Agarwal, N.K. (2011). Evaluation of information services in the library: Areas identified by graduate students. In A. Katsirikou & C. Skiadas (Eds.) *New trends in qualitative and quantitative methods in libraries: Selected papers presented at the 2nd Qualitative and Quantitative Methods in Libraries, 2010* (pp. 77-88). Singapore: World Scientific Publishing. https://doi.org/10.1142/9789814350303_0011

Evaluation of Information Services in the Library: Areas identified by Graduate Students

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Abstract: Evaluation is the systematic assessment of the operation and/or the outcomes of a program or policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy (Weiss, 1998). Neal (2006), in the context of academic libraries, says that "decisions are routinely not supported by the evidence of well-designed investigations" and that "research in the field is poorly communicated, understood and applied" (quoted by Peter Hernon, in the forward to Matthews, 2007). In addition, more and more libraries are either closing down or being forced to cut down on services due to recession (Powell, 2009; Applegate, 2009). Thus, identification of different areas of library services for systematic evaluation becomes extremely imperative in the current economic scenario. In an assignment to graduate students in a Master of Science in Library and Information Science program (with most students currently working in library or archive settings), the students were asked to describe an evaluation research scenario and a problem statement based on the scenario. An important criterion for grading was the significance of the scenario proposed. Using the areas of library (and archive) evaluation identified by the students as a case study, this study seeks to propose research questions and current areas of interest in the evaluation of library services. The study should shed light on the evaluation areas of importance in the current economic scenario and also help drive future research in this area.

Keywords: evaluation of library services, evaluation research scenario, graduate students, assignment, research questions, problem statement

1. Introduction

Evaluation is the systematic assessment of the operation and/or the outcomes of a program or policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy (Weiss, 1998).

Neal (2006), in the context of academic libraries, says that "decisions are routinely not supported by the evidence of well-designed investigations" and that "research in the field is poorly communicated, understood and applied" (quoted by Peter Hernon, in the forward to Matthews, 2007). In addition, more and more libraries are either closing down or being forced to cut down on services due to recession (Powell, 2009; Applegate, 2009). Thus, identification of different areas of library services for systematic evaluation becomes extremely imperative in the current economic scenario.

This study lists 28 problem statements adapted from an assignment submitted by students in a graduate class. These also serve as 28 examples on how to effectively write problem statements for any research study.

Using the areas of library (and archive) evaluation identified by the students as a case study, this study seeks to propose research questions and current areas of interest in the evaluation of library services. The study should shed light on the

evaluation areas of importance in the current economic scenario and also help drive future research in this area. The 28 examples of problem statements would be useful to researchers preparing to write studies, librarians, as well as graduate LIS students learning to write problem statements for an evaluation research study.

2. Methodology

In an assignment in Fall 2009 to 28 graduate students in a Master of Science in Library and Information Science program (with most students currently working in library or archive settings), the students were asked to explore and describe an evaluation research scenario in the Library and Information Science field for a specific research topic; and to write a problem statement derived from the research scenario. An important criterion for grading was the significance of the scenario proposed¹. The students were given 2 weeks to complete the assignment (distributed during Week 2 in a 12 week semester; due on Week 4).

In the scenario, the students were tasked to include the following in their narrative: 1) the specific library, archives or museum *setting* (either hypothetical setting or modeled on a real one) where the evaluation study is conducted (e.g. medium-sized academic library, large public library, small music library, university archives, historical society, etc.); 2) the *evaluand* (any product, service or policy which is to be evaluated) of the evaluation study, which could be any component of information services, such as a newly launched information system or a specialized information service; 3) the position/role of the student in the organization/setting as the *evaluator* in the study; 4) *stakeholders* concerned with the evaluation results; 5) *participants*, if any, in the evaluation study; 6) specific range of *data* that the student (as the evaluator) planned to collect for the study; and finally, 7) the likely impact and *significance* of the evaluation study.

Based on their scenario, the students were also required to come up with a problem statement. Hernon and Schwartz (2007) mention 4 components of any problem statement in the social sciences (which would apply to library and information science) as stressed by Dr. David Clark: 1) lead-in; 2) declaration of originality (e.g., mentioning a knowledge void, which would be supported by the literature review); 3) indication of the central focus of the study; and 4) explanation of study significance or the benefits to be derived from an investigation of the problem.

For the purposes of this paper, each 2-4 page assignment was adapted into a problem statement format recommended by Hernon and Schwartz (2007).

3. Findings and Discussion

Given below are 28 problem statements based on the scenarios that the students came up with. Keywords in the setting and evaluand for each problem statement have been highlighted in **bold**. These help shed light on the current areas of research interest as identified by graduate students, most of who work in library or archive settings. Read each case from left to right. Column 3 on what each study does provides examples of research questions in the library and archive settings.

¹ The assignment was adapted from one used by Associate Professor Rong Tang in her class.

	Lead-in (setting)	Knowledge	What this	Significance
		gap	study will do? (evaluand)	
1	The database in	However, no	This study will	This will help
	the Suffolk	study has	compare the	libraries make better
	County	compared the	efficiency and	informed, cost-
	Historical	accuracy of	accuracy of	productive decisions
	Documents	databases set	database set	when assigning database
	Library is managed by both	up by part- time staff to	up by part time staff to	creation/management
	professional and	the accuracy of	those by their	tasks to staff.
	part-time staff.	those set up by	professional	
	F	professionals.	peers.	
2	As the digital age	However,	This study will	The study will help
	is now upon us,	many archives	investigate	archives decide
	many researchers	often have	whether	whether or not to
	enjoy being able	lone arrangers	providing	digitize collections
	to search archival	or a small staff	online finding	and post finding aids
	finding aids online	and it is often	aids and	online, and which
	and browsing	difficult to find time for	partially digitizing	collections they
	digital collections from the comfort	digitization	digitizing collections	should digitize because of the cost
	of their own home.	projects.	will help draw	and time involved in
	or their own nome.	projects.	in more	the process
			researchers.	
3	Project SAVE	However, no	This study will	The knowledge
	Armenian	study has been	evaluate the	gained from such a
	Photograph	performed to	user needs	study would aid in
	Archives in	determine the	with regards	procuring the funds
	Watertown, MA	needs of	to digitization	necessary to digitize
	has over 30,000 images in its	image-seeking users of the	of collection, to determine if	the large collection so that the information
	collection and is	archives.	digitization is	within the archive
	the premier	drenives.	necessary and	could reach a larger
	archive of		to what extent.	audience.
	Armenian photos.			
4	The local history	However, local	This study will	This will help
	room of the	history	help evaluate	libraries better
	Somerville Public	collections	if the local	position their legacy
	Library is a	have	history	collection, or create a
	collection that has	constituted	collection is	new collection for
	grown organically over the years.	very little of the discussion	meeting the needs of the	educational purposes.
	over the years.	of archival	patron. and	
		practices,	help determine	
		although many	what patrons	
		local libraries	need from	
		in New	history	
		England	resources in	
		maintain a	the public	
-	The De	collection.	library setting.	The ava1
5	The Farr Begional	However, it is	Before the	The evaluation will
	Regional Library, the main	not clear how effective the	library board decides to	help determine patrons' level of
	branch of the High	program has	implement	satisfaction with the
	Plains Library	been in	self-checkout	system, potentially
	District, has	providing	systems on its	save the library
	_ 104100, 1145	rionomb	011110 011 110	

	implemented a	patrons with	other	money over time, and
	self-checkout	faster service,	branches, this	provide for better
	program.	giving more	study will	overall customer
		control over	evaluate the	service for library
		their library	effectiveness	patrons.
		experience and	of the system	
		in allowing	at the Farr	
		circulation	Regional	
		staff to spend	Library.	
		more time on other tasks.		
6	A new service is	Since this is a	This study will	More information on
0	being offered by	relatively new	investigate if	the efficacy of this
	the medical school	service, it is	users find this	service should help
	reference	unknown if the	new service	the library better
	librarians to	users are	useful, and if	serve the needs of
	encourage use of	actually	they are	and be a useful part
	their expert	finding this	willing to	of the medical school
	abilities and the	portable	return or are	community.
	library, whereby	reference	returning.	
	the reference	service useful		
	librarians set up	and if anything		
	a portable station	could be done		
	in the cafeteria	to make it		
	during peak dining	better.		
7	hours.	However, it is	This study will	The evaluation will
/	A new digital circulation system	not clear how	evaluate	help shed light on
	has just been	the new	whether the	aspects of the new
	implemented in a	system will	process of	system which patrons
	small library for	impact patrons	implementing	find frustrating and
	a private	used to an	the digital	those they find
	educational	older system.	circulation	useful, and allow the
	institute in		system	library staff to adjust
	Boston, MA that		adequately	operations based on
	was used to a		takes into	those issues.
	rolodex of old		account the	
	book inserts		concerns of	
	ranging in dates		users who are	
	from ten years ago to the present.		used to the older system.	
8	A new lecture	However, it is	This study will	An evaluation of this
0	series at the	not apparent	evaluate the	particular lecture
	Boston Public	how useful do	effect of the	series could shed
	Library offers	scholars of	new literary	light not only on its
	free admission to	different sorts	lecture series	effectiveness for the
	all Bostonians,	find these	at the library	Boston Public
	caters to people	series –	on all those	Library, but on the
	from a wide	academic	who benefit	way literature lecture
		researchers,	scholastically	series affect urban
	variety of			
	academic	librarians and	from the	and/or academic
	academic programs and	librarians and curious	resources of	communities in
	academic programs and schools in a city	librarians and curious Bostonians in	resources of the Boston	
	academic programs and schools in a city with many	librarians and curious Bostonians in search of an	resources of the Boston Public	communities in
	academic programs and schools in a city	librarians and curious Bostonians in search of an afternoon of	resources of the Boston	communities in
9	academic programs and schools in a city with many	librarians and curious Bostonians in search of an	resources of the Boston Public	communities in

	promoting library services to known and unknown users.	commissioned by the Cambridge Public Library to observe how patrons of the Central Square branch found	study of new patrons registering for library cards focusing on their method of acquaintance with the	determine how effective its current marketing is and what can it do to improve.
		out about the services offered here.	library.	
10	Overdrive Media currently supplies online downloadable media (audio and e-books) for more than 8,500 libraries across the U.S.	While much research has been devoted to the study of user characteristics and the use of e-book and e- journals in a research setting, audio books have not been studied all that much.	This study will evaluate the selection criteria for audio books in a shared virtual branch called CW/Mars.	Understanding the use and demand for this type of service and the effect it has in the library marketplace is essential to establishing a development plan for online downloadable media collection that will be sustainable and effectively meets patron needs.
11	A university archives with a medium-sized repository has just implemented a new website.	However, it is not clear if the website is effective in helping visitors decide what they want before they come to the physical building.	This study will evaluate the effectiveness of the website in disseminating information about the materials stored in the archives.	The evaluation will help the stakeholders ascertain if the website is effective in meeting user needs and what, if any, changes are required.
12	The State Library of Massachusetts is an important resource for state employees.	However, there is no data suggesting that there is currently a working marketing plan.	This study will evaluate the marketing practices of the library and determine its efficacy.	The study will help the library understand the efficacy of its marketing practices and to modify the practices to increase the number of patrons.
13	Facility design is a high priority for librarians who want to effectively attract users to their space.	Yet, no assessment has been made to address the lack of successful facility design in regard to teen space at the Honan- Allston Library.	This study will evaluate the young adult's facility to ascertain whether the space is effective in encouraging positive teen experiences in the library.	Such a study will result in the redevelopment of a space that is inviting and meets the needs of young adults, leading to higher young adult library patronage in the Allston community.
14	Any training	Despite the	This study will	The study will allow

	provided to implement a disaster recovery plan in a university archive must focus not just on the measurement of	importance placed on the competency of staff members during a disaster, very little data is available on	determine how comfortable and confident staff feels when performing their role within the	the institution to modify and perfect their plans so that the staff feel involved in the process, and may lead to an increased likelihood of
	the preservation of the collection, but also on the way staff should handle their individual responsibilities.	how feedback from staff about their training can assist in effectively executing the	disaster plan.	successfully preserving the collection in the unfortunate event of a disaster.
15	The Thomas Crane Public	disaster plan. Yet, no studies have been	An evaluation using a	The study will benefit the patrons by
	Library's music CD collection constitutes a significant portion of the library budget, and the items that comprise it are consistently sought after.	performed measuring the collection's usability or physical accessibility, and patrons and staff have called these aspects of the CD collection into question.	questionnaire will gather data on the collection's usability and physical accessibility.	making a more accessible music collection. The library staff will likely get fewer questions about the collection and be more comfortable explaining the simpler classification scheme and physical layout.
16	Collins, the smallest branch of the Cambridge Public Library is adding several computer terminals to help make it more child-friendly.	However, in order to justify the computer purchases to the stakeholders, it is necessary to evaluate how much use the services receive, and whether patrons are actually valuing the services being offered.	This study will help determine how much use the computers receive, and whether their placement in the children's area results in greater use of the online catalog, which has previously received very little use.	If the evaluation shows increased computer use and overall increase in online catalog use, the library will be able to claim that the service fulfills patron need and possibly recommend further computer services for youth patrons. A negative outcome will demonstrate that the computers might be better served elsewhere.
17	A grant-funded feasibility study suggested modifying and expanding the Bancroft Memorial Library, a small public library with a rich history and exquisite	Unfortunately, residents did not want to change the historic library leading to continued challenges in effective utilization of the limited	The library staff and trustees would like to see if relocating the large print collection will increase circulation and alter patron	Getting patron perceptions before and after the collection is moved will help determine if patrons have a safe and convenient access to browsing and selecting books, and may also prepare them to consider

	architecture, that	space in which	attitudes	modifications to the
	is suffering with	to	toward	building
	outdated and	store/display	building	recommended by the
	insufficient building features.	materials for	improvements	feasibility study.
10	Online book-	patrons.	in the library.	The state of the second st
18	marking tools	Yet, no study has sought to	This study will record the	The study would be useful to elementary
	such as	discover if	frequency of	schoolteachers and
	'Delicious' make	these can be	young student	librarians who use the
	finding hard-to-	successfully	use of	Internet as a vital
	remember	used by young	'Delicious'.	teaching tool and
	websites with	children from	the time it	information source
	obscure domain	Kindergarten	takes them to	but lack the time and
	names and	to Second	find the	ability to type in
	relevant	grade, some	required	domain names for
	information easier.	non-readers, to	website, and	each child's
		navigate the	whether they	computer.
		often	would use it	
		dangerous	for personal	
		world of the	use.	
10	01 .1	Internet.		
19	Since the release	To date, there is little	This study will	The study could serve
	of the first Amazon Kindle	information	gather patron	as a road map of sorts for libraries wishing
	in November	available about	input to determine	to purchase e-readers
	2007, interest in e-	the issues	current and	and to implement this
	book readers such	faced by	future e-	type of service.
	as Kindle or Sony	libraries	reader	type of service.
	e-reader has	choosing to	circulation	
	quickly increased.	lend e-readers	procedures	
		to patrons.	and ways in	
			which the	
			service could	
- 20		TT .1	be improved.	T 1. C.1.1
20	The Portsmouth	However, the	The study will	The results of this
	Public Library	extent to	help determine if the	study will help the Portsmouth Public
	provides access to 166 licensed	which library patrons avail	li the databases are	Library allocate its
	electronic	themselves of	those that the	limited funds in a
	databases. a	this resource is	patrons want	manner consistent
	service offered at	unknown.	or if the	with the needs of its
	substantial cost.		library should	patrons.
			subscribe to	
			others.	
21	The Waltham	Unfortunately,	This	Results of the
	Public Library's	as most of the	evaluation will	evaluation will be
	archives contain	information	determine the	used by the library to
	personal historical	from the	satisfaction of	strengthen outreach
	information like	archives is not	archival	programming,
	high school	catalogued or	users, and the	reconsider staffing
	yearbooks, marriage notices,	bar-coded, there is no	frequency with which	and hours, and include information
	and other	consistent way	they avail	in annual budget
	materials of local	to track the	themselves of	reports- an important
	and personal	value of the	the services	issue for the library
	importance.	archives.	offered by the	as it has faced a
	1		archivist.	\$75,000 budget cut.
22	The Luther W.	There isn't an	This	Insight gained from

	Brady Art Gallery is the professional showcase for art at George Washington University, Washington D.C.	information system for the gallery that would organize the various holdings in the Permanent Collection, and would also make them accessible to those unfamiliar with cataloging rules.	evaluation seeks to determine the language preferred by patrons to describe the artworks – cataloging methods such as AACR2 or MARC, or a proprietary language of descriptions for the repository.	this study would assist Art Librarians in describing art in a way that is accessible and helpful to patrons from all backgrounds.
23	The "One	Since the	This study will	The results of the
20	CardEndless Possibilities!"	inception of the program 3	seek to understand the	study will help determine the
	program	years ago, a	unique	connection between
	encourages Monohostor City	formal	experience of each business	library patrons and
	Manchester City Library patrons	evaluation has never been	and patron	local businesses, reveal areas where
	to visit local	conducted	through the	the program is
	businesses in the	regarding the	program.	lacking, establish if
	city to obtain	community		the program was
	discount s/freebies by showing their	response or effectiveness		responsible for new library cardholders,
	library card.	of partnering with businesses.		and ultimately decide if the program will continue in the future.
24	Historical	No study has	This study will	Insight gained from
-	societies offer a	previously	help a	this study will
	wealth of research	been	historical	illustrate whether or
	material, trained	conducted to	society similar	not there is a need for the historical society
	staff eager to assist with queries,	analyze the way in which	to the New England	the historical society to implement a more
	and an array of	moderately-	Historic	aggressive outreach
	exhibitions and	sized	Genealogical	program and offer a
	lectures, yet their	historical	Society	program and offer a larger selection of
	lectures, yet their attendance levels	historical societies	Society evaluate its	program and offer a
	lectures, yet their attendance levels are modest	historical societies approach	Society evaluate its user programs	program and offer a larger selection of
	lectures, yet their attendance levels	historical societies	Society evaluate its	program and offer a larger selection of
	lectures, yet their attendance levels are modest compared to those of libraries, museums and	historical societies approach user programs and outreach, and	Society evaluate its user programs and outreach and compare these with	program and offer a larger selection of
	lectures, yet their attendance levels are modest compared to those of libraries,	historical societies approach user programs and outreach, and their	Society evaluate its user programs and outreach and compare these with those offered	program and offer a larger selection of
- 25	lectures, yet their attendance levels are modest compared to those of libraries, museums and universities.	historical societies approach user programs and outreach, and their effectiveness.	Society evaluate its user programs and outreach and compare these with those offered by peers.	program and offer a larger selection of user programs.
25	lectures, yet their attendance levels are modest compared to those of libraries, museums and	historical societies approach user programs and outreach, and their	Society evaluate its user programs and outreach and compare these with those offered by peers. This study will	The evaluation will
25	lectures, yet their attendance levels are modest compared to those of libraries, museums and universities. A small-to-	historical societies approach user programs and outreach, and their effectiveness. There is much	Society evaluate its user programs and outreach and compare these with those offered by peers.	program and offer a larger selection of user programs.
25	lectures, yet their attendance levels are modest compared to those of libraries, museums and universities. A small-to- medium-sized corporate library of the law firm ,	historical societies approach user programs and outreach, and their effectiveness. There is much literature about evaluation of launching	Society evaluate its user programs and outreach and compare these with those offered by peers. This study will evaluate the usability of the new	The evaluation will help the library improve the interface and contents of the
25	lectures, yet their attendance levels are modest compared to those of libraries, museums and universities. A small-to- medium-sized corporate library of the law firm , Greeley and Cour	historical societies approach user programs and outreach, and their effectiveness. There is much literature about evaluation of launching technology	Society evaluate its user programs and outreach and compare these with those offered by peers. This study will evaluate the usability of the new OPAC with	The evaluation will help the library improve the interface and contents of the OPAC. With better
25	lectures, yet their attendance levels are modest compared to those of libraries, museums and universities. A small-to- medium-sized corporate library of the law firm , Greeley and Cour has purchased a	historical societies approach user programs and outreach, and their effectiveness. There is much literature about evaluation of launching technology and even	Society evaluate its user programs and outreach and compare these with those offered by peers. This study will evaluate the usability of the new OPAC with respect to ease	The evaluation will help the library improve the interface and contents of the OPAC. With better access to information,
25	lectures, yet their attendance levels are modest compared to those of libraries, museums and universities. A small-to- medium-sized corporate library of the law firm , Greeley and Cour	historical societies approach user programs and outreach, and their effectiveness. There is much literature about evaluation of launching technology and even OPACs, but	Society evaluate its user programs and outreach and compare these with those offered by peers. This study will evaluate the usability of the new OPAC with respect to ease of use,	The evaluation will help the library improve the interface and contents of the OPAC. With better
25	lectures, yet their attendance levels are modest compared to those of libraries, museums and universities. A small-to- medium-sized corporate library of the law firm , Greeley and Cour has purchased a new Online	historical societies approach user programs and outreach, and their effectiveness. There is much literature about evaluation of launching technology and even	Society evaluate its user programs and outreach and compare these with those offered by peers. This study will evaluate the usability of the new OPAC with respect to ease	The evaluation will help the library improve the interface and contents of the OPAC. With better access to information, the firm can make

26	to replace their ugly and underused 10-year old system. Small Liberal Art College's library has always offered introductory workshops covering library resources and basic research methods during the first few weeks of the semester.	settings like this one. However, an increasing number of professors, students and library staff members are questioning the effectiveness of these.	future use, attractiveness of interface, and search precision. This study will evaluate the effectiveness of these workshops and the usability of the library website.	the library could become the place where patrons go for top quality legal information. The study will help determine the usefulness of these resources to students in meeting the stated learning outcomes of the college, of which research skills are a major component.
27	The Night Owl Program is an innovative new method of the Annenberg Library collaborating with professors of the Pine Manor College, Chestnut Hill, MA and incentivizing students to use the library.	The course integrated approach used by the program is recommended in LIS literature but few studies have been done to compare its effectiveness with other methods.	This study will determine if a curriculum integrated user instruction method is more effective for first year students at a small/diverse liberal arts school than the traditional method.	The outcome of this study is crucial in gaining a better understanding of the most effective way to provide user instruction to first year students at Pine Manor College, and helping create information literate students.
28	Libraries' role in helping new college students succeed is often assumed, and certainly one can see many first- year students in libraries, or connecting to their school libraries online in the beginning of their college education.	However, it is not clear if the reference interview contribute to the students' first year academic success and eventual information literacy.	This study will evaluate how students' visits to the reference desk affect those students' first year grades.	This study will help reference librarians justify their salaries with the library's budget and bring forth their crucial role in helping promote information literacy.

The problem statements above provide different examples of areas of current interest in the library/archives/information settings. As seen in the cases above, many students choose to study the efficacy of services provided (an area of primary concern to a service-oriented field such as Library and Information Science). Many students have mentioned limited budgets/funding and the need to streamline services to best meets patron needs.

4. Implications and Limitations The examples above would be useful to researchers preparing to write studies, librarians, as well as graduate LIS students trying to look for questions to evaluate, as well as learning to write problem statements for an evaluation research study.

Limitations of this paper are also to be noted. The scenarios/problem statements could be based on either hypothetical or real-life settings. Also, at the time of doing this assignment, most students were not trained researchers or evaluators, but training to be one (though most of them did work in real-life library/information settings). Due to lack of space, the individual components of the scenarios, such as stakeholders, participants in the study and specific range of data to be collected (as identified by the students) were not included in this paper. While the scenarios above serve as good examples, they hardly touch the surface of the countless possibilities for evaluation that could take place within a library and information setting (see Matthews 2007 for a detailed treatment on the evaluation of various information services in a library).

5. Conclusion and Future Work

This study has highlighted 28 problem statements identified by graduate students in a class assignment. Using these areas of library/archive/information services evaluation identified by the students as a case study, this paper provides examples of current areas of research interest in the evaluation of library services. The paper also builds on Hernon and Schwartz (2007)'s editorial on problem statement by providing various examples on writing problem statements.

Future work will involve expanding upon each case by identifying the participants in each study and the specific range of data to be collected. Scenarios and problem statements identified by future batches of students will also be incorporated. There might also be a need to group scenarios based on specific themes and specific types of questions.

Acknowledgements

The author is grateful to all his students who helped identify these areas of evaluation research interest as part of their class assignment.

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