

THE RED QUEEN EFFECT: ROLES FOR ADULT EDUCATION IN SOCIAL SUSTAINABILITY

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Summary

This article demonstrates that adult education in its myriad forms – including continuing professional education, adult higher education, staff training and development, adult literacy, civic education, health extension and educational gerontology, to name only those – is an integral part of any effort to create a viable society and to reach sustainable futures. It is so for both supply- and demand-related reasons. On the demand side, all the arenas of social life where people are beginning to take increased responsibility for their own governance, for resource management and for better stewardship of the environment require means for training adults in these new roles and responsibilities, as well as for helping them get the additional skills and knowledge necessary for the exercise of such expanded functions. On the supply side, providing enhanced learning opportunities to people of all ages is a necessary corollary of the movement of Education For All and a condition for creating a “learning society” where knowledge is pursued throughout the lifespan. But the potential for adult education’s contribution to

our future can only be fully realized where the arenas of demand are connected to the impulses of supply and where tough political decisions are also made to decentralize authority, ensure broader access to resources and grant local groups increased latitude to manage their own affairs. It is in such environments that lifelong learning itself becomes self-sustaining and adult education serves as one of the principal supports of social sustainability.

1. Introduction

In 1973, the evolutionary biologist, Leigh Van Valen of the University of Chicago devised what he called the “Red Queen Effect” to describe the growth and development of species. It stipulated that an evolutionary system must continue to develop just to maintain its fitness relative to others evolving in its environment. The literary reference is to the well-known passage in Lewis Carroll’s *Alice Through the Looking Glass* where the Red Queen interrupts the conversation to grab Alice by the hand and start running at a breakneck pace. After some minutes of sprinting, Alice notes with wonder that they are still in the same spot. Nothing unusual, the Red Queen remarks dryly; in her country “it takes all the running you can do to keep in the same place.”

Sustainability arguably has some of the same characteristics. Reaching and then maintaining a relative plateau where human needs are met and the human instinct for personal and social growth is accommodated is likely to be a moving target, not to say an ambition that will require widespread artistry and a lot of vigilance to achieve. It is not simply a destination or a goal to be attained, but rather a lasting challenge. Meeting it presupposes that people everywhere have finely honed abilities to adjust to the many internal convulsions and exogenous shocks that society and the environment may sustain -- and to respond individually and collectively by bringing them back each time onto a viable and sustainable track.

Note that the term “social sustainability” is used both in the title above and in the pages to follow as a shorthand for the multiple dimensions – cultural, political, personal and environmental -- of the future that must be crafted in order to ensure human survival on this planet. In fact, the great variety of adult education highlighted hereafter mimics in many respects the same diversity.

2. The Learning Connection

Sustainability therefore clearly entails a highly developed social and individual capacity for *learning* -- but learning that goes well beyond the limits of the conventional elementary, secondary and higher education systems. Those institutions are normatively responsible for turning their charges into good learners. However, the cycle between environmental and social disequilibria on the one hand and curricular response in formal institutions of schooling and socialization on the other is a long one -- and made longer by the delay before new cohorts schooled in the new curricula accede to the labor market and to positions of social responsibility. As a consequence, this process, though critical, is generally too extended and cumbersome for school-based reform to serve as the driving force for social adjustment and the achievement of a sustainable steady-state

equilibrium. In order to understand and encourage the learning processes in question, a broader view of education is required.

Philip Coombs' classic distinction among formal, nonformal and informal education remains quite serviceable in this regard. In the text that he authored with Roy Prosser and Manzoor Ahmed (1973), the three forms of educational delivery are defined as follows:

Formal education: the hierarchically structured, chronologically graded 'education system', running from primary school through the university and including, in addition to general academic studies, a variety of specialized programs and institutions for full-time technical and professional training.

Nonformal education: any organized educational activity outside the established formal system - whether operating separately or as an important feature of some broader activity - that is intended to serve identifiable learning clienteles and learning objectives.

Informal education: the truly lifelong process whereby every individual acquires attitudes, values, skills and knowledge from daily experience and the educative influences and resources in his or her environment - from family and neighbors, from work and play, from the market place, the library and the mass media.

In brief, formal education activities are purposeful, socially organized and officially "credentialed;" nonformal ones are purposeful and organized but do not grant diplomas valid in the overall social promotion system; whereas informal learning activities, which may be purposive or serendipitous, are neither socially organized nor sanctioned by an official diploma. All three may transpire in the same space and timeframe. Picture a school building where secondary school classes are held during the day (formal), community education classes or agricultural extension sessions meet at night (nonformal) and people read newspapers or practice language skills in their spare time (informal).

This distinction obviously has more to do with the administrative organization and delivery of learning than with its content. Moreover, the borders between the three spheres are admittedly quite blurry: there are substantial areas of overlap as well as coexistence, and hybrid forms abound. The general scheme still has a number of virtues when one is concerned to locate and characterize the different learning processes that must contribute to the achievement of social sustainability. It may be useful to portray the relations of these three spheres and their commerce with surrounding society, albeit quite simplistically, in the manner indicated in Figure 1. Here formal education appears to be, in a sense, both the core of the educational system and its smallest part. (This depiction seems confirmed by the fact that, at least in the United States, the amount currently spent on nonformal and continuing education of adults, whether in the workplace or for leisure purposes, in fact dwarfs the total of all public and private university budgets.) The sphere of formal education is, in any case, surrounded on all sides – not to say interpenetrated -- by myriad types of nonformal education, and they are in turn bathed in a context of informal learning of every complexion. This entire system shades off at its borders into and finally becomes indistinguishable from the web of activities that constitute the social environment. Nearly no one moves directly from

formal education to the job market or a new social status without passing through several varieties of nonformal and informal learning experiences. Such learning prepares graduates of various levels of schooling to play new roles and helps them to translate skills, knowledge and attitudes acquired through coursework into forms that can be applied in the workaday world and society at large.

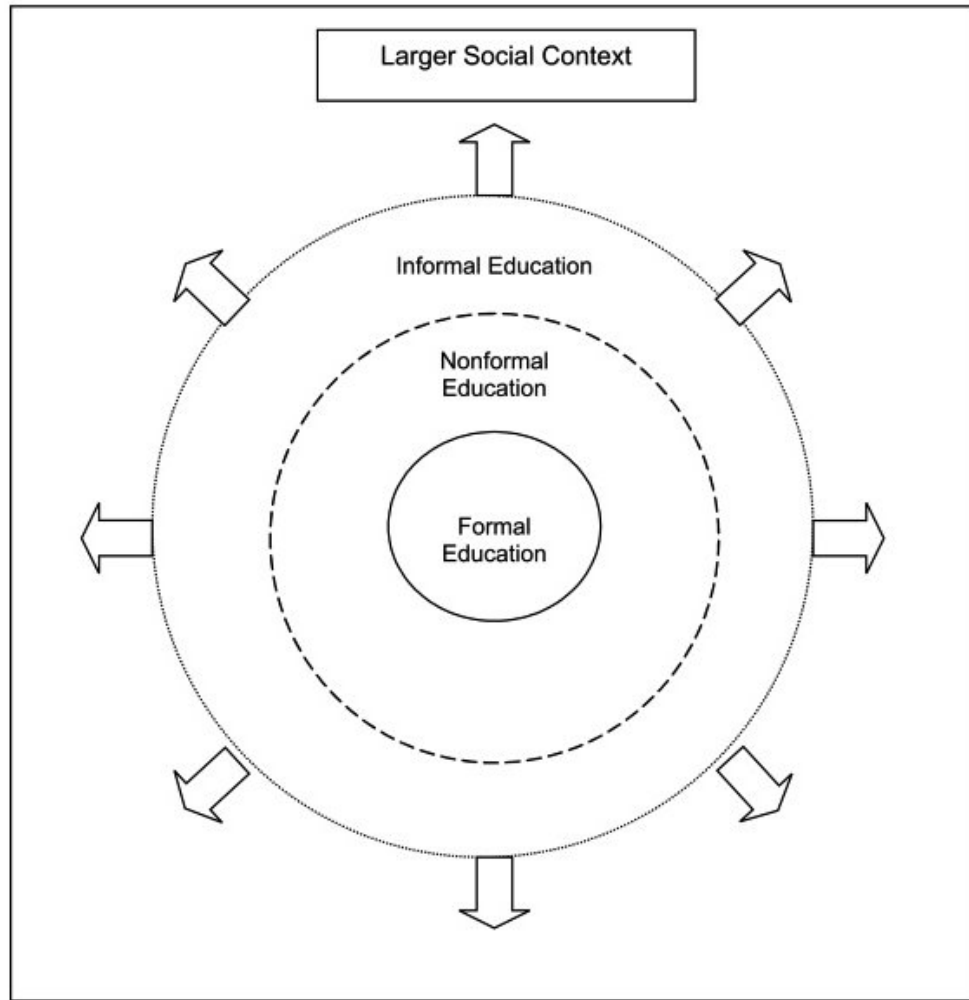


Figure 1. The Relationship of Formal, Nonformal and Informal Education to the Social Environment.

These large “buffering” elements of the educational system that serve to smooth the relation of its formal components to their social context and to extend learning capacity throughout the lifespan will arguably become increasingly vital and developed as the population ages and as humans strive to adopt new ways of working, living and co-existing that place less strain on the environment. It is scarcely surprising, then, that international institutions from the United Nations agencies to the World Bank and a variety of regional associations, Nongovernmental Organizations (NGOs) and bilateral donors have put increasing emphasis on the importance of *lifelong learning* (LLL) in their social programming.

Though a decent slogan, lifelong learning is definitely a contested term. The simplest form of opposition evident in the literature and in the current discussion about LLL involves the degree to which emphasis is put (a) on imperatives that derive (or are perceived as deriving) from the world of work or, more broadly, (b) on the need for political, cultural and personal forms of fulfillment. Behind this conflict, however, lurks another concern: how is access to lifelong learning opportunities distributed? How are those opportunities to be funded and guaranteed in the case of marginalized groups that have not much benefited from K-12 schooling, notably in developing areas of the world and poverty-stricken zones of the North? Educators have a history of seeing the supply side of the learning market much more clearly than the demand side – and of confusing what they *perceive* to be the needs of the population with what those groups actually want and can realistically use, afford, or get underwritten.

Another bone of contention concerns just who will control and deliver lifelong learning. Much of the international literature leaves nonformal and informal education out of the picture. Education For All is still envisaged in terms of “schooling” society rather than of multiplying venues and avenues for education. From a schooling perspective, emphasis on lifelong learning is essentially limited to two important themes: on the one hand, emphasizing the need to devote initial formal education to *learning to learn* as much as to teaching particular subject matter, in order to prepare lifelong learners; and, on the other, undertaking modifications in the organization of secondary and higher education that will make these institutions more accessible to the “over-age” student. Both initiatives are worthwhile, but both understate the relevance of adult and nonformal education to the enterprise of lifelong learning. At least in the more developed countries, the market for educational services is shifting inexorably toward an increasing volume and variety of adult education. Here it is significant to note the recent change in the name of the UNESCO Institute for Education in Hamburg – traditionally a center for study and support of adult education – to the UNESCO Institute for Lifelong Learning.

As this correction suggests, however, the role of adult education in achieving sustainable futures cannot be fully understood by fixating on the supply side and on the issue of who provides what. If educators are serious about promoting the intensified and extended lifelong learning patterns that sustainability requires, then it is important to start with the demand side: what people demonstrably want and need to learn – now and in the foreseeable future; what they can use; what they can fund (or get funded); and the factors that determine such demand-side realities. These issues will be examined in the sections immediately to follow. The question of *provision* or the supply side of the educational exchange will be revisited in the concluding portions of this article.

3. Existing Demands for Learning

It helps to turn the question around a bit – to start by considering *existing* demands for learning before addressing the issue of the potential demand for learning in, and for, a sustainable world. What are the arenas of social life where the challenges of reform and viability are *already* impelling adults to learn new things and to do so in new ways? Seven are synoptically reviewed hereafter: (a) decentralization, democratization and citizen participation; (b) human resource development and continuing training; (c)

organizational learning; (d) multiculturalism and multilingual competence; (e) conflict resolution and peace studies; (f) human growth potential; and (g) information mastery. Each likewise represents, as will soon be evident, a domain of social life whose challenges must be mastered on the way to true sustainability.

3.1. Decentralization, democratization and citizen participation

Movements for decentralization, both in government and in many other forms of social “governance,” typically create a strong demand for new learning. When people start to assume increased ground-level responsibility for the delivery of services used in their communities, for managing the enterprises and institutions where they work, for decision-making in their local governments and for directing the civic groups to which they belong, that initiative entails developing new technical and managerial skills and acquiring new kinds of knowledge. (See Article 6.61.5.2 in this Theme) For the farmer to function as a practicing agronomist, a member of the crop marketing board or a candidate for the district council, for example, a mastery of differential calculus might not be necessary, but he or she must learn many new things about biological science, business management and/or public administration. Decentralization of governance in any sphere inevitably means new learning. And there is ample indication that some degree of decentralization is a more effective form of social organization than highly hierarchical and centralized patterns of authority. Political scientists often talk of the importance of “subsidiarity” to efficient administration: that is, respect of the principle that responsibility for governance and organizational functions should be situated at the lowest level where the necessary skills and authority can be secured.

As for movements towards democracy and greater citizen participation, they both tend to have effects similar to those just described. People must learn more if they wish to penetrate the corridors of power, use collective action to change entrenched patterns of privilege or injustice and guarantee that elected leadership remains responsible to its constituents. Though to date scarcely a model of democratic process, the movement for improved governance in Haiti that sprang up after the destitution of Duvalier the younger quickly learned that broad popular oversight of government action was a key to success and adopted the slogan “*veye yo*” (“keep an eye on them” in Creole). The opposition to Slobadan Milosevic in Serbia – an example of successful nonviolent insurrection – and, whatever its subsequent course, the Orange Revolution in the Ukraine, both have demonstrated how important self-directed and collaborative learning are to popular movements for social change. Thomas Jefferson, one of the founding fathers of the United States, put the matter succinctly when he said that “those who hope to conserve their freedom in a state of ignorance want something that never has been and never can be.” The way towards sustainable and truly representative political regimes is therefore paved with learning.

3.2. Human resource development and continuing training

Over the last two decades a veritable chorus of voices in the United States has insisted on the challenges of “Workforce 2000” – or, more recently, “Workforce 2020”: that is, how to keep economic institutions and players competitive in the growing knowledge economy of the 21st century. The more production-oriented version of this rhetoric

emphasizes the revolution of information technology, the imperative of performance in a global economy, as well as the impact of new technologies and competition on local labor markets. The more humanistic version stresses the importance of “learning organizations,” reformed workplaces and the realization of human potential -- and, to this extent, dovetails with the movements for citizen participation mentioned above. But the two strains have in common a conviction that accelerated economic and technological change mean continual mutation in the nature of jobs, workplaces and social roles for the foreseeable future, and both put a premium on continued learning by many different categories of workers. The concern has found expression in the shorthand rule of thumb, at least figuratively true, that everyone entering the labor market in the early part of this century can expect to have six or seven distinctly different types of jobs before retirement.

This theme is in fact reinforced by the increasing prominence of the tertiary or service sector in industrialized economies and, correlatively, the increasing element of “service” in both primary and secondary sectors as well. The logic is simple: quality of production in the service sector is determined to an appreciable extent by the last person in the chain of production, the one who delivers the service to the client and must both explain it and adapt it to the client’s particular needs. It follows that in such enterprises, training – in fact, active learning – is an imperative not just for management personnel, but also for people all the way down the chain of command and production, with particular emphasis on frontline and service delivery personnel. If no provision is made for new learning by staff, the quality of the service takes a nosedive, and the competitiveness of the enterprise or organization soon follows. Moreover, this logic now applies well outside the tertiary sector. In manufacturing as well, firms need increasingly to “tailor” their products to individual needs and to the kind of location-specific requirements that concern for environmental sustainability (among other factors) often imposes. This imperative inevitably increases the “service” component in production, with the same effects on job training requirements.

3.3. Organizational learning and the learning organization

Corporations in the industrial world were forced to face a conundrum in the 1970s after two decades of increasing emphasis on upgrading the competencies of their staff: the people who received training may have applied it more or less well, but the knowledge was too often lost to the organization once the trainee moved to other employment or even up or laterally within the same enterprise. In short, while the individual had learned, the culture of the organization had not: the new insights, techniques and procedures were not necessarily built into its routines and strategies. The problem came to be referred to as the challenge of “organizational learning” and quite a literature of studies and opinions ensued. How could the fruits of individual learning be most effectively captured by the organization and built into its structure and operating procedures?

This concern mutated by degrees into a still broader one, most frequently known under the rubric of the “learning organization”: how can workplace environments be structured in such a manner that employees are both challenged and enabled to learn on a continuing basis while feeding the new knowledge into the intellectual capital of the

organization itself? The shift toward service or tertiary sector production in Western economies mentioned above -- and toward a growing service component in the production of other sectors -- has greatly reinforced the trend, for it has made both self-direction and conscious teamwork in the workplace progressively more important.

At the same time, these demands have entailed broadening the focus of organizational training design from periodic workshops and courses (nonformal education in Figure 1) to on-the-job training and the daily experience of work itself: to wit, *informal* education. What does it mean to transform the workplace into a learning environment and to make of the enterprise, corporation or agency a “learning organization?” Organizations worldwide have been experimenting with ways to answer this question: from elevating their trainers or HRD (Human Resource Development) specialists to the status to “Chief Learning Officer” with a say in the design of the workplace environment and the determination of human resource policies to greatly expanding the availability of online learning. Before these experiments, “designing learning environments” was most frequently understood to mean modifying the layout of primary school classrooms or preschool centers. It is now a major issue in labor relations and corporate governance.

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Biographical Sketch

Peter B. Easton is Associate Professor of Adult and International Education at Florida State University, a position that he has occupied for the last 18 years. He resided for 10 years in West Africa working on adult literacy programs and agricultural cooperative management and has, since that time, returned to the African continent and consulted in the Caribbean and Southeast Asia in support of literacy and nonformal education programs. He is the author of several books and numerous articles and reports on related topics.