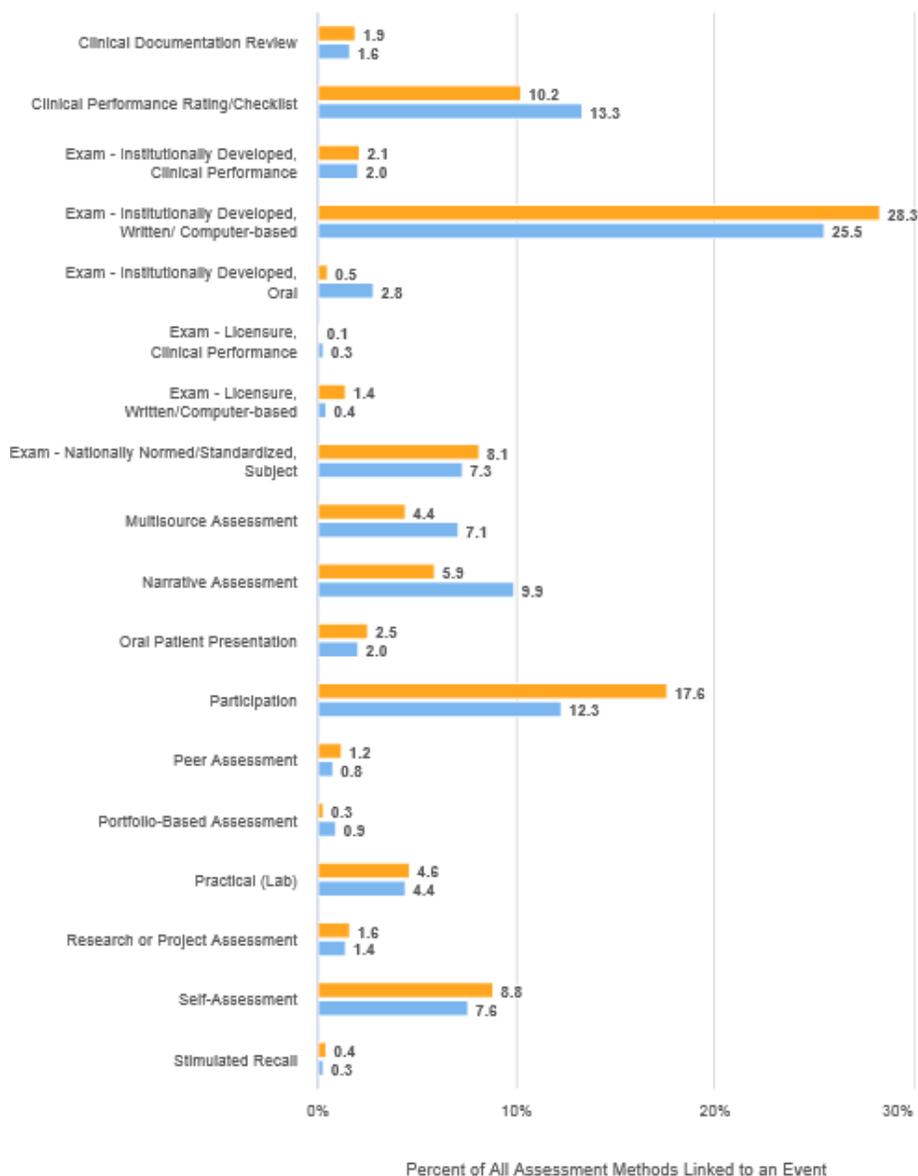


# Curriculum Inventory in Context

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## Use of Assessment Methods by US and Canadian Medical Schools ☰

Each Assessment Method Linked to an Event as a Percent of All Assessment Methods Linked to an Event



Click a legend item below to add or remove a bar from the report.

■ 2012-2013    ■ 2013-2014  
 N = 90            N = 120

[Click to view complete chart online](#)

### Attendance (Participation) as a Form of Assessment: What Do We Know and Does it Matter?

Question: how do you know you've been around medical education for quite a while? Answer: when you start recycling your own posts to a national medical education listserv! Earlier this year, I posted an

inquiry pertaining to attendance policies at US medical schools to the wonderfully helpful DR-ED listserv. I was primarily interested in whether there were formal attendance requirements in place and, if so, how they were measured. What I discovered accidentally was that I had posted a very similar inquiry to this same listserv way back in 2005! On both occasions, I received a small number of responses that were very consistent: medical schools typically don't take attendance at larger lecture-type sessions during the first two years of the curriculum, but most often do mandate attendance at more clinically focused learning sessions (e.g., small group activities, problem-based learning sessions, workshops, laboratory sessions, clinical shadowing sessions).

This finding made me think further about the issue of participation, defined by the MedBiquitous Curriculum Inventory Standardized Vocabulary<sup>1</sup> as "sharing or taking part in an activity" and considered as synonymous with attendance. As one can see from the CIR on "Use of Assessment Methods by US and Canadian Medical Schools," only 12%-17% of schools reported that "participation" is used as a form of assessment. When I posted my recent inquiry to the listserv, one big reason for my curiosity was the impact that preparation for the USMLE Step I exam might be having on attendance in the early portion of the curriculum, especially for medical students during the final few months leading up to taking the exam. The stakes of the Step I exam are widely felt to be extremely high for students, perhaps even more so in recent years.<sup>2</sup> Another, more intuitive reason was simply this: isn't student attendance at various learning activities important to both the learning process itself and to the development of professional values associated with the medical profession?

How might attendance impact student learning in medical school? What do we know about the relationship between attendance and student learning? Studies can be found as far back as 1974, with most studies focusing exclusively on the relationship between attendance and grades or other performance measures. In the context of a clinical rotation in Obstetrics and Gynecology at a teaching hospital in Ireland, Deane and Murphy<sup>3</sup> reported that student attendance at various clinical and tutorial learning experiences was positively associated with overall performance on examination scores, even when controlling for potential confounding factors (student sex, age, country of origin, timing of the rotation and previous exam failures). They also provided numerous references on this topic for those interested in pursuing the literature further. Other interesting studies have resulted in similar findings, i.e., a positive effect of attendance on academic performance.<sup>4-5</sup> However, the paucity of studies and the inability to identify a definitive causal link between attendance and performance indicate that this issue is far from being resolved and remains an interesting area for future study.<sup>3</sup>

Which brings me back to my original question: do US medical schools mandate attendance and, if so, how do schools assess it? It appears that the answer is "it depends." Depends on what? Several things: the specific learning context, the performance of a given student, the opinion of the faculty as to whether attendance matters, and perhaps even the "learning styles" or preferences of students (a can of worms that I hesitate to open!). The majority of schools do not appear to have formal attendance policies that are universally applied to all learning situations. And, even when attendance/participation is mandated for a specific learning context or event, it is not clear how it is measured and whether it is related to actual student performance.

Like many who responded to my two listserv postings, I am decidedly ambivalent on this issue. On the one hand, it seems to make sense that student learning would clearly be impacted by their level of involvement; if students don't come to class or other learning activities, how will they achieve the educational objectives of the curriculum? And, absenteeism from clinical rotations would certainly appear to not only harm student learning but also be at odds with developing a strong sense of medical

professionalism. On the other hand, students often feel that at least some activities are either not relevant to their learning needs, or even counter-productive to those needs. And, it appears to be the case that many students perform well regardless of whether they attend certain learning activities. So, perhaps the best summary is simply this: in the absence of consistent evidence on this issue, each school must decide whether to mandate attendance or participation in various learning activities, and how to best address issues that may arise when students do not participate at the expected level.

There's an old saying, attributed to William Lowe Bryan, to the effect that "an education is one of the few things a person is willing to pay for and not get." I certainly hope this isn't true for medical students, don't you?

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#### References

1. Curriculum Inventory Standardized Vocabulary. AAMC and MedBiquitous, 2012. <https://www.aamc.org/initiatives/cir/about/273972/cistandardizedvocablist.html>. Accessed November 1, 2016.
2. Canterbury RJ. Effect of USMLE on US Medical Education. 2016; 3 (7, July). AAMC Curriculum Inventory in Context Report. <https://www.aamc.org/download/464742/data/ciic03-7jul2016.pdf>. Accessed November 1, 2016.
3. Deane RP and Murphy DJ. Student Attendance and Academic Performance in Undergraduate Obstetrics/Gynecology Clinical Rotations. *Journal of the American Medical Association* 2013; 310 (21): 2282-8.
4. Schillerstrom JE and Lutz M. Academic Performance in the Context of a "Three Excused Absences" Psychiatry Clerkship Policy. *Academic Psychiatry* 2013; 37 (3): 171-4.
5. Bamuhair SS, Al Farhan AI, Althubaiti A, Ur RS, Al-Kadri HM. Class Attendance and Cardiology Examination Performance: A Study in Problem-Based Medical Curriculum. *International Journal of General Medicine* 2016; 9: 1-5.