The Impact of Interstate Migration on Human Capital Development in Washington

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Washington State is a leader in the innovation economy largely due to the combination of aerospace, software, and biomedical industries centered in the greater Seattle area; and, the state’s high level of international trade. Washington ranks second in the 2008 State New Economy Index—-an analysis of 29 indicators that measures the degree to which state economies are knowledge-based, globalized, entrepreneurial, IT-driven, and innovation-based.

Despite Washington’s national ranking, the state is overly reliant on importing educated workers from other states and countries. This reliance is, in part, due to a scarcity of educational opportunities for its citizens to achieve degrees in the key employment disciplines driving the knowledge economy.

Further complicating the picture, the number of Washington high school graduates who leave the state to seek higher education, exceeds the number of graduates from other states who come here. These ‘best and brightest’ Washington students often fail to return here to live and work once they have left, which constitutes a net ‘brain drain’ for the state.

Over the last two decades, Washington has attracted and developed a highly educated workforce that is the envy of many other states and nations and that is critically important to the state’s economy. Washington ranks first nationally in the employment of engineers, sixth in computer specialists, and ninth in life and physical scientists. We also rank second in the net number of trained workers with a bachelor’s degree or higher who migrate here.

Over-reliance on imported talent is almost certain to be a liability in the long run. The Prosperity Partnership, a coalition of government, business, labor, and community organizations from the Puget Sound region, has warned that our high rate of importing talent suggests ‘we are not taking

1 Send correspondence about this article to Randy Spaulding at randys@hecb.wa.gov or telephone 360-753-7823.
4 Department of Commerce as cited in Prosperity Partnership’s Higher Education Working Group Proposal
care of our own.\footnote{Educating Washington citizens for high-demand jobs. Prosperity Partnership. October 2006.} We rank 38th nationally in the production of bachelor’s degrees in science and engineering and 42nd in the production of graduate degrees in these fields.

Other developed nations have been investing heavily in postsecondary education, raising the attainment levels of their younger citizens at a much faster rate than the United States – and Washington. Meanwhile, the competition for educated workers around the world and in other states is growing. For example, in 2000 Washington was one of only 16 states that relied on net in-migration of educated workers to meet the needs of its employers. By 2007, 40 states were importing more talent than they produced.\footnote{NCHEMS Analysis of 2000 Census and 2007 ACS data. \url{http://www.internationalregions.org/Full-TalentReport.pdf}.}

As the recession ends and global economic activity heats up, countries with the best-educated workforces will lead the way.\footnote{The Emerging Policy Triangle: Economic Development, Workforce Development and Education. WICHE. 2007. \url{http://www.wiche.edu/pub/11558}; Moving the blue arrow: pathways to educational opportunity. The 2008 Master Plan for Higher Education. Higher Education Coordinating Board. November 2007. Olympia, WA. \url{http://www.hecb.wa.gov/research/masterplans/documents/2008MasterPlan-fromPRT.pdf}} This is why, in his 2009 inauguration speech, President Barack Obama pledged that the United States would once again be the world’s most educated nation by 2020. Many higher education policy experts have described this goal at best as a daunting challenge, and are skeptical it can be achieved given current resources.

To provide a more complete picture of the dynamics driving the need for increased educational attainment in Washington State, staff at the Higher Education Coordinating Board conducted an analysis of in-migration of talented workers and out-migration of talented high school graduates.

**Migration of working-age adults**

Washington ranks number two nationally in the net number of trained workers with a bachelor’s degree or higher who migrate here.\footnote{This statistic is measured as the ratio of net in-migration to in-state degree production. HECB calculation based on NCHEMS analysis of in-migration and IPEDS degree awards by state. \url{http://www.higheredinfo.org/}.} In 2007, 69,873 more working age adults (22-64) moved into the state than left the state. These included:

- 22,027 (31.5%) with a bachelor’s degree; and
- 13,789 (19.7%) with a graduate or professional degree.\footnote{Net Migration by State, Age-Group, and Degree-Level 2007 (ACS). National Center for Higher Education Management Systems (NCHEMS). \url{http://www.higheredinfo.org/}.}

In 2007, Washington imported 76 bachelor's degrees to meet workforce needs for every 100 bachelor’s degrees awarded by a Washington public or private university, and 125 graduate or professional degrees for every 100 graduate or professional degrees awarded by a Washington public or private university.\footnote{HECB Analysis of NCHEMS tables cited above and IPEDS Degree data for Washington.}
The following chart provides a greater level of detail about the in-migration of educated workers versus Washington State degree production.

**Washington degree production and in-migration - 2007**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Associate Degree</td>
<td>20,923</td>
<td>4,307</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>29,160</td>
<td>22,027</td>
</tr>
<tr>
<td>Graduate or Professional Degree</td>
<td>11,054</td>
<td>13,789</td>
</tr>
</tbody>
</table>

Source: HECB calculation based on NCHEMS analysis of Net In-migration and Postsecondary Education Opportunity compilation of state degree award data from IPEDS.

**Migration of recent high school graduates attending college**

Overall, more high school graduates leave Washington to go to college than are replaced by high school graduates who migrate here. In 2008 we experienced a net loss of 1,235 recent high school graduates. A total of 5,917 recent high school graduates entered the state to attend a college or university, while 7,152 left the state to attend a college or university.\(^{11}\)

**Migration of recent high school graduates by institution type – fall 2008**

<table>
<thead>
<tr>
<th>Sector</th>
<th>In-Migration</th>
<th>Out-Migration</th>
<th>Net In-Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Two-Year</td>
<td>260</td>
<td>273</td>
<td>-13</td>
</tr>
<tr>
<td>Public Four-Year</td>
<td>2,743</td>
<td>2,642</td>
<td>+100</td>
</tr>
<tr>
<td>Private Two-Year</td>
<td>0</td>
<td>118</td>
<td>-118</td>
</tr>
<tr>
<td>Private Four-Year</td>
<td>2,914</td>
<td>4,118</td>
<td>-1,204</td>
</tr>
<tr>
<td>All Sectors</td>
<td>5,917</td>
<td>7,152</td>
<td>-1,235</td>
</tr>
</tbody>
</table>


\(^{11}\) Interstate Migration of College Freshmen 1986 to 2008, Postsecondary Education Opportunity, Number 214, April 2010.
Additional 2008 analysis reveals:

- Most of the 1,235 students who represented Washington’s net student loss attended private colleges and universities in other states.

- Forty-one percent more Washington students left the state to attend a private college or university than those who came here to attend one.

- In- and out-migration among high school graduates who attended public colleges and universities was roughly even, with Washington attracting 100 more students than it exported.

- Pell-eligible high school graduates left Washington to attend private colleges and universities at a much higher rate than Pell-eligible students migrated to Washington to attend private institutions: 2,363 more left than entered.

- Only 77 more Washington Pell-eligible students left the state to attend a public college or university than the number of Pell-eligible students from other states who moved here to attend a public institution.

The net out-migration of Washington Pell-eligible students to private colleges and universities exceeds the total out-migration of Washington students. In effect, we are exporting our neediest students and replacing some of them with students from families that are better off financially. This raises questions about the reasons why some Pell-eligible students are turning to private colleges in neighboring states, and whether institutional and state aid policy may play a role.

The data seem to support the claim that Washington’s public four-year institutions continue to place greater emphasis on enrolling resident students than they do recruiting out-of-state students. As mentioned above, in- and out-migration for the public four-year schools is about even. Further, with a non-resident freshman class of 27.3 percent, the University of Washington ranks 30th nationally among public research institutions. This is a little lower than the national average, but considerably higher than some of its peers, including the UC Berkeley, which enrolls only 4.5 percent non-residents.  

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12 Range is 74.8% at University of Vermont to 4.4% at UT Austin. Source: Interstate Migration of College Freshmen 1986 to 2008, Postsecondary Education Opportunity, Number 214, April 2010.
Conclusion

Washington is a growing state with a vital economy that has been sustained to some degree by an in-flow of talented workers trained elsewhere. To remain a leader in the new economy, Washington will need to continue attracting some of the best and the brightest from around the world. However, it also will need to do a better job of educating more Washington residents to fill many of these well-paying positions.

From a practical standpoint, ensuring that Washington’s postsecondary education system can continue to serve the state’s residents is an important factor in maintaining the public support necessary to preserve and grow our state institutions. From a broader perspective, the economic vitality of the state depends upon our ability to continue to attract the educated and trained workforce needed to fuel the state’s emerging and growing industries. In a competitive environment, ensuring adequate levels of educational capacity for our state residents is not only a question of equity but also a means to ensure we have the talent we need to attract and retain the innovative entrepreneurs and firms that will help us continue as a leader in the new economy.

Finding the critical balance between migration and development of local talent is a vexing challenge. It is really a question about where the bar should be set. Washington, like many states, has established aggressive goals to increase educational attainment levels (HECB, 2007) which would dramatically reduce the state’s dependence on imported talent. But higher education leaders and advocates have been unable to garner the support necessary in the legislature and among taxpayers to commit the resources required to achieve these goals, even in good economic times. In the current economic environment, the need to support higher education is dire.

We can reduce our reliance on highly educated workers from other states and countries in several ways: by encouraging more qualified Washington residents who are already prepared and motivated to enroll in the state’s higher education system; by addressing factors that prompt some lower-income students to seek private educations out of state; and by better preparing underserved populations to access the higher education system.

Taking these steps will help Washington achieve the state’s master plan goals for higher education. Perhaps even more importantly, it will help raise the level of economic opportunity for all Washington residents.