While a certain amount of stress is beneficial to learning, neuropsychology research shows us that learning is negatively affected if there is too much stress, particularly if they feel personally threatened or attacked. First year dental students’ previous educational experience usually contains little exposure to the level of face-to-face feedback that is a staple of dental education. On the contrary, their usual experience of feedback is summative evaluation (grading) which is an emotionally charged, high-stakes activity. When put in an environment of frequent personal feedback, many students find the situations stressful and threatening, and many to react defensively or emotionally which is a significant barrier to learning.

The intervention included discussion and activities designed to increase student readiness for faculty feedback, to introduce the concept of deliberate practice, and to help them see feedback as a part of their professional development and career. Additional focus was on increasing student awareness of their emotions and cognitions related to seeking and receiving feedback.

Recognizing that this situation was primarily a mismatch of expectations, a half-day seminar was developed for first year dental students to be delivered during their orientation week to set appropriate and realistic expectations around feedback.

Prior to the seminar, the students were asked to read a classic article on feedback in medical education (Ende, Feedback in Clinical Medical Education, JAMA 83) to introduce the background concepts and experiences in a professional setting. Additionally, they were asked three short answer questions on previous experiences with feedback.

The seminar itself consisted of a short 20 minute background lecture on deliberate practice in skill acquisition, and the role of feedback in deliberate practice. The students were then divided into small groups for a series of activities:

1. **Explore the emotional impact of feedback vs evaluation** (especially grading) based on student experiences and the reading assignment.
2. **Origami Activity** - each student was given origami paper and instructions, and completed a simple origami crown, then self-assessed against a rubric. Next, they passed their origami project to a classmate for peer evaluation using the same rubric. This served as a basis for discussion of the value of self-assessment and peer evaluation and how they will be used in dental education.
3. Students read an abstract of an article on feedback in surgical knot tying that showed that effective feedback was not as popular as praise with students, which led to a discussion on the transition from fact based education to developing internal judgment in the process of becoming a professional. Bohler, An investigation of medical student reactions to feedback. Medical Ed 2006
4. **Individual Desire for Feedback.** A list of cognitions allowed the students to decide if they tend to be more or less likely to seek feedback, leading to a discussion on learning situational judgment on seeking feedback in dental school.

All groups came back together for a final seminar to discuss small group experiences, reinforcing the key concepts from each of the activities. Each student was asked to rate the seminar as part of orientation.