

Jack be Nimble...Quick', and Communicative: Flexible Staffing Positions for Changing Technical Services Workflows

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Abstract

As library purchases for their collections move to predominantly electronic and patron-driven, acquisitions staffing has been changing to meet demands of fast paced and more complex workflows. For large academic institutions with legacy print collections, this change has not been a seamless or simple transition away from print to electronic. Unique print and patron-driven acquisitions have required complex management and staffing needs similar to those of e-resources.

In 2006 the Acquisitions/Serials Department at the University of Kansas began addressing these staffing needs by hiring all new or vacant entry level library assistant staff positions as flexible assignments. Each one shares duties and supervisors across three Units of the department: Serial Records (print), Serial Orders & Claims (print and electronic), and Monograph Orders/Approvals (print and electronic). Based on the skill set of the applicant and the needs of the department at any given time, each new hire began within different units in an effort to determine: 1) the best sequential learning for training purposes, 2) best practices in communication between staff and supervisors, and 3) appropriate physical space and location of new hires. Job advertisements outlined the reporting structure and nature of the flexible assignment. Hiring interviews focused on measuring behaviors such as adaptability to change, technological literacy, and communication skills. Physical spaces were adjusted as needed. Interviews with staff and supervisors assessed the effectiveness of this arrangement and the impact on workflow.

This presentation summarizes the process and assessment, and solicits audience feedback to identify areas for further research. This presentation is potentially applicable, beyond technical services, to anyone seeking new collaborations or restructuring of staff and workflows.

Introduction

Workflow and staffing challenges are a particularly hot topic, especially given the continual and rapid rise of electronic collecting practices against decreasing or flattening of library budgets. One example of this can be seen in the programming of the 2011 Electronic Resource & Libraries (ER&L) conference. In response to the 2010 conference's evaluation recommendations, a new program track was developed devoted exclusively to the workflow and management of e-resources (Winters). Similarly, a very active two-day discussion in June 2011 on the *Association for Library Collections and Technical Services* listserv focused exclusively on staffing, formats, and workflows (Sippel). Each of these speaks to the ongoing need to understand best practices in

workflows that are responsive to complexity and rapid change.

The University of Kansas Libraries has explored a variety of new structures and staffing models to increase flexibility across its organization including:

- an experiment in matrix reporting structure for Collection Development, Reference, and Instruction
- the use of temporary staff positions, cross-training, and backup assignments in Cataloging and Acquisitions/Serials
- increased use of student employees
- ad hoc flexible work assignments
- explicit shared work assignments.

These models vary in their reporting structure and the how the nature of the assignment is communicated and maintained. For example, the

matrix structure is the most complex arrangement, involving dual reporting structures. Because of this it is a more formally communicated and documented flexible staffing assignment. Others more often involve only single reporting structures. The levels of formal communication, implementation, or permanence across them can vary.

This session will provide the background for how explicit shared work assignments developed in the Acquisitions/Serials department. A review of the existing literature will show trends in workflow and staffing and various models for their assessment. Assessment of staff members' and supervisors' experience in this model is outlined, followed by the group's response to the results and how they will proceed based on this experience.

Background

The University of Kansas is a large academic library with a total library materials budget of \$9.5 million. Since 2006, electronic resources acquisitions have grown by 61%. In addition to e-collecting practices, there has also been an upward trend in ILL, patron driven acquisitions, and e-preferred approval book profiling. The Acquisitions/Serials department's current structure does not have a single unit devoted to electronic resources work. Instead, it distributes electronic resources workflow by format (print and electronic) and function (one-time and continuous purchasing) across three units within the department: Serial Records (print), Serial Orders & Claims (print and electronic), and Monograph Orders/Approvals (print and electronic). Many staff members are trained in a number of areas in order to effectively manage new and changing workflows. Like at many other libraries, retirements and vacancies are an opportunity to regularly evaluate resources and workflows.

In 2006, the department began hiring all new or vacant entry level library assistant staff positions as flexible or 'shared' assignments. Job advertisements outlined the reporting structure and nature of the flexible assignment. Hiring interviews focused on measuring behaviors such as adaptability to change, technological literacy, and communication skills. Physical spaces were adjusted as needed to accommodate work in several units. Each work assignment shares duties and supervisors across the three basic units

of the department. Based on the skill set of the applicant and the needs of the department at any given time, each new hire began within different units in an effort to provide a solid foundation in more than one workflow. The goal was that staff would become familiar with the department overall and be prepared to perform effectively in a variety of roles.

While the concept behind shared assignments is not particularly unique within the organization, the impact of this workflow has not been systematically assessed. Similarly, workflow and staffing issues related to electronic resources are abundant in the literature, but the impact of various models in practice remains underreported.

Literature Review

Reorganization and workflow changes were major topics of the acquisitions literature from 2003-2007 and included a variety of perspectives of organizational changes in libraries (Dunham and Davis 238-39). These studies begin to address the importance of flexible staffing arrangements -- described in practice as cross-training, retooling, or reassigning staff -- but neglect to assess the impact at the unit or individual staff level. A presentation at the 2010 NASIG annual conference, specifically addresses the staffing implications related to the elimination of print workflows. This study found 85% of responding libraries were reporting reorganization and retraining of staff within the library (Glasser and Arthur 111). This is a very similar figure to the often cited ARL Spec Kit survey reporting that 87% of ARL libraries are making organizational changes to support electronic resources (Grahame and McAdams 11). Still, the challenges presented in Glasser's survey teased out a further need to assess these instances of reorganization and retraining. For example, response comments and audience discussion questioned whether retraining is as effective as hiring for necessary skill sets, and Glasser suggests further study to measure these areas.

Whether it is more effective to retrain or hire for expertise has not yet been fully resolved. The impact of the hiring temporary employees was discussed to some degree by administrators of medium-sized research libraries at the 2007 ALA Midwinter meeting. They report the increased use of temporary employees "brings new ideas into a department and serves as motivation for

permanent staff . . .” (Boock 73). More recently, this same group reports a list of various reorganizational strategies taking place that are “shifting toward a model where everyone in technical services does a bit of everything” (Winjum and Wu 352). The importance of observing this shift away from the traditional expertise-based workflow is useful, because the shift brings with it new core areas of impact that necessitate assessment beyond just the libraries’ functional changes in workflow.

Communication is one of these areas with significant impact at the unit and individual level, especially in a distributed structure. In the traditional expertise model, needed communication can remain within a silo created by an individual expert, especially without proper documentation of workflows and policy (Kulp and Rupp-Serrano 17). But examining communication networks in e-resources workflows shows that communication silos can occur, not just with individual specialists, but within limited communication networks, if not examined. One study shows that even while email has flattened the hierarchy and served an effective communicative function within a changing workflows environment, “email alone is not an effective management tool” when “used for more purposes than those for which it was designed” (Feather 206). Other authors who support flatter organizational models (Boock 73) and distributed expertise are quick to add that this structure necessitates flexibility and “efficient communication strategies to stabilize and guide workflow practice across the library” (Collins 264). Across all the literature the need to focus on effective and streamlined communication and increased collaboration was strongly emphasized. This was a key component in developing and structuring assessment of the shared assignment.

The business and management literature was most useful in providing concrete models for assessment of flexible staffing structures like shared assignments. Case studies on the matrix structure were most common and were reported in environments ranging from hospitals (North and Coors) to consumer packaged goods companies (Kesler and Schuster). Others looked specifically at the impact on organizations (Derven), on managers (Sy and D’Annunzio), and at the implications for training (Rees and

Porter). The remaining lack of both workers’ perspectives and a library context supports the need to expand the assessment begun here.

The study of six industries’ use of the matrix structure and its impact on managers was most relevant for developing the assessment of shared assignments. Matrix structures are like shared assignments in that both the work and the reporting line in each cross two or more divisions. Of the three most common types of matrix structures (functional, balanced, and project), the shared assignments matched matrix elements of both the balanced and the functional types. A key difference between them is that the functional matrix employees remain full members of a single functional unit, rather than as official members of two (Sy and D’Annunzio 40). While the goals of the shared assignments reflect the desire to have the more balanced understanding of membership, they do retain a primary supervisor, resembling more closely in practice the functional model. The matrix study also identified five “challenges” from industry managers’ perspectives. How these shaped the assessment of shared assignments is described further in the next section.

Methodology

When looking internally to other experiences of shared assignments, cross training, or matrix reporting experiences, the general feedback matched preliminary, anecdotal findings of our experience. The primary data informing this evaluation of shared assignments, however, includes a structured survey of three staff currently working in shared assignments and three semi-structured interviews of the supervisors of these shared assignments.

Content of the questions were developed following the key factors identified by the matrix model assessment (Sy and D’Annunzio). For the shared assignment assessment, key factors included evaluating clarity of roles and responsibilities; understanding goals; and a commitment to the department overall, as opposed to a single area (or silo). The data gathered informally across the library helped inform additional questions in the areas of communication, time management, and learning connections across assignments.

15. How likely are you to recommend shared staffing assignments based on your experience?						
	not at all likely (0)	1	2	3	4	extremely likely (5)
Recommendation	0.0% (0)	0.0% (0)	0.0% (0)	66.7% (2)	33.3% (1)	0.0% (0)
NPS	Detractors (0-2)		N/A (3)		Promoter (4-5)	
	1	-0	0		1	

Fig. 1. Net Promoter Score for Ultimate Question

Survey and structure interview results were openly reviewed, discussed, and analyzed by the supervisors and department head, as well as shared with staff in these positions.

Limitations

Our assessment involved a very small set of staff experiences working and supervising shared assignments. It was primarily intended as a tool to inform ongoing departmental planning, rather than serve as a valid or general research instrument. Due to the small size of the survey pool, complete individual anonymity was not possible, and this was made explicit in the administration of the survey. The goals and purpose of the assessment for continuous improvement were also clarified, as was the assurance that no data would be used as a performance evaluation of any employee or supervisor. We aimed to be as open as possible with the assessment and discussion of results.

The methodology was appropriate for the purpose, but would require further development to ensure reliability over time, or to potentially include other shared assignment experiences in the organization, or across other libraries.

Staff Survey Instrument

The survey instrument consisted of fifteen questions divided across three sections. The first section gathered demographic information by the respondent's assigned units, physical location, and whether there had been any previous experience of shared assignments. It also included a question about initial perceptions of shared assignments in general.

The middle section assessed four categories of the shared assignment experience: communication, time management, physical location, and learning connections. One additional question about learning connections was asked of any staff who worked part of their assignment on the public reference services desk. Questions in this section were designed using a variant of the Net Promoter Score evaluation tool, a customer loyalty/satisfaction rating based out of Reicheld's book *The Ultimate Question*. Using specific questions for each category, the respondents were asked to rate effectiveness of each of the categories based on a scale of 0 (not at all effective) to 5 (extremely effective). When calculated, all middle values (3) are considered passive and are not counted toward the score. Detractor values from 0-2 are subtracted from any promoter values of 4-5 to arrive at the Net Promoter Score (NPS).

The third section sought to determine any change from initial perceptions, as well solicit suggestions for improvements. The survey concluded using the NPS scale to ask the Ultimate Question: whether the respondent would *recommend* shared staffing assignments based on this experience. Fig. 1 shows this question and provides an example of how the NPS is calculated.

The value of using NPS was primarily for the simplicity of the questions and actionable nature of the resulting scores. This metric used straightforward language to tie together the day-to-day effects of working in this model with the goals of the assignment. The scoring mechanism more clearly identifies the actionable areas. These are revealed by promoter scores (what do

Table 1
NPS Results and Comments on Shared Assignment

communication	NPS (100 scale)		comments
b/w employee and supervisor	2	67	
b/w supervisors	1	33	
training documentation	0	0	"quite a bit of helpful training documentation..."; "...not much training documentation... frequently took notes and made my own..."
clarifying roles and responsibilities	(-1)	(-33)	
time management			
distribution across units	2 (67)	67	
understanding / setting priorities	0	0	"...priorities are clear in serials check-in area, but not very clear in elecres/claims/usage"
physical location			
proximity to supervisor	1 (33)	33	
proximity to others doing similar work	1 (33)	33	
ability to concentrate	0	0	"...I frequently have trouble concentrating when working in my cubicle because of [noise in the area]."
equal access to needed resources	2 (67)	67	"...I have plenty of access to all needed resources."
learning connections			
primary unit	2	67	"...very useful for making connection and learning how the units work (independently and with each other. I would say this is the most noticeable benefit of this type of work sharing."
secondary unit	2	67	
other units in the department	1	33	"I do not think the shared assignment is any better or worse than any other method for learning connections with other units, departments, and the library/University."
across library departments	1	33	
across university	1	33	

we keep doing) and detractor scores (what do we stop doing, or what we do to turn this to a promoter?).

Supervisor Structured Interview

Supervisors were interviewed individually using similar questions as the staff survey instrument where applicable. Supervisors' historical perspective and involvement in the planning of these shared assignments made the interview a more effective method for gathering their spontaneous and complete feedback. A neutral facilitator conducted the interviews and shared each interview summary with the supervisor to clarify responses. This summary was then shared with all three supervisors and the head of Acquisitions/Serials department. These results along with the summary of the staff survey results were discussed in a meeting of these four individuals to determine if any follow-up was needed with staff, and to identify actionable next steps.

Results

Staff in Shared Assignments

All questions in the survey instrument were answered by each staff member, but only one of the three staff members provided additional feedback in the form of comments. There were no strongly positive or negative initial perceptions of shared assignments; most reported mixed perceptions, and one had no opinion.

Additional comments about perception spoke to the respondent's experience in the beginning of the assignment, noting "it can be confusing/overwhelming, particularly when first beginning training". This sentiment was repeated in the comments regarding current perceptions as well, even though the ratings of current perception indicated one instance of a change to positive. Comments here indicated an understanding of the department's goals for the shared assignment and an appreciation for a variety of learning experiences.

The majority of the other questions using NPS score resulted in promotional scores of 1. On the whole this left more questions than answers since these scores resulted from such a high occurrence of passive ratings and comments were limited to a single perspective (table 1).

Ratings and comments about learning connections did reveal that some aspects of the goals for shared assignment were met effectively. The goal for the assignment to gain a familiarity with department overall, however, was not necessarily reflected as a result of the shared assignment itself. It was rated useful for only the working units of the assignment. Department level impact was reflected, however, in the response to learning connections based out of the public reference services desk experience (table 2).

Table 2

NPS Results and Comments on Reference Services Experience

learning connections	NPS (100 scale)		comments
primary unit	1	100	"...the reference experience gave me additional learning connections that I would not have had with only the shared assignment. [e.g.]...lets me see how library users access our electronic resources, issues/difficulties they have, and what they use them for. It also gives me the opportunity to interact with the subject liaisons/bibliographers, which is beneficial because they are one group of our "internal customers" - for usage reports, claims, etc"
secondary unit	1	100	
other units in the department	1	100	
across library departments	0	0	
across university	0	0	

There were two questions that in hindsight may have been more appropriate to incorporate within the evaluation of communication using the NPS scale. First, when asked how staff members were made aware of the nature of the shared assignment, the survey sought to evaluate the effectiveness of communication about the assignment at various stages. Based on inconsistent response, we could not factor this communication's effect on their experience of the assignment as we had hoped to in questions that followed. A second question identified the primary and secondary working areas of the assignment, which revealed confusion between the name of the unit and work being done within it. For example, the same working area was identified by one respondent as the given option, *Serials orders claims*, and by another as *Other: Electronic Resources*. This too may be related to the areas of communication. The survey's only negative NPS (-1) was regarding effectiveness of *Clarifying roles and responsibilities*. Comments given about this section unfortunately did not address this specific response.

Other comments about shared assignment in general also revealed some discrepancies in communication and time management from one unit to another, and were repeated in supervisor comments.

Supervisors of Shared Assignments

Similar to staff survey responses, supervisors expressed lukewarm perceptions of shared assignments overall. The topics addressed in the interviews focused primarily on communication and physical location. All agreed on the importance of staff proximity to supervisor, noting that the need to travel to another location, even to remain in proximity to another supervisor, seemed less productive overall. Each cited the prominent role of communication in the process of developing, training, working, and assessing the shared assignment experience. Most also generally noted positive communication

experiences between staff and other supervisors in the course of their work. Some inequities in both physical location and initial communication experiences with staff were noted. Regarding the latter, however, the process of assessment helped to clarify role and purpose more clearly in the end.

Supervisors also discussed the importance of clarifying distinctions between cross-training and the shared assignment, saying "shadowing" for cross-training may be enough for some areas. In other areas, where you may more regularly need people to fill in, a fixed shared assignment is more effective. Otherwise, the time spent training is wasted since practice in those skills is not ongoing.

Conclusions

The following goals shaped our next steps: to assess the shared assignment as a concept, to decide whether to continue shared assignment for the next 6-12 months, and how to make shared assignments more effective given the feedback from staff and supervisors.

It was determined that some of the envisioned benefits were achieved. Staff were trained in a variety of duties and made learning connections within the department. Communication among all involved staff was generally effective, but there is potential for improving training and providing clearer priorities and definitions of responsibilities. Scheduling, time management, and physical locations are presenting some challenges. The responses reinforced the importance of continually clarifying the purpose and goals of the shared assignments.

It was originally envisioned that after initial training, the two newest hires would shift to a different primary and secondary supervisor and learn a new workflow. Because of transitioning workflow in Serials Check-in/Binding (print) to project-based activities, however, there was no estimated need to retain ongoing staff in this

workflow going forward. The secondary assignments in this area were deemed an effective use of shared time, as staff successfully gained a general understanding of this workflow. Considering this with the other units' upcoming needs and priorities for the new academic year, supervisors proposed to continue only one of the three shared assignments between Monographic Firm Orders (print + electronic) and Serials Orders/Claims (print + electronic). The remaining two assignments would adjust their time to 100% in these same primary areas.

While shared assignments served the established goals, it was noted they may not be the only way to address these goals. Ultimately all involved felt the experience provided a beginning understanding of what makes a good shared assignment, what to monitor as pitfalls, and where to account for practical constraints over which there may be little control (e.g. space, noise). The most useful part of the experience however, was the process of assessment itself. The experience opened up communication between staff and supervisors, among supervisors, and between supervisors and the department head, and helped in planning workflow and larger departmental priorities. More specifically, it revealed the importance of communicating the peaks and valleys of each unit's workflow. It also helped each unit begin to determine a minimum percentage of staff time needed to maintain comprehension for the most effective use of cross-training.

Another unforeseen outcome was accomplishing a first step of a more comprehensive workflow analysis for the department. It would be useful to build on a study of communication networks to identify specific communication gaps in the shared assignment and other areas of the acquisitions workflow going forward.

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