Re-Thinking Program Innovation
Lessons from Neglected Trend Data

Richard Garrett
Eduventures Chief Research Officer at ACT | NRCCUA
To-Do List for Academic Leaders

- Don’t get caught out by today’s challenging enrollment environment
- Launch some “hot” new programs to enroll more students and grow incremental revenue
- Make sure they are the right programs — relevant, in-demand, flexible, compelling, aligned, innovative etc etc.

…but is this approach working?
What’s the Problem?

Bachelor's Degrees

- 2010: 1,650,000
- 2018: 1,990,000
- Up 21%

Master's Degrees

- 2010: 695,000
- 2018: 827,000
- Up 19%

Source: Eduventures analysis of NCES data.
**Problem:** Traditional Age Undergrad Flat for a Decade; Same for Grad. Adult Undergrad Down Sharply.

Source: Eduventures analysis of IPEDS and National Student Clearinghouse data. Degree-granting, Title IV eligible schools only. Fall, for-credit students only. The 2018 and 2019 figures are Eduventures estimates.
Learn from Data: Available Data Far from Perfect but Rarely Analyzed Systematically

Useful but…
Rich, longitudinal program completion data (7+ credentials, 1,000+ CIP codes, thousands of schools) speaks to enrollment in the past.

Latest federal program completion data is for 2018
Agenda

1) **Selected Program Trends**: drawing the right lessons
   a. **Master’s**
   b. Bachelor’s (plus a look at top-performing sub-fields)

2) **The Enrollment vs. Program Growth Dynamic**: are new programs a good move?
   a. Bachelor’s Trends at M1 and M2 schools
Master’s Completions 2010-18: STEM and (Some) Professions Thriving. Few Cases of Steep Decline.

**Business** - 193,000, 9% growth, 23% share

**CIT** - 47,000, 159% growth, 6% share

**Education**
- Liberal Arts - 2,500, 35% decline, 0.3% share
- Social Sciences, Theology, V&P Arts, Psych.
- Public Admin.
- Engineering
- Criminal Justice
- Healthcare
- Engineering
- Math
- Multi
- Recreation
- Consumer, Agriculture, Comm. & N. Resources
- Recreational

**Library Science**
- Eng. Tech, English History, Philosophy, Foreign Languages
- Completion Growth
- Completion Growth

**Source:** Eduventures analysis of NCES data.
Master’s Year-by-Year: Healthier Recent Growth, Slowing in Face of Sustained Economic Expansion and (?) Alternatives

Completion Growth


Major Fields of Study (2-digit CIP)

CIT

Engineering

Math

Multi
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Bachelor’s Completions 2010-18: STEM and (Most) Professions Thriving; Rest Flat or Down

Bachelor’s Completions (2010 vs. 2018)
Size, Growth and Share

### Market Share

- **Social Sciences, V&P Arts, Liberal Arts**
- **Business**: 389,000, 9% growth, 20% share
- **History**: 23,000, 34% decline, 1.2% share
- **Psych. & Comm.**
- **Engineering**
- **Math**
- **Healthcare**
- **CIT**: 80,000, 102% growth, 4% share
- **Natural Resources**
- **Physical Sciences**
- **Agriculture**
- **Public Admin.**
- **Biosciences**
- **Multi**
- **Recreation**
- **Natural Resources**
- **Education**
- **English Philosophy Foreign Languages**

Completion Growth

Source: Eduventures analysis of NCES data.
Bachelor’s Year-by-Year: More Stable than Master’s. Slowing Growth but Recent Uptick; Demographic, High School, College Completion Tailwinds

Source: Eduventures analysis of NCES data.
Top 20 Performing Bachelor’s Programs: Nice Range but How to Judge a Good Opportunity today?

<table>
<thead>
<tr>
<th>Top Performing Sub-Fields</th>
<th>2018</th>
<th>Growth 10-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Public Health- General</td>
<td>6,678</td>
<td>1040%</td>
</tr>
<tr>
<td>2. Informatics</td>
<td>1,268</td>
<td>1014%</td>
</tr>
<tr>
<td>3. Digital Arts</td>
<td>1,458</td>
<td>801%</td>
</tr>
<tr>
<td>4. Experimental Psychology</td>
<td>1,920</td>
<td>674%</td>
</tr>
<tr>
<td>5. Emergency Mgmt</td>
<td>956</td>
<td>637%</td>
</tr>
<tr>
<td>6. Mathematics &amp; Computer Science</td>
<td>663</td>
<td>510%</td>
</tr>
<tr>
<td>7. IT Project Mgmt</td>
<td>555</td>
<td>463%</td>
</tr>
<tr>
<td>8. Homeland Security</td>
<td>972</td>
<td>448%</td>
</tr>
<tr>
<td>9. Statistics- General</td>
<td>2,560</td>
<td>432%</td>
</tr>
<tr>
<td>10. Cartography</td>
<td>572</td>
<td>421%</td>
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</tbody>
</table>

Program Criteria
- At least 500 completions in 2018 (median= 174)
- At least triple completion growth from 2012 (vs. 21%)
- Strong growth in 2018 (average 15% vs. 1%)

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<th>Top Performing Sub-Fields</th>
<th>2018</th>
<th>Growth 10-18</th>
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<tbody>
<tr>
<td>11. Multi-Disciplinary- General</td>
<td>5,176</td>
<td>417%</td>
</tr>
<tr>
<td>12. PR &amp; Advertising</td>
<td>2,418</td>
<td>382%</td>
</tr>
<tr>
<td>13. Logistics &amp; Materials Mgmt</td>
<td>5,508</td>
<td>362%</td>
</tr>
<tr>
<td>14. Computer Science</td>
<td>26,441</td>
<td>335%</td>
</tr>
<tr>
<td>15. Digital Communications</td>
<td>4,237</td>
<td>302%</td>
</tr>
<tr>
<td>16. Health &amp; Wellness- General</td>
<td>15,586</td>
<td>299%</td>
</tr>
<tr>
<td>17. Exercise Physiology</td>
<td>3,879</td>
<td>289%</td>
</tr>
<tr>
<td>18. Neuroscience</td>
<td>6,191</td>
<td>258%</td>
</tr>
<tr>
<td>19. Healthcare Admin/Mgmt</td>
<td>12,003</td>
<td>256%</td>
</tr>
<tr>
<td>20. Information Technology</td>
<td>10,074</td>
<td>238%</td>
</tr>
</tbody>
</table>

Source: Eduventures analysis of NCES data.
Top 20 Performing Bachelor’s Programs: Unique Stories, Reversion to Mean, but Still Plenty of Opportunities

Source: Eduventures analysis of NCES data.
Agenda

1) **Selected Program Trends**: drawing the right lessons
   a. Master’s
   b. Bachelor’s (plus a look at top performing sub-fields)

2) **The Enrollment vs. Program Growth Dynamic**: are new programs a good move?
   a. Bachelor’s Trends at M1 and M2 schools
Enrollment vs. Program Growth: Bachelor’s Trends at M1&2 Schools as a Case Study

**Introduction.** This section of the webinar considers the relationship between undergraduate enrollment and bachelor’s program growth. To what extent are the two aligned? When is a new program the right move?

**Case Study:** The analysis focused on an institutional sub-set- to limit the variables at play and improve like-with-like comparison. The institutional sub-set selected is: Master’s 1 and Master’s 2.

Other points to note:

- The M1&2 group is itself quite diverse, spanning institutions of all sizes, different disciplinary mixes, delivery modes and locations. This makes it a decent proxy for all schools.
- Bachelor’s enrollment specifically is not tracked at federal level. At almost all M1&2 schools, the bachelor’s degree is the dominant undergraduate credential.
- Few M1&2 schools are highly selective, and most are either growth-oriented or are under pressure to growth in the face of enrollment shortfalls- hence lots of interest in new programs.
- There were 500 schools with complete data on undergraduate enrollment and bachelor’s programs between 2012 and 2018 (the first and most recent years both datasets are available).
Enrollment vs. Program Growth: New Programs are Widespread; Commensurate Enrollment Growth is Not

74% 31%
31%

Master’s Institutions (M1&2) Undergraduate Fall Enrollment (Degree/Certificate-Seeking) vs. Bachelor’s Programs (Growth 2012-18)

- Median Enrollment Growth
- Median Program Growth

<table>
<thead>
<tr>
<th>Undergraduate Fall Enrollment Growth Category - Fall 2012-18</th>
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<tbody>
<tr>
<td>Up 50%+ (24 schools)</td>
</tr>
<tr>
<td>15% 15%</td>
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</tbody>
</table>

Comparable Starting Points.
Across all growth categories, average undergraduate enrollment in fall 2012 was 5,000-7,000 students.

Source: Eduventures analysis of IPEDS data - 500 schools with complete reporting. Excludes schools with fewer than 700 degree/certificate-seeking undergraduates in Fall 2018.
Enrollment vs. Program Growth: Poor ROI from New Programs is Commonplace

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<tr>
<th>Enrollment Growth</th>
<th>Program Growth</th>
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<tbody>
<tr>
<td>Up 50%+ (24 schools)</td>
<td>Program Growth 10%+ Faster than Enrollment Growth</td>
</tr>
<tr>
<td>Up 25-49% (26)</td>
<td>About the Same</td>
</tr>
<tr>
<td>Up 10-24% (48)</td>
<td>Enrollment Growth 10%+ Faster than Program Growth</td>
</tr>
<tr>
<td>Up 5-9% (36)</td>
<td></td>
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<tr>
<td>Up 0-4.9% (50)</td>
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<tr>
<td>Down 5% (50)</td>
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<tr>
<td>Down -5% (50)</td>
<td></td>
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<tr>
<td>Down &gt;-10% (209)</td>
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Master’s Institutions (M1&2)
Undergraduate Fall Enrollment (Degree/Certificate-Seeking) vs. Bachelor’s Programs (Growth 2012-18)

Source: Eduventures analysis of IPEDS data-500 schools with complete reporting. Excludes schools with fewer than 700 degree/certificate-seeking undergraduates in Fall 2018.
# Enrollment vs. Program Growth: Program Focus as Important as Number. Online Helps but Not Essential.

**Master’s Institutions (M1&2) Undergraduate Fall Enrollment** (Degree/Certificate-Seeking) vs. **Bachelor’s Programs** (Growth 2012-18)

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<tbody>
<tr>
<td><strong>Up 50%+ (24 schools)</strong></td>
<td>1 (4%)</td>
<td>33</td>
<td>162</td>
<td>12</td>
</tr>
<tr>
<td><strong>Up 25-49% (26)</strong></td>
<td>7 (27%)</td>
<td>39</td>
<td>124</td>
<td>1.5</td>
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<tr>
<td><strong>Up 10-24% (48)</strong></td>
<td>7 (15%)</td>
<td>47</td>
<td>92</td>
<td>1</td>
</tr>
<tr>
<td><strong>Up 5-9% (36)</strong></td>
<td>5 (14%)</td>
<td>46</td>
<td>118</td>
<td>1</td>
</tr>
<tr>
<td><strong>Up 0-4.9% (50)</strong></td>
<td>6 (12%)</td>
<td>49</td>
<td>76</td>
<td>0.5</td>
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<tr>
<td><strong>Down 5% (50)</strong></td>
<td>7 (14%)</td>
<td>43</td>
<td>80</td>
<td>0</td>
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<tr>
<td><strong>Down -10% (57)</strong></td>
<td>12 (21%)</td>
<td>50</td>
<td>62</td>
<td>2</td>
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<tr>
<td><strong>Down &gt;-10% (209)</strong></td>
<td>27 (13%)</td>
<td>41</td>
<td>69</td>
<td>2</td>
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Source: Eduventures analysis of IPEDS data- 500 schools with complete reporting. Excludes schools with fewer than 700 degree/certificate-seeking undergraduates in Fall 2018.
Bachelor’s Program Mix: High-growth Schools have Invested More Concertedly and Selectively

### Bachelor’s Program Investment (Selected Areas)

M1&2 Schools (G) that Grew Undergraduate Enrollment by 50%+ between 2012 and 2018

<table>
<thead>
<tr>
<th>Program Concentration in Business, CIT and Healthcare (2018)</th>
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<tr>
<td>G: 30%</td>
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<td>D: 24%</td>
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**Average Program Growth by 2018**

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<tr>
<td>0.93</td>
<td>4.3</td>
<td>0.34</td>
<td>5.6</td>
<td>0.75</td>
<td>0.29</td>
<td>4.2</td>
<td>6.6</td>
<td>0.64</td>
<td>0.68</td>
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**Change by 2018**

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<tbody>
<tr>
<td>0.19</td>
<td>1.14</td>
<td>0.64</td>
<td>3.1</td>
<td>1.7</td>
<td>1.7</td>
<td>1.14</td>
<td>3.1</td>
<td>1.6</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Some Key Takeaways: The Reality of New Programs

- **Trend Data Not Perfect But Let’s Make Better Use of it.** Too many schools and leaders make program decisions without learning the lessons from this data. Of course, available data determines what is tracked and analyzed—e.g., degrees not alternatives. We can’t see—at scale—which degrees have novel components such as stackable certificates but can be factored in for school-specific studies.

- **New Programs Can Be A Great Idea**—healthy departmental and institutional renewal, keeping up with wider developments, broadening appeal.

- **But Too Often New Programs Do Not Have a Big Impact.** Poor program choices, bad timing, execution issues and wider challenges get in the way. Program opportunities needs to be considered from multiple angles to be properly assessed.

- **Neglect of Strategy and Existing Programs.** Too many new programs emerge as short-term fixes or pet projects. Program portfolios can become bloated, and enrollment growth overly dependent on novel offerings. It is notable that, on average, the fastest growing schools have the fewest programs. The key to long-term institutional success is a clear-eyed look at mission, brand and niche—without that, new programs will often flounder.

- **Eduventures Can Help**—with more experience in program evaluation than anyone, our data, research and advice can help institutions of all types wrestle with program questions and underlying strategic issues. Each program-institution combination has its own story to tell…
Thank you.

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Questions?