

Usage Comparison of Print and Electronic Theses and Dissertations at The University of Southern Mississippi

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Research Questions

- 1.) To what extent does online access through an Institutional Repository affect the usage of theses and dissertations?
- 2.) Which category saw the greatest change from print to digital exposure?

Methods

This study is a usage comparison of print Honors Theses, Masters Theses, and Dissertations and electronic Honors Theses, Masters Theses, and Dissertations at the University of Southern Mississippi. Usage statistics for the print materials were obtained from III Millennium using the create list function to pull item records for all print Honors Theses, Masters Theses, and Dissertations in Cook Library holdings. Interlibrary loan statistics and non-circulating, archival copies housed in McCain Library and Archives were excluded from this study. The title, author, call number, item type, and total checkouts were recorded. Usage statistics for the electronic Honors Theses, Masters Theses, and Dissertations were gathered using Bepress. The title, author, item type, and total number of downloads were recorded for each item. Embargoed materials were excluded from this study.

Using Millennium's Create List function, a query was performed to identify print theses and dissertations from the circulating collection in Cook Library. The screenshots below detail the Create List functions used and the information exported.

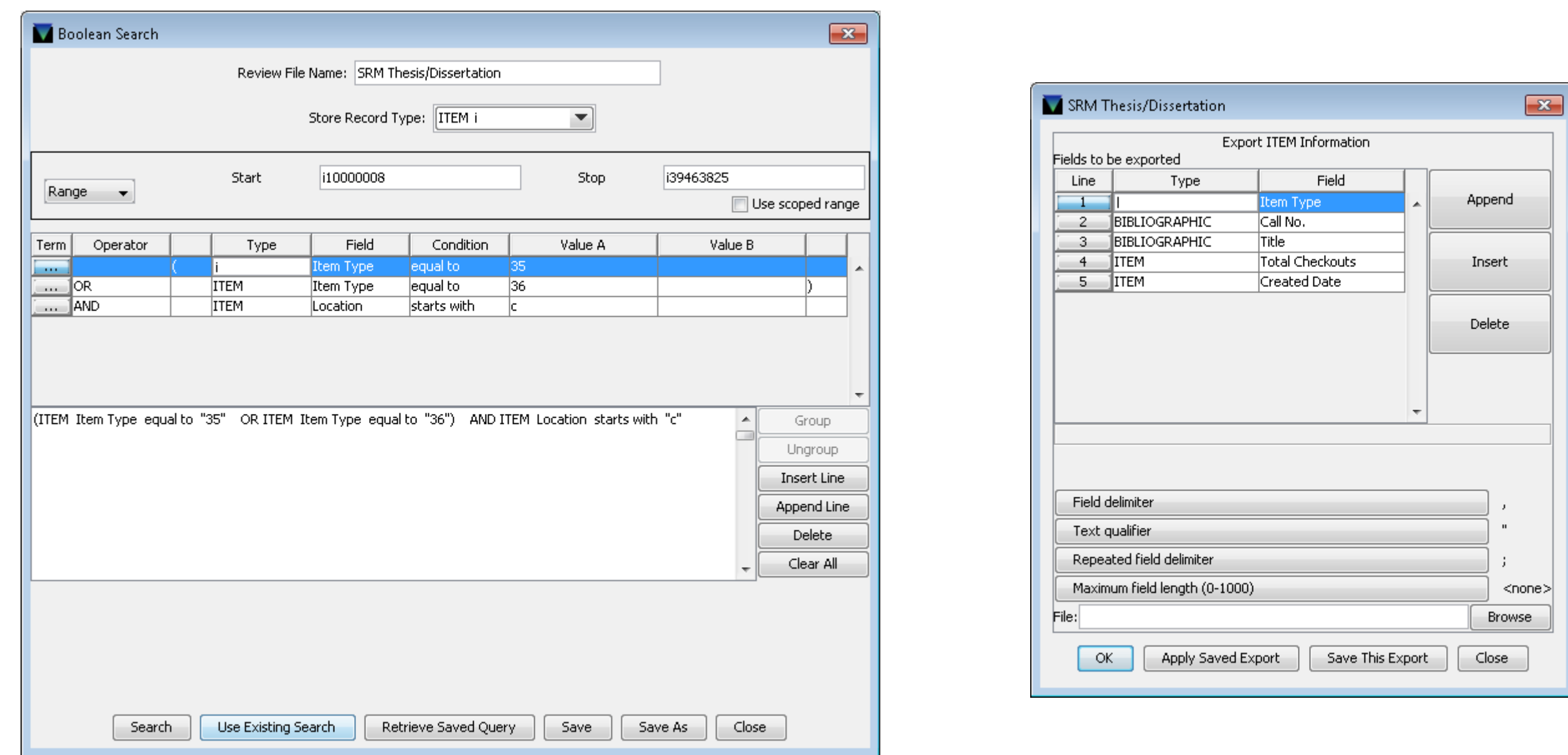


Figure 1: Screenshots of Millennium's Create List formula and export options.

The screenshot below illustrated the exported usage statistics from Bepress, the hosting platform of Aquila, detailing the Honors Theses sorted by most downloaded.

Title	URL	Date first posted	Number of downloads
Ghosts of the Mind: The Supernatural and Madness in Victorian Gothic Literature	http://aquila.usm.edu/honors_theses/99	1/17/2013	15341
The Portraiture of Women During the Italian Renaissance	http://aquila.usm.edu/honors_theses/118	6/6/2013	13417
The Relationship between Attitudes and Achievement in Mathematics among Fifth Grade Students	http://aquila.usm.edu/honors_theses/126	6/6/2013	12696
CHANGING THE NATURE OF THE BEAST: AN ANALYSIS OF SIGNIFICANT VARIATIONS FROM MADAME DE LAUNAY'S LA BELLE ET LA BÊTE IN DISNEY'S BEAUTY AND THE BEAST	http://aquila.usm.edu/honors_theses/150	6/6/2013	8615
Effects of Illegal Immigration Upon Crime in the United States	http://aquila.usm.edu/honors_theses/164	6/6/2013	5824
GAAP AND IFRS CONVERGENCE: THE EFFECT ON LEASE ACCOUNTING	http://aquila.usm.edu/honors_theses/157	6/6/2013	4910
Folk After Midnight, or Nobody Listens to Joan Baez Anymore: A Short Story Sequence	http://aquila.usm.edu/honors_theses/205	6/21/2014	4889
Inside the Score in the 21st Century: Techniques for Contemporary Large Jazz Ensemble Composition	http://aquila.usm.edu/honors_theses/73	7/30/2012	4824
"I have been a real actor": Analyzing the Writings of John Smith Through the Lens of Performative	http://aquila.usm.edu/honors_theses/133	6/6/2013	3819
Parenting Styles, Peer Pressure, and the formation of Antisocial Behavior	http://aquila.usm.edu/honors_theses/101	1/17/2013	3421
Adaptive Selling: A New Direction for the Pharmaceutical Industry	http://aquila.usm.edu/honors_theses/132	6/6/2013	3197
The Effects of Xanthigen Supplementation on Body Weight, Resting Energy Expenditure, and Body Composition in an Obese Population	http://aquila.usm.edu/honors_theses/43	5/30/2012	3099
U.S. GAAP Versus IFRS: Reconciling Revenue Recognition Principles in the Software Industry	http://aquila.usm.edu/honors_theses/132	6/6/2013	2700
Water Simulation on WebGL and Three.js	http://aquila.usm.edu/honors_theses/137	6/6/2013	2539
Online Music Piracy in College-Age Students	http://aquila.usm.edu/honors_theses/9	5/16/2012	2285
Keeping It Real: Teaching and Learning in the Harry Potter Series	http://aquila.usm.edu/honors_theses/1	2/28/2012	2101
Disagreeable, Villainous, and Wimpy: The Child as Antihero in Burnett, Colfer, and Kinney	http://aquila.usm.edu/honors_theses/181	6/6/2013	2048
Deconstructing the Body: The Exploration of the Human Mind through Symbols	http://aquila.usm.edu/honors_theses/225	6/21/2014	2020
What Makes a Man: Social Constructions of Masculinity in the Works of Stanley Kubrick	http://aquila.usm.edu/honors_theses/65	6/1/2012	1776
"A Very Different Looking Class of People": Racial Passing, Tragedy, and the Mulatto Citizen in American	http://aquila.usm.edu/honors_theses/110	6/6/2013	1741
Weak Central Coherence Theory Problem Solving in Adults with Asperger Syndrome	http://aquila.usm.edu/honors_theses/28	5/24/2012	1720
The Influence of Residence Hall Design on College Students' Grade Point Averages, On-Campus Involvement, and Sense of Community	http://aquila.usm.edu/honors_theses/60	6/1/2012	1635
The Comparison of the Effectiveness of Using a Traditional Approach to Speech Therapy to Using a Traditional Approach to Speech Therapy Plus Non-Speech Oral Motor Exercises in Children with Articulation Disorders	http://aquila.usm.edu/honors_theses/250	6/21/2014	1531
The Hero's Journey: A Postmodern Incarnation of the Monomyth	http://aquila.usm.edu/honors_theses/39	5/29/2012	1442
Television's Effects on Speech and Language: The Parent's Perspective	http://aquila.usm.edu/honors_theses/32	5/29/2012	1432
Color Theory: The Effects of Color in Medical Environments	http://aquila.usm.edu/honors_theses/115	6/6/2013	1422
Aaarrrggg I'm a Pirate: Cloud-Streaming Services and Their Effects on Music Consumption and Music Piracy	http://aquila.usm.edu/honors_theses/167	6/6/2013	1382
Barriers and Motivators for Influenza Vaccination Compliance Among Healthcare	http://aquila.usm.edu/honors_theses/59	6/1/2012	1328
1st Mississippi Mounted Rifles: Mississippi's Union Battalion in the Civil War	http://aquila.usm.edu/honors_theses/41	5/30/2012	1305
You Make Me Feel: A Study of the Gay Rights Movement in New Orleans	http://aquila.usm.edu/honors_theses/5	2/28/2012	1293
Knowledge and Attitudes Regarding the Human Papillomavirus and HPV Vaccine Among College Students: A Gender Comparison Study	http://aquila.usm.edu/honors_theses/50	5/30/2012	1280
Don't You Be Telling Me How Tah Talk: Education, Ebonics, and Code-switching	http://aquila.usm.edu/honors_theses/233	6/21/2014	1259

Figure 2: Honors Theses usage statistics in Excel.

Results

Honors Theses saw a 12,578% increase in usage from print to digital formats making the Honors Theses the greatest usage increase from online exposure. Honors Theses were the least used print collection, with only 1,648 total checkouts, but they are the most used of the digital formats with 208,933 downloads or 79% of the total material usage.

Masters Theses had a 978% increase in usage, once available in digital format. The print circulation statistics for the Masters Theses show 1,958 checkouts, while Bepress statistics show 21,106 downloads. The print Masters Theses make up 0.70% of the total material usage, whereas the digital Masters Theses make up 8% of the total usage.

The digital Dissertations are used 125% more than their print counterparts, increasing from 9,322 checkouts to 20,987 downloads. The digital Dissertations account for 8% of the total usage, while the print Dissertations only account for 3% of the total material usage.

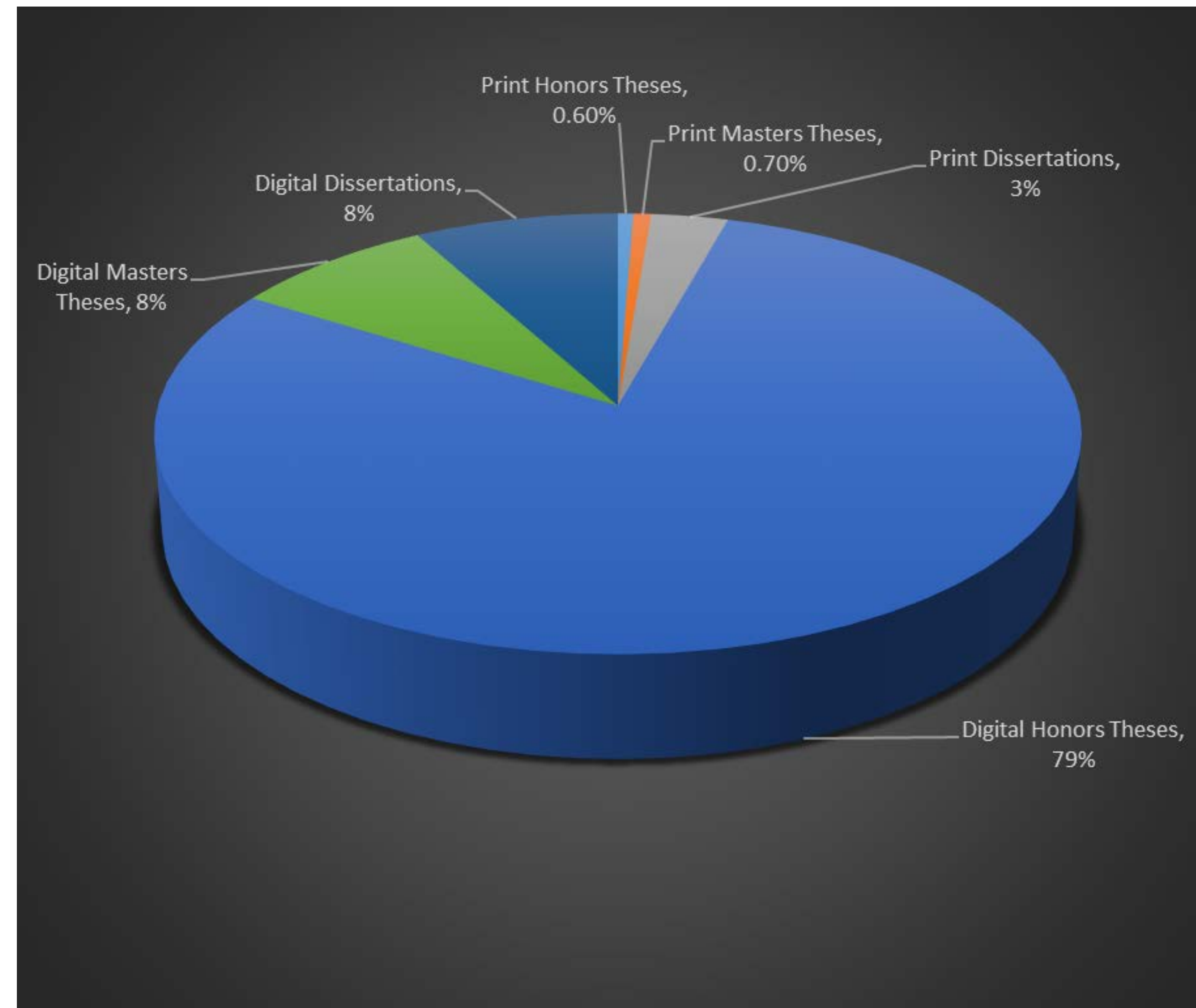


Figure 3: Pie chart of total usage by category.

In all, this study looked at 10,158 unique titles with a combined 263,954 checkouts and downloads. The publication dates range from 1948 to 2015. Overall, material usage increased 1,842% over physical checkouts in three years (from 2012-2015).

	Total Number in Print	Total Checkouts	Average Checkout	Percentage of Use
Print Honors Theses	1358	1648	1.21	0.60%
Print Masters Theses	3786	1958	0.52	0.70%
Print Dissertations	4258	9322	2.19	3%
	Total Number in Digital format	Total Downloads	Average Downloads	Percentage of Use
Digital Honors Theses	330	208,933	633.13	79%
Digital Masters Theses	165	21,106	128	8%
Digital Dissertations	261	20,987	80.41	8%

Figure 4: Table of print circulation vs electronic downloads by category.

History

Aquila, the Institutional Repository of The University of Southern Mississippi launched in 2011. Aquila, so named after the constellation of the eagle, has the capability to publish ETDs as well as serialized journals and other materials.

In 2012, the Honors College ceased printing physical copies of Honors Theses and began publishing through Aquila, to the cost and time saving benefit of the students as well as the institution.

The next year, the option was given for students to add their Masters Theses to Aquila. In 2015, the Graduate School started requiring submission through Aquila, and added the Dissertations to the system as well.

The print copies of the Masters Theses date back to 1948 when the college conferred its first Masters of Arts degree on 7 students. The first MA was bestowed on Saint Inzer Hudson. Hudson's thesis, entitled "A survival study of the Purvis High School class of 1948" resides in Cook Library.

The first doctoral degree was issued to Eugene Miller Keebler in 1962. Keebler's dissertation entitled "A study of the combination office of Dean-Registrar in institutions of higher education" marks the beginning of print Dissertations in Cook Library's collection.

The University of Southern Mississippi offered its first Honors classes in 1965. By 1975, the program had evolved into a formalized Honors College, making it the sixth oldest public Honors College in the nation and the oldest Honors College in the state of Mississippi. The Honors Theses in Cook Library date back to 1968 starting with "A study : Jean Genet as playwright" by Frances Jean Stone.

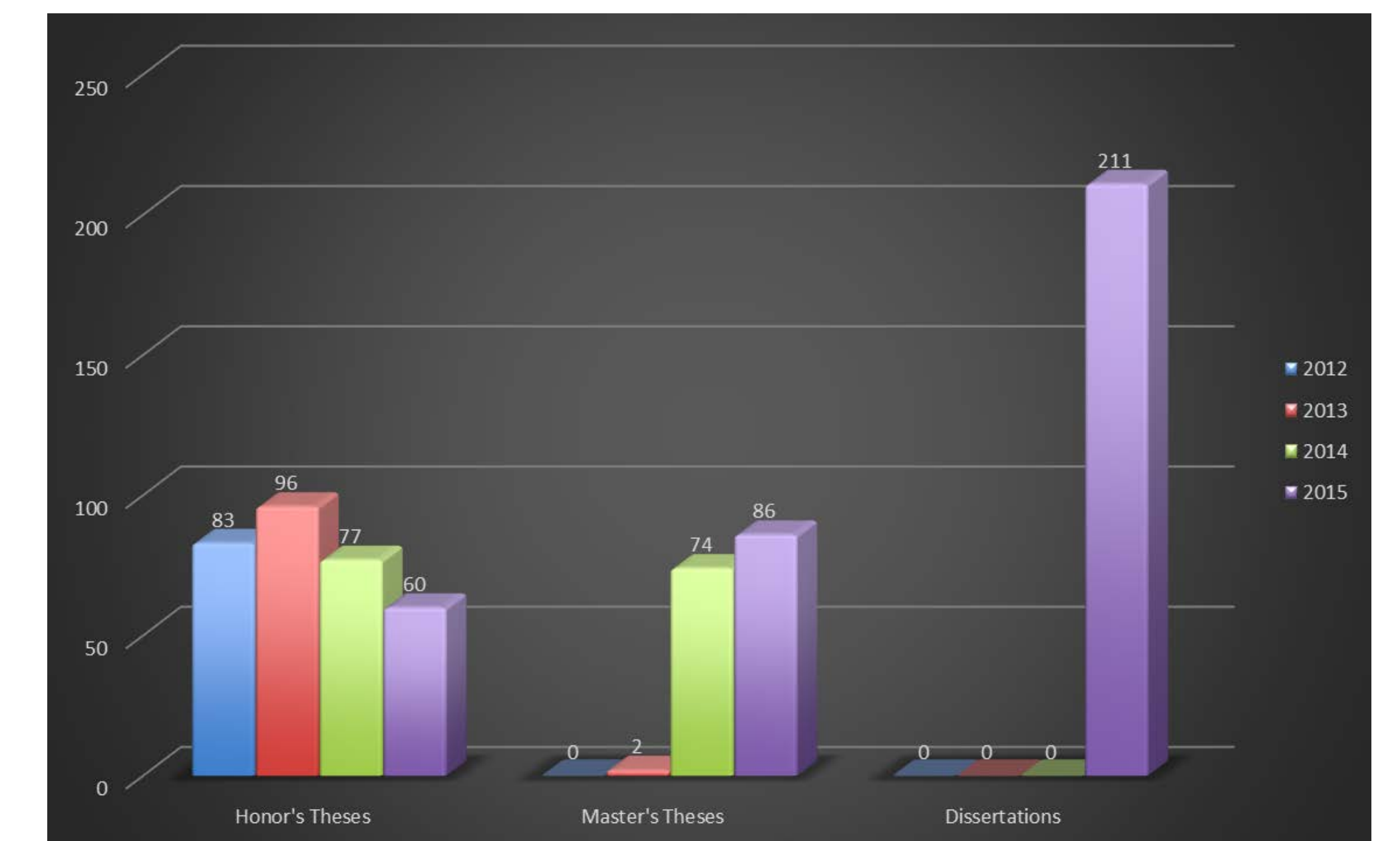


Figure 5: Bar graph of electronic materials added to Aquila by year.

Significance

Overall, we can conclude that online exposure garnered a 1,842% increase in material usage with Honors Theses seeing the largest increase at 12,578%.

Additional research is needed to compare the rate of checkouts by year. The print materials have been available for decades longer than the digital forms, making an annual comparison difficult as III's Millennium only tracks total checkouts and not checkouts by year. Moreover, a direct comparison of exact titles available in both formats is a data set worth exploring, but challenging as there is little overlap in these particular collections.

With digital ETDs gaining a 1,842% increase in usage in just 3 years, the case for adding ETDs to ones' IR is strong. The largest impact was seen in the usage increase between the print Honors Theses and their digital counterparts. As the Honors Theses are written by undergraduates, the worldwide exposure is beneficial to students at the brink of their career and research. The increase also enhances the reputation of the university and can be used as a recruitment tool, to recruit students, faculty, and donors.

The additional materials also serve to illustrate the staffing needs of an IR, as each year more and more departments are adding materials. Overall, we conclude the additional needed resources are outweighed by the positive impact.