



Alumni-informed dental school curriculum development

Well-rounded dental education must encompass foundational concepts, sequential learning experiences, and up-to-date content. Dental schools have the challenging task of preparing learners for the rapidly changing environment they face after graduation. For decades, all but one of the US dental schools have operated on a 4-year model. Due to an explosion in new technologies (eg, digital scanning), methodologies (eg, implant-supported dentures), and materials that dental practitioners now use daily in private practice, the already constrained curriculum has become even more overloaded. Traditionally, US schools design their curriculum to meet standards set by the Commission on Dental Accreditation (CODA). CODA develops and implements accreditation standards for all US-based dental education programs. These guidelines assure that graduates meet minimum competency standards in prescribed domains, but does such a curriculum adequately prepare the practitioner for the real-world experiences they face in practice? CODA standards establish the floor, but dental schools must ensure that their curriculum is developing the practical skills their graduates will need as they enter the profession, despite already constrained programs.

Pediatric dentistry, like other specialty domains, is continuing to evolve. New materials (eg, zirconia crowns, silver diammine fluoride), new techniques (eg, Hall crowns, minimally invasive dentistry), and changing behavior guidance methodologies have all emerged in the past two decades. Pediatric dental clinical experiences are notoriously cursory and so a new graduate might not recognize the gaps in his or her education until they have had some time in practice.

As such, gaining input from recent alumni is a valuable tool to help dental educators prioritize information and experience in the curriculum. These data offer a window into the challenges that new graduates face and will facilitate the identification of gaps in the current curriculum. This method has been used to inform curriculum changes in a variety of medical and veterinary educational settings^{1,2} to improve outcomes-oriented training. Outcomes in this sense refers to competencies gained by the learner. As many dental schools already have a competency or outcomes-based learning model in place, adding ad-

ditional information to further enhance assessment ability is a logical next step.

Responses from alumni can be gathered through surveys or focus groups. Both require time and resources, but these practices have additional benefits beyond curriculum development. Surveying alumni first begins by identifying alumni. Having a robust, accurate alumni database will only aid other school efforts such as future continuing education programming and fundraising. Asking for input from alumni also strengthens touchpoints after graduation and fosters a healthy alumni network to provide community expertise and job opportunities for future graduates. In addition to identifying areas for improvement in the curriculum, these practices also provide insight into workforce geographic dispersion, practice type, and other key data important for informing school policy, strategic planning, and future grant applications.

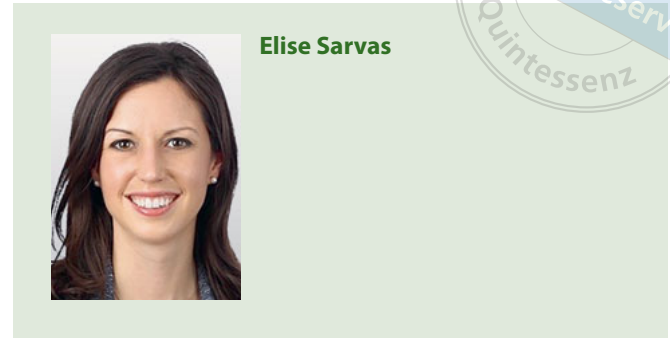
Surveys tend to have low response rates, but this can be improved. First, students on the cusp of graduation should be informed by the school that these will be forthcoming. This allows the student to 1) provide accurate contact information that may or may not be different from their school-related information (eg, a personal email address instead of an institutional one); 2) be aware that the surveys are coming so that they can anticipate their arrival; and 3) understand the survey's purpose and begin to cultivate buy-in to the process. Additionally, mailed surveys with handwritten addresses have a greater response than a survey emailed as a link.^{3,4} Schools could also include a letter from a known dental school professor instead of or in addition to a generic form letter, providing a personal touch and further enhancing initial buy-in to the process.

In summary, alumni-informed curriculum development is a useful adjunct to current CODA standards when designing an already crowded course of study. This method may be of particular use in specialty rotations where it is difficult to provide the full range of potential clinical scenarios, as in pediatric dentistry. Moreover, asking for alumni input provides additional benefits to schools because it aids their understanding of the surrounding workforce and improves alumni connections with the school.



References

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Elise Sarvas

Elise Sarvas, DDS, MSD, MPH
Clinical Associate Professor, Division of Pediatric Dentistry, University of Minnesota School of Dentistry, Minneapolis, MN, USA
Email: esarvas@umn.edu