GALE-CENGAGE OUTREACH EVALUATION, 2010-2011: FINAL REPORT OF PROJECT ACTIVITIES

(October 1, 2010 – June 30, 2011)

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Introduction

As part of an ongoing assessment process, the Information Use Management & Policy Institute (Information Institute)[1] of Florida State University,[2] College of Communication & Information,[3] School of Library & Information Studies[4] has engaged in a number of activities to accomplish specific tasks related to the goals described below as well as the larger goals of the Florida Electronic Library (FEL).[5] The Information Institute has received an award from the Florida Division of Library and Information Services (DLIS)[6] to conduct an evaluation of Gale-Cengage's outreach efforts. The overall purposes of this project are to (1) support the DLIS goal of meeting the cultural, educational, and information needs of the people of Florida, (2) create a database that provides stakeholders with access to usage and retrieval data, which will help (3) produce data-driven recommendations to guide Gale-Cengage's future marketing and promotion efforts.

This final report provides a summary of project activities from October 1, 2010, to June 30, 2011, divided among the five tasks below:

- Task 1: Identify, collect, and analyze usage and demographic data;
- Task 2: Design outline for interactive database;
- Task 3: Pilot test and make recommendations to refine/improve the database;
- Task 4: Produce recommendations for marketing driven by the collected data; and
- Task 5: Produce draft final report.

This report completes Task 5, and includes a summary of project activities, overview of findings, identification of key issues, and specific recommendations for Gale-Cengage's future marketing efforts.

Project Goals

The goals of the Gale-Cengage Outreach Evaluation efforts are to assist the DLIS in (1) collecting and analyzing usage and retrieval data from four datasets evaluating outputs, (2) using outputs and datasets to create an outline for an Access (or other type of) database, and (3) using the resultant data for providing recommendations to guide marketing efforts to end users. FEL goals described in the five year Strategic Directions and Goals include:

- To maintain its role as a primary source of content to meet the information, educational, and cultural needs of the people of the state of Florida;

[1] http://ii.fsu.edu
[2] http://www.fsu.edu
[3] http://cci.fsu.edu
[4] http://slis.fsu.edu
[5] See http://www.flelibrary.org/about/FEL-Stratetic-Goals2008-09.pdf
[6] http://dlis.dos.state.fl.us/

- To broaden the FEL's reach in the communities of the state of Florida by incorporating the tools and technologies of Web 2.0;
- To complement and further enhance the utility of content and services; and
- To ensure currency of the FEL.

The project cost was $50,000 and was conducted by the Information Institute between October 1, 2010, and June 30, 2011 (9 months).

Creation and Implementation of End User Database

Based on conversations that occurred prior to beginning and during the early stages of this project, the original plan was to create an end user database that allowed comparison of several datasets. Gale-Cengage initially provided the following datasets: Gale-Cengage usage data, ForeSee satisfaction survey data, and Google Analytics. The Information Institute obtained selected county-level demographic data from the U.S. Census. The ultimate goal was for the DLIS to create a database that could be queried at county level, as well as statewide.

The Information Institute worked with the DLIS to develop the database field structure, providing input and feedback on which types of indicators, outcomes, and queries should be available in the database. The purpose of the database was to provide the DLIS with the ability to cross-tabulate and analyze data that could be used for purposes of outreach and marketing efforts targeted to specific segments of the end user population.

During the course of the project, several challenges arose, including the inability to appropriately cross-tabulate data from the four datasets. For example, the Google Analytics and ForeSee customer satisfaction data were available at only the statewide level, while the usage and demographics data were available at both statewide and county levels. The project team had determined that the best solution was to focus on statewide data for the beta database, and to consider expanding to county-level data in a follow-up effort. However, the DLIS *needed* county-level data in order to perform the necessary queries to (1) accurately depict usage on a county-by-county basis and (2) market the FEL appropriately. Therefore, the DLIS ultimately created a database including county-level data from two datasets: Gale-Cengage usage data and county-level demographic data from the U.S. Census American Community Survey.[7]

As of the completion of this project, the database remains in beta, and one purpose of this report is to provide guidance and suggestions for continued work and improvements to that database. For example, the report includes recommendations regarding the graphical user interface (GUI) and possible queries and computations that can be "canned" for easy subsequent use by DLIS staff and perhaps others.

[7] http://www.census.gov/acs/www/

Task 1: Identify, Collect, and Analyze Usage and Demographic Data

The purpose of this task was to identify, collect, and analyze usage and demographic data for eventual inclusion in a database. The status of key activities for Task 1 is delineated in Table 1 below.

Table 1: Status of Key Activities for Task 1

ACTIVITY	STATUS
1. Collect initial examples of available data: • Collect datasets from Florida DLIS, Gale-Cengage (ForeSee satisfaction survey), and Google Analytics; • Request raw data of ForeSee Survey; and • Collect key state-level demographic data for Florida, including total population, ethnicity, age, and educational attainment.	*Complete*
2. Identify the available data elements from selected databases and resources.	*Complete*
3. Develop template for (a) menu of possible data elements to be incorporated into the database, and (b) menu of indicators and measures of FEL usage.	*Complete*
4. Develop criteria for selecting possible data elements and indicators/measures.	*Complete*
5. Compile possible indicators and measures (including outputs and outcomes) of FEL usage: • Collect datasets from Florida DLIS, Gale-Cengage (ForeSee satisfaction survey), and Google Analytics; and • Collect key state-level demographic data for Florida, including total population, ethnicity, age, and educational attainment.	*Complete*
6. Discuss possible data elements and measures/indicators with the Florida DLIS liaison.	*Complete*
7. Produce Interim Report detailing project updates and status of tasks.	*Complete*
8. Finalize data elements and measures with Gale-Cengage and Florida DLIS liaison.	*Complete*
9. Deliver Final Report of project activities.	*Complete*

Issues

Initially, this task required members of the study team to select outcomes and variables from Gale-Cengage database usage reports that previously have been used in projects conducted by the Information Institute for the DLIS: Gale-Cengage ForeSee user satisfaction data, Google Analytics data for the FEL portal (http://www.flelibrary.org), Florida DLIS Annual Public Library Statistics, and select, key state-level demographic datasets from the U.S. Census.[8] These variables were used in Task 2 to make recommendations for how the DLIS could create a database that would assist in the production of recommendations for the data-driven marketing and promotion efforts for Gale-Cengage (Task 4).

During subsequent conversations with the DLIS, the priorities for data collection turned away from statewide data for Florida, and instead focused on county-level data for Florida's 67

[8] A full list of all proposed variables is available in the Interim Report; see McClure, C. R., Mandel, L. H., Doster, K. C., & Weissenberger, L. (2010). *Gale-Cengage outreach evaluation, 2010-2011: Interim report of project activities (October 1-December 20, 2010).* Tallahassee, FL: Information Use Management and Policy Institute, the Florida State University College of Communication and Information. Available at: http://ii.fsu.edu/content/download/57002/463887/StLib#17_InterimReport_Dec9_2010d.pdf

counties.[9] Data variables were reduced in number to encompass demographic data for Florida counties and seven variables from the monthly Gale-Cengage database usage reports: total sessions, total connect time, average connect time, total searches, total retrievals, total full-text retrievals, and turnaways. Information Institute staff collected the data from the annually-updated American Community Survey to ensure all data variables from the 2000 U.S. Census (and included in the list of proposed variables) could be included in the updated datasets.[10] This Census data was provided to the DLIS for inclusion in the database.

Task 2: Designing Requirements for Interactive Database

The purpose of this task was to design an outline for an interactive database based on the requested data elements. The status of key activities for Task 2 is delineated in Table 2 below.

Table 2: Status of Key Activities for Task 2

ACTIVITY	STATUS

1. Develop requirements for database:
• Determine set of queries to run in database;
• Identify database goals:
  ○ Organize and present FEL usage data,
  ○ Function to display relevant query results to the user,
  ○ Display query results in an organized structure depending on the nature of the query (either map, table, or diagram), and
  ○ Allow user to store queried data in a system of their choosing (give export options: Excel, Word, and PDF);
• Define database type (Access database);
• Define outputs that will be provided at the state level: stakeholders and indicators of use per capita;
• Select datasets to be included in the database;
• Define database requirements; and
• Identify intended audiences.
	Complete

2. Create an outline for the structure of the database.	*Complete*
3. Deliver database outline to DLIS for beta database to be constructed.	*Complete*
4. Deliver Final Report of project activities.	*Complete*

From additional discussions with the Project Manager, DLIS, he identified the following needs for the end user database:

- The need to be able to get reports on each data element by county and by a single database or all databases;

[9] Although there are libraries in each of the 67 counties in Florida, there are several instances of multi-county cooperatives with the same loc_id (location ID, or unique identified) in the Gale-Cengage usage portal. Because the usage data for these multi-county cooperatives cannot be ascribed to each individual county in the cooperative, the DLIS assigned each cooperative to the most populous county in that cooperative for purposes of comparing usage and demographic data. However, usage data for all 67 counties appear in the database.

[10] The 2010 U.S. Census saw a reduction in the number of data elements collected compared to the 2000 census, however these omitted data elements are collected via a separate survey called the American Community Survey conducted on an annual basis.

- The need to be able to get reports on each data element by a single loc_id or group of loc_ids; and
- The need to be able to get average use by population demographic (e.g., how many searches were done in the Kids Alphabits database in a given county (or loc_id) and how many children live in that county?).

The above represents the overall needs of the database. The following table (Table 3) is a categorized list of queries to be performed on the completed database.

Table 3: Database Queries by Category

QUERY CATEGORY	OUTPUT
Query by loc_id	• View all usage statistics for all databases by a specific loc_id; • View all usage statistics for a single database by a specific loc_id; • View all usage statistics for all databases for a aggregated group of loc_ids (e.g., all loc_ids in a certain county); and • View all usage statistics for a single database for an aggregated group of loc_ids (e.g., all loc_ids in a certain county).
Query by statewide	• View all usage data for all libraries in the state; • View all usage data in the state for a single database or all databases; and • Compute average use per capita for the whole state using the aggregated demographic data.
Query by county	• View all usage data for a single county; • Compute the average usage of a given variable per county population using demographic data; • Compare usage in one county to a different county (or different counties); • Compute average use per capita in one county versus another (or others); and • Compare statewide average use per capita to a single county's usage per capita.
Query by usage data output	The need to view separate counts for each of the following data elements: • Searches; • Sessions; • Citation retrieval; and • Full-text download.

The study team created requirements and developed the structure for an interactive database to be developed by the Florida DLIS.[11] The requirements were created based on information collected from the evaluation and analysis of datasets collected in Task 1. Once the outline for the database was complete, it was given to the Project Manager at DLIS to be constructed. The purpose of this database was to provide key stakeholders with the ability to access relevant user information to create targeted marketing efforts (Task 4).

[11] The original database design and discussion is available in the Database Structure report; see McClure, C. R., Weissenberger, L. K., Mandel, L. H., & Brobst, J. L. (2010). *Gale-Cengage outreach evaluation, 2010-2011: Database Structure*. Tallahassee, FL: Information Use Management and Policy Institute, the Florida State University College of Communication and Information.

Issues

Based on meetings between the Project Manager at DLIS and the Information Institute study team, the original database design had statewide-level data from five different data sources.[12] Information Institute staff collected and compiled the demographic data and arranged the additional datasets into a relational database design using Microsoft Access. The study group determined that county-level data was needed instead, so Information Institute staff revised the database elements and design accordingly, leaving two tables of the original five and a reduction in the number of data elements to include in the database (detailed in the Database Structure Report).

While constructing the database according to the revised Database Structure report, DLIS Technical Staff determined that Access could not support the type of database structure that was needed; however, a SQL database could. As a result, DLIS staff imported the database into SQL. DLIS Technical Staff completed further refinements and preliminary testing of the SQL database before the Information Institute received access to it for further testing and running queries. The final database structure is delineated in Appendix A.

Task 3: Pilot Test and Make Recommendations to Refine/Improve the Database

The purpose of this task was to test and, if necessary, make recommendations to refine the database. Due to the change in database type, Technical Staff at DLIS needed to complete more extensive in-house testing and refinements to the new SQL database. This resulted in less time for the Information Institute to conduct testing and make recommendations to refine the database. The status of key activities for Task 3 is delineated in Table 4 below.

DLIS staff developed the SQL database and a front-end GUI for the database to make queries easier. The GUI increases usability of the database by allowing users who are less comfortable creating SQL query strings to select the information they need and the query language is written automatically. To test functionality, the Information Institute study team (with the assistance of Technical Staff at DLIS) performed queries for county-level usage data to determine FEL usage per capita. The team found no issues with functionality or usability in the SQL database.

[12] McClure, Weissenberger, Mandel, & Brobst, 2010.

Table 4: Status of Key Activities for Task 3

ACTIVITY	STATUS
1. Develop guidelines for usability test and standards that the database should meet: • Ensure the database system successfully performs user queries and delivers relevant results: o Function to display relevant query results to the user, o Display query results in an organized structure depending on the nature of the query (such as map, ordered table, or diagram), and o Allow user to store queried data in a system of their choosing (give export options such as Excel, Word, and PDF); • System error messages should provide contact information for users to report error to database author/administrator; • System should issue explanation to the user when it produces unexpected results due to the nature of the query (information in addition to specified parameters): o Additional information may not have certain parameters defined; therefore, they will be included in query results even if information is not as relevant or is completely irrelevant, and o System should have error messages in place to help direct users to refine queries (e.g., too many results, too general results, no results); and • Database system should be available only to a select audience, not the general public, so a web portal should be built for authorized users to log into the system.	*Complete*
2. Conduct usability tests: • Testers will include the Florida DLIS staff, select stakeholders, and Information Institute staff, and • Evaluate test findings.	*Complete*
3. Provide feedback from test to the Florida DLIS and Gale-Cengage to improve and refine the database.	*Complete*
4. Deliver Final Report of project activities.	*Complete*

Recommendations

The Information Institute study team recommends that the DLIS continue to develop a database front end with a graphical user interface (GUI) for ease of query construction. A front-end GUI should perform user queries and deliver relevant results successfully, specifically including:

- Function to display relevant query results to the user;
- Display query results in an organized structure depending on the nature of the query (such as map, ordered table, or diagram); and
- Allow user to store queried data in a system of their choosing (give export options such as Excel, Word, and PDF).

Task 4: Recommendations for Marketing

To support future marketing efforts of the Florida DLIS and Gale-Cengage, the study team used the database to make recommendations that are more targeted at the county level. Information Institute staff examined county-level usage data to determine FEL usage per capita

for 57 of Florida's 67 counties.[13] The study team analyzed data from two of the 10 counties with the lowest usage per capita for total sessions, total searches, total full-text, and total retrievals to determine possible target markets in which to promote the FEL. In addition, the study team examined usage data for three FEL databases: *General OneFile*, *Academic OneFile*, and *Kids InfoBits*. The status of key activities for Task 4 is delineated in Table 5 below.

Table 5: Status of Key Activities for Task 4

ACTIVITY	**STATUS**
1. Develop list of specific marketing research questions to be answered to make recommendations.	*Complete*
2. Run data queries to answer research questions for marketing recommendations: • Identify countries, regions, or other areas of low usage that can be targeted for marketing efforts; • Identify regions with high usage for comparison and investigation; and • Analyze data by stakeholder group.	*Complete*[14]
3. Develop marketing and outreach recommendations.	*Complete*
4. Deliver Final Report of project activities.	*Complete*

Findings

Increasing awareness of the FEL in Florida's 10 counties with the lowest per capita usage of the FEL, based on the measures of full-text, retrievals, searches, and sessions will help increase overall FEL usage. Among those counties that showed usage of the FEL, the following table (Table 6) represents the 10 Florida counties with the lowest FEL usage per capita in four categories. The table lists the counties from lowest use to highest use, excluding those counties with zero usage for the month of April 2011; these are outlined in Table 7. Counties that are among the lowest 10 in FEL usage per capita for all four categories are DeSoto, Sumter, and Okeechobee; these are marked in red in Table 6. Charlotte County is among the lowest 10 counties in three of the four categories; the one category in which Charlotte is absent from the lowest 10 is total sessions, where they rank 17.

Among counties with zero usage, Dixie, Jefferson, and Washington show zero usage in all four variables (marked in red in Table 7). These counties are part of a multi-county cooperative, which may relate to why they show zero usage (i.e., their usage may be measured via the cooperative and not at an individual library/county level). This is an issue that should be investigated by the DLIS to determine if membership in a multi-county cooperative is the ultimate cause of this level of usage, or if there are other mitigating factors.

[13] Because multi-county library cooperatives access the FEL through a central location, it is not possible to separate and distinguish usage among individual counties within cooperatives. All of the MCLC's usage will show as usage for one county. This usage does, however, reflect usage within all 67 counties in Florida so that all counties are represented in the database and the data.

[14] Due to delays in the Information Institute's ability to access the database, as of this report, only the first activity (identify countries, regions, or other areas of low usage that can be targeted for marketing efforts) is complete. The other two activities (identify regions with high usage for comparison and investigation and analyze data by stakeholder group) will be completed during the next FEL evaluation project (2011-2012).

Table 6: The 10 Florida Counties with Lowest Per Capita Usage of the FEL

	TOTAL FULL-TEXT	TOTAL RETRIEVALS	TOTAL SEARCHES	TOTAL SESSIONS
1.	Taylor	**DeSoto**	**Okeechobee**	Hardee
2.	**DeSoto**	Lafayette	Franklin	**Okeechobee**
3.	Lafayette	**Sumter**	Calhoun	Franklin
4.	**Sumter**	**Okeechobee**	**DeSoto**	Calhoun
5.	**Okeechobee**	Gadsden	Levy	**DeSoto**
6.	Gadsden	Taylor	**Sumter**	Wakulla
7.	Putnam	Putnam	Collier	**Sumter**
8.	Charlotte	Wakulla	Sarasota	Santa Rosa
9.	Wakulla	Charlotte	Charlotte	Putnam
10.	Polk	Polk	Lake	Gadsden

Table 7: Counties with Zero Usage of the FEL

TOTAL FULL-TEXT	TOTAL RETRIEVALS	TOTAL SEARCHES	TOTAL SESSIONS
Calhoun	Calhoun	**Dixie**	**Dixie**
Dixie	**Dixie**	Hardee	**Jefferson**
Franklin	Franklin	**Jefferson**	**Washington**
Hardee	Hardee	**Washington**	
Jefferson	**Jefferson**		
Levy	Levy		
Washington	**Washington**		

It is important to note that the data used in this usage analysis was from one sample month—April 2011. This month may not necessarily represent typical monthly usage trends, as the Florida Comprehensive Assessment Test (FCAT) is given during this month for grades 4, 5, 8, 10, and 11.[15] Overall usage and use of specific databases within the FEL may be affected by the FCAT testing.

The study team analyzed usage statistics from three FEL databases to demonstrate functionality and usability. Those databases are *General OneFile*, *Academic OneFile*, and *Kids InfoBits*. These databases serve as a sample of more detailed usage statistics that are essential to understanding which areas of the FEL are least used in which counties. *General OneFile* is a general interest periodical database that also includes the ability to translate articles into 11 different languages.[16] In contrast, *Academic OneFile* focuses on peer-reviewed material suited to higher education and academic libraries.[17] *Kids InfoBits* is a database targeted to students in kindergarten through 5th grade.[18] Tables 8, 9, and 10 list the counties from lowest use to highest use for each of the above databases respectively, excluding those counties with zero use for the month of April 2011; these are outlined in Tables 11-13, respectively. In each table, counties that appear in all four columns (full-text, retrievals, searches, and sessions) are marked in red.

[15] http://fcat.fldoe.org/
[16] http://www.gale.cengage.com/PeriodicalSolutions/generalOnefile.htm
[17] http://www.gale.cengage.com/PeriodicalSolutions/academicOnefile.htm
[18] http://www.gale.cengage.com/InfoBits/

Table 8: The 10 Florida Counties with Lowest Per Capita Usage of *General OneFile* Database

	FULL-TEXT	RETRIEVALS	SEARCHES	SESSIONS
1.	Taylor	**DeSoto**	**DeSoto**	Hardee
2.	**Sumter**	Putnam	Flagler	Levy
3.	**DeSoto**	**Sumter**	**Sumter**	**Sumter**
4.	Gadsden	Gadsden	Levy	**Osceola**
5.	Charlotte	Charlotte	Collier	**DeSoto**
6.	**St. Lucie**	**St. Lucie**	**Osceola**	Wakulla
7.	Collier	Collier	Polk	**St. Lucie**
8.	Monroe	**Osceola**	Wakulla	Gadsden
9.	**Osceola**	Monroe	**St. Lucie**	Putnam
10.	Sarasota	Sarasota	Nassau	Bay

Table 9: The 10 Florida Counties with Lowest Per Capita Usage of *Academic OneFile* Database

	FULLTEXT	RETRIEVALS	SEARCHES	SESSIONS
1.	**Osceola**	**Osceola**	Franklin	Franklin
2.	Collier	Collier	Calhoun	**Osceola**
3.	**Wakulla**	**Wakulla**	DeSoto	Levy
4.	Clay	Clay	**Osceola**	Calhoun
5.	Manatee	Manatee	Collier	Sumter
6.	Escambia	Columbia	Flagler	DeSoto
7.	Columbia	**Sarasota**	Levy	**Wakulla**
8.	**Sarasota**	Escambia	Sumter	Putnam
9.	Sumter	Lake	**Sarasota**	**Sarasota**
10.	Lake	Monroe	**Wakulla**	Gadsden

Table 10: The 10 Florida Counties with Lowest Per Capita Usage of *Kids InfoBits* Database

	FULLTEXT	RETRIEVALS	SEARCHES	SESSIONS
1.	**Collier**	**Collier**	**Collier**	**Collier**
2.	**Lake**	**Lake**	St. Lucie	**Lake**
3.	Leon	Leon	Santa Rosa	**Manatee**
4.	**Manatee**	**Manatee**	**Polk**	Jackson
5.	Escambia	Escambia	**Broward**	**Broward**
6.	**Sarasota**	**Sarasota**	**Manatee**	**Polk**
7.	**Polk**	**Polk**	Jackson	**Sarasota**
8.	**Volusia**	**Volusia**	**Lake**	Hernando
9.	**Broward**	**Broward**	**Sarasota**	Suwannee
10.	Brevard	Brevard	**Volusia**	**Volusia**

Osceola, Collier, and Sarasota Counties appear most frequently among the lowest 10 counties with per capita usage of the above three databases. Collier and Sarasota Counties appear among the overall lowest 10 counties per capita usage of FEL in the searches category (Table 6), however they are outside the lowest 10 counties in all other categories of usage. It is unclear which FEL databases Osceola, Collier, and Sarasota counties use most frequently, as the Information Institute study team only examined the usage statistics for *General OneFile*,

Academic OneFile, and *Kids InfoBits*. It is certain that, although they appear in the bottom of usage for these three databases, these counties show higher usage of the FEL than counties shown in red or that appear multiple times in Table 6.

The following Tables 11-13 list those counties with zero usage of the individual databases. Among counties with zero usage, Dixie, Jefferson, and Washington show zero use of the FEL overall (see Table 7), which explains why they also appear in the individual database tables with zero usage. These counties are part of a multi-county cooperative, which may relate to why they show zero usage. Again, this is an issue that should be investigated by the DLIS to determine if membership in a multi-county cooperative is the ultimate cause of this level of usage, or if there are other mitigating factors.

Table 11: Counties with Zero Usage of *General OneFile* Database

FULL-TEXT	RETRIEVALS	SEARCHES	SESSIONS
Dixie	**Dixie**	**Dixie**	**Dixie**
Jefferson	**Jefferson**	**Jefferson**	**Jefferson**
Okeechobee	**Okeechobee**	**Okeechobee**	**Okeechobee**
Washington	**Washington**	**Washington**	**Washington**
Hardee	Hardee	Hardee	**Franklin**
Franklin	**Franklin**	**Franklin**	
Levy	Levy		
Calhoun	Calhoun		
Lafayette	Lafayette		
Dixie	Dixie		

Table 12: Counties with Zero Usage of *Academic OneFile* Database

FULL-TEXT	RETRIEVALS	SEARCHES	SESSIONS
Dixie	**Dixie**	**Dixie**	**Dixie**
Jefferson	**Jefferson**	**Jefferson**	**Jefferson**
Okeechobee	**Okeechobee**	**Okeechobee**	**Okeechobee**
Washington	**Washington**	**Washington**	**Washington**
Hardee	**Hardee**	**Hardee**	**Hardee**
Franklin	Franklin		
Levy	Levy		
Calhoun	Calhoun		
Lafayette	Lafayette		
Taylor	Taylor		
DeSoto	DeSoto		
Gadsden	Gadsden		

Table 13: Counties with Zero Usage of *Kids InfoBits* Database

FULL-TEXT	RETRIEVALS	SEARCHES	SESSIONS
Dixie	**Dixie**	**Dixie**	**Dixie**
Jefferson	**Jefferson**	**Jefferson**	**Jefferson**
Okeechobee	**Okeechobee**	**Okeechobee**	**Okeechobee**
Washington	**Washington**	**Washington**	**Washington**
Hardee	**Hardee**	**Hardee**	**Hardee**
Franklin	**Franklin**	**Franklin**	**Franklin**
Levy	**Levy**	**Levy**	**Levy**
Calhoun	**Calhoun**	**Calhoun**	**Calhoun**
Lafayette	**Lafayette**	**Lafayette**	**Lafayette**
Taylor	**Taylor**	**Taylor**	**Taylor**
DeSoto	**DeSoto**	**DeSoto**	**DeSoto**
Wakulla	**Wakulla**	**Wakulla**	**Wakulla**
Sumter	**Sumter**	**Sumter**	**Sumter**
Monroe	**Monroe**	**Monroe**	**Monroe**
Hillsborough	Hillsborough	Indian River	Indian River
Charlotte	Charlotte		
Putnam	Putnam		
Highlands	Highlands		
Jackson	Jackson		
Indian River	Indian River		
Suwannee	Suwannee		
Hernando	Hernando		
Martin	Martin		

DeSoto and Sumter Counties appear within the 10 lowest-usage counties overall in full-text, retrievals, searches, and sessions (see Table 6). In addition, they appear either in the 10 lowest-usage counties, or they show zero usage (see Tables 8-13) within the three selected FEL databases: *General OneFile*, *Academic OneFile*, and *Kids InfoBits*. One exception is in the retrievals for *Academic OneFile*, where Sumter County is just outside the lowest 10 counties; ranking12th in lowest usage on this measure.

Either of these two counties provides an opportunity for more detailed study to try and determine factors affecting FEL usage and offer recommendations to improve usage in these counties. It is possible to apply the same analysis techniques to other Florida counties to determine areas for improvement in FEL marketing to improve usage statistics. Because DeSoto County has slightly lower usage than Sumter County—appearing either among the 10 lowest-usage or zero-usage counties in every category and overall—it is appropriate to create an example of a detailed profile to examine FEL usage within the county, identify key populations of interest, determine possible reasons for FEL usage or lack of usage, identify marketing potential, and address any concerns.

Detailed Profile: DeSoto County

FEL Usage Overview

DeSoto County appears among the lowest 10 counties in usage per capita based on the variables of full-text, retrievals, searches, and sessions in the FEL overall (see Table 6). In addition, usage data for *General OneFile* database also puts DeSoto County among the lowest 10 in all four categories of use for April 2011 (see Table 8). Usage data for the *Academic OneFile* database also placed DeSoto County among the lowest 10 for the variables of searches and sessions (see Table 9). DeSoto County showed zero usage on the variables of full-text and retrievals within *Academic OneFile* (see Table 9), and for all four categories of the *Kids InfoBits* database (see Table 10).

For the month of April 2011, DeSoto County usage data showed 93 unique sessions with 159 total searches in the FEL. Within those 93 sessions, only four full-text and four retrievals (downloads) resulted from all 159 searches. In terms of usage per capita, DeSoto County's total full-text and retrievals are 0.0114%, searches are 0.2665%, and sessions are 0.4557%; note that on each of these four variables, usage per capita in DeSoto County is below 1%.

Of the four total full-text and retrievals in April 2011, three of those were in *General OneFile*. Neither *Academic OneFile* nor *Kids InfoBits* databases had any full-text or retrievals for this month. Of the 159 total searches in the FEL, 12 of those were in *General OneFile*, and 12 were in *Academic OneFile*. Usage data revealed *General OneFile* and *Academic OneFile* each had seven sessions, for a combined total of 14 out of the 93 overall total sessions in the FEL. April 2011 usage data showed zero activity in *Kids InfoBits* for all four categories.

Key Populations

DeSoto County has a total population of 34,890 people, with 11,397 (32.66%) of the population identifying themselves as Hispanic. [19] Of the Hispanic population in DeSoto County, 87.86% (n=10,014) reported speaking English with "less than very well," proficiency; they also noted that Spanish is their primary language. The majority of the county's population (n=23,493; 67.33%) identifies as not of Hispanic ethnicity. Because the American Community Survey separates race and ethnicity categories, it is unclear how the various race categories are distributed among the two Hispanic and Not Hispanic ethnicity categories.

School-age children (ages 5 to 19) make up 18.39% of the county's population; however, only 16.05% of the total population is enrolled in kindergarten through high school. Only 2.41% of the total county population currently is enrolled in college or graduate school; however, 19.38% of the total population reports having a higher educational background—this includes people who reported having obtained some college, an associate's degree, a bachelor's degree, or a graduate degree in the higher education categories. More than half of DeSoto County (62.81%) reports obtaining a high school diploma or having less than high school education.

[19] All county-specific demographic data is from the 2009 American Community Survey.

Adults aged 20-54 make up almost half of DeSoto County (48.11% of the total population). By contrast, only 24.65% of the population is children from birth to age 19. Adults of retirement age (60-84) make up the next smaller demographic at 21.72% of the population.

FEL Usage and Marketing Potential

The demographic profile of DeSoto County reveals some target populations for marketing the FEL to increase usage within the county. First, the Hispanic population, population of adults 20-54, and population of adults with high school or less than high school education is significant. The population of adults 20-54 is an important demographic for marketing because they represent the age range of parents of minor to young adult children. This age group is also a key population because it is the prime period for employment. Another demographic that is unclear, but potentially important, is the unemployed population of the county.[20]

Usage of the *General OneFile* database might be attributed to the convenience of translating articles into 11 different languages, including Spanish. More likely, however, is the broad appeal of this database due to periodical articles of general interest to parents and adults aged 20-54 and older. Due to the small percentage of DeSoto County's population who are enrolled in higher education, the *Academic OneFile* and other scholarly databases in the FEL are less likely to see regular use. Additionally, the *Kids InfoBits* database likely will not receive frequent use due to children aged 5 through 9 making up only 5.09% of the total population.

Issues and Concerns

DeSoto County is a part of the Heartland Library Cooperative.[21] The Heartland Library Cooperative's website contains a page of categorized databases from the FEL, although no FEL branding is present, such as a logo.[22] The lack of FEL branding might affect potential usage of FEL resources outside of the library. If library patrons are not aware that these resources are available to them at http://www.flelibrary.org via IP authentication from anywhere in Florida, they are unlikely to use the resources outside the library.

Another issue with the Heartland Library Cooperative's database list is that when users click the database hyperlinks, they are taken to a page that asks for a "library ID, barcode, or other ID." This page likely disappears if users who are accessing the databases through Heartland's website do so within a library. Again, the lack of FEL branding prevents users from knowing that these resources are available through another website that will allow access via IP authentication, and not require a library ID or other ID in order to proceed.

[20] DeSoto County's population of work-eligible people ages 20-64 is 18,798; however, only 13,508 people identified themselves as employed, while 1,255 people identified themselves as unemployed. This leaves 21.46% of the total work-eligible population unaccounted for. If the work-eligible population was expanded to include ages 15-19, the percent of potential workers not accounted for would be even greater.
[21] http://myhlc.org
[22] http://myhlc.org/databases/

Perhaps the biggest issue with Heartland's choice to display their own categorized listing of FEL (Gale) databases is that some of the available databases are omitted from the list, and others are aggregated into a common title that does not makeit clear to the user what the database contains. An example of an omitted database is *Educator's Reference Complete*, which would provide information for educators, parents, both those who homeschool and those who do not, and anyone studying education. The *Gale Virtual Reference Library* (*GVRL*) is listed under General Reference in the Heartland's categories; however, none of the business-related resources within the *GVRL* and some other resources like the *Encyclopedia of Children and Childhood in History and Society* are available under the business, history, or children categories. Other resources within the *GVRL* are listed separately, such as the *Encyclopedia of African-American Culture and History*, or *Fashion, Costume, and Culture, Clothing Headwear, Body Decorations and Footwear through the Ages*.

Heartland's categorization neither improves access to materials by subject, nor does it make available the complete Gale resources through the FEL. If users accessed the FEL resources through the FEL website (http://www.flelibrary.org), not only could they browse the resources by subject or as an alphabetized list, but the subject tags beneath each resource would help users understand what each resource contains. Usage of the FEL, especially within specific databases, is likely affected by Heartland's choices in the above areas. By removing FEL branding, and by not making users aware of flelibrary.org, usage of the FEL is likely to remain lower than it would be if library patrons knew they could access these resources outside the library.

Task 5: Produce Draft Final Report

The Information Institute developed a final report that described project activities, summarizes findings, identified key issues, and made specific recommendations for Gale-Cengage's future marketing efforts. The report was provided to the Florida DLIS on June 30, 2011. The status of key activities for Task 5 is delineated in Table 14 below.

Table 14: Status of Key Activities for Task 5

ACTIVITY	STATUS
1. Develop Draft Final Report – • Describe project activities; • Summarize findings and identify key issues; and • Make specific recommendations for future marketing efforts. • Provide recommendations on how to maintain and update database.	*Complete*
2. Draft Report Reviewed by the Florida DLIS Liaison.	*Complete*
3. Deliver Final Report to the Florida DLIS.	*Complete*

Dissemination of Project Findings

In addition to completing the five tasks associated with this project, the Information Institute actively engaged in dissemination of project findings. Specifically, the project team presented results and solicited librarian feedback at the Florida Library Association (FLA) Annual Conference, May 4-6, 2011, in Orlando, Florida. Also, the project team submitted and

will present a paper at the 9th Northumbria International Conference on Performance Measurement in Libraries and Information Services, August 22-25, 2011, in York, UK.

The presentation at the FLA Annual Conference, "Planning for the Future: Using Database Usage Statistics to Map Out Future Library Development," emphasized that libraries can analyze and understand electronic database usage data in order to plan future staff training, create targeted programming for users, and guide collection development. The program covered a range of topics offering ideas for how libraries can analyze and understand usage data to better understand their users and meet their needs.

The project team stressed the importance of accessing the usage statistics available from Gale-Cengage as a means to better use, market, and promote the various databases in the FEL. These and other issues related to electronic database usage data and library planning can be found in the full presentation.[23] While conducting the presentation, the project team also solicited feedback from the audience regarding utilization of FEL-Gale usage statistics in local libraries.

In addition to presenting at the FLA Annual Conference, the project team is seeking a wider, international audience at the 9th Northumbria International Conference on Performance Measurement in Libraries and Information Services in York, UK. This presentation (to be given August 24, 2011), "Designing a User and Usage Database to Promote, Market, and Demonstrate the Value of Selected Statewide Databases: The Florida Electronic Library as an Example," focuses on the user and usage database as an example for other regional databases. The presentation will show how multi-dataset databases can be created to compare usage data with Census and other data and that a user and usage database can be useful developing targeted marketing campaigns for counties, regions, and states.

Also, the presentation will discuss how the creation of one database that cross-tabulates various datasets provides researchers with a wealth of data that can be used to address various research questions about digital libraries regarding demographics of users in general, correlations between demographics and usage levels, possible indicators of impact and value, and interrelationships among user demographics, usage levels, and customer satisfaction, among others. The presenters also will solicit input and feedback from an international audience on other potential uses of and improvements to this database. A paper based on the presentation will be published in the conference proceedings.

Overall Project Findings

The goals of the Gale-Cengage Outreach Evaluation efforts were to assist the DLIS in (1) collecting and analyzing usage and retrieval data from four datasets evaluating outputs, (2) using outputs and datasets to create an outline for an Access (or other type of) database, and (3) using

[23] Doster, K. C., & McClure, C. R. (2011). *Planning for the future: Using database usage statistics to map out future library development* [PowerPoint presentation]. Presented at Florida Library Association Annual Conference 2011, May 4-6, 2011, Orlando, FL. Available at http://ii.fsu.edu/content/download/54353/444161/Presentation_FLA_April28_2011.pdf

the resultant data for providing recommendations to guide marketing efforts to end users. Overall findings can be discussed in the context of these three goals.

With regard to FEL data collection and analysis and the resulting database design, numerous discussions between the Information Institute and the DLIS revealed the need for both county-level and statewide data, as well as a database that could support complex query design. Information Institute staff initially collected, compiled, and arranged statewide datasets into a relational database design using Microsoft Access. The Study Group determined that county-level data was needed instead, so Information Institute staff revised the database elements and design; however. Access was not able to support the type of database structure needed, so DLIS staff imported the database into SQL. DLIS completed further refinements and preliminary testing of the SQL database before the Information Institute gained access to it for further testing and running sample test queries.

Data-driven recommendations to guide FEL marketing efforts outlined the need to closely examine counties underutilizing the FEL to determine how to increase usage. Specifically, improving awareness of the FEL in Florida's 10 counties with the lowest per capita usage—based on the measures of full-text, retrievals, searches, and sessions—may directly impact overall usage of the FEL. Detailed examination of usage data revealed those counties with especially low usage or zero usage. Some counties belonging to multi-county library cooperatives also show zero usage of the FEL, and this is an issue that should be further investigated by the DLIS to determine if membership in a multi-county cooperative is the ultimate cause of this level of usage, or if there are other mitigating factors.

The Information Institute closely examined usage data and demographic data for a sample county with extremely low or zero usage of the FEL in various categories, DeSoto County. Information Institute staff identified key populations for possible marketing efforts to increase overall usage of the FEL, as well as usage of specific databases in the FEL. Outside of DeSoto County's usage data and demographic data, Information Institute staff looked to the Heartland Library Cooperative's FEL access point to determine other possible influences on FEL usage because DeSoto is a member of the Heartland Library Cooperative. Findings from the county profile indicate that future FEL marketing research should include an examination of how individual counties or cooperatives access the FEL. Issues that directly impact marketing include prominent FEL branding, patron awareness of flelibrary.org when outside the library, and whether FEL access points outside flelibrary.org clearly list resources and make all resources available to users.

Summary and Implications

The Information Institute, working closely with the DLIS, conducted a preliminary evaluation of Gale-Cengage's outreach efforts to support the DLIS goal of meeting the cultural, educational, and information needs of the people of Florida. Information Institute staff identified, collected, and analyzed usage and demographic data; created an outline for an interactive database; tested and provided recommendations to refine/improve the database; and produced some recommendations for marketing driven by the collected data.

One purpose of this study was to determine the usefulness and feasibility of the data as developed in the database; thus, there are two limitations—first, the available usage data from April 2011 may not necessarily represent typical monthly usage trends as the Florida Comprehensive Assessment Test (FCAT) is given during this month, and second, that it is limited to one month. Additional research in terms of an analysis of the use of specific Gale-Cengage databases by county and an assessment of Florida librarians' preferences for including existing or different databases in the FEL could provide valuable insights into the possible causes of varying levels of usage by county and changing levels of usage over time, as well as allowing longitudinal analysis of marketing efforts over a longer time period.

APPENDIX A: FINAL DATABASE STRUCTURE