Occupation: The Keystone of a Curriculum for a Self-Defined Profession

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Key Words: education, occupational therapy • profession's value system • philosophy

The idea of occupation is proposed as the basis for constructing a curricular renaissance for occupational therapy in preparation for a new millennium. Implementing an occupation-centered curriculum could create a more integrated profession in which practice, ideas, scholarship, and education nurture and support one another, increasing the autonomy of both the occupational therapy profession and recipients of its services. A practice-oriented rationale for curricular design includes explication of the idea of occupation, a view of the person as an occupational being embedded in that concept, and the thought process of occupational therapy. Recommendations are provided to create an integrated curriculum that will contribute to future-oriented practice and a self-defined profession.

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This article was accepted for publication October 13, 1997.

It is not the truth that makes you free.

It is your possession of the power to discover the truth. (Lewontin, 1997, p. 32)

It is the year 2050. Which of the following scenarios is more likely to occur?

- Occupational therapy no longer exists as a separate, distinct profession. A hybrid group of "rehabilitation therapists," bachelor of science graduates in "allied health," receive most of their training on the job. They provide physical "rehabilitation" in large centers owned by megacorporations. Patients are given "therapy" by technicians and computer-operated machines. A formula specifies the number and extent of treatments according to reimbursement criteria for diagnostic categories. Burgeoning populations of people with chronic impairments cannot find a place in their culture. They become the invisible, throw-away people of the 21st century. The public, viewing disablement as a "tragedy," supports euthanasia for persons with chronic conditions (Proctor, 1988).
- Occupational therapists are in high demand as autonomous professionals who are advocates for and allies with persons who have chronic impairments as well as others who seek a healthy, satisfying life through engagement in occupation. Occupational therapists provide a broad range of individually tailored services to enable persons to achieve self-organization and mastery of their environments through their own actions. Recipients of occupational therapy modify their unique nervous systems (Calvin, 1996), learn competence, experience efficacy, achieve "equality of capability" (Bickenbach, 1993), contribute to their culture, and find satisfaction in their daily rounds of activity. Health is reconceptualized as possession of a repertoire of skills that enables persons to achieve their vital goals (Pörn, 1993). Recipients of occupational therapy not only survive but develop skills, respond to challenges, organize their time, and manage their own environments regardless of impairment. Because such persons are visible, participating members of society, public attitudes toward disability change. Impairment is no longer viewed as rendering a life "not worth living" (Proctor, 1988) but as a special class of challenge, one among many facing human beings. The strength of the occupational therapy profession is connected with the power of those it serves through knowledge of occupation.

ences health (Reilly, 1962, 1966; Yerxa, in press).

People are not instinctively or otherwise programmed to move through an itinerary of daily occupations (Yerxa et al., 1989). Rather, they make choices (Yerxa, 1967), consciously deciding what they will and will not do. They sequence their choices in time so that, on each day, a round of activities is orchestrated into a sort of routine (Beisser, 1989). The net effect is engagement in a daily blend of occupations, each of which may be experienced and classified, for example, as work, rest, play, leisure, self-care, or other cultural categories.

The experience of individual occupations and their blend shape, in part, a person's perception of the quality of life. Occupations, so orchestrated, mediate adaptation (Yerxa et al., 1989). In occupational therapy we often call occupations the "activities of daily living," meaning the gamut of activities that people need and want to do to function effectively in their own environments and culture (MacDonald, 1976; Söderback, 1988).

The word occupation is derived from the Latin root *occupacio* meaning "to seize or take possession," conveying action (Engelhardt, 1977). Occupation is both organized and acts as an organizer. People are seized by their occupations (Csikszentmihalyi, 1975). To engage in occupation is to take control. The human seems to be the only organism that adapts to its environment by acting on it or by creating a new environment that is habitable through occupation. As Reilly (1966) observed, occupation that enables humans to become self-sufficient and productive has an economic function. Fulfillment of an occupational role helps connect individuals to their culture.

Because of the complexity of both occupation and occupational therapy practice, a new synthesis of interdisciplinary knowledge is needed to support the curriculum. Reilly (1969) urged the profession to think about what knowledge was "necessary and sufficient" (p. 302) to construct our own theoretical framework.

In contrast to medicine's roots in the natural sciences, the scientific foundation of occupational therapy requires a synthesis of interdisciplinary knowledge organized in a nonreductionistic, systems framework. Some scholars in our field have called this synthesis "occupational science" (Yerxa et al., 1989), emphasizing that occupation is a universal phenomenon worthy of serious study.

I do not expect to discover relevant knowledge in the physical and natural sciences that support medicine and physical therapy. Rather, salient knowledge is emanating from evolutionary biology (at the macro level of whole organisms), human growth and development, interdisciplinary brain science, social psychology, anthropology (including the culture of disability), philosophy, sociology, and even management theory. This emerging knowledge may be organized into different configurations depending upon the scholarly interests and skills of particular faculty members and their communities of scholars.

View of the Person as an Occupational Being

Occupation requires that persons have interests, intentions, and the skills to follow them to achieve their purposes. People, in all their marvelous complexity and diversity, engage in occupation "through the use of their hands as energized by mind and will" (Reilly, 1962, p. 2). Therefore, occupation cannot be explained by reducing it to a level of understanding below that of the person, for example, to the level of organs such as muscle and joints. Persons, not synapses or muscles or cognitions, engage in occupation.

Reductionistic thinking is the belief that it is scientifically efficient to reduce all fields of knowledge to one science whose principles apply to all phenomena (Angeles, 1981). For example, it might propose that all human behavior is "nothing but" neurophysiology. Though practicing occupational therapists rarely view people this way, a reductionistic curriculum may erase both occupation and the occupational human from how we explain and develop our practice. Midgley (1995), a philosopher, observed that "...in medicine and especially psychiatry there is often a choice between viewing patients as physical organisms [reductive] or as conscious agents [nonreductive]" (p. 40) [terms in brackets added]. This choice can have a profound impact on treatment; in fact, it might decide the patient's entire fate. If reductionistic thinking cannot explain occupation, what sort of thinking can?

In contrast, systems thinking is appropriate for understanding complex, living systems. (Our patients are alive, and they are certainly complex!) Systems thinking enables us to preserve that most important human attribute, the capacity to organize or reorganize oneself (Donald, 1991). We laugh about it, saying, "Tomorrow I'll get organized!" But as Simon (1969), the Nobel Laureate observed, organic systems have the capacity to reorganize themselves without having to restructure themselves molecule by molecule, fragment by fragment. When occupational therapists work with people's interests and purposes, we are tapping into the human system's capacity to organize itself; for example, when we ask, "What are your goals?" Even the patient with the most serious disability possesses this inherent human capacity for reorganization, and our task is to create the "just right environmental challenge" (Robinson, 1977) to activate it.

Another characteristic of this fantastically self-organizing human system is that people exchange information with their environments. They take in food, ideas, symbols, and expectations, and transmute these into output, a portion of which we call occupation. The environ-

ment is not only that which currently surrounds the person but also includes the past, embedded in memory as history, and the future, as projected in imagination (Fraser, 1982). The occupational human is contextualized.

And what of the person? If we cannot reduce the person to neurophysiology and say that we are concerned with a person and occupation, how might we look at an occupational being? We can do what all good occupational therapists do. We can see that a person is simultaneously a biological organism carrying the organic wisdom of evolution; a conscious agent of the most remarkable complexity with an individualized mind (Fraser, 1982); a social being who is a family member; a member of a community and a culture that transmits habits and traditions (Young, 1988); a symbolizer who endows value and meaning to all experience including occupation (Bruner, 1990; Fraser, 1982); and finally a spirit, which itself seeks a place in the universe (Campbell, 1988).

People accomplish complex purposes through their occupations and are simultaneously biological, psychological, social, cultural, symbolic, and spiritual. This is what is meant by viewing people hierarchically. Lower levels, such as the biological, are nested in higher levels such as the symbolic. Higher levels depend on the lower for continuity and lower levels are directed by the higher ones (Feibleman, 1969). But occupation cannot be reduced to "nothing but" a lower level and still be occupation.

Systems thinking enables occupational therapists to capture the complexity and uniqueness of occupation as the fulfillment of human purposefulness by preserving and employing multiple levels of explanation. This way of thinking appears to be on the cutting edge of scientific thought as the limitations of reductionism become increasingly apparent (Calvin, 1996; Donald, 1991).

Thought Process of Occupational Therapy

In Sweden I gained new insight about occupational therapists' thinking. Occupational therapy students had been assigned case studies to complete. The faculty members were disappointed with the students' reports because they seemed as though they had been written by medical students, not occupational therapy students. The cases contained comprehensive content on diagnosis and pathology but virtually nothing about the interests, capacities, or the daily occupations of the subjects. The students were emulating the thought processes of the primary faculty at that point in their education, who were physicians. These learners had not yet seen role models using the tools of thought of occupational therapy or been educated to use these tools.

Traditional medicine uses diagnostic thinking. Its purpose is to discover and treat pathology. The basic science of medicine is derived from natural science, consisting of physics, chemistry, and microbiology, and is applied to cells and specialized organ systems.

Occupational therapy has a very different objective and thought process. Its goal is to discover and foster the inherent adaptive capacities of people in order that the individual may meet environmental challenges by engaging in occupation that is satisfying to self and contributory to society. Occupational therapists' thinking emphasizes not the diagnosis and treatment of pathology but the development of *skill* that enables persons to achieve their purposes and connect with the routines of their culture. Pathology may reverberate through all levels of the human system increasing the degree of challenge to the individual's adaptation. Similarly, certain environments such as the Arctic Circle have required people to develop extraordinary skills for survival. But the real task of occupational therapists is to discover the strengths and potential of individuals, regardless of the amount and degree of impairment, and enable these to be used to achieve mastery (White, 1974). Thus occupational therapists need to understand pathology, not primarily in a diagnostic or acute, curative sense, but as one source of incapacity that may interfere with the achievement of personal goals or fulfillment of social expectations and, in this sense, impair health.

The occupational therapy thought process attends to the orchestration of occupations in time and space. The person is not decontextualized, but embarks upon a developmental trajectory in multiple environments. Thus, his or her history provides clues to current strengths. Again, disability may create extraordinary challenges to such organization. But one's use of time and the timing of occupations make essential contributions to the ability to manage one's environment and the quality of daily life experienced.

Occupational therapists ask a vital question: What now? How can this life be one that is truly worth living to the human being who is left with incapacity? To answer this question we look at one of the most fundamental characteristics of the human, his or her occupational nature. We view the health and life quality of the person in the context of his or her capacities as an occupational being, as *homo faber*, man the fabricator (Arendt, 1958). Our knowledge represents continuity with *universal knowledge* about humankind that emanates from a broad array of sources, including not only science but the humanities and the arts. It is pluralistic and liberal.

Complexity of Occupational Therapy

No wonder we have difficulty explaining occupational therapy. It is, at least, a three-part challenge. First, al-

though occupation is something every person engages in, like the goldfish dependent upon water for survival, most persons are not conscious of their occupational natures. If they think of occupation at all it is in a limited way, synonymous with a job or vocation. Secondly, although occupational therapy may be provided in the medical system, that system employs a different way of thinking about patients and their needs. And thirdly, occupation is a complex phenomenon that involves all levels of the open, living human system in interaction with the environment over a developmental continuum. It cannot be reduced to simple cause–effect dyads.

If that were not sufficient as a reason for our challenge, the therapy part of occupational therapy is performed by, rather than being done to or for, the patient. The therapy consists of the therapist doing whatever is necessary in the environment so that the *patient–agent*[1] can produce an adaptive response, accomplishing vital putposes. The adaptive response often consists of learning new skills.

Knowledge as a Source of Power

Lewontin (1997) believed that the power to discover the truth would set us free. I propose that such discovery is the source of power for which we have been searching, for our patient–agents and ourselves. Those we serve need the power to achieve their vital goals, walk the pathways of independence, and derive a sense of efficacy from their own efforts. We, as occupational therapists, need the power to achieve our potential contribution to society, defining our own knowledge and scope of practice.

We need a deeper understanding of occupation to support the practice of occupational therapy. We already know a great deal about human activities of daily living, but this knowledge needs to be broadened beyond self-care and organized into a systems framework. And, our knowledge needs to be refreshed with new ideas from relevant disciplines. I propose not only that occupational therapists need to learn much more about occupation but also that we are the ones to lead the way to that understanding through our own scholarship that contributes to the curriculum.

Recommendations

I offer the following suggestions to tap into the richness of occupation as a source of power for an integrated curriculum and self-defined profession. Some of these already are being implemented.

Our educational programs need to initiate a curricular renaissance by using occupation as the central organizing idea of the curriculum. This could be done by establishing a community of scholars consisting of faculty members, students, and members of the clinical community. Each community will study and develop its own unique conceptual framework for the generation and transmission of knowledge about occupation. This creative process will result in a unique curricular structure and research program that contributes to an integrated profession.

A proper balance will need to be sought between necessary medical knowledge and the study of occupation (Reilly, 1969). Comparing and contrasting the scientific foundation, traditions, and tools of thought of medicine and occupational therapy will emphasize complementarity and reaffirm occupational therapy's commitment to persons with chronic impairments.

Each educational program needs to develop a centralized resource center for the study of occupation and related ideas. The center will be available to all members of the community of scholars and serve as a repository for the products of scholarship. It will legitimize the program's scholarly endeavors and provide a means for them to be incorporated into curriculum, research, publications, and the conceptual foundation for new models of practice.

To help students achieve the breadth and depth of thought necessary to study occupation as well as the courage to tackle its complexity, the following educational sequence is proposed. At the baccalaureate level, students will complete a nonspecialized degree in the liberal arts and sciences before undertaking professional preparation. Such a general foundation will provide learners with a perspective of humans as agents, embedded in culture and history. This will create the broad context (pair of glasses) necessary for the study of occupation, assuring that professional education will not limit students' vision but build upon a base of universal knowledge and wisdom (Yerxa & Sharrott, 1986).

Entry-level education will begin at the master's level because graduate education is appropriate for learning advanced tools of thought such as analysis, synthesis, and evaluation. These are requisite skills for mastering the interdisciplinary synthesis necessary to study occupation along with necessary medical subjects and thought processes. Relevant, familiar ideas about occupation might be organized into a systems framework and explored through the three temporal contexts of evolution, human development, and learning (Reilly, 1974; Yerxa, 1993).

The highest educational level will be doctoral study designed to explore cutting-edge issues of occupation from an interdisciplinary perspective. It will develop skills

[1]I use this term to highlight our ethical responsibility to help transmute patients into agents.

bution, competence, health, and the quality of daily life experiences. Learning self-organization and mastery through responding to appropriate environmental challenges will allow persons with chronic conditions to join the mainstream of society, enabling them to be viewed as healthy, efficacious, and having the right to equality of capability (Bickenbach, 1993). More persons will achieve their vital goals, exercise choices in their lives, and be active participants in the expected and valued routines of their culture because occupational therapists will understand much more about increasing human capability.

The occupational therapy profession will exert a stronger and more positive impact on society as a whole. A major issue of the next century will be how persons develop competence and learn to organize their lives in an overwhelmingly complex world (Toffler, 1981). The study of occupation as related to life organization has limitless potential to cast new light on this question.

A curriculum centered on occupation will better describe occupational therapy and differentiate it from other professions, enhancing our communication with the public. By articulating and further developing our scholarship, occupational therapy could develop new and mutually beneficial collaborative relations with disciplines sharing our humanistic values (Yerxa, 1993). Finally, a curriculum focused on occupation will prepare our students to take their vision, enthusiasm, and infectious need to know into the unknown opportunities and demands of the world of the 21st century. ▲

Acknowledgment

I thank Wendy Wood, PhD, OTR/L, FAOTA, for her insightful editorial comments and assistance.

References

Angeles, P. A. (1981). *Dictionary of philosophy.* New York: Barnes & Noble.

Arendt, H. (1958). *The human condition.* Chicago: University of Chicago Press.

Beisser, A. (1989). *Flying without wings: Personal reflections on being disabled.* New York: Doubleday.

Bertalanffy, L. von. (1968). *General system theory.* New York: Braziller.

Bickenbach, J. (1993). *Physical disability and social policy.* Toronto: University of Toronto Press.

Bruner, J. (1990). *Acts of meaning.* Cambridge, MA: Harvard University Press.

Bruner, J. (1996). *The culture of education.* Cambridge, MA: Harvard University Press.

Calvin, W. H. (1996). *How brains think: Evolving intelligence, then and now.* New York: Basic Books.

Campbell, J. (1988). *The power of myth.* New York: Doubleday.

Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety: The experience of play in work and games.* San Francisco: Jossey-Bass.

Donald, M. (1991). *Origins of the modern mind: Three stages in the evolution of culture and cognition.* Cambridge, MA: Harvard University Press.

Engelhardt, H. T., Jr. (1977). Defining occupational therapy: The meaning of therapy and the virtues of occupation. *American Journal of Occupational Therapy, 31,* 666–672.

Feibleman, J. K. (1969). Theory of integrative levels. In J. Coleman (Ed.), *Psychology and effective behavior* (pp. 456–459). Glenview, IL: Scott, Foresman.

Fraser, J. T. (1982). *The genesis and evolution of time: A critique of interpretation in physics.* Amherst: University of Massachusetts Press.

Gergen, K. (1982). *Toward transformation in social knowledge.* New York: Springer-Verlag.

Hill, W. F. (1969). *Learning through discussion.* Beverly Hills, CA: Sage.

Lewontin, R. (1997, January 9). Billions and billions of demons. *The New York Review, 44,* 1, 28–32.

MacDonald, E. M. (Ed.). (1976). *Occupational therapy in rehabilitation* (4th ed.). London: Baillier Tindall.

Midgley, M. (1995). Reductive megalomania. In J. Cornwell (Ed.), *Nature's imagination: The frontiers of scientific vision* (pp. 131–147). Oxford: Oxford University Press.

Montgomery, M. (1984). Resources of adaptation for daily living: A classification with therapeutic implications for occupational therapy. *Occupational Therapy in Health Care, 1,* 9–23.

Pörn, I. (1993). Health and adaptiveness. *Theoretical Medicine, 14,* 295–303.

Proctor, R. (1988). *Racial hygiene: Medicine under the Nazis.* Cambridge, MA: Harvard University Press.

Reilly, M. (1962). Occupational therapy can be one of the great ideas of 20th century medicine, 1961 Eleanor Clarke Slagle lecture. *American Journal of Occupational Therapy, 16,* 1–9.

Reilly, M. (1966). A psychiatric occupational therapy program as a teaching model. *American Journal of Occupational Therapy, 20,* 61–67.

Reilly, M. (1969). The educational process. *American Journal of Occupational Therapy, 23,* 299–307.

Reilly, M. (1974). *Play as exploratory learning.* Beverly Hills, CA: Sage.

Robinson, A. (1977). Play: The arena for acquisition of rules for competent behavior. *American Journal of Occupational Therapy, 31,* 248–253.

Simon, H. A. (1969). The architecture of complexity. In H. A. Simon (Ed.), *The science of the artificial* (pp. 86–118). Cambridge, MA: MIT Press.

Söderback, I. (1988). *Intellectual function training and intellectual housework training with patients with acquired brain damage.* Doctoral dissertation, Department of Social Care and Rehabilitation, Stockholm College of Health and Caring Sciences, Stockholm.

Toffler, A. (1981). *The third wave.* New York: Bantam.

Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

White, R. W. (1974). Strategies of adaptation: An attempt at systematic description. In C. V. Coehlo, D. A. Hamburg, & J. E. Adams (Eds.), *Coping and adaptation* (pp. 47–68). New York: Basic.

Wright, B., & Fletcher, B. L. (1982). Uncovering hidden resources: A challenge in assessment. *Professional Psychology, 13,* 229–235.

Yerxa, E. J. (1967). Authentic occupational therapy, Eleanor Clarke Slagle lecture. *American Journal of Occupational Therapy, 21,* 1–9.

Yerxa, E. J. (1993). Occupational science: A source of power for participants in occupational therapy. *Journal of Occupational Science (Australia), 1,* 3–10.

Yerxa, E. J. (in press). Health and the human spirit for occupa-

tion. *American Journal of Occupational Therapy.*

Yerxa, E. J., Clark, F., Frank, G., Jackson, J., Parham, D., Pierce, D., Stein, C., & Zemke, R. (1989). An introduction to occupational science: A foundation for occupational therapy in the 21st century. *Occupational Therapy in Health Care, 6,* 1–17.

Yerxa, E. J., & Sharrott, G. W. (1986). Liberal arts: The foundation for occupational therapy education. *American Journal of Occupational Therapy, 40,* 153–159.

Young, M. (1988). *The metronomic society.* Cambridge, MA: Harvard University Press.