PacAIR Tenth Annual Conference

Pathways to the Future
In Recognition of Dr. Clifford Adelman’s Contribution to IR

NOVEMBER 3RD, 2017
EAST WEST CENTER
HONOLULU, HI
10 years strong

- 75+ members, 200+ friends
- Professional development conveniently held in the Pacific.
- Valuable and quality learning experiences
- Workshops
- Networking
- Welcoming venue for first-time presenters
Mahalo to Information Builders for sponsoring this year’s conference
Panel Discussion

Topic: Academic Momentum

Panelists: Dr. Serge Herzog, Dr. Jon Norman, Stephen Schatz

Moderated by John Stanley and Leighton Vila

PACAIR CONFERENCE

NOVEMBER 3, 2017
Revisiting Cliff Adelman’s Work

“Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor’s Degree Attainment” (1999)

- Forty three percent of variance in degree attainment explained by 11 variables.
- Only two key variables: “Academic Resources” (quintiles), Continuous College Enrollment (CCE).
- “Academic Resources” (AR) = H.S. Curriculum (41%), Test Score (30%), Class Rank/GPA (29%).
- H.S. Curriculum = Highest Level of Math (“students who stop their study of math after completing geometry are not very likely to finish college”, p. 18).
- Top quintile AR students: 72.5% graduation rate, 17 percentage points higher than top quintile SES students (AR – SES Pearson’s r = .36).
- CCE: credit accumulation is key to persistence analysis.
### Adelman’s “Math Ladder”

<table>
<thead>
<tr>
<th>Highest Math Studied in H.S.</th>
<th>Odds versus those below the referent rung</th>
<th>Odds ratio versus everybody</th>
<th>Beta</th>
<th>Percent of H.S. Grads Earning BA</th>
<th>Percent of College Students Earning BA</th>
<th>Percent of All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus</td>
<td>9.52</td>
<td>9.52</td>
<td>2.25</td>
<td>79.8</td>
<td>81.6</td>
<td>6.4</td>
</tr>
<tr>
<td>Pre-Calc</td>
<td>7.2</td>
<td>6.15</td>
<td>1.82</td>
<td>74.3</td>
<td>75.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Trig</td>
<td>5.42</td>
<td>3.83</td>
<td>1.34</td>
<td>62.2</td>
<td>65.1</td>
<td>11.3</td>
</tr>
<tr>
<td>Algebra 2</td>
<td>4.15</td>
<td>1.54</td>
<td>0.43</td>
<td>39.5</td>
<td>44.4</td>
<td>28.3</td>
</tr>
<tr>
<td>Geometry</td>
<td>4.27</td>
<td>0.69</td>
<td>-0.38</td>
<td>23.1</td>
<td>28.5</td>
<td>17</td>
</tr>
<tr>
<td>Algebra 1</td>
<td>2.52</td>
<td>0.17</td>
<td>-1.77</td>
<td>7.8</td>
<td>11.9</td>
<td>20</td>
</tr>
<tr>
<td>Pre-Algebra</td>
<td>N.A.</td>
<td>0.07</td>
<td>-2.61</td>
<td>2.3</td>
<td>5.1</td>
<td>11.1</td>
</tr>
</tbody>
</table>

https://www2.ed.gov/pubs/Toolbox/Part1.html
Revisiting Cliff Adelman’s Work

Answers in the Tool Box Part II: ”The Toolbox Revisited” (2006)

- HS math level still ‘key marker’ for college completion (i.e. >Algebra 2/4)
- College grads vs non-grads: 71% vs 38% college-level math completed, resp.
- Key degree completion factors:
  - WRPT ratio (-49%), continuous enrollment (43%), part-time (-25%), first-year GPA (23%), multiple schools (-15%), GPA trend (12%), summer credits (12%)
- Non-significant factors:
  - Self-reported education goal, gender, race/ethnicity, remediation, change of major
- Taking ‘rigorous’ HS curriculum (top 40% intensity) is key to closing gap in college completion across SES and race/ethnicity groups.
Join the PacAIR Board

This is an open call for your participation on the PacAIR Board

How can you join the PacAIR Board?

• Send an email expressing your interest in volunteering on the PacAIR Board to pacairweb@gmail.com

• In addition, nominations are welcome. Individuals are encouraged to nominate colleagues whom they feel will be a good fit to the PacAIR Board.