Bruce Elkin

The Individual and Environment

School is established, not in order that it should be convenient for the children to study, but that the teachers should be able to teach in comfort... Schools which are established from above and by force are not a shepherd for the flock, but a flock for the shepherd.

Leo Tolstoy

Schooling teaches that knowledge is a commodity that can be packaged and marketed, and that if one wants to obtain that commodity, then school is the only place where it is available. Skills and knowledge picked up outside of schooling are not granted value or importance. The question "What is your educational background?" really asks for your schooling history. Further, school teaches that the key to prosperity and status is an ever-increasing consumption of the school's product — "the need to be taught". The schooling industry and the attitudes that underlie it are very much a part of the "consumer society". Knowledge is not seen as something we can develop or pick up on our own, nor can our knowledge be recycled and informally passed on to others. Knowledge is considered to be the product of formal teaching, and teaching is a professional process that is carried on only in accredited schools. The fare that is offered by those schools is based on the needs of the schooling industry, not on the needs of those it was meant to serve.

^{*}This paper is based on a presentation to the Inaugural Planning Conference of the School of the Environment in Banff, October, 1976.

Education, in fact, has become big business, and our schools have become branch-plants of a mighty corporate activity... In order to do this successfully, they must do certain things. They must oblige their workers to follow company policies; they must persuade the customer that he needs the product; and they must produce only that which is likely to sell.

Anthony Burton

Schools do develop a narrow form of social competence — the ability to effectively carry out actions conceived by others or actions embedded in routine social roles. However, they not prepare for living in the world outside the school, because schools do not address the task of developing personal competence — the ability to both conceive of and carry out effective actions.

Much of this world is not predictable. It is much more complex and non-routine than that of the school. It is more and more a world of diversity and constant change, which demands personal actions that are not routine re-actions but critically-determined, reasoned responses to actual situations or problems. Many people find their social competence inadequate, and further, they are unable to develop new, effective responses on their own. Threatened by this complex changing world, many hurry back to schools hoping to find answers. Others hide in safe, routine jobs in large institutions similar to schools. Still others escape into the world of addiction whether it be drugs, television, or work. An ever-increasing number seek psychological help or a guru or new messiah. All have become passive consumers of mass-produced, pre-fabricated actions, ceding responsibility to experts not only in the field of learning, but in every other field.

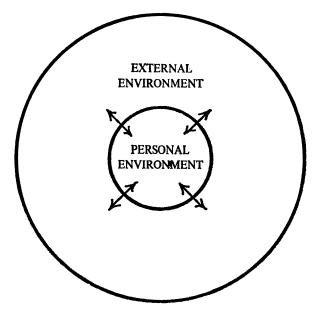
We are faced with a dilemma. The very nature of schools, as an agency which transmits traditional knowledge, makes them the least likely agency to develop new ways of educating for a new world. We need alternatives. Alternatives within the schooling industry, but more important we need alternatives to schooling itself. We must re-establish the primacy and integrity of learning, and underline the fact that learning is not a process that occurs only as a result of schooling. It is considerably more complex than the traditional notion that "the teacher teaches and the student learns".

Young children and self-directed learners take an active stance within their environment, rather than a passive or re-active one. They explore, they seek, they invent, they do. They "test, rather than take for granted the boundaries of their abilities to take in new information and to adapt to change (Peele)." Real learning is an experimental process — "a trying out". It is not a process of

memorizing and handing back right answers, but a process whereby the rightness of answers or response is tested against environmental conditions. The answer to the question of "what is worth learning" should not, therefore, be based on institutional prescription, but primarily upon the experience of the individual learner in relation to his or her environment.

environment: an experience-action system

Webster defines environment as "all the conditions, circumstances, and influences surrounding or affecting the development or growth of an organism". We usually speak of the environment as being that which surrounds us or is outside of us. We refer to the biophysical world of nature or the built environment of man. Occasionally we include the social and cultural worlds. However, when we consider the "conditions, circumstances and influences... affecting" us, we must take into consideration the individual who is being affected as well as the inter-relationships between the individual and his or her external environment. Environment then is a system which includes the external bio-physical and social worlds, the inner personal world of the individual, and the interrelationships and transactions between the two. Understanding the environment involves understanding the workings of this system.



THE ENVIRONMENT

External bio-physical social cultural

Personal senses analysis and interpretation physiological states "Environmental education" at present concerns itself with the external environment, particularly the bio-physical aspects of that environment. The institutionalization of environmental concerns has rendered the individual and his experience irrelevant. As a consequence we tend to think of environment in massive, global terms. We think of the runaway growth of urban centers, the increasing pollution of our air and our waterways, the increasing loss of productive farmlands and wild spaces, and the whole question of over-consumption and depletion of our non-renewable resources. Thinking about environment in these terms produces overwhelming feelings of helplessness and insignificance in most people. The problem of managing the environment appears to be beyond our control. The warnings of ecological apocalypse do not spur us to action, but leave us cynical and despairing, perhaps wishing that there was something we could do, but not knowing what nor how.

If we accept that environment is a system made up of an individual's personal environment, the external environment, and the transactions between them, we see that it is impossible to study only isolated parts of that system without reference to the other parts and to the nature of the system as a whole. We must understand not only our external environment as a system, but ourselves — our personal environment — as a system, and the nature of the transactions between these two, which the individual perceives as experience. The external environment is part of the experience-action system, but not a determining factor on its own.

Aldous Huxley once said, "Experience is not what happens to a person, experience is what a person does with what happens to him." Experience is a product of the world around us, the situation within us, and the way we respond to both. We can create our own experience. To give a simple example:

I am outside, lightly clad, and a storm hits, with snow, wind and rapidly dropping temperatures. I can't stop the storm nor raise the temperature. However, I can change their effects by dong any one, or combination, of a number of things.

I can alter my external environment by going to a different external environment — I can go inside.

I can alter the unpleasant sensation of cold by putting on clothing that shields me from the wind and cold.

I can change my physiology by moving about briskly and increasing my body's heat production and blood flow.

If the storm has caused me to become upset *emotionally*, I can take action to calm myself by doing deep breathing exercises, taking a tranquillizer, taking a shot of whisky.

I can also change my *interpretation* — the way I think about what is happening. I can say to myself, "Well, this storm is not such a terrible thing, in fact it's a pretty intriguing meteorological event," or "I'm not about to be upset by this storm. I see it as a challenge to my mental and physical abilities."

personal competence

By doing any or all of these things, by acting on or doing something with what happens to us, we can alter the nature and quality of our experience. We make our own experience by determining what is worth doing and then taking action somewhere in the action-experience system to bring it about. Personal competence, the individual ability to manage personal experience, is the critical factor in this experience-action system which we call environment.

The key to environmental education, indeed all education, is in enabling individuals to learn why and how to act effectively on their environment and to select and manage the quality of their own experience; to enable them to be able to determine for themselves "what is worth doing" and to develop a general understanding of the nature of doing, or action, so that they will be able to carry out their intentions.

Personal competence includes the holistic development of the cognitive (knowing) and the affective (feeling) domains. But it also includes the conative domain. Conation is the faculty of volition or desire, of endeavour or attempt, the process of undertaking or initiating. Personal competence includes not only knowing and feeling but intending and creating one's own purposes. As well, it includes the ability to act, having the technical skills necessary to carry out intentions. Finally, the development of confidence, or a "can do attitude", is basic. Such confidence arises out of experience in a wide variety of specific actions and is complemented by the ability to abstract from them general principles, common to all actions, and the ability to apply those principles to new actions. It involves the ability to see non-routine situations and changes as challenges rather than as threats. Equipped with a feeling that "I can do" and a general understanding of the nature of doing, the individual is able to respond to non-routine situations by undertaking to produce change in the experience-action system.

It is extremely important to understand the distinction between personal competence — the ability to both conceive and carry out effective actions; and social competence — the ability to carry out actions conceived by others or actions embodied in routine social roles.

There are no experts in the field of personal competence development, no institutions to tell us the answers; we are on the edge of new territory. We must, therefore, become explorers and adventurers, and undertake new ventures in learning and education.

Obviously one major task is to develop a widespread familiarity with and understanding of whole systems, and to foster systematic approaches to causation rather than the narrow linear approaches that are now in wide use.

We must examine the principles and guidelines upon which our actions are based. If we are to change values and attitudes, we must understand that values and attitudes are general ways or approaches for achieving purposes. They are strategies for living. Recently much attention has been paid to values, and work is going on to help people examine and clarify their values. This is good, but what is really needed are the skills necessary to build or create new values. Values are part of a system of creating meaning and purpose and of taking action to fulfill that purpose.

competence and adventure

Another major task required of us is to devise appropriate means of recognizing practical competence regardless of the method of its achievement. Certainly society should require that standards of competence be met by its citizens as pre-requisites for undertaking certain actions, but it does not follow that society should also require that those standards be achieved by one specified method in a specified place.

One of the most stubborn barriers preventing the development of competence is an attitudinal one — the attitude that it's better to be safe than sorry. Don't take chances or risks, stay in areas that you know and are safe. Scrub baseball becomes little league. Fooling around and hanging out becomes day camp, or an after-four program at the "Y". Kids are left no ntime or space to move beyond that which they know and that which has been prefabricated for them.

The nature of the built environment contributes to isolating learners from their environment. Cities are sadly lacking in wild places. As cities get larger there is proportionally less edge, and that edge gets further away from most of us as the city expands outward. Playgrounds and schoolyards are unbelievably sterile. Very little equipment, and what there is always fixed to the ground — you can't do anything with it and if you try there's always the teacher or supervisor with the stern and limiting warning that "swings are for swinging on, Johnny, not for launching missiles".

Play is the work of children. Through it they explore and discover their world, make sense out of it and act on it. In play they develop many skills, imagination and initiative, and a feeling of personal effectiveness. Play should be open and unfettered, bounded only by reasonable safety precautions. Most present playgrounds and programs are extensions of institutionally structured experience, inappropriately based on economics and efficiency rather than on human needs.

To overcome this barrier we need to design play areas and programs that let kids learn, that let them explore, that let them construct and build, and that let them tear apart and destroy. Programs such as these do not take the place of programs designed to build intellectual abilities, they complement such programs.

Recently, the Action Studies Team in Calgary designed a travelling adventure playground called "Can Do" to provide kids with access to a great variety of materials, resources and tools, allowing them the opportunity to explore the nature of these materials and tools, to invent uses, to create and construct. The playground's pilot testing was highly successful, and now the Action Studies Team is working to set up adventure and exploration (play) programs at selected elementary, junior and senior high schools. If a child has a thorough opportunity to develop a basic sense of "I can do" in the physical and concrete realm, he or she may be more inclined to develop that same sense in the conceptual realms of intellect and emotion. The program provides an opportunity for the development of a sense of personal effectiveness that is the basis for personal competence.

real work

Ralph Nader's Public Interest Research Groups allow university students access to real and meaningful work, and contact with effective models of self-direction and creation.

Another barrier that keeps learners from contact with their environment is the lack of access to real and meaningful work. Urie Brofenbrenner writes that a child's lot is one of isolation from meaningful human contact as well as meaningful work. A good example — of school children of all ages as well as teachers, parents, and community workerse learning and working at the same time — was the joint project of the STOP group and several Edmonton schools in which they undertook to build a park in an unused ravine adjacent to the schools. To do so they had to work very hard and to learn such diverse things as the history of the area, the water flow patterns of the creek and the sewer and drainage systems in the ravine, the legal and economic implications of recycling a park, the flora and fauna and ecology of the ravine. Real work, real learning. The result — a park and a tremendous feeling of having done something of value and impact.

The Calgary-based Action Studies group has also undertaken the development of demonstration projects and learning environments that facilitate an understanding and development of personal competence, and which provide an opportunity for individuals to develop a sense of personal effectiveness and a heightened sense of worth. One of the group's projects has been a summer, wilderness-based, adventure learning program which incorporates meaningful work, play and learning, "Earth Ways: Experiences in Personal and Environmental Exploration." Combined with a follow-up program, "The Winter Workshop", Earth Ways provides an intense experiential package designed as a systematic approach to taking action and managing experience.

The Earth Ways program makes use of another inventive approach to learning known as acclimatization. Developed by the Acclimatization Experiences Institute, acclimatization has added an exciting and effective learning component to many camping programs, youth groups, nature centers and interpretation programs, as well as significantly influencing the attitudes and techniques of a great many teachers and environmental (and outdoor) education programs. Based on the premise of "starting where the learner is", acclimatization is a process designed to help people of all ages "build a sense of relationship with the natural world in both feelings and understanding". Begun at a boys' camp in Northern Wisconsin, this unique program is now used throughout Canada and the United States and is recognized as a highly effective means of "turning people on" to learning about the natural world and their relationships with it.

Acclimatization is a prime example of a developing "social invention". Adventure playgrounds, STOP's "It Really Works" program, Can Do, and Earth Ways are all social inventions designed to build the power and competence of the individual to influence the course of his or her life and to be able to do something with what happens. They are only a beginning.

Children have a natural exuberance and an instinct to explore. Bringing up children to be non-addicted means supporting and rewarding their explorations, thereby passing on to them a spirit of adventurousness that will persist through their adult years. It means granting them as much autonomy as possible at any given age, without interfering with the response - even when it is painful — that they get from the outside world. It means encouraging them to complete self-initiated enterprises which give them a sense of their own worth. It means allowing them joint, and eventually full, responsibility for managing their own lives, as well as for accomplishing work that has real value in the family or elsewhere. It means welcoming spontaneous impulses and new personal directions which will take them beyond the sphere of parental observation and influence. It means treating them with a respect that teaches them to respect themselves and others. And finally, it means establishing a relationship of mutuality in which their communications are part of a genuine interchange. When you take seriously what you tell a child and do what you say you will, when you listen seriously to him and give him a real opportunity to influence you, then he or she has the best chance of becoming a real person. He can count on himself and others, and he knows that he can make things happen in human relationships and practical affairs.

Stanton Peele

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