



*Using Evidence in Practice*

**Reorganizing a Technical Services Division Using Collaborative Evidence Based Information Practice at Auraria Library**

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**Setting**

As a tri-institutional academic library, Auraria Library is administered by the University of Colorado Denver and also serves Metropolitan State College of Denver and the Community College of Denver. Committed to providing an environment which stimulates and nourishes the growth of ideas, Auraria Library offers collections and services that support the curriculum of the three institutions, ranging from vocational training to doctoral programs. Situated in the heart of the city's commercial, cultural and recreational district, the campus attracts a diverse population consisting of nearly 50,000 students. In general, students of Auraria Campus tend to be mature and distant learners who commute to campus, work part-time, and rely on accessing online resources to meet their research needs.

In response to local user needs and in alignment with international collection development trends, the Auraria Library in Denver, Colorado shifted its focus from print to electronic formats. This change forced the technical services division to reorganize and revise its workflow. Economic conditions prohibited expanding or replacing existing staff members. Instead, collaborative Evidence Based Information Practice (EBIP) was implemented to guide problem identification, data collection, evidence interpretation, and knowledge creation changes (Somerville et al. 141-61). This paper focuses on the evidence-creating aspects of the 'knowledge enabling' (Von Krogh et al. 4) elements which facilitate organizational members' synthesis and analysis of collective experience. Based on Swedish philosophy, fortified by Australia ideas, and implemented

in North America (Somerville, Mirijamdotter, and Howard 119-26), the collaborative EBIP approach invites and enables employees to identify problems and create solutions. The authors offer a practical and replicable model for other organizations to repurpose, reorganize, and retrain their human resources (Callahan and Howard 85-90).

### **Problem**

In the increasingly complex area of electronic resources management, there is a great deal of confusion amongst players - library administrators, librarians, publishers, content providers, and subscription agents to name a few. This turmoil is evidence by the proliferation of various National Information Standards Organization (NISO) initiatives, including SUSHI, ONIX, COUNTER (Pesch 483), CORE (Aipperspach et al.), SERU (Tenopir 26), KBART (McCracken and Arthur 231). Each standard represents a new function or responsibility within technical services, not previously present in the print world. As a result, libraries globally are struggling to manage workflow issues. The literature is well documented with this fact, but identified solutions primarily involve purchasing Electronic Resource Management Systems (ERMS) (Harvell 127-31; Meyer 19; Sadeh and Ellingsen 208-13; Pan).

In order to respond to new electronic resources management demands for acquiring, accessing and discovering, libraries must develop viable workflow efficiencies where highly complex and dispersed processes and procedures are clearly defined. This represents a marked change from traditional print-oriented technical services departments, where processes and personnel could be isolated from each other. In this environment, colleagues communicate by manoeuvring carts of physical materials from one department to another and thereby initiating the next processing activity primarily through visual cue.

In the new information world, however, electronic resource management

responsibilities are distributed among several individuals in a variety of roles ranging from collection development, acquisitions, cataloguing, and library management systems administration. When acquisitions order a new e-journal, cataloguing personnel are unaware unless that information is communicated. Given the large volumes of transactions - as of April 2009, Auraria Library subscribes to over 31,000 e-journals via 277 databases - dependence on face-to-face conversations or email communications is no longer sustainable.

The literature on reorganization of technical services reveals case studies but no formal quantitative or qualitative research. The library purchased an ERMS, as the literature suggested, however workflow issues were not resolved. Consequently, the library turned to established experts in workflow analysis, R2 Consulting, who advised the organization to "recognize e-resources as the library's mainstream" and "expand e-resources staff in both number and level" (Lugg and Barnes 22). Given that the library was unable to budget for new positions, the Library had to repurpose, retool, and reorganize existing staff members in order to satisfy R2's recommendations.

### **Evidence**

As previously mentioned, the electronic resources management literature did not provide advice or solutions sufficient to address the question of workflow issues. Evidence was gathered through the collective experience and knowledge of the organizational members, which was synthesized and analyzed within the context of local environment requirements. However, the technical services division was not capable of developing solutions until their workplace practices transitioned from isolation to collaboration. Wisdom and understanding was enabled through fostering a culture of conversation, learning, and contribution based upon collaborative EBIP. Shared leadership, appreciative inquiry, and knowledge creation provide the theoretical framework for Auraria

Library to reconcile challenges within the technical services division.

The shared leadership approach (Deiss and Sullivan 6) moved decision making beyond organizational hierarchies to distribute influence and authority throughout the workplace, in recognition that organizational success relies upon individuals, teams, departments, and divisions working collaboratively, cross-functionally and across hierarchies. Conversations about the 'best of what is' currently and 'what could be' in the future (Sullivan 220; Whitney et al. 34) provided a foundation for organizational revitalization.

Over time and with practice, the electronic resources team was transformed into an intentional learning environment. These 'communities of practice' (Wenger 2; Nonaka et al.) are an integral part of the fabric of life, identifiable everywhere – at home, school, work, and play, whereby membership is self-defined by aligning with community mission, actions and results. Developing communities are essential for maintaining shared understandings for knowledge exchange and interpretation, possessing institutional memory, encouraging forward thinking, and developing group identity. In a workplace, this is ideally translated into a shared space for creating knowledge and developing collegial relationships where the collective may produce a "transcendental perspective...which integrates information into knowledge, within a context that harbors meaning" (Somerville, Mirijamdotter and Collins 4).

Through implementing these concepts in a workplace learning environment, the organization and its employees can grow together by developing knowledge through meaningful encounters that activate prior understanding within individuals and among groups (Howard and Somerville 4). Solving immediate problems is only the starting point. By defining and resolving challenges, ideas are generated from existing information, and can further formulate new knowledge;

employees 'learn-by-doing' with one another. In other words, "In organizational knowledge creation, one plus one could be more than two. It can be also zero, if interactions among individuals work negatively" (Nonaka 3). These various theories conceptualize an organization as a purposeful social interaction system in which collective capabilities develop through workplace socialization processes (Howard and Somerville 4).

Due to the longevity of service that many staff members had invested at Auraria Library, personnel were largely conditioned to work in hierarchical structure and discouraged from innovation or initiative without prior permission. They were victims of entrenched hierarchies, institutional memory, and long standing processes that had not evolved at the same pace as industry. Applying shared leadership, appreciative inquiry and knowledge creation theories produced a new workplace culture for technical services librarians and paraprofessionals. They were empowered with a voice, recognized for their service and wealth of experience, and encouraged to create their own evidence.

Through this process of discovery, personnel were able to reframe their histories and renegotiate their roles. Conversations emerged throughout the appreciative inquiry which enabled experiences to be collected, shared, discussed and new knowledge created for the application of new thinking to the local environment. This reinforced the wisdom of the notion that "one plus one, could be more than two" (Nonaka 3). The emergent workplace model provides evidence that employees can cooperatively generate a positive and productive workplace environment, when enabled to work autonomously and appreciate the contribution of their colleagues. In turn, the technical services division continues to develop their own solutions within an ever-changing digital landscape.

### **Implementation**

To begin the transformation within the

Auraria Library technical services department, new collaboration processes were established by reorganizing and redefining workflows. Restructuring was necessary because of the need to alter established processes due to new technologies and formats, and limited budget for materials and staff. Team members were encouraged to work cross-functionally, establish backup training, and increase communication within the department and the library. Appreciative inquiry sessions were conducted individually with each team member to establish a framework for shared understanding (Sullivan 225) through the introduction of the Learning Resource Life Cycle (see Fig. 1).

Focusing on this cycle enabled the development of a strategic dialogue about team member technical services roles and responsibilities, rather than concentrating on operational matters such as reporting structures and organizational charts. After being appreciatively 'heard and understood,' staff members willingly participated in conversations about their capabilities and aspirations.

In redesigning the work flow processes in technical services, four factors were considered for redefining roles: library needs, department needs, personal interests, and individual capabilities. Concurrently, similar

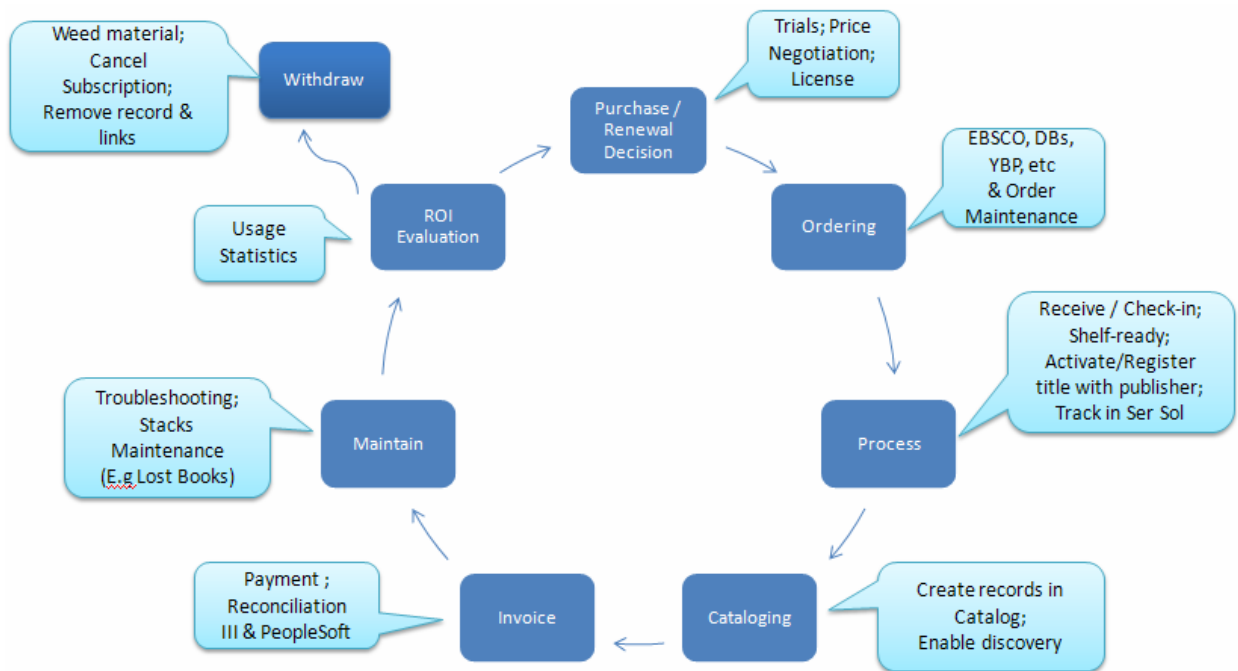


Fig. 1. Learning Resource Life Cycle.

reorganization processes were occurring across Auraria Library. As a result of this comprehensive appreciative inquiry process, three library personnel transferred to the technical services department and two individuals reassigned to other departments. Library staff members were reorganized to stimulate collaboration and thereby establish communities of practice and create knowledge, in order to realize the benefit of organizational learning beyond individual pursuits.

### **Outcome**

Once staff members' assignments were finalized, the department focused on implementing the library's strategic plan. Technical services staff members explicitly linked the departmental annual plan and personal performance plans to strategic plan initiatives which underscored the importance of cross functional electronic resource management. By doing so, they ensured goals and objectives that would become tangible outcomes of individual and group efforts.

Recognizing and appreciating what each person "brings to the table" celebrates individuals' skills, expertise, knowledge and contribution, regardless of title or rank. Through emphasizing the value of employees' skills, expertise and capabilities, commencing with the appreciative inquiry process, employee professional confidence was developed. Reinforced through a collaborative EBIP framework, this confidence enabled staff members to engage at a higher level within the workplace. This resulted in greater staff member cooperation and communication, with questions being posed and addressed at all team levels for the growth and benefit of the organization. This community development and collaborative process of knowledge creation has resulted in a culture change within the department where problems are actively solved and decisions made through evidence generated collectively.

With electronic resources, it is essential that co-workers cooperate and communicate. As a

result of collaborative EBIP, technical services personnel have a heightened sense of camaraderie, which encourages teamwork, creative synergies, and knowledge creation. Information exchange and shared leadership is proactively expressed at the peer level rather than being reliant on knowledge and permission from supervisors. Amidst dynamically changing circumstances, staff members have gained the capability to ask questions, produce workflows and assign responsibilities. Their efforts provide compelling evidence that harnessing collective experience to produce new knowledge can satisfy contemporary organizational needs for agile responsiveness and perpetual learning.

### **Reflection**

According to EBIP, challenges within librarianship can be met by identifying and applying the best available evidence (Eldredge 291). This paper is firmly grounded in EBIP, but places greater emphasis on two defining characteristics: best available evidence and incorporation of the user perspective (Booth and Brice 54). With collaborative EBIP, "evidence based processes are driven not by librarians but rather by stakeholders who assume responsibility for problem definition, methodological implementation, and data analysis activities. Reliance on student-framed, student-conducted, and student-reported research results serves to shift the locus of decision making control from 'library centric' to 'user centric'" (Somerville et al. 144). In the Auraria Library case study, best evidence is found in organizational management theories and the user perspective present in library staff. Similarly, the decision-making authority shifts from 'employer centric' to 'employee centric.'

Auraria Library's technical services department created a collaborative EBIP environment by flattening workplace hierarchies, distributing problem solving and encouraging reflective dialogue. Embracing the collective knowledge and experiences of Technical Services staff members enables them to be valued and respected leaders and

followers. In doing so, participants are encouraged and empowered to identify problems and create solutions amidst a dynamically changing electronic resources environment.

In redefining the question for the future, there are several imminent challenges ahead including a significant number of retirements and continuing issues in resource management within a growing digital environment. Through these personnel and resource changes, maintaining the collaborative EBIP framework will be tested to see if the model remains sufficiently robust to evolve despite increasingly harsh demands - including the organization's inability to replace staff during this economic downturn.

Although this case study occurred within a North American academic institution, the principles of flattening workplace hierarchies, distributing problem solving and enabling reflective dialogue can be applied to any library, information, or knowledge organization. The Auraria Library's experiences to date suggest that through embracing the collective knowledge and experiences of staff members and empowering them to be leaders and followers, individually valued and respected, collaborative EBIP can be initiated and maintained.

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