Demonstrating the Relationship between Inputs to Academic Libraries in a System and Student Success
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https://go.uncc.edu/library_system
Research Questions

1. Is there a common set of metrics that are collected across a diverse academic library system?

2. Is there a source of student success metrics for a diverse academic library system?

3. What is the relationship between inputs to both individual and groups of academic libraries in a state system and student success?

4. How might academic libraries use input metrics in relationship to student success measures?

5. What are the contributions of academic libraries to student success in a system?
Study Goals

- Demonstrate academic library impact at a system level that aligns with UNC System strategic goals.
- Align and analyze metrics across institutions with measures of student success.
UNC System Schools

- Appalachian State
- UNC Asheville
- Western Carolina Univ.
- UNC Charlotte
- UNC Pembroke
- UNC Greensboro
- School of Science & Math
- UNC Chapel Hill
- NC State
- NC A & T
- NC Central
- Eliz City State
- East Carolina
- Fayetteville State
- UNC Wilmington
- Winston-Salem State
Mission

The University Library Advisory Council … holds a deep commitment to system-wide sharing, collaboration, and leadership. ULAC leverages its combined resources and expertise to advise the UNC System Office on critical issues and to provide excellent and cost-effective collections, services, and technologies that stimulate creativity, learning, and scholarship.
UNC System Peer Groupings

UNC System Schools

Strategic Goals (2017-2022)

1. Access
2. Affordability and Efficiency
3. Student Success
4. Economic Impact and Student Engagement
5. Excellent and Diverse Institutions

ULAC 2018-2019 Strategic Plan

Goal 3

Enhance our ability to utilize learning analytics through the use of data to demonstrate the impact of System libraries on student success.

ULAC 2018-2019 Strategic Plan

Goal 3, Obj. 3

Develop a consistent methodology to enhance our ability to utilize learning analytics through the use of ACRL and other data sources to demonstrate the impact of System libraries on student success.
## 2018 ACRL ACADEMIC LIBRARY TRENDS AND STATISTICS SURVEY

### DATA SUMMARY

<table>
<thead>
<tr>
<th>REPORT DATE</th>
<th>INSTITUTION</th>
<th>PREPARED BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 28, 2019</td>
<td>University of North Carolina - Charlotte</td>
<td>Rebecca Croston</td>
</tr>
</tbody>
</table>

### STAFF

<table>
<thead>
<tr>
<th>STAFFING</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>#FTE Librarians</td>
<td>37.00</td>
</tr>
<tr>
<td>#FTE Other professional staff</td>
<td>14.00</td>
</tr>
<tr>
<td>#FTE Other paid staff</td>
<td>53.00</td>
</tr>
<tr>
<td>#FTE Student assistants</td>
<td>26.00</td>
</tr>
<tr>
<td>#FTE Total staff</td>
<td>130.00</td>
</tr>
</tbody>
</table>

### EXPENDITURES: STAFF

<table>
<thead>
<tr>
<th>STAFFING EXPENDITURES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Librarian salaries &amp; wages</td>
<td>$2,356,937</td>
</tr>
<tr>
<td>Other professional salaries &amp; wages</td>
<td>$844,533</td>
</tr>
<tr>
<td>Other paid staff salaries &amp; wages</td>
<td>$1,899,620</td>
</tr>
<tr>
<td>Student assistant salaries &amp; wages</td>
<td>$767,784</td>
</tr>
<tr>
<td>Total salaries &amp; wages (excluding fringe)</td>
<td>$5,247,874</td>
</tr>
</tbody>
</table>

### EXPENDITURES: NON-STAFF

<table>
<thead>
<tr>
<th>NON-STAFF EXPENDITURES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-time purchase of books, serial backfiles and other materials</td>
<td>$568,250</td>
</tr>
<tr>
<td>Ongoing commitments to subscriptions</td>
<td>$4,528,419</td>
</tr>
<tr>
<td>All other materials/services</td>
<td></td>
</tr>
</tbody>
</table>
Aligned all of the ACRL data from 2015 to 2018 for all institutions, but focused on select Key Metrics for this study:

- Total Library Materials Expenditures per Student FTE
- Total Enrolled Students per Library Staff FTE

Used the UNC System Dashboards to identify success metrics, including:

- Total Degrees Awarded
- Yr 1 to Yr 2 Undergraduate Retention Rates
- 6 Year FT Undergraduate Student Graduation Rates
UNC Charlotte & Peer Comparisons
UNC Charlotte …

- Large, Urban Research University
- 30,000 Students
  - 24,000 Undergraduates
- 69% Acceptance Rate
- 57% New Freshman
  - 43% Transfer Students
- 82% Year 1 to Year 2 Persistence
<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Library Materials per Student FTE</td>
<td>$194</td>
<td>$182</td>
<td>$163</td>
<td>$187</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Enrolled Students per Library Staff FTE</td>
<td>311</td>
<td>308</td>
<td>227</td>
<td>229</td>
<td>-26.4%</td>
</tr>
<tr>
<td>Number of Titles (Physical + Electronic) per Student FTE</td>
<td>111</td>
<td>80</td>
<td>96</td>
<td>85</td>
<td>-23.4%</td>
</tr>
<tr>
<td>Total Degrees Awarded</td>
<td>6,228</td>
<td>6,961</td>
<td>6,978</td>
<td>7,241</td>
<td>+16.3%</td>
</tr>
<tr>
<td>6-Year Graduation Rate</td>
<td>53.2%</td>
<td>56.7%</td>
<td>53.9%</td>
<td>58.9%</td>
<td>+10.7%</td>
</tr>
<tr>
<td>Yr 1 to Yr 2 Retention Rates</td>
<td>83.5%</td>
<td>82.5%</td>
<td>83.3%</td>
<td>81.9%</td>
<td>-1.9%</td>
</tr>
</tbody>
</table>

Library budgets have decreased, while total degrees awarded, and graduate rates have increased.
Degrees Awarded (in tens)
% Change since 2015
- ECU: 8.6% increase
- UNCC: 16.3% increase

Total Mat'ls Expend. per Student FTE
% Change since 2015
- ECU: 18.0% increase
- UNCC: 3.6% decrease

UNC Charlotte & East Carolina University
UNC Charlotte supports more enrolled students per Library Staff FTE than ECU.

% change since 2015
- ECU: 11.6% increase
- UNCC: 26.4% decrease

* UNC Charlotte Enrolled Students per Library Staff FTE  ▲ ECU Enrolled Students per Library Staff FTE
UNC System Peer Comparisons
<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
</table>
| ● NC State University  
● UNC Chapel Hill | ● East Carolina University  
● UNC Charlotte  
● UNC Greensboro  
● NC A & T ♦,* | ● Appalachian State Univ.  
● NC Central University ♦  
● UNC Pembroke  
● UNC Wilmington  
● Western Carolina Univ. |

<table>
<thead>
<tr>
<th>Group 4</th>
<th>Group 5</th>
<th>Group 6</th>
</tr>
</thead>
</table>
| ● Fayetteville State *  
● Winston Salem St. ♦,* | ● Elizabeth City State Univ. ♦  
● UNC Asheville  
● UNC School of the Arts | ● North Carolina School of Science and Mathematics |

♦ HBCU  
* Not included in analysis due to missing data.
UNC System – Affordable & Accessible
Trends suggest Total Materials Expenditures per Student FTE is on the decline.

There is disparity in Total Materials Expenditures between groups.
Total Degrees Awarded is on the rise across institutions, particularly for Groups 2 and 3.
### UNC System Peer Groupings

#### Total Materials Expenditures per Student

- **Group 1**: Decreased by 6.3% from 2015 to 2018.
- **Group 2**: Increased by 10.3% from 2015 to 2018.
- **Group 3**: Decreased by 22.5% from 2015 to 2018.
- **HBCUs**: Decreased by 37.5% from 2015 to 2018.

#### Total Degrees Awarded

- **Group 1**: Increased by 3.6% from 2015 to 2018.
- **Group 2**: Increased by 12.9% from 2015 to 2018.
- **Group 3**: Increased by 10.2% from 2015 to 2018.
- **HBCUs**: Decreased by 24.2% from 2015 to 2018.
Enrolled Students per Library Staff FTE has remained relatively stable.

There is disparity between Group 1 compared to Groups 2, 3, & HBCUs.
UNC System Peer Grouping

Total Materials Expenditures per Student FTE
- Group 1: $493, $481, $463, $462
- Group 2: $277, $278, $233, $236
- Group 3: $222, $214, $197, $173
- HBCUs: $5,358, $5,636, $5,860, $6,048

Enrolled Students per Library Staff FTE
- Group 1: 277, 278, 246, 232
- Group 2: 234, 234, 198, 195
- Group 3: 217, 187, 173
- HBCUs: 104, 103, 105, 106

Total Degrees Awarded
- Group 1: 8,325, 8,435, 8,569, 8,625
- Group 2: 5,358, 5,636, 5,860, 6,048
- Group 3: 2,608, 2,703, 2,829, 2,875
- HBCUs: 1,342, 1,040, 1,068, 1,017
How can universities use these findings?
Next Steps

1. Dig deeper into data for additional analyses.
2. Formalize process for data alignment moving forward.
3. Begin working with select campuses to gather, align, and analyze individual student metrics, much like we're doing at UNC Charlotte.
References


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