STEM Education Comparison – UVU, USHE and UVU Peers

This report is designed to highlight the efforts of Utah Valley University (UVU) to meet STEM education needs. Completion data from 2001 and 2009 from all STEM degree programs, as defined by IPEDS, at UVU are compared to other institutions in the Utah System of Higher Education (USHE) and UVU’s national comparable peer institutions.

2001 to 2009 Data Comparison Highlights:
- UVU led increases in STEM degrees in USHE and substantially exceeded the average improvement among our national peers
- UVU nearly tripled completions by women in STEM programs
- UVU increased completions in all STEM program clusters, leading USHE in Computer & Information Science

Overall STEM Completions

<table>
<thead>
<tr>
<th>USHE Institutions</th>
<th>Total Males</th>
<th>Total Females</th>
<th>Grand Total</th>
<th># Chg</th>
<th>% Chg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dixie State College of Utah</td>
<td>88</td>
<td>53</td>
<td>141</td>
<td>-98</td>
<td>-70%</td>
</tr>
<tr>
<td>Salt Lake Community College</td>
<td>253</td>
<td>50</td>
<td>203</td>
<td>-112</td>
<td>55%</td>
</tr>
<tr>
<td>Snow College</td>
<td>41</td>
<td>20</td>
<td>61</td>
<td>35</td>
<td>45</td>
</tr>
<tr>
<td>Southern Utah University</td>
<td>71</td>
<td>44</td>
<td>115</td>
<td>96</td>
<td>30</td>
</tr>
<tr>
<td>University of Utah</td>
<td>614</td>
<td>143</td>
<td>757</td>
<td>856</td>
<td>287</td>
</tr>
<tr>
<td>Utah State University</td>
<td>536</td>
<td>173</td>
<td>709</td>
<td>457</td>
<td>128</td>
</tr>
<tr>
<td>Utah Valley University</td>
<td>88</td>
<td>14</td>
<td>102</td>
<td>270</td>
<td>52</td>
</tr>
<tr>
<td>USHE Totals</td>
<td>1,899</td>
<td>570</td>
<td>2,469</td>
<td>2,320</td>
<td>598</td>
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</table>

<table>
<thead>
<tr>
<th>UVU Peer Institutions</th>
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</table>

Definitions and Data Sources
- 2001 and 2009 STEM completion data are from the 2001-2002 and 2009-2010 IPEDS data collection cycles. More recent IPEDS data are not comparable due to revisions in 2010 to CIP codes and STEM field classifications. Data for this report are accessible from the IPEDS Data Center (http://nces.ed.gov/ipeds/datacenter/)
- IPEDS collated STEM degree data based on designated CIP codes from the U.S. Immigration and Customs Enforcement (ICE) STEM programs list (http://www.ice.gov/doclib/sevis/pdf/stem-list.pdf)
- Six STEM Clusters were defined in the IPEDS publication “Postsecondary Awards in Science, Technology, Engineering, and Mathematics by State: 2001 and 2009” (http://nces.ed.gov/pubs2011/2011226.pdf). Five are presented in this report; the limited Science Technologies Cluster was excluded due to too few programs at USHE institutions.

Prepared by S. Robson, UVU Institutional Research & Information
Spring 2013
Female Completions in STEM

USHE Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>2001</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
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<td>-11</td>
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Change in Total STEM Awards at USHE Institutions: 2001 & 2009

<table>
<thead>
<tr>
<th>Institution</th>
<th>2001</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dixie State College of Utah</td>
<td>31</td>
<td>14</td>
<td>-17</td>
</tr>
<tr>
<td>Salt Lake Community College</td>
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<td>Snow College</td>
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<tr>
<td>Southern Utah University</td>
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<td>5</td>
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</tr>
<tr>
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<tr>
<td>Utah State University</td>
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<tr>
<td>Weber State University</td>
<td>159</td>
<td>11</td>
<td>-148</td>
</tr>
<tr>
<td>USHE System</td>
<td>690</td>
<td>559</td>
<td>-131</td>
</tr>
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</table>

UVU Peer Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>2001</th>
<th>2009</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boise State</td>
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<td>170</td>
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<tr>
<td>Cal State Northridge</td>
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<tr>
<td>Indiana University of Indiana</td>
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<td>112</td>
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</tr>
<tr>
<td>Indiana State University</td>
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<td>134</td>
<td>-39</td>
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<tr>
<td>Kennesaw State</td>
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<td>132</td>
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<tr>
<td>Metro State College of Denver</td>
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</tr>
<tr>
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</tr>
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<td>62</td>
<td>-11</td>
</tr>
</tbody>
</table>

USHE STEM Completions by Program Cluster

<table>
<thead>
<tr>
<th>Program Cluster</th>
<th>USHE Institution Completion: 2001 &amp; 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and Info Sciences</td>
<td>2001: 31, 2009: 14, # Chg: -17</td>
</tr>
<tr>
<td>Engineering &amp; Engineering Tech</td>
<td>2001: 3, 2009: 4, # Chg: 1</td>
</tr>
<tr>
<td>Biological &amp; Biomedical Sciences</td>
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</tr>
<tr>
<td>Physical Sciences</td>
<td>2001: 11, 2009: 8, # Chg: -3</td>
</tr>
</tbody>
</table>

Change in Number of STEM Completions at USHE Institutions by Program Cluster: 2001 & 2009