How does the integration of a high-fidelity measurement of professionalism impact overall student grades?

Vidya Ramaswamy PhD, Romesh P, Nalliah, DDS, MHCM

Dr. Ramaswamy is Associate Director for Curriculum and Program Evaluation, Academic ffairs; Dr. Nalliah is Associate Dean for Patient Services. Both authors are in the, University of Michigan School of Dentistry. Address correspondence to Dr. Vidya Ramaswamy, ramaswav@umich.edu.

Vidya Ramaswamy, Ph.D., Associate Director for Curriculum and Program Evaluation, Academic Affairs, University of Michigan School of Dentistry, Ann Arbor, MI 48109.

Romesh P, Nalliah, DDS, MHCM, Associate Dean for Patient Services, University of Michigan School of Dentistry, Ann arbor, MI 48109.

PROBLEM

At our institution, graduating students consistently met requirements like passing summative exams, but some fell short of expectations regarding professional behavior. Professional identity has been conceptualized as the highest level of Miller's pyramid and is important in the development of a health care professional (Figure 1).[1] However, traditional assessments focus on procedural-based performance and measure professionalism as moment-in-time tests. There was a need for a better, longitudinal assessment of professionalism.

SOLUTION

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A longitudinal measure of students' (n=62) professionalism was included in an overall evaluation of their performance by a panel of their faculty. Professionalism was assessed using an abbreviated version of criteria derived from two measures validated on dental student populations (Table 1).[3,4] Through reviewing of data and discussion, the faculty panel categorized students into three categories: Senior Clinician (SC, a student who can move forward in the curriculum without significant correction and may be afforded some autonomy), Junior Clinician (JC, someone needing to improve a specific skills/knowledge/behaviors/attitudes but progressing well and needs no remediation) or Requiring Remediation (RR, not meeting the standard in a specific skill/knowledge/behaviors/attitudes and must remediate).

The project was deemed as "not regulated" (HUM00169572) by our institutional research body.

RESULTS

Among students who responded to the student survey (24 of 62), all identified feedback about their non-clinical skills such as professionalism from their clinical faculty (100%) and clinic director (79%) as a metric to be included in feedback. Similarly, patient complaints/commendations (92%) and feedback from staff about their interaction with them (88%) was also rated highly.

In the traditional letter grading system (Table 2), 54 of 62 students (87%) gained an "A," "A-," or "B+." In the faculty panel review process, 9 (17%) of these 54 were classified as "remediate" and 25 (46%) were classified as "Junior Clinician" (Table 2). In total, 17 of 62 (27%) were identified as needing remediation. However, not one of these students were currently in a remediation program and 6 of them were actually getting an A or A-.

What went well

There were two specific outcomes of the faculty panel review process. Firstly, there was a more focused evaluation of professionalism over time as part of the overall evaluation. Secondly, the faculty panel review process adjusted for grade inflation.[5]

What didn't go well

While students requested feedback, they were also resistance to it. Only 22 of the 62 requested their feedback (35%)—notably, among the 22, none were classified into the "remediate" group.

Lessons learned

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Traditional grading had awarded 44 students (71%) an A or A-. However, the faculty panel review (which delved deeper into professionalism) only classified 17 students (39%) as senior clinician—a comparable ranking of excellence. Importantly, six individuals who were awarded an A or A- in the traditional system, after faculty panel evaluation, were ranked as requiring remediation.

Interestingly, while the faculty panel results conflicted for those with grades of B+ or higher with the traditional grading system, there was complete agreement for the eight students with grades of B or lower.

References

1. Cruess RL, Cruess SR, Steinert Y. Amending Miller's Pyramid to Include Professional Identity Formation. Acad Med. 2016 Feb;91(2):180-5. doi: 10.1097/ACM.0000000000000913. PMID: 26332429.
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3. Ramaswamy V. The Patient Management and Professionalism Scale to Assess Dental Students' Behavior in Clinic. Journal of dental education. 2019;83(1):94-102.
4. Ramaswamy V, Piskorowski W, Fitzgerald M, et al. Psychometric Evaluation of a 13-Point Measure of Students' Overall Competence in Community-Based Dental Education Programs. Journal of dental education. 2016;80(10):1237-1244.
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Figure 1. Amended Miller's Pyramid with Professional Identity at the highest level.
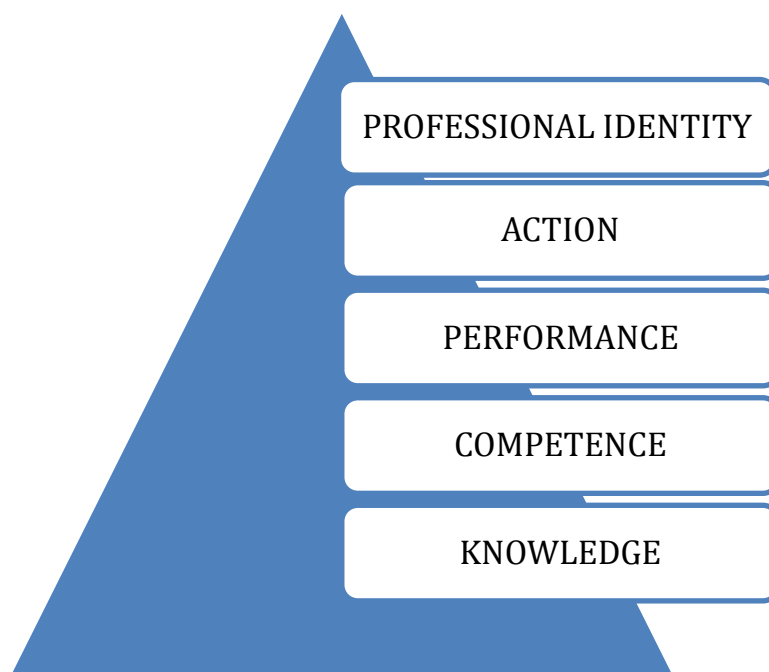
Adapted from Cruess RL, Cruess SR, Steinert Y. Amending Miller's Pyramid to Include Professional Identity Formation. Acad Med. 2016 Feb;91(2):180-5. doi: 10.1097/ACM.000000000000 0913. PMID: 26332429

Table 1. Student Traits to assess Patient Management Skills*	
Collaborative	Receptive when given critical feedback by faculty/staff; vs defensive. Open to different viewpoints; vs question instructor's knowledge/abilities if they don't align to their own or chooses to work with someone else. Is compliant to instructions and protocols; vs makes excuses or request exemptions for themselves. Works well with patients, staff, faculty and other students; vs has multiple poor interactions

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Empathy & Communication	Sincerely shows care/concern for patients; Shows empathy/kindness for the patient; vs treats patients like requirements and delivers care that is not patient centric. Listens to and engages patients; vs frequently misunderstands patient/faculty/staff.
Integrity	Is prepared for procedures that require some prep ahead of the appointment (did their homework prior to presenting); vs comes unprepared. Schedules patient family on a timely basis; vs multiple neglected patients. Doesn't have to be told something twice when asked to do something; vs student evades certain faculty
Ethics & Professionalism	Student does not lie/cheat; vs does whatever is needed to advance. Student is a good representative of our profession and could serve as a role model to others; vs student fails to model the characteristics of peer professional

Adapted from Ramaswamy, V (2019). The Patient Management and Professionalism Scale. *Journal of Dental Education*, 83 (1), 94-102 & Ramaswamy V, Piskorowski W, Fitzgerald M, et al. Psychometric Evaluation of a 13-Point Measure of Students' Overall Competence in Community-Based Dental Education Programs. *Journal of dental education.* 2016;80(10):1237-1244.

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Table 2. Number of students classified in each category

Grade	Senior Clinician	Junior Clinician	Remediation Required
A	8	7	3
A-	9	14	3
B+	3	4	3
B			3
B-			2
C+			1
C			1
C-			1
SUM	**20 (32%)**	**25 (40%)**	**17 (27%)**