2012-2013

Statistical Profile: Philip Weltner Library

Philip Weltner Library Annual Report 2012-2013: New statistical profile for "Efficient, responsive, convenient libraries"*

The 21st century academic library is more than books housed in a support mechanism; it is a destination for both curricular and social integration. 21st century libraries, like all academic programs, are searching to find their role in the ongoing issues of retention and graduation rate. Academic libraries are a major force for good in both instances as they supply a dual support role. How to assess and articulate this role is often a challenge. Additionally, linking library resources and programs to retention and graduation rate calls for a re-examination of the use of both spaces and collections. This requirement in turn necessitates a new perspective through a more authentic statistical profile. Library success rates can no longer be confined to circulation statistics. A more robust set of data that provides a broader outlook is necessary. Re-examining the role of the library and how it relates to the goals and mission of the university and the relationship of these activities to retention and graduation rate is one means of providing a more profound perspective.

Retention and graduation rate is one of the most highly discussed issues in the educational climate today. Observation and research has indicated a significant influence and positive impact on these areas comes from a combination of factors. These include but are not limited to:

- First-year seminars
- Common intellectual experiences
- Learning communities
- Writing-intensive courses
- Collaborative assignments and projects
- Undergraduate research
- Service learning
- Internships¹

¹ Meagan Oakleaf. Value of Academic Libraries: A Comprehensive Research Review and Report. Chicago: ALA, 2010, 33.

^{*} This phrase is borrowed from a 2008 research article, "Improving Student retention: A University of Western Sydney Case Study by Geoff Scott, etc. Al.

Integration of library services into these areas indicates that library programs have a direct impact on retention and graduation rate. These impacts are most strongly achieved through:

- Curricular and behavior integration
- Frequent contact with faculty
- Consistently accessible and responsible staff
- Prompt and effective management of student queries
- Efficient, convenient, and responsive libraries ²

Academic libraries have been transformed to provide "technology and content ubiquity" as well as individualized support³ and consequently they are well positioned to engage students curricular, co-curricular, and social experiences. The challenge is to Document and articulate the value academic libraries bring to the institutional student engagement efforts. ⁴

Meagan Oakleaf in her seminal study, *The Value of Academic Libraries: A Comprehensive Research Review and Report* (2010), provides twenty-two select recommendations for librarians to use in defining and articulating the impact of the library on the 21st century academic environment including retention and graduation rate. In order to provide a better perspective on the impact of the library in these areas, it is necessary to select from the twenty-two recommendations those that most closely associate with the programs of the Oglethorpe University. These include the following:⁵

- Record and increase library impact on student enrollment personal librarian letters; Passport participation; orientations; proactive assessment tools for majors
- Link Libraries to improved student retention and graduation rates- engage in high-impact educational practices such as FYS seminars, collaborative assignments and projects undergraduate research.
- Enhance library contribution to student job success number of student FWS in library; number of student internships
- Track library influences on increased student achievement Journal of Undergraduate Research

² Ibid.

³ James G. Neal. "What Do Users Want? What do Users Need? W(h)ither the Academic research Library? Journal of Library Administration 49, 5 (2009).

⁴ Oakleaf, 35

⁵ Oakleaf, 12-17.

- Demonstrate and develop library impact on student learning assessment of library FYS sessions; customized sessions; IND class; Academic traditions
- Review course content, readings, reserves and assignments What percent of readings used in courses or co-curricular
 activities are available and accessed through the library; how many assignment do students complete that require use of
 information skills? What library services and resources enable student to do or do better?
- Demonstrate and improve library support of faculty teaching online tutorials, LibGuides; collaboration on assignments and assessment; integrate library resources into course materials.
- Record library contributions to overall institution reputation and prestige building collections that support faculty activity;
 scholars using special collections;
- Review course content, readings, reserves, and assignments rack the integration of library resources into the teaching and learning process what percent are available through the library;
- Create Library assessment Plans –

Re-defining and articulating the impact of the library on the campus community provides an opportunity to see the correlation between the two. Similarly, a statistical profile that reflects the library services that students frequent is more helpful than relying only on circulation stats as the benchmark for library relevance. Adding to that profile the use of spaces for collaboration and projects performed in the library indicates ways in which the library contributes to student interaction. The hallmark of the library in the 20th and 21st century has been its role in information literacy. The importance of information literacy and how it supports the academic mission cannot be over emphasized.

"Most academic library student learning outcomes focus on information literacy, a concept that has been described as the core literacy of the 21st century by some and included as a key factor of other definitions of 21st century skills. " ⁶ Information literacy skills directly relate to student learning skills. They are perhaps one of the most serious components of critical thinking. Librarians assess these skills in their own sessions. By expanding these assessments to classroom projects and activities, a greater understanding can be gained of the ways in which information literacy skills and academic skills support and reinforce each other. "74% of institutions say their general learning outcomes include critical thinking, 59% include information literacy and 51% include research skills." These elements of academic skills relate directly to the university goals.

⁶ Oakleaf, 38.

⁷ Ibid.

Part I Relationship Between Library Goals and University Mission

One of the key elements in the missions and goals of the university is the word "engaged". "Strategies for increasing retention, and ultimately graduation rates, center on helping students engage with other students and educators." As Steven Bell has pointed out in his article "Keeping them Enrolled: How Academic Libraries Contribute to Student Retention, "strategies for engaging students include aspects that revolve around people.

The library provides an environment that supports and augments the academic program and student life in general. Through an array of services, equipment, and spaces, support is perpetuated. Furthermore, the library provides the necessary environment for a wide assortment of collaborative projects and presentations ranging from the annual psychology testing to Science Palooza and the Liberal Arts and Sciences Symposium.

Figures 1 - 1 c provide a visual representation of the library goals and their support of the university goals. These goals are specific to the plan for the 2012-2013 academic year. A full assessment of the results of these goals can be reviewed in the library annual report for 2012-2013.



Science Palooza 2013

⁸ Steven Bell, "Keeping them Enrolled: How Academic Libraries Contribute to Student Retention." Library Issues, 29, 1 (2008), 2

Figure 1a. Relationship of Library Goals to University Mission



Prepare students to engage with a global society through the increased internationalization of our campus population and program offerings.

Related Library Goal

- 1. Update and redesign the information literacy program to reflect a 21st century global learning environment.
- 2. Rewrite the librayrmission statemnt and long-term department goals to relfect the same.

Engaged Campus Community

Enhance campus infrastructre, faclities and programs to foster deeper connections among all members of our community

Related Library Goal

1. Develop a computing environment supporting direct user access for all students, faculty and staff regardless of location and time and reflecting service linkages among complementary units to support teaching and research

Figure 1b. Relationship of Library Goals to University Mission

Engaged Diffference

Enhance Programs that educate students to be informed and active citizens.

1. Redesign the information literacy program for the 21st century global environment

Enngaged Campus Community

Enhance campus infrastructre, facilties and programs to foster deepr connections among all members of the community

1. Implement the Journal of Undergrduate Education to promote student research and access to that research in a global online enviornment

Figure 1c. Relationship of Library Goals to University Mission

Engaged EnngalgedLiving Life Proivde necessary support systems to ensure student academic success Ensure that every student has the opportunity to complete one or more internships related to his or **Related Library Goals** her field of study 1. Implement an effective, measuable information literacy program that prepares all graduates to be critical thinkers, and life long learners who can identify, access **Related Library Goals** and use resources effectively in a 1. Provide internships in archival vareity of formats. adminsitration and digtial scholarshhip to prepare students for jobs in related fields of study. Use library network to assist in finding related opportunities for similar experiences in the libray and archival communtiy.

Part II - The library impact on university goals

"It is important for ...libraries to decide what their outcomes should be and to determine how to connect measures and statistics to those outcomes at both the library and the university levels." Following the advice of assessment expert, Bonnie Gratch-Lindauer, the Philip Weltner Library emphasizes the following:

- Connectivity between library resources and services and institutional goals
- Effects of resources and services on users
- Assessment data and its relationship to institutions' goals ¹⁰

Library resources and services support authenticate university goals by direct contribution to the learning environment both in quality and quantity. Resources, space, classroom support and integration of library services into the curriculum are a few of the ways in which the library contributes. By supporting the long term goals of the academic program the library supports and contributes to institutional effectiveness. The following resources and services are in direct support:

- Information Literacy Program
- Network and /or electronic resources and services
- FYS orientation Sessions
- Customized searching sessions for faculty
- Ad Hoc searching sessions
- For credit Academic Research Class
- Teaching/ instruction space and equipment
- Study space and collaborative learning areas
- Maintenance of resources for online course management systems
- Collaboration with academic program
- Support of student learning outcomes

⁹ Bruce T. Fraser,et Al., "Toward a Framework for Assessing Library and Institutional Outcomes." *Libraries and the Academy*, Vol2, No. 4 (2002) 505.

¹⁰ Ibid, 516.

The effect of resources and services on users begins by clarification of the library audience. The library audience at Oglethorpe University includes, students, graduate students, staff, faculty and administration; outside the community visitors; visiting scholars; EF students and staff. Users visit the library environment for a variety of reasons supported by an array of services and resources both electronic and print. The library audience comprised of the OU community is impacted in the areas of:

- **Student Learning** integration into the course syllabi; library use as part of the curriculum; library's role in instructing students in information literacy skills develops the ability to access, evaluate, incorporate; relationship between information literacy and critical thinking skills practice in finding and criteria- based evaluation of resources;
- **Student Achievement** Journal of Undergraduate Research; HEDS test; Information Literacy Instruction; Reading; Critical Thinking; Science Reasoning; Academic Traditions Classes; paper preparations; resources access; sustaining a scholarly environment; student internships.
- **Student Success** job ready skills; life-long learning skills; publication experience; research skills; digital initiative skills; internships- archives, digital; Career experience; FWS job experience; Research experience; Publication in the Journal of Undergraduate Research; Applied Technology; Information Literacy Instruction

Figures 1-3 indicate ways in which the library and its resource and services relate to key elements of the university's mission. These include the 3 elements above and a more protracted perspective relating to student retention and graduation rate.



Figure 1. Library impact on Student Retention

- Library Expenditures
- Collection Values
- Collection use, physical and online
- Space Use
- Services ILL, Reserves, Reference, circulation, course web sites
- Service use instruction, integration of library resources and services into
- course syllabi, course web sites

- Personal librarian letters to new students
- Participation in Passport Sessions
- Services ILL, Ref., Reserves, course web sites, LibGuides
- Services use
- Space Use 24 hour study room, individual & group studies, extended hours
- Collection Use GALILEO, print, ILL

- Tutorials
- Academic Traditions Classes
- Resource logins

Enrollment in for credit library instruction classes

- Space Use
- Information Literacy Instruction Sessions
- FYS instruction sessions
- Ad Hoc instruction sessions
- Extended hours

Student Success

Student Success

Achievement

Student Learning

Internships – archives, digital

- Career experience
- FWS job experience
- > Research experience
- Journal of Undergraduate Research
- Applied Technology
- ➤ Information Literacy Instruction Searching skills set
 - Critical thinking skill set
 - Evaluation skill set
 - Incorporation skill set
- Use of resources

- Journal of Undergraduate Research
- ➤ HEDS test
- Information Literacy Instruction
 - Reading
 - Critical Thinking
 - Science Reasoning
- Use of resources

- Library Assessment
- EDP library survey
- Faculty library survey
- Student focus groups
- Use of resources

Part III – Assessment Data and its relationship to Institutional Goals

Libraries have traditionally collected input and output data to indicate the ways in which they support the academic community. Traditionally these sets of data emphasize collection size and use. This set of information is invaluable but incomplete in formulating the impact of library programs and linked support of university goals, especially those that center on student learning. The library's "role must now include the provision of high-quality services to address the community's information needs as well as measure what students have learned." ¹¹

Figure 3. *







Resource Level (input)

What do we need to ensure success?

What funding level is appropriate?

Do we need more of a particular resource?

Use/Capacity Level (output)

How much are services and resources being used?

Who is using them?

Why are they using them?

Outcome Level

What are the results of a program or process?

What benefical effect are you having?

How can a program/service be changed to become more effective?

¹¹ Robert E. Dugan and Peter Hernon, "Outcomes Assessment: Not Synonymous with Inputs and Outputs." The Journal of Academic Librarianship 28, 6, 377

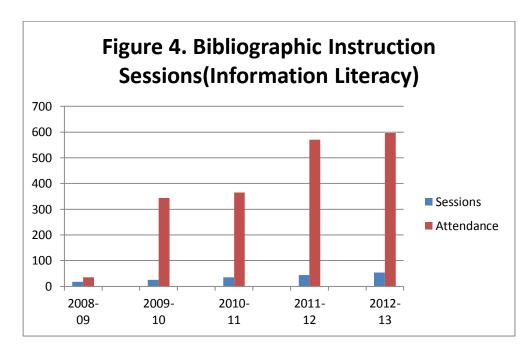
*This chart was created using a model from Bruce T. Fraser, "Toward a Framework for Assessing Library and Institutional Outcomes." Libraries and the

^{*}This chart was created using a model from Bruce T. Fraser, "Toward a Framework for Assessing Library and Institutional Outcomes." *Libraries and the Academy, (2002) 2, 4,522.*

Measuring what students learn is an activity that creates many challenges. For the library, the use and application of the information literacy program is the first means of measuring student learning. Information literacy is based on a series of progressive, linked activities that form a set of core competencies or requirements.

- Formulate and state a research question
- Determine the information requirements for question, problem, issue
- Locate, retrieve information in its various formats
- Organize information in a concept that permits analysis, evaluation, synthesis
- Create and communicate information effectively using various media
- Understand the ethical, legal and socio-political issues surrounding information
- Understand the techniques, points of view and practices employed in the preservation of information from all resources

Staff of the Philip Weltner Library has been actively engaged in fine tuning the Information Literacy components of the library's assessment profile. Information Literacy has been insinuated into the academic program since 2003. Gathering and creating data from a variety of surveys, tests, program and services has culminated in the ability to formulate a program that accurately fits the mission of the university and the goals of the academic program. Finding appropriate direct measurement and data collecting tools has also been part of the ongoing study to inject and measure information literacy. Figure 4 shows the growth in number of sessions given annually and attendance at the sessions.



	2008-09	2009-10	2010-11	2011-12	2012-13
Sessions	18	25	35	44	54
Attendance	35	344	365	571	596

Over the past two assessment cycles, the library has identified and tested several direct measurement and data gathering tools. These tools were utilized to find a significant in-house tool and a similar national measuring tool. The in-house tool is a measurement rubric that responds to the campus profile while the national tool provides a measurement of comparisons. The in-house measuring tool was created by Reference Librarian, Laura Masce Sinclair. Ms. Sinclair attended the prestigious *ALA (American Library Association) Emersion Program* in 2012. Returning from this in-depth and intense study program, she created an in-house measuring tool —rubric—customized to fit the needs of the OU campus and the segment of the information literacy scale that the library was interested in gauging. (Appendix A)

After a year of research and study the librarians decided to adopt the **HEDS** (Higher Education Data Consortium) as the primary national scale testing tool for library research skills. HEDS has been used since 2012 to test various segments of the student body. Using the data that resulted and calculating it with the number of responses, the librarians have decided to implement the HEDS test twice a year to the entire student body in order to receive a significant pool of responses. Data from the 2012-2013 testing is being used to calculate and record some significant comparisons with the **NSSEE** test.

In addition to the HEDS test and the in-house rubric, another measurement of student learning is being employed. This is embedded assessment using assignments in a variety of courses. For the fiscal year 2012-2013 the library used embedded assignments in the following classes:

Name of Course	Learning Outcome	Over all % score	
Honors 101	Embedded assessment	78%	
INT 201	Embedded Assessment	80.4%	
Core 310	Embedded Assessment	46%	
Core 401	Embedded Assessment	68%	

The library employs the following direct measures of student learning:

- 1. Higher Education Data Consortium (HEDS test)
- 2. Embedded assessment using academic assignments (using in-house rubric to measure success)

The library seeks to be "efficient, convenient and responsive" to students and the campus community. This year's new statistical profile highlights the ways in which the library responds to student retention either through use of resources, services or space. Additionally, it emphasizes those resources and services that are **high-impact on student learning**, **success and achievement**. The library will continue to provide proactive service to the academic program as well as integrate the library into an array of campus based activities. The library will collect and analyze data through which an aggregate will provide a more in depth view of the ways in which the library works with the academic programs to ensure that students develop critical thinking skills, the ability to evaluate

resources and the ability to incorporate resources into their research. These life long learning and job ready skills are the foundation of information literacy. The library's plan for 2012-2013 and the final report for the year can be read in the Library Annual Report 2012-2013.

The new statistical profile report for the annual is organized into the following areas:

I Resource Level (input)

II Use/Capacity Level (output)

II Outcome Level (Student learning, achievement)



I Resource Level (input)

- What do we need to ensure success?
- What funding level is appropriate?
- Do we need more of particular resource?

To ensure success, the library makes available a wide array of **electronic /networked services and print resources** that support the information needs of the university's learning environment. Networked services include the ability to provide off-campus access to library electronic resources through a gateway maintained and manipulated by library expertise. The major networked resources and print materials are comprised of electronic databases, books, DVDs, and digital resources.

The library provides access to more than **305 databases (full text, indexes, or abstracts of electronic journals)** via the GALILEO Gateway. These databases are acquired at reduced cost through membership in the following consortiums:

- AMPALS
- GPALS
- ARCHE
- LYRASIS

In addition to the electronic access through GALILEO, the Philip Weltner Library subscribes to noteworthy databases exclusively for Oglethorpe. These include but are not limited to:

- Cambridge Companions Complete Collection
- JSTOR
- JSTOR Plant Science Collection
- New Media and Society Journal
- Opposing Viewpoints in Context
- Oxford Dictionary of National Biography
- Oxford English Dictionary
- Project Muse
- Science Direct Health and Life Sciences Journals Collection (College Edition)

The process for selecting and adding new databases is faculty and program driven. This ensures a high level of resource use through a direct relation to faculty assignments and expertise.

Networked services include the ability to use electronic resources on and off campus. Monitoring logins, data transfers, connectivity stability, IP address updates, updating and running downloads of programs, are all supplied by library expertise. Librarians work with IT support to create and monitor dependable data transfer programs, accurate logins, and record transfers. In addition, an excellent working relationship with the staff at GALILEO ensures student success in connecting to the databases. Library staff must be proficient in operating both the library online system, Voyager, and the campus system Datatel. Librarians spend time and expertise in assisting students with multiple forms of services and resources that are directly related to electronic formats or services delivered through electronic formats. These include:

- creating webpages or research guides for faculty,
- providing and embedding links to journal articles,
- creating and maintaining the electronic reserve system for the campus,
- interlibrary loan online article delivery
- day to day electronic data maintenance (rebooting machines, troubleshooting logins)
- printing assistance
- scanning assistance
- database access
- online tutorials
- Journal of Undergraduate research

Off campus access to library resources is supplied through a program data exchange between Datatel and Voyager. The integrity of records provides a smooth transfer of data. Once the data exchange occurs, students are able to check out materials and access databases on and off- campus. In addition they are able to connect and use a growing collection of e-resources, eBooks in particular.

Studies have shown that **eBooks** are most often used when required for class assignments. Further study indicates faculty is frequently the catalyst to the use of eBooks. ¹² Although the general use of eBooks has not taken on the revolutionary proportions often predicted, there is a steady growth in their acquisition. Over the course of their development, eBooks have become more flexible in use and access. From an economic perspective, eBooks are expensive. The average cost of a book is \$52. The average cost of an eBook is hard to estimate as cost is associated with type of access. For example, an eBook purchased with a license for single user may cost \$50. Upgrading to multiple users may drive the cost \$175. In some instances, eBooks are subscriptions requiring annual renewal.

Currently, the EBSCO model which the Philip Weltner Library subscribes to allows for a variety of prices depending on the tier of access. Items are purchased in perpetuity and are accessible through MARC records embedded in the online catalogue. This system makes access seamless for students and faculty. Library staff is instrumental in providing access and connectivity to these electronic records which have to be downloaded into the system and tested for connectivity. Faculty-library collaboration in 2012-2013 has created an EBook collection of CORE titles. The 26 titles purchased include all major core text currently available in eBook format.

The Philip Weltner Library currently subscribes to 15, 023 eBooks. Access is available through the library's online catalogue. The chart in figure 6. provides the use rate of eBooks from the EBSCO provider for the past fiscal year.

Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total E-Books at EBSCOhost Searches 1,224 2,343 1,982 1,122 1,776 2,817 **Full-Text Views** Link Chosen **Citation Views**

Figure 6. EBook Use - Oglethorpe University 2012-2013

¹² Judith Brook and Anne Salter, "E-books and the Use of E-book Readers in Academic Libraries: Results of an Online Survey." *Georgia Library Quarterly*, Vol 49, is. 4, Articles 10.

In addition to electronic resources, the print collection is also utilized and augmented annually through purchase or through gift. Multi-media is also popular especially DVD format. Purchases are faculty driven. The chart below provides an overview of resources added to the collection in 2012-2013:

Type - Books	Amount
• Gift	1,481
• Purchase	460
Type – Multi Media	
• Gift	25
Purchase	162

A final tier of electronic resources is the **digital collection**. Over the past few years, the library has either created and scanned materials into the host system, ContentDM, or has worked with an agency, LYRASIS, using grant monies to scan and upload materials of significance into the digital archives. Currently the holdings reflect the following:

Name of Collection	Type of resource	Dates Covered
Yamacraw	Publication - Year Books	1920-2008
Athletics Photographs	Images	200 hundred original photos various dates
Yamacraw Athletics Images	Images from yearbooks	500 images from the yearbooks
Buildings and Grounds of Oglethorpe University	Images	1912-1927
Campus Life in the 1950s	Images – Edmund Bator, photographer	1950s
Stormy Petrel	Publication - Newspaper (student)	1993-1994; 1994-1995
The Flying Petrel	Publication - Newspaper (alumni)	1956-1971
Course Bulletins	Publications - Bulletins	1916-1942; 1965-2012
The Carillon	Publication - magazine	2004-2010

4,178 unique users visited the collections this year via ContentDM. *The Yamacraw* collection received 574 hits making it the most highly used with *The Carillon* placing second. The university based unique resources are also available through a link in the Digital Library of Georgia making them accessible from a high profile national database.

Funding and Acquiring Resources

Funding levels for resources are targeted at database acquisition first followed by print and media. The addition of major new resources is always a product of analysis based on campus need. Recent database additions are listed below.

Name of Data Base	Description
Philosopher's Index	The Philosopher's Index, considered the most thorough index of journal literature on the subject, features author-written abstracts covering scholarly research published in journals and books, including contributions to
	anthologies and book reviews. The database covers the fifteen fields of
	philosophy: aesthetics, axiology, philosophy of education, epistemology, ethics, philosophy of history, philosophy of language, logic, metaphysics, philosophical anthropology, metaphilosophy, political philosophy, philosophy of science, social philosophy, and the philosophy of religion.
*Cambridge Companions Complete	Cambridge Companions Online brings together subject-based collections of Cambridge titles, making them available together online for the first time. •The Cambridge Companions to Literature and Classics •The Cambridge Companions to Philosophy, Religion and Culture •The Cambridge Companions to Music
Opposing Viewpoints	This database can help with writing a critical essay, researching a report or term paper, or preparing for a debate. This database covers a variety of reference materials, commentaries and viewpoints, periodical and news articles, primary sources, statistics and multimedia.
**Science Direct	Science Direct Health and Life Sciences Journals Collection features full-text access of over 950 current Elsevier journals in the health and life sciences, covering 1995-2012.
PsychArticles	The database contains more than 137,000 articles from 66 journals published by the APA, its imprint the Educational Publishing Foundation (EPF), and from allied organizations including the Canadian Psychological Association and the Hogrefe Publishing Group. It includes all journal articles, book reviews, letters to the editor, and errata from each journal.
PsychINFO	The database also includes information about the psychological aspects of related fields such as medicine, psychiatry, nursing, sociology, education, pharmacology, technology, linguistics, anthropology, business, law, and others. Journal coverage, which spans from 1887 to present.

^{*}Recent database acquisition for English and Communications but cut across disciplines in all the humanities **Recent acquisition for Science

Acquiring and adding additional resources are best achieved through input from faculty, students and staff. The director of the library serves on the APC where new courses are discussed and approved. Additionally, faculty works directly with the director of the library and the acquisitions librarian to identify and procure new resources. For example, through faculty and library staff collaboration, 17 new titles were added for the Latin American studies; 42 titles were identified for the new World Literature class; and 49 titles were identified for the sports management class. A collaborative approach for adding new resources is the most effective, especially one that improves or relates to highly populated university majors and new programs.

Library services related to electronic delivery and format include instructional services, acquisitions, online cataloging, interlibrary loan, access to online catalogs materials, digital initiatives access, and access to all electronic databases. These services are part of the technological support system of the library program and are interrelated with the DATATEL system. An array of effective and relevant databases adds prestige to the university. It also becomes a selling point for perspective students and a retention mechanism for student success. Excellence in resources and effective access to resources and services attract and retain students and faculty. In addition, they can provide alumni with life-long learning resources available to them in the library. Further, instructional services (information literacy) have been shown to have a strong correlation between student success, retention and graduation rate.¹³ "Service involves…an instructional and learning role, especially as academic libraries promote information literacy, critical thinking and problem solving, and play an important role in the educational process and in advancing research and scholarship." ¹⁴

The Philip Weltner Library is experiencing an increase in the number of information literacy sessions (bibliographic instruction) with individual classes, a growing number of sessions and students in the FYS library orientations (see figure 4),and a more reflective experience with the first for credit academic research class (Spring 2013). The resulting data from these services provides data for "outcomes" assessment. "Outcomes assessment refers to a change in behavior, skills, knowledge, perceptions or attitudes resulting from contact with library programs, training sessions, workshops or services. " ¹⁵ Outcomes assessment indicates the impact of library services on learning.

¹³ Jean Cook. "A Library Credit Course and Student Success Rates: a longitudinal study." College and Research Libraries News. Unpublished manuscript.

¹⁴ Peter Hernon. "Outcomes are Key but Not the Whole Story." *The Journal of Academic Librarianship*, 28, 1, 54.

¹⁵ Ibid.

II Use/Capacity Level (output)

- How much are services and resources being used?
- Who is using them?
- Why are they using them?

The data and related charts that comprise the majority of this section indicate the use of resources and services for the past fiscal year in addition to comparative charts from previous years. The GALILEO usage reports show a growing increase in usage. There are several reasons and correlations for this growth:

- Increase in the number of assignments requiring peer-review resources
- Increase in the number of students at OU
- Increase in the number of information literacy sessions (service) to students
- Increase in gathering assessment data and its relevance to the academic program
- Faculty influence in resource selection
- For credit academic research class

The use of resources is primarily classroom and project related. However, use of library space, resources and equipment is part of a wider picture relating to institutional impacts in the area of:

- Student
- Faculty
- Community

In addition to input and output data, the Philip Weltner library reports on the significance of their services (outcomes). The library staff will continue to apply survey tools to assess and evaluate services. In addition they will strive to create a reliable and tangible set of data resulting from information literacy sessions. Quality of services is directly related to student success. The library can no longer be measured by the number of books it has checked out. The wide array of services and resources prohibits such a contracted perspective.

Chart 1 - USE OF LIBRARY RESOURCES - Database Participation 2012-2013

Resources type: Database Vendor: Philip Weltner Library ACCESS: Library homepage

*Library Research Guides (LibGuides)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	TOTAL
Accesses	510	955	1,532	1,223	1,155	702	686	1,075	1,170	1,235	773	501	11517

^{*}These are in-house guides created by the librarians to support academic programs. These customized guides can range in topic and detail from the writing and citing guide to customized instructions on how to access GALILEO for EDT students.

Resource type: Database

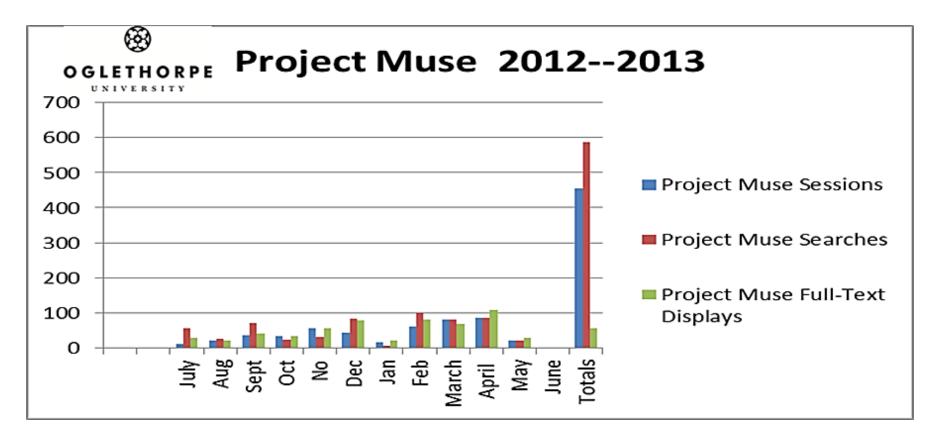
Vendor: EBSCO ACCESS: GALILEO Chart 2 - EBooks

*EBooks	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Total</u>
Searches	76	49	157	1,224	2,343	1,982	399	1,122	1,776	2,817	1621	411	13977
Full-Text Views	7	19	37	62	100	79	24	31	78	63	54	6	560
Link Chosen	6	11	20	19	25	16	10	22	17	21	17	4	188
Citation Views	8	28	75	113	181	159	58	50	183	145	112	12	1124

^{*}EBooks are integrated into the library online catalogue. Students discover them in the same way in which they would discover a print copy.

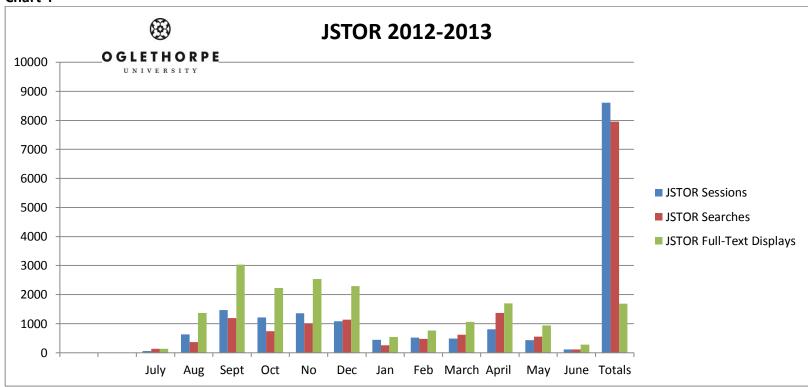
Resource Type: Database Vendor: Philip Weltner Library

Access: GALILEO



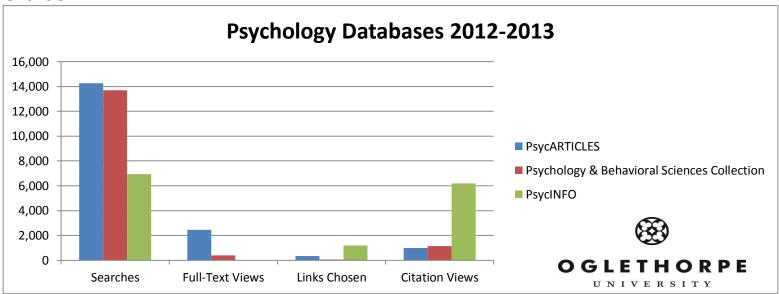
Resource Type: Database Vendor: Philip Weltner Library

Access: GALILEO



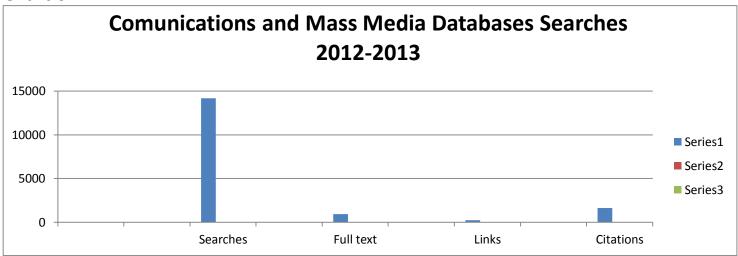
Resource Type: Database Vendor: Philip Weltner Library

Access: GALILEO



Resource Type: Database Vendor: Philip Weltner Library

Access: GALILEO





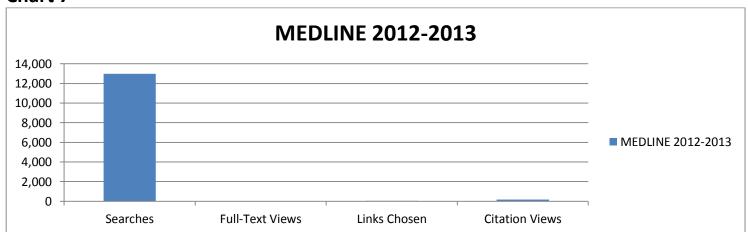
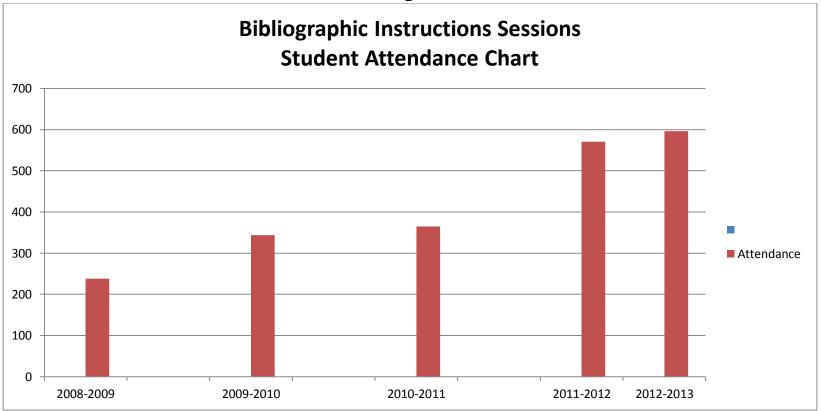


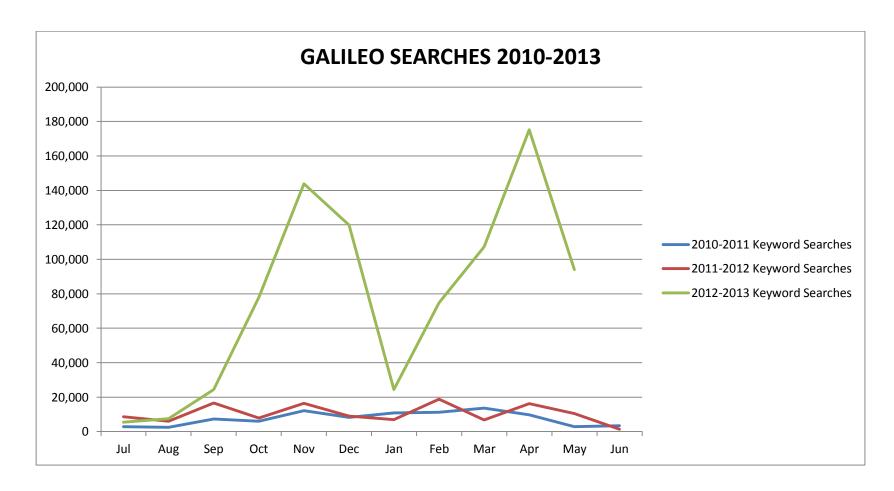
Figure 7 a.



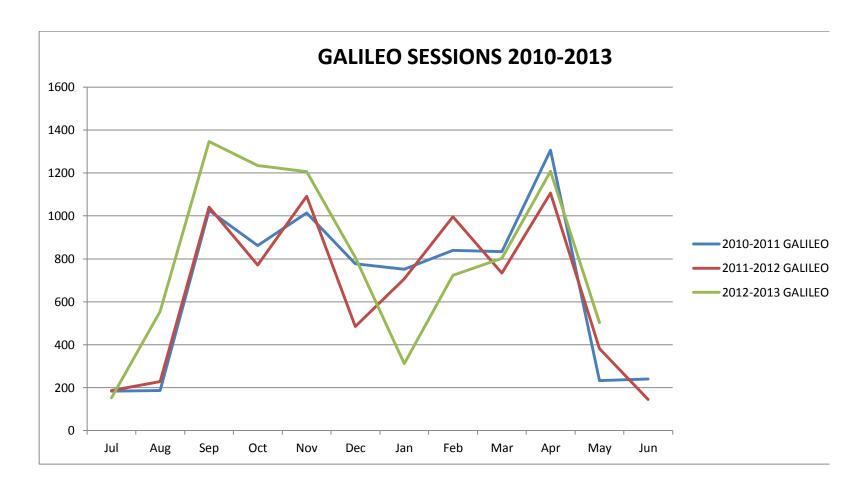
GALILEO USAGE REPORT

The increase in use of GALILEO is significant. Many factors contribute to the use of the databases in the GALIEO. These include but are not limited to the follow:

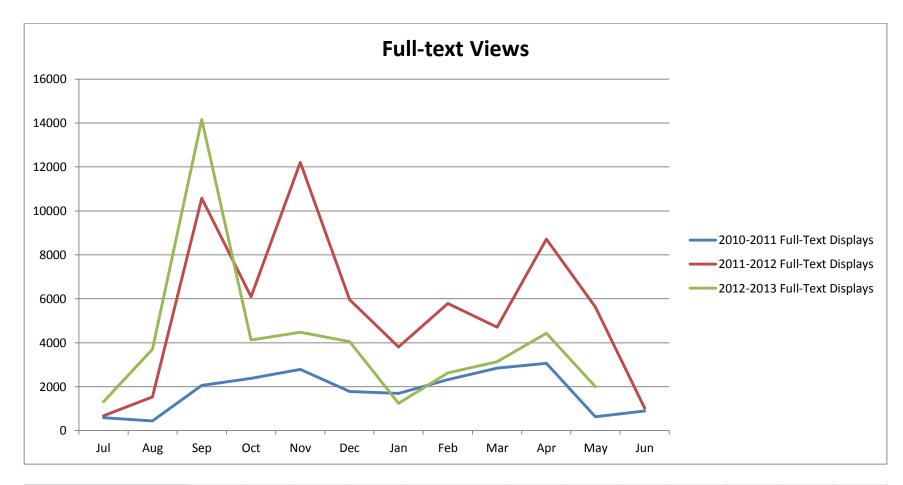
- 1. Increase in specific assignments by the faculty that require students to use scholarly resources
- 2. Increase in the number of Library Instruction sessions that help student's access scholar resources
- 3. The increase in student ability to navigate and use GALILEO as a result of instruction sessions
- 4. Use of data from faculty and student surveys that pinpoint areas in library services that need to be emphasized
- 5. More personal contact of librarians with faculty and students
- 6. Integration of information literacy into the curriculum through librarians:
 - a. team teaching in honors
 - b. teaching in FYS
 - c. teaching a research class
 - d. collaborating with faculty on assignments
 - e. Use of engaging pedagogical equipment



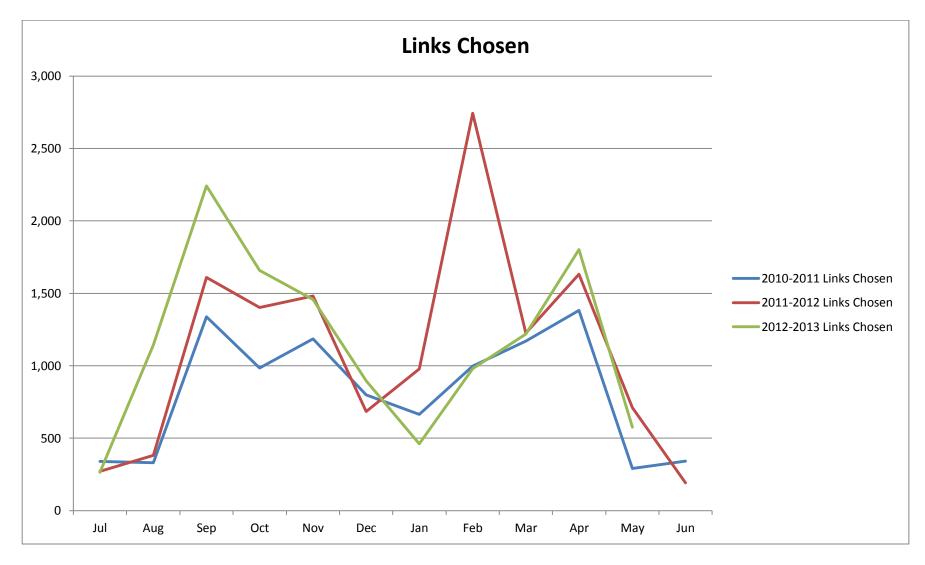
	<u>Jul</u>	Aug	Sep	<u>Oct</u>	Nov	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Total</u>
2010-2011 Keyword Searches	2,852	2,452	7,305	5,950	12,053	8,211	10,914	11,262	13,566	9,643	2942	3472	90622
2011-2012 Keyword Searches	8,527	6,072	16,539	7,935	16,340	8,981	6,965	18,886	6,814	16,309	10,447	1,418	125233
2012-2013 Keyword Searches	5,406	7,592	24,377	77,869	143,857	119,883	24,463	74,692	107,226	175,306	94,108		854779



	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	Nov	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	Mar	<u>Apr</u>	May	<u>Jun</u>	<u>Total</u>
2010-2011 GALILEO Sessions	184	187	1,026	862	1,014	777	751	840	834	1,306	233	241	8255
2011-2012 GALILEO Sessions	186	229	1,041	771	1,092	485	707	996	734	1,106	382	145	7874
2012-2013 GALILEO Sessions	152	555	1,347	1234	1,206	807	312	723	803	1,207	503		8849



	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	May	<u>Jun</u>	<u>Total</u>
2010-2011 Full-Text Displays	581	439	2,054	2,385	2,781	1,775	1,692	2,322	2,837	3,067	631	895	21459
2011-2012 Full-Text Displays	680	1,529	10,583	6,097	12,209	5,961	3,802	5,791	4,713	8,715	5,623	1,025	66728
2012-2013 Full-Text Displays	1317	3,708	14,163	4,122	4,472	4,053	1,241	2,621	3,142	4,436	2,006		45281



	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	May	<u>Jun</u>	<u>Total</u>
2010-2011 Links Chosen	340	331	1,337	985	1,185	799	664	998	1,170	1,382	290	342	9823
2011-2012 Links Chosen	271	382	1,609	1,403	1,482	685	979	2,744	1,226	1,633	711	191	13316
2012-2013 Links Chosen	265	1,144	2,242	1,659	1,457	896	460	981	1,219	1,802	576		12701

III Outcome Level

The library's information literacy program impacts most in the area of student learning, success and achievement. Outcomes can be measured in a number of ways. Oglethorpe University uses several direct measurements of student learning. These include NSSE, FSSE, HEDS and an in-house rubric designed to measure the acquisition of information literacy standards (see appendix A). The tables below show those questions from NSSE that correspond most closely to information literacy. Although they are not exact or even equivalent matches, these scores should show improvement as the information literacy program increases.

The tables reveal that by the senior year improvements have been made.

Table 1: Selected NSSE Items - percent responding "often" or "very often "for Activity during Current School Year

	2010 Freshmen	2010 Seniors	2011 Freshmen	2011 Seniors	2012 Freshmen	2012 Seniors
Worked on a paper/project requiring integrating ideas or information from various sources	82%	91%	72%	95%	71%	91%
Used electronic mediums to discuss or complete an assignment	54%	54%	39%	68%	39%	52%

Table 2: Selected NSSE Items – percent responding "Quite a bit and "Very Much" for *During the School Year how much has your course work emphasized*

	210	210	2011	2011	2012	2012
	Freshmen	Seniors	Freshmen	Seniors	Freshmen	Seniors
Synthesizing and organizing ideas, information, or experiences	85%	89%	71%	90%	81%	85%
Making judgments about the value of information, arguments, or methods	83%	88%	65%	86%	76%	87%

Table 3: Selected NSSE Items – percent responding "Quite a bit" or "Very Much" for question *To what extent does your institution emphasize*

	2010 Freshmen	2010 Seniors	2011 Freshmen	2011 Seniors	2012 Freshmen	2012 Seniors
Using computers in academic work	73%	79%	70%	78%	66%	66%
Thinking critically and analytically	88%	95%	80%	95%	86%	96%
Using computing and information technology	67%	58%	45%	66%	48%	39%

Table 4: Selected FSSE Items – percent of faculty responding "Quite a bit "or Very much" for question *To what extent does your institution emphasize each of the following* –

2006	Lower Division	Upper Division
Encouraging student to use computers	65%	65%
in their academic work		

Table 5: Selected FSSE Items – percent of faculty responding "Often" or "Very often" for question How often do students in your selected course section engage in the following:

2006	Lower division	Upper Division
Use an electronic medium (listserv, chat	25%	32%
group, Internet, instant messaging, etc.)		
to discuss or complete an assignment		

Table 6: Selected FSSE Items – percent of faculty responding "Important" or "Very Important" for question In your selected course section, how important to you is it that your student do the following?

2006	Lower Division	Upper Division
Work on a paper or project that requires	75%	95%
integrating ideas or information from various sources		
Work with classmates outside of class to prepare class assignments	35%	53%

Table 7: Selected FSSE Items – percent of faculty responding "75% or more" to the following?

	Lower Division	Upper Division
what percent of class time is spent on	0%	0%
student computer use		

Table 8: Selected FSSEE Items – percent of faculty responding "quite a bit" or "very much" to in your selected course section, how much emphasis do you place on engaging students to each of these mental activities?

2006	Lower Division	Upper Division
Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships	95%	100%
Making judgments about the value of information, arguments or methods such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	70%	84%
Applying theories or concepts to practical problems or in new situations	95%	84%

Table 9: Related HEDS Data to Questions on use of library:

Most Frequent Reason	Oglethorpe	All Other	Oglethorpe	All other
for using the library	2011	2011	2012	2012
Non-academic, leisure	11%	17%	23%	16%
academic course work	35%	33%	26%	35%
Other academic work –	48%	45%	42%	41%
studying, homework, group				
project				

Table 10: Related HEDS Data to percentage of student's answering "5 or more to "

	Oglethorpe	All Other	Oglethorpe	All Other
	2011	2011	2012	2012
how many assignments,	51%	48%	50%	47%
papers or research				
projects have you				
completed in the past				
academic year that				
required you to include				
at least three sources in				
a bibliography,				
references or works				
cited list? "				

Table 11: Related HEDS Data to Question for types of library electronic resources used:

	Oglethorpe	All Other	Oglethorpe	All other
	2011	2011	2012	2012
Online Sources used:	86%	90%	80%	90%
Google, Yahoo				
Online Sources Used:	86%	74%	119%	125%
Online library catalog +				
online journals				
Online indexes and	55%	51%	53%	51%
databases				

Table 12: Related HEDS Data to Question for types of library print resources used:

	Oglethorpe	All Other	Oglethorpe	All Other
	2011	2011	2012	2012
Print Sources used:	77%	79%	73%	78%
books				
Print Sources Used:	41%	59%	53%	57%
encypd.,dictionaries, etc.				
Print Sources Used:	52%	46%	46%	44%
Academic Journals				
Print Sources:	32	46%	30%	48%
newspapers or				
magazines use				

Table 13: Related HEDS Data for percent of students responding "Often" (2012) Or "Almost Always" (2011) to:

	Oglethorpe	All Other	Oglethorpe	All other
	2011	2011	2012	2012
in the past academic year	70%	73%	69%	76%
when you were given				
research project				
assignments, how often				
were you required to use				
a specific format? (ALA,				
MLA, Chicago, etc.)				

Table 14: Related HEDS Data for percent of students responding "Very Easy" or "Somewhat Easy" to How challenging are the different components of research for you?

	Oglethorpe	All Other	Oglethorpe	All Other
	2011	2011	2012	2012
Narrowing a topic	67%	67%	69%	77%
Developing a list of	66%	70%	65%	77%
sources to investigate				
Developing a thesis	58%	55%	65%	72%
statement				
Documenting your sources	80%	73%	84%	73%

Table 15: Related HEDS Data for percent of students responding "Very Easy" or "Somewhat Easy" to *How challenging is it for you to identify and retrieve sources:*

	Oglethorpe	All Other	Oglethorpe	All Other
	2011	2011	2012	2012
Using an electronic index searches (Proquest)	62%	59%	56%	55%
Using an Internet search	91%	94%	87%	93%
Physically locating materials in a library	69%	72%	74%	71%

Table 16: Related HEDS Data for percent of students responding "Very East or "Somewhat Easy" to How challenging is it for you to use sources:

	Oglethorpe	All Other	Oglethorpe	All Other
	2011	2011	2012	2012
Determine whether a	84%	87%	87%	85%
source is appropriate				
Deciding what	77%	77%	76%	76%
information to use from				
your sources to				
integrate into your				
project				
Knowing when to	79%	70%	80%	65%
document a source				
Knowing how to	76%	66%	76%	69%
document a source				
Organize resources into	66%	66%	72%	65%
a logical unified				
structure				
Determining whether a	84%	87%	87%	85%
source is appropriate for				
an academic project				

Table 17: Related HEDS Data for percent of student giving correct response to the questions concerning citations

	Oglethorpe	All Other	Oglethorpe	All Other
	2011	2011	2012	2012
A citation is	53%	53%	38%	56%
A citation is Not	73%	68%	76%	70%
required when				

Table 18: Comparing FSSE, NSSE, and HEDS questions concerning responses to questions on critical thinking, integrating, synthesizing

Question	*FSSE 2006	**NSSE 2010	**NSSE 2011	NSSE 2012	HEDS 2011	HEDS 2012
Worked on a paper/project requiring integrating ideas or information from various sources(FSSE,NSSE); • Number of papers requiring 5 or more sources(HEDS)	170%	173%	167%	162%	51%	50%
Synthesizing and organizing ideas, information, or experience (FSSE,NSSE); • Organizing your materials into a logical and unified structure (HEDS)	195%	174%	161%	166%	66%	72%
Making judgments about the value of information, arguments, or methods (FSSE,NSSE); • Determining whether a source is appropriate for an academic project(HEDS)	154%	171%	151%	163%	84%	87%
Thinking critically and analytically (NSSE); Applying theories or concepts to practical problems or in new situations (FSSE); Deciding what information to integrate into your paper (HEDS)	179%	183%	175%	182%	77%	76%

^{*}These are combined scores of lower and upper divisions.

^{**}These are combined scores.

Table 19: Comparing FSSE, NSSE, and HEDS questions pertaining to use of computers in student academic programs

Question	*FSSE 2006	**NSSE 2010	NSSE 2011	NSSE 2012	HEDS 2011	HEDS 2012
Encouraging students to use computers in academic work (FSSE,NSSE); • Easy to use electronic index (HEDS)	130%	152%	148%	132%	62%	56%
Used electronic mediums to discuss or complete an assignment (FSSE,NSSE); • Easy to use an Internet Search (HEDS)	57%	108%	107%	91%	91%	87%
Using computing and information technology; Ease of using an electronic index searches(HEDS)	130%	125%	111%	87%	62%	56%

^{*}These are combined scores of the lower and upper levels.

^{**} These are combined scores of the reporting responses.

Summary of surveys results

Although improvements are made by the senior year, a comparison of the FSSEE, NESSEE and HEDS test reveal some interesting trends. These pertain to computing and the use of computers in the class room, the questions relating to information literacy found in all 3 tests and questions pertaining to use of types of resources.

The questions concerning computing show some lower scores in the senior year, an exception to almost all other questions on these test. Table 19 provides comparative figures that illustrate the responses to the survey question "to what extent does your institution emphasize "using computing and info. Lit" which show decreases in the percentage points by the senior year of both 2010 and 2012. 2011 shows an increase. There are several reasons that justify the decreases and these include:

- Student understanding of the term "info lit"
- Student understanding of the term "computing"

The related question, "using computers in academic work: and to what extent it is emphasized", received higher scores with an improvement by the senior year. The ambiguity of the two questions (both compared in table 19) concerning computers and their emphasis creates varied responses when compared across the 3 surveys. The comparison reveals the HEDS test as the survey that contains the lowest scores. More evaluation is needed in this area to arrive at a general conclusion and a benchmark that will be helpful in obtaining further data.

The answer to "what extent does your institution emphasize encouraging students to use computers in their academic work "was 65% for both upper and lower divisions in the 2006 FSSE survey. Compared to the NSEE survey response of 2010, 2011 and 2012 to a comparable question the answers do correspond closely to the freshmen and senior responses of 66% in both cases. The answers for 2010 and 2011 are slightly higher than the 2006 FSSE.

Further indications concerning computer use can be observed by comparing FSSE question on" how often do students in your courses engage in use of an electronic medium (listserv, chat group, interment, instant messaging, etc.) "The 25% in the lower division increased to 32% in upper division responses indicating that this was emphasized more in the junior and senior years. Compared to NSEE's similar question for the "frequency of using electronic mediums to discuss or complete assignments" a similar increase is seen in the senior year. Use of computers has increased on campus especially with the introduction of Moodle.

Survey questions concerned with components of info. Lit included those that pertain to:

- use of resources for academic reasons,
- synthesizing information,
- making judgments about value of information
- applying or incorporating information.

FSSEE (206) and NSSEE have exact matching questions with HEDS having questions that either match or have similar implications. Table 18 provides a comparison of these answers. In all cases, improvement is indicated by the senior year. This stand to reason given the emphasis and progression of academic content and the skill set required for ever increasing need to synthesize information and apply it to projects. 2011 appears to be a pivotal year which saw a drop in the % rate but with a rise in 2012 except in the area of the number of papers that required more than 5 resources.

It appears from these stats that a slight decrease in preparedness with incoming students is indicated. However, in all but 2 cases increases are indicated by the senior year with the exception being a one point decrease in the HEDS test. The decrease in student preparedness as freshmen can be addressed through the information literacy program. The component of the program impact students at the following access points:

- FYS orientation
- Customized searching instruction for individual classes
- Ad hoc information literacy sessions
- Individualized one on one sessions with librarians
- Academic traditions
- For credit academic research class

The FYS sessions provide the first point of contact for librarians and incoming freshmen. Although the time slot is not conducive to a full hour of information literacy instruction, it provides an excellent introduction. Basic principles can be introduced with follow up exercises. In addition to FYS sessions librarians work directly with faculty to customize searching for their academic classes.

"Customized" sessions are assignment driven. During these sessions students learn basic principals of information literacy which translate well into finding and evaluating resources and applying and incorporating them into their papers. Additional opportunities

are available for library staff to segway into the academic program with information literacy. These include the academic traditions classes and the introduction to academic research. Benchmarks have been created from library instruction in both the academic traditions class and the academic research class. The data is available in Table 21.

Table 21: Librarians conducted 6 Academic Integrity Classes for the academic year 2012-2013.

Number of students	Completed Class	Left the University
38	38	7

18% of those attending left the University for a Variety of reasons. Because there are too many contributing factors why students leave the university, it is unclear if the class has any direct bearing on their ability to stay. However, students surveyed (indirect) responded most frequently that the class had helped them:

- Avoid plagiarism
- Understand how to properly cite

The overall pattern established through these learning outcomes indicates the following:

- Students need more instruction in how to use databases
- Students need more instruction in how to cite sources
- Students need more overall knowledge of information literacy and its purpose

Librarians plan to redesign the FYS sessions for 2013-2014; dispose of inaccurate and ambiguous testing tools; focus on the 3 prime areas of information literacy.

The next area of impact was the newly offered Academic Research Class. The statistics for this class set a benchmark for data gathering for the next cycle.

The assessment data below provides an overview of the information literacy skills employed in the class and the resulting data.

Students in the INT 290 Academic research class created a research portfolio which included:

- 1. A well developed research question
- 2. Annotated bibliography of books
- 3. Annotated bibliography of articles
- 4. Annotated bibliography of websites
- 5. Final research portfolio with detailed information on how they selected and researched their question (thesis) 100% of the students created the product (portfolio) and presented the information in an oral presentation for their final grade. The benchmark was met.

The librarians graded the annotated bibliographies using an in-house rubric developed for the information literacy program. The score for INT was 80.4%. The benchmark was met. (see the attached rubric)

Students in the INT 290 Academic Research class were measured both indirectly and directly. Direct measurements consisted of assignments that were graded (8) and a final project which was an oral presentation of their written research portfolio. All students responded to a survey question asking what they learned from the class. Three features dominated their responses:

- Learning to use Boolean searching
- b. Better understanding of how to use databases
- c. The importance of the annotated bibliography

They further indicated they would change their research habits and use the databases instead of relying on Google. 100% of the students agreed their research skills had increased. INT290 will be offered again in the spring of 2014. Using the data and the feedback from the students the following changes will be made:

- 1. More emphasis on searching databases and developing searching skills
- 2. More emphasis on learning and using Boolean searching
- 3. Continued exercise in the use and development of annotated bibliographies

There are many ways in which the library information literacy program is a value added asset to the campus. One way in particular is assessment and the part it can play in providing usable data. This aspect was tested in the 2012-2013 academic year through a special rubric. Reference librarian Laura Masce Sinclair designed the rubric after attending the emersion conference (ALA). The rubric focus is based on the elements of information literacy that include:

- Accessing
- Evaluating
- Incorporating

It further measures the student ability in selecting appropriate, creditable sources in a variety of formats with proper citations. The librarians analyzed the following paper sets:

- Honors 101 19 papers
- INT. 201- Academic research -12 papers
- Core 301 11 papers
- Core 401 14 papers

Section	Score
Honors 101 (freshmen)	78%
INT 201 Academic Research (seniors, freshman)	80.4%
CORE 301 (juniors)	46%
CORE 401 (seniors)	68%

The librarians used a sampling of responses from the INT class to ascertain students 'ability to evaluate resources. 11 students responded by naming the type of research activity that was most helpful to them:

Type of activity	Response
Annotated bibliography	27%
Searching databases effectively	36%
Evaluating resources	54%

100% of the students felt their ability to perform research had improved.

Together, data from the NSEE and FSEE along with HEDS and in the in-hours rubric will create a profile of the information literature freshman vs. information literate senior. Benchmarks can be established for the coming assessment year using data from these test.

The library will continue to emphasize the role of information literacy on the campus. Its impact of learning outcomes can be best examined through a comparative results among the various testing measurements and the overall impact of the learning environment.

The learning environment is most effected by:

- Equipment
- Furniture
- Study space

A small focus group comprised of Oglethorpe University students were survey in 2013 by the library director. They indicated that top priorities were individual study space. The library has 8 individual study rooms which are used to constantly by students. Unlike most universities, students at OU prefer to study alone. Statistics show that "students who study by themselves for more hours



each week gain more knowledge -- while those who spend more time studying in peer groups see diminishing gains."¹⁶ However, collaborative learning and the use of particular projects require that students collaborate. For example, the psychology department conducts annual testing requiring use of spaces in the library for student peer examination. The science department also conducts similar studies. A space to conduct these and individual study space are high priorities for students. In addition, equipment that provides them with the ability to create and complete projects is also a priority.

IN 2013 the late summer of IT department relocated to the library. As part of the relocation, the library reference commons received computers from the Goodman Lab. This acquisition brought the number of computers to 24 and the service point for students to the library environment.

Space, equipment and service all work together to provide students with a first-rate research experience. Whether it is using the building for academic purposes or recreational reading, the library environment and its various components provide a value added asset to the university as well as prestige to the institution.



¹⁶ Internet article by Scott Jaschik concerning the book Academically Adrift by Richard Arum and Josipa Roksa, http://www.insidehighered.com/news/2011/01/18/study finds large numbers of college students don t learn much

Appendix A- In-house Information Literacy Rubric

The student uses information from various research source types (i.e., books, internet sites, journal articles, etc.) that are relevant to their topic. The student uses information their topics are tools source disce quali		Student utilizes information from a variety of source types in their work. More than one information retrieval tool has been used, and	Student relies primarily on one source type in their work. Other source types may be consulted, but only marginally.	Student relies on one source type in their work.
The student uses information from various research source types (i.e., books, internet sites, journal articles, etc.) that are relevant to their topic. The student uses information their topic A various source disce quali	m a variety of source types in ir work. ariety of information retrieval ls have been used, and rces chosen reflect a cernment of information	from a variety of source types in their work. More than one information retrieval tool has been used, and	source type in their work. Other source types may be consulted, but only marginally.	type in their work.
types (i.e., books, internet sites, journal articles, etc.) that are relevant to their topic. A var tools source disce quali The series relevant to their topic.	ls have been used, and rces chosen reflect a ternment of information	retrieval tool has been used, and		
The s relev		the sources chosen somewhat	More than one information retrieval tool may have been	Only one information retrieval tool has been used.
relev Stude writt	discernment of information quality.	information quality.	used, but sources seem to have been chosen for convenience rather than quality.	The source is loosely related to their topic matter, but better sources could have been chosen.
writt	sources are pertinent and evant to the chosen topic.	pertinent and relevant to the chosen topic.	The source(s) are somewhat relevant to the topic.	
The student chooses authoritative research sources that are written by scholars or experts in the field of study. Articl revie The t and / unive reput Webs	dent utilizes sources that are ten by authorities in the d. The sources reflect ternment of the credentials he authors and publishers. cles are published in peer tew or scholarly periodicals. books chosen are by experts / or are published by a versity press or other utable publishing house. bsites are written by or libuted to experts or scholarly anizations.	Student mostly utilizes sources that are written by authorities in the field, with some popular sources also cited. The sources, in general, reflect some discernment of the credentials of the authors and publishers, though some of the sources are written for the general public. Most of the articles are published in peer review or scholarly periodicals. The majority of the books cited are by experts or are published by a university press or other reputable publishing house. Websites are written by or attributed to experts or scholarly organizations, but some general websites are consulted.	Student utilizes a few sources that are written by authorities in the field, but mostly relies on popular sources. The sources are mainly written for the general public rather than for scholars. Many of the sources used are general purpose websites, anonymously written or written by authors with little expertise in the field of study. A few sources that reflect discernment of the authors and publishers, such as scholarly journals and books, are used.	Student uses one or two sources that are written by authorities in the field, but mostly relies on popular sources. The sources are mainly written for the general public rather than for scholars. Nearly all of the sources used are general purpose websites, anonymously written or written by authors with little expertise in the field of study. One or two sources that reflect discernment of the authors and publishers, such as scholarly journals and books, may have been used.

	4	3	2	1
The student utilizes research sources that are current or properly historically situated.	Student chooses research sources that are up to date and relevant to current research and theories in the field. Older works, when used, are consulted in order to historically situate past theories and research.	Student chooses research sources that are mostly up to date and relevant to current research and theories in the field, though a few out of date materials may have been utilized.	Student chooses research sources that are somewhat out of date but still relevant to current research or theories in the field. Very few current works are consulted.	Student chooses research sources that are no longer relevant because the material is out of date. The material is no longer valid to current research or theories in the field.
Student selects appropriate documentation style and uses it consistently to cite sources.	Student is consistent with using a single citation style and its standards throughout their work. Parenthetical citations are present and correct in form. Bibliography citations are complete in information and correct in following the style's conventions.	Student is mostly consistent with using a single citation style and its standards throughout their work. Parenthetical citations are present and mostly correct. Bibliography citations are mostly complete in information and nearly correct in following the style's conventions.	Student is somewhat consistent with using a single citation style and its standards. Parenthetical citations are present but have errors. Bibliography citations are somewhat complete in information, but they are inconsistent in following the citation style's conventions.	Student does not follow a single citation style and its standards. Parenthetical citations are absent or haphazard. Bibliography citations are incomplete and do not follow the citation style's conventions.