7-2009

Collection Assessment of Monograph Purchases at the University Of Nevada, Las Vegas Libraries

J. Cory Tucker

University of Nevada, Las Vegas, cory.tucker@unlv.edu

Follow this and additional works at: https://digitalscholarship.unlv.edu/lib_articles

Part of the [Collection Development and Management Commons](#)

Repository Citation

Tucker, J. C. (2009). Collection Assessment of Monograph Purchases at the University Of Nevada, Las Vegas Libraries. *Collection Management*, 34(3), 157-181.

https://digitalscholarship.unlv.edu/lib_articles/21

This Article is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Article in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Article has been accepted for inclusion in Library Faculty Publications by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

Collection Assessment of Monograph Purchases at UNLV Libraries

JAMES CORY TUCKER

University of Nevada, Las Vegas Libraries

The purpose of this article is to describe an assessment project of the monograph collection at the University of Nevada, Las Vegas (UNLV) Lied Library. The circulation statistics and in-house use of all monographs for the nine colleges at UNLV were assessed analyzing the last five years of data. The analysis included an assessment of the circulation statistics and in-house use of books purchased on an approval plan compared with books purchased by individual liaison librarians. The findings illustrated the fact that overall use of the monograph collection has declined over the past five years. The findings also showed that books purchased on approval plan had slightly higher use than the books purchased by individual liaisons. The study shows that academic libraries need to monitor usage of the monograph collection to make certain money is spent in the most efficient manner and that usage data can be helpful if there is a need to reduce budget allocations for monographs or if a reallocation of funds for monographs is necessary.

KEYWORDS: monographs, collection assessment, usage statistics, circulation, approval plan, discretionary spending

Address correspondence to Cory Tucker, Head of Collection Management,
University of Nevada, Las Vegas Libraries, 4505 Maryland Pkwy., Box 457014, Las
Vegas, NV 89154-7014. Email: cory.tucker@unlv.edu

INTRODUCTION

Collection management involves the entire process of selecting, acquiring, and evaluating resources for the library. Due to the fact that collections make up a large percentage of a library's budget, it is important to carefully analyze all resources. Evaluation of a collection is important because it allows a library to analyze how the resources are being used and can assist the library in shifting money to resources that will have better use.

Starting in the spring of 2007, the UNLV Libraries began a collection assessment project to analyze the entire library collection, including monographs, serials, databases and other materials. In order to complete the project, a collection assessment committee was organized and a subgroup of the committee was selected to gather data including usage statistics, collection specific information and other data as needed. Besides collecting usage statistics, the subgroup also collected budget data for the last five years to see if the budget needed reallocation. The subgroup decided that the best option for the project would be to collect usage statistics and organize them separately for the nine colleges at UNLV. The first area to be analyzed was the monograph collection at Lied Library. The main reasons for the assessment of the monograph collection were:

- To evaluate the monograph budget and use of monographs to see if the current budget allocation for monographs is warranted and if funding needs to be increased or decreased
- To analyze spending and use of monographs among disciplines to see if the monograph budget needs to be reallocated

BACKGROUND

The University of Nevada, Las Vegas (UNLV) Libraries consists of Lied Library, the main branch, and three branches: Architecture Studies Library, Curriculum Materials

Library, and the Music Library. The UNLV Libraries supports nine colleges including:

- College of Business
- College of Education
- College of Engineering
- College of Fine Arts
- College of Health Sciences
- College of Hotel Administration
- College of Liberal Arts
- College of Sciences
- College of Urban Affairs

The Lied Library contains over 1.1 million monographs and support all nine colleges at UNLV. The Library supports over 21,000 FTE including undergraduate, masters, and PhD students. The library also supports over 800 full-time teaching and research faculty. UNLV Libraries purchases monographs on approval and with discretionary funds through Yankee Book Peddler (YBP). Monographs purchased with discretionary funds are selected by 19 liaison librarians who represent various colleges and departments. Currently, the library spends about 13% of its budget on monographs and 87% on serials.

LITERATURE REVIEW

The review of the literature illustrates various articles looking at monograph collections in academic libraries. One case study analyzed the circulation of engineering monographs purchased through an approval plan at Rowan University (Brush 2007). The library monitored the circulation of approval books compared with the engineering collection as a whole to see if the approval profile for the library would need to be modified or dropped. The study showed that the approval books circulated at a higher rate.

In another article, the approval plan at Western Michigan University was assessed to see if approval books circulated at a higher rate than non-approval books (Kingsly 1996). The study compared the books during two specified time frames of five months of availability and 16 months of availability. In both cases, the books purchased on approval had higher circulation rates.

Other studies have looked at circulation statistics analyzed by publisher, publication date and subject (Adams and Noel 2008). This study analyzed circulation of books purchased at the Swain Hall Library in 2003. The study covered books in mathematics, computer science, astronomy, and physics. The study showed that math books have the most use and astronomy books had the least use. In regards to publishers, books from Chapman & Hall/CRC had the most use. The study also found that older books circulated more at a higher rate than more recently published titles. An additional analysis conducted at Baylor university used circulation statistics and interlibrary loan requests (Ochola 2002). The study showed that language and literature had the highest circulation rates and interlibrary loan requests. The overall study showed high use of monographs and active use of interlibrary loan.

A study in 2006 looked at the holdings, circulations, interlibrary loan requests of the English-language monograph collection at the University of Colorado at Boulder (Kneivel et al. 2006). The study showed various results for each subject. For overall holdings, the subject area with the most holdings was language, linguistics and literature. Music had the highest average number of transactions per item and anthropology had the highest percentage of circulation. Agriculture had the highest holdings/ILL ratio.

METHODOLOGY

Data

This project used six distinct sets of data from Lied Library. In all six sets, data is limited to monographs only and were analyzed across LC classifications from July 1, 2002 through June 30, 2007, unless noted otherwise. The six data sets included:

- Money spent on monographs
- The entire collection of monographs at Lied Library
- Number of Monographs added to the collection
- Monographs purchased on approval between July 1, 2005 through June 30, 2006
- Monographs purchased with discretionary funds July 1, 2005 through June 30, 2006

Monographs from the branch libraries were excluded from this study. Branch libraries have overall use statistics, but the branches do not zero out their circulation statistics in the Libraries' integrated library system (ILS), so a yearly circulation rate cannot be calculated for individual books.

Definition of a monograph

The operational definition of a monograph for this study was any circulating monograph that had the designation of being located in UNLV book stacks. For each LC number, a list of monographs was created in Innovative Interfaces Inc. (III) Millennium using the "location = unlm" (UNLV Bookstacks).

Money Spent on Monographs

At UNLV Libraries, monographs in the circulating collection are purchased using two methods. The first is on an approval plan through Yankee Book Peddler (YBP) and through other vendors for foreign languages and music. The second method for purchasing books is using discretionary funds that are budgeted for each liaison librarian.

Each year, collection management provides liaison librarians with separate discretionary funds to purchase monographs that supplement the approval plan or fill faculty requests. For both the approval plan and for discretionary spending, the order record for the monograph contains an assigned code as to what funds were used to purchase the monograph. For this project, lists for each order code were created in the ILS. The calculations included total amount spent on books by college, amount spent on approval plan books by college and amount spent on books through discretionary funds by college.

LC Classifications and College Designations

In order to begin the monograph analysis, the collection management department emailed all liaison librarians and asked them to send LC numbers for their departments and colleges. If the classification had two or more subject areas, the subject area most predominant was selected for the classification so that only one subject area was used for each LC classification. Once the LC numbers were received, the collection management staff ran lists for each college in Innovative Interfaces Inc. (III) Millennium, extracting various data from the order, item and bibliographic records. The lists were downloaded into Microsoft Excel, so the data could be “cleaned up” and duplications deleted. Excel spreadsheets were imported into Microsoft Access and various queries were set up to manipulate the data. Data for the LC classification breakdown was selected from July 1, 2002 to June 30, 2007.

Usage Statistics

For the purposes of this study, total usage is the number of circulations combined with in-house use statistics. The statistics for use were individual monographs that circulation

one or more times during the time period. At the end of each fiscal year, the Lied Library runs circulation statistics for analysis using the ILS. In addition, during the fiscal year, in-house use statistics are compiled by the circulation department. All monographs at UNLV Libraries have RFID tags and student workers use handheld devices to scan monographs and compile in-house use statistics that are reflected in the ILS.

RESULTS & ANALYSIS

Budget Results

The first analysis of the monograph collection was to look at the budget allocation for monographs and calculate the amount of money spent on monographs for each college. Funding for monographs at UNLV Libraries comes from approval funds and discretionary funds. For approval funds, the library currently spends 51% of the monograph budget for books purchased from YBP and other vendors. The breakdown of spending by college from July 1, 2002 through June 30, 2007 for books purchased on approval is as follows:

Table 1 Approval Monograph Spending

COLLEGE	PERCENT
Business	9%
Education	3.7%
Engineering	5.1%
Fine Arts	15.9%
Health Sciences	3.7%
Hotel	1%
Liberal Arts	47.5%
Sciences	10.20%
Urban Affairs	3.8%

As shown in Table 1, Liberal Arts, Fine Arts, Sciences, and Business make up the highest levels of spending for books purchased on approval. Discretionary funds take up 49% of the budget spent on monographs and the breakdown of spending by college from July 1, 2002 through June 30, 2007 is:

Table 2 Discretionary Monograph Spending

COLLEGE	PERCENT
Business	7.9%
Education	10.8%
Engineering	5.6%
Fine Arts	17.3%
Health Sciences	6%
Hotel	3.3%
Liberal Arts	37.1%
Sciences	7.9%
Urban Affairs	4.1%

Table 2 shows that Liberal arts, Fine arts, Education, Sciences, and Business have the highest budget amounts for discretionary funds. For Education, the increased percentage in discretionary funds is due to the fact that the Curriculum Materials Library does not have an approval plan.

Calculating the spending on monographs by college was an important step for the assessment project. Due to the fact that the UNLV Libraries might be facing budget cuts in the next two years, cuts in the monographs budget may have to occur. The budget data will be used in conjunction with usage data to make certain the library is spending the monograph budget effectively and to see if the monograph budget needs to be reallocated.

Usage Statistics FY 2002/03-2006/07

The next step in the assessment of the monograph collection involved compiling usage

statistics for monographs. Usage statistics for monographs were compiled from July 1, 2002 through June 30, 2007 and consisted of the following data:

- Number of monographs for each college in Lied Library
- Percentage growth of monographs for each college
- Percentage use of each college collection
- Monographs with at least one use
- Monographs with zero use
- Breakdown of Use of Monographs by LC Classification

Number of Monographs for each College in Lied Library and Percentage Growth

In order to assess the monograph collection by college, the number of monographs added to Lied Library from July 1, 2002 through June 30, 2007 was gathered. Table 3 shows the number of monographs for each college in Lied Library:

Table 3 Monographs in Lied Library by College Designation

Fiscal Year	2002-03	2003-04	2004-05	2005-06	2006-07	Increase of Monographs	% Increase of Monographs
Business	56,316	58,002	59,634	61,413	62,898	6,582	12%
Education	25,084	25,940	26,732	27,908	28,996	3,882	15%
Engineering	39,432	40,768	42,208	43,142	43,779	4,347	11%
Fine Arts	124,739	128,789	132,477	136,370	140,357	15,618	12.5%
Health Sciences	33,931	35,117	36,268	37,459	38,450	4,519	13%
Hotel	18,300	18,812	19,409	20,470	20,521	2,221	12%
Liberal Arts	313,683	323,959	330,985	340,802	348,647	34,964	11%
Sciences	77,193	79,231	80,821	82,173	83,418	6,225	8%
Urban Affairs	21,518	22,391	23,094	23,971	24,761	3,243	15%

When analyzing the monographs purchased in the last five years, the largest increase in the number of monographs added to the collection was in the Liberal Arts and the Fine Arts. This corresponds with budget data above that shows most money for

monographs is budgeted for these colleges.

Monographs Usage by College

The measure of usage of the collection is use by the college as a percentage of the monograph collection identified for that college. The percentage use statistics do not reflect the popularity of any one title, so each title was counted only once for this calculation. Table 4 shows the percentage of total monograph use by college collection and also the average circulation rate for all colleges.

Table 4 Percentage Total Monograph Use by College

College	2002-03	2003-04	2004-05	2005-06	2006-07
Business	17%	17%	20%	14%	12%
Education	24%	23%	27%	21%	20%
Engineering	21%	21%	24%	15%	14%
Fine Arts	29%	30%	36%	24%	21%
Health Sciences	25%	26%	30%	24%	22%
Hotel	29%	29%	37%	26%	25%
Liberal Arts	20%	22%	26%	18%	16%
Sciences	17%	18%	21%	15%	14%
Urban Affairs	27%	27%	30%	23%	20%
Average	23%	24%	28%	20%	18%

The total use percentage of monographs in each college collection experienced a decrease over the five year period. During this period, only three colleges, Fine Arts, Hotel and Urban Affairs had higher than average use rate. Business, Sciences, Engineering, and Liberal Arts had the lowest use rates. These use patterns were very interesting considering the fact that Liberal Arts, Science and Business have three of the top four budget allocations for monographs. The decrease in use rate might be attributed to the number of monographs that are added to the collection each year. To help with the analysis, the assessment team looked at the number of monographs for each college

collection with at least one use.

Monographs With at Least One Use

Table 5 provides an overview of monographs with at least one use.

Table 5 Monographs with at Least One Use

Fiscal Year	2002-03	2003-04	2004-05	2005-06	2006-07	5-year decrease of 1-use monographs	5-year % decrease of 1-use monographs
Business	9,430	9,564	11,853	8,732	7,764	1,666	17.6%
Education	6315	5909	7084	5979	5690	625	9.8%
Engineering	8138	8698	9959	6335	6180	1,958	24%
Fine Arts	26,132	28,626	34,543	24,771	22,072	4,060	15.5%
Health Sciences	8,628	8,975	10,960	8,913	8,463	165	1.9%
Hotel	5,306	5,539	7,136	5,301	5,221	85	1.6%
Liberal Arts	63,319	72,233	84,263	61,670	54,976	8,343	13%
Sciences	13,321	14,262	17,138	12,441	11,873	1,448	10.8%
Urban Affairs	5958	6084	6987	5634	5302	656	11%

Over the five year period, each college had a decrease in the number of monographs with one use. When looking at the percentage decrease for each college's collection, Engineering, Business, Fine Arts, and Liberal Arts had the largest decreases in use. The colleges with the least percentage decrease is Health Sciences and Hotel. The performance of Health Sciences and Hotel might be attributed to a shift in demographics for these colleges. The assessment team analyzed the number of undergraduate students (by college) over the last five years and both colleges had the highest increases in undergraduate student growth and in most cases, undergraduates are heavy monograph

users. Over the past five years, on average, each college grew about 25%. The Health Sciences undergraduate population grew 90% and Hotel increased 41%. In addition, the increase in undergraduate population growth was analyzed and from 2004-05 to 2005-06, Health Sciences and Hotel and the largest increase in growth.

The data in Table III illustrate an upward trend in use of monographs for all colleges from 2002-03 to 2004-05. After 2004-05, there is a sharp decrease in use of monographs. The collection assessment committee also noticed this type of usage pattern with UNLV's electronic resource statistics. Further analysis has yet to find a concrete reason for the usage pattern, although there was an slight decrease in overall full-time enrollment during this period.

Analysis of LC Call Number Classifications Used from FY 02/03 – 06/07

To further assess the Lied Library monograph collection, the assessment team calculated percentage use of the college collections by LC classifications to attempt to identify patterns of use in specific subject areas. The percentage use was calculated for the 236 LC classifications from July 1, 2002 to June 30, 2007. The total usage includes circulation and internal use and the percentage use calculation is for the college collection, not entire collection. The *LC Classification Outline* seventh edition of the Library of Congress 2003 was used for this analysis report. This reference work lists 236 LC Sub Classifications starting with AC and ending with ZA. These sub classifications are referred in this study as LC classifications. Subject Areas for this report were determined by the liaison librarians and the classifications were sent to collection management. If the classification had two or more subject areas, the subject area most

predominant was selected for the classification so that only one subject area was used for each LC classification. The breakdown of LC classifications by college is shown in

Table 6:

Table 6 LC Classifications by College

Subject Area	Number of LC Classifications
Business	7
Education	12
Engineering	12
Fine Arts	15
General	12
Hotel	2
Health Sciences	17
Information Science	1
Liberal Arts	104
Law	27
Sciences	22
Urban Affairs	5

The results were interesting:

- 166 classifications decreased in the number of titles used
- 42 classifications increased in the number of titles used
- 24 classifications remained unchanged (4 classifications are not used by Lied Library for books)
- 4 classifications had no Use in FY02-03, and of those titles 3 had one use in FY06-07 and one title had two uses.

Of the 166 decreased classifications, 24 decreased by less than 10%, 39 decreased between 10 – 20% and 98 decreased by more than 20%. The 166 LC classifications that decreased were as follows:

- 74 in Liberal Arts
- 19 in Sciences

- 13 each in Health Sciences and Fine Arts
- 11 in Law
- 10 in Engineering
- 9 in General
- 7 in Education
- 6 in Business
- 2 each in Hotel and Urban Affairs

Table 7 LC Classifications with Decreased Usage

LC Class	Titles Used FY02-03	Titles Used FY03-04	Titles Used FY04-05	Titles Used FY05-06	Titles Used FY06-07	% decrease 02-07	College
TX	2372	2425	3403	2484	2360	-1%	Hotel
NC	680	680	900	630	675	-1%	Fine Arts
QC	1766	1862	2402	1724	1746	-1%	Sciences
DT	448	429	760	559	442	-1%	Liberal Arts
RA	1293	1295	1667	1380	1262	-2%	Health Sciences
HT	459	467	559	521	447	-3%	Urban Affairs
PF	37	30	32	35	36	-3%	Liberal Arts
P	1090	1256	1376	1197	1056	-3%	Liberal Arts
JC	689	695	896	709	667	-3%	Liberal Arts
RC	3344	3474	4048	3412	3237	-3%	Health Sciences
HN	640	675	776	589	615	-4%	Liberal Arts
HG	1063	1171	1449	1086	1014	-5%	Business
RS	21	22	30	30	20	-5%	Health Sciences
UB	104	65	80	86	99	-5%	Liberal Arts
N	2285	2453	3168	2363	2168	-5%	Fine Arts
MT	696	794	949	756	656	-6%	Fine Arts
TP	427	411	550	367	400	-6%	Engineering
BD	381	395	513	436	353	-7%	Liberal Arts
NA	63	54	73	49	58	-8%	Fine Arts
QP	939	925	1179	888	864	-8%	Sciences
PH	12	12	11	12	11	-8%	Liberal Arts
R	685	732	845	704	627	-8%	Health Sciences
TE	163	282	181	162	148	-9%	Engineering
GB	236	232	264	241	213	-10%	Sciences
F	2386	2037	3809	2800	2150	-10%	Liberal Arts
HB	606	722	897	641	544	-10%	Business

NB	262	293	350	250	235	-10%	Fine Arts
DJK	19	24	9	7	17	-11%	Liberal Arts
QH	1350	1376	1782	1257	1199	-11%	Sciences
PC	318	307	334	319	282	-11%	Liberal Arts
UA	93	120	136	95	82	-12%	Liberal Arts
DS	2188	2796	3320	2070	1920	-12%	Liberal Arts
PN	4768	4999	6561	5031	4165	-13%	Fine Arts
JX	181	139	193	126	157	-13%	Law
TR	1424	1292	1980	1519	1231	-14%	Fine Arts
DL	44	225	218	62	38	-14%	Liberal Arts
BX	503	439	639	443	434	-14%	Liberal Arts
TT	138	145	173	138	119	-14%	Fine Arts
PS	6453	7264	8842	6516	5555	-14%	Liberal Arts
DD	289	336	343	194	247	-15%	Liberal Arts
Q	669	660	870	616	570	-15%	Sciences
H	402	358	447	341	341	-15%	Liberal Arts
BF	3753	3627	4387	3421	3133	-17%	Liberal Arts
HQ	3855	4186	4856	3505	3199	-17%	Liberal Arts
E	5515	6755	7855	5939	4574	-17%	Liberal Arts
RM	242	259	324	313	200	-17%	Health Sciences
LB	3929	3616	4501	3593	3244	-17%	Education
PQ	2088	2456	3039	2159	1720	-18%	Liberal Arts
JA	221	203	261	213	182	-18%	Liberal Arts
GV	2394	2371	2860	2108	1967	-18%	Hotel
RJ	767	691	787	548	630	-18%	Health Sciences
TN	139	132	143	114	114	-18%	Engineering
LC	1807	1567	1927	1640	1479	-18%	Education
BJ	446	406	489	343	365	-18%	Liberal Arts
JK	655	1643	1716	645	536	-18%	Liberal Arts
PR	6255	6765	8547	5833	5109	-18%	Liberal Arts
HS	49	34	52	34	40	-18%	Liberal Arts
DE	27	24	39	26	22	-19%	Liberal Arts
CT	152	150	195	213	123	-19%	General
ML	2936	2815	3676	2739	2371	-19%	Fine Arts
AS	36	21	19	23	29	-19%	General
DF	186	194	216	160	149	-20%	Liberal Arts
B	2056	1942	2397	1826	1643	-20%	Liberal Arts
GT	592	517	626	481	473	-20%	Liberal Arts
QA	5652	5815	6913	4557	4512	-20%	Sciences
QR	231	236	285	239	184	-20%	Sciences

AM	78	50	68	77	62	-21%	General
PT	595	578	741	421	468	-21%	Liberal Arts
HV	4508	4454	5089	4112	3537	-22%	Urban Affairs
HF	2957	2737	3486	2661	2315	-22%	Business
DJ	9	6	18	17	7	-22%	Liberal Arts
G	580	538	733	778	451	-22%	Sciences
TA	1615	1716	2061	1446	1252	-22%	Engineering
HM	1603	1279	1621	1360	1241	-23%	Liberal Arts
S	127	97	124	113	98	-23%	Sciences
BH	122	114	142	104	94	-23%	Liberal Arts
PE	577	567	753	742	442	-23%	Liberal Arts
HD	3696	3629	4318	3347	2828	-23%	Business
BQ	262	218	280	245	199	-24%	Liberal Arts
TJ	664	744	931	495	504	-24%	Engineering
DC	340	402	489	255	258	-24%	Liberal Arts
KF	1330	1401	1655	1300	1008	-24%	Law
HX	305	307	330	272	230	-25%	Liberal Arts
SB	216	166	239	175	162	-25%	Sciences
VE	4	3	7	5	3	-25%	Liberal Arts
RB	103	106	147	108	77	-25%	Health Sciences
GN	1195	1394	1563	1184	886	-26%	Liberal Arts
K	148	136	131	128	109	-26%	Law
QL	1270	1409	1603	999	919	-28%	Sciences
T	521	585	644	447	377	-28%	Engineering
SF	142	111	171	92	102	-28%	Sciences
QK	458	492	668	359	326	-29%	Sciences
TK	1800	1831	2284	1404	1280	-29%	Engineering
GR	282	271	308	254	200	-29%	Liberal Arts
CB	242	135	251	172	171	-29%	Liberal Arts
SD	90	89	113	52	63	-30%	Sciences
Z	736	700	1070	839	513	-30%	General
UG	59	50	95	40	41	-31%	Liberal Arts
TG	39	47	54	22	27	-31%	Engineering
LA	400	358	406	289	276	-31%	Education
DP	165	878	871	129	112	-32%	Liberal Arts
CC	232	212	264	249	157	-32%	Liberal Arts
KN	9	12	19	8	6	-33%	Law
UF	18	13	11	5	12	-33%	Liberal Arts
GC	77	60	79	37	51	-34%	Sciences
QE	1039	888	1210	814	670	-36%	Sciences
QM	174	147	187	203	112	-36%	Sciences

ND	1825	1815	2454	1478	1171	-36%	Fine Arts
PA	830	856	978	562	525	-37%	Liberal Arts
HE	427	400	456	354	270	-37%	Business
AY	8	9	2	4	5	-38%	General
TH	229	209	248	243	143	-38%	Engineering
TL	439	478	597	374	271	-38%	Engineering
L	13	8	14	42	8	-38%	Education
RL	13	7	6	4	8	-38%	Health Sciences
PG	460	521	536	328	282	-39%	Liberal Arts
NK	474	568	643	312	282	-41%	Fine Arts
RE	17	23	25	20	10	-41%	Health Sciences
GA	41	24	39	43	24	-41%	Sciences
DA	916	836	1048	643	535	-42%	Liberal Arts
DU	185	178	224	186	108	-42%	Liberal Arts
PK	64	44	62	55	37	-42%	Liberal Arts
RG	320	243	325	237	184	-43%	Health Sciences
DK	465	857	821	528	256	-45%	Liberal Arts
D	1469	1308	1199	954	808	-45%	Liberal Arts
SH	49	72	40	28	26	-47%	Sciences
PM	80	92	94	50	42	-48%	Liberal Arts
DB	116	74	46	38	58	-50%	Liberal Arts
DX	12	12	16	18	6	-50%	Liberal Arts
KH	2	8	3	1	1	-50%	Law
VB	6	3	3	2	3	-50%	Liberal Arts
VK	10	8	10	3	5	-50%	Liberal Arts
PB	31	32	44	29	15	-52%	Liberal Arts
KM	22	11	11	4	10	-55%	Law
AC	65	55	78	41	28	-57%	General
PD	24	9	11	13	10	-58%	Liberal Arts
KD	47	15	22	17	19	-60%	Law
CR	43	30	29	15	17	-60%	Liberal Arts
TS	275	256	298	180	105	-62%	Business
AZ	30	16	27	14	11	-63%	General
TF	34	29	47	23	12	-65%	Engineering
VM	32	19	27	18	11	-66%	Liberal Arts
KP	3	0	3	0	1	-67%	Law
RF	6	5	8	8	2	-67%	Health Sciences
KJ-	25	19	22	15	8	-68%	Law

KKZ							
AG	22	11	21	15	7	-68%	General
NE	274	259	339	146	87	-68%	Fine Arts
RZ	36	32	31	19	11	-69%	Health Sciences
KE	9	6	8	1	2	-78%	Law
CJ	15	2	4	3	3	-80%	Liberal Arts
V	21	12	26	13	4	-81%	Liberal Arts
AE	40	36	64	98	7	-83%	General
CS	37	12	16	23	5	-86%	Liberal Arts
UC	15	2	4	1	2	-87%	Liberal Arts
PZ	93	107	28	11	11	-88%	Education
CD	19	3	8	10	1	-95%	Liberal Arts
CE	4	2	5	6	0	-100%	Liberal Arts
CN	1	3	3	0	0	-100%	Liberal Arts
DAW	3	1	0	1	0	-100%	Liberal Arts
KU	3	2	4	0	0	-100%	Law
LG	1	1	1	2	0	-100%	Education
LT	1	0	1	0	0	-100%	Education
RX	3	1	1	13	0	-100%	Health Sciences
UD	3	1	2	1	0	-100%	Liberal Arts
UE	1	0	2	0	0	-100%	Liberal Arts
VA	17	11	20	13	0	-100%	Liberal Arts

When looking at the LC classifications with a decrease in use, the data shows the 63 of the LC classifications had less than 100 uses on average throughout the five years and because of the small size of the collection, the percentage of decrease in use is impacted to a larger extent. The data for these 63 LC classification need to be investigated further to find out if they are subjects or disciplines that are not part of the research or curricular focus. These classifications may also be areas where programs have been discontinued or where faculty may have had a research interest and have left the university or moved on to other research areas. The analysis at the college level illustrates that out of the total amount of LC classifications, all but one college had 50%

of their LC classifications experience a decrease in usage. Sciences, Fine Arts, Hotel, Business, and Engineering had over 80% of their LC classifications experience a decrease in use. Urban Affairs was the only college that experienced less than a 50% decrease in their LC classification usage. For the percentage decrease, all colleges, except for Hotel and Fine Arts, had half of their LC classifications experience a decrease of 20% or more over the five year period. However, 61% of the LC classifications that had over a 20% decrease in usage had less than 100 uses in the call number range that were used and the small collection size will have a significant impact on the percentage decrease. Hotel was the only college that had all of its LC classifications experience a decrease in use.

Of the 42 classifications that increased, twelve increased less than 10%, thirteen classifications increased between 10 and 20%. There were only seventeen classifications that increased more than 20%. The 42 LC classifications that increased were in the following subject areas:

- 23 in Liberal Arts
- 3 each in Health Sciences, Sciences, Urban Affairs and Law
- 2 each in Education and Engineering
- 1 each were in Business, Fine Arts and Information Science (ZA)

Table 8 LC Classifications with Increased Usage

LC Class	Titles Used FY02-03	Titles Used FY03-04	Titles Used FY04-05	Titles Used FY05-06	Titles Used FY06-07	%increase 02-07	College
LD	54	55	50	209	421	680%	Education
UH	1	0	0	4	5	400%	Liberal Arts
J	1	7	13	5	4	300%	Liberal Arts
DH	2	13	18	8	7	250%	Liberal Arts
RK	98	116	172	252	298	204%	Health Sciences
KL	3	5	3	11	8	167%	Law

KZ	17	30	29	23	38	124%	Law
JS	17	31	40	45	33	94%	Liberal Arts
ZA	14	21	24	13	27	93%	Library & Information Science
JZ	70	80	105	49	110	57%	Law
JL	58	80	103	93	90	55%	Liberal Arts
JV	194	242	268	315	286	47%	Liberal Arts
GF	104	132	190	136	140	35%	Liberal Arts
LJ	3	8	6	10	4	33%	Education
BV	121	138	191	158	157	30%	Liberal Arts
NX	234	299	398	309	295	26%	Fine Arts
JN	147	160	212	148	185	26%	Liberal Arts
SK	16	15	17	14	19	19%	Sciences
RT	639	724	962	777	749	17%	Health Sciences
DR	93	589	592	77	109	17%	Liberal Arts
BS	224	288	426	263	259	16%	Liberal Arts
BT	161	205	227	192	185	15%	Liberal Arts
GE	236	297	337	269	270	14%	Liberal Arts
BP	289	347	377	303	327	13%	Liberal Arts
TC	99	120	156	122	112	13%	Engineering
DQ	8	50	52	4	9	13%	Liberal Arts
JQ	61	61	109	51	68	11%	Liberal Arts
PJ	144	132	160	126	159	10%	Liberal Arts
HC	646	815	1062	819	711	10%	Business
JF	193	177	242	173	212	10%	Liberal Arts
QB	333	342	491	400	362	9%	Sciences
QD	788	985	1230	1017	854	8%	Sciences
RD	161	185	243	197	170	6%	Health Sciences
HJ	136	164	184	109	143	5%	Urban Affairs
U	137	155	190	169	143	4%	Liberal Arts
BC	134	147	187	239	139	4%	Liberal Arts
DG	296	315	409	294	307	4%	Liberal Arts
BR	348	314	469	303	357	3%	Liberal Arts
BL	912	959	1244	1012	930	2%	Liberal Arts
BM	156	174	200	182	159	2%	Liberal Arts
TD	627	737	815	510	637	2%	Engineering
HA	199	196	273	261	201	1%	Liberal Arts

Of the 62 LC classifications that had an increase in use, 15 had less than 100 uses

on average and with a small collection size, any increase will affect the percentage in some capacity. These classifications will need to be investigated in more detail to determine what factor may have led to an increase in use. Some factors could be new programs or classes, increase in undergraduate populations or new areas of research. At the college level, Urban Affairs had the most LC classifications that experienced an increase in use. On average, each college had 18% of their LC classifications experience increased use. The college with the lowest percentage increase in use was Fine Arts. The evaluation of this data set also revealed that if the data is analyzed for four years instead of five years, the results show that 21 of the 42 LC classifications would have experienced a decrease in usage. Another year of data will be useful to help analyze these trends.

The four LC classification that had zero use in FY 02 – 03 and are not applicable for percentage increase or decrease and their usage for FY 06 – 07 is negligible. Two classifications each are from Liberal Arts and Law.

LC Classifications used most in FY 06-07

In Fiscal Year 06-07, 128 of the 236 classifications had more than 100 titles used, and of those, 32 classifications had more than 1000 titles used. The top classifications with more than 4000 titles used were PS,PR, E, QA, and PN.

Table 9 Highest Used LC Classifications FY06-07

LC Class	Titles Used FY06-07	College
PS	5555	Liberal Arts
PR	5109	Liberal Arts

E	4574	Liberal Arts
QA	4512	Sciences
PN	4165	Fine Arts
HV	3537	Urban Affairs
LB	3244	Education
RC	3237	Health Sciences
HQ	3199	Liberal Arts
BF	3133	Liberal Arts
HD	2828	Business
ML	2371	Music
TX	2360	Hotel
HF	2315	Business
N	2168	Fine Arts
F	2150	Liberal Arts
GV	1967	Hotel
DS	1920	Liberal Arts
QC	1746	Sciences
PQ	1720	Liberal Arts
B	1643	Liberal Arts
LC	1479	Education
TK	1280	Engineering
RA	1262	Health Sciences
TA	1252	Engineering
HM	1241	Liberal Arts
TR	1231	Fine Arts
QH	1199	Sciences
ND	1171	Fine Arts
P	1056	Liberal Arts
HG	1014	Business
KF	1008	Law

Further analysis showed that of the 32 classifications that had more than 1000 titles used, all classifications decreased in usage for the five year period FY 02-03 to FY 06-07. This is a significant finding for the assessment because it matches the overall usage trends of the monograph collection. So far, the assessment has shown that both the overall usage trends and LC classification analysis reveal a decrease in usage over the five-year period.

Even the most highly used areas of the collection are experiencing a decrease in use.

Approval Books versus Discretionary Books

The next analysis of the monograph collection involved evaluating the last two years of total use statistics to measure use of approval monographs versus discretionary monographs. This analysis was conducted to see if the approval plan profile with YBP and other vendors should be re-evaluated. The approval plan has been set up to provide the core collection of monographs for the UNLV Libraries' collection and the discretionary funds are be used to supplement the approval plan and to fill faculty monograph requests. The hypothesis would be that approval monographs should have higher usage rates than discretionary monographs. For this study, monographs ordered in FY 05 - 06 were tracked for use in both FY 05/06 and FY 06-07 for approval and discretionary use. The first graph shows the total use of monographs in FY 05/06.

The average use for approval monographs was 43% and the average for monographs

purchased with discretionary funds was 43%. These numbers are good to monitor, but are not significant in the analysis because of the fact that the use was monitored in the year of purchase and the amount of time the book has been available to users varied. In order to further analyze approval and discretionary book usage, the committee analyzed percentage use in FY 06/07 for monographs purchased in FY 05/06.

The graph above shows that average total use (includes in house and circulation) is 46% for Approval and 45% for Discretionary. A slight increase from the previous year. The graphs show that education and engineering are either average or are above average for both Approval and Discretionary use. Business, Fine Arts, Liberal Arts, and Sciences are below average for Approval and Discretionary use. Health Sciences is above average for Discretionary and below average for Approval. Hotel and Urban

Affairs are above average for Approval and below average for Discretionary.

CONCLUSIONS

Over the past five years, the number of monographs added to the collection have increased 15% or an average of 28,514 new monographs per year.

Table 10 Number of Monographs Added to Lied Library

Fiscal Year	2002-03	2003-04	2004-05	2005-06	2006-07
# Volumes in Libraries	978,588	992,638	1,014,262	1,097,271	1,121,158

The most additions to the monograph collection were in the areas of liberal arts and fine arts and this corresponds with monograph budgeting as these two areas have the highest budgets in both approval and discretionary funds. These two areas are also traditionally heavy users of monographs.

The most interesting results of this study are with percentage use of each college's monograph collection and number of monographs with at-least one use. The percentage use for each of the college collections demonstrated that overall, the usage of the monograph collection has declined over the last five years. However, from 2002-03 to 2004-05, all monograph collections experienced increases in use. The decline in use actually started in 2005-06 to the present. A variety of factors could be possible reasons to the decline of use. One factor is that the budget for monographs increased the last two years and this was a time when more monographs were added to the collection. In addition, the full-time enrollment and undergraduate enrollment declined due to increased admission standards. Finally, in 2005-06, UNLV Libraries began purchasing electronic

book collections and these ebooks are included in the library catalog and use of these electronic books may have had an impact on decrease in print monograph usage.

Looking at specific colleges, the analysis shows that for each college and most LC classes, use of monographs is decreasing. All colleges, except for Health Sciences, Hotel and Urban Affairs have lower than average use rates. Part of this trend may be attributed to the fact the Health Sciences, Hotel, and Urban Affairs had larger increases in undergraduate programs, while the rest of the colleges have remained at a level pace. When comparing usage to money allocated for monographs, liberal arts, fine arts, business, and sciences have the highest budget allocations for monographs and each of their use is below average.

In order to further investigate the drop in usage, the number of monographs per college with at least one use was analyzed. The findings demonstrate that in all colleges, the number of monographs with at least one use dropped for all colleges after 2004-05. This in some ways disputes the thought that the increase in monographs added to the collection was a large factor in the decrease in percentage use. This shows that the use of the monograph collection is indeed on the decline. An analysis by college demonstrated again that fine arts, liberal arts and business had the largest decreases in monographs with at least one-use. Health Sciences and Hotel and the smallest declines in monographs with one-use.

The analysis of LC classifications demonstrated some interesting trends as well. Out of the 236 LC classifications analyzed, 70% or 166 classifications experienced a drop in use. The LC classifications that experienced an increase in use was 42 classifications or 18%. Looking at the specific college collections, liberal arts had 73 classifications that

had a decrease in use, which is 44% of all decreases. However, liberal arts also had the most classifications that increased in use with 23 or 55%. Further investigation of the liberal arts classifications needs to be undertaken to identify specific trends.

Assessment of the use of monographs purchased on approval and monographs purchased with discretionary funds demonstrated that during the first year, both types of monographs circulated at 43%. However, due to the fact that monographs were purchased throughout the entire year, the second year of use is more important for this analysis. For the second year, the approval books circulated at a higher rate 46% to 43%. The difference is not significant overall. When looking at use by college, seven of the nine college collections had higher use for discretionary monographs than monographs purchased on approval. This could be due to better selection of discretionary books by liaison librarians or due to the fact that the approval plan profile needs to be reviewed to reflect new programs and research interests.

LIMITATIONS OF THE STUDY

The results of this study have been very useful for the UNLV Libraries and will be used for future budget allocation decisions. However, there are limitations to the assessment methodology. One of the limitations is the organization of the use by college. As stated previously, liaison librarians were asked to send LC ranges for their colleges. If the classification had two or more subject areas, the subject area most predominant was selected for the classification so that only one subject area was used for each LC classification. The decision to organize circulation percentage by college was chosen to give a snapshot of the use of monographs by a specific demographic set of users. Although one would attribute a majority of the use to a specific college, due to the

interdisciplinary nature of research, some use could be attributed to users in other colleges. Another limitation to the study is the lack of statistical information from the three branch libraries. These libraries do not have the data available to track individual titles. If this data had been available, there is a strong possibility that circulation for the Fine Arts and Education would be higher. Since the inception of this study, UNLV Libraries has agreed that all libraries should keep statistics in a consistent manner and branch library statistics will be available in future projects. The circulation data used in this study only reflect a five-year period. This is a small percentage of the many years of circulation statistics. Further limitations include the impact of physical reserves on the circulation of the collection. Physical reserves, depending on when and how often monographs are in reserve, may affect usage rates. A final limitation to this study is the fact that interlibrary loan (ILL) requests were not used. ILL statistics were gathered for the collection assessment, but were not used in the analysis of this paper. ILL requests could have been helpful to identify weaknesses in the approval plan or in discretionary purchases.

IMPLICATIONS AND FUTURE CONSIDERATIONS

The assessment was a wonderful exercise for the collection management department and the results of the study will have many implications for the UNLV Libraries. The first area that will be significantly impacted is the monograph collection budget. Due to the fact that use of monographs is decreasing in every discipline, UNLV Libraries will need to adjust the amount of money that is budgeted for the monographs collection. At this time, UNLV Libraries is facing potential budget cuts and the data from this study could be used to justify a budget reduction from the monographs budget to library and

university administration. Another impact for the monograph budget is the allocation of funds by discipline. The usage data will be applied to identify specific disciplines where funding allocation will need to be adjusted for both approval and discretionary funds.

The study will also have implications on how the UNLV Libraries harvests monograph usage statistics. As a result of the study, the UNLV Libraries has changed the method for gathering statistics for the branch libraries. Monograph usage statistics will now be collected in a consistent manner in order to include usage for the branch libraries and this will provide more clarity on monograph use. In addition, UNLV Libraries will analyze usage of books purchased on approval and with discretionary funds at the end of each year. This will help identify areas in the approval plan profile that may need to be updated or changed.

The study will have implications for the library in regards to selection and future analysis of the monograph collection. The collection management department will need to work more closely with liaison librarians on what materials to choose for the collection. Liaisons play a vital role in building a strong monograph collection and their role in collection development may need to be monitored or enhanced through training. It is vital that liaison librarians have knowledge of classes, programs and faculty research interests in order to make informed decisions. Liaison librarians need to communicate with faculty and ask for input on monograph purchases. In addition, liaison librarians play a vital role in marketing the UNLV Libraries' collection and more evaluation of these efforts may be needed.

The assessment results could be used in tandem with faculty and student surveys to see if there are issues with selection, marketing or access. Future research will need to

include investigation of electronic books to see if any trends can be identified that may impact use of print monographs. In the past few years, UNLV Libraries has purchased many electronic book collections from *NetLibrary*, *ebrary*, *Springer*, and *Elsevier* just to name a few.

REFERENCES

- Adams, Brian and Bob Noel. 2008. Circulation statistics in the evaluation of collection Development. *Collection Building* 27(2): 71-73.
- Brush, Denise. 2007. Circulation analysis of an engineering monograph approval Plan. *Collection Building* 26 (2): 59-62.
- Kingsley, M. 1996. Circulation statistics for measuring approval plan effectiveness. *Against the Grain* 8(4): 16-17.
- Kneival, Jennifer E., Heather Wicht and Lynn S. Connaway. 2006. Use of circulation statistics and interlibrary loan data in collection management. *College & Research Libraries* 67(1): 35-49.
- Ochola, J. N. 2002. Use of circulation statistics and interlibrary loan data in collection Management. *Collection Management* 27(1): 1-13.