

# Leadership Training for Postdoctoral Dental Students

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*Abstract:* Harvard School of Dental Medicine launched a course on leadership for its postdoctoral dental students in 2010 in order to introduce them to the art of leadership and the latest theories and principles regarding becoming a leader. Nine four-hour modules over a period of six months took the students on a journey of leadership self-exploration by building awareness of their capacity in core leadership skills; providing them with tools and frameworks for developing effective leadership skills; encouraging the immediate practice of core skills; creating space for honest reflection; and providing inspiration with guest lectures. A constant toggle between the present and their future as leaders was built into the course. In the student evaluations, the course received an overall rating of 4.71 (5=excellent), and the students reported an enhanced interest in all topic areas. They reported that the ability to build trust with others was the most beneficial skill for a dentist, while viewing advocacy skills as the least beneficial. All the students indicated an intention to continue developing their leadership skills. Through the course, the students developed an understanding of their leadership strengths and limitations through case studies, role-play, and self-reflection, as well as gaining an understanding of team dynamics and cultural perceptions in the context of dentistry.

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Harvard School of Dental Medicine (HSDM) is dedicated to developing and fostering a community of global leaders advancing oral and systemic health.<sup>1</sup> The school has a long tradition of research and requires all its D.M.D. students to complete a research project as part of the curriculum. In addition, HSDM has always promoted leadership among its students through exposure to leaders in the field and offers a course on management and leadership to its predoctoral students. Nevertheless, there was no course offered that focused exclusively on leadership until introduction of the course “Dentist as Leader” in 2010. This course was designed as an introduction to the art of leadership with the purpose of introducing postdoctoral dental students to the latest theories and principles in leadership, while giving them practical tools and frameworks for beginning to practice leadership while still in training.

As Victoroff et al. pointed out,<sup>2</sup> few dental schools offer formal leadership courses for their dental students, and HSDM was the first to offer a mandatory semester-long course for third-year predoctoral dental students on management and leadership (now in its third year).<sup>3</sup> A recent literature search using the search terms “leadership,” “ad-

vanced graduate curriculum,” and “dental” did not produce any published materials on postdoctoral dental programs that have integrated leadership into their curricula. In contrast, recent studies in medical education have called for including leadership in the curriculum for medical students and as part of lifelong learning for practicing physicians,<sup>4,5</sup> as well as for academicians to exhibit appropriate leadership skills in clinical education.<sup>6</sup>

At HSDM, this inattention to leadership in the dental curriculum was in contrast to Harvard’s Kennedy School of Government, Harvard Law School, and Harvard Business School, where courses on developing skills related to leadership are offered and thrive. Current course offerings on leadership at Harvard Business School include fifty-three courses that would be interesting and applicable for dental students: examples include those on the broad topic of leadership, as well as more specific ones on operations management, strategy, organizational behavior and leadership, negotiations, finance, entrepreneurial management, and accounting and finance.<sup>7</sup> Harvard Law School offers nineteen potentially applicable courses in areas such as leadership, management, negotiation, communications, and strategy.<sup>8</sup> HSDM’s

“Dentist as Leader” course was developed as an introductory course on leadership and is a compilation of topics. It draws many of its teachings from these schools, including research and pedagogy developed over thirty years at Harvard Law School<sup>9</sup> and research and teachings from Harvard’s School of Education, Harvard Business School, and Harvard’s Kennedy School of Government.

The goal of HSDM’s postdoctoral leadership course was to make the practice of leadership a learned core competence for students through the application of a broad set of skills associated with effective leadership. These included relationship management, building trust, negotiation, communication, and the continual development of emotional intelligence—skills previously not considered integral to postdoctoral dental curricula. These core competencies of leadership were highlighted using a wide variety of exercises and examples taken from the contexts of dental school, dental practice, hospital administration, research, and health care.

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## Methods

### Design of the Course

The “Dentist as Leader” course consisted of nine modules, each four hours in length, conducted over a period of six months (Table 1). The sequencing was designed to take students on a journey of exploration of self and their capacity to navigate and adapt to relationships, environment, and culture. The purpose was to provide them with tools and frameworks for developing effective leadership skills; encourage the immediate practice of core skills; create space for honest reflection; and provide inspiration with guest lectures. A constant toggle between the present and their future as leaders was built into the course. Skills-based learning sessions that included exercises, case studies, and facilitated discussions alternated with lecture-based learning sessions delivered by high-level health care leaders, who shared inspirational stories of career challenges and successes.

As in HSDM’s predoctoral management and leadership course, we used Kotter’s definition of leadership as setting a direction, aligning people, motivating, and inspiring.<sup>10,11</sup> We supplemented this definition with concepts developed by Heifetz in *Leadership Without Easy Answers*.<sup>12</sup> Heifetz draws a distinction between leadership and authority and points out that authority figures often fail to exercise

leadership as they are constrained by the pressures, interests, and concerns that influence their position. He argues that leadership can be exercised no matter one’s position or where one sits in an organization or institution.

Our course was evaluated in several ways in an effort to obtain a broad scope of feedback in its inaugural year. Throughout the semester, students were asked for feedback about their experience at the beginning and end of each session. This schedule not only enabled the course developers to evaluate it in real time, but also provided an opportunity for students to practice reflecting on their experience, which is an important element in leadership. Additionally, the students were urged to problem-solve with instructors whenever concerns arose. The goal was to engage students in taking responsibility for their own learning and to practice collaborative approaches to problem-solving. Finally, the course was formally evaluated at its end with two forms of written evaluations.

Attendance was mandatory, and the students’ engagement as well as physical attendance was required. As such, no electronics were allowed in class, and full physical, emotional, and mental “presence” was required. The goal was to embed the idea that the practice of leadership requires one’s full attention and presence in the moment.<sup>13</sup> All presentations were made available on HSDM’s common platform after each class and upon request from the class. During the second session of the course, a single student made a request to the course directors that he be permitted to take notes on his laptop. His hope was that these notes would be posted after each class on the common platform. This student engaged several “partners” in the class to support his request. Not only was his request granted, but the strategic approach he used in making the request was used as a leadership example in the negotiation module.

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**Table 1. Topics of sessions in leadership course**

1. Building Self-Awareness
  2. Team-Building
  3. Negotiation Essentials
  4. Cultural Awareness
  5. Communications
  6. Conflict Management
  7. Strategic Planning and Execution in the Face of Change
  8. Thinking Big and Making Your Mark
  9. Emotional Intelligence and Neuroplasticity
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The overall goal for the course was articulated in the course description, which stated that “students will gain an understanding of the challenges of leadership.” Specific goals were for students to gain a better understanding of the following: 1) the intrinsic qualities necessary to be a leader, such as self-awareness and the ability to self-manage; 2) the impact of emotional intelligence; 3) the difference between leadership and management; 4) what leads to leadership failures; 5) strategic planning and how to align the organization’s vision and goals accordingly; 6) the importance of communication skills, negotiation essentials, and the application of conflict management techniques; 7) the importance of cross-cultural care; 8) how personal values impact leadership; and 9) the idea that the practice of leadership is an ongoing developmental process that requires focus and discipline.

Each of the nine modules stood independently, and students were required to read one assigned book per session. Additional reading materials were provided but not considered mandatory. The materials required for and/or used to develop the course are listed in Table 2. The nine modules were as follows.

**Module 1: building self-awareness.** The first module focused on the individual as leader. Students were required to take the Myers-Briggs Personality Assessment. The purpose of beginning the course with an assessment was to highlight that individuals have different approaches to how they collect and analyze data. Understanding one’s own approach highlights the differences that are inherent when working with other people. By understanding one’s own differences, one increases awareness and builds empathy for others. Students were also given a blank reflection journal to be used throughout the course. There were two purposes for having the students keep a journal. First was to have them begin the disciplined practice of developing self-awareness by writing down situations during the day that stood out as particularly successful or challenging and assessing options available to them. Examples included times when they became “stuck,” felt challenged, and did not know how to respond or when they noticed group dynamics that were interesting or felt successful in having a difficult conversation in which the actions they took made the conversation go well. The second purpose was to have students write down leadership lessons they wanted to remember that were then shared in class, as well as frameworks or tools that were particularly resonant.

#### **Module 2: building a team environment.**

The second module was dedicated to the concept of building a team environment. A former patient safety officer of Partners Healthcare, an integrated health care system in Boston, led a dynamic lecture-style discussion around building a team environment in a clinical setting. The lecture highlighted the evidence that creating a trusting team environment decreases medical errors and improves patient safety.

**Module 3: negotiation essentials.** In this module, negotiation was defined as an interaction between two or more parties whose interests appear to be incompatible. Given that the average day in a leader’s life may include situations in which staff members, direct reports, patients, spouses, and children present with demands that are difficult to understand, let alone meet, negotiation becomes an essential leadership skill. This module was based on research developed at the Program on Negotiation at Harvard Law School. Through facilitated discussion and classroom exercises, students began the morning building self-awareness of how an adversarial mindset can negatively impact negotiated outcomes as well as important relationships. Students were then introduced to an interest-based framework that can be applied in preparing, conducting, and debriefing negotiation. The module concluded with students using the framework to prepare and conduct a live negotiation based on a Harvard Law School case study.

**Module 4: cultural awareness.** These students had a variety of cultural backgrounds and came from four continents: North America, Asia, South America, and Africa. Most had not received any training in cultural awareness with respect to providing clinical care or working with other clinical care team members. As background, the students were required to read Anne Fadiman’s *The Spirit Catches You and You Fall Down*. In the four-hour session, members of Harvard Medical School’s Cross-Cultural Care Committee provided key learning points taken from the school’s cross-cultural care curriculum. Additionally, the students viewed as a group an educational video about a patient’s medical encounters in a cross-cultural setting that ended tragically. The class was divided into two groups for a facilitated discussion on the required reading, the video, and students’ personal stories and viewpoints regarding cross-cultural care.

**Module 5: communications.** The communications module was based on research and teaching methods developed in the Program on Negotiation at Harvard Law School.<sup>9</sup> The module was designed to

**Table 2. Materials required for the course and/or used in developing the course**

	Required Reading	Course Prep
Goleman D. Emotional intelligence. New York: Bantam Books, 1995.	R	P
Goleman D. What makes a leader? Harv Bus Rev 1998;Nov-Dec:93–102.	R	P
Goleman D. Leadership that gets results. Harv Bus Rev 2000;March-April:78–90.	R	P
Argyris C. Teaching smart people how to learn. Harv Bus Rev 1991;May-June.	R	P
Fadiman A. The spirit catches you and you fall down: a Hmong child, her American doctors, and the collision of two cultures. New York: Farrar, Straus, & Giroux, 1997.		P
Nohria N. From regional star to global leader. Harv Bus Rev 2009;Jan:33–9.	R	P
Yuan JC, Lee DJ, Kongkiatkamon S, Ross S, Prasad S, Koerber A, Sukotjo C. Gender trends in dental leadership and academics: a twenty-two-year observation. J Dent Educ 2010;74(4):372–80.	R	P
Heifetz R. Leadership without easy answers. Cambridge: Harvard University Press, 1998.	R	P
Butterworth B. On the fly guide to building successful teams. New York: Random House, 2006.	R	P
Katzenbach JR, Smith DK. The discipline of teams. Harv Bus Rev 1993;71(2):111–20.	R	P
Chilcutt AS. Exploring leadership and team communication within the organizational environment of a dental practice. J Am Dent Assoc 2009;140(10):1252–8.	R	P
Resick CJ, Whitman DS, Weingarden SM, Hiller NJ. The bright-side and the dark-side of CEO personality: examining core self-evaluations, narcissism, transformational leadership, and strategic influence. J Appl Psychol 2009;94(6):1365–81.	R	P
Beer M, Nohria N. Cracking the code of change. Harv Bus Rev 2000;78(3):133–41,216.	R	P
Eagly AH, Chin JL. Diversity and leadership in a changing world. Am Psychol 2010;65(3):216–24.	R	P
Piotrowski C. Earthquake in Haiti: the failure of crisis management. Organ Dev J 2010;28(1):107–12.	R	P
Employee motivation: a powerful new model—letters to the editor. Harv Bus Rev 2008;Oct:133–4.	R	P
Reinertsen JL, Bisognano M, Pugh MD. Seven leadership leverage points for organization-level improvement in health care. 2nd ed. Cambridge, MA: Institute for Healthcare Improvement, 2008.	R	P
Nohria N. The core four. People Management J 2006;Oct:42–7.	R	P
Stone D, Patton B, Heen S. Difficult conversations: how to discuss what matters most. New York: Penguin, 2000.	R	P
Fisher R, Ury WL, Patton B. Getting to yes: negotiating agreement without giving in. 2nd ed. New York: Penguin, 1991.	R	P
Hanson R, Mendius MR. Buddha's brain: the practical neuroscience of happiness, love, and wisdom. Oakland, CA: New Harbinger Publications, 2009.	R	P
Goleman D. Social intelligence: the new science of human relationships. New York: Bantam, 2006.		P
Kotter JP. What leaders really do: a Harvard Business Review book. Cambridge: Harvard Business Press, 1999.		P
Buckingham M, Coffman C. First, break all the rules: what the world's greatest managers do differently. New York: Simon & Schuster, 1999.		P
Katzenbach JR, Smith DK. The wisdom of teams: creating the high-performance organization. New York: Harper Business Essentials, 1999.		P
Collins J. Good to great. New York: HarperCollins, 2001.		P
Myers IB, McCaulley MH, Quenk NL, Hammer AL. MBTI manual. 3rd ed. Mountain View, CA: Consulting Psychologists Press, 2009.		P
HBR 10 must reads: the essentials. Boston: Harvard Business Review Press, 2011.		P

be facilitated and to draw real-life experiences from students. Students were put through a series of communications exercises that drew attention to their lack of skill in situations in which emotions run high and they feel certain they are right and the other party is wrong. These were designed to mimic difficult con-

versations that could arise in a clinical setting with patients and staff. Students were offered a framework for dealing with these conversations.<sup>14</sup> The goal was for them to develop a new definition of the concept of communication and to see interpersonal communication as an evolving and ongoing developmental



process much like the practice of dentistry. Students were then given a case study of a conflict between a dentist and a dental assistant and were asked to role-play the conversation with the goal of reaching agreement. The students used a framework for holding parties accountable and reaching consensus based on *Difficult Conversations*.<sup>14</sup>

**Module 6: conflict management.** This module was designed to highlight each student's conflict management style and offer tools and strategies to expand students' repertoire to become more effective in managing conflict. Each student was given the Thomas-Kilmann Instrument (TKI) to take in class.<sup>15</sup> Each of the five conflict management styles in the TKI was reviewed with respect to its merits and liabilities depending on the situation. A facilitated class discussion, along with case studies, highlighted when it is most appropriate and least appropriate to exercise each style.

**Module 7: strategic planning and execution in the face of change.** In this module, the students explored the challenges of managing complex health care systems, especially in times of change. Leadership and motivational skills for performing as an effective leader in such times were discussed as well as how staff and faculty members interrelate with each other and with the system in which they work. The goal was to provide students with insight into the roles, challenges, and success requirements of executives and clinical leaders. Topics included challenges leaders face professionally and personally; ethical and practical operational planning; governance and health care leadership in light of major challenges and opportunities; and communication, teamwork, and how to realize the potential of diversity. Through case study, the students were exposed to the necessary elements for improvement and how to identify and eliminate barriers to change. Leading change from the top versus from the bottom up or the middle was explored.

**Module 8: thinking big and making your mark.** Throughout the course a "toggle" existed between real-time practice of leadership skills and inspiration through guest speakers. This module included both approaches in its four hours. Students were introduced to the concept of creating a vision in the face of current reality, and a dynamic and inspiring speaker who exemplified the leadership skill of building a vision and bringing it to fruition was featured. Students prepared for class by thinking through their own professional and personal goals and vision. The first part of the module featured a facilitated discussion around the tension that exists

between current reality and vision and how that tension either creates the energy for change or quashes the vision.<sup>16</sup> The second portion of the morning included a guest speaker: a public health physician who explained a need to shift how public health workers gather data in the field. He described the challenges of collecting data on paper in sub-Saharan Africa and how it occurred to him that everyone in Africa had a cell phone—making this an obvious and easy tool for data collection. Leaving the government, he pursued his dream and today provides thousands with a free, web-based, data collection service. His story exemplified creating a vision and the challenges that reality can pose to its implementation.

**Module 9: emotional intelligence and neuroplasticity.** Our final module brought the course full circle. We began with the concept that building self-awareness is the first step to self-management based on Goleman's seminal work, *Emotional Intelligence*.<sup>17</sup> Emotional intelligence is considered a key building block to developing leadership capacity, supplemented more recently with Neuro Leadership,<sup>18</sup> the idea that understanding the neuroplasticity of the brain and its ability to be "rewired" can positively affect our behavior and ability to self-manage. The guest speaker for this module based his lecture on the latest research in meditation and its link to happiness and the capacity to reduce reactivity when emotionally triggered. The ability to withstand emotional triggers is useful to anyone, particularly to leaders in high-level positions. Students were introduced to a mindfulness practice designed to elicit calmness in the face of daily stress. The speaker argued that the daily practice of mindfulness can increase self-awareness and the capacity to manage one's self in stressful situations.<sup>19</sup>

## Student and Course Assessment

The students were evaluated on their attendance, participation in class, and final papers and, as with all courses at HSDM, were assigned a final pass/fail grade. They received a grade on their final paper as well as in-class participation, including presentations and attendance. Similar to the practice in the leadership course for dental students, these postdoctoral students were asked to assess their course using two tools. Students must complete the school's anonymous, web-based standard questionnaire at the end of every course in order to receive a grade for the course. The details of this assessment tool were described in a previous article.<sup>3</sup> In addition, for this course, the stu-

dents were asked to complete a customized evaluation to assess what skills they perceived as most valuable to them, for now and in the future. This evaluation was administered at the end of the last class as part of the session; it was voluntary and anonymous, and students were allowed to leave without completing the evaluation. The details of this assessment tool were also described previously.<sup>3</sup> Institutional Review Board approval was obtained for publication of the results of the customized evaluation form.

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## Results

All students passed this course. Grading was heavily dependent on participation and attendance in class, and twenty of the twenty-one students (95 percent) attended all nine sessions. During the exercises, the students were observed by the co-directors and received immediate feedback on how well they performed the exercises or skills. Students were asked to assess what they did well and could do differently with a one-on-one peer coach; they also received feedback from their peers. This was followed by a plenary discussion in which insights were captured. Since leadership development requires self-awareness and gathering feedback from those around one, student self-assessment and peer assessment were viewed to be as important as instructor assessment. At the end of the course, students expressed disappointment that it would not continue into the new year. Three students received an honors grade because of their outstanding contributions in class discussions as well as the excellent quality of their final papers.

All twenty-one students completed the standard questionnaire; they gave the course an overall rating of 4.71 on a scale of 1 (poor) to 5 (excellent). The students indicated that this course enhanced their interest in all areas: difficult conversations, vision planning, cultural awareness, conflict management, communication, negotiations, teamwork, self-improvement, and goal-setting. They also noted major strengths and weaknesses of the course and gave recommendations (Table 3).

Twenty of the twenty-one students completed the customized student questionnaire. Overall, they assessed their leadership skills at 3.74 on a scale from 1 (poor) to 5 (excellent). On average, they assessed themselves best at authenticity (4.54 score) and worst at managing conflict (3.25 score; Table 4). It appears that the students did grasp the principles of leader-

ship by the end of the course. Of the fifteen skills they were asked to consider (Table 5), they viewed the ability to build trust with others as the most beneficial skill for a dentist and viewed advocacy skills as the least beneficial. All the students (75 percent very likely, 25 percent somewhat likely, and none not very likely) indicated that they intended to continue practicing to develop their leadership skills, with the most focus on leading groups/teams and dealing with difficult personalities (Figure 1).

Additional comments on the customized questionnaire were similar to those on the standardized questionnaire. The students indicated they would have liked to have more exercises as part of the course and requested a number of management topics. They greatly appreciated the guest speakers and the breadth of the topics covered in the course. The students reported that the course made them more self-aware and motivated them to take more of a leadership role.

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## Discussion

HSDM's mission is to educate students to become leaders in their field. Many of our graduates have dedicated their careers to research and/or academia, through which they have taken leading roles in industry, patient care, and national organizations. Ongoing changes in health care demand leadership from oral health professionals at every level. Dentistry as a profession will continue to have to position itself in numerous areas, including lobbying and policy developments at the professional association level, reform of state-level oral health programs, the growth of the profession in the twenty-first century, the direction of oral health research in light of recent genetic advances, and the responsiveness of dental schools to changes in the economic climate.

With respect to education, in spite of the urgent need for leadership in academia, currently there are faculty vacancies at all levels, making it impossible to build a "bench" of future leaders. The American Dental Education Association (ADEA) reported that vacancies for full-time faculty positions in U.S. dental schools rose from 273 in 2001<sup>20</sup> to 334 in 2007.<sup>21</sup> More than 10 percent of all these vacant positions were left unfilled for more than twenty-four months. The academic rank of nearly 60 percent of the vacant positions was at the assistant professor level in 2007, an increase from 2006. In addition, the percentage of associate professor vacancies increased 9 percent to 23 percent from 2006 to 2007. Similar to prior years,

**Table 3. Students' feedback on standard questionnaire at end of course**

Strengths	Weaknesses	Recommendations
Excellent instructors who are passionate in teaching leadership and who have real experience in the field.	Each class took really long duration: 4 hours.	More guest speakers.
Several amazing invited lecturers in all related fields.	Sometimes it was difficult to initiate discussion.	Discuss the reading assignments in class.
Intense class participation.	Only didactic classroom teaching; no internship or observation.	Increase the time.
Course organization.	Not any major weaknesses, but initially there was lot of rearranging of the topic.	More details in each section.
Interesting and relevant topics.	I would like to have more time in classes, to be able to cover more material and practice them.	A concrete example for our journals, asking us to tie the content of a case/article to our own personal experience and to turn them in each week.
Small-group exercises.	I would have liked a specific lecture on being a leader in a small private dental office. Managing, learning, and changing with the attitudes of your staff, while still maintaining the office vision.	HBS has one of the richest resources for cases and a great battery of cases on management and on leadership, and they are often very interesting to read. Perhaps assigning 1 case per session could complement our learning.
Bridged the gap to apply this material to dentistry.	The balance of work from session to session.	More interactive exercises would have made it even better.
Reading material.	It would be much better if the class is held in a larger classroom.	Podcast would have been helpful.
Diverse breadth of exposure.	Need more case studies.	Expand the class to 1 more semester.
Excellent material to learn with the potential of daily applications professionally and in all environments.	Not as much class participation as I would have liked. All of my peers come from various backgrounds and have done amazing things that I would have loved to hear about throughout this course.	I feel that a major deterrent for any person in a leadership role is a feeling of insecurity when making new policies with regards to federal, state, and local laws. A lecture on common malpractice claims, common workplace lawsuits, and business law would be beneficial.
The fact that it isn't every week.	Relatively little time; only one semester; only met once per month.	More sessions, less session time.
Excellent course directors.	Not all the PowerPoint presentations were posted on the website. It would be helpful if all the handouts/presentations were available electronically.	The course was really amazing. It includes so many topics that are required for practicing leadership. I feel that I learned a lot from this course. Thank you so much!!

in 2007, 12 percent of vacant budgeted positions were at the full professor level.<sup>21</sup>

During its most recent advanced graduate education review, the HSDM leadership surmised that a significant number of master's-level students and some doctoral-level students might benefit more from a mandatory leadership track than the current mandatory research requirement since these students' ambitions and interests were focused more on academia and leadership than basic research. The course described in this article was built around this need,

and its nine modules represented the latest theories and concepts in leadership today. The course began with the concept of self-awareness as the basis for developing the capacity to notice one's behavior in order to modify it—or self-manage—as a leader. Not only does self-awareness provide a springboard to managing oneself as a leader, but as Lyke has shown, insight into oneself is positively associated with subjective happiness and satisfaction with life.<sup>22</sup> Recently, Harrington and Loffredo reinforced and expanded on Lyke's work, showing that “insight is

**Table 4. Students' self-assessment on customized questionnaire at end of course: scale of 1 (poor) to 5 (excellent)**

Leadership Skill	Average Score	Leadership Skill	Average Score
Compassion	4.00	Authenticity (transparency)	4.54
Advocacy skills	3.60	Integrity	4.35
Inquiry skills	3.45	Ability to build trust with others	4.05
Empathy	4.05	Personal responsibility	4.10
Ability to influence	3.60	Managing conflict	3.25
Self-management	3.45	Leading groups/teams	3.60
Relationship management	3.65	Dealing with difficult personalities	3.35
Likelihood to exercise leadership during a crisis	3.60	Overall assessment	3.74

**Table 5. Students' assessment of most and least beneficial leadership skills at end of course**

Leadership Skill	Most Beneficial Skill		Least Beneficial Skill	
	Points	Percentage	Points	Percentage
Compassion	3	15%	0	0
Advocacy skills	0	0	6	30%
Inquiry skills	1	5%	1	5%
Empathy	2	10%	0	0
Ability to influence	1	5%	1	5%
Self-management	3	15%	0	0
Relationship management	1	5%	0	0
Authenticity (transparency)	1	3%	0	0
Integrity	5	25%	0	0
Ability to build trust with others	6	30%	1	5%
Personal responsibility	2	10%	1	5%
Managing conflict	2	10%	0	0
Leading groups/teams	0	0	0	0
Dealing with difficult personalities	3	15%	1	5%
Likelihood to exercise leadership during a crisis	1	3%	3	15%

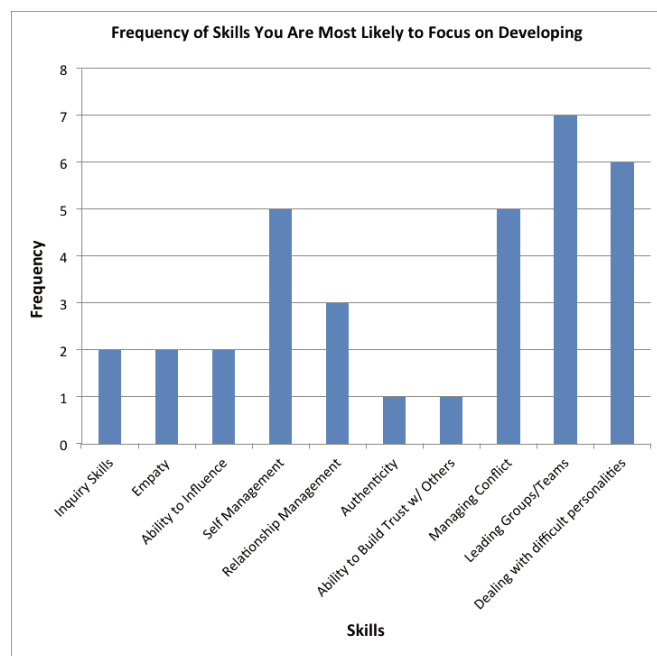
a very important dispositional self-focused attention variable related to positive well-being.”<sup>23</sup> As Goleman had noted earlier, optimism is a key component of strong leadership.<sup>17</sup>

With respect to team-building, the dental profession by nature is technical and solitary: the majority of dentists in the United States work as solo practitioners or with one other dentist<sup>24</sup> in a small office setting where the dental assistant and dentist may multitask as scheduler, receptionist, or other roles. In spite of the solitary mentality of many dentists, even the smallest dental practice setting is one of a team. In addition, trends suggest that dental teams are facing more and more complexity, requiring better communication and more cohesiveness. One of these trends includes an aging dentate population that will need complex dental care. As of this year, the first of the baby boomers are Medicare-eligible. Given the political power this group holds, it may be that Medicare benefits will be expanded to include

dental services. In this context, it is conceivable that reimbursement rates will drop and small dental practices will merge in order to reduce overhead costs and remain economically viable. For those providers working in multi-specialty practices and practice management arrangements, their setting already represents a complex team. For any such setting to be successful, safe, and enjoyable, it will be necessary for the twenty-first century dentist to understand the concept of team dynamics and be an effective team leader when the occasion arises.

In March 1966, at the second convention of the Medical Committee for Human Rights in Chicago, Dr. Martin Luther King Jr. stated, “Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”<sup>25</sup> More than forty years later, there is an understanding in medicine that a patient’s sociocultural background affects his or her beliefs and behaviors, yet cross-cultural curricula are still not widely used in medical education, and the few





**Figure 1. Skills that students reported they were most likely to focus on for development in the future**

curricula developed tended not to take into account the importance of social factors on the cross-cultural doctor-patient encounter.<sup>26</sup> A lack of cultural awareness and sensitivity to the behaviors that undermine trust in this context are key to providing quality care to all patients. Betancourt et al. have made great strides in the development of a cross-cultural medical curriculum that “improves providers’ ability to understand, communicate with, and care for patients from diverse backgrounds,” while weaving “the concepts of cross-cultural care into the ethics of caring.”<sup>27</sup> A model for effective cross-cultural medical education was described by Betancourt in 2003.<sup>28</sup> In 2008, the Strategy Forum suggested a multifaceted approach to address racial/ethnic disparities in health care, one of them being “securing the support of leadership.”<sup>29</sup>

In the course “Dentist as Leader,” one goal was to help students gain an awareness of the importance of cross-cultural care and a sense of responsibility that its implementation will require their leadership as future authority figures: “Leading change is an organizational growth and enrichment requirement at all levels and types of organizations. Yet, most change is resisted and most change efforts fail. It is said that the currency of leadership is change yet few leaders either study change or consider themselves adept at it. Effective management of change differ-

entiates those who are successful from those who are not. No matter what the work, to be successful requires coming to work every day to not only make the ‘product’ but also to make it better.”<sup>30</sup> In order to be successful at providing safe, effective, efficient, and equitable care, health care leaders will need to learn to innovate, change, and improve continuously.

One reason we see the course as successful was the style of teaching and the use of facilitated methods of teaching, which is consistent with adult learning methods. The purpose of teaching the course in this fashion also models a style of leadership that encourages the thoughts and ideas of many in the group versus a more directive/hierarchical approach to leadership. In addition, we wanted to have the students engage in class, which meant that we assessed them by their level of engagement and the insights they shared based on their experiences in the exercises. Both co-directors were always present to observe and guide each small-group discussion and exercise. Additionally, the groups’ reports allowed for further feedback and guided learning. However, going forward, we have adjusted the course in that every session starts with a check-in on journaling with the students to discuss and provide feedback on how well they have incorporated the last session’s teachings into their daily lives.

While many of the teaching materials used in the course were originally developed at Harvard, the majority of these materials are available to the public. In addition, we believe that the instructors should have in-depth knowledge of the subject. It is not necessary to have Harvard faculty members teach this class. Dental schools are affiliated with institutions of higher learning and therefore should have access to faculty members who are familiar with the topic of leadership and the reading materials used to develop this course. In addition to case studies that are accessible to the public, many of our leadership examples were local. For instance, Jim Conway lectured to the class on his experience with leadership and change based on a case at the Dana Farber Cancer Center. Providing local examples by using leaders in the community brings the practice of leadership alive to the students.

Our students indicated a number of areas of the course that they appreciated, including the quality of the instructors, requirement of intense group participation, relevance of the topics, diverse breadth of exposure to topics, and the fact that a new topic was introduced at each session. They also expressed appreciation for the bridge created between dentistry and the exercise of leadership. This feedback leads us to conclude that a leadership development course within the dental school is a more powerful link to leadership for dental students than a general leadership course taken outside the setting of dentistry.

These students also suggested that it was sometimes difficult to initiate discussion. Our belief is that this was largely due to cultural influences on the majority of students, who were from non-Western countries. In addition, this group of students was new to the school; the first class was the first time they had been introduced to one another. The lack of group participation was raised and discussed in class and used as an example of a leadership challenge. Specifically, the instructors had an expectation, and the group was unwilling early on to meet it. Over time, a pattern developed whereby students would become participatory toward the end of each session, so that most sessions closed with lively discussion. In future sessions, we plan to address this issue by calling on students rather than expecting them to volunteer their contributions.

We also noted the majority of the students' comments reflected an interest in more class time, another semester of study, and additional group activities. To us, this suggested that the students appreciated the course and viewed it as a success.

Minor changes we intend to make include a more rigorous and applicable session on innovation in dental care and a clearer expectation that students spend more time in serious reflection through journaling. Although a few students objected to the four-hour sessions, we will continue spending this amount of time on sessions as they are important for several reasons, including allowing students enough time to take in content and to observe dynamics, make active contributions, and immerse themselves in the topic and the experience of learning.

Because leadership skills are acquired and fine-tuned over a lifetime, it did not seem appropriate nor valuable to measure students' leadership skill at the end of the course. At best, we could only measure if students remembered certain leadership concepts and definitions, which was not the intention of the course. Rather, we wanted to provide a first-time insight into the realm of leadership and, through exercises and lectures, instill in the students the idea that leadership is not a skill learned in the lecture room but rather in life, over time. Hence, we measured if the students not only liked the content and teaching style, but also if they thought this approach was valuable to start their journey of lifelong leadership learning. Additionally, at the end of the course, the students had the opportunity to enroll in a longitudinal study of their leadership skill development.

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## Conclusions

The students in this course developed an understanding of their leadership strengths and limitations through case studies, role-play, and self-reflection, along with an understanding of team dynamics and cultural perceptions in the context of dentistry. Our conclusions are based on the results of a customized questionnaire completed by twenty postdoctoral students in one dental school and may not be generalizable to students in other graduate programs. Nevertheless, we believe that the course was particularly successful because of the approach we took in "toggling" between the real-life opportunities students could take to practice leadership in their everyday lives and the inspirational examples of leadership they could envision for themselves in the future, represented by the guest lecturers. By requiring students to begin their leadership development in their current life experience, we gave them an opportunity to begin the process of reflection and the exercise of new behaviors that will develop into a practice over time.

Finally, we hope that a focus on leadership development in the core curricula of graduate dental education will produce strong, effective leaders in dentistry. Currently, there are three programs<sup>2,3,31-33</sup> besides HSDM's that focus on leadership in dental schools in the United States. Two years ago at HSDM, we began surveying predoctoral and postdoctoral students who had been exposed to a leadership development curriculum in their training and are conducting a longitudinal study of the impact of the courses on their professional lives as dentists.

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