Transforming Admissions

A Practical Guide to Fostering Student Diversity in Dental Schools
Credits

This guide is based on the ADEA Admission Committee Workshop developed by Dr. Anne Wells, ADEA Associate Executive Director for Educational Pathways; Dr. W. David Brunson, Associate Director of the ADEA Center for Equity and Diversity; and the ADEA Admission Committee Workshop facilitators.

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Disclaimer

The content of this publication should not be construed as legal advice, and readers should not act upon information contained in this publication without professional counsel.
ACKNOWLEDGMENTS

The authors wish to acknowledge the Robert Wood Johnson Foundation (RWJF) for continued support of the ADEA Admissions Committee Workshops (ADEA ACW) and the development of this manual, especially RWJF program officer Ms. Denise Davis. ADEA Executive Director Dr. Richard W. Valachovic and ADEA Associate Executive Director and Director of the ADEA Center for Equity and Diversity Dr. Jeanne C. Sinkford provided leadership and encouragement.

Drs. Charles Alexander, Dennis A. Mitchell, and Shelia S. Price provided direction in the development and evaluation of the ADEA ACW. The ADEA ACW facilitators helped shape the current version of the workshop and provided input for this manual:

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This project could not have been completed without the support of ADEA staff, particularly Drake Washington, Project Coordinator, ADEA Division of Educational Pathways.
How can we diversify the student bodies of our institutions to promote educational excellence and produce a workforce prepared to serve an increasingly diverse society? Ours is not the first generation to ask this question. Since the legal and judicial civil rights victories of the 1950s and 1960s, professional schools have been among those institutions that, in the words of former U.S. President Lyndon Johnson, strived “to correct the effect of present and past discrimination” on members of minority groups. Their efforts initially met with considerable success, yet over the course of several decades they encountered an equal measure of opposition.

By the end of the 21st century, the first set of educational affirmative action initiatives lay battered and bruised yet partially intact. A series of Supreme Court decisions affirmed the legitimacy of diversity as an educational goal, and set a new, more nuanced course for achieving this objective. The current generation of health professions educators and their supporters has embraced the Court’s guidance. Keenly aware of the health care challenges that lie ahead, they have committed themselves to developing new approaches to promoting diversity that meet the Court’s standards.

In 2000, the Robert Wood Johnson Foundation, in collaboration with The California Endowment and the W.K. Kellogg Foundation, initiated the Pipeline, Professions, and Practice: Community-Based Dental Education program. Its complementary goals were to help dental schools improve access to dental care while increasing the enrollment of underrepresented minority (URM) students. Twenty-three schools participated, and over the program’s four years, they saw their URM applicant pool grow by 77% and increased the number of first-year URM student enrollees by 54%. During the same period, the remaining U.S. dental schools saw their URM applicant pool increase even more, by 84%, but they lagged far behind in URM enrollments, raising the number of first-year URM student enrollees by only 16%.

This evidence made clear what forward-thinking admissions deans and others had long suspected—increasing the applicant pool was not sufficient for increasing diversity. It appeared that admissions committees themselves were one of the bottlenecks preventing URM students from entering dental schools.

Fortunately, the Pipeline program demonstrated that admissions committees that are ready to transform their policies and practices can achieve diversity in their student bodies. With support from the Pipeline program and from ADEA, the Association’s Division of Educational Pathways subsequently developed an admissions committee workshop to disseminate promising admissions practices. Since 2005, nearly half of all U.S. dental schools have hosted the ADEA Admissions Committee Workshop. To ensure the continued dissemination of admissions practices that foster diversity, in May 2009 ADEA trained 10 admissions officers in conducting the workshop.

The online version of this guide represents a further attempt to make this information available to all ADEA member institutions and to other health professions schools that are striving for greater diversity. It contains a thorough discussion of diversity and excellence in higher education, concrete suggestions for ways to work with your committee, PowerPoint slides—from the ADEA Admissions Committee Workshop—with illustrative data, and an extensive reference list for further reading. As a web-based resource, we hope its accessibility and adaptability will make it a valuable tool for admissions committees for many years to come.
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INTRODUCTION: HOW TO USE THIS GUIDE

The purpose of this guide is to generate a discussion within your institution about how you might reshape your admissions process to produce a more diverse student body and, in turn, provide a better educational experience for your students.

- It provides relevant data about the limitations of traditional admissions practices.
- It discusses diversity and excellence in dental education, and the ways in which diversity can benefit your institution.
- It describes promising newer practices that are producing more diverse dental school classes.
- And it offers concrete tools to help you generate discussion among admissions committee members, other faculty, and administrators about how you might modify your current practices.

Chapter 1 provides a national context for the discussion of diversity and admissions practices.

Chapter 2 makes the case that increasing diversity in the institutions that prepare health professionals promotes educational excellence, creates a more diverse practitioner community, and increases access to care. Once you have familiarized yourself with this background material, you will be ready to initiate a discussion with your colleagues.

Chapter 3 shows you how to engage them in an exploration of what your school is hoping to accomplish with its admissions practices and to set specific priorities that are consonant with the values of your institution.

Once your committee has prioritized increasing diversity in admissions, you can view Chapter 4 to find promising practices that are producing results at other institutions.

Chapter 5 addresses the concerns that institutions raise about how to implement admissions strategies in ways that are both fair and legal.

Finally, Chapter 6 looks at how the makeup of admitted students has changed at dental schools that have embraced the practices outlined in Chapter 4.

Throughout this guide, you will find suggestions for generating discussion among admissions committee members and others at your school. In the online version of this guide, you will also find links to PowerPoint slides that you can download for use in these discussions. Finally, in the Resources section, you will find an extensive list of the published literature on this topic.
CHAPTER 1: WHAT YOU SHOULD KNOW (BUT MAY NOT)

Presumably the members of your admissions committee have a handle on admissions trends at your institution, but they may lack a good grasp of the climate for dental school admissions generally. It is important that they look beyond your school to understand the context that is helping to shape admissions at your school.

Over the last two decades, the number of dental school applicants has more than doubled. They have higher grade point averages (GPAs) and Dental Admission Test (DAT) scores than ever before. These factors make it increasingly difficult for all students to distinguish themselves from the pack, and place additional pressure on underrepresented minority (URM) and low-income (LI) students. Traditional standardized tests have been shown to include cultural biases that have historically resulted in lower average scores for minority test takers.

Trends in Applications and Enrollment

Despite significant increases in applications from URM students in dentistry, total URM enrollments have risen only slightly. This disparity is all the more pronounced given these trends:

- URM makes up an increasing portion of high school graduates.
URMs make up an increasing portion of college graduates with bachelor’s degrees awarded in the biological and physical sciences.

Getting the conversation started

Note that in the last decade, admission to dental school has become increasingly competitive for all students, with about 40% of applicants accepted in 2010. Increases in the number of URM applicants mirror those in the total pool, but there has not been a commensurate increase in their enrollment. Admissions officers tell us that in most cases it is because they are not being admitted or, in many cases, even interviewed.

Some admissions committees report a pervasive sense among their members that URM students will not “make it” if admitted. **Ask:** Have similar concerns been voiced within our committee? Does our limited URM enrollment reflect a lack of focus on diversity?

Getting the conversation started

**Look at slides on the next page.** Note how the average entering GPA and DAT scores of dental school enrollees have increased since 2002.

**Ask:**
Are we admitting a more qualified student today than we did 30 years ago or even 10 years ago? Note that many people who have become successful practitioners and dental educators would not be admitted to dental programs today at schools that use current numerical cut-offs.
U.S. Dental School Applicant and First-Year Enrollment Trends 1959 - 2010

Source: American Dental Education Association, Applicant Analysis Survey

American Dental Education Association
What Admissions Committees Are Doing

In most areas of life, we tend to think that our way of doing things is the norm unless we have gone out of our way to take a different approach. The 2010 ADEA Admissions Officers Survey reveals that there is no norm or standard way for admissions committees to operate. Schools take a variety of approaches to staffing their admissions committees, selecting candidates for interviews, and conducting interviews. They also emphasize a diverse range of factors in selecting candidates for admission.

As you review the survey data, ask: How do our admissions practices compare with those at other institutions? What do the survey results tell us about the latitude we have in adopting new practices and revising established protocols?

Getting the conversation started

Look at the slide below. Note that the percentage of admissions committees that limit their membership to dental school faculty has risen since 2007. Note also that the percentage of committees that include students or diversity/minority affairs officials dropped by 11% over the same time period. These trends are of potential concern. Because diverse committees bring a variety of perspectives to the process, they may be better able to recruit a diverse student body. See “Reconfiguring the Admissions Committee,” Chapter 4.

Ask: How diverse is our committee? What additional perspectives might we want to include?
Look at the slides below and on the next page. Note that while the work of screening the applicant pool is shared at many institutions, some schools assign this task to the dean or director of admissions. The challenge of reducing a large applicant pool to a manageable size can increase reliance on numerical cut-offs, which require little time or labor, when too few people are involved in selecting candidates for interviews.
The last slide on page 12 shows that of the 40 schools responding to the survey, 16 used GPAs and 17 used DAT scores to eliminate candidates from their applicant pools. Note also that the range of numerical cut-offs used to screen applicants varies considerably among schools.
Ask: Why does our school use cut-offs (if it does)? Is there evidence that this practice is eliminating otherwise viable minority and nonminority candidates?

As the first slide on page 13 indicates, schools consider a variety of other factors in considering which candidates to interview. One school with a large applicant pool reports that it has found a way to retain the use of cut-offs without automatically eliminating otherwise viable candidates. The committee conducts a cursory review of all applications that fall below the cut-off to see whether other factors indicate that the candidate merits a full review. These factors might include high grades in biology, chemistry, and physics courses that are masked by a lower GPA, or an overall GPA that rises over time as the applicant becomes motivated by a desire to enter dental school.

Look at the slides below and on the next page. Note that while three-quarters of survey respondents had full access to applicants’ files prior to conducting interviews, schools are increasingly limiting interviewer access to student information. To date, no one has studied the impact that sharing or limiting access to applicant information during this phase of the admissions process has on admissions decisions.

Ask: Why does our school limit access or not limit access to applicant files? What are the advantages and disadvantages of our approach? What alternatives might we want to consider?
Look at the following slides. Note that grades and test scores still top the list of factors considered by admissions committees. Review the complete list of factors and the survey respondents’ comments about how they make admissions decisions.

Ask: Are admissions committees screening for the qualities they value? Would you say that your committee’s values and its practices are well aligned?
### Rating of Other Factors in Extending Offers of Admission

<table>
<thead>
<tr>
<th>Other Factors</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of community and healthcare issues</td>
<td>39%</td>
</tr>
<tr>
<td>Perceptual Ability DAT score</td>
<td>35%</td>
</tr>
<tr>
<td>Initiative</td>
<td>27%</td>
</tr>
<tr>
<td>Works well with others</td>
<td>27%</td>
</tr>
<tr>
<td>Critical thinking skills including problem solving</td>
<td>26%</td>
</tr>
</tbody>
</table>

### Factors Least Important When Extending Offers of Admission

<table>
<thead>
<tr>
<th>Factors Least Important</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical reasoning</td>
<td>20%</td>
</tr>
<tr>
<td>Ability to write and express oneself logically</td>
<td>18%</td>
</tr>
<tr>
<td>Demonstrated ability to overcome challenges</td>
<td>18%</td>
</tr>
<tr>
<td>Demonstrated ability to multi-task</td>
<td>18%</td>
</tr>
<tr>
<td>Research Experience</td>
<td>2%</td>
</tr>
</tbody>
</table>
Additional Comments about Making Admissions Decisions

This is a forced listing—our process does not lend itself to a Top 5 list.

Although we marked 5 categories, we do not feel this list accurately reflects our process. We have made significant changes to ensure that we are considering noncognitives in addition to DAT and GPA.

This is a limited list. Screening establishes an applicant’s academic ability. Interviews tell us more about a candidate’s motivation, interests, and ability to work with others.

Academic ability to undertake our rigorous curriculum; and applicants who can use the unique features of our program to optimize their professional development, be it clinical, research, academic, or a combination.

Additional Factors about Making Admissions Decisions

- Interview scores
- MMI results
- Extracurricular activities; contribution to diversity
- Passion/commitment to people, dentistry, community service
- # of hours shadowing not as important as what applicant can articulate about dentistry
- Commitment to community service; history of serving others
The Limitations of Cognitive Criteria

DAT validity studies conducted by the American Dental Association show that, at best, DAT scores are moderately predictive of success during the first two years of dental school, particularly in basic science courses. They do not predict the traits that contribute to overall success in dental school or in dental practice.

Getting the conversation started

Look at the slides below and on the next page. Note that these graphs show that admitted candidates possess a range of grades and DAT scores.

Ask: Given this range, does a focus on averages make sense? Publicized averages may discourage potential applicants from applying if their grades or scores fall below the average. Might it be more appropriate to talk about the range of DAT scores and GPAs of an entering class rather than the averages?
CHAPTER 2: WHY DIVERSITY MATTERS

Educators, researchers, policymakers, and the courts have all explored the role of diversity in education and the health professions. While approaching the subject from different angles, they have identified two principal reasons for increasing diversity in our health professions schools:

- Diversity provides a better educational experience for all students.
- Diversity leads to improved access to care.

Similar conclusions have been reached in two highly respected reports on minorities and health care, three Supreme Court decisions, and a variety of scholarly publications. These authoritative sources all agree that diversity matters, and offer compelling reasons why educational institutions should pursue it. In 2010, the Commission on Dental Accreditation (CODA) joined this chorus when its revised Predoctoral Accreditation Standards recognized diversity as an essential component of academic excellence.

Better Educational Experience for All Students

While many might assert that diversity is valuable in its own right, the key question for health professions schools is whether and how diversity might affect their primary mission—to educate students to become competent health care providers.

In 1978, the U.S. Supreme Court issued a landmark decision in the case *Regents of the University of California v. Bakke*. The court’s ruling that, “the State has a substantial interest that legitimately may be served by a properly devised admissions program involving the competitive consideration of race and ethnic origin” prompted researchers to study the educational impact of diversity.

After surveying thousands of students and tracking their early career choices, researchers found that:

- “Because of the racial separation that persists in this country, most students have lived in segregated communities before coming to college.”
- “Colleges that diversify their student bodies and institute policies that foster genuine interaction across race and ethnicity provide the first opportunity for many students to learn from peers with different cultures, values, and experiences.”
- “Students with frequent interaction with diverse peers while in college demonstrated greater intellectual engagement and active thinking four and nine years after college entry.”
- “They also showed a greater capacity to engage in a diverse workplace after college.”

Dr. Sylvia Hurtado, Professor and Director of the Higher Education Research Institute at the University of California, Los Angeles, and her former colleagues at the University of Michigan have concluded that: “One of the key implications of this empirical research is that diversity is an asset to learning and important for development of the new thinking skills that are needed in the workplace.”

Research by Dr. Hurtado and others is premised on the assertions of psychologist Erik Erikson, educator Jean Piaget, and others who believe that when students’ perspectives are challenged, this spurs their intellectual growth. Opportunities to see the world in a new light are more likely
The Difference: An Empirical Analysis of Diversity

In the introduction to his book *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies*, theorist Scott E. Page asserts that diversity trumps ability when it comes to problem solving. He takes pains to make clear that he does not mean that ability does not matter, only that diversity matters, too. He acknowledges that certain conditions must be met for differences between people to produce benefits. For starters, he says diversity must be relevant to the problem at hand, and the people in a diverse group must be able to get along. Given these conditions, he believes that a group of diverse problem solvers will outperform groups of high-ability problem solvers, and he has created a mathematical model to demonstrate this premise.

Page’s work implies that a student body composed of diverse individuals who possess complementary skills, abilities, and perspectives will enhance learning for the entire class. His work also suggests that benefits might accrue to society at large when a more diverse cohort of students enters the workforce. Page closes the introduction to *The Difference* with these words: “In difference lies the potential to contribute.”

Improved Access to Care

As an influential report pointed out in 2004, “The lack of minority health professionals is compounding the nation’s persistent racial and ethnic health disparities. From cancer, heart disease, and HIV/AIDS to diabetes and mental health, African Americans, Hispanic Americans, and American Indians tend to receive less and lower quality health care than whites, resulting in higher mortality rates. The consequences of health disparities are grave and will only be remedied through sustained efforts and a national commitment.”

ADEA’s long-held position has been that, without minority practitioners, access to care will be limited or absent in minority communities throughout the nation. Dental practice data from both the American Dental Association (ADA) and ADEA support this position.

to occur when the composition of the student body is diverse, as suggested by a white student in his evaluation of a course on intergroup relations at the University of Michigan.

I come from a town in Michigan where everyone was white, middle-class and generally pretty closed-down to the rest of the world, although we didn’t think so. It never touched us, so I never questioned the fact that we were “normal” and everyone else was “different.” Listening to other students in the class, especially the African American students from Detroit and other urban areas just blew me away. We only live a few hours away and yet we live in completely separate worlds. Even more shocking was the fact that they knew about "my world" and I knew nothing about theirs. Nor did I think that this was even a problem at first. I realize now that many people like me can go through life and not have to see another point of view, that somehow we are protected from it. The beginning for me was when I realized that not everyone shares the same views as I, and that our different experiences have a lot to do with that.

*Diversity and Higher Education: Theory and Impact on Educational Outcomes*
Getting the conversation started

Look at the slides below and on the next page. These slides illustrate the practice characteristics of U.S. dentists as reported in a 1996 ADA survey. Note that only 8% of practicing dentists come from underrepresented minority groups. The second slide on page 22 reveals that white, black, and Hispanic dentists are more likely than other dentists to treat patients of their own race. This fact supports the notion that minorities will not achieve full access to care unless they are proportionately represented in the health care work force.

According to the a 2002 Institute of Medicine Report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, patients are drawn to health professionals of the same race or ethnicity because they believe these providers will be better able to relate to their concerns.

**Ask:** Should the responsibility of providing care to URM populations reside solely with URM practitioners? How can our institution's diversity policies engage all students in extending access to care to the underserved?
Look at the box below. Annual surveys of practicing dentists and dental school seniors affirm that individuals educated in diverse settings are far more likely to work and live in racially and ethnically diverse environments after graduation.

ADEA Annual Survey of Dental School Seniors 2009

Table 27. Percentage of their future patients seniors expect to be from underserved race/ethnic populations, by percentage of total 2008 respondents.

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>0-10%</th>
<th>11-24%</th>
<th>25-50%</th>
<th>&gt;50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Americans</td>
<td>0.0%</td>
<td>21.4%</td>
<td>14.3%</td>
<td>21.4%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>2.8%</td>
<td>14.0%</td>
<td>14.8%</td>
<td>51.8%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Black/African-American</td>
<td>1.9%</td>
<td>7.1%</td>
<td>11.0%</td>
<td>43.2%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>2.1%</td>
<td>10.5%</td>
<td>12.6%</td>
<td>48.2%</td>
<td>26.7%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>2.3%</td>
<td>31.7%</td>
<td>22.5%</td>
<td>37.0%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

Note: Percentages may not total 100% because of rounding.

Sources of additional evidence that diversity promotes improved access to care include:

- A 2002 report by the Institute of Medicine, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*

  This report warns that minorities face “unequal treatment” when encountering the health care system. Using data from the U.S. Department of Health and Human Services, the
report states that “racial and ethnic minority providers are more likely to serve in minority and medically underserved communities.”\textsuperscript{vii}

The report recommends increasing “the proportions of underrepresented U.S. racial and ethnic minorities among health professionals” and says that “to the extent legally permissible, affirmative action and other efforts are needed” to reach this goal.\textsuperscript{viii}

- **Missing Persons: Minorities in the Health Professions**, a 2004 report by the Sullivan Commission on Diversity in the Healthcare Workforce, funded by the W. K. Kellogg Foundation.

The report calls for increasing diversity in America’s health professions education and training programs with a goal of increasing the numbers of health professionals from underrepresented and underserved communities. The report outlines three principles that it deems essential to fulfilling this vision:

- To increase diversity in the health professions, the culture of health professions schools must change.
- New and nontraditional paths to the health professions should be explored.
- Commitments [to diversity initiatives] must be at the highest levels.

The report notes the urgent need to bring more URM students into the health professions. “While African Americans, Hispanic Americans, and American Indians, as a group, constitute nearly 25 percent of the U.S. population, these three groups account for less than 9 percent of nurses, 6 percent of physicians, and only 5 percent of dentists.” The report recommends:

- Dental and medical schools should reduce their dependence upon standardized tests in the admissions process. The Dental Admissions Test and the Medical College Admissions Test should be used, along with other criteria in the admissions process, as diagnostic tools to identify areas where qualified health professions applicants may need academic enrichment and support.
- Diversity should be a core value in the health professions.
- To reduce the debt burden of underrepresented minority students, public and private funding organizations for health professions students should provide scholarships, loan forgiveness programs, and tuition reimbursement strategies to students and institutions in preference to loans.
- Accrediting bodies for programs in medicine and the other health professions should embrace diversity and cultural competency as requirements for accreditation.

- **Supreme Court Decisions**

Beginning with the historic *Regents of the University of California v. Bakke* case in 1978, a series of Supreme Court decisions have recognized the educational benefits of diversity as a “compelling interest.” While prescribing some restrictions on how and when institutions of higher learning can apply race, gender, and other factors in admissions, these decisions make clear that admissions practices that are narrowly tailored to achieve the educational benefits of diversity may be used to create a diverse student body.
See Chapter 5 for a fuller discussion of the legal issues related to increasing diversity in educational institutions.

CODA Predoctoral Accreditation Standards

In 2010, the Commission on Dental Accreditation (CODA) approved new Accreditation Standards for Predoctoral Dental Education Programs. These state:

1-4. The dental school **must** have policies and practices to:
   a. achieve appropriate levels of diversity among its students, faculty and staff;
   b. engage in ongoing systematic and focused efforts to attract and retain students, faculty and staff from diverse backgrounds; and
   c. systematically evaluate comprehensive strategies to improve the institutional climate for diversity.

The new standards recognize diversity as an essential component of academic excellence. They call on dental schools to educate dentists with the interpersonal and communication skills needed to manage a diverse patient population. They further assert that the diversity of the student body, faculty and staff, and curriculum is essential to creating a learning environment that improves patient outcomes for people from all backgrounds.

The standards present diversity as having three dimensions in the academic context. These are defined as follows:

- **Structural:** Structural diversity, also referred to as compositional diversity, focuses on the numerical distribution of students, faculty and staff from diverse backgrounds in a program or institution.
- **Curriculum:** Curriculum diversity, also referred to as classroom diversity, covers both the diversity-related curricular content that promote shared learning and the integration of skills, insights, and experiences of diverse groups in all academic settings, including distance learning.
- **Institutional Climate:** Institutional climate, also referred to as interactional diversity, focuses on the general environment created in programs and institutions that support diversity as a core value and provide opportunities for informal learning among diverse peers.

While this guide directly addresses one aspect of diversity in higher education, the structural diversity of the student body, the new standards make clear that institutions will be expected to look at diversity broadly and adopt appropriate policies and practices that impact other domains.
CHAPTER 3: GETTING STARTED

Transforming an admissions process takes time, deliberate consideration, and the inclusion of multiple stakeholders on campus. Above all, the missions of the school, its programs, and the parent institution must remain in the forefront of the discussion.

In considering the legal issues related to policies that promote diversity in higher education, the Association of American Medical Colleges (AAMC) recommends that diversity policies be grounded in “evidence of mission-related benefits that stem from a diverse student body.”ix Your goal is to create an admissions process that is consonant with your institution’s missions and assists your committee in furthering them.

Setting Priorities

The first step in transforming your admissions process is to establish what your institution values in its applicants and in its student body. Consider which qualities and values are most important to student success in your programs, and which student characteristics have produced graduates who further the school’s mission in their professional lives.

This process may require the involvement of individuals outside your committee. Invite the faculty and other members of your community to join in creating a list of priorities that will drive your admissions process. Remember to seek the endorsement of these priorities by the faculty at large, which may change over time. Each year the committee should revisit its priorities to make sure they speak to current needs.

Before your committee establishes what it values in an applicant, you may want to inform the members about the national context in which your institution’s discussion about admissions is occurring. Use the slides and discussion points provided in Chapters 1 and 2 to bring your colleagues up-to-date on recent trends in admissions practices and to generate discussion on why diversity matters. Once everyone is on the same page, you can begin the process of setting your own admissions priorities.

Getting the conversation started

Look at the slide on the next page. At our ADEA Admissions Committee Workshops, we use this list of characteristics to generate discussion about what defines a strong applicant. It invariably produces a friendly debate about which characteristics matter most. This slide may be a useful icebreaker for your committee.

Ask: Which characteristics does your school value most in its applicants? Which characteristics does your school value in the composition of the student body as a whole?
In the late 1990s, an admissions dean at a highly selective dental school decided his school could do a better job of diversifying its student body, but he realized that changing admissions practices would be a “hard sell.” Although the school had only admitted two or three students with borderline credentials who failed to thrive in the dental program, the memory of these individuals was entrenched in the minds of many faculty members. The Admissions Dean knew he would need to gather evidence to show that the experience of these students was not the norm.

A review of applicant scores and grades and admitted students’ subsequent performance revealed that candidates who fell below the class average on these metrics were just as likely to succeed in the program as their peers. Conversely, the admissions dean discovered examples of candidates with stellar metrics who had struggled academically as dental students. This data had a powerful effect on the faculty, convincing it to explore alternative ways of evaluating candidates. With this new awareness, the admissions committee began the process of redefining its criteria for admissions and seeking approval from the faculty at large for its newly articulated values.

Once your committee has set its priorities and agreed that increasing diversity in admissions supports your larger institutional goals, explore the promising practices outlined in Chapter 4 to determine which approaches will work best for your school.
CHAPTER 4: PROMISING PRACTICES

Traditionally, admissions committees have focused much of their work on rejecting candidates. To borrow a gardening metaphor, they have sought to “weed out” candidates presumed to be less desirable, thoroughly vetting only a small subset of their applicants. Using rigid, quantitative criteria—grades or scores that fall below a set cut-off, an incomplete application, or one that is submitted late—to reject applicants strikes most people as fair and efficient, but does it result in offers of admission to the most desirable candidates? Does such a method create a cadre of students that creates the best educational experience for all?

At some dental schools, admissions committees are turning the traditional approach on its head. They see their role as cultivating a larger pool of applicants and screening for candidates whose strengths may not be reflected in traditional metrics. The practices they have adopted fall under three broad categories:

- Adopting Holistic Review
- Reconfiguring the Admissions Committee
- Creating a More Diverse Pool of Candidates

According to the AAMC, schools that have adopted these practices are finding it easier to increase student body diversity.

Adopting Holistic Review

Much of the information in this section is drawn from Roadmap to Diversity: Integrating Holistic Review Practices into Medical School Admission Processes published by the AAMC in 2010 and available on the organization’s website. AAMC has articulated the value of holistic review and developed guidelines for implementing this practice, setting a standard that admissions committees in other health professions schools, including dental schools, can apply.

The terms “holistic” and “whole file review” refer to the practice of evaluating applicants in accordance with criteria that extend beyond the usual metrics: grades and standardized test scores. AAMC defines holistic review as “a flexible, highly-individualized process by which balanced consideration is given to the multiple ways in which applicants may prepare for and demonstrate suitability as medical students and future physicians. Under a holistic review framework, candidates are evaluated by criteria that are institution-specific, broad-based, and mission-driven and that are applied equitably across the entire candidate pool.”

Why Holistic Review?

Holistic review serves multiple purposes. First and foremost, it integrates applicants’ academic and personal qualities in the selection process. This improves the chances that those admitted will not only be capable of doing the work involved in earning a dental degree, but will contribute to the school on other levels as well. Candidates bring outlooks, goals, and qualities with them that can expose their peers to new perspectives, strengthen the fabric of the learning community, and support the school in achieving its mission within the university and the community at large. Holistic review helps admissions committees identify candidates whose attributes are consonant with the school’s priorities. In so doing, this process facilitates the shaping of a diverse student body whose members will more likely contribute to furthering the school’s mission after graduation.
How To Conduct Holistic Review: A Five-Step Process

1. Establish your admission criteria.

As Art Coleman, a leading authority on education and the law, has said, the role of the admissions committee is to bring together individuals into a “symphony” that will work together in harmony. The holistic admissions process focuses on admitting qualified individuals whose diverse backgrounds, skills, and talents will all contribute to the learning and growth of their peers and produce the type of workforce needed in the future. The members of your admissions committee must have a clear, shared understanding of the values that define your institution, including the qualities you seek in students. These values will form the foundation of your admissions process and ensure that the committee’s work is focused on helping the institution achieve its goals.

Getting the conversation started

Ask: What values define your institution?

Look at the slide on the next page. AAMC has developed an approach to establishing admission criteria that balances experiences, attributes, and metrics. You can use this approach as a guide in creating admission criteria for your school.

The institution’s mission and values should drive the selection of appropriate criteria. An institution whose mission is to graduate health professionals capable of serving a predominantly rural and elderly population will have different criteria than a school whose mission is to graduate a high proportion of clinicians capable of conducting cutting-edge scientific research.

Ask: Which experiences and attributes are associated with students who thrive in your institution and contribute to fulfilling its mission after graduation? These provide an excellent starting point for developing your admissions criteria.
Once you have a tentative list, look for evidence within your institution to support the proposed criteria. Comparing anonymous data on student performance with application data can point to which criteria are most predictive of success. Unfortunately, most schools do not collect this data. Your school may wish to consider adopting a policy of collecting and reviewing anonymous student data to assess the correlation between specific candidate attributes and their later school performance.

2. **Conduct whole file review of all applicants**

Screening applications using metrics alone and establishing a cut-off or threshold is straightforward, mechanical, and efficient. It typically produces a relatively homogenous student body.

Holistic review has the potential to create a student body whose diversity improves the quality of education for all students and produces a workforce better able to address the nation’s care needs. It takes more time than traditional methods and can impose additional costs, since it typically requires the involvement of more people in the screening process. Nevertheless, schools are finding ways to incorporate holistic review in whole or in part, often within their established budgets.

- Some schools that previously assigned the task of screening the applicant pool to the admissions dean or director of admissions have increased the number of committee members involved in selecting candidates for interviews. This reallocation of the workload makes it feasible to conduct a holistic review of all applicants.

- At one school the admissions committee continues to use numerical cut-offs to screen candidates for interviews, but it has adopted a policy to ensure that desirable applicants are not screened out of consideration based strictly on GPAs and DAT scores.
Committee members now conduct a cursory review of the files of all candidates whose metrics fall below the cut-offs to look for indications, such as a GPA that improves significantly over time, that a candidate’s application merits a full review.

As these practices continue to evolve, ADEA meetings provide opportunities to learn about new approaches and discuss successful practices with colleagues.

3. **Assess noncognitive attributes**

Standardized tests are popular because they provide "a common yardstick" for measuring all students, are not prone to lawsuits, and provide a convenient numerical way to sort large numbers of students. In addition, they are relatively inexpensive, and students and their families, not schools, bear the cost. These are the views of William E. Sedlacek, who argues for a radically different and, he contends, more fair assessment model in his book *Beyond The Big Test: Noncognitive Assessment in Higher Education.*

Sedlacek proposes that admissions committees assess noncognitive variables not as a substitute for cognitive assessments, but as additional attributes worthy of consideration. Over the past 30 years, Sedlacek and others have conducted research to determine which noncognitive variables are valuable in determining the likelihood that students will be successful in higher education. He has also created a number of related assessment instruments, which can be used or adapted by admissions committees.

What Are Noncognitive Variables?

Sedlacek defines noncognitive variables as those "relating to adjustment, motivation, and perception, rather than the traditional verbal and quantitative (often called cognitive) areas typically measured by standardized tests." Research by Sedlacek and others has identified eight noncognitive variables that are valuable in assessing diverse populations.
Description of Noncognitive Variables.

- **Positive self-concept.** The applicant demonstrates confidence, strength of character, determination, and independence.
- **Realistic self-appraisal.** The applicant recognizes and accepts any strengths and deficiencies, especially academic, and works hard at self-development. The applicant recognizes need to broaden his or her individuality.
- **Successfully handling the system.** The applicant exhibits a realistic view of the system on the basis of personal experience of racism; shows an ability to handle a racist system and a commitment to improving the existing system; takes an assertive approach to dealing with existing wrongs, but is not hostile to society and does not "cop out."
- **Preference for long-term goals.** The applicant is able to respond to deferred gratification, to plan ahead, and to set goals.
- **Availability of strong support system.** The applicant seeks and takes advantage of a strong support network or has someone to turn to in a crisis or for encouragement.
- **Leadership experience.** The applicant demonstrates strong leadership in any area of his or her background (church, sports, clubs, etc.).
- **Community involvement.** The applicant participates and is involved in his or her community.
- **Knowledge acquired in a field.** The applicant acquires knowledge in a sustained or culturally related way in any field.

Reprinted from Sedlacek, page 37, table 4.1.

Measuring Noncognitive Variables

Admissions committees may use a variety of approaches to assess noncognitive variables, including questionnaires, interviews, portfolios, and essays. *Beyond the Big Test* includes standardized questionnaires with scoring instructions, a list of short-answer questions that can serve as essay prompts, and a list of interview questions designed to reveal a candidate's noncognitive attributes. These instruments are designed to reveal how the applicant feels about his or her ability to handle the challenges of higher education, graduate from school, and achieve long-term goals.

*How this might look:*

The Louisiana State University medical school uses interviews to assess noncognitive variables. According to Sedlacek, almost all members of the admissions committee report that self-concept and realistic self-appraisal are among the most useful indicators for predicting the success of nontraditional students. Only 61% indicated that grade point average and 57% identified MCAT scores as being useful for minority admission decisions. Following the introduction of noncognitive variables in LSUs admissions process, the school doubled its enrollment of minority students to 21%.
How this might look:

In evaluating candidates for evidence of positive self-concept, admissions committees might ask themselves:

**Positive Evidence**
- Does the applicant feel confident of making it through graduation?
- Does the applicant make positive statements about him- or herself?
- Does the applicant expect to achieve his or her goals and perform well in academic and nonacademic areas?
- Does the applicant show evidence of how he or she will attain his or her goals?
- Does the applicant link his or her interests and experiences with his or her goals?
- Does the applicant assume he or she can handle new situations or challenges?

**Negative Evidence**
- Does the applicant express any reason he or she might not complete school or succeed in attaining his or her goals?
- Does the applicant express concerns that other students are better than he or she is?
- Does the applicant expect to have marginal grades?
- Does the applicant have trouble balancing his or her personal and academic life?
- Does the applicant appear to be avoiding new challenges and situations?

Advantages of Using Noncognitive Assessments

The advantages of incorporating the assessment of noncognitive variables in admissions processes are many. Instruments are readily available for use. They have been carefully researched and legally tested, and they are focused on long-term outcome measures "such as student grades across the college career, retention at our institutions, and (ideally) graduation." Finally, Sedlacek asserts, "The noncognitive variable method yields important attributes correlated with student success that appear to be legal and fair to all applicants." xii

Beyond the Big Test is designed "to make it easy, inexpensive, and practical" to use noncognitive assessments. Dental schools that have integrated noncognitive assessments in their review processes have produced more diverse entering classes in recent years. (See Chapter 6.)

Validity and Reliability of Noncognitive Assessments

Sedlacek’s questionnaire is just one instrument being used to measure noncognitive variables. While at Tufts University, Robert J. Sternberg, psychologist and Provost at Oklahoma State University, developed essay prompts to measure creativity and other factors in making undergraduate admissions decisions through an approach he dubbed “the Rainbow Project.” His research indicates that this approach decreases the differences in performance expected of different racial and ethnic groups. (Inside Higher Ed, February 20, 2011)
Additional research is underway regarding the validity and reliability of Multiple Mini Interviews (see Annotated Resources).

4. **Offer individualized interviews**

Interviews provide a unique opportunity to ascertain personal attributes that are not easily conveyed on paper. Committees should use interviews to gather information that cannot be gleaned from the application. Committee members may want to explore specific information contained in the applicant’s portfolio in greater depth. Interviewers might ask, why did the applicant choose a particular internship or research project? How did the applicant handle a demanding family situation while in school? The goal of the interview should be to elicit those traits in a candidate that reveal his or her potential to perform well in the school’s learning environment and eventually contribute to the profession.

Committees should also be mindful that gatekeeper-type interviews can have a negative impact on how their school is perceived by prospective students. Interviews are a two-way street, giving committees the opportunity to learn more about applicants and applicants an opportunity to decide whether the school is a good “fit.” URM applicants often have concerns about institutional climate that can be addressed or dispelled during the interview process.

Student reactions to dental school interviews, culled from www.studentdoctor.net, provide a glimpse into student perceptions of the interview process.

> A complete waste of my time and money, the interviewers are rude, condescending and, don’t care about you as a person. They look only at your scores. …selects those with the scores and not much else. …so full of themselves…they really are arrogant. Awkward, uncomfortable, demeaning. The interviewers tried to make me feel small and dumb.

At schools where only one individual meets with each applicant, students also may feel disadvantaged if they do not “click” with the assigned interviewer.

AAMC cites research suggesting that structured or semi-structured interviews conducted by two or more people are the most valid. While well-conceived traditional interviews can be effective, two innovative interview formats currently in use, the Multiple-Mini Interview (MMI) and the Interactive Problem-Based Learning (PBL) Session, reveal skills and abilities that would likely otherwise escape notice.

**Multiple Mini-Interview (MMI)**

The MMI, developed by researchers at McMaster University, is widely used by Canadian medical schools and has been adopted by some medical and dental schools in the United States.

At the University of Michigan School of Dentistry, admissions officers have added the MMI to their repertoire of assessment techniques. In six to 12 timed encounters, prospective students are asked to talk through structured problems or take part in scenarios designed to reveal the characteristics that faculty value most in their students: critical thinking, ethical decision making, knowledge of the health care system, and effective communication skills.
The MMI appears to provide a valuable approach to assessing these noncognitive abilities and may be a good predictor of clinical performance and ethical behavior. It can be structured to prompt applicants to respond to an ethical dilemma, work in teams, or analyze a situation under pressure, revealing a broad range of strengths and weaknesses. From the applicant's perspective, it also provides an opportunity to interact with more than one representative of the school and gain insights into which skills and qualities the school values in its students.

The Michael G. DeGroote School of Medicine at McMaster University introduced the MMI in 2002. Dr. Kevin Eva and his colleagues have studied the MMI's reliability, validity, acceptability, and cost effectiveness. They have concluded that the MMI provides a reliable way to assess candidate that is acceptable to both candidates and evaluators.

The researchers have compared the MMI scores of admitted candidates to their performance in the medical program and to long-term measures such as licensing examinations. They found that the MMI was the best predictor of student performance on objective structured clinical examinations (OSCEs), an assessment method that tests the ability of students to make the kinds of decisions they will face every day in practice. Dental programs that already use OSCEs may be able to incorporate the MMI smoothly as part of the applicant's personal interview.

At the time the MMI was introduced at McMaster University's medical school, about 400 candidates were interviewed annually. Researchers estimate that this process required 1,600 person hours at a cost of about $27,500 per year. In contrast, they estimate that the use of MMI requires about half the number of faculty hours and costs about half as much.

Problem-Based Learning Sessions

Some of the schools that use a problem-based curriculum have begun to incorporate PBL sessions in their interview process to determine whether candidates are well suited for study in a PBL environment. At the University of British Columbia (UBC), the dental school conducts a two-day open house for applicants. This allows candidates to meet faculty, talk to students, tour the facility, and receive an initial orientation to PBL and the school’s curriculum. On the second day, students are given a personal interview, and they are observed and assessed in a PBL tutorial group as they work through a case. The process broadens the information available to the committee as it makes its admissions decisions and gives successful applicants a palpable sense of what their educational experience will be like should they choose to attend UBC.

5. Evaluation and selection

Each school must decide how to weigh the information it gathers on candidates in making its evaluation. No single formula will apply to all institutions since each will adopt admissions criteria that support its unique institutional mission. Nevertheless, it may be helpful for your committee to consider the following scenarios as you evaluate your admissions practices. These case studies may reveal weaknesses in your admissions approach and areas that merit further consideration.
Getting the conversation started

Look at the following descriptions of hypothetical candidates. Ask:

- What are your first thoughts about the candidate?
- How do you feel about his or her GPA and DAT scores?
- What more do you want to know about this candidate?
- What would keep you from accepting this candidate?

Applicant #1

- 23-year-old African-American male
- Has a B.A. in Biological Sciences from a four-year institution
- Overall GPA of 2.75
- DAT scores average 15
- First-generation college attendee

Applicant #2

- 30-year-old single white female with two young children
- Has a B.A. in Biological Sciences from a four-year institution, but took a large number of courses at a community college
- Overall GPA of 2.90 and DAT scores average 17
- Had a high score on her interview

A final note: Some schools fill their entire class early, leaving few available slots after the first round of admission offers (December 1). This puts URM students at a disadvantage, since on average they tend to submit their applications later. Some wait longer than necessary to receive their DAT scores and grades, while others hold off from applying for financial reasons.

Ask: How might we adjust the timing of our admissions process so as not to put minority applicants at a disadvantage?

Reconfiguring the Admissions Committee

While committees may have different styles and their work processes may vary, each committee should acknowledge the importance of its work by having a clear rationale for why it operates the way it does. Admissions Committees play the central role in determining whether URM candidates will be admitted to dental school. As such, they have a sizable role in shaping the future dental workforce.

- Mission statement

Admissions committees that have succeeded in increasing the diversity of their dental classes have a mission statement that is specific to the committee and blends well with the missions of the dental school and the university. Engaging the entire committee in the creation of the mission statement encourages all members to consider the goals of their program, to define what they value in applicants, and to feel invested in the mission itself.
**Sample Mission Statement**

“To assure increased access to high-quality oral health care in the United States, the Admissions Committee will strive to increase the selection and enrollment of dental students who will be highly qualified, diverse, and sensitive to the oral health needs of patients.”

- Composition

The composition of the admissions committee will vary from school to school. Its size will depend on the size of the class and the applicant pool. Its composition should reflect the diversity of both the community it represents and the community it is striving to build. With this in mind, it may be appropriate to engage undergraduate biology or chemistry faculty, campus diversity officers, directors of summer enrichment programs, current students, and community practitioners as members of the committee. The committee should include individuals who are in tune with both the educational climate of the dental school and the future needs of the population served by its graduates.

In order for the faculty to have confidence in the committee’s decisions, key stakeholder groups need to feel represented. This typically means drawing faculty members from both the basic sciences and clinical sides of the school. If part-time faculty have a substantial presence, or if the school fosters considerable collaboration between dentistry and dental hygiene, faculty members from these sectors might also be recruited. Having a representative composition will facilitate the committee’s ability to engage the entire faculty in accepting the committee’s mission statement and supporting its work.

**Getting the conversation started**

**Look at the following slides.** Use the Guidelines for Admissions Committee Composition to begin to consider the make-up of your school’s committee.

**Ask:** How does your current committee rank in terms of diversity? Which areas lack representation? What priorities would you set for a reconfigured committee?
Guidelines for Admissions Committee Composition

The committee should include diversity in gender, ethnicity, and personal background and have representation from:

- each of the academic departments of the dental school
- academic departments of the medical school (if basic science instruction is from that area)
- the predoctoral student body (generally one or two members from the third- and fourth-year dental classes)
- allied dental education programs
- the postdoctoral programs (generally one student from a specialty program)
- the university faculty (usually from biology or chemistry)
- representation from any summer enrichment program, preferably the director of the program
- a member of the medical school admissions committee or faculty
- representation from the dental practice community

Drawing on these last two communities may increase the racial, ethnic, and gender diversity of the committee, especially at schools with a relatively homogenous faculty.

Orientation Session

To ensure continuity, equity, and fairness in the admissions process, the admissions committee should schedule an orientation meeting at the beginning of each admissions cycle. This meeting permits the committee to review, discuss, and standardize the admissions process.

Guidelines for the Orientation Session

- The meeting should be held in the summer to review any changes that the committee might make in the admissions process that could affect the applications for that admissions cycle.
- The dean should deliver the charge to the committee and reinforce the school's stated mission to ensure a diverse student body. Schools where deans have set a goal of increasing diversity and provided tangible support have achieved substantial increases in minority enrollment.
- The committee chair should lead a review of the admissions process and a discussion of any proposed changes.
- The committee chair or the school's admissions officer should provide statistical data and other information about the recently admitted classes. This should include GPAs, class rank, and other information with a bearing on the committee's criteria for admission. This will allow the committee to evaluate how students they "took a chance on" in previous years, and those whose application metrics ranked near the top are actually performing in dental school. (See also "Chapter 3, "Setting Priorities.")
- Discussion of noncognitive factors that have characterized excellent students from past classes are reviewed.
Keys to Creating a More Diverse Pool of Candidates

- Partner with medicine

Data from the Annual ADEA Survey of Dental School Seniors reveals that typically only about one-third of dental school graduates identified themselves as planning to enter dentistry when they started college. It appears that many students simply are unaware of options in dentistry when they start their college studies. As a result, it is not surprising to find better attendance at premedical school events than at gatherings targeted solely at future dentists.

Dental school admissions officers can use premedical and other health professions recruitment events to expose students to the unique opportunities and advantages of a career in dentistry. This tactic is especially important for reaching URM students, who typically have a limited awareness of dentistry as a professional option. Not only does the medical profession receive much better exposure in the mass media, but many URM students have limited personal experience with dentistry as well. They are more likely than non-URM students to live in dental shortage areas, and many are among the millions of Americans who lack dental insurance and receive dental care irregularly.

- Work the pipeline

Dental schools with pipeline programs that reach down into middle and elementary school are more successful at enrolling URM students. Why so early? Pipeline programs that expose URM students to dentistry at an early age can create the spark that motivates students to reach the academic benchmarks needed to enter dental school. Programs that further expose students to dental practice during the high school years and offer academic enrichment during or after college are among the most promising vehicles for recruiting URMs to dentistry.

*How this might look:*

The Bridge to Dentistry program at Baylor College of Dentistry (BCD) raises the profile of dentistry in URM communities with dental awareness programs that begin in prekindergarten, and it gives students who lack traditional educational support an opportunity to consider and prepare for entry to dental school. BCD offers summer enrichment programs for high school students and an innovative, year-long post baccalaureate program serving a select few college graduates with a demonstrated commitment to their communities.

This bridge year provides them with two semesters of college-level science courses, DAT preparation, and an opportunity to shadow working dentists and acquire hands-on skills. As of January 2010, more than 80% of BCD’s postbaccalaureate students had matriculated in dental school, about 80% of BCD’s college summer students had applied to dental school, and about 80% of those had been admitted.

Schools that do not have pipeline programs of their own can establish ties with existing programs. Start by contacting diversity officers, career counselors, and others at your institution’s undergraduate college to locate programs in your community.
Connect with strong educational enrichment programs

Many URM students lack exposure to a professional school environment, familiarity with the application process, and a solid understanding of how to navigate the undergraduate curriculum to prepare for professional study. Few have received positive messages about their ability to perform at a high academic level or have role models to support their professional goals.

Strong educational enrichment programs, whether summer or postbaccalaureate, directly address these shortfalls. These programs expose students to the rigors of professional school and equip them with the skills needed in such an environment. Students leave these programs with the knowledge and confidence they need to succeed. Graduates of strong programs have consistently demonstrated the ability to complete their professional education and make significant contributions to the profession.

Universities that host educational enrichment programs are ideally positioned to reap their benefits in the form of new entrants to their applicant pools, but all dental schools can profit from these programs. They can invite program participants to apply as predoctoral candidates. They can include participation in such programs in the criteria they use when evaluating applicants. They can take advantage of this conduit by recruiting their university’s undergraduates to take part in enrichment programs. Finally, they can establish partnerships with existing enrichment programs to increase their URM applicant pool.

Summer Medical and Dental Education Program (SMDEP)

The Summer Medical and Dental Education Program (SMDEP) is the largest preparatory program of its kind. Funded by the Robert Wood Johnson Foundation and managed by ADEA and AAMC, the program has an excellent track record of its participants gaining admission to medical and dental schools.

The value of academic interventions such as SMDEP is being further validated by the work of Dr. Joshua Aronson, Associate Professor of Applied Psychology at New York University. His research shows that if two identical groups of students are told different messages about how teachers anticipate they will perform, those who receive positive messages produce better results. In other words, it is not just the specific things we do to help students improve their academic performance that make a difference. It is also the act of admitting them to the club of those who can envision a rewarding future in the health professions. Summer and postbaccalaureate educational enrichment programs accomplish this by immersing students in an academic environment that helps them understand the culture of dental school and develop confidence in their abilities to function in this previously foreign milieu.
- Seminars and Workshops
  Clinical Exposure in Medicine and Dentistry
  Career Development Plans
  Financial Planning Workshop
  Health Policy Administration

- Student Eligibility
  - Rising college sophomores and juniors
  - From disadvantaged, low-income communities or backgrounds
  - From racial and ethnic groups historically underrepresented in dentistry and medicine
  - Have an interest in dentistry or medicine

- SMDEP Enrollment 2006-10
  - 10,188 applicants: 8,813 premed 1,375 predent
  - 4,782 participants: 3,896 premed 886 predent
  - Gender: 68.8% female 31.2% male
  - URM: 49% Black/African-American; 20% Hispanic/Latino; 2% American Indian

- Admission to Medical and Dental School

<table>
<thead>
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<th>Year &amp; Category</th>
<th>Medical School Enrolled</th>
<th>Dental School Enrolled</th>
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<td>86</td>
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<td>79</td>
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<td>2009 Scholars</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>524</strong></td>
<td><strong>213</strong></td>
</tr>
</tbody>
</table>

Other areas: Basic science graduate school, basic science research, biomedical engineering, business, psychology, dental hygiene, education, health care management, law, public health, nursing, optometry, physician assistant, pharmacy, podiatry, veterinary medicine

How this might look:

The University of Nebraska Medical Center (UNMC) in Lincoln is one of nine SMDEP medical-dental sites. The program has significantly increased diversity in the student body. Thirteen of the 20 students in the school’s first SMDEP class applied to dental school at UNMC, and the seven who were accepted matriculated. The following year, nearly three-quarters of Nebraska’s SMDEP alums submitted applications. Nine were accepted, and eight are now students at UNMC. Most impressive of all, of the five students who made the first semester Dean’s List in 2009, the top three were SMDEP alums.
What Does NOT Work

Lessons learned:

- Don’t use numerical cut-offs for GPAs and DAT scores. These eliminate desirable candidates from the applicant pool before holistic review can occur.

- Don’t recruit for dentistry alone. URM students are more familiar with medicine as a career option and more likely to attend recruiting events or respond to appeals that include medicine. An exclusive focus on recruiting URM students who have self-identified as predental students will necessarily yield a small applicant pool.

- Don’t assume your institution will be the draw. While each institution has unique strengths that serve as magnets for many students, URM students report that they are most likely to attend schools whose campus climate is perceived as welcoming by URM students already enrolled.

How this might look:

This comment, posted on www.studentdoctor.net, illustrates the type of negative information about a school’s climate that prospective students encounter.

I’m a third [year] dental student in a big North East University. I’m one of the only two black guys in a class of 127 students…I have seen student[s] make some comments about poor patients who are demographically majority black, but nothing hostile. I have always wanted to speak up for the patients, but sometimes you just can’t do anything when you are by yourself in a clinic floor of two hundred student doctors.
What Does Work

Support from Dean and Faculty

Leadership by the Admissions Committee

Partnership with Medicine and other Health Professions

What Does Work

A working pipeline

Strong summer &/or post-baccalaureate program

Holistic review

Consistent data
CHAPTER 5: DIVERSITY AND THE LAW

For the general public, the name Bakke is synonymous with the 1978 Supreme Court case that struck down an admissions policy designed to achieve diversity: the use of quotas for underrepresented minorities. Less familiar is the Court’s enduring finding articulated by Justice Lewis Powell, that “the goal of achieving a diverse student body is sufficiently compelling to justify consideration of race in admissions decisions under some circumstances.” This decision provides the legal rationale for basing affirmative action programs in student admissions on diversity. The Supreme Court reaffirmed this rationale in 2003, stating that “student body diversity is a compelling state interest that can justify the use of race in university admissions.”

In this chapter, we explore the legal history surrounding efforts to achieve diversity in higher education and offer guidelines for developing policies that are able to withstand legal challenges.

- Timeline of Landmark Decisions
- What the Law Allows
- Getting There

Landmark Decisions

*Regents of the University of California v. Bakke, 1978*

This Supreme Court decision is widely known for prohibiting the use of racial quotas in admissions. Allan Bakke, a white male applicant to the University of California at Davis Medical School, filed an action in state court to compel his admission after twice being rejected. He cited the admission of minority applicants with lower test scores through a separate “special admissions program” for economically and/or educationally disadvantaged applicants. A majority of the Supreme Court held that the university’s admissions practice of reserving spaces in the entering class for “special” students constituted a quota and violated the Equal Protection Clause. At the same time, the court asserted that “the State has a substantial interest that legitimately may be served by a properly devised admissions program involving the competitive consideration of race and ethnic origin.”

Justice Powell, who wrote the controlling opinion of the Court, stated that the use of race in admissions should be subject to "strict scrutiny." This means that there must be a compelling governmental interest for considering race. In addition, he asserted that admissions programs must be “narrowly tailored” to achieve that interest.

The Bakke decision found that the educational benefits of diversity constitute a compelling governmental interest and justify the use of race as a "plus factor" in admissions.

*Grutter v. Bollinger et. al., and Gratz and Hamacher v. Bollinger et. al., 2002*

The University of Michigan Admissions Lawsuits website describes these two cases as follows:

- On June 23, 2003, the U.S. Supreme Court held in *Grutter v. Bollinger et al.* that diversity is a compelling interest in higher education, and that race is one of a number of factors that can be taken into account to achieve the educational benefits of a diverse
student body. The Court found that the individualized, whole-file review used in the University of Michigan Law School’s admissions process is narrowly tailored to achieve the educational benefits of diversity. The Court also held that the law school’s goal of attaining a critical mass of underrepresented minority students does not transform its program into a quota. In contrast, the Court found that the university’s undergraduate admissions policy did not meet the same standard. In Gratz and Hammacher et al. v. Bollinger et al, the Court held that, while race is one of a number of factors that can be considered in undergraduate admissions, the automatic distribution of 20 points to students from underrepresented minority groups is not narrowly tailored.

- In an opinion by Justice O’Connor (joined by Justices Stevens, Souter, Ginsburg, and Breyer), the Court explicitly adopted Justice Powell’s view from Regents of the University of California v. Bakke (1978), finding that “student body diversity is a compelling state interest that can justify the use of race in university admissions.” It noted that public and private universities across the nation have modeled their admissions programs on the views articulated by Justice Powell in Bakke, and it reiterated that race “is only one element in a range of factors a university properly may consider in attaining the goal of a heterogeneous student body.”

Other Decisions

Since the Supreme Court’s ruling in the Bakke case, a number of cases challenging its findings have come before the court. The University of Michigan website has an Overview of Recent Affirmative Action Cases prior to 2004. A history and analysis of these cases and related law, Update on Affirmative Action in Higher Education: A Current Legal Overview, appears on the website of the American Association of University Professors.

Ballot Initiatives

California Proposition 209, 1996

California was the first state to challenge affirmative action through a ballot initiative. Proposition 209 amended the state constitution to prohibit public institutions from discriminating against or providing “preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting.”

According to University of California, Los Angeles (UCLA) professor Walter Allan, lead author of a 2004 study released by the Ralph J. Bunche Center for African American Studies, there is evidence of the drop in minority enrollment at University of California schools following the passage of Proposition 209.

In 1997, 515 new California African American freshmen were admitted to UC Berkeley; by fall 2004, this number had dropped by 60% to 194 admits, Allen said. UCLA admitted 470 new California African American freshmen in 1997; by fall 2004, these admissions declined 58% to 199 admits, he said.

Following the passage of Proposition 209, the proportion of URM students in University of California medical schools also dropped considerably from previous levels of 20% or more. The medical schools responded with a number of initiatives, including the institution of year-long postbaccalaureate programs for students denied admission as first-time applicants. Like the
programs described in Chapter 4, the University of California programs helped students build their academic skills and prerequisite knowledge, prepare for the medical school entrance exam, and navigate the application process. The medical schools also established pipeline programs for students considering careers in the health professions.

In fall 2002, URM enrollments began to rebound. UC attributed the increase to a variety of factors including its outreach programs. The University of California's five medical schools reported an increase in URM enrollment in 2002, with 94 URM students accounting for 16.5% of the first-year class compared with 11.9% in 2001, when there were 68 such students.

In 2006, when enrollment numbers for African-American freshmen at UCLA were at their lowest level since 1973, the school’s Academic Senate voted to adopt a holistic model of admissions.

**Arizona Proposition 107, 2010**

Arizona is the most recent state to employ a ballot initiative to overturn affirmative action in higher education. In 2010, the Arizona legislature placed a constitutional amendment on the ballot, and Proposition 107, also known as the Arizona Civil Rights Amendment, was approved by the voters in November. According to the Morrison Institute for Public Policy at Arizona State University:

> Proposition 107 would amend the Arizona Constitution to ban programs that give preferential treatment to or discriminate against any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education or public contracting, while exempting certain programs.

The Morrison Institute’s analysis states that while the official ballot language did not include the phrase “affirmative action,” both supporters and opponents believed such programs to be the target of the initiative.

**Other Initiatives**

Similar initiatives aimed at restricting the use of affirmative action have passed in Washington, Michigan, and Nebraska in the last decade. Your committee may want to explore other state initiatives in your region. See the slide on the next page for a map of Public Reaction to Race- and Gender-Conscious Preferences.
*On July 1, 2011, a federal appeals court ruled that Michigan voters did not have the right in 2006 to ban public colleges and universities from considering race and ethnicity in admissions. State officials immediately announced an appeal.

**What the Law Allows**

The *Bakke* and *Michigan* cases affirm the value of diversity in higher education and establish a legal framework within which universities can devise policies. Nevertheless, as Dr. Patricia Gurin and her colleagues at the University of Michigan point out, “It is clear from these now-famous higher education cases that the question of whether *Bakke* is still good law and whether diversity is a compelling state interest justifying the use of race-sensitive admissions policies remains controversial.”

In the wake of the Michigan decisions, the College Board convened The Access and Diversity Collaborative on Enrollment Management and the Law to “address the needs of college and university leaders who want to pursue institutional diversity-related goals in legally sound ways.” The Collaborative issued three publications authored by Arthur L. Coleman and Scott R. Palmer. The third of these, *Admissions and Diversity after Michigan: The Next Generation of Legal and Policy Issues*, serves as the basis for the next section of this guide. For a complete discussion of these topics, visit www.collegeboard.com/prod_downloads/diversitycollaborative/acc-div_next-generation.pdf.
Getting the conversation started

Look at the slide above. This graph illustrates a spectrum of compliance with federal law in light of decisions about particular admissions programs.

Ask: What elements are needed to ensure that admissions practices are legal? Where does our institution fit along the left to right axis? How might we adjust our admissions practices to ensure compliance with federal law?

The Michigan decisions provide valuable elaboration on legal standards that govern the use of race and ethnicity in admissions decisions; however, they do not specifically address every variation of the admissions policies under consideration.

Institutions should exercise care in formulating specific admissions policies. They may wish to use the following guidance reprinted from *Admissions and Diversity after Michigan: The Next Generation of Legal and Policy Issues*.

**Education Matters.** Any federal decision involving a discrimination challenge to admissions policies inevitably turns upon two key questions: (1) why, as a matter of educational policy, an institution decides to pursue race- or ethnicity-conscious strategies; and (2) how it designs and implements its policies to achieve those aims. In each instance, the basic answers to these questions, which are inherently educational, drive conclusions about the legal soundness of the policies in question.

**Goals Matter.** Both as a legal matter and as a matter of sound educational decision making, the implementation of admissions policies must be preceded by
a clear vision of the educational goals those policies are designed to serve, and how those particular policies work individually and collectively to achieve those goals. In fact, the focus on institutional goals was the key foundation for the Grutter Court’s emphasis on the mission-driven nature of the University’s diversity interests and, in turn, the basis for the Court’s deference to inherently academic judgments about the value of diversity at the University of Michigan.

**Evidence Matters.** It is important that higher education institutions develop evidence regarding both the “substantial” and “real” educational benefits of diversity (i.e., improved teaching and learning, enhanced civic values, and better preparation for the workforce) on their campuses, along with evidence about the appropriate design of their race- and ethnicity-conscious policies.

**Process Matters.** University of Michigan was also able to establish in Grutter that it satisfied a key legal requirement—that it had a process involving key institutional stakeholders through which its race- and ethnicity-conscious policies were periodically evaluated and refined to ensure that race and ethnicity were considered only to the extent necessary to achieve its compelling goal.

**The Law Matters.** At the risk of stating the obvious, it is also important to remember that institutions act at their peril if they do not heed the lessons of the Michigan cases and other federal law when pursuing diversity-related admissions policies. Based upon federal constitutional principles (which apply to public higher education institutions) and identical principles of Title VI of the Civil Rights Act of 1964 (which apply to any recipient of federal funding, public or private), it is clear that race- and ethnicity-conscious admissions policies must satisfy “strict scrutiny” standards in order to withstand any legal attack:

- **Strict scrutiny** is the most rigorous standard of judicial review. It is applicable to race- and ethnicity-conscious decisions that confer opportunities or benefits because distinctions based on race and ethnicity are “inherently suspect” under federal law. To satisfy strict scrutiny, institutional policies must serve a “compelling interest” and be “narrowly tailored” to achieve that interest.
- **A compelling interest** is the end that must be established as a foundation for maintaining lawful race- and ethnicity-conscious programs that confer opportunities or benefits. Federal courts have expressly recognized a limited number of interests that can be sufficiently compelling to justify the consideration of race or ethnicity in a higher education setting, including a university’s interest in promoting the educational benefits of a diverse student body.
- **Narrow tailoring** refers to the requirement that the means used to achieve the compelling interest must “fit” that interest precisely, with race or ethnicity considered only in the most limited manner possible. Federal courts examine several interrelated criteria in determining whether a given program is narrowly tailored, including the flexibility of the program, the necessity of using race or ethnicity, the burden imposed on nonbeneficiaries of the racial/ethnic preference, and whether the policy has an end point and is subject to periodic review.
Taken together, an understanding of these principles (see Figure 3) can help colleges and universities identify the policies and programs that should be subject to an institution-specific analysis, and ensure that their race- and ethnicity-conscious policies and programs both promote their diversity-related educational goals and minimize institutional legal risk—which are complementary, not competing goals.3

The strict scrutiny standard should not be viewed as a categorical prohibition on race- or ethnicity-conscious practices. Rather, it should be understood as the embodiment of the federal law’s guarantee of equal opportunity and equal treatment regardless of race or ethnicity, and its resistance to distinctions based on race or ethnicity except in the most limited—and compelling—circumstances. The task for college and university officials is to understand the legal principles associated with the strict scrutiny analysis and to ensure that any consideration of race and ethnicity comports with those principles.

![The Picture of Strict Scrutiny](image-url)
How to Get There

The following steps may help institutions implement policies that are mission driven, narrowly tailored, and able to withstand strict scrutiny.

1. **Establishing clear goals and objectives.** Higher education institutions must be able to justify their race- and ethnicity-conscious programs with compelling interests, which are clearly defined and central to the achievement of each institution’s educational mission.

2. **Devising appropriate strategies.** Higher education institutions must be able to demonstrate that the means used to achieve their compelling goals are in fact designed and implemented in ways that materially advance those goals, and consider race and ethnicity in the most limited manner possible to achieve those goals.

3. **Reviewing and evaluating results.** Higher education institutions must periodically evaluate their programs to ensure continued compelling interests and the implementation of appropriate race- or ethnicity-conscious strategies advancing those interests, and they must make changes when necessary (for instance, as institutional goals change or as evidence indicates that policies are not having the desired effect).
CHAPTER 6: WHAT CONSTITUTES SUCCESS?

Schools can make significant gains in URM enrollment using the strategies described in this guide. Of the first nine schools that invited ADEA to present the Admissions Committee Workshop on which this guide is based, all but two have seen substantial growth in the percentage of URM students among their first-year enrollees.

This chapter looks at two exemplary schools that have succeeded in raising URM enrollment, addresses concerns about maintaining high standards for admission, and summarizes keys to success in transforming admissions practices.

Look at the slide below. Note that while URM enrollment varies from year to year, almost all the schools that hosted workshops, even those in states with relatively little racial diversity, have made substantial progress.

Exemplary Schools

Two schools that pioneered a holistic approach to dental school admissions offer concrete examples of what can be achieved over time.

- School #1

  With strong support from the dean and the help of a strong summer enrichment program that had been in place for over 20 years, school #1 decided to “retool” its admissions process to become more holistic and inclusive. The strategies it employed included removing GPA and DAT score cut-offs, reviewing all applications, and increasing the number of URM and disadvantaged students interviewed.
After these changes were put in place, school #1 initially tripled its enrollment of URM students.

Today the school enrolls roughly double the number of URM students that it admitted prior to changing its admissions practices. With the departure of the team that pioneered holistic admissions at this school, URM enrollments have declined somewhat, underscoring the importance of leadership and a sustained commitment to achieving student body diversity even after new admissions practices are put in place. Admissions committees also need strong institutional support to sustain the personnel and infrastructure needed to carry out these practices.

- School #2

A charge from the dean to increase student diversity spurred school #2 to transform its admissions process. The dean of admissions responded by instituting holistic review and adjusting the previously used points system for applicants so that heavily weighted GPAs and DAT scores would be given equal weight with student interviews. This increased the emphasis on noncognitive factors, such as interpersonal skills, and gave highly motivated students from all backgrounds a boost in the admissions process.

At the same time, school #2 expanded an existing pipeline program that now reaches students from kindergarten through college and provides an intensive preparatory year for postbaccalaureate students seeking entry to dental school. Through its pipeline program, school #2 gives students who lack traditional educational support an opportunity to consider and prepare for entry to dental school.

These changes made a dramatic difference. The percentage of URM students in the entering classes of 2004 and 2005 was in the high teens. In fall 2006, the first year the new policies were in place, that figure jumped to 26%, and in the following three years it reached 40% of the entering class. A comprehensive pipeline strategy, revised admissions policies, support from the faculty, and the leadership of the dean have been key to the school’s ability to achieve these spectacular results.

Concerns About Standards

The Bakke case highlights the concern of some that admissions policies that aim to increase minority enrollment may favor less well-qualified candidates and lower standards for the applicant pool as a whole. Some schools fear that evaluating students on the basis of less conventional metrics could make their schools appear less competitive and reduce their attractiveness to those traditionally viewed as the best candidates.

A multi-school comparison of the GPAs and DAT scores of URM and non-URM first-year enrollees has yet to be conducted. Nevertheless, the experience of one school that has adopted holistic admissions suggests that standards can be maintained.

Getting the conversation started

Look at the slide on the next page. Note that non-URM students at this school have a greater range of GPAs than their URM counterparts. Rather than lowering the range of these metrics for the entering class, URM students’ GPAs fall comfortably within the existing range. The range of
URM students’ DAT scores typically start one to two points below that of their non-URM counterparts, but in some years, it also surpasses the top end of the non-URM range.

**Ask:** How does this compare with your preconceptions about the potential impact of enrolling more URM students on the range of GPAs and DAT scores for your school’s entering class? At some institutions, faculty members assume that URM students are unprepared and will do poorly. When URM students face acculturation challenges or academic difficulties, faculty may lower their expectations for these students. How can your committee change faculty assumptions that URM students will be at the bottom of the class? (See also Chapter 3, Setting Priorities.)

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**Keys to Success**

The schools that have had the greatest success in increasing URM enrollment typically possess most if not all of the following:

- Visible support from the dean

When looking at dental schools that have been successful in increasing URM enrollment, the role of the dean is crucial. At institutions whose deans have set a goal of increasing diversity and provided support, schools have witnessed substantial increases in minority enrollment. Interestingly, the presence of the dean during the ADEA Admissions Committee Workshop correlated with immediate and sustainable increases in URM enrollment at those schools. When the dean was not present, increases also occurred but more slowly and at much lower levels.
• Admissions committee members who are committed to diversity

The admissions committee must also make a firm commitment to increasing diversity. The committee must also understand that its policies and goals do not exist in a vacuum but must support the overall mission of the school. Those admissions committees that have had success with increasing the diversity of their dental classes have a mission statement around increasing diversity that is specific to the committee and blends well with those of the dental school and the university.

• Support from the faculty

Dental school faculty must appreciate the role of diversity in fostering educational excellence and embrace the admission committee’s goals. As participants in the admissions decision-making process and as mentors in the classroom and clinic, they must demonstrate a strong commitment to the mission of increasing diversity. Some URM students enter dental school without the solid educational foundation or preprofessional preparation enjoyed by their peers. This can lead to faculty expectations of low performance, which too often become a self-fulfilling prophecy. Faculty must invest in the success of URM students, providing appropriate guidance and academic support while retaining high performance expectations.

• A working pipeline

Dental schools that have their own pipeline initiatives or connect with other pipeline programs that reach down into middle and elementary school are more successful at enrolling URM and disadvantaged students. Pipeline programs deliver by exposing URM and disadvantaged students to dentistry during their formative years and offering them access to enrichment programs that provide the skills and knowledge needed to become competitive applicants to dental school.

• Strong educational enrichment programs

Many URM students lack exposure to the professional school environment, affirmation of their abilities, and role models who can support their goals of attending dental school. Strong summer and postbaccalaureate programs have demonstrated their value by giving students an understanding of the rigors of professional school and equipping them with the skills and confidence needed to succeed. Students who have attended strong programs have consistently demonstrated the ability to complete their professional education and become outstanding practitioners.

• Partnerships with medicine

Surveys of dental students reveal that only about one-third of dental school graduates identified themselves as planning to enter dentistry when they started college. As a result, it is not surprising to find better attendance at premedical school events than at gatherings targeted solely at future dentists. Dental school admissions and recruitment officers who partner with their counterparts in the medical school increase their ability to attract URM students. Many of these students have limited personal knowledge of dentistry due to insurance constraints or the limited availability of dental practitioners in low-income communities, and are more familiar with medicine through media exposure.
Sharing the evidence that your practices work

To reach your goals, your institution needs evidence from within to show that you are implementing the chosen strategies and achieving your objectives. Gathering this evidence and communicating it broadly within your community is a critical means of supporting your transformation.
### COMMONLY USED ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>RWJF</td>
<td>Robert Wood Johnson Foundation</td>
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<td>ADEA ACW</td>
<td>ADEA Admissions Committee Workshop</td>
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<td>URM</td>
<td>underrepresented minority</td>
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<tr>
<td>GPA</td>
<td>grade point average</td>
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<td>DAT</td>
<td>Dental Admission Test</td>
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<td>CODA</td>
<td>Commission on Dental Accreditation</td>
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<td>ADA</td>
<td>American Dental Association</td>
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<td>AAMC</td>
<td>Association of American Medical Colleges</td>
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<td>MMI</td>
<td>Multiple-Mini Interview</td>
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<tr>
<td>PBL</td>
<td>Problem-Based Learning</td>
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<tr>
<td>OSCE</td>
<td>objective structured clinical examinations</td>
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<tr>
<td>SMDEP</td>
<td>Summer Medical and Dental Education Program</td>
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ANNOTATED RESOURCES

The resources cited here informed the creation of this guide. This is not meant to be an exhaustive list. Many others resources are available in each of the areas outlined below.

Access to Care


This annual survey of graduating dental students found that underrepresented students were more likely than their peers to indicate that “service to vulnerable and low income groups” and “service to own racial/ethnic group” were primary motivators to pursue a career in dentistry. The survey also found that 40% of seniors who participated in community-based clinical experiences believed those experiences enhanced their cultural competence, and one-third of those seniors indicated that community-based clinical experiences increased their interest in treating patients from underrepresented groups.


The American Dental Association surveyed the profession in 1996 and published its findings as a series of five reports describing the demographics and experiences of five racial groups in dentistry: White, American Indian, Asian, Black/African-American, and Hispanic/Latino. Until recently, dentistry has been a profession primarily made up of white men. The report was spurred by the realization that over 33% of students in dental schools in 1996 were non-white as compared with roughly 7% in 1971.


This study explores whether the characteristics of dentists’ patients can be inferred by analyzing the location of their practices. The authors found that, on average, black/African-American dentists practice in areas that have a significantly higher residential black/African-American population than areas where non-black dentists practice. They also found that black dentists are more likely to serve lower socio-economic areas. This study provides support for dental school strategies aimed at increasing care to underserved communities by enrolling underrepresented minority students.


This article uses data from the 2007 annual ADEA survey of dental school seniors to study the relationship between student income and URM status and student intention to treat underserved patients upon graduation. The authors’ findings may have implications for dental school recruitment and retention programs that focus mainly on underrepresented minority students since most low-income students are not members of underrepresented minority groups.

This article appeared in response to a position paper released by ADEA about the roles and responsibilities that dental education institutions have for improving dental health in the United States. The authors assert that as the demographic composition of the U.S. shifts, providers of oral health services will be ill-equipped to provide high-quality and culturally competent care to patients unless something is done to ensure that there are more individuals from minority groups in the oral health workforce. The authors cite data indicating that among 2004 dental schools graduates, black/African-Americans were significantly more likely than whites to anticipate serving a population with a large percentage (>50%) of underserved patients, to value the opportunity to serve vulnerable and low-income populations, and to view low-income patients in a less negative light.


The author argues that the most prominent factor that contributes to a lack of access to dental care for racial and ethnic minorities is the lack of diversity among oral health professionals. He cites research suggesting that minorities are more likely to seek treatment from people of their own racial or ethnic background and that those providers are more likely to work in minority communities. Minority professionals are also more likely to have a desire to provide care to underserved populations. In addition to diversifying dental schools, the author calls for increasing awareness of diversity and providing opportunities for all dental students to work with minority communities as ways to improve access to care.

Diversity Policy


This first report on oral health from the Office of the Surgeon General alerted the American public to the meaning of oral health and explained why oral health is essential to general health. The report recognizes the strides that have been made in the prevention of oral diseases while pointing out the existence of a “silent epidemic” of oral diseases among the most vulnerable. The report calls for the development of a National Oral Health Plan to improve the nation’s oral health and eliminate these disparities.


This report was prepared at the request of Congress to assess the extent to which racial and ethnic differences impact the quality of health care received by patients. A committee assembled by the Institute of Medicine found racial and ethnic disparities in health care, even when controlling for factors such as insurance status, income, age, and severity of condition. The report also points to higher rates of illness, disability, and premature death among minority populations. The committee attributes these disparities to many sources (health systems, patients, and health care managers), as well as bias, stereotyping, prejudice, and clinical uncertainty on the part of healthcare providers. The committee provides a number of regulatory
and policy recommendations, including increasing the proportion of racial and ethnic minorities who seek careers in health care. Specific recommendations for health care providers include attending to consistency and equity of care, structuring payment systems in ways that are accessible by minority patients, and improving communication and trust between patients and providers with financial incentives for providers who take steps to reduce barriers and make use of evidence-based decision making.


In 2003, the W.K. Kellogg Foundation issued a grant to Duke University School of Medicine to plan and convene a commission on diversity in the health care workforce. Sixteen health, education, legal, and business leaders made up the commission, which was headed by former U.S. Health and Human Services Secretary Dr. Louis W. Sullivan. The Sullivan Commission was charged with identifying and understanding the barriers to achieving diversity in the health professions and recommending solutions. The commission's report highlights three central principles that are necessary for achieving its vision for a health system modeled on excellence, access, and quality for all people: 1) increasing diversity in the health professions by changing the culture of health professions schools; 2) exploring new and nontraditional paths to the health professions; and 3) making these changes a priority at the highest levels of institutional leadership. Recommendations are wide-ranging. They include broadening the pipeline through strategies such as mentoring, counseling, and training in test-taking and interviewing skills, and efforts to include more students from two-year colleges and more allied health professionals seeking second careers. Financial recommendations include increasing funding to support diversity programs and eliminating the financial barriers that discourage so many minority students. The commission also made recommendations for the leaders of health professions schools related to accountability in the following areas: quality care, measurement of progress, benefit to the community, and institutional commitment.


This article looks at how the increased number of female dentists has impacted the profession in Canada. Dentistry has feminized more slowly than pharmacy, law, and medicine, but more women have pursued dentistry than other male dominated professions like engineering and architecture. The author argues that if women are practicing dentistry differently than men, it is likely that this increase in women in the profession may alter the nature of dental practice overall. This study finds that there are very few differences between male and female dentists when considering their practice characteristics and attitudes towards dentistry. Men and women tend to differ in their practice type and average income, but they are similar when it comes to working hours, practice location, and professional attitudes. Age emerged as an important factor in this study and, among younger, newly graduated dentists, there are gender differences in terms of practice hours per week and practice type. These differences appear to be influenced by differences between male and female dentists regarding family roles and career goals.


This article covers a speech given in October 2010 by Dr. Raymond Gist, the first African-American president of the American Dental Association (ADA). Gist said that dentistry has not always been the most diverse profession and that historically there have been proactive
American Dental Education Association attempts to discourage minorities from joining the ADA. Gist noted that while opportunities for minorities in dentistry have improved, there is still much to be done to increase access for people of color who want to become dentists. According to the U.S. Census Bureau, in 2009 only about 6% of all dental students were African-American and/or Hispanic, while African-Americans and Hispanics make up nearly 30% of the total U.S. population.


The authors argue that improving the diversity of the health professions will require a multi-pronged strategy that addresses the educational pipeline, admissions policies, and the institutional culture at health professions schools. They call for funding and sustained partnerships for primary education, interventions at the college and graduate school levels, and federal government programs that provide funding to increase the educational pipeline. They also recommend reaching beyond the traditional applicant pool and following the examples set by Duke University and the University of California, San Francisco in attempting to diversify the student bodies at their health professions schools. In the larger public policy arena, the authors suggest building strong regional and national coalitions among diversity proponents so that advocacy, communications, and implementation strategies can be coordinated in ways that help the policy climate to become more receptive to the benefits of health professions diversity.


Gladwell argues that, for most exceptionally successful individuals, a combination of natural ability, luck, and the influence of others leads to achievement. Gladwell regularly references the 10,000-Hour Rule, which is the idea that success in any field tends to require in excess of 10,000 hours of practice at that task. Canadian hockey prodigies, Bill Gates, J. Robert Oppenheimer, and others are used to illustrate how success is a complex phenomenon that often has nothing to do with the meritocratic perspectives that are popular in American culture. Gladwell argues that success is rooted in the advantages with which some individuals are blessed. While in some cases Gladwell oversimplifies and makes some logical leaps, overall the book encourages the reader to think about success in the context of historical social factors, rather than attributing it entirely to hard work or luck.

**Educational Benefits of Diversity**


Scott Page, a social economist and faculty member at the University of Michigan, examines sets of models from psychology, organizational theory, education, computer science, economics, biology, political science, and statistics. His research shows that diversity can trump ability when it comes to problem solving. He believes that a group of problem solvers from diverse backgrounds will outperform homogenous groups of high-ability problem solvers. Page’s work implies that a student body composed of diverse individuals who possess complementary skills, abilities, and perspectives will enhance learning for the entire class. He also suggests that benefits might accrue to society at large when a more diverse cohort of students enters the workforce.
This article looks at the impact of diversity on higher education. The authors found that when students experience diversity during college, this has a positive effect on outcomes related to learning (such as active thinking, intellectual engagement, motivation, and academic skills) and democracy (such as citizenship engagement, perspective-taking, and racial/cultural engagement). Informal interactions between individuals of different racial groups were found to be particularly influential. The authors conclude that racial diversity on college campuses functions through students’ experiences, and that individuals have more complete understandings of members of other groups when the relative group size is more balanced. The results of the research support curricular initiatives that introduce diversity topics into courses as well as efforts to give attention to the types of experiences that students have with diverse peers in and out of the classroom.


This report focuses on educational outcomes associated with a number of diversity-related practices and with informal interactions among diverse peers at ten public universities. The researchers also collected information from four-year institutions to illustrate the organizational landscape of diversity in higher education. Students made significant gains in learning outcomes when they had informal interactions with diverse peers during the first two years of college. Diversity courses and diversity-related extracurricular activities were also found to have a positive effect on educational outcomes. Students who reported negative interactions with diverse peers were the least likely to develop the skills necessary to navigate a diverse and global world. Through focus-group research, the authors found that white students acquire critical thinking skills, personal growth, and interpersonal communication skills through interacting with diverse peers, while students of color articulated the burden of educating others. This suggests that instructors need to improve their skills at facilitation so that diversity experiences are mutually beneficial for all students.


This is a traditional scholarly presentation of the same research discussed in Preparing College Students for a Diverse Democracy: Final Report to the U.S. Department of Education. The results of this study reinforce the argument that learning and development results when students have high quality interactions with diverse peers. The authors conclude that institutions should provide opportunities for students to encounter a peer group that reflects the diverse demographics of the work and social environments that they will experience after graduation. These experiences should occur inside and outside the classroom. Educators must also be more intentional about teaching civic education in college, particularly in hostile racial climates.

This is one of three papers commissioned by the Association of American Colleges and Universities to address how institutions will need to adapt to meet the goals of inclusion and excellence in higher education. The paper makes the argument that integrating initiatives that address diversity and academic excellence at the same time produces stronger and more durable change for institutions in both of these arenas than addressing them in unrelated ways. The authors use data gathered for the University of Michigan’s defense of its affirmative action policies to demonstrate that institutions must be intentional about how they will foster diversity on their campuses in order for diversity to generate educational benefits for students. The authors also argue that diversity should be treated as a process that leads to better learning instead of as an outcome in and of itself. Institutions can do this by recruiting diverse students, faculty members, and staff; improving the campus climate; and making changes to the curriculum that demonstrate commitment to inclusion and excellence.


As more American medical schools abandoned affirmative action following ballot initiatives and lower court decisions, these researchers attempted to contribute to the understanding of the educational effects of diversity, particularly in medical education. In 2000, they surveyed medical students from all four years at the Harvard Medical School and the University of California, San Francisco School of Medicine. Students were asked about the frequency of their contact with people of different races and ethnicities, the impact of diversity on the way topics were discussed in class, and the impact and importance of diversity for members of the study body, the basic science faculty, and the clinical faculty at the institutions. The authors found that students typically had less contact during their formative years with those of different races and ethnicities than they did during college, an effect that was amplified even more during medical school. Students at both schools also reported that interacting with a diverse student body greatly enhanced their educational experiences in medical school. Respondents strongly supported maintaining or expanding the affirmative action policies in admissions at their institutions.


This article describes a study in which the authors hypothesized that exposure to racial and ethnic diversity in the student body, faculty, staff, and patient population in dental school and a dental school curriculum that includes content about racial and ethnic diversity should contribute to students’ feeling more competent and confident to enter a multicultural work environment. A survey was administered to fourth-year dental students at seven different dental schools in geographically diverse parts of the U.S. The results of the research suggested that both the perception of diversity in the school environment and diversity-specific course content had positive and significant correlations with the students’ perception of their competency and their ability to work with diverse populations.
Holistic Admissions


This 54-page publication was created “to help medical schools establish and implement institution-specific, diversity-related policies that will advance their core educational goals.” Its primary focus is the establishment of criteria for holistic review, training admissions committees in the use of such criteria, and evaluating the effectiveness of holistic review policies and procedures. It includes a Holistic Review Admissions Checklist that committees may find helpful as they assess their efforts and formulate new processes.

https://services.aamc.org/publications/index.cfm?fuseaction=Product.displayForm&prd_id=219&prv_id=267

This document presents the legal underpinnings for developing diversity policies and programs. It describes key operational elements associated with success in achieving diversity-related goals, including carefully articulated missions statements, attention to enrollment management policies, substantive admissions criteria, and mechanisms for evaluating the enrollment management process. It also contains an institutional diversity self-assessment checklist and an action plan template designed to help medical schools engage in discussion and collaboration around diversity-related issues.


Sedlacek proposes that admissions committees assess noncognitive variables such as those "relating to adjustment, motivation, and perception, rather than the traditional verbal and quantitative (often called cognitive) areas typically measured by standardized tests.” The book also contains a number of instruments for assessing both applicants and the campus climate as it relates to diversity. These can be used or adapted by admissions committees.

Lane IF. Professional competencies in health sciences education: from multiple intelligences to the clinic floor. *Advances in Health Sciences Education.* 2010;15:129-146.

This article cites Sedlacek’s work on noncognitive assessment and applies it, along with other research in this area, to medical education. The author describes the trend toward competency-based education. Evidence demonstrates that nontechnical, noncognitive, or humanistic skills influence achievement in academic settings, medical education, and clinical performance. There are references to Sedlacek’s Noncognitive Variable Questionnaire (NCV-Q), which assesses performance in eight different domains. The author is critical of the value of the NCV-Q for medical students, but supports finding additional noncognitive domains and instruments that apply more coherently to medical school students.

The author argues for a theory called successful intelligence, which states that people in most walks of life require creativity, analytical intelligence, and practical intelligence. Noting that academic admissions processes have traditionally focused on analytical intelligence at the expense of these other components, Sternburg argues that it may be possible to accomplish the goals of affirmative action using assessments like the Rainbow and Kaleidoscope projects as supplements to or substitutes for traditional affirmative-action programs. The author describes the Rainbow Project, which incorporates factors related to creativity and practical intelligence in admissions, and the Kaleidoscope Project, which adds wisdom to the factors measured by the Rainbow project.


The author argues that academic excellence and enhanced diversity are synergistic and compatible concepts in higher education. He suggests that intelligence comprises creative skills for thinking of new ideas, analytical skills for deciding if an idea is good, and practical skills for applying ideas and persuading others that they are good. Sternburg calls this “successful intelligence.” The author describes the Rainbow Project, a supplement to traditional standardized tests that can account for creativity and practical intelligence. Data from Sternburg’s research indicates that the Rainbow Project substantially increases an institution’s ability to predict a student’s college success as measured by first-year GPA and to decrease differences in scores among members of diverse ethnic groups.


The authors describe the institutional and policy-level strategies that dental schools in the Pipeline, Profession, and Practice: Community-Based Dental Education program (funded by the Robert Wood Johnson Foundation) have used to adjust their admissions practices to increase the diversity of their student bodies. The authors argue that admissions decisions should be based on a comprehensive evaluation that considers both the quantitative and qualitative characteristics of candidates. They detail the whole-file review process as a way to measure merit and professional promise for each candidate. They also describe a number of noncognitive variables, including leadership, the ability to sustain academic achievement with competing priorities, volunteerism, communication, social background, and disadvantaged status as variables that schools can take into consideration during the admissions process. Additionally, the article reaffirms the importance of a diverse composition of the admissions committee and discusses how technical assistance for admissions committees can help schools to improve the diversity of their student bodies.

**Multiple Mini Interviews (MMIs)**

Multiple Mini Interviews (MMIs) originated at McMaster University in Hamilton, Ontario, Canada. A series of articles explains the MMI and explores its validity and reliability:


This article identifies the tools that are predictive in medical school admissions. The authors note that the Multiple Mini Interview (MMI) is a better predictor of performance that other noncognitive assessments including the personal interview, letters of reference, personality testing, emotional intelligence, and situational judgment tests.

Legal Issues


This document offers a primer on issues related to the Supreme Court affirmative action decisions involving the University of Michigan. The publication provides “a framework for using the diversity rationale in building race- and ethnicity-conscious admissions policies and offers:

- brief summaries with an analysis of the Grutter and Gratz cases
- policy considerations associated with the Court's rulings
- a list of considerations to help medical [and dental] schools think about how to implement narrowly tailored, race-conscious/ethnicity-conscious admissions policies or assess existing policies and
- appendices that include historical highlights of affirmative action in education; and selected references for readers to obtain more information about how the Court ruled and the implications of its rulings"


In Parents Involved in Community Schools v. Seattle School District No. 1 the Supreme Court ruled that the specific student assignment policies at issue (which considered race when assigning students to schools) were unconstitutional, as they were not properly designed and implemented ("narrowly tailored") to achieve their stated goals. However, the court determined, for the first time, that K–12 public schools have potentially compelling interests (analogous though distinct from those in higher education) to promote diversity, as well as to reduce the
harms of racial isolation, and these goals may be pursued through appropriate race conscious policies. The authors provide a number of policy implications, including that higher education institutions must ensure compliance with the Grutter decision and enrollment management goals must be mission-driven and educationally focused. Institutions must document consideration of possible race-neutral alternatives, and critical mass objectives must be established that include individualized review in which race is one factor among many being considered for admission. In all, access and diversity policies must be transparent, well understood, and followed by campus constituents.


Following the Supreme Court rulings in the University of Michigan cases, voters in the state approved a constitutional amendment, which forbid the use of race, ethnicity, or gender in public education and essentially nullified the Supreme Court rulings. Similar legislation put forth through voter ballot initiatives or executive rulings has also been passed in Washington, California, and Florida. These acts illustrate the need for educational institutions to communicate effectively with the public about the use of race-conscious enrollment practices.

The authors make a number of recommendations for action. These include fostering broad-based coalitions to inform policy development and provide support for the educational, economic, civic, and security interests associated with diverse student bodies; sharing data that demonstrates the significance of diverse student populations; and using public education campaigns to showcase the benefits of diversity.


According to its authors, this manual provides “higher education leaders with a practical tool that can help guide institutional decision making regarding diversity and the use of race and ethnicity in the admissions selection process.” The authors provide a significant review of the *Bakke*, *Gratz*, and *Grutter* cases, while acknowledging that the landmark University of Michigan Supreme Court cases are not comprehensive for informing all institutions about how best to apply affirmative policies on their campuses. Major take-away messages are that institutions need to do a better job at communicating their vision related to admissions, and that institutions can pursue race-conscious admissions by answering the same questions that they should ask about any other mission-driven goal: “What are my goals? By what measures can I evaluate success in achieving those goals, over time, as a basis for correcting or enhancing my policies? Are my policies working as planned—are they effective in helping me achieve my goals?”


According to its authors, this manual was designed “to provide higher education leaders with a practical tool that can help guide institutional decision making on issues related to diversity and the use of race and ethnicity as factors in recruitment, outreach, and retention programs. This
manual offers a framework that can help structure and inform institution-specific reviews of such programs that are race- and ethnicity-conscious. Although it cannot provide a definitive formula that will establish foolproof models in all settings…, this manual presents key questions and important information for higher education institutions to consider, based on federal legal principles."

**Summer and Post Baccalaureate Programs**


This paper describes a University of California, San Francisco School of Dentistry project to help economically and educationally disadvantaged students gain admission to dental school. Students in the program had met the requirements for admission to dental school, had applied, and had been previously denied admission. These students had a desire to provide dental care for underserved populations when they graduated. This program included a summer preparation course for the Dental Admission Test, workshops and seminars about academic skill building, and mentorship during the reapplication process. Students in the program participated in clinical clerkships and were enrolled in upper-division and graduate-level science courses at a local university while they prepared to reapply. Five students participated in the pilot project in 1998. All were admitted to dental schools and completed the first year successfully.


www.jdentaled.org/cgi/reprint/68/5/542.pdf

This article describes a study in which researchers attempted to identify program characteristics of summer enrichment and recruitment programs and to determine which characteristics predicted participant enrollment in dental school. Seventeen dental schools participated in the study, and most of the program participants were underrepresented minority students. Programs in the study provided the following experiences: preparation in the basic sciences, review and preparation for the Dental Admission Test, preclinical laboratory activities, and classes related to academic success strategies. The length of the program was found to be a significant predictor of participant enrollment in dental school. Program directors also reported that mentoring, institutional support, program structure, and admission policies were major factors that contributed to success for their program participants. The authors conclude that recruitment and enrichment programs are a viable approach for increasing dental school enrollment for underrepresented minority students.

Grumbach K, Chen E. Effectiveness of University of California Premedical Programs in Increasing Medical School Matriculation for Minority and Disadvantaged Students. *JAMA.* 2006;296:1079-1085.

Many medical schools facilitate postbaccalaureate premedical programs that target underrepresented minority and disadvantaged students. These programs exist to increase the number of underrepresented minority and disadvantaged students who enroll in medical school. This particular study assessed if the University of California (UC) postbaccalaureate programs are effective in increasing the matriculation rate for program participants. Researchers used a retrospective cohort study to assess five UC medical school postbaccalaureate programs. Students who had applied to the postbaccalaureate program but did not participate served as a
control group. During the timeframe being assessed, 67.6% of program participants and 22.5% of controls matriculated into medical school. Even after adjusting for baseline student characteristics, students who participated in postbaccalaureate programs had a higher probability of enrolling in medical school than members of the control group. The authors conclude that postbaccalaureate premedical programs appear to be an effective way to increase the number of medical school students from disadvantaged and underrepresented groups.


The purpose of the Connecting the Dots project is to determine more precisely the relationships between key student behaviors and the institutional practices and conditions that foster student success. The authors of this report examined the relationship between student engagement as measured by the National Survey of Student Engagement (NSSE) and various measures of college achievement. In addition to many specific findings, they conclude, “While student engagement is not a silver bullet, finding ways to get students to take part in the right kinds of activities helps to level the playing field, especially for those from low-income family backgrounds and others who have been historically underserved, increasing the odds that they will complete their program of study and benefit in the desired ways.”


This article examines the Pipeline, Profession, and Practice: Community-Based Dental Education program (funded by the Robert Wood Johnson Foundation). Participating dental schools used new outreach, recruitment, and retention strategies to increase the number of underrepresented minority and low-income students in their predoctoral programs. Enrollment of underrepresented minority students at these institutions increased from 184 students in 2003 to 246 in 2007. The article describes the internal infrastructural and organizational approaches used by participating dental schools to increase awareness about oral health careers among students in the target populations and the methods used to recruit applicants. These included effective partnerships and collaborations among the participating schools and with external stakeholders.


This article provides data from a study conducted to determine if an academic skills training program for undergraduate predental students from underrepresented minority backgrounds increased the students’ standardized test scores for vocabulary, reading comprehension, reading rates, spelling, and math as well as subject-specific test results in biology, chemistry, and physics. Data was collected from participants in the Pipeline Programs between 1998 and 2006. These were summer enrichment programs for undergraduate predental students from disadvantaged backgrounds and were six weeks in length. The data showed that the students
improved their vocabulary scores, reading comprehension scores, and reading rates during the summer programs. They also exhibited improvements in spelling and math scores, as well as subject-specific scores in biology, chemistry, and physics. These data demonstrate that a six-week enrichment program significantly improved the academic skills and basic science knowledge scores of undergraduate predental students. These improvements may improve the performance of these students in their college courses and increase their level of competitiveness as they go through the dental school admissions process.


This article provides a summary of the types of support offered by academic enrichment programs. These address barriers to student achievement such as unevenness in academic preparation, less rigorous educational background, family influences, unease in a new setting, and lack of professional role models. To be successful, these programs must address both the academic and social complexities of underrepresented minority students. The authors provide synopses of specific post baccalaureate and summer programs, including those at Marquette University, Baylor College of Dentistry, Columbia University, Creighton University, and University of North Carolina at Chapel Hill.

**ADEA Admissions Committee Workshops**


This article explores the rationale for the development of the ADEA Admissions Committee Workshops, discusses lessons learned from workshop presentations, and tracked enrollment trends of underrepresented students in dental schools where the workshop has been presented.


With funding from the Robert Wood Johnson Foundation, in summer 2009 ADEA identified and trained ten dental school admissions/minority affairs officers to present the ADEA Admissions Committee Workshop at six U.S. dental schools. This article is an evaluation of that project and the outcomes of the workshops they presented.
ENDNOTES


iiIbid.


ivIbid.


xiIbid., p. 56.

xiiIbid., p. 10.


Ibid.


Ibid.