

The Essential Elements of Action Research: Refining and Applying a Personal List

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Libr 285-02

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August 10, 2010

Abstract

In a previous paper I formulated a personal list of essential elements of action research. Based on further reading and exposure to Senge's work in Somerville's *Working Together*, in this paper I reorganize my basic principals under the headings of his 'Five Disciplines', with an increased emphasis on systems thinking and student participation. I examine reforms undertaken by the Kennedy Library at Cal Poly using my essential elements as reformed by Senge. The evaluation supports the actions of the library staff while finding some gaps in the book's reflection of participants' voices. Ultimately I conclude that the changes in roles of library staff were so cataclysmic as to make revision essential, reducing the relevance of some questions of 'fairness' in or control of process. A brief look at conditions in the library a few years after the studied changes were made bears out their effectiveness but notes the deprecations of current economic realities.

In traditional organizations, this invention process for generating ‘ideal futures’ requires rethinking organizational structure, service priorities, and staff assignments, guided by organizational leaders who foster the application and advancement of information literacy, knowledge generation, and collaborative learning.

--*Working Together*

Certainly there is no more ‘traditional organization’ than a classroom, and as have other such venerable institutions, most modern university instruction has been presented with the mandate: “Change or die”. For our first major assignment in this class, after reading, reflecting, and sharing classmates’ observations and resources, we individually created a list of elements which each considered crucial for successful action research—a traditional culminating assignment. In the spirit of more current constructivist pedagogy, we must now apply the criteria created to an approximation of a real-world effort—restructuring and revision of the library at Cal Poly as described in our instructor’s text, *Working Together* (Somerville, 2009). If we as a class have been successful in creating ‘ba’--a “shared space” which “conceptualizes the ideal, persistent workplace learning environment” (Somerville, 2009, p. 70), the result must be that, in application to a fresh situation our criteria evolve even as we gain knowledge of the new situation through applying them; this has been the case with my list of elements. In this paper I first explain the revisions in my own list of crucial elements for action research. I then apply my revised criteria to situations in *Working Together*.

First, I wrote my previous paper from the perspective of a classroom teacher—a reasonable beginning point, given my personal experiences, but not broad enough to provide insight into all the permutations of library responsibilities. I had divided my elements into those which were internal to the practitioner, such as ‘paying attention’, or an emphasis on social justice, and those which were organizational, such as equity and trust, but found this structure too limited for general application. I was able to refine my elements into two broader areas: required

attitudes of those within the organization toward the goals or served populations, and required traits of the relationships and research within the organization. I ultimately found that my elements could all be organized under Senge's "five disciplines which undergird a learning organization" as summarized in the culminating discussion of *Working Together* (Somerville, 2009, p. 75-76). Organizing my elements under this system also revealed to me shortcomings in my list of elements beyond their limited workplace focus—primarily a lack of attention to Senge's "fifth discipline"—'systems thinking', providing no consideration of how various reform efforts within an organization might best be planned and evaluated in order to contribute to a change in the whole.

A library staff within a large university constitutes a separate constituency with its own goals and responsibilities. It is also true, as seen at Cal Poly in the separate but connected evolution of the librarians' role and the role of the library assistants, that within the group of library employees there are discrete subgroups with specific challenges or concerns, some of which will be examined in later paragraphs. In my previous paper I discussed the need to reconcile differing perspectives when prioritizing changes or reallocating resources in a school, but did not consider how structures for promoting alignment to the common goal might be established and nurtured. Those involved with the library changes at Cal Poly realized that their early, separate areas of progress and success were not integrated into the larger framework of the university—there was no structure for connecting or perpetuating these efforts as part of overarching efforts at realizing a shared vision. On a practical level, a "big picture" framework was needed "to inform organizational design decisions, human resource allocations, political negotiation strategies, and workplace culture attributes" (Somerville, 2009, p.40). The new curricular partnerships developed by the librarians, which led to outreach and connections to the

subject area colleges, provided the necessary connections. From smaller, internally focused efforts arising from student-led research, Cal Poly library staff continued to reach outward to the larger university, forming partnerships and alliances exemplified by the successful effort to create a Business research portal (Somerville, 2009, p.22). As described by Somerville (2009), in furthering the evolution of the Cal Poly library from “A static resource center” to “a dynamic center of instruction, exploration, and learning”, librarians’ engagement remained “information-centered, learning-focused, and action-oriented. Projects had progressively expanded librarian’s relationships with campus constituencies—moving them from receptive consumers to active co-creators” (p. 37). I conclude that an excellent strategy for thinking systemically to further common goals is “Start small, but think of all”. Continuous efforts to connect and communicate incremental improvement to other areas of an organization form the networks of connection and influence which lead to sustainable change.

Contemplating *Working Together* revealed another particularly regrettable shortcoming within my original elements—although I was voluble on the importance of equity and authenticity in representative participation, I did not emphasize enough the importance of student participation in education action research. In the Cal Poly reforms described by Somerville (2009) students conducted much of the research referenced on student perceptions of information and the library environment (p.8). Student input contributed to the ultimate design of the Business research portal (p.22). Following a central principal of interface design, Librarians incorporated user feedback by considering student-designed web research guide templates and reflected student recommendations in creation and redesign of “digital learning environments” (p. 50-51). It is true that responses from surveyed groups must always be interpreted realistically: constituency groups have their own desires and priorities. Students’ preference, for example, to

combine Barnes and Noble or Starbucks café-type spaces with study areas (Somerville, 2009, p. 29) may be motivated by marketing imagery, or by a desire to maximize pleasure or socialization as much as learning. However, the uses of student response demonstrate a genuine respect for and engagement with the primary university stakeholder group, and certainly help to ensure the accuracy and relevance of the research and innovations.

Having revised and reorganized my elements, I now must apply them to the library actions recorded in *Working Together*—are my essential elements organized according to Senge’s Five Disciplines observable and significant? The first discipline, Personal Mastery, encompasses “learning to expand our capacity to create the results we most desire, and creating an organizational environment which encourages all its members to develop themselves toward the goals they choose” (Somerville, 2009, p. 76). In my previous paper I discussed recursive teacher efforts to create and revise curriculum, to subject their instruction to peer and other useful observation and critique, and to use training and observation in constant effort to improve practice. This kind of commitment is clearly observable in the Cal Poly examples. The 2007 *Report to the Provost* lists some of the new skills required for the Kennedy librarian’s redesigned work responsibilities, including increased use of social networking technologies (p. 13), rich media production, and software development (p. 15). In implementing the RISE system, the library support staff made a tremendous commitment to workplace training to increase their skills in basic reference work and dealing with the public (Somerville, 2009, p.44).

In addition to individual efforts, managerial consideration of workplace reality must also reflect support of the possibility of “Personal Mastery”. Somerville (2009) concurs with this tenet of Senge’s, writing “The design of workplace environments must support information encounters that enable employees to find the possibilities, energize the vision, and create the

future (p. 54-55). One problem discussed in my previous paper was the allocation of time for meeting, planning, or reflection in support of attempted improvement. In his 1996 presentation “The Critical Features of Innovation”, Delbecq wrote of “the time overload which burdened those trying to do innovation while at the same time continuing to do their everyday work”. Providing library staff and faculty time for development of the innovations would be crucial to the success of their action research. Delbecq concludes, “In high-performing organizations, innovation represents a legitimate portion of the work role. Especially during pilot and implementation phases, innovation requires you to reallocate your efforts away from the press [of] every day duties.” A crucial factor in the success of the Cal Poly initiatives was the change in the work expected of librarians. In beginning efforts to redesign their role on campus and in curriculum librarians “initiated discovery by making ‘house calls’ to academic departments”. They used their work day to converse with faculty colleagues and increase their knowledge of curriculum and requirements (Somerville, 2009, p.49). This use of time and resources shows strong organizational support for the improved knowledge and competency of employees, reflecting value for this knowledge as an organizational asset.

The second discipline, “Mental Models”, encompasses “reflecting upon, continually clarifying, and improving our internal pictures of the world, and seeing how they shape our actions and decisions”. Mental Models are “assumptions and stories we carry with us about others and ourselves”. (Somerville, 2009, p. 76). Many of the concerns I raised as elements in my first paper were to do with the mental models of educators. I stressed the importance of truly ‘paying attention’ to individuals and conditions, rather than operating from unexamined or outdated assumptions. I supported with several sources my argument that action research must use high quality data and careful analysis to support proposed courses of action. There can be

few better examples of the power of data than the program review used to justify the original repurposing of the Kennedy Library staff. This review found that a large percentage of the questions asked of the librarian dedicated to the reference desk could have been answered by improved directional signage (Somerville, 2009, p. 2), a phenomenon I observed still much in evidence during a recent lengthy observation at a Northern California public library. Many of the queries were technology related, and could have been addressed through better maintenance agreements for the machines (Somerville, 2009, p. 2). A 2006 Davis and Somerville article revealed that 51 percent the informational queries were assignment related and 33 percent involved either known item searches or ready reference business questions. Excellent work done by Cal Poly students also provided interesting information about the different ways students perceived information and its uses: as ‘sources’—finding information in locations, as ‘process’, where information is used to begin action, and as ‘purposes’, when personal knowledge is needed for specific use (Somerville, 2009, p.8). More in depth-consideration of student information use guided the design of research portals for maximum usability and curricular integration (Somerville, 2009, p.22).

The third discipline, “Shared Vision”, is described as “ building a sense of commitment in a group, by developing shared images of the future we hope to create, and the principles and guiding practices by which we hope to get there”. It is stressed that with a shared vision, “everyone contributes” to what will be “an evolutionary process” (Somerville, 2009, p. 76). This discipline is closely tied to the fourth, “Team Learning”, which is intended to transform “conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual members’ talents”. Crucial aspects of team learning are “less authority and more emphasis on collaboration and facilitation”, and “A



great deal of trust”(Somerville, 2009, p. 76). Public school teachers in the age of government mandated reform often experience action research as something imposed from without, lacking, as Somerville quotes, those “shared ‘pictures of the future’ that foster genuine commitment and enrollment rather than compliance” (p. 66). With this background my former paper had a perhaps disproportionate emphasis on equity, honesty, idealism and trust among participants—managerial, employee, and consultants or public agencies. Certainly these are elements of fundamental importance, but even legitimate concern for fairness should not cause us to lose sight of other important goals—ultimate progress toward realizing our vision, sustainability of our efforts, and the best interests of our stakeholders. An examination of issues of equity and trust in the Cal Poly revisions shows how complex and multi-faceted the disciplines of Shared Vision and Team Learning can be.

On page 14 of *Working Together* Somerville (2009) shares some devastating results of student-designed research with the Cal poly population: the “overwhelming majority” of both students *and faculty* did not know what librarians did or how to find one. Only 4% said they went to the library when needing to do research. Astonishingly, “before this project began, workplace participants had never collectively reflected on their roles in a holistic context”. Somerville (2009) continues, “...one of the most profound outcomes of this three year rethinking project is clarification of workplace participants’ relationships to internal and external stakeholders (p. 54). Dr. Johnson’s famous remark comes to mind: “When a man is about to be hanged in the morning, it concentrates his mind wonderfully”. Some questions of whether research is imposed or staff-initiated have clearly become moot here—in an era of scarce resources and accountability change has become a matter of survival.

The need for change was no longer debatable; nevertheless, the picture presented in the 2006 Davis and Somerville article is chilling: prompted by the ongoing budget devastation, “library leaders introduced the idea of data-driven inquiry in October 2003, when they initiated a self-study of fall quarter reference desk transactions”. Two information desks and an outdated service area were closed, displacing technical support workers. These must have been some anxious and perhaps resentful employees when these examinations were undertaken and restructuring was imposed. It is very awkward to question the implementation of changes which were designed and led by one’s instructor, but it’s fair to ask—where are the voices of the participants in this narrative of reformation? Some quotations or case excerpts as found in McNiff’s book would have made it much easier to evaluate the Shared Vision and Team Learning aspects of this effort. All of the observations about employee participation and attitude in *Working Together* are extremely complimentary, and indeed the reported outcomes seem to support a positive view of the implementation and acceptance of change in the Kennedy Library, but questions remain. Librarians, who had a position of prestige, unquestioned authority, and some ease, were pushed out into the insecure world of politics, organizational entrepreneurship, and personal networking. Library assistants, formerly performing repetitive and isolated, if skilled tasks, were now in more visible and public positions, requiring new reference and communication skills and training. (As a union negotiator I was relieved to read in the *Report to the Provost* (2007) that the state job classification of these support workers had been upgraded to reflect their new responsibilities [p.16]). It would be very interesting to know more about the experiences of those who participated in these upheavals. Did they perceive equity and inclusiveness? Did they feel or experience trust? There are a few reflections of the participants’ experiences provided in *Working Together*. One interesting impression is created by noting how

as “few librarians were substantially involved in the research study implementations, considerable yearning developed for substantial engagement in original inquiry” (p. 38). The section also records how “...librarians expressed an unsatisfied desire for inclusive research methods capable of furthering both collective understanding and situation improvement”(p. 38-39). Here are perhaps preserved some echoes of library staff’s frustration and desire for a stronger voice in and more control over their workplace changes.

It is interesting to consider these revisions in light of Flood’s 1998 article, in which he describes three separate “loops of learning” during system change. The first loop of learning centers around the question, “Are we doing things right”, which leads to the question, “*How* should we do it”? It is in this loop that most reforms in my public school experiences occur. The question is not usually, for example, should we teach history? --but what is the most effective *way* to teach history to our current population? Flood’s second learning loop asks, “*Are we doing the right things?* This specific question in other words is, *What* should we do”? This question relates to the more cataclysmic redefinition of roles encountered and bravely met by the library staff. In my first paper the vision or task for the school is plain—it is the methods and priorities which are disputed. Even with increased online instruction and scripted textbooks few question the need for strong teachers. There is much controversy about what constitutes an effective lesson or best practice, but teachers are still expected to plan, prepare, assess, revise, present, and supervise. In libraries, any instruction provided is subject to this same combination of shift in teaching techniques and continuity of traditional tasks contained in the first learning loop. For example, page 20 of Somerville’s 2009 book quotes Katts’ conviction that “information literacy is necessarily demonstrated in a context and within a domain of content”, and this finding is reflected in the subject-connected research courses described at Cal Poly and commonly seen in on CSU campuses. However, the work of reference and information management has shifted in

the last decades into the uncharted territory of Flood's second loop, where the actual everyday tasks of participants have transformed. Flood's third learning loop calls for the complex question, "*is rightness buttressed by mightiness, and/or mightiness buttressed by rightness?*" This specific question is, *Why* should we do it?" (p. 93-94), which imparts a certain unrealistic immaturity to my former concern with 'fairness' and employee control and my questions about the emotions of those involved in these changes. "Precipitated by accelerating change, increasing uncertainty, growing ambiguity, and heightened complexity, these unrelenting forces demand significant organizational development" (p. 65). Why should we do it? Change or die.

In the absence of more testimony from participants, one way to judge the effectiveness of the actions elements present in the Kennedy Library initiatives is to look at their long-term sustainability and effectiveness, and by this measure the reforms appear successful but perhaps handicapped. The 2007 *Report to the Provost* begins with the dire news that "The library has lost half of its faculty positions in the last 25 years and one-third of its staff positions" and "ranks near the bottom of the CSU in ratio of students to librarians. At the same time, technology has increased the roles and responsibilities of library faculty and staff" and the librarian budget has been cut so that it is not comparable to that of similar institutions (p.2). However, the document goes on to praise the librarians' transition "from reference librarians tethered to desks in the library to College Librarians" calling this "more than just a name change", representing a maximization of time spent with faculty and students (p.11). The report specifically mentions the many partnerships the library has forged with other on-campus learning groups (p. 12), and recognizes the varied new roles of academic librarians, such as web designer, scholarly publisher, and usability tester (p. 15).

Examination of the Cal Poly Kennedy Library website shows the library's change actions

perhaps hampered by its horrific budget realities. There are basic subject research guides for each discipline, but far fewer class-specific sites where the library is embedded in the curriculum—only three for the English department showing for the last two years (Research Guides Subjects: English), and only two for Biology (Research Guides Subjects: Biology). To date, the still existing Business research portal seems to be the only such portal developed on the site.

Somerville reminds us that “those who have grown up with the Internet...have a relationship with information which challenges “cherished higher education assumptions about learning, including libraries’ traditional ‘warehouse of knowledge’ role” (p. 27). In imagining the future of the library the *Report to the Provost* displays knowledge of this change, but also reflects great confidence in the library’s continuing ability to respond to change with flexibility and enthusiasm. The concept of a learning commons formulated by library staff in its early process of revision is captured in the report’s vision of the future Cal Poly library as a “21st century union”, an active place to make the most effective use of information, to study, to learn - alone or with others” and a “ a campus centerpiece and the hub of an active program to spark discovery and support the many facets of learning” (p.5). Such confidence is evidence that the library staff did indeed succeed in creating a “community of practice informally bound together by shared expertise and passion for the joint enterprise” (Somerville, 2009, p.70)

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