MSI Degree Production by Field & Labor Market Alignment: A Descriptive Analysis

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“At a time when many workplaces were filled with not just glass ceilings, but brick walls, Spelman was urging black women to become doctors, lawyers, engineers and ambassadors. This is the story of Spelman College: that unyielding presumption of promise, that presumption of brilliance, that presumption that every woman who enrolls at this school has something infinitely valuable to offer this world.” – Michelle Obama, former First Lady of the United States
**MSI designations**

Title III and Title V institutions are classified into seven categories based on demography:

- **Historically Black Colleges & Universities (HBCUs):** institutions established prior to 1964 whose primary mission was to educate Black Americans

- **Tribally-controlled Colleges & Universities (TCUs):** institutions that qualify for funding through the Tribally Controlled College or University Assistance Act of 1978 or the Navajo Community College Assistance Act of 1978, are cited under the 1994 Equity in Educational Land Grant Status Act (Section 532), or are designated as eligible by the Bureau of Indian Education

- **Hispanic-serving Institutions (HSIs):** 25% of the full-time equivalent undergraduate enrollment is Hispanic

- **Native American-Serving Non-Tribal Institutions (NASNTIs):** institutions that are not TCUs that have an undergraduate enrollment that is at least 10% Native American
MSI designations

Title III and Title V institutions are classified into seven categories based on demography:

- **Asian American and Native American Pacific Islander-Serving Institutions (AANAPISIs):** institutions that have an enrollment of undergraduate students that is at least 10% Asian American and Native American Pacific Islander

- **Alaska Native Native Hawaiian-Serving Institutions (ANNHs):** institutions that have an undergraduate enrollment that is at least 20% Alaskan Native and institutions that have an enrollment of at least 10% Native Hawaiian

- **Predominately Black Institutions (PBIs):** institutions that are not HBCUs with an undergraduate enrollment of 40% or more Black students
Sample Programs

- Alaska Native and Native Hawaiian-Serving Institutions
- Developing Hispanic-Serving Institutions (Title V)
- Historically Black College and University Capital Financing
- Minority Science and Engineering Improvement
- Predominantly Black Institutions (PBI) – Formula Grants
- Promoting Postbaccalaureate Opportunities for Hispanic Americans
- Strengthening Historically Black Graduate Institutions

Sample Grant Activities

- Establish or enhance a program of teacher education designed to qualify teacher candidates to teach in public elementary schools or secondary schools.
- Develop or enhance articulation agreements and/or student support programs designed to facilitate transfer from 2-year to 4-year institutions.
- Academic instruction in disciplines in which Black American are underrepresented.
- Faculty exchanges, faculty development, and faculty fellowships to assist in attaining advance degrees in the field of instruction of the faculty.
- Establishing or improving an endowment fund.
- Creating or improving facilities for Internet or other distance learning technologies.
- Purchase, rental, or lease of scientific or laboratory equipment.
- Purchase of library materials as well as tutoring, counseling, and student services programs.
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- ...creating or improving facilities for Internet or other distance learning technologies

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- ...purchase of library materials as well as tutoring, counseling, and student services programs
## Institutional Service

### Sample Programs

1. **Alaska Native and Native Hawaiian-Serving Institutions**
2. **Developing Hispanic-Serving Institutions (Title V)**
3. **Historically Black College and University Capital Financing**
4. **Minority Science and Engineering Improvement**
5. **Predominantly Black Institutions (PBI) – Formula Grants**
6. **Promoting Postbaccalaureate Opportunities for Hispanic Americans**
7. **Strengthening Historically Black Graduate Institutions**

### Sample Grant Activities

1. **...establish or enhance a program of teacher education designed to qualify teacher candidates to teach in public elementary schools or secondary schools.**
   - **...develop or enhance articulation agreements and/or student support programs designed to facilitate transfer from 2-year to 4-year institutions**

2. **...academic instruction in disciplines in which Black American are underrepresented**
   - **...faculty exchanges, faculty development, and faculty fellowships to assist in attaining advance degrees in the field of instruction of the faculty**
   - **...establishing or improving an endowment fund**
   - **...creating or improving facilities for Internet or other distance learning technologies**

3. **...purchase, rental, or lease of scientific or laboratory equipment**
   - **...purchase of library materials as well as tutoring, counseling, and student services programs**
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Purpose & overview of analysis

Credential Production
• What differences exist between MSIs and non-MSIs and the two- and four-year sectors in terms of the types of credentials produced and in what fields?

Labor Market Alignment
• To what extent is MSI and non-MSI credential production aligning with the concurrent labor market?

Why does this matter?
Academic fields and labor market misalignment are costlier for students of color
OPE Funded-MSI & non-MSI sample description

<table>
<thead>
<tr>
<th>Racial Demographic:</th>
<th>MSIs (N=362)</th>
<th>Non-MSIs (N=564)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANNAPISIs (n=19)</td>
<td>24.2%</td>
<td>32.1%</td>
</tr>
<tr>
<td>ANNHs (n=13)</td>
<td>23.1%</td>
<td>20.3%</td>
</tr>
<tr>
<td>HBCUs (n=100)</td>
<td>83.3%</td>
<td>--</td>
</tr>
<tr>
<td>HSIs (n=143)</td>
<td>45.0%</td>
<td>38.9%</td>
</tr>
<tr>
<td>NANSTIs (n=14)</td>
<td>20.7%</td>
<td>23.8%</td>
</tr>
<tr>
<td>PBIs (n=40)</td>
<td>56.7%</td>
<td>58.1%</td>
</tr>
<tr>
<td>TCUs (n=33)</td>
<td>89.0%</td>
<td>--</td>
</tr>
</tbody>
</table>

Selectivity (Open Admissions Policies): 60% 73%
Pell Grant Recipients: 53% 63%

Note: MSI sample only included institutions that were both eligible and funded through Title III and Title V federal programs. The non-MSI comparative sample are institutions whose student and institutional characteristics (e.g., race/ethnicity, socioeconomic status, selectivity) aligned with the funded-MSI sample, and may have been eligible for MSI designation, but were not funded through federal programs for FY 2011-2012.
## Credential production – field by sector

<table>
<thead>
<tr>
<th>2-Year Institutions</th>
<th>4-Year Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MSI</strong></td>
<td><strong>non-MSI</strong></td>
</tr>
<tr>
<td>Education &amp; training</td>
<td>Education &amp; training</td>
</tr>
<tr>
<td>Health science</td>
<td>Health science</td>
</tr>
<tr>
<td><strong>STEM</strong></td>
<td><strong>Business</strong></td>
</tr>
<tr>
<td><strong>MSI</strong></td>
<td><strong>non-MSI</strong></td>
</tr>
<tr>
<td>Education &amp; training</td>
<td>Education &amp; training</td>
</tr>
<tr>
<td>Health science</td>
<td>STEM</td>
</tr>
<tr>
<td><strong>Business</strong></td>
<td>Health science</td>
</tr>
</tbody>
</table>

4-year AANAPISIs (25.2%), ANNHs (20.2%) and HBCUs (18.9%) produce STEM credentials at rates above the MSI average of 18.8%
## Credential production – field by credential type

### Credential Level by Field, Funded Two- and Four-Year MSIs and non-MSIs

<table>
<thead>
<tr>
<th>Field</th>
<th>Certificates</th>
<th>Associate</th>
<th>Bachelor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MSIs</td>
<td>Non-MSIs</td>
<td>MSIs</td>
</tr>
<tr>
<td>Arts, A/V Technology &amp; Communications</td>
<td>3.0%</td>
<td>2.5%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Business, Management &amp; Administration</td>
<td>7.1%</td>
<td>6.9%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>19.9%</td>
<td>15.1%</td>
<td>48.1%</td>
</tr>
<tr>
<td>Health Science</td>
<td>24.4%</td>
<td>27.7%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Human Services</td>
<td>4.6%</td>
<td>4.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8.4%</td>
<td>10.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Marketing, Sales &amp; Service</td>
<td>7.3%</td>
<td>5.9%</td>
<td>3.9%</td>
</tr>
<tr>
<td>STEM</td>
<td>2.2%</td>
<td>2.0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Transportation, Distribution &amp; Logistics</td>
<td>8.7%</td>
<td>10.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Other Fields (n=8)</td>
<td>19.0%</td>
<td>14.3%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

# Labor Market Analysis

## Alabama and California

- 91 institutions of HE
- 20 MSIs: 15 HBCUs & 5 PBIs
- 36.7% of Alabama’s working age population has a postsecondary credential
  - below the national average of 45.3%

## California

- 500+ institutions of HE
- 132 MSIs: HSIs and both HSI/AANAPISIs represent over 75% of all California MSIs
- 47% of California’s working age population has a postsecondary credential
  - surpasses the national average of 45.3%

Alabama and California rank among the top ten states nationally with the most MSIs.

**To what extent is MSI and non-MSI credential production aligning with the concurrent labor market?**
Alabama: Labor Market Analysis

In 2012, 30% of all jobs in Alabama required postsecondary education

<table>
<thead>
<tr>
<th>Industry</th>
<th>% of Employment by Industry</th>
<th>MSI Credentials by Industry</th>
<th>non-MSI Credentials by Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business, Management &amp; Administration</td>
<td>21%</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>Health Science</td>
<td>17%</td>
<td>14%</td>
<td>33%</td>
</tr>
<tr>
<td>Hospitality &amp; Tourism</td>
<td>15%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>10%</td>
<td>20%</td>
<td>41%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>27%</td>
<td>37%</td>
<td>43%</td>
</tr>
</tbody>
</table>
## California: Labor Market Analysis

In 2012, 35% of all jobs in California required postsecondary education.

<table>
<thead>
<tr>
<th>% of Employment by Industry</th>
<th>MSI Credentials by Industry</th>
<th>non-MSI Credentials by Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>23% 2%</td>
<td>1%</td>
</tr>
<tr>
<td>Hospitality &amp; Tourism</td>
<td>18% 1%</td>
<td>1%</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>15% 26%</td>
<td>20%</td>
</tr>
<tr>
<td>Business, Management &amp; Administration</td>
<td>14% 12%</td>
<td>8%</td>
</tr>
<tr>
<td>Health Science</td>
<td>11% 9%</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>19% 50%</td>
<td>63%</td>
</tr>
</tbody>
</table>
Limitations of the analysis

- IPEDS, CIP codes and Perkins IV Crosswalk
- Labor market inferences
- Employment unrelated to major/field
- Availability versus quality of programs/credentials
Policy implications

Strengthen institutional capacity

- Engage leaders at MSIs to highlight facilitators and inhibitors of student success
- Build evidence base regarding OPE programs that yield strong student outcomes
- Stronger linkages with promising higher education reform programs (e.g., guided pathways)
- Increased transparency
Visit our website at capseecenter.org

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