Sifting through the maze of new "Big Data" Benchmarks to get to those that matter to you

Presented by:

Rick Torres

CEO National Student Clearinghouse

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Major Themes

• The current state and federal measurement indicators provide at best an inconsistent views of what it means to have a successful outcome in higher education and at worst, presents a distorted view of the same.

• There is progress being made to improve the data and measurement eco-system and a line of sight to an improved, more representative benchmarks and measurements.

• Challenge will always be on ensuring transparency and clarity on data and cohort definitions and replicability of outcome measures and telling your story.
Quick Facts:
- 1993 Year 501c6 Non-profit established
- 97% Post Secondary Enrollment Coverage (99% Publics, 96% Private NP)
- 60% High School Diplomas issued annually stored; 10K HS, 40+ states
- 1.5bln Transactions Annually on behalf of education
- 220 Employees
- +150mln Individual records
- NO COST TO HIGHER EDUCATION
## US Higher Education Enrollment Coverage (3,678 schools)

<table>
<thead>
<tr>
<th>Enrollment Type</th>
<th>Enrolled students (MM)</th>
<th>% Active</th>
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</thead>
<tbody>
<tr>
<td>Public Inst (2 yr)</td>
<td>6.6</td>
<td>99.4%</td>
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<tr>
<td>Public Institutions (4 yr)</td>
<td>8.3</td>
<td>99.8%</td>
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<tr>
<td><strong>Total Publics</strong></td>
<td><strong>14.8</strong></td>
<td><strong>99.6%</strong></td>
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<tr>
<td>Private 2yr</td>
<td>0.03</td>
<td>53.4%</td>
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<tr>
<td>Private 4yr</td>
<td>4.1</td>
<td>95.8%</td>
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<tr>
<td><strong>Total Privates</strong></td>
<td><strong>4.1</strong></td>
<td><strong>95.5%</strong></td>
</tr>
<tr>
<td><strong>Total Privates and Publics</strong></td>
<td><strong>18.9</strong></td>
<td><strong>98.8%</strong></td>
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<tr>
<td>For Profit 2yr</td>
<td>0.3</td>
<td>20.6%</td>
</tr>
<tr>
<td>For Profit 4yr</td>
<td>1.4</td>
<td>83.8%</td>
</tr>
<tr>
<td><strong>Total For Profits</strong></td>
<td><strong>1.7</strong></td>
<td><strong>73.8%</strong></td>
</tr>
<tr>
<td><strong>TOTAL COVERAGE</strong></td>
<td><strong>20.6</strong></td>
<td><strong>96.7%</strong></td>
</tr>
</tbody>
</table>
Delivers over $750MM of annualized value to higher education

<table>
<thead>
<tr>
<th>Service</th>
<th>2 Yr</th>
<th>4 Yr</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment Reporting</td>
<td>$65,800,361</td>
<td>$139,825,761</td>
<td>$205,626,122</td>
</tr>
<tr>
<td>Degree Verify</td>
<td>$1,297,189</td>
<td>$10,584,270</td>
<td>$11,881,460</td>
</tr>
<tr>
<td>Enrollment Verify (not incl. those by SSS)</td>
<td>$1,103,235</td>
<td>$4,655,637</td>
<td>$5,758,872</td>
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<tr>
<td>Transcript Order</td>
<td>$72,097,056</td>
<td>$93,042,174</td>
<td>$165,139,230</td>
</tr>
<tr>
<td>Student Self-Service</td>
<td>$2,333,993</td>
<td>$7,369,622</td>
<td>$9,703,615</td>
</tr>
<tr>
<td>Student Tracker</td>
<td>$175,973,590</td>
<td>$182,206,972</td>
<td>$358,180,562</td>
</tr>
<tr>
<td>Total</td>
<td>$318,605,424</td>
<td>$437,684,437</td>
<td>$756,289,860</td>
</tr>
</tbody>
</table>

Other Key Statistics (annually)

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Charged to Higher Ed for Services Provided</td>
<td>$0</td>
</tr>
<tr>
<td>Enrollment Records Processed Free of Charge</td>
<td>250mln</td>
</tr>
<tr>
<td>Verification Requests Processed</td>
<td>1.2bln</td>
</tr>
<tr>
<td>Transcript Requests Processed (by recipient)</td>
<td>4mln</td>
</tr>
<tr>
<td>Number of Staff at NSC</td>
<td>220</td>
</tr>
</tbody>
</table>

We also work with over 1,400 outreach organizations serving millions of students annually.
NSC’s Service Areas

- Compliance
- Verification
- Data Exchange
- Research
Growing compliance regulations = increasing work burdens to higher ed administration

Title IV and current major system enhancements underway:
- Process improvements, technology enhancements, compliance focus
- Student Tracker College University reporting to allow for institutional peer and aspirational cohort analysis of NSC published numbers
NSC’s Service Areas

Compliance → Verification → Data Exchange → Research
NSC Research Center Supports:

• PSED Institutional Enrollment Management & Accountability Needs

• Presidential Associations and Accrediting Bodies on public policy issues (i.e., Completion agenda)

• Multi-State Data Exchange & Workforce Initiatives: WICHE

• Institutional and Public Policymaking through free publications
  – Enrollment trend reporting and analysis
  – Completion trend reporting and analysis

• Education programs like NCAN, TRIO & GEAR-UP

• K-12 longitudinal data needs (LEA & SEA)
  – Outcomes, feedback reports, compliance and curriculum evaluation
  – Collaborations with 3rd party service providers
How NSC can enable the K-20/W Reporting Continuum

- K-20 outcomes Service (State and local level)
- K-20 StudentTracker linking
- PSED (Access, Persistence, Completion)
- PSED (Workforce)
- Benchmarking National Scale

- Collaborate with data sources
  - CB
  - ACT
  - SLDS
  - National Benchmarking Potential

- Partner with 3rd Parties
  - College Summit: college going environment
  - Naviance tool for guidance counselors
  - Teacher Evaluations

DATA STANDARDS ARE A MUST HAVE

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So why am I here, speaking with you today about benchmarks and metrics?

4% of ACC students graduate in 3 yrs. Is that a good use of tax $? TX Association of Business
Baseball vs. Education

In higher education….

• What does it mean to win?
• What key measures underlie winning?
• Disruption of traditional measures
• Getting the measures, statistics down to “1 number”
• Using existing data, in different ways and finding the value
• Through data finding people are overlooked for a variety of reasons
How well do current, well known publicly visible measures at the federal and state level truly serve the purpose of informing what winning or success look like?
# Comparison of Visual Displays of Graduation Rates from National Websites

**Four-year Institution Example: Ohio State University**

**Two-year Institution Example: Richland Community College (IL)**

<table>
<thead>
<tr>
<th>Site</th>
<th>Cohorts Included</th>
<th>Graduation Rates Reported</th>
<th>Source Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPEDS College Navigator</td>
<td>First-time in any college, Full-time only</td>
<td>4-year, 5-year, 6-year grad rates</td>
<td>IPEDS</td>
</tr>
<tr>
<td>Dept. of Ed College Scorecard</td>
<td>First-time in any college, Full-time only</td>
<td>4-year grad rate for two-year schools and 6-year grad rate for four-year schools</td>
<td>IPEDS</td>
</tr>
<tr>
<td>Student Achievement Measure</td>
<td>Bachelor’s Model (4 cohorts): First time in any college, full-time and part-time First-time at reporting institution, full-time and part-time (pt cohorts are optional for bachelor’s model) Associate/certificate Model (2 cohorts): First-time at reporting institution, Full-time First-time at reporting institution, Part-time (includes transfer-ins)</td>
<td>Bachelor’s Model: 4-year, 5-year, 6-year rates for full-time 6-year, 8-year, 10-year rates for part-time Associate/certificate Model: 6-year rate only</td>
<td>NSC and reporting institution data</td>
</tr>
<tr>
<td>GI Bill Comparison Tool</td>
<td>First-time in any college, Full-time only</td>
<td>4-year grad rate for two-year schools and 6-year grad rate for four-year schools</td>
<td>IPEDS / VA data?</td>
</tr>
<tr>
<td>Complete College America (State-level Data)</td>
<td>First-time in any college, Full-time First-time in any college, Part-time Transfer-ins</td>
<td>150% of normal time to completion; 200% of normal time</td>
<td>States and public institutions</td>
</tr>
<tr>
<td>Voluntary Framework for Accountability</td>
<td>“Main” (all first-time students at reporting institution) Credential-Seeking (12 credits by end of year 2) First-time in any college</td>
<td>6-year rate only (but nine different outcomes reported at end of 6 years)</td>
<td>Institution data and/or NSC data on transfer-outs</td>
</tr>
</tbody>
</table>
IPEDS College Navigator: Ohio State University – Main Campus

OVERALL GRADUATION AND TRANSFER-OUT RATES FOR STUDENTS WHO BEGAN THEIR STUDIES IN FALL 2008

Overall graduation rate: 83%
Transfer-out rate: 10%

Percentage of Full-time, First-Time Students Who Graduated or Transferred Out Within 150% of "Normal Time" to Completion for Their Program

BACHELOR'S DEGREE GRADUATION RATES

Bachelor's degree graduation rates measure the percentage of entering students beginning their studies full-time and are planning to get a bachelor's degree and who complete their degree program within a specified amount of time.

GRADUATION RATES FOR STUDENTS PURSUING BACHELOR’S DEGREES

Began in Fall 2006
Began in Fall 2008

4-year: 53% 61%
6-year: 82% 83%
8-year: 84%
Dept. of Ed College Scorecard: Ohio State University – Main Campus

For four-year institutions, this tool displays only the six-year IPEDS graduation rate.
Bachelor's Seeking Model

First-Time Full-Time Students Starting Fall 2009
Number of students: 6,727

- 83% Graduated: Reporting institution
- 79% Within 6 years
- 58% Within 5 years
- 29% Within 4 years

Full-Time Transfer Students Starting Fall 2009
Number of students: 1,956

- 74% Graduated: Reporting institution
- 68% Within 6 years
- 15% Within 4 years
- 71% Within 2 years
For four-year institutions, this tool currently displays only the six-year IPEDS graduation rate.

Graduation rate data specific to veterans will not be available on the GI Bill Comparison Tool website until September 2016.
Only state-level data available in this tool, disaggregated by institution type, time-to-completion, enrollment intensity, and transfer-in status.
IPEDS College Navigator: **Richland Community College (IL)**

### Overall Graduation and Transfer-out Rates for Students Who Began Their Studies in Fall 2011

- **Overall Graduation Rate:** 23%
- **Transfer-out Rate:** 21%

### Graduation Rates for Students Who Began Their Program in Fall 2010 or Fall 2011, by Time to Completion

- **Within "Normal time" for the program:**
  - Began in Fall 2010: 14%
  - Began in Fall 2011: 21%
- **Within 150% of "Normal time" for the program:**
  - Began in Fall 2010: 9%
  - Began in Fall 2011: 23%
- **Within Twice as Long as "Normal time" for the program:**
  - Began in Fall 2010: 29%

**Percentage of Full-time, First-time Students Who Graduated in the Specified Amount of Time**
For two-year institutions, this tool displays a four-year IPEDS graduation rate (twice the normal time to completion for associate degree seekers).
Student Achievement Measure: Richland Community College (IL)
SAM Associate/Certificate Seeking Model

First-time-at-Institution, Full-Time Students Starting Fall 2008
Number of students: 235
roll over each bar for detail data

63% 28%
WITHIN 6 YEARS
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Graduated: Reporting institution
Enrolled: Reporting institution
Transferred: Other Institution
Current Status Unknown

First-time-at-Institution, Part-Time Students Starting Fall 2008
Number of students: 288
roll over each bar for detail data

36% 12% 47%
WITHIN 6 YEARS
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Graduated: Reporting institution
Enrolled: Reporting institution
Transferred: Other Institution
Current Status Unknown

view detail data for graph »

view detail data for graph »
Voluntary Framework for Accountability: Richland Community College (IL)

**Six-Year Outcomes**

**Outcomes by the end of Six Years by Cohort Type**

<table>
<thead>
<tr>
<th>Cohort Types</th>
<th>Different types of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Main Cohort: fall entering, first time at reporting college, &quot;all students&quot;</td>
</tr>
<tr>
<td>B.</td>
<td>Credential Seeking: earned 12 credits by end of year two</td>
</tr>
<tr>
<td>C.</td>
<td>First Time in College: fall entering, first time in college</td>
</tr>
</tbody>
</table>

*Students could be in more than one cohort type.

**Six-Year Outcomes Measures**

These measures report nine potential outcomes for students in the cohort ranging from receipt of a credential (with and without transfer) to left the college.

Each student in the cohort is counted in only one of the Six-Year Outcomes and the sum of all of the outcomes will total 100% of the cohort.

- Unduplicated
- Hierarchical
- Achieved by the end of six years
- Credentials earned at the reporting college
For two-year institutions, this tool shows four-year graduation rates from IPEDS. However, it is currently not displaying any graduation rate for this particular institution.

Graduation rate data specific to veterans will not be available on the GI Bill Comparison Tool website until September 2016.
Only state-level data available in this tool, disaggregated by institution type, time-to-completion, enrollment intensity, and transfer-in status.
## Benchmarks matrix

<table>
<thead>
<tr>
<th>Data Collection Source</th>
<th>Efficacy &amp; Practice</th>
<th>Research &amp; Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required/Fed</td>
<td>Delta Cost Project</td>
<td>College Scorecard IPEDS Delta Cost Project ESSA (there is no threshold, the requirement is to make it public)</td>
</tr>
<tr>
<td>Required/SLDS</td>
<td></td>
<td>State Performance-based funding</td>
</tr>
<tr>
<td>Voluntary/National</td>
<td>Student engagement surveys - NSSE - FSSE - BCSSE - CCSSE - CLA - VSA, VFA - National CC Benchmark Project EAB Student Success Collaborative NACE PAR Framework</td>
<td>CIRP (The Cooperative Institutional Research Program) Freshmen Survey (from UCLA) VSA, VFA</td>
</tr>
<tr>
<td>Voluntary/State</td>
<td></td>
<td>CCA</td>
</tr>
<tr>
<td>Voluntary/Groups (efforts by groups, college associations to have benchmarks or performance metrics)</td>
<td>AtD - NCAA - Accreditors</td>
<td>HSI, HBCU</td>
</tr>
</tbody>
</table>
Top line major conflicts and issues

Most State-Level benchmarks only take into consideration outcomes in a particular state. This is in conflict with the college completion agenda at the national-level.

Current benchmarks at the national-level do not capture student mobility (IPEDS, Scorecard, which includes this type of measures but is limited to aided students only).

Data inconsistencies:
States that measure HS to College access only within the limits of their own SLDS (e.g. inconsistent data collection)

Retention and graduation rates – has been well documented
The intent of this report is two-fold:

- To focus state and national conversations about college and career readiness on results — on the actual performance of high school graduates in each state.

- To draw attention to the need to improve metrics to evaluate performance and progress. Many states do not yet report critical indicators, or they do so in vastly different ways from one another. Consequently, there is little comparability across states, and little transparency within many.

MANY STATES DO NOT YET REPORT CRITICAL INDICATORS, OR THEY DO SO IN VASTLY DIFFERENT WAYS FROM ONE ANOTHER.

CONSEQUENTLY, THERE IS LITTLE COMPARABILITY ACROSS STATES AND LITTLE TRANSPARENCY WITHIN MANY.
### STATE DATA SUMMARY TABLE

The below chart summarizes which states report which indicators of high school graduates' postsecondary performance. Due to a lack of availability, subgroup data is not included. Additional information about each of the indicators and how they are reported and defined by individual states, including the minimum criteria for inclusion, as well as student outcomes data, is available in the pages that follow and in state-specific profiles available here (www.achieve.org/state-profiles).

<table>
<thead>
<tr>
<th>State</th>
<th>Postsecondary Enrollment</th>
<th>Postsecondary Remediation</th>
<th>Postsecondary Persistence</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE</td>
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<td>NV</td>
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</tbody>
</table>
THE COLLEGE AND CAREER READINESS OF U.S. HIGH SCHOOL GRADUATES

• “... states' reporting differs in:
  • whether they include students pursuing postsecondary education at two- and four-year institutions,
  • whether they follow both in-state and out-of-state attendees,
  • whether data includes both public and private institutions, and
  • whether their reporting is limited to graduates from high schools in their state or includes anyone enrolled in their state institutions.

• Further, states vary in how they define enrollment, remediation, and persistence. As such, comparisons across states are challenging”
Top line major conflicts and issues

Wage and employment data
- inconsistent data collection: surveys (e.g. NACE surveys employers, colleges survey graduates; states collect only from own UI wage systems).
- Inconsistent definitions (e.g. timing of when to survey – colleges, 6 mos/12 mos after grad, scorecard, 10 years after entry, whom to survey; population to include – employed FT vs PT, in grad school)

Additionally:

CLA, NSSE: Rigorous, uniform data standards, but High cost to administer

VFA, Delta, IPEDS: High burden to collect and submit data

None of these capture industry certifications.
“Certifying Skills and Knowledge: The Future of Credentials”

• A baseline future, “All Roads Lead to Rome,” imagines a future in which degrees awarded by the K-12 and post-secondary sectors still serve as the dominant form of credentials, but there are many roads toward gaining those credentials, such as diverse forms of school and educational assessments.

• An alternative future, “The Dam Breaks,” explores a future in which the employment sector accepts new forms of credentials, such as micro-credentials, on a standalone basis, leading to major shifts in both the K-12 and post-secondary sectors and new relationships between the academic and working worlds.

• A second alternative future, “Every Experience a Credential,” considers what credentials might look like if new technologies enabled every experience to be tracked and catalogued as a form of credential for both students and employees.
Enablement of student mobility pathways is continuing leading to even more complexity in defining success on institutional terms.
Postsecondary Student One-Year Mobility Rates
(by sector of earliest enrollment within academic year)

- 2-Year Public:
  - 2011-12: 11.8%
  - 2012-13: 11.6%
  - 2013-14: 12.0%
  - 2014-15: 12.2%

- All Sectors:
  - 2011-12: 9.6%
  - 2012-13: 9.4%
  - 2013-14: 9.4%
  - 2014-15: 9.4%

- 4-Year Public:
  - 2011-12: 7.2%
  - 2012-13: 6.9%
  - 2013-14: 6.8%
  - 2014-15: 6.5%

- 4-Year Private, Nonprofit:
  - 2011-12: 5.1%
  - 2012-13: 4.8%
  - 2013-14: 4.8%
  - 2014-15: 4.8%

- 4-Year Private, For-Profit:
  - 2011-12: 4.8%
  - 2012-13: 4.8%
  - 2013-14: 4.8%
  - 2014-15: 4.8%

With data current through June 2015.
Postsecondary Student One-Year Mobility Rates by Age Group

<table>
<thead>
<tr>
<th>Year</th>
<th>20 and under</th>
<th>20 to 24</th>
<th>Over 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>12.0%</td>
<td>10.7%</td>
<td>7.4%</td>
</tr>
<tr>
<td>2012-13</td>
<td>11.8%</td>
<td>10.5%</td>
<td>7.1%</td>
</tr>
<tr>
<td>2013-14</td>
<td>11.8%</td>
<td>10.5%</td>
<td>7.1%</td>
</tr>
<tr>
<td>2014-15</td>
<td>11.8%</td>
<td>10.5%</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

With data current through June 2015
The State of Kansas is number two on the list!
Overall Transfer & Mobility Rates

- Well over a third (37.2 percent) enrolled in a different institution at least once within six years
- Of those who did, almost half (45 percent) changed institutions more than once
  - 19% did so three times or more
- Counting transfers in as well as out, over half of all students on a typical campus are mobile
- Counting multiple moves, the 3.6 million students made 2.4 million transitions from one institution to another
State Level Transfer and Mobility

Starting Institution

- Public TWO-YEAR: 81.5% Transferred Out of State, 18.5% Transferred Within State
- Public FOUR-YEAR: 76.0% Transferred Out of State, 24.0% Transferred Within State
- Private Nonprofit FOUR-YEAR: 57.2% Transferred Out of State, 42.8% Transferred Within State
- Private For-Profit: 51.9% Transferred Out of State, 48.1% Transferred Within State
6-Year Outcomes by Associate’s Degree Status showing that 2/3 of transfers do so w/o a credential (and that only 56% of those end up with a credential)
Transfer and Mobility Effects

- Transfer rates and mobility patterns are increasing as more institutions increase their reach across state lines.
- State based Reverse transfer systems alone will not be able to maximize benefit to students and institutions who deserve credit.
- Locus of control for educational attainment is shifting (or has shifted) from the institution to the student.
- School attainment rates are entirely mis-represented.
Getting the count right…why it matters

Bachelor's Seeking Model

First-Time Full-Time Students Starting Fall 2009

Number of students: 1,753

Nearly 1/3 of this public institution’s starting cohort would go unaccounted for without NSC.
Drilling a little on delivery and outcomes…mega trends

- Disaggregation/unbundling of education
  - Delivery mechanisms
  - Recognition of learning
  - Recognition of capabilities

There is no roadmap. This evolution and in some cases revolution (example: tech bootcamps) is happening on the fly in real time.
Drilling a little on delivery and outcomes…mega trends

- Education value prop being redefined
  - The end game: pathway to what?
  - Demonstration of ROI (state vs federal)
  - Credit When It’s Due:
    - Student and institutional

How you are held accountable is inconsistent and conflicted…

NSC is positioning itself to be on national, regional, state and local institutional assistance
### Established Benchmarks

<table>
<thead>
<tr>
<th>Type of Benchmarks</th>
<th>Available data sources</th>
<th>Best possible data source</th>
<th>Limitations of the Best Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Benchmarks (or high-school-to-college transition)</td>
<td>High school exit surveys, SLDS, NSC, STHS</td>
<td>SLDS (more data elements available about the student to measure access for subgroups of students)</td>
<td>Tracking those who enroll in in-state private colleges or out-of-state public and private colleges is not possible.</td>
</tr>
<tr>
<td>Transfer, persistence &amp; completion</td>
<td>IPEDS Institutional Surveys, SAM/VSA, VFA, NSC</td>
<td>NSC</td>
<td>Institutional coverage rate is lower than enrollment coverage rate meaning many small institutions are not participating with NSC. This has, particularly, implications when the unit of analysis is individual schools. In some cases when the unit of analysis is state/sector combinations institutional coverage rate may matter as well.</td>
</tr>
<tr>
<td>Workforce</td>
<td>American Community Survey, UI wage records, College Measures</td>
<td>UI Wage Records</td>
<td>Not all states linked postsecondary and workforce data. Data are not linked across states either. Unless states in an exchange program (e.g. WICHE multistate data exchange) employment in a different state won’t be captured.</td>
</tr>
</tbody>
</table>

### Emerging Benchmarks or Measures

| Attainment of third-party credentials | A number of individual initiatives | No comprehensive data source but emerging research findings on individual states are available | Example: Bahr (2014) found positive returns to credits in career and technical education subfields of study. He mentioned that the explanation for this was, at least partly, because, some of those fields were tied closely to licenses or certifications in California that require the completion of particular coursework or specific numbers of credits in particular subfields |
| Portable Stackable Credentials | Emerging field | Data definitions are being developed now | CLASP (2014). Scaling "Stackable Credentials" Implications for Implementation and Policy |
California Community College System Example

The Labor Market Return in Earnings to Community College Credits and Credentials in California

by Peter Riley Bahr* Center for the Study of Higher and Postsecondary Education University of Michigan

Revised May 1, 2015
The completion agenda … is inextricably linked to, and reinforced by, two other threads of ideas.

- The **first revolves around longstanding policy efforts to develop and implement widely accepted standards of institutional accountability, especially expressions of accountability that link institutional performance to funding** (Walters, 2012).

- The central **challenge of these efforts is identifying measures that capture the full range of activities of community colleges**, including preparing students to transfer to four-year institutions, workforce development, and community education (Bahr, 2013).

- In the face of this challenge, **policymakers often have defaulted to readily measureable outcomes that capture only a portion of the community college mission, of which the most common measure is graduation rate** (Bautsch & Williams, 2010; Dowd & Tong, 2007).
Some Implications suggest that lack of data is forcing, in some cases unfortunate decisions

- Not surprisingly, then, anecdotal evidence suggests that community colleges that are grappling with the challenges of excess demand, declining resources, and increasing scrutiny of their graduation rates are electing to reduce or eliminate programs of study in part based on program-specific rates of credential completion (e.g., Puente, 2013; Grubb, 2002a).

- Such cuts tend to fall disproportionately on career and technical education programs (Bohn, Reyes & Johnson, 2013), which typically have lower rates of graduation than do liberal arts programs (Jenkins & Cho, 2012).
An alternative…that makes sense

- Against this paradigmatic and policy backdrop, a reinforcing thread has developed in the past several years.

- Specifically, education researchers increasingly have focused their attention on measuring the labor market returns to the various types of postsecondary credentials offered by community colleges (e.g., Dadgar & Weiss, 2012; de Alva & Schneider, 2013; Jepsen, Troske & Coomes, 2009; Lang & Weinstein, 2012; Stevens, Kurlaender & Grosz, 2014), such as associate degrees and certificates.

- Under the completion agenda paradigm, this attention makes sense:

  if the chief goal of community colleges is providing educational pathways that lead to postsecondary credentials, then certainly the labor market value of those credentials is an important matter to investigate.
The student population and course sections offered described in the tables are based on the 2014-15 academic year. Students represented differ from those included for calculation of Scorecard metrics, which are based on first-time students enrolled in 2009-10.

<table>
<thead>
<tr>
<th>STUDENT INFORMATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>2,317,945</td>
</tr>
<tr>
<td>GENDER</td>
<td>ETHNICITY/RACE</td>
</tr>
<tr>
<td>Female</td>
<td>53.1% African American 6.7%</td>
</tr>
<tr>
<td>Male</td>
<td>45.8% American Indian/Alaska Native 0.4%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.1% Asian 11.4%</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
</tr>
<tr>
<td>Less than 20 years old</td>
<td>24.9% Hispanic 41.7%</td>
</tr>
<tr>
<td>20 to 24 years old</td>
<td>32.2% Pacific Islander 0.4%</td>
</tr>
<tr>
<td>25 to 39 years old</td>
<td>26.8% White 28.2%</td>
</tr>
<tr>
<td>40 or more years old</td>
<td>16.1% Two or more Races 3.7%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.0% Unknown 4.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER INFORMATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time Equivalent Students</td>
<td>1,133,287.1</td>
</tr>
<tr>
<td>Credit Sections</td>
<td>337,685</td>
</tr>
<tr>
<td>Non-Credit Sections</td>
<td>29,455</td>
</tr>
<tr>
<td>Median Credit Section Size</td>
<td>26</td>
</tr>
<tr>
<td>Percentage of Full-Time Faculty</td>
<td>56.1%</td>
</tr>
<tr>
<td>Percentage of First-Generation Students</td>
<td>41.7%*</td>
</tr>
<tr>
<td>Student Counseling Ratio (FALL 2014)</td>
<td>657:1</td>
</tr>
</tbody>
</table>

* Insufficient data  ** No data
NSC’s new data projects: Extending data coverage

✓ Reverse Transfer: course, grade and credit information
✓ Institutionally supported Micro-credentials: digital credentials
✓ 3rd Party Credentials tied to workforce and non credit leaners
✓ National Transcript Center integration with StudentTracker®
✓ Competency Based Education: Direct Assessment … Rubrics, KSA’s… beginning with workforce defined ksa’s
✓ Military: Veteran completion and certification
A Cautionary Tale: Even when using consistent data sources there are issues

NYS Southside HS example
Principal uncovers flawed data in her state’s official education reports

School reformers talk nonstop about using “data” to drive policy, teaching and just about everything else, which, you would think, would require that the data being used be accurate. The following post exposes a troubling problem with the push for “data-driven” everything — bad data. This important piece was written by award-winning Principal Carol Burris of South Side High School in New York, who was named New York’s 2013 High School Principal of the Year by the School Administrators Association of New York and the National Association of Secondary School Principals, and in 2010, tapped as the 2010 New York State Outstanding Educator by the School Administrators Association of New York State. Burris has been exposing the botched school reform program in New York for years on this blog, and it is worth reading.
In its zest to prove there is a crisis of college readiness, combined with a sweetheart infatuation with big data, NYSED produced reports (SIRS 601-604) to track New York high school graduates’ college enrollment. A few days before the public release of the reports, Deputy Commissioner Ken Wagner sent a memo to districts. He explained that the department had combined school data with that of the National Student Clearinghouse to document which former high school students were enrolled in college and whether they persisted in their studies.

The memo informed superintendents that after the Regents discussed the data, it would be publicly released because it would be of interest to communities.

Our district data coordinator, who is my assistant principal, brought me the SIRS report. It claimed that only 80 percent of our students from the cohort of 2008 (Class of 2012) were enrolled in college. As soon as I saw the number, I knew it was not correct. Ninety-eight percent of the 2012 Class told us they were going to college and gave us the name of the college they would attend. Might some have left after one semester, or changed their minds? It’s possible. But I found it difficult to believe that 18 percent had either not enrolled or quickly dropped out.
Did you mean: principal-uncovers-flawed-data-in-the-states-official-education-reports twitter

The Answer Sheet: Principal Uncovers Flawed Data in Her ...
nepc.colorado.edu/.../principal-uncover... - National Education Policy Center
Nov 24, 2014 - ... Uncovers Flawed Data in Her State's Official Education Reports ... This important piece was written by award-winning Principal Carol Burris ...

Katie Zahedi on Twitter: "Principal uncovers flawed data in ... https://twitter.com/kzahedi/status/53626807977181184
Nov 22, 2014 - Principal un covers flawed data in her state's official education reports http://wapo.st/1p9093T Carol Burris explains flaws in SED data.

Principal Uncovers Flawed Data in Her State's Official ...
casliny.com/education/.../principal-uncovers-flawed-data-states-official-e... - National Association of State Boards of Education
Nov 24, 2014 - Principal Un covers Flawed Data in Her State's Official Education Reports – Washington Post. Principal Uncovers Flawed Data in Her State's ...

Flawed and Inaccurate Data | Data Justice
www.datajustice.org/site/flawed-and-inaccurate-data
EU Seeks to Tighten Data Privacy Laws, Wall Street Journal, 03/10/2015. Carol Burris. Principal uncovers flawed data in her state's official education reports ...

uncovers flawed data in her state's official education reports
www.datajustice.org/.../principal-uncovers-flawed-data-her-states-official-e...
Principal uncovers flawed data in her state's official education reports. Submitted by Nathan Newman on Mon, 02/23/2015 - 16:15 ...

LCTA Newsletter
lancasterteachers.com/weekly%20political%20action.htm
Monday, March 9 the State Assembly and Senate will print their budget bills. .... If you're on Twitter, follow the #AllKidsNeed hashtag for up to date posts from ... /11/22/principal-uncovers-flawed-data-in-her-states-official-education-reports/

SWRTA: November 2014
swra.blogspot.com/2014_11_01_archive.html
Nov 2, 2014 - As a result, the New York State Board of Regents is considering a proposal to "clarify" the .... reform movement by sharing articles like this via email, Facebook, Twitter, etc. Principal uncovers flawed data in her state's official education reports ... The Locust Valley Teachers Association President reports that:
Trust, Big Data, and Bad Timing

By Tod Massa

5. December 2014 20:08

I read this story before Thanksgiving. A principal in New York finds that the state’s education department (NYSED) issued reports on high school graduates attending college seems to be terribly flawed. Principal Burris was not shy about letting people know. The report is based on data from the NYSED student records matched to data from the National Student Clearinghouse. Read the original essay and then associated linked article and see what conclusion you reach.

This evening, a Twitter user @EduBenM rwtweeted @klarkcollege tweet of the the story:

Wow - account of massive errors at national student clearinghouse - important reading for all edu stats nerds
http://t.co/QTEvLaZbyI

— Kim Clark (@kclarkcollege) December 5, 2014

I retweeted this just to draw attention to how people respond to these stories and because it is of interest. This drew a responding tweet from Richard Torres of NSC to read the comments to the article as the fault does not belong to NSC. Rick and I exchanged tweets as I pointed out that the comment from NSC was just an assertion and did not explain anything, and he then directed me to the response from the principal, which I still thought did not explain things. At least to my satisfaction.

This tweet, however, does explain things:

@todmassa the challenge is that the HS may quote a 1 year since grad number and the state may apply a time basis. Both are correct

— Ricardo Torres (@Bdatawise) December 5, 2014

Now, I understand especially in the context of a prior tweet:

@todmassa tks for suggestion. We are wkg with districts 2 understand NYS cut off for enrollment on rpt. Big diff bet 6 mos vs 15 mos

— Ricardo Torres (@Bdatawise) December 5, 2014

Haha! Now I understand. Apparently the NYSED is only looking at six months post-graduation while the high schools are looking a year later. A basic problem of definitions, one that we struggle with all the time. At SCHEV we try to be clear about the definitions we use because we know it can cause confusion on campus. We are not always successful. There are also times when institutions have long-standing definitions and metrics that conflict with ours and with national standards. I encountered one of those last summer on Twitter in following one of public university presidents.
So if both numbers were correct, what actually happened?

<table>
<thead>
<tr>
<th></th>
<th>Southside HS Report from NSC</th>
<th>NYS Report to Southside HS (using NSC data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduating Class</td>
<td>2012</td>
<td>2012</td>
</tr>
<tr>
<td>Completion rate</td>
<td>96%</td>
<td>80%</td>
</tr>
<tr>
<td>Claimed completion rate</td>
<td>98%</td>
<td></td>
</tr>
<tr>
<td>Missing NSC schools</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>
Contact us regarding your involvement in these initiatives

✓ Reverse Transfer: **course, grade and credit information**
✓ **Institutionally supported Micro-credentials**: **digital credentials**
✓ **3rd Party Credentials tied to workforce and non credit leaners**
✓ **National Transcript Center** integration with StudentTracker®
✓ **Competency Based Education**: Direct Assessment …Rubrics, KSA’s… beginning with workforce defined ksa’s
✓ Military: **Veteran completion and certification**
So the MoneyBall Outcome…

- Wins needed to get in playoffs: 99 (needed) vs. 103 (actual)
- Runs needed to win 99 games: 814 (needed) vs. 800 (actual)
- Runs allowed to win 99 games: 645 (needed) vs. 654 (actual)

During the regular season won 20 straight games, an American League Record

Finished in first place
Thank you