Beyond the classroom: self-direction in professional learning

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Against the backdrop of a rapidly changing profession, the context for professional thinking among medical librarians is changing. Competent performance increasingly is linked with the educational efforts of self-directed adult learners. This paper examines strategies that facilitate self-direction, including skills development, organizational learning, learner-based decision making, and alternative teaching models. The analysis provides the basis for a recommended agenda for redesign and development of educational programs.

INTRODUCTION

"All education springs from some image of the future" [1]. With those nine words, Alvin Toffler introduced his 1974 discussion of the role of the future in education. He went on to suggest that if the image of the future held by a society is inaccurate, society will confuse, mislead, and betray its members. According to Toffler, this situation exists today, and, for medical librarians, the message is not entirely new. Librarians have heard it from Estelle Brodman [2], Nina Matheson [3], Phyllis Mirsky and her colleagues [4], and the *Ad Hoc* Committee on Professional Development [5]. This message shaped the recommendations of *Challenge to Action: Guidelines for Academic Medical Libraries* [6]. Now, the same theme informs *Platform for Change*, but the focus is both sharper and broader [7]. *Platform for Change* takes on the discussion of education for the future directly and grapples not only with the knowledge, skills, and competencies needed by professionals in a radically altered environment but also with the professional context within which growth and development may be fostered.

A CONTEXT FOR PROFESSIONAL THINKING

Certainly, the role of the medical librarian will be reshaped continually over the next decade by the reorganization and rationalization of medicine, and the expanding roles of commerce in information management will call for a redefinition of "ethical" library practice. As roles shift, so will the competencies expected of the accomplished professional. Heretofore, in the design and implementation of library education programs, much attention has been devoted to content and very little to the context and process of learning or the professional competencies such programs are intended to produce. The underlying assumption seems to be that the purpose of professional education is to impart knowledge about the field (rather than competence in it), and that the relevant knowledge can best be imparted through a relatively straightforward process of written and oral communications from teacher to learner, punctuated with occasional tests of the learner's ability to report back the knowledge acquired. As Donald Wolfe suggests, "Seldom do we delve deeply into the nature of competent performance in professional roles and relate this to the educational enterprise" [8].

On the whole, then, it should come as no surprise that professional education is mismatched to the changing character of actual practice—to the complexity, uncertainty, instability, uniqueness, and value conflicts that are central to the world of biomedical information management. But these are turbulent times, and the mismatch needs to be corrected. What medical librarians need under these conditions is not only generalized knowledge and technical expertise but also an active, synthetic, inventive, professional competence by which to make sense of phenomena as they occur.

The character of professional competence

Four characteristics of competence have direct implications for professional learning.

Competence is contextual. Although the term *competence* indicates a characteristic of a person, the

meaning concerns one's ability to influence external conditions or events, to produce a consequence or outcome of some kind. What is easily accomplished in one context may be much more difficult in other circumstances. The professional librarian is expected to be effective in diverse situations and in an ever-changing atmosphere. Moreover, while the small hospital and university complex may provide similar contexts, the intervention that is effective in one will not necessarily transfer to the other. Thus, a competency initially has a limited range of relevance, which can be expanded only through considerable adaptation and skill development.

For professional learning, several implications are clear:

- the learner needs models to understand a wide variety of environments, methods of inquiry, situational diagnosis, and relationship building;
- a program that limits activities to one setting (i.e., the classroom) and to one role (i.e., the passive student) can hardly be expected to generate competencies applicable to changing circumstances; and
- the assessment of competence should occur in a variety of professional settings or in situations that simulate them closely.

Competence involves both knowledge and analysis. Medical librarianship is grounded in an understanding of the information process, its internal dynamics, the forces that maintain or change it, and the possibilities for further expansion and development of information resources. While a student may learn the jargon and trappings of the field soon enough, such knowledge is superficial. Librarians use a number of conceptual models to help define tasks more clearly and identify opportunities for problem solving. They must be able to refer quickly to a variety of theoretical frameworks and conceptual models, to shift from one to another, or to invent a new one when necessary. They must be able to shift back and forth between the concrete realities of a situation and abstract theories that may help explain those realities. To know the theories but be unable to recognize the conditions to which those theories apply is no more competent than knowing the facts but lacking the framework for understanding them. Efforts to foster professional learning cannot ignore librarians' need for a generalized base of knowledge and skill; for the conceptual and analytic tools essential for system diagnosis, planning, and evaluation; and for the opportunity to practice using those tools.

Competence and professional values are interdependent. In many professions, there is a tendency to highlight technology and technique and to sidestep any discussion of the values with which both are applied. Even in the various intriguing scenarios for medical librarianship in the twenty-first century, values seldom are addressed. Even so, the development of competence must go hand in hand with the development of a professional value system to guide the use of that competence. Programs for professional learning need to incorporate opportunities for value analysis and clarification.

Competence is holistic. Competence has often been treated as a combination of knowledge and skills that can be transferred to a person just as tools are added to a tool kit, but the key is active acquisition and use of competence. The professional brings more than technical tools to a task; he or she also brings needs, hopes, fears, predilections, and strengths. To treat knowledge and skills simply as tools to be picked up and tacked on would be to miss the creative adaptation and incorporation of such skills into a unified personal style. The development of a professional identity involves the integration of knowledge, skills, personal strengths, and propensities into a coherent whole. Professional learning, then, should incorporate processes for nurturing personal strengths and potentials and for working through problems. The learner should be encouraged to work independently, with access to concrete, continuous feedback to support personal adaptation. The emphasis should not be on pushing all individuals to learn the same set of competencies but rather on helping each to develop a unique set, capitalizing on personal potential and interest.

In fostering professional competence, librarians must understand that education needs to move beyond the classroom into an arena of action, where the privileged knowledge of the school may collide with on-the-spot demands made on practicing professionals, adults who bring to any learning event a set of unique, highly personal realities [9].

Adults as learners. "Adults are not tall children." With that, Zahn summarized the single underlying assumption for adult learning with which most educators agree [10]. Opinions vary with regard to all other assumptions, which may relate to cognitive functions and age, broader aspects of adult development, or principles of adult learning. Such assumptions frequently are referenced in library literature, especially the work of Knowles [11], Zachert [12], Mayfield [13] and Stone [14]. They may be summarized as follows. Adults learn throughout their lives, often prompted by the negotiations associated with the societal, professional, and personal imperatives of young adulthood, midlife, and old age. They exhibit diverse learning styles and learn in different ways, at different times, for different purposes. As a rule, they like their learning activities to be problem-

centered and to be meaningful to their life situation, and they want the learning outcomes to have some immediacy of application. Past experiences affect the current learning of adults, serving sometimes as an enhancement, sometimes as a hindrance. Effective learning is linked to the adult's self-concept as a learner. Finally, the use of personal experience and the exercise of autonomous self-direction in learning are the distinguishing characteristics of adult learning [15].

Self-directedness, according to the most commonly cited definition, is a process in which individuals take the initiative for designing learning experiences, diagnosing needs, locating resources, and evaluating learning [16]. The definition has been expanded to include the assumption of responsibility by the learner for planning and directing the course of learning [17–18]. Self-directed learning is deliberate and purposeful, voluntary and self-sustaining, and unlimited by any affiliation with conventional educational institutions and agencies. Confidence in the potential for autonomy of direction in the act of learning and in the ability of individuals to assume responsibility for professional learning undergird the policy recommendations set forth in *Platform for Change* [19].

Unfortunately, however, the authors of *Platform* failed to articulate as an explicit aim the development of self-directed learning capacities. They put forth the notion that all adults are natural, self-directed learners and that the boundless capacity for self-learning, innate but perhaps dormant in adults, has but to be awakened. This idea presents some difficulties. Anyone who has tried to liberate the genie of self-directed learning from the minds of adults has realized quickly that the concept can be oversimplified. Far from acquiescing in the joyful release of latent talents for self-directedness, many adults stubbornly resist. Others are intimidated by injunctions to take control of their own learning. Still others are confused or puzzled by educators and employers who urge learners to be self-directed but retain control over the terms, conditions, content, and criteria related to learning.

For most adults, and certainly for many practicing librarians, self-directed learning in a professional, institutional context is more fantasy than reality. However, as *Platform for Change* advises, "Individuals bear the major responsibility for the enhancement of their own professional knowledge and skills," and "Individuals must assume personal responsibility for aggressively seeking lifelong education and professional development opportunities from a variety of sources" [20]. If librarians accept these assertions, explicit attention must be given to the means by which self-directed professional learning can be achieved. Otherwise, as Toffler warns, "anti-adaptive" conditions may be created [21].

ACHIEVING SELF-DIRECTION: EXPLORING THE ALTERNATIVES

In exploring the means to achieve self-direction, the aim is neither to develop a complex, procedurally consistent structure for all learning programs nor to analyze the vast array of specific instructional options available to adults. Rather, the goal is to examine some critical issues related to self-direction and to identify strategies for assisting adults in becoming self-directed, critically aware individuals, capable of moving beyond the classroom to take responsibility for their own learning.

Self-directed learning has been studied in an enormous variety of adult populations [22]. The picture that emerges, while not entirely consistent, highlights a number of promising strategies for professional learning. All these strategies involve shifting the locus of control from the teacher, provider, or employer to the learner. Teaching and learning are understood as transactions in which goals, content, methodology, and evaluative criteria are always open to negotiation and reconsideration.

Skills for self-directed learning. When asked, most professionals may say they want to increase self-direction in their careers, but improving control over their learning is rarely a conscious and compelling personal objective, at least as yet. This may be because self-direction occurs at the "meta" level, the level of process within process, as described by Rossman [23]. It also may be that individuals must undertake considerable work and skills development to gain greater control over their learning. When learners begin to assume greater responsibility and control over their learning, they need to work consciously and deliberately at building internal capacities to replace the external supports present in traditional learning situations. These internal capacities or competencies fall into four major categories: self-assessment competencies (a conscious, explicit, articulated sense of one's interests, strengths, learning style, and knowledge base); career research competencies (the ability to develop deliberate strategies for exploring alternative paths for professional development); project and program planning and implementation competencies (the ability to create a coherent, personally rewarding program of self-managed development and to put the plan into action); and competencies for the effective use of peer and expert support. These all are learnable skills, and models exist for the teaching of needed skills [24].

What is clear, however, is that the transition to increased self-direction in learning is not well served by discarding all external structure and expecting individuals to devise their learning experiences spontaneously. Instead, it usually takes careful planning

and structure to support the enhancement and expansion of the learner's control over learning and professional development efforts. What is needed is not another fixed structure that keeps learners dependent but an explicitly transitional structure that is flexible and, by its very design, helps individuals assume greater control of their learning.

Organizational learning. A useful framework of analysis that can be used in self-directed learning has been developed by theorists in organizational psychology and human resource development. Authors such as Schon [25], Argyris [26], Carr and Kemmis [27], and Mintzberg [28] have investigated the improvisational, problem-centered aspects of professional practice and have argued practitioners to be skeptical of textbook models of exemplary practice. They suggest that the key to professional success is "developing one's own continuing theory of practice" [29], rather than attempting to follow the neatly conceived models found in manuals and textbooks. According to this analysis, most professionals are aware that ordinary work has a dimension, crucially important to effective performance, that cannot be reduced to technique. More importantly, when professionals are faced with new and unfamiliar situations and have to react immediately, they call on their intuitive sense of professionalism—their accumulated experience—to introduce some order into their responses. These periods of trauma, surprise, and experimentation with new situations are central to the learning of professionals. Schon calls this "knowing in action" [30], or on-the spot surfacing, restructuring, and testing of understanding and skills developed in a specific situation.

Much professional learning, then, may be "organizational." The professional's life in many cases is concerned wholly with an organization that is both the stage for activity and the object of inquiry. The phenomena the professional knows are the phenomena of organizational life. Organizations, furthermore, are the repositories of cumulative knowledge: the principles of best practice, images of mission and identity, facts and techniques of operation, stories of past experience. In directing learning, the professional draws on this stock of organizational knowledge, adapting it to some present instance. The individual thus functions as an agent for future organizational learning, extending or restructuring the stock of knowledge available for the future.

Professionals live and work in organizational systems that either promote or inhibit learning. Organizational structures, among them libraries, are more or less adaptable to new findings and new tasks and roles, and the interpersonal world of the organization is more or less open to reciprocity and collaboration in learning, the posing of new problems, the resolution of conflicting notions, and the public airing of dilemmas. Insofar as organizational structure and behavior condition professional inquiry, they make up the "learning system" of the organization, strongly influencing the scope and direction of professional learning.

One attempt to ground the process of learning in organizational reality is Lefkoe's idea of "context training" [31]. Lefkoe argues that "if participants are able to create a new context for themselves, a new way of seeing themselves or of defining their roles in a work . . . situation, they will take it upon themselves to do and learn most of the things required to operate in that new context" [32]. In this concept the goal is not to impart information to teach skills but "to lead participants to discover that their job actually consists of and has always consisted of more than the mechanical tasks they have been performing" [33]. The assumption is that, if professionals' perceptions of the world in which they work are changed, they will not need to be taught to acquire new skills and knowledge. They will be eager to discover these for themselves.

Not surprisingly, a number of concepts and methodologies for education and training developed by human resource professionals are context-referenced, recognizing the dynamics of human behavior and the workings of organizations [34]. The desired results of training, whether self-directed or required, generally are thought to occur only when the organization clearly links its mission, goals, and objectives with intentional learning, endorses the efforts of learners in the organization, and demonstrates consistent support for the transfer of learning to the workplace [35]. Experience shows that professional learning does not happen primarily through highly structured, short-term courses for the dissemination of information [36]. Rather, it takes place through an intensely active yet often informal network of individuals monitoring one another in the context of their practice and often through the very activity of their practice. The organization, then, is critical to self-direction in professional learning, providing the community in which new knowledge is created and new conceptual frameworks emerge for professional practice.

Participation and involvement. Nowhere in the arena of self-directed learning is conflict with present practice more troublesome than in program development for adult learners, and nowhere is the disconnection between theory and practice more evident. A brief review of the program-planning process as described in adult education literature over the past twenty years reveals a remarkable consistency in approach. Briefly put, the model comprises the following five stages of action: identify needs, define objectives, identify learning experiences to meet those

objectives, organize learning experiences into a plan with scope and sequence, and evaluate program outcomes in terms of the attainment of the behaviors specified [37]. These five stages are remarkably close to the model of curriculum planning first proposed by Tyler in 1949 [38], an approach Blaney has described as "institutional" because it fits supremely well with the institutional arrangements of many training and education agencies [39]. The model allows for an institutional definition of needs, it cedes to institutional representatives the decisions concerning program format and content, and it allows for the placement and management of programs within previously designated, institutionally convenient time periods. As a consequence, educators and trainers of adults have come dangerously close to accepting uncritically a number of assumptions about the nature of learning derived from colleagues working in schools and colleges.

It is obviously absurd to presume that adults learn only during three- or six-hour blocks of time preceding a professional meeting. Still, organizations and many continuing education programs rely almost totally on that construct in organizing workshops, courses, and seminars. Of course, for certain purposes, this model is effective and appropriate. In settings where learners and teachers agree to predefined objectives for learning, where the short-term acquisition of well-defined proficiencies is desired, and where a clear imbalance of expertise exists between teacher and learner, the model may be suitable, even desirable. Even in these situations, however, most educators would talk of enlisting learners' aid in planning, establishing a mutual structure for planning, appraising situations for application, and setting a climate for learning.

Many leading educators do challenge the hegemony of the traditional model and dispute its viability in the context of self-directed professional learning [40–42]. At the heart of the debate is the specification by the providing agency or organizing educator of the learning objectives for the program, course, or class session, because these objectives provide the basis for program design activity planning and evaluation of instructional success. As Robinson and Taylor state, "Who decides the question of what are to be the appropriate objectives for a course is at the root of the dichotomy between student-centered and teacher-directed approaches to learning" [43]. The fundamental flaw in the institutional approach is the tendency to distance the learner from the most basic decisions about learning—what it is that should be learned. The approach is misdirected in establishing common expectations for all participants and in limiting their success to predetermined outcomes. Another problem is that specific learning objectives, once established, remain unchanged over time, while alternative avenues of inquiry or the possibility of other terms of interaction are ignored. To many, the institutional approach is "a process developed . . . to constrain and control rather than to broaden and liberate" [44].

Self-directed professional learning, on the other hand, acknowledges that much complex learning cannot be specified in detail before its acquisition. Rather, the goal is to develop an autonomous critical awareness among learners, challenging them to redefine and reinterpret their learning goals in the context of effective professional practice. As an alternative to the institutional mode, Monette [45], Apps [46], and Blaney [47] posit an approach based on the ideas of Freire. In this approach, learners are encouraged to examine critically the assumptions underlying most formal educational programs and to participate fully in the determination of learning objectives and purposes, learning methods, and evaluative criteria. Learners are deliberately weaned away from a dependence on prepackaged instructional events with predefined objectives, prescribed learning activities, and fixed outcomes measures.

There are a variety of ways to make learning more self-directed. A number of models for program development, deriving from contexts other than the school, are available to document the attempts of enterprising organizers, animateurs, and community workers to engage adults in study circles [48], learning exchanges [49], educational brokering agencies [50], and the developing concept of the educative community [51]. From corporate training has come another promising approach, that of "synergogy," the basic notions of which were developed more than thirty years ago by Blake and Mouton [52]. Synergogy attempts to reduce the barriers to learning by creating synergy in the learning situation. While preserving the role of the expert in providing authoritative information about a topic, this approach places primary responsibility for learning with the student. Three characteristics of the approach are worth noting. First, it offers learners a role in determining the structure for learning. Second, it relies on teamwork, rather than individual or group work, to enhance involvement and participation. Third, the cumulative result of the learning experience is more than could have been achieved by any single participant.

Although Freirean and synergogic strategies seldom are addressed in program development manuals for continuing professional education, they may offer powerful options for format and content of programs of self-directed professional learning.

Models of excellence. However impassioned our commitment to self-direction in adult learning, learners cannot be effectively self-directed if they are unaware of alternative bodies of knowledge, new ways

of thinking and acting, and professional expectations. An individual's definition of need should not always be the operational criterion for the development of a program of professional learning. Adults confronted by new demands; rapidly changing job expectations; and complex, conflicted organizational systems may not be able to imagine other ways of behaving. There are occasions, then, when adults must be prompted to consider alternatives to their present ways of thinking and acting. The need to introduce individuals to concepts beyond their present comprehension and to bridge the worlds of private and professional thought is the fourth major aspect of facilitating self-directed learning.

Educators of adults tend to stress the pluralistic nature of teaching in the context of self-directed learning [53]. Apps [54] and Ruddock [55] have identified a range of roles for the teacher—trainer, counselor, resource, demonstrator, assessor, and manager, among others. Pratt [56] and Wilson [57] have described the competencies needed by adult instructors, while Conti [58] and Zerges [59] have examined collaborative teaching skills. Others view teaching for self-directed adults as an art that never can be reduced to a set of rules that can be applied routinely in various situations [60].

What is clear in all this is the continued prominence, even in self-directed learning, of some form of mediator who can reduce or clarify complexities, help define the learner in relation to a task, guide the learner toward a question that is fitting or an experience that is informing, and provide processes and tools appropriate to the learner. This mediation bestows coherent and useful form on the learner's experience. To a learner in the complex processes of change, "a mediator is a bridge or a designer of bridges," as David Carr has said [61].

It is difficult to guide or mediate a learner's experience, for several reasons. First, such engagements demand skills that most people, including librarians and many professional educators, rarely are encouraged or explicitly helped to learn. Second, because these transactions are exceedingly personal, they have meanings and effects that go beyond the simple exchange of information. Third, they involve interdependency, and they create bonds. Fourth, they are demanding, requiring responsiveness, adaptation and pliancy, rigor, accuracy, knowledge, and competent performance. Fifth, mediators assist in what Havelock calls "process helping" [62], the focus of which is often ambiguous. Finally, while engaging in the dynamic process of mediation, the mediator remains an outsider . . . often a threat.

In much that passes for continuing professional education, the role of the teacher is left unexamined. There is little doubt that didactic procedures in which learners are viewed as receptive repositories eagerly awaiting the deposits of experts are not likely to foster the self-direction described in *Platform for Change.* However, librarians are, quite literally, at a loss for words in describing alternative models of excellence in mediating the learning of adults. Rather than looking to concepts of teaching drawn from research in schools and colleges, it might be more fruitful to consider concepts and practices drawn from community development or community action. At the very least, it is important to realize that somewhere between the "institutional" transmission of information to uncritical, passive students and the free-flowing, self-directed activity of the motivated professional is a role—as yet without precise description—that is essential to professional learning.

BEYOND THE CLASSROOM: CONCLUSIONS AND IMPLICATIONS

From the outset, in responding to the underlying premises of *Platform for Change,* this article has attempted to set self-directed learning in a context of competent professional performance, to move it away from conventional learning environments, and to draw together ideas and concepts that facilitate this shift in direction. What must be obvious by now, however, is that the conditions for self-direction are represented only marginally in programs and services available to health sciences information professionals. If the goals of *Platform for Change* are to be realized, an assertive agenda for program redesign and development must be undertaken.

Four agenda items, complementing the recommendations in *Platform for Change,* are implied by the literature. First, options for training in "how to learn in the professional environment" should be explored and provided. Second, structured links among centers of excellence in health information, the National Library of Medicine, and the Medical Library Association should be established to exploit the potential for contextually relevant professional learning. Third, existing training programs should be appraised in the context of self-directed learning, and alternative delivery systems for education and training should be designed and piloted that intentionally facilitate learner decision making and self-direction. Fourth, the role of mediation and instruction in adult learning for medical librarianship should be examined, and opportunities provided for teachers and other providers to reconceive their tasks and refine their skills for altered roles.

Clear, no single organization, institution, or agency could marshall the resources needed to address the agenda. A collaborative effort is required, an effort that itself may contain the seeds of the development of an integrated, holistic framework for education and training beyond the classroom.

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Received April 1993; accepted May 1993