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Library Instruction, Net Promoter Scores, and Nudging beyond Satisfaction

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Title: Library Instruction, Net Promoter Scores, and Nudging beyond Satisfaction

Abstract: Washington University in Saint Louis Libraries are beginning to use the Net Promoter Score (NPS), in place of satisfaction surveys, to measure how library instruction sessions for the College Writing 1 program are received. NPS uses the 10-point Likert-scale question "Would you recommend this library instruction session to your friends and colleagues?" NPS determines whether library instruction participants and faculty are active "promoters," simply satisfied "passives," or dissatisfied "detractors."

Nudge theory is also introduced. "Nudge" is an attempt to unconsciously influence positive behaviors in place of using mandated activities. The author believes that NPS is inherently a "nudge."

Keywords: Net Promoter Score, NPS, Beyond Satisfaction, nudge theory, nudge, Qualtrics

Project focus: assessment methodologies, techniques, or practices; information literacy assessment; organizational practices (i.e., strategic planning); user behaviors and needs; assessment concepts and/or management

Results made or will make case for: improvements in services, improvements in spaces, proof of library impact and value, decisions about library staffing, professional development/training

Data needed: Net Promoter Score and other related data

Methodology: evaluation or survey

Project duration: ongoing (continuous feedback loop)

Tool(s) utilized: Qualtrics

Cost estimate: $100–$500; uses campus-wide Qualtrics license

Type of institution: university—private

Institution enrollment: 5,000–15,000

Highest level of education: doctoral

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Chapter 22

Library Instruction, Net Promoter Scores, and Nudging beyond Satisfaction

Richard "Ted" Chaffin

Context

> *I think it's very important to have a feedback loop, where you're constantly thinking about what you've done and how you could be doing it better.*
>
> —*Elon Musk*[1]

How do we as librarians measure success in our library instruction programs? Is our methodology overly complex, using expert language and requiring complex graphs? Do we need a system where everyone can easily understand and describe our method of measurement? If so, perhaps it is time to explore using the Net Promoter Score (NPS).

This chapter explores NPS and nudge theory (nudge). NPS uses a single survey question to understand the percentage of users who would recommend your service to their friends and colleagues. Nudge theorizes that questions or activities formulated in the right way, and in the best interest of the public, can positively influence decisions

by the recipient. Can NPS and nudge work together, and is the wording of the NPS question nudging individuals with positive service experiences to recommend it to others? This chapter explores NPS and nudge, where we are beginning to implement NPS into library instruction at Washington University in St. Louis (WUSTL), and how libraries might use both concepts in their library instruction programs. NPS and nudge both set the stage for an interesting conversation, and they provide a lens through which to re-examine our instruction program and the associated measurements.

Satisfaction and Proficiency

Academic libraries use a variety of standardized and unique methods to gather and assess both user satisfaction and patron proficiency in relation to instruction sessions.[2] Efforts range from quick in-class evaluations to longitudinal studies that track the impact library instruction has on overall student success.[3] Satisfaction surveys are a common and useful way to gain data on a service. However, what does satisfaction mean? How actionable is a satisfaction score? How is it defined? Studies within library literature suggest that the proficiency of students after a library instruction session is arguably the best measurement of an instruction session's quality.[4] Methods of determining proficiency include activities such as citation analysis.[5] NPS is not designed to replace a rigorous citation analysis or assessments of research citation source usage; neither does it measure the impact students' grades, either immediately or longitudinally. NPS focuses on measuring satisfaction based on the likelihood of word of mouth (WOM) promotion by satisfied users.

Net Promoter Score

> *In many spheres of human endeavor, from science to business to education to economic policy, good decisions depend on good measurement.*
>
> —*Ben Bernanke*[6]

At its heart, NPS is a single-point metric designed to calculate whether or not users appreciate a service so much that they would actively promote the service (in this case, library instruction) across their own personal networks. NPS specifically relies on the single question "Based on your experience would you recommend this service [library instruction session] to your friends and colleagues?" The respondent uses a 0–10 scale. NPS captures 0–6 as detractors, 7–8 as passive, and 9–10 as promoters. The final Net Promoter Score is derived by subtracting the percentage of detractors from the percentage of promoters.

Key elements that separate NPS from other satisfaction ratings include (1) asking whether users would actively promote the service (i.e., library instruction sessions) to friends or colleagues on campus, (2) the simplicity of using a single-question survey,

and (3) the measurement of excited promoters instead of a general or undefined satisfaction. NPS is reasonably new to the landscape of customer measurement. In 2003, the *Harvard Business Review* first explored NPS in the article "The One Number You Need to Grow."[7] Two books, *The Ultimate Question* and *The Ultimate Question 2.0*, were later published on NPS, and they continued to explore the usage and methods associated with NPS.[8]

Why use a single score? Richard Watts, who led the adoption of NPS at Progressive Insurance, saw NPS as "a leading indicator of what was going to happen… a measure we could actually explain to 26,000 employees" and said that having "everyone talking the same way was absolutely huge."[9] Dave Gilboa, the cofounder of Warby Parker, focuses on how this single-score methodology allowed the company to find a critical customer issue quickly when "NPS dropped below 80% and alarm bells sounded." The drop in Warby Parker's NPS score led them to quickly discover that shipping times had increased, and they were then able to rectify the issue.[10] The literature on NPS is littered with examples of how "thousands of innovative companies… liked the fact that NPS was easy to understand. And they like it because it focused everyone on one inspirational goal—treating customers so well that those customers become loyal promoters—and led to action in pursuit of that goal."[11]

How can we quickly and easily engage with NPS, and what is the most efficient way to calculate NPS using current software options on the market? Net Promoter Score appears easy to determine, and it is derived by subtracting the percentage of detractors from the percentage of promoters to arrive at the Net Promoter Score. Qualtrics and SurveyMonkey, two leaders in the field of survey software, have created NPS question models for users in their survey software. Qualtrics identifies the NPS question by calling it Net Promoter Score in its survey software, and SurveyMonkey refers to NPS in its survey software as The Ultimate Question. Ryan Smith, cofounder and CEO of Qualtrics, spoke candidly about how he and his team "fell into it [NPS]" after querying their database and discovering approximately 130,000 different NPS-related surveys in their system.[12] WUSTL Libraries launched a very similar question in our spring 2016 survey after a review of how we were defining user satisfaction. This author similarly stumbled upon NPS at the 2016 EDUCAUSE conference in Anaheim during the session titled "Catalyzing Academic Innovation with New Spaces and Services."[13]

Nudge Theory

Nudge theory, or simply nudge, was in part popularized by Richard Thaler and Cass Sustein in their 2009 book, *Nudge: Improving Decisions about Health, Wealth, and Happiness*.[14] This theory captures a growing collection of research that draws upon concepts in psychology, political science, and economics, in which experts attempt to unconsciously influence positive behaviors in place of using mandated activities. In theory, a well-delivered and mostly unconscious "nudge" works in tandem with an individual's preconceived interests or motivations to lead to a positive result. The majority of the research and use of nudge centers around policy-making, policy-

makers, and government agencies. Though the use of nudge was originally centered in the UK, other organizations are exploring alternative approaches for government to have a positive impact on the world through the application of nudge.[15]

Two leaders in the field of nudge include Cass Sunstein, Harvard Law professor, and David Halpern, chief executive of Nudge Unit. Their work with nudge focuses on creating a positive improvement in people's lives through the thoughtful analysis and redesign of government services, the sharing of statistical data, and the encouraging of individuals to look beyond the current struggle and focus on the near-term better future.[16] According to Sunstein, how we present information and how we ask questions, such as with surveys, influences the outcome. Sunstein views this "choice architecture" as the background environment against which we make decisions.[17]

Choice architecture also includes bringing conscious planning to areas such as website design, placement of items in stores, bright coloring, and font size increases, all designed to utilize choice architecture.[18] Examples of nudges to influence choice architecture include removing candy from the checkout at grocery stores and using automatic enrollment in retirement savings plans.[19] Also, a key element relies on easy adoption and human nature: "If you want to encourage someone to do something, make it easy."[20]

Some researchers perceive a nudge as a potential threat or wrongdoing and view it as being manipulative or paternalistic. This argument is challenged by the concept that "choice architecture is inevitable and freedom of choice weakens the paternalistic argument."[21] Additionally, David Halpern, CEO of Nudge Unit, emphasizes that nudge interventions by his team are designed to create choice-enhancing options.[22] Nudge experts focus heavily on respecting individual dignity and agency, protecting against younger thinking (example: Social Security System), and developing cooling-off periods regarding purchases (examples: drugs, guns, prescriptions, drinking).[23] Based upon the evaluation put forth by the experts in nudge, this author views the NPS question, "Based on your experience, would you recommend this service to a friend or colleague?" as a possible nudge, but ultimately views whether to recommend instruction sessions as a personal choice.

Communicating Results and Impact

> There are two possible outcomes: if the result confirms the hypoth-
> esis, then you've made a measurement. If the result is contrary to
> the hypothesis, then you've made a discovery.
>
> —*Enrico Fermi*[24]

The University Libraries at WUSTL have a long tradition of supporting the College Writing program and especially its Freshman College Writing 1 course (CW1).[25] CW1 currently includes a research paper as a portion of the course. The schools of Architecture, Art, Arts and Sciences, and Business require the completion of College

Writing 1 to satisfy the university's writing requirement. There are approximately seventy sections of CW1 each fall and spring semester. Each section has a maximum class size of twelve students, and this accounts for an overall potential annual impact on up to 1,680 students out of a total undergraduate student body of 7,543.[26] Librarians and library staff volunteer to assist sections of CW1 each year with the research component of the course. There are sixteen to twenty library employees on average assisting CW1 sections each semester. WUSTL Libraries gather data related to the support of CW1 in areas including satisfaction and the needs and preferences of CW1 instructors and students through the use of an optional survey administered every fall and spring semester.

After a small pilot of the NPS question in our spring 2016 survey, we introduced the NPS question into the newly revised version of our survey, which focused on NPS and collecting data on instructor and student library session resource use and preferences. As of spring 2017, we now have two semesters of data on CW1 using NPS (fall 2016 and spring 2017). The pilot survey in the spring 2016 semester, however, did not allow for the separation of student and faculty responses. Fall 2016 marked the first full launch of the NPS question embedded in our new Qualtrics-hosted survey.

In fall of 2016, eleven out of twelve instructor/faculty respondents answered the Net Promoter Score question. The instructor NPS was an impressive 63.64 percent. The exact breakdown of scoring was promoter, 72.73 percent; passive, 18.18 percent; and detractor, 9.09 percent. The fall 2016 student survey contained seventeen responses to the NPS question out of a total of twenty-one respondents. The NPS for students was 11.76 percent. The exact breakdown of scoring was promoter, 41 percent; passive, 29 percent;, and detractor, 29 percent. The response rate in fall of 2016 was lower than average. Subsequent investigation into the reduced responses revealed the need to time the release of the survey closer to the completion of the library instruction sessions and the assignment.

Spring 2017 marked the second full launch of the Net Promoter Score question, and it was again embedded in our new Qualtrics-hosted survey. Overall, spring 2017 had a stronger response rate by students and an exact match in response rate by instructors. The NPS score instructors for both the fall 2016 and spring 2017 was identical. In spring of 2017, eleven out of twelve instructor/faculty respondents answered the Net Promoter Score question. The NPS was again 63.64 percent. The exact breakdown of scoring matched the fall 2016 scores, with promoter, 72.73 percent; passive, 18.18 percent; and detractor, 9.09 percent. The spring 2017 student survey contained fifty-six responses to the NPS questions out of a total of sixty-two respondents. The NPS for students was –28.57 percent. The exact breakdown of scoring was promoter, 18 percent; passive, 36 percent; and detractor, 46 percent. Next steps involving the analysis of the spring 2017 NPS score are included in the Leveraging the Findings section.

As of June 2017, the responses to the non-NPS questions in the survey data were presented during a CW1 instructor/librarian wrap-up meeting. NPS data was not shared at this time, but the plan is to share it with the librarians. The identical instructor score both semesters creates the option to establish a baseline NPS score

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for instructors. However, the radically differing student NPS survey scores call for a review of the data and continued exploration into where we stand in relation to the students in CW1. The use of NPS allows for the gathering of additional feedback from librarians, instructors, students, and CW1 administrators, with the goal of creating an environment of review of methods, techniques, processes, and resources being shared across a linked curriculum. NPS also provides a platform in which the library can easily understand how we are measuring satisfaction associated with library instruction, and therefore it is much easier to tell the story of who is important to us, where we have been, and where we are going.

Leveraging the Findings

Too often we're happy to receive thanks from the nonprofits we fund, accepting gratitude instead of feedback or performance measurements.

—Laura Arrillaga-Andreessen[27]

As of June 2017, WUSTL Libraries has piloted a version of the NPS question, gathered two semesters of data, and conducted a meeting with librarians and instructors on non-NPS data. These three key milestones have set the stage for our next milestones with the NPS and the other survey data. The next milestones include presenting our findings to the library administration, introducing NPS and the associated data to the librarians providing instruction sessions to CW1, and determining and testing interventions designed to increase the student NPS score.

Unlike the instructor NPS score of 63.64 percent, the variability in the student NPS scores (fall 2016, 11.76 percent; spring 2017 –28.57 percent) warrant making the student NPS score and associated data a priority. The underlying question now is how might we decrease our number of student detractors and increase our number of student promoters. The plan and associated milestones moving forward regarding the student NPS scores and data include

1. gathering instruction differences from fall 2016 and spring 2017
2. analyzing the student preferences indicated in the survey responses
3. conducting student and instructor focus groups
4. determining next steps to pilot in fall 2017 and spring 2018
5. analyzing the fall 2017 and spring 2018 NPS scores and data
6. repeat steps 1–5

Milestones 1–5 will lay the groundwork for milestone 6, and together they will provide data on whether NPS used for the purposes of library instruction is a strong indicator of satisfaction and programmatic support, easily understood by team members, and an excellent conversation starter for future librarian workshops that focus on exploring the student and instructor preferences and how we might integrate those preferences into sessions. The creators of NPS clearly state that our milestone 6 is

the critical element for NPS to work, and that "[we] must create closed-loop learning and improvement processes and build them into [our] daily operations. NPS doesn't accomplish anything unless companies actually act on what they learn—unless, that is, they 'close the loop' between learning and action."[28]

Reflection

> *Intuitive diagnosis is reliable when people have a lot of relevant feedback. But people are very often willing to make intuitive diagnoses even when they're very likely to be wrong.*
>
> *—Daniel Kahneman*[29]

Currently, our CW1 survey contains several questions, and we have no plans at this time to adjust the Net Promoter Score question. CW1 survey data reveals critical elements about the preferences and needs from the CW1 instructors and students. The addition of the NPS question does, however, provide us with an excellent overall understanding of CW1 faculty and student satisfaction, and it is useful in framing the conversation around instructor and student preferences and possible best practices methodology. The additional questions specifically seek to capture preferences related to locations to hold instruction sessions (library or instructor classroom); resources, collections, and databases; length and number of library instruction sessions per semester; and instructional videos. The survey seeks input on what is missing from library instruction sessions, general comments or recommendations, and whether we can contact respondents for additional information. This last element helps us gather potential focus group participants.

To date, the most rewarding parts of this process have included defining an easily understood satisfaction metric; creating forums for librarians and instructors to gather ideas, methods, and input; exploring a satisfaction measurement used in other relatable areas of higher education; and exploring NPS data in a move toward more, "data-informed decision-making."[30] The most difficult parts of the process involve questions surrounding the areas of data gathering and analysis, internal constituency needs, and external constituency needs. These issues outstanding issues and challenges include the following.

Issues related to data gathering and analysis:

- Do we have enough data for use as an indicator? CW1 library instruction sessions are measured only once per semester, whereas businesses measure after each transaction.
- Do we need a baseline NPS score for instructors and students?
- Does the required nature of CW1 confound the student NPS responses? Should we establish a baseline NPS outside of CW1?
- Does NPS use nudge, or is that a cognitive leap? How would we prove it?

Issues related to internal constituency needs:

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- How do we determine a baseline NPS for both the instructors and the students? Would a baseline cause a decline in effort or an alarm when there is a drop? Does the establishment of a baseline score require librarian and administrator participation?
- Will NPS be rejected in the higher education setting because of its simplicity?
- What is the balance between spending time and effort on measuring satisfaction through NPS and conducting proficiency and citation assessments?

Issues related to external constituency needs:

- How can we increase our survey response rate?
- What level of detail surrounding NPS scores is useful for the CW1 administrators and instructors? What survey biases will sharing NPS data generate?

Several key lessons have emerged through the process of exploring NPS and nudge. Key among those lessons is the usefulness of having a three-pronged approach to assessing library instruction related to the CW1 program at WUSTL. This three-pronged approach includes NPS as a measure of user satisfaction and conversation starter, programmatic assessment through the use of citation analysis, and creation of the opportunity for key conversations by organizing instructor and librarian sharing sessions and topic exploration through focus groups. NPS provides an excellent framework for library instruction programs to build a conversation around goals, measurements of success, and the creation of an ever-evolving program based on growth, enhancing word of mouth, and customer retention.

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