We wanted to come up with an allocation formula for acquisitions that was:
- More responsive to usage patterns
- Supportive of the long-term strength of the collection
- Readily understandable to campus administration
- Relatively easy to build and maintain

A presentation by the good folks from Arkansas State’s Ellis Library at the 2017 Charleston Conference provided some needed inspiration. They considered:
- Credit hours, undergrad
- Credit hours, graduate
- Courses, undergrad
- Courses, graduate
- Degrees awarded, undergrad
- Degrees awarded, graduate
- Faculty
- Average cost, books
- Average cost, periodicals

We liked their method, but...

The Math:
- weighted percentage = (value for dept. ÷ total for that column) x weight
- percent of total budget = weighted percentage for dept. ÷ total weighted percentages
- allocation = percent of total budget for dept. x available budget

Following discussion and experimentation, we changed our allocation formula.

Old data elements:
- Average of historical spending
- Add small % to cover inflation

New data elements:
- Credit hour production
- Enrolled majors
- Subject area circulation, 5-yr. avg.
- Average cost, books

While considering their approach and the data points they used, we had to keep some key questions in mind.
- Which factors would give the clearest picture of usage patterns?
- Which data would help us maintain overall collection strength?
- Could we get the necessary data?
- Could we get it easily?

Early results indicate that the new allocation formula is a success.

Responsive to usage patterns
Long-term strength of collection
Understandable to administration
Easy to build and maintain

Would an allocation formula designed for a large research library with millions of dollars work at a small ag & tech with a few thousand?

The table below shows the old and new data elements and their weights.

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>Credit Hrs. (1)</th>
<th>Enrolment (1)</th>
<th>Avg. Cost (2)</th>
<th>% Credit Hrs. (1)</th>
<th>Enrolment (1)</th>
<th>% Circulation (8)</th>
<th>% Avg. Cost (2)</th>
<th>% of Total Budget</th>
<th>allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag Engineering</td>
<td>1171</td>
<td>152</td>
<td>36</td>
<td>$110</td>
<td>5.19%</td>
<td>7.08%</td>
<td>8.76%</td>
<td>29.53%</td>
<td>$421</td>
</tr>
<tr>
<td>Ag Business &amp; Culinary</td>
<td>1819</td>
<td>271</td>
<td>379</td>
<td>$68</td>
<td>8.06%</td>
<td>11.84%</td>
<td>93.30%</td>
<td>18.26%</td>
<td>$1,095</td>
</tr>
<tr>
<td>Fisheries &amp; Wildlife</td>
<td>1076</td>
<td>279</td>
<td>213</td>
<td>$110</td>
<td>4.77%</td>
<td>12.19%</td>
<td>52.51%</td>
<td>29.53%</td>
<td>$825</td>
</tr>
<tr>
<td>Plant &amp; Animal Sciences</td>
<td>3712</td>
<td>652</td>
<td>625</td>
<td>$87</td>
<td>16.45%</td>
<td>28.48%</td>
<td>153.68%</td>
<td>23.36%</td>
<td>$1,850</td>
</tr>
<tr>
<td>Liberal Studies</td>
<td>5730</td>
<td>270</td>
<td>972</td>
<td>$92</td>
<td>25.40%</td>
<td>11.80%</td>
<td>239.10%</td>
<td>24.70%</td>
<td>$2,508</td>
</tr>
<tr>
<td>Psych &amp; Early Childhood</td>
<td>1668</td>
<td>174</td>
<td>716</td>
<td>$87</td>
<td>7.39%</td>
<td>7.60%</td>
<td>176.28%</td>
<td>23.45%</td>
<td>$1,789</td>
</tr>
<tr>
<td>Math &amp; Natural Science</td>
<td>4961</td>
<td>127</td>
<td>228</td>
<td>$88</td>
<td>21.99%</td>
<td>5.55%</td>
<td>56.15%</td>
<td>23.62%</td>
<td>$894</td>
</tr>
<tr>
<td>Business &amp; IT</td>
<td>2422</td>
<td>354</td>
<td>82</td>
<td>$103</td>
<td>10.74%</td>
<td>15.47%</td>
<td>20.22%</td>
<td>27.56%</td>
<td>$617</td>
</tr>
<tr>
<td>Totals</td>
<td>22559</td>
<td>2289</td>
<td>3251</td>
<td>$745</td>
<td>100.00%</td>
<td>100.00%</td>
<td>800.00%</td>
<td>200.00%</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

Adapting a weighted allocation formula for a different climate
April Davies, Van Wagenen Library, State University of New York at Cobleskill (DaviesAC@cobleskill.edu)