

Spring 2011

## Developing a library value indicator for a disciplinary population

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### Repository Citation

Brown, J. M. (2011). Developing a library value indicator for a disciplinary population. *Proceedings of the 3rd annual Library Assessment Conference 9*. Association of Research Libraries.

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# Developing a Library Value Indicator for a Disciplinary Population

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## Abstract

Three different ways of documenting library value were presented to fourth year landscape architecture students in the UNLV School of Architecture: a contingent valuation survey, a library calculator, and a survey to rate importance and impact of library services and features. Students used the three approaches, then discussed their experiences with the author. Their input suggested improvements in the instruments and provided feedback on possible positive and negative consequences of inviting this kind of valuing. Working with a focused collection and population provided a relatively safe environment to explore concerns about negative consequences.

## Introduction

Value has been a topic of high interest to libraries and library organizations in the past several years. There have been workshops, conference sessions, and a growing number of publications.<sup>1</sup> ACRL commissioned Megan Oakleaf to produce a report that is expected to add substantively to the literature on this topic.<sup>2</sup>

Return on Investment (ROI) is a subset of the value literature. ROI studies have been done in public libraries to prove the value of their libraries to the individual and to the community. Academic libraries in general have been slower to engage in these types of studies, although there have been notable exceptions such as Luther's study relating grant funding and ROI.<sup>3</sup> One type of ROI studies in academic libraries looks at faculty time and dollars saved.<sup>4</sup> An in-progress ROI study is a three-year, IMLS grant-funded study involving the University of Illinois at Urbana-Champaign, University of Tennessee, and the Association of Research Libraries.<sup>5</sup> One of their stated goals is to "develop a model for ROI and tools that implement this model which can be used by other academic libraries."<sup>6</sup>

The study reported here is related to both the value literature and that on ROI. It is a modest investigation, using a small population (ten students), of several methods for eliciting feedback on library value: a value survey, a calculator, and a contingent valuation survey. Although calculators and contingent valuation methods have been used somewhat widely in public libraries, few academic libraries have explored these approaches. One source of reluctance might be a concern that once students know the costs of the library's collections and services they will lobby to decrease campus spending on the library—especially in the current fiscal climate. The purpose of the study was to elicit response both on the methods and the specific instruments used, as well as to observe any positive or negative reactions to the valuing exercise.

## Population and Context

In spring 2010, the study's student population was in their final year of the landscape architecture program at the University of Nevada, Las Vegas. Their instructor was a supporter of the library, effectively incorporating many types of research, including library research, into the studio. The Architecture Studies Library (ASL) is in the same building as the School of Architecture, and prides itself on being welcoming and inviting, as well as providing research assistance.

To obtain descriptive information on the population, I asked several questions on frequency of library use, both physical and virtual. When asked how many times they used the Architecture Studies Library per month, the response range was 1-20. When asked how frequently they used the library website per month, answers for the most part mirrored the physical use, with one notable exception. The

person who was the most frequent user of the physical library, at 30 uses per month, was also

the least frequent user of the virtual library, at 5 uses per month.

Respondent number ->	1	2	3	4	5	6	7	8	9	10
Use of physical library per month	1-2	4	8	10	10-15	10-15	13	15-20	20	30
Use of virtual library per month	2-4	4	10	6	10-15	10-15	15	10-20	20-30	5

Students were also asked to rate their skill in using the physical and virtual library environments compared to their peers. Seven of the ten felt they were above average in ability. Two felt they were above average in using both the physical or virtual library. Two indicated they were above average in use of the ASL webpage. Three said they were above average in their skills in using the physical ASL. Only one indicated being below average in using either the physical or virtual spaces; he indicated being below average in “knowing what is on the ASL webpage and being able to navigate the page easily.”

Students also rated themselves—compared to peers—on eight other skills. Only three indicated they were below average on any skill: one (use of both physical and virtual space is 10-15 times per month) said he was below average in “being able to select terminology and use discipline-specific vocabulary to get targeted search results”; one (ASL use 8 times per month; library web use 10 times per month) indicated being below average in “being able to search print and electronic sources for images of a particular project or works of a particular landscape architect”; and one (uses web and ASL both 4 times per month) admitted being below average in three skills: using the ASL web pages (mentioned in the previous paragraph), selecting terminology, and “knowing the major journals in landscape architecture.”

It is important to have a sense of how often the students use the library and its website, and how confident they are in their skills in order to put their response to various valuing methods into context. Overall these are students who are confident in their information skills and moderate in the frequency of library use. Seven (70%) use the ASL ten or more times per month. Six (60%) use the website 10 or more times per month. Only one student (10%) reported using the library

enough times (30 times) to be a daily user of the ASL, and one (10%) similarly for the website. This use is less frequent than that of the overall School of Architecture student population as indicated by LibQUAL+® respondents. In the UNLV Libraries 2009 LibQUAL+® administration, the disciplinary analysis showed those reporting daily use of the ASL constituted 30% of architecture school student respondents, with 22% reporting daily use of the library’s web pages.

### Study Process

Students were surveyed during a class period. They were first given the survey asking them to rate themselves on ten information skills in comparison with their peers (total time 2-5 minutes). The value survey was given next (total time 5-12 minutes). The contingent valuation sheet followed, taking 2-3 minutes. Lastly they were asked to complete the calculator sheet (3-5 minutes). Discussion followed on each of the instruments. A week later, the students were sent three follow-up questions via email. They were subsequently provided a variant form of the contingent valuation survey.

### Value Survey

The value survey was composed of 12 questions, exclusive of demographic information. The first set of questions asked respondents to rate the importance of various service and resources items on a 1-5 scale, with an additional option of IO (“important to others, not to me”). The items were grouped into five categories: library content, library space, people, convenience, and tools (each a separate question with multiple subparts). The remaining items were open-ended ones: the impact of the library on their education, the consequences for them personally should the ASL close, the most important benefit of the physical library and the digital library for them, and lastly an opportunity to offer additional comments.

The items on the value survey were selected based on formal and informal feedback from School of Architecture students over the 13 years the architecture branch has been open. Multiple past surveys in the ASL have explored what students consider important, what they like, and what they use. From this input, in addition to standard aspects of the library such as books and staff help, I selected elements such as whiteboards and scanners.

### Contingent Valuation

Contingent valuation seeks to determine how much someone is willing to pay for a service, possibly indicating marketplace value. Students were asked how much they would be willing to pay for seven services, including hours between 8-10 pm, weekend services, access to a staff person to answer questions, etc. The final question was "Think about the library as a paid membership. How much would you pay for a membership?"

### Calculator

The calculator as used in this study provided both cost information and an opportunity to indicate monetary value to the individual. The calculator listed eight items, including books, journals, databases, computers, interlibrary loan, etc. For each item there was an explanation of costs. For example, for the item "Having access to the books you want" is the explanation that "The average cost of an architecture book is \$50, although individual titles can be much more costly." Students filled in a column labeled "Value to you" and another labeled "Number of uses per month."

The calculator was roughly based on the one on the University of Hawaii Manoa (UH) webpage.<sup>7</sup> However there are several key differences. The University of Hawaii Manoa created separate documents for costs and how the costs were derived<sup>8</sup> rather than incorporating that information into the calculator. For the calculator in this study costs (derived from local data e.g. average cost of an architecture book, and Kinko's charges for computer access; or, in the case of interlibrary loan, the national average) were included as part of the calculator although the method of determining the costs was not. Another difference is that the UH calculator automatically supplies a monetary value based on number of uses and the library's determination of

cost/value. For this study the respondent supplied the value and there was no automatic computation of value based on number of uses.

### Student Comments on the Instruments

After the instruments were administered, I posed a series of questions concerning each instrument. These are the questions which applied to all three instruments:

- What did you think about length?
- Would most students take the time to complete the instrument?
- Are there items that you'd suggest be deleted?
- Are there questions you'd suggest we add?
- What was confusing (if anything)?
- Do you see any unintended consequences in asking students to complete these surveys?

Questions which applied to just one instrument were:

- On the value survey: comment on the format of the survey, did you find the option "important to others, not to me" a helpful or confusing option?
- On the contingent valuation survey: What do you think about this method?
- On the calculator: was it helpful to have information on the costs of different services? Why or why not? What do you think about this method?

### Comments applying to all three methods:

- "The best way to administer in order to get participation is by administering surveys in class. There might possibly be participation if a person handed it out in the library and explained it as 'saving the library.'" E-mail was seen as the least productive method of administering the instruments. A couple felt that incentives might increase response.
- The length of each instrument was seen as "manageable."

### Comments on the value survey:

- "Liked best of three, for format."
- "Liked the category 'important to others'—gave a chance to weigh in even if don't use something personally."
- "More honest on this one—it was the 'safest' of the three."

### Comments on contingent valuation form:

- “Scary—afraid of another fee. In fact, if they take the library away they need to pay the students, since it is an expected part of college.”
- “Putting value is hard, suggest phrasing it as percentage of tuition.”
- “Might ask instead ‘what would you do without it.’ ”
- “Title of form—‘Help us put a value to library services and collections’—is confusing.”
- “For the item ‘how much would you pay to have’—‘have’ is confusing. Does it mean access? Or having on the shelf next to my desk in studio?”
- “‘Pay to find right book’ also confusing.”
- “Difficult to answer as do not know how much things cost. Maybe use a scale, e.g. \$5-\$250.”
- “This might give the school the idea of charging!”
- “Consider asking how much it is worth, rather than how much would you pay.”

### Comments on the calculator:

- “Like number of uses per month in the chart—helpful in thinking about value.”
- “Explanation of price helpful, and addressed the problem in the contingent valuation form of not knowing how much things cost.”
- “Liked having the average costs for a baseline.”
- “Separate Avery and full-text databases.”  
[Author note: some indexes are critical to certain disciplines, and for those in the School of Architecture the *Avery Index to Architectural Periodicals* is essential.]

### Comments referring to both the contingent valuation form and calculator:

- “Prefer calculator to contingent valuation method.”
- “Need comment space.”

### Indications from the Quantitative Data

There would seem to be some relationship between the amount someone is willing to pay and the rating given to importance, although it is

inconsistent. Supporting the relationship are these two examples. One student who was willing to pay the least (\$0.50) for a staff member to answer a question, also rated “help from staff on projects” a “3” in importance—the lowest rating assigned. This low rating was given by only two students. The other student giving the item a “3” was willing to pay \$1 for staff assistance, an amount on the low end of the range (\$20 was maximum).

On the other hand, looking at all three methods of collecting feedback, there are obvious discrepancies. This is apparent in the chart below, especially for DVDs. Respondent number three, for instance, rated DVDs lower in importance than books or journals, appears not to use DVDs at all, yet assigned it a monetary value higher than books or journals on the calculator. Similarly respondent number one assigned DVDs the highest monetary value of any item on the calculator, although he does not use DVDs and has assigned it a neutral importance rating.

Use also does not align with monetary value. Items in order of uses, with the most frequent first, are: access to journal databases, downloading journal articles, access to a computer, journals, books, ILL, access to study rooms, DVDs.

On the calculator the student’s assignment of monetary value aligned more closely with the average costs provided on the calculator than with importance ratings. Looking at the items in order of student-assigned monetary value, the following items are listed in order of average monetary value: journals, books, ILL, journal downloads, DVDs, access to study rooms, access to computers, access to databases. Items in order of the cost as indicated on the calculator—using the low end of the range—with the most costly listed first—are books (\$50 average), DVDs (\$30-\$300), journal downloads (\$30), journals (\$20-\$650), ILL (\$17.50), access to computers (\$5-\$20), and access to databases (\$0.13-\$1.06). Obviously something can be important and/or well-used without necessarily being costly, such as access to databases.

**Feedback by respondent from Value (Importance) Survey, Calculator, and Contingent Valuation (Would Pay)**

	Book Importance rating	Journal importance rating	DVD importance rating	Book would pay	Journal would pay	Book calculator value	Journal calculator value	DVD calculator value	DVD uses per month
#1	4	5	3	\$2	\$5	\$5	\$5	\$10	0
#2	Important to others	5	3	\$1	\$5	\$1	\$2	0	0
#3	5	5	4	\$5	\$5	\$10	\$5	\$30	0
#4	5	5	3	\$3	\$2	\$10	\$15	\$5	1
#5	5	5	Important to others	\$5	\$2	\$50	\$20	\$10	0
#6	5	5	3	\$5	\$5	\$5	\$10	\$1	0
#7	5	5	4	\$2.25	\$2	\$30	\$25	\$1	1
#8	5	5	4	\$10	\$5	\$30	\$30	\$1	1
#9	5	5	3	*	*	\$50	\$200	\$30	0
#10	5	5	Important to others	\$1	\$5	\$60	\$40	0	0

\*My fees already cover this. [Author note: student response on contingent valuation form.]

**Indications from the Qualitative Feedback**

Feedback from the participants on the contingent valuation form highlight a potential negative reaction to asking students how much they would pay for services. Two comments, one labeling it as “scary” and one expressing worry this was leading to additional fees, indicate that heightened anxiety was produced during the contingent valuation part of the exercise.

On the other hand the comments provided in the value survey were extremely positive. The open-ended questions on the value survey instrument, which invited respondents to comment on library impact and how closure of the library would affect them, provided rich positive documentation lacking with the calculator and contingent valuation instruments (which unfortunately lacked a place for comments). Examples of these comments include:

- “I would not be able to do my senior research paper without the help of the ASL.”

- “Without the library I would rely on the Internet, which would lower my knowledge of my major.”
- “The ASL is needed for landscape architecture students to learn the current trends in the profession.”
- “Without the ASL I would not be able to research things relating to my major in a tangible setting. I get most of my inspiration and knowledge from the plethora of books in the library.”
- “If the ASL were closed I would be devastated. As School of Architecture students we need convenient access to resources. The main library does not provide an area where we can convene as students of similar interests.”
- “Not having the library would be detrimental to my education.”
- “If the ASL closed it would make research much more time-consuming. Also it would lead to fewer students seeking scholarly data.”

- “If the ASL closed I would have to spend more time and money to get books. It would lessen my educational experience.”

All comments were similar in tone.

### Follow-Up Questions for the Student Group

Approximately one week after the three instruments were administered, additional questions were sent via email to the group. Only three responded by email. Additional responses were gathered in a visit to the studio. Below are the questions and the student responses.

1. What is the impact of knowing the cost of the library services per item (cost per book, journal index, etc.)?
  - a. “We understand the economic implications of the outstanding library services.”
  - b. “I feel that if anything it will cause users to take better care of the library items.”
  - c. “It helps in knowing how important each book and journal is.”
  - d. “Eye opening. Helped me realize what I’m paying for or what is being provided free of cost.”
  - e. “Help realize how important these things are.”
  - f. “Gives them more worth to me.”
  - g. “Knowing the cost serves as a reason why we do not have access to more online articles.”
  - h. “*Knowing the cost of the services in the library can alarm the students in taking more part in the library or to tell the library staff which item they feel needs to have more budget attention.*”
  - i. “Greater appreciation of the resource.”
  - j. “It would make me realize how important different items are.”
2. Would knowing how much it costs increase your use?
  - a. “I’ve known the cost for some time. Need dictates my use, not cost.”
  - b. “Personally it would not increase my use of these items just by knowing the costs. I am still going to do my research in the same way. *But it would increase my response to the library if the items I used were not as high of a priority in the budget.*”

- c. “Yes.”
- d. “More than likely yes ... it would open my eyes to how important they actually are.”
- e. “Probably not. I like to use services that are easy and high quality.”
- f. “I don’t feel that knowing the cost of an item will increase my use of it. The only thing that would increase my use would be school related projects that called for use of these items.”
- g. “Knowing the cost wouldn’t increase my use but it would increase the quality of info I pull from each source.”
- h. “Most likely.”
- i. “Most likely.”
- j. “Yes.”

3. Would knowing how much it costs increase your appreciation for the service?  
Responses: No; Yes; Yes; Yes, for sure; Yes it would; Yes; Yes; Yes it would; Yes; Yes

The responses, even of such a small group, begin to form a picture of possible student response to strategies such as calculators and contingent valuation. Italicized answers above indicate possible negative consequences of placing monetary value on library services: increased budget scrutiny and more active input into library priorities. On the other hand, is increased involvement—even if it is to challenge library decisions—a bad thing? Do we want patron involvement at a budget and allocation level? For most students, knowing costs would tend to increase their appreciation of services provided. This is an important positive result.

### Modifications to Instruments

Students suggested several changes in the instruments. For the value survey, in addition to the option of “important to others, not to me,” or perhaps instead of that option, they suggested adding “Not currently important but the option of future use is important.” For the calculator, instead of combining the Avery Index (not full-text but the most important index for the discipline) with other databases, they suggested making it a separate item. For the contingent valuation form, feedback indicated that the confusing title would need to be revised, and several of the questions re-worked. In addition, a range of amounts they might be “willing to pay”

is preferred to a blank for the respondent to fill in. For both the calculator and the contingent valuation forms, they suggested that space for comments should be added, which might result in valuable qualitative feedback.

Several modifications are suggested based on the analysis of results. Items listed in each instrument should carry over consistently on each instrument if they are to be analyzed as a package (e.g., add a staff and hours item to the calculator, and electronic resources and services to the contingent valuation form). In addition, the average or range of costs included in the calculator should clarify whether it is the cost for the library to provide an item or an indicator of the cost to obtain the service or resource from an alternative source. Lastly, for both the calculator and the contingent valuation, a disclaimer should be included to attempt to allay fears of fee increases.

### Contingent Valuation Reprise

Students in this study suggested alternate approaches to “filling in the blank”: that value be phrased as a percentage of tuition and that a range of values be given from which to choose. Another approach would be to ask the student to indicate willingness to pay in the context of other student fees. This approach was taken by Harness and Allen<sup>9</sup> in their use of contingent valuation of reference services.

I created a contingent valuation form that asked students to insert the library’s value among other campus fees and asked them to complete it during studio. Six students contributed responses. Several commented that they liked this approach. They mentioned that there are many fees for things they don’t use, why not one for something they use the most.

The student fee scale puts costs in the context of familiar campus services. The results were encouraging. On the range of student fees from \$1 (recycling fee) through \$50 (parking) and \$70 (health fee) to \$150 (recreation center fee), four of the students inserted the library at the \$100 or \$150 level, one at \$70, and one at \$25. One caveat: this could lead to confusion about costs, since fees only *contribute* to the costs of a service.

### Limits of the Study

This is an exploratory study. The number of participants is quite small. The intent was to test the responses of a group who might be expected to appreciate the library. In this environment the study could be “safe” for the library, protected by student support of the library from the consequences of unforeseen negative reactions.

### Future Research Questions and Considerations

Assigning quantitative value to the library, and to library offerings, may have a different outcome when attempted with students having neither a close link to the library nor a strong disciplinary perspective. Would such students react similarly or is this approach best used only with library branch (or equivalent) users? Do we want to focus the valuing process on those we *know* value the library? How do we balance the possibility of negative feedback with the power of potentially positive feedback?

If a student doesn’t use the library, what would they think about institutional money going to library? For students who don’t use books—will they protest that too much money is going to books instead of online journals, or otherwise question budgetary decisions? What about the possibility that results will show students valuing place but not high-priced librarians? These potentially negative results should be tested. Even students who use the library and consider it important fear the addition of fees. Would explaining in more detail how results would be used effectively negate this fear?

Additional factors could be explored for potential impact on library valuing. It is possible that the need for specialized librarian expertise (as is the case for music, law, business) enhances the perception of high library value. As well, information behavior outside the mainstream, such as with art and other visually-oriented disciplines, might lead to a perception of high library value. Is how much someone is willing to pay aligned with how much money they have? Might willingness to pay be related to personal spending habits and comfort levels rather than (or in addition to) worth or value.



What are the positive consequences of soliciting feedback from patrons on value? Although this study touched on the issue, additional investigation should be directed to verifying consequences of the valuing process. Do they result in increased appreciation of library services, as is indicated with the landscape architecture students? Do they result in an aware group that could be targeted for advocacy? Do they lead to positive involvement of patrons in library decisionmaking?

## Lessons Learned

Each of the three approaches had strengths. I found that the value survey in particular provided effective qualitative feedback on the value individual students place on the library and what it contributes to their academic life. If I had to choose just one to demonstrate value to campus administrators this would be the one I would choose. Nonetheless, the calculator proved most effective in raising student appreciation of the library's value. Lastly, the second contingent valuation form was useful in putting library value in a campus context.

Using all three types of instruments together allowed triangulation of results. It guarded against putting too definitive an interpretation on the dollar amounts respondents supplied. For students, unlike faculty with grant funding and unlike public libraries with a tax base, the open ended questions in the value survey on importance and impact provided a critical balance to monetary valuation.

Although the results of these types of approaches can be powerful, the specific population to be addressed and potential negative consequences should be considered. The content of each instrument consisted of items or areas of perceived importance to landscape architecture students. The students themselves were familiar with the library and its value. Knowing one's audience and using multiple methods may be the key in gathering persuasive value feedback on the library while avoiding unintended consequences.

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## Acknowledgement

I would like to thank Lee-Anne Milburn, studio instructor and coordinator of the UNLV

Landscape Architecture program, for her assistance with this study. Not only did she provide access to her students, she reviewed and suggested revisions on each of the instruments, collaborated on devising the questions about the instruments, and participated in the recording of student responses after they had completed the surveys.

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