Update on the Dental Admission Test (DAT)

Dr. Kathleen J. Hinshaw
Sr. Manager, Test Administration
Department of Testing Services

ADEA Fall 2013 Meeting
CDEL is responsible for policies and issues related to:

- dental licensure (includes DAT Committee)
- continuing dental education/CE course listing/ADA CERP (CE Provider Recognition)
- specialty definitions/certifying board recognition/requirements/policies
- anesthesia guidelines/policies
- allied dental career recruitment material
- dental/specialty/allied dental education policies.

DAT Committee oversees policies and procedures of the DAT Program and provides direction to the ADA Department of Testing Services (DTS).
DAT Committee Composition/Appointment Process

DAT Committee
- Solicits/reviews nominations
- Makes recommendations to CDEL

CDEL
- Reviews DAT Committee recommendations

ADA Trustees
House of Delegates
- Approves DAT Committee appointments

- Appointed members (5) based on knowledge/experience of dental education, dental school admission procedures, testing.
- One year term (4 maximum terms).
- Liaisons (3):
  - National Association of Advisors for the Health Professions (NAAHP)
  - Association of Schools and Colleges of Optometry (ASCO)
  - Canadian Dental Association (CDA)
DAT Committee 2013-2014*

**Members**

**Dr. Diane Hoelscher, Chair and CDEL member**
Associate Professor and Chair Department of Patient Management
University of Detroit Mercy

**Dr. Steven J. Filler**
Associate Dean, Student, Alumni, and External Affairs
University of Alabama School of Dentistry

**Dr. Gary E. Jeffers**
Department of Oral & Maxillofacial Surgery
University of Detroit Mercy

**Ms. Stephanie L. Perry**
Director of Dental School Admissions
Medical College of Georgia School of Dentistry

**Dr. Gregory A. Stoute**
Executive Vice Dean
Meharry Medical College School of Dentistry

**Liaisons**

**Dr. Lewis Reich**
Vice President for Academic Affairs
Southern College of Optometry

**Dr. Euan Swan**
Manager, Dental Programs
Canadian Dental Association

**Ruth O. Bingham, PhD**
President-elect, NAAHP
Pre-Health/Pre-Law Advising Center
University of Hawaii at Manoa

*Commences after ADA Annual Session*
DAT Program Purpose

- Foundation upon which the test is built; in operation (nationally) since 1950.

- Designed to measure general academic ability, comprehension of scientific information, and perceptual ability. While all dental schools require examinees to participate in the Dental Admission Testing Program, test results are only one factor considered in evaluating the admission potential of an examinee.

- Drives:
  - Test content
  - Administration policies and procedures
  - Scoring, Reporting, and Interpretation

- Validity studies shown that test scores (in conjunction with academic records) are useful in predicting performance in dental school. The importance in the admission process is determined by each dental school.
DAT Program Operating Principles

- Set/maintain standards for profession.

- Test is valid, reliable, credible.

- Complies with *Standards for Educational and Psychological Testing*, incorporates industry best practices.

- Cost effective.

- Security and protection of content/intellectual property.

- Examinees given reasonable opportunity to demonstrate ability/achievement. Opportunity provided is fair and equitable.
Testing Format

- Computer-based, administered by Prometric, Inc. at test centers in the United States and territories (Guam, Puerto Rico, and the Virgin Islands).

<table>
<thead>
<tr>
<th>DAT Testing Schedule</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Tutorial</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Survey of Natural Sciences</td>
<td>90 minutes</td>
</tr>
<tr>
<td>Perceptual Ability Test</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Optional Break</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Reading Comprehension Test</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Quantitative Reasoning Test</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Optional Post Test Survey</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Total time</td>
<td>5 hours</td>
</tr>
</tbody>
</table>
Battery of four tests (280 multiple-choice questions)

- **Survey of the Natural Sciences** (100 items)
- **Perceptual Ability Test** (90 items)
- **Reading Comprehension** (50 items)
- **Quantitative Reasoning** (40 items)

See DAT Guide for detailed test specifications.
Changes to Critical Thinking Content

To enhance testing of critical thinking skills, the QRT specifications are being revised.

Eliminate:
- Numerical calculations
- Conversions
- Geometry
- Trigonometry

Add:
- Data analysis
- Interpretation and sufficiency
- Quantitative comparison
- Probability and statistics

2014 - 2015
- Questions pilot tested; performance and quality evaluated.
- Will NOT contribute to scores.

2016
- WILL contribute to scores.
  (QRT and Academic Average)

Monitor DAT website for updates.
Changes to Biology Test Specifications

- Biology survey courses have shifted to a systems approach. (focus on complex interactions within biological systems)

- Biology test specifications are being adjusted to conform.

Test Construction

- Ongoing process.

- Multiple test forms prepared annually.

- Both new and previously used items. Items drafted by TCC.
  
  • Review and revise items.
  • Adhere to *Test Item Development Guide*.
  • Ensure accuracy and relevance.
  • Evaluate item quality/performance via item level statistics (item discrimination and difficulty).
  • Select items per test specifications.

- New items are pretested and reviewed. Items that don’t meet standards are revised/retired.

- TCCs suggest content changes. Changes approved by DAT Committee.
### TCC Representation

#### Sample Representation

<table>
<thead>
<tr>
<th>University of Illinois (Chicago, IL)</th>
<th>Case Western Reserve University (Cleveland, OH)</th>
<th>New Mexico State University (Albuquerque, NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xavier University (Cincinnati, OH)</td>
<td>Lincoln Land Community College (Springfield, IL)</td>
<td>University of Detroit–Mercy (Detroit, MI)</td>
</tr>
<tr>
<td>Old Dominion University (Norfolk, VA)</td>
<td>University of North Carolina (Chapel Hill, NC)</td>
<td>University of San Diego (San Diego, CA)</td>
</tr>
<tr>
<td>Northwestern University (Chicago, IL)</td>
<td>Ferris State University (Big Rapids, MI)</td>
<td>Wingate University (Wingate, NC)</td>
</tr>
<tr>
<td>University of Wisconsin (La Crosse, WI)</td>
<td>Bemidji State University, (Bemidji, MN)</td>
<td>Seminole State College (Sanford, FL)</td>
</tr>
<tr>
<td>New Mexico State University (Albuquerque, NM)</td>
<td>Randolph College (Lynchburg, VA)</td>
<td>Murray State University (Murray, KY)</td>
</tr>
</tbody>
</table>
Quality Control

- DTS quality control procedures:
  - Multiple quality control procedures during test development and publishing.
  - Score audits.
  - Review post test surveys.
  - Major infrastructure improvements:
    - Application and score reporting system (Aptify).
    - Item banking software (Zoomorphix).
Reliability and Validity

Reliability

• Precision or consistency of test scores.

• Permits meaningful descriptions of the abilities measured.

• DAT reliability coefficients within acceptable range and typical of standardized tests and the DAT program since the 1970s.

Validity

• Degree to which the test measures what it claims to measure.

• Evidence supports the use of scores for making a critical decision (e.g. admission to dental school).

• Includes content validity, external correlational, and reliability evidence.
  o Content validity: how well test items cover areas in undergraduate curriculum.
  o External correlational: extent to which future level is predicted from prior test performance (DAT scores and 1st/2nd year dental school grades).
  o Reliability evidence: the precision/consistency of scores.
Test Administration and Fees

- Electronic application process; 6 month eligibility period. Monitor DAT website for upcoming enhancements to website and application process.

- Delivery nationwide at Prometric Test Centers, any business day. Approximately 282 professional level testing centers in North America with 5,029 available seats.

- Secure test environment/process. Biometric check-in.

- Prometric Website:
  - Computer-based DAT Practice Test
  - Test Drive
  - Test Center Regulations

<table>
<thead>
<tr>
<th>2014 Fees</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAT</td>
</tr>
<tr>
<td>(Includes unofficial personal report, official reporting to schools selected at time of application, and pre-health advisor report if selected)</td>
<td>$395</td>
</tr>
<tr>
<td>Additional score report (per entity)</td>
<td>$33</td>
</tr>
<tr>
<td>Audit Request</td>
<td>$65</td>
</tr>
</tbody>
</table>

- Partial fee waivers available in cases of severe financial hardship (see DAT guide). Fee waiver program has been expanded beginning in 2014.
Eligibility Email and Checklist

This checklist is a summary of the most frequent issues that create complications for examinees on the day of testing. Please read the entire DAT Guide and call 800.232.1694 with any questions.

1. I will bring two original, current (not expired) forms of identification (ID) to the testing center:
   - One government issued ID, with photograph and signature (e.g. driver license or passport)
   - One ID with signature (e.g. social security card, credit card, debit card, library card

2. The name on my application matches my IDs exactly. Examples:
   - Matching: Joseph Anthony Smith and Joseph A. Smith
   - Non-matching: Joseph Anthony Smith and Joseph Anthony Smith-Johnson

3. I will follow the instructions of the test administrator and the testing center rules.

4. I left all non-essential items at home.

5. I will store any personal items in the testing center locker. I cannot access these items during testing or an unscheduled break.

6. I will check my pockets to ensure they are empty before I begin testing.

7. If I experience a problem with testing conditions, I will notify the test administrator immediately. Concerns not resolved must be submitted in writing within 5 business days of my testing appointment.

8. I made arrangements for my ride after I complete my test. I will not use my cell phone during my testing session.
### DAT Examinee Satisfaction Survey Results: Prometric

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointment date</td>
<td>12,745</td>
<td>44.3</td>
<td>50.9</td>
<td>4.8</td>
</tr>
<tr>
<td>Promptness in seating them</td>
<td>12,660</td>
<td>67.1</td>
<td>30.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Helpfulness of test center staff</td>
<td>12,601</td>
<td>68.4</td>
<td>29.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Performance of testing system</td>
<td>12,556</td>
<td>36.7</td>
<td>51.1</td>
<td>12.3</td>
</tr>
<tr>
<td>Test center total testing environment</td>
<td>12,520</td>
<td>50.5</td>
<td>45.4</td>
<td>4.0</td>
</tr>
<tr>
<td>Total experience of taking DAT</td>
<td>12,477</td>
<td>42.6</td>
<td>53.3</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Definition of Irregularity: there is a question about the validity of test results accurately reflecting the ability/skills of an examinee.

Reasons for withholding scores include, but are not limited to:

- Unusual answer patterns.
- Atypical score increases from one testing attempt to another.
- Inconsistent performance on different parts of test.
- Improper access to secure test content.
- Test administration irregularity.
- Discrepancy/falsification of personal identification.
- Engaged in misconduct or violation of rules/regulations.
- Falsification of application information/supporting documents.
- Falsification of score report.
- Information indicating the results may not be valid.

Irregularities detection and investigation:
- Testing vendor Irregularity reports.
- Information sources (e.g., anonymous tips, routine audit procedures)
- Conduct investigation
- Take action to applicable regulations/rules; withhold score and wait to retest

Notification/Appeal Process
- Examinee notification; 30 days to submit appeal.
- Appeal received; forwarded to Chair for screening (60 day deadline to respond to examinee with final decision).
- Chair grants/denies/or forwards appeal to DAT Committee for ballot.
- Examinee notified of decision.
Score Reports/Scoring

- Unofficial score report upon completion of test at test center.

- Administrations are monitored for irregularities. Penalties implemented for misconduct and cheating.

- Audit procedures conducted and official scores reported (electronically) 3 to 4 weeks after testing appointment.

- Based on the number of correct answers provided by the examinee.

- Number correct scores (raw scores) converted to scale scores.

- Equating process adjusts for differences in difficulty among test forms and permits comparison of scores over time.

- DAT Committee reviews examinee performance to understand trends and potential changes.

- Score analysis provided in DAT User’s Manual.
Frequency Table/Demographic Listing

Frequency Table Schedule:
• Sent to deans
  July – June data, sent 3rd quarter (e.g., September)
  January – December data, sent 1st quarter (e.g., March)

Demographic Listing Schedule:
• Sent to deans
  January – December data, sent in January/February.

Contact Dr. Chien-Lin Yang (yangc@ada.org) for additional questions.
Retesting

• 90-day wait required between retests.

• Three or more testing attempts = apply for permission to retest and provide evidence of intent to apply to dental school.

  • Acceptable evidence:
    • ADEA AADSAS application or
    • Rejection letter from a dental school or
    • Letter from dental school admission officer/pre-health advisor
DAT Monthly Volume

DAT Monthly Volumes ('08-'12)

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

- 2008
- 2009
- 2010
- 2011
- 2012

ADA American Dental Association®
Testing Accommodation Volume

![Testing Accommodation Volume Chart]

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

- 2009
- 2010
- 2011
- 2012
Reschedule – No Show Volume (2012)
Reschedule Policy

- To improve rescheduling process and permit last minute rescheduling, a new reschedule process commenced January 2013.

- Contact Prometric and pay fee directly to Prometric. Contractual agreements requires DTS payment for no-show appointments.

- Fee Schedule
  - $100  day before to 5 business days prior to the testing appointment
  - $ 60  6 to 30 business days prior to the testing appointment
  - $ 25  31+ business days prior to the testing appointment
  
  (Saturday and Sunday are NOT business days)
Web-based Practice Test

DAT Practice Monthly Volumes

January  February  March  April  May  June  July  August  September  October  November  December

2011  2012
Website

http://www.ada.org/dat.aspx

Step 1: Read the DAT Guide
Step 2: Obtain a DENTPIN® and Apply to take the Test
Step 3: Schedule a Time to Take the Test
Step 4: Take the Test at a Prometric Test Center
Step 5: Score Reports
http://www.ada.org/sections/educationAndCareers/pdfs/dat_examinee_guide.pdf
http://www.ada.org/108.aspx
DAT Resources

http://www.ada.org/3746.aspx

- Newsletters
- Meeting Presentations
- Validity Study
- User’s Manual
- Examinee Information
- Reference Texts
Contact Information

Dental Admission Testing Program
211 E. Chicago Avenue, Suite 600
Chicago, Illinois 60611
800-232-1694
datexam@ada.org

Kathleen J. Hinshaw, L.D.H., Ed.D.
Senior Manager, Test Administration
hinshawk@ada.org

Ellen J. Ryske, MBA, PMP
Manager, Client Services/Special Projects
ryskee@ada.org

Chien-Lin Yang, Ph.D.
Manager, Research and Development/Psychometrics
yangc@ada.org

Open
Manager, Test Development

David M. Waldschmidt, Ph.D.
Director, Department of Testing Services
waldschmidtd@ada.org