Current Ability Assessment Issues

- Restriction of Range
  - Tests
  - Grade Inflation
- Courses
- Diversity
- Three Musketeers Problem
  - Multiverse v. Universe
  - Range of Abilities
Componential
Ability to interpret information hierarchically in a well defined and unchanging context. Standardized tests.

Experiential
Ability to interpret information in changing contexts, be creative. Standardized tests DO NOT measure.

Contextual
Ability to adapt to a changing environment, ability to handle & negotiate the system. Standardized tests DO NOT measure.
"Holistic" can be defined as an emphasis on the whole person, not just select pieces that make up the whole person."

- “If a college has holistic admissions, the school's admissions officers consider the whole applicant, not just empirical data like a GPA or SAT scores. Colleges with holistic admissions are not simply looking for students with good grades. They want to admit interesting students who will contribute to the campus community in meaningful ways.”

Noncognitive Variables

- **Self-Concept**
  - Demonstrates confidence, strength of character, determination, and independence.

- **Realistic Self-Appraisal**
  - Recognizes and accepts any strengths and deficiencies, especially academic, and works hard at self-development.
  - Recognizes need to broaden his/her individuality.

- **Handling System/Racism**
  - Exhibits a realistic view of the system based upon personal experience of racism. Committed to improving the existing system. Takes an assertive approach to dealing with existing wrongs, but is not hostile to society, nor is a "cop-out." Able to handle racist system.
Noncognitive Variables (Contd)

- **Leadership**
  - Demonstrates strong leadership in any area of his/her background (e.g. church, sports, non-educational groups, gang leader, etc.).

- **Long-Range Goals**
  - Able to respond to deferred gratification, plans ahead and sets goals.

- **Strong Support Person**
  - Seeks and takes advantage of a strong support network or has someone to turn to in a crisis or for encouragement.

- **Community**
  - Participates and is involved in his/her community.

- **Nontraditional Learning**
  - Acquires knowledge in sustained and/or culturally related ways in any field outside school.
Advantages of Noncognitive Variable System

- Research based
- Multiple ways to assess
  - Questionnaire (structured-short answer), interview, essay, portfolio
- Retention related
- Considers diversity, US or international
- Tested legally
- Revise to fit situation-flexible
- No cost
- Student development
- Admissions, financial aid, student services, teaching, advising
Why No Cost?

- Tesla Motors
- “Yesterday, there was a wall of Tesla patents in the lobby of our Palo Alto headquarters. That is no longer the case. They have been removed, in the spirit of the open source movement, for the advancement of electric vehicle technology.
- We believe that Tesla, other companies making electric cars, and the world would all benefit from a common, rapidly-evolving technology platform.
- **Tesla Motors was created to accelerate the advent of sustainable transport. If we clear a path to the creation of compelling electric vehicles, but then lay intellectual property landmines behind us to inhibit others, we are acting in a manner contrary to that goal.** Tesla will not initiate patent lawsuits against anyone who, in good faith, wants to use our technology.”
- Elon Musk June 12, 2014
Criticisms of Noncognitive Variable System

- “To avoid criticism, do nothing, say nothing, be nothing.” Elbert Hubbard
- Not a single “test”- many formats
  - College Board says invalid
- Scoring not same for all
  - Three Musketeers
- May require some scoring time
- Easier to get grades & test scores
- Need to explain to some audiences
  - Parents, staff, faculty, alumni
Farmer v. Ramsey et al.- 1998
Castañeda et al. v. U Cal Regents- 1999
Fisher & Multer Michalewicz v. U of Texas- 2009
Fisher v. University of Texas- 2013
Schuette v. Coalition to Defend Affirmative Action- 2014
Oregon State program cited as “best practice” by the US Office of Civil Rights
Key Legal Cases

  - U MD medical school
  - Some accepted with lower MCATs
  - Interviews for noncognitive variables
  - Directed verdict- can use noncognitives
"A university must make a showing that its plan is narrowly tailored to achieve the only interest that this Court has approved in this context: the benefits of a student body diversity that ‘encompasses a broad array of qualifications and characteristics of which racial or ethnic origin is but a single though important element,’ ” wrote Justice Anthony M. Kennedy in support of a 7-1 decision that was sent down to a lower court for further review.
• University of Michigan ban on affirmative action.
• Universities & colleges may still employ the limited consideration of race authorized in previous Supreme Court rulings.
• Voters and legislators also have the right to curtail such plans in public universities and colleges.
• Majority ruled state voters have rights, no one class should be protected, and rights could spread to public schools, highways etc.
• Dissent (Sotomayor) said Blacks can’t lobby, Whites can; “decision can hardly bolster hope for a vision of democracy that preserves for all the right to participate meaningfully and equally in self-government.”
Gates Millennium Scholars - GMS

- African American, American Indian/Alaska Native, Asian Pacific Islander American, or Hispanic American
- Federal Pell Grant eligible
- Citizen/legal permanent resident or national of U.S.
- 3.3 High School GPA
- Curriculum Rigor
- Noncognitive Variables
A GMS award provides:

- Support by covering needs unmet by other financial options
- Renewable awards for satisfactory progress
- Option to transfer
- Graduate school in math, science, engineering, library science, education, and public health
- Leadership development program
- 1.75 billion dollar program
GMS Outcomes

• Over 15,000 Scholars funded
• Freshman retention 97%; sophomore 95%
• 5 year program retention rate 92%
• 5 year graduation rate 79% (53% all 4yr schools)
• 6 year graduation rate 90% (57% all 4yr schools)
• Scholar higher education GPA mean = 3.25
• Raters within each racial group trained to evaluate noncognitive variables - Alpha reliability = .92
• Scholars from 50 states & American Samoa, Guam, Federated States of Micronesia, Puerto Rico, Virgin Islands
• Scholars in over 1500 colleges and universities
• Scholars more likely to attend: selective, private, residential schools
# Top 10 Undergraduate Institutions

**GMS 2012-13**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Institution</th>
<th>Total</th>
<th>%AA</th>
<th>%AI</th>
<th>%AP</th>
<th>%HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University of California-Berkeley</td>
<td>155</td>
<td>9.7%</td>
<td>3.2%</td>
<td>38.1%</td>
<td>49.0%</td>
</tr>
<tr>
<td>2</td>
<td>University of California-Los Angeles</td>
<td>142</td>
<td>10.6%</td>
<td>--</td>
<td>25.4%</td>
<td>64.1%</td>
</tr>
<tr>
<td>3</td>
<td>University of Texas at Austin</td>
<td>119</td>
<td>13.5%</td>
<td>0.8%</td>
<td>8.4%</td>
<td>77.3%</td>
</tr>
<tr>
<td>4</td>
<td>Stanford University</td>
<td>109</td>
<td>19.3%</td>
<td>14.7%</td>
<td>22.0%</td>
<td>44.0%</td>
</tr>
<tr>
<td>5</td>
<td>Harvard University</td>
<td>78</td>
<td>26.9%</td>
<td>2.6%</td>
<td>29.5%</td>
<td>41.0%</td>
</tr>
<tr>
<td>6</td>
<td>Emory University</td>
<td>60</td>
<td>63.3%</td>
<td>--</td>
<td>26.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>6</td>
<td>University of California-San Diego</td>
<td>60</td>
<td>16.7%</td>
<td>--</td>
<td>21.7%</td>
<td>61.7%</td>
</tr>
<tr>
<td>8</td>
<td>Brown University</td>
<td>59</td>
<td>18.6%</td>
<td>6.8%</td>
<td>10.2%</td>
<td>64.4%</td>
</tr>
<tr>
<td>8</td>
<td>Howard University</td>
<td>59</td>
<td>100%</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>8</td>
<td>University of Washington</td>
<td>59</td>
<td>10.2%</td>
<td>11.9%</td>
<td>33.9%</td>
<td>44.1%</td>
</tr>
</tbody>
</table>

*Legend, AA = African American, AI = American Indian, AP = Asian Pacific Islander, HA = Hispanic American*
Educate rural practitioners
Select on noncognitive variables
Self concept, Negotiating the system, Support person correlate highest with actual selection
Faulty and staff stress how to work rural dental practice system- e system after graduation
Funding from State based on working rural health system
Four essay questions (average 100 words) to measure eight dimensions of Sedlacek’s model. (Replaced two existing short essays in the current application.)

Reader gives one score for each of the eight non-cognitive dimensions; sums to one overall score.

Each set of essays read by two readers; where the difference of the scores is greater than 4, essays are read a third time.
De Paul Findings

- DIAMOND scores appear to help to provide a useful, more holistic assessment of the likelihood of student success, especially for:
  - Students with low HSGPA
  - Minorities with low HSGPA
  - Students with low standardized test scores
  - Chicago Public School students
  - Students with low HSQ Index
  - Federal Pell Grant eligible male students
### Some Schools & Programs That Have Used Noncognitive Variables

<table>
<thead>
<tr>
<th>Washington State Achievers</th>
<th>University of Northern Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington DC Achievers</td>
<td>Texas A &amp; M University</td>
</tr>
<tr>
<td>Capital Partners for Education</td>
<td>Louisiana State University</td>
</tr>
<tr>
<td>Washington State University Pullman</td>
<td>Boston College</td>
</tr>
<tr>
<td>Washington State University Vancouver</td>
<td>Lehigh University</td>
</tr>
<tr>
<td>Univ. British Columbia Business School</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Bowling Green State University</td>
<td>Prairie View A &amp; M University</td>
</tr>
<tr>
<td>Montgomery College</td>
<td>University of Arizona</td>
</tr>
<tr>
<td>Engineering Vanguard Program (NACME)</td>
<td>US Coast Guard Academy</td>
</tr>
<tr>
<td>University of Central Missouri</td>
<td>Nagoya University</td>
</tr>
<tr>
<td>DePaul University</td>
<td>Samuel Merritt University</td>
</tr>
<tr>
<td>Eastern Washington University</td>
<td>Douglas Cty Performance Lrng Ctr (GA)</td>
</tr>
<tr>
<td>Colorado State University-pending</td>
<td>Indiana State University</td>
</tr>
<tr>
<td>Linn-Benton Community College, Oregon</td>
<td>University of Washington Tacoma</td>
</tr>
<tr>
<td>Central Oregon Community College</td>
<td>University British Columbia Vancouver</td>
</tr>
<tr>
<td>Linfield College, Oregon</td>
<td>University British Columbia Okanagan</td>
</tr>
<tr>
<td>Manchester College, Indiana</td>
<td>Oregon Coast Community College</td>
</tr>
<tr>
<td>University of Nevada Las Vegas</td>
<td>Northwestern College, Iowa</td>
</tr>
<tr>
<td>George Fox University, Oregon</td>
<td>East Carolina University</td>
</tr>
<tr>
<td>Goshen College</td>
<td>Foundation for Educational Success</td>
</tr>
<tr>
<td>Big Picture Schools</td>
<td>Jack Kent Cooke Foundation</td>
</tr>
<tr>
<td>University of Sydney</td>
<td>Virginia Commonwealth University</td>
</tr>
<tr>
<td>Assn of Coll Registrars &amp; Admiss Officers</td>
<td>Ten2One Leadership</td>
</tr>
<tr>
<td>University of California-Davis</td>
<td>Secondary School Admiss Test Board</td>
</tr>
<tr>
<td>Paine College</td>
<td>University of Texas- Rio Grande</td>
</tr>
<tr>
<td>Thomas Jefferson High School for Science and Technology</td>
<td>Oregon State University</td>
</tr>
</tbody>
</table>


