

# The value of questions, and Questions of value

The following two papers on what school should be about were written to complement each other. Werner examines the main questions asked, and the methodologies employed, for the past several decades in the study of curriculum. He illuminates their limitations and inadequacies, and draws attention to some new concerns that are redirecting those working in this field from questions of technique toward questions of value. Butt, taking a perspective more distant from the field, asks whether our present curricula in schools are addressing the most pressing needs of human life ahead of us. He turns from a survey of the dysfunctional values present in society towards proposing a new scheme of values that should be taught if society is to survive. It is upon this scheme that any curriculum should be put into force, henceforth.

## Part I

### The Value of Questions

The field of curriculum studies is exceedingly broad, and so is the range of possible critiques. It includes research, and the construction of descriptive and prescriptive images in curriculum development, change, evaluation and implementation. Also the field includes immensely practical decision-making directed at "getting things done" while drawing upon child development and learning theory, pedagogical wisdom, and the subject-matter of the disciplines. Traditionally these tasks included designing learning environments within the constraints of real schools; selecting print and non-print resources to enhance student learning; sequencing learning activities;

and justifying the choice of learning goals and content. In particular, intense work was directed at curriculum development and evaluation across North America during the past two decades, and judging from current interest, the 1980's promise considerable research sophistication in curriculum implementation and teacher inservice training. These new reseach areas are expanding quickly through graduate programs, international journals, and professional associations and conferences.

One way to critique this growing and diffuse field is through its major **questions**, and the **consequences** that these questions have for the field's development. Central to any form of inquiry are the questions that the inquirer devises, for in the absence of questions, everything potentially is relevant and inquiry remains random. Questions imply what is to be looked at (what counts as relevant data), how data are to be examined (what constitutes appropriate method), and even what acceptable range of answers can be expected. Hence the quality of practical and scholarly curriculum work depends on formulating good questions to guide the scope and depth of that work.

### Questions

What are the questions that orient curriculum workers, and around which their occupational techniques, skills, and attitudes are developed? From early theorists such as Franklin Bobbitt (1918), through Ralph Tyler (1949), and to a host of curriculum technologists today, the prominent questions have been administrative and technical, concerned with procedures and organization in developing and evaluating curriculum. Tyler's basic "how to" questions summarize this dominant view:

What educational purposes should the school seek to attain?

How can learning experiences be selected which are likely to be useful in attaining these objectives?

How can learning experiences be organized for effective instruction?

How can the effectiveness of learning experiences be evaluated?

Underlying these questions is a concern for the ends (the goals or objectives of the curriculum) and the means (the teaching methods and resources for achieving ends). The way in which the ends and means are related by these questions implies definite values: precision, predictability, certainty. Once ends are established in precise form, the curriculum worker searches for those means that are time and cost effective for ensuring goal achievement. Since the best means

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are those that make the goals predictable, the techniques within curriculum development and evaluation focus largely on aligning ends and means. According to Tyler's questions, this is a simple task conceptually, although sometimes complex technically.

Examples can be given of how this set of questions may focus the curriculum worker upon technology for devising means and aligning these with ends, rather than upon other issues. Producing classroom resource material is a curriculum development task that may be time-consuming and require considerable expertise. If the ends-means orientation of Tyler's questions is taken for granted, as it usually is, the curriculum developer would be guided by questions concerning how that material is to facilitate desired outcomes in the classroom:

Is the selection of this material effective for predicting and controlling goal achievement?

Is the use of this material efficient in terms of the time and cost of goal achievement?

Is the material applicable to achieving goals across a broad range of teacher, student, and organizational characteristics?

Is the relation of means to the ends explicit and clear?

These typical criteria illustrate that resource material is a vehicle for achieving objectives, and as such can be judged on the strength of its instrumentality. By seeing material as simply instructional means to achieving prescribed learning ends, curriculum developers may neglect many important questions about the nature and use of materials in the classroom, and about their socio-political import. Tyler's questions are important both for what they emphasize and for what they neglect.

That questions with a technical emphasis continue to have priority raises an interesting question for anyone critiquing the field. Why are most of the metaphors characterizing curriculum development, implementation, and evaluation based on technical and administrative interests? Three reasons for this instrumental orientation can be postulated.

We could look at the practice of the occupation itself. Traditionally the things that occupied curriculum workers were classroom materials and activities. Devising and selecting these resources and strategies were concrete tasks, and this contributed to the development of an occupational orientation that concerned itself with instrumental questions. During the 1960's and 1970's, curriculum developers and evaluators gained legitimacy through enormous output of materials and reports, and the permanence of their status depended upon what they could continue to do for schools. Their success within the educational enterprise lay in producing visible products and teaching strategies, and this practical interest influenced the thinking of curriculum workers to such an extent that their technology became

the important aspect of curriculum studies. In other words, as they became conscious of their techniques and productions, the field of curriculum was rationalized in terms of an instrumental orientation towards schools.

The rising power of educational psychology concurrently strengthened this instrumental orientation in curriculum studies. Various lists of learning "needs" were devised by psychologists during the 1950's and 1960's to define the affective, cognitive, and psychomotor domains of learning, and by implication, the types of skill and knowledge that all students "needed". Educators quickly absolutized these need inventories and taxonomies to the extent that they became the goal and justification of curriculum. Few people questioned the premise that curriculum was the means for satisfying student "needs"; as the ends of curriculum thereby became nonproblematic, curriculum workers would busy themselves further with the technology that seemed to be their rightful domain. Indeed, it is difficult to find any curriculum from the past fifteen years that does not directly use or reflect the language of the **Taxonomy of Educational Objectives** (Handbooks I and II) developed by Benjamin Bloom and others (1956 and 1964). On the unquestioned assumption that these Handbooks were truly lists of "needs", and that curriculum was to serve these lists, curriculum development and evaluation became focused on ways to "diagnose" and "adjust" student "deficiencies" in terms of these famous taxonomies of learning "needs". These lists of "needs" were used as if they were independent entities and essential descriptions of human beings, rather than a way of talking about human learning or as concepts for guiding research. Such reification obscured the value basis of curriculum.

Another reason for the technical emphasis of curriculum studies has to do with a dominant social belief that schooling is to be defined and valued primarily in terms of what it is for. Generally policy makers assume that the school is and should be an instrument for implementing their vision of our social and economic future; parents commonly take it for granted that the school prepares youth for family life and leisure; business groups value the school for its power to train and select students for the job market. It is viewed as a "tool" for furthering national ideals, an instrument for achieving societal goals, a means for promoting a group's values. Given this instrumental orientation towards education, it is not surprising that federal agencies and groups from the private sector fund and develop curriculum to serve their particular interests; that skill-oriented and job-related curricula have proliferated; "that educational institutions would reflect a 'factory' or 'managerial' model of organization, or that the making of a human being might be thought of as analagous to the making of an automobile" (Crittenden). Given this ideology, it is not surprising that the language used to conceptualize evaluation, implementation, and development relies heavily upon an ends-means logic and technical schemes and questions.

There is a circularity here. Though curriculum practice has been influenced by the instrumental view of schooling, it shapes these values more precisely in curriculum evaluation, implementation, and development, thus contributing to the entrenchment of instrumental values. When practising their craft, curriculum workers often may be guided by a narrow concern for concrete outcomes in the classroom, and with the best ways to achieve visible results. This interest in turn shapes the attitudes of curriculum workers towards their own activities and classrooms, including what it means to be a teacher and student and what constitutes classroom knowledge. Once developed, these outlooks insulate thinking from other questions and interests, and become screens for modifying or rejecting innovative ideas that curriculum workers may encounter. Such screens become formalized in various "instruments" and "checklists" that further guide and guard the development of the field. For example, curriculum analysis systems such as EPIE have enshrined technical values and instrumental questions ("Materials Analysis Form" published by EPIE Institute, 463 West Street, New York; Erault, Goad, Smith, 1975.)

### **Consequences**

Dependence upon instrumental questions had important consequences for curriculum studies. A central concern with technology allowed the field to develop without much substance other than its techniques. With so much energy and expertise put into curriculum technology, it was overdeveloped through the proliferation of procedures that were variations of one another and that served the same value of predicting and controlling goal achievement. This preoccupation with methodology resulted in a narrowing of the field: development became the mere production or selection of means and the aligning of these with predetermined ends or "needs"; evaluation involved a judging of how well ends and means were related; implementation was seen as the transmission of curriculum into classroom practice with little regard for the situational features of that classroom. Curriculum evaluation in particular developed without a complementary deepening of philosophical bases. Scores of evaluation "models" appeared in the journals, but few of their authors questioned the notions of evaluation and curriculum implied by this technology. By 1969 the entire field of curriculum was open to charges of being "moribund, unable by its present methods and principles to continue its work and desperately in search of new and more effective principles and methods" (Schwab, 1969, p.1).

The process of getting to this moribund state of affairs has been outlined by sociologists studying occupations (Bensman and Lilienfeld, 1973, pp.339-340):

The focus on methodology serves to provide a dynamic for an occupation because every technique, craft, and starting

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assumption which becomes the basis for a method is necessarily limited. The concentration on technique results in an elaboration and development of these various limited sets of assumptions which may cause such a proliferation of methods, vocabulary, and products on such a narrow base that the work done tends to collapse under the weight of overrefinement, complexity, repetition, and sterility. It may also collapse under the weight of its incomprehensibility and uselessness, for any craft or occupation can easily go beyond the point of diminishing returns in the pursuit of elaborate techniques with limited goals. When a set of technical ... or other limited assumptions is exhausted through overdevelopment, then it may be necessary for innovators to alter the initial assumptions, methodologies, and techniques, so that these new assumptions can provide the basis for new or different methods, contributions, and content of an occupation. But even here there are dangers. The development of new assumptions, methods, and techniques may become an aesthetic and a dynamic of a profession which has no other impulse to its development than change per se. The emphasis on such change produces a kind of meaninglessness which can be called pure occupational virtuosity. Solutions to such problems of meaninglessness can be found by either the return to earlier methodological ... assumptions, or through the borrowing of such assumptions from related fields.

As a way out of this cul-de-sac of technical overdevelopment, curriculum workers began in earnest to borrow methodological assumptions and content from other disciplines in the hope of generating new questions and directions. Borrowing since 1970 has been intense and is proving to be useful. The so-called "reconceptualist movement", as an example, seeks new foundations in diverse areas such as psychoanalysis, phenomenology, anthropology, aesthetic and literary criticism, and political theory (Pinar, 1975 and 1978; van Manen, 1978). During this past decade a new literature of curriculum scholarship has arisen and gone far beyond technical concerns (Willis, 1978; Eisner, 1979). However, a consequence of this borrowing is that the field has become fractured into competing groups. Commitments to particular assumptions and values makes each group especially self-conscious, and their social networks intensify through special conferences, professional associations, and journals that draw people with similar outlooks together. And as each group develops its own focus and speciality more clearly through these avenues, their domain of inquiry takes on special status and other domains are ascribed secondary value.

From such ferment there is emerging an interpretive orientation to complement the dominant instrumental orientation in curriculum

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work and studies. This view focuses upon the relations between curriculum and the context within which it is maintained, rather than on relations between ends and means. The curriculum is not seen as something independent of its social and political contexts (including social values, economic relations, and interest groups) or of the quality of life experienced by teachers and students within classrooms.

Many ethical and political questions are raised about the power relations established or reflected through a curriculum, and about the values that it stands for. Which groups have or should have the right to determine goals and content? Who should be involved in developing and evaluating curriculum? How and when should they be involved? What ideological interests are served through the curriculum? In what ways does the curriculum legitimize existing social and economic relations within the community? What knowledge is worth including in curriculum, and on what principles does this selection operate? What is the nature of childhood, learning, or work implied within a curriculum? These questions are only illustrative, but they do give rise to new methods of interpreting and evaluating curriculum, of illuminating the quality of experience that may be implied through a curriculum, and of explicating the necessary relations between a curriculum and the society it serves. This trend to interpretive rather than technical questions makes the sociology of curriculum increasingly important as an area of curriculum studies for the 1980's (Bates, 1978; Saha, 1978; Giroux, 1979).

This is not to say that technology is unimportant, or that lists of learning "needs" are not useful for devising curriculum goals. Needs and methodology are derivative rather than basic; values are at the heart of educational activities (Lee, 1969; Werner, 1980). When anyone develops a curriculum, both ends and means are selected on the basis of values (often expressed as "needs"); ends and means are themselves values. Similarly, curriculum evaluation judges value in terms of selected criteria for particular contexts; curriculum innovation and implementation represent changed values for the classroom. Even a cursory look at "needs assessment" literature reveals that there are prior value commitments by researchers on how to conceptualize a "need". In short, the currency of curriculum work is values and valuing.

### Summary

Instrumental questions will continue to influence curriculum studies and work, but on their own these questions are inadequate for understanding the meaning and uses of curriculum. New questions have arisen for interpreting curriculum in relation to various contexts, and for addressing the values that are negotiated in curriculum implementation, transmitted through curriculum change, maintained in curriculum development, and justified by curriculum evaluation

activities. This explication requires reference to both a theory of value and to the specific contexts of curriculum. Current curriculum studies draw upon socio-political and ethical theories for understanding and arguing values, and upon numerous qualitative research approaches for understanding the classroom experiences engendered through curriculum.

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## Part II

### Questions of Value

Walter Werner's investigation of the questions that have dominated the field during the past several decades reveals their severe limitations and our need to evolve from questions of technique to questions of value. While Werner's critique is discipline-centered, my own focuses on human life.

Judged from the humanist position, any field of knowledge is only as good as its potential for improving the human condition. A curriculum only has human value if it gives access to knowledge that will improve the lot of the individual learner. My focus on the individual in no way excludes the needs of the community and society. Nor does such an emphasis imply a narcissistic or anarchistic approach to life. Like Walt Whitman and the New England Transcendentalists, I believe that enlightened self-interest inevitably leads to group action, community co-operation, and the negotiation of collective values.

My view then is that education is or should be the development of individual and social meaning; that curricula and the curriculum field should provide for an improvement in the human condition; and that they should enable the individual and thus the community to engage in a continuous emancipation. The question is, how far do existing curricula and the curriculum field achieve these ideals? An answer to this question must focus on the practical world into which our learners are evolving, the problems they encounter there, and the role curriculum can play in solving them (D. Pratt, 1981).

### Problems in human life

For a significant proportion of the population there is a diminishing personal satisfaction with life, especially for the young. Symptoms of this malaise are manifest in a lack of purpose and feelings of futility, anomie, helplessness, and alienation. The hardest - in both senses of the word - and most unfortunate datum that underscores this problem is that 75% of mental illness now occurs in persons under twenty-five. The world suicide rate **doubled** between 1971 and 1975. One is reluctant to seek out more recent figures (D. Glines, 1978).

There is abundant documentation of marriage breakdown and urban deterioration attended by alienation and violence. Terrorism, rioting, kidnapping, and other violent crimes fill the media. It is not

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surprising (though hardly a solution) that there has been an increase in the use of police and military personnel to maintain order. A decrease in the sense of community, and constant inter- and intra-national strife, have been accompanied by the advent of non-institutionalized religions. These symptoms have been shown to represent a pre-revolutionary state (W.W. Harman, 1972); in countries where the social malaise has reached critical proportions, revolutions "successful" and "unsuccessful" have already occurred.

Our most basic problem is the increasing scarcity of things fundamental to our physiological needs - food, water, air, space, energy, and shelter. We have ample evidence of the depletion of non-renewable natural resources. The easiest space to build on has been the alluvial flood plains, so that our best agricultural land is being gobbled up. We are also familiar enough with not being able to swim at our favourite beach, boiling our drinking water, mornings when the air makes us cough, an increase in respiratory diseases and cancer, and most recently, the energy crisis.

Many people blame modern science and technology for these problems, not realizing that it is thanks to them that the earth is able to support its present population. People are starving in today's world, but without scientific methods most of the rest of the world would starve as well. Science - the use of human reason to understand the environment - is in its origins value-laden, revering independence, originality, the views of others and their right to dissent, and the sanctity of life (Brunowski, 1965). What the industrial state has done with science and technology is to abuse it with the beliefs that man is omnipotent, that science can conquer nature, and that ecological cycles are inconsequential when measured against profit. Control over the industrial effort has been wielded by persons ignorant of its ecological, social, or human consequences.

### **The industrial state paradigm**

Underlying the personal, social, and ecological crises in human life is the current industrial state paradigm that dominates our society and lives. Its dysfunctional effects now outweigh its desirable characteristics. We have come to the limits of its usefulness (Harman, 1972).

The root problems are the values underlying the industrial **modus operandi** and the very powerful momentum that it has. Consumerism, the work ethic, and economic growth have been overemphasized. The focus of human life has been changed from family and community to the workplace. There is a dwindling sense of personal identity and control, a lack of autonomy and authenticity. Individuals feel like servomechanisms to the machine of commerce and have become split from the old socially-based community, from the extended family, and

recently, from the nuclear family as well. There is widespread lack of interpersonal support and trust (Toffler, 1970). All of this is further complicated by the helplessness engendered by future shock, and the phenomenal rate of technological change, which easily outpaces the evolution of social institutions sensitive to such changes (Shane, 1973, Ch.3). It is no wonder that the lone individual turns naively to the industrialized state's trap of hedonistic materialism as a palliative. We need drastic value shifts so that industry may operate using appropriate and benign technologies in harmony with healthy human and social values. Even if we wished, we cannot abandon industry. We do need a significant proportion of its products. But we can be discriminating in what it is essential to consume and how it should be produced. We can weigh carefully the environmental and social consequences before allowing continued industrial growth. We can clean up our existing act.

Modern society in its presentism and narcissism has not developed an adequate sensitivity to the future. Where is this train going? Nowhere fast? What future do we want? What values will generate that future? I'm really not interested in the finer subtleties of preferred futures. The real basic is survival, not just of a privileged or accidental few who survive an ecological or nuclear holocaust, but of all of us. This requires a more conscious appreciation of the nature of environmental health, both social and ecological, as well as a more concrete vision of the future and of those values which will carry us there (Boyer, 1973).

### **What knowledge is of most worth to survival?**

Do our current curricula provide each young person with the skills to address these serious problems (Shane, 1973)? Curricula for our young people are determined in large part initially by what knowledge policy makers include and exclude, but in the last real instance, by what teachers put in and leave out. If we judge existing curriculum policies and activities by what is needed for human survival and development, they are inadequate. What we see, despite all the efforts of so-called reform, is the skeleton of a Sabre-Toothed Curriculum (Peddiwell, 1939), whose thinly disguised content of academic rationalism is irrelevant not only to the real though misguided world of industrialism, materialism, and consumerism, but more importantly, to human survival and development. Not only is the raw content inadequate, but the very design of our curricula is causing problems. In keeping the humanities (as a source of values) separate from social science, and social science adrift from science, we do not encourage the type of thinking that creates bridges between those bastions of knowledge that are necessary to address our human problems. Wren-Lewis cites research studies which show that

the impersonal, specialized structure of science courses

tends to attract those students whose fear of their own emotions makes them want to retreat into a world of abstractions. At the same time, the more vigorous, concerned minds are so repelled by what they see science has become that they retreat into a counterculture which is more and more explicitly antiscientific. This trend, if not altered, could spell disaster for the human race, since it would lead to a situation in which those who possess the knowledge, which is power, are lacking in all conviction, while those whose concern about the future has passionate intensity remain powerless to translate their ideals into practice. (Wren-Lewis, 1974)

### **Process as content?**

In curriculum, process is as influential as curriculum content and design (Parker and Rubin, 1966). At present, most schools can be construed as thinly disguised factories, with lock-step production times and products which receive certificates of approval for use in the machine. The very structure of many curricula is based on behavioral performances to be achieved through prescribed means which only contribute to personal and social alienation. We do have and have had curricula which move towards human development and social and scientific literacy; but they stand little chance of becoming either policy or action in the competition for classroom time. Policy makers already have a full timetable and agenda, so do teachers - both being heavily pressured by industry, universities, and short-sighted parents to concentrate only on the so-called basics (Butt, Benjamin, Burrige, 1982). Even where policy has advocated curricula which are potentially emancipatory, their implementation has failed miserably owing to a "top-down" methodology (Berman and Pauly, 1975). This approach apes the industrial model by delivering curriculum packages developed by experts to teachers unprepared in their use, many of whom, refusing to be treated as technicians or assembly line workers, circumvent such packages in most ingenious ways.

As new knowledge and value structures become necessary for human life, it is essential that we find ways of enabling learners to have access to them in the classroom. Our current ways have not met with much success. The injection of new curricula into classrooms has often been ignorant of the particularities of unique schools, communities, and teacher and pupil needs. Recent attempts at classroom change have revealed that school and community-based approaches are much more successful than other more bureaucratic methodologies (Goodlad, 1975). This is especially true when school district curriculum personnel provide the leadership, support, animation, and resources school staffs request. These more local approaches, however, have tended to be limited in scope to immediate needs.

Ways must be found for integrating the broader visionary concerns of the future within the teacher's day-to-day intentions and the child's personally expressed purposes, to provide a curriculum of mutual benefit to all.

### **Curriculum basics for the future**

Criticism and rhetoric are naked without constructive suggestions. I propose a curriculum design-framework which, if elaborated and complemented, will focus on human development and emancipation. While addressing current human problems, it also embraces future needs. Implicit in the approach is that the school must liberate itself from being the caboose of society and become instead a trailbreaker, the leading edge. This is not tinkering with the existing curriculum; this is not reform, but major and radical reconstruction, which needs to be implemented in a gradual and continuing fashion over the next several decades.

Just as it is obvious that schools will need many resources from outside to implement such a curriculum, it is equally obvious that a curriculum prescribed and imposed by experts will not work. Classroom change must proceed at the teacher's pace to be successful. Teachers must also be the authors of their own curriculum so that they liberate themselves from the technician's or mere user's role. In turn, classroom transactions, to be liberating for pupils, should surely provide for a transition towards independence and authenticity at a reasonable pace. This is not meant to imply that each teacher and each school derive and develop all of the curriculum from zero, but that materials that are available from outside the school be acted upon - elaborated, modified, and adapted to suit the philosophy, aims, and objectives of the school and its community (Walker, 1979; Connelly, 1972).

In considering the content and design of the school's curriculum we return to the question of what knowledge is of most worth. What are the basics for human survival, development, and emancipation? I take the stark position that there is no point in being able to read, write, or add if you are dead from some environmental, social, or personal breakdown. That is, the traditional basics will become increasingly useless on their own if they are not combined with new basics which emerge directly from current and future human concerns. These new basics need to be integrated with a curriculum structure which explicitly manifests their interrelatedness.

### **New basic literacies: a proposal**

In order that school curricula may help our children meet existing and future challenges, they need to be built upon an

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integration of the old and the new basic literacies. The new literacies that may be derived from the foregoing analysis consist of three first order literacies, one second order, and one third order.

The first order "basics" are scientific, social, and personal literacies. They are not mutually exclusive. Currently, many social and personal needs and problems have a scientific base, in either a positive or negative sense. Though a separate new curriculum might be necessary for each first order literacy, their integration must be reflected in the selection of content and structure - for example, a science curriculum might include an examination of the social impact of various technologies, or consist of a study of social problems with a science base.

The manner in which these literacies are taught is as important as their content. In contrast to the separation of existing curricula from real life, the new literacies should be taught using an experiential approach. The more traditional approach, learning a theory and then applying it to real life, is replaced by praxis whereby student learning is based upon projects in the community. Being involved in useful community work, besides providing for an acquisition of new skills, illustrates to the student that his or her actions can have an effect on society. This type of learning can, of course, be consolidated with more conventional study relating to the concrete problems encountered in the field.

### **Scientific**

Fieldwork, laboratory work, and conventional study can give students an understanding of the fundamental ecological cycles, their essential relationship to a healthy environment, and our ultimate dependence on that environment. Our curricula must provide an understanding not only of the major physical science processes but also of how these may affect our lives now and in the future through various technological developments. With this approach pupils could become literate in the use and abuse of science, so that they might determine which technology is inappropriate, appropriate, or benign.

Personal and community projects could include such activities as school and home energy conservation, health care, nutrition, food production, and monitoring of local air and water pollution.

### **Social**

Human cooperation and understanding is of paramount importance, not only to avoid international, intersectorian, cultural, and racial strife, but for positively building human groupings that are healthy.

There are abundant opportunities for involving our elementary and high school pupils in projects in the community. Becoming active in any local groups concerned with such issues as day care, recycling projects, parks, playgrounds, food co-ops, involvement in various ethnic groups, and assisting persons in need would provide a base for acquiring skills in social literacy while animating healthy community development.

More conventional study would then build on and elaborate field work. Typical content would include the varied notions of family, community, and society evident within the different cultures within Canada and in other nations. The processes of social innovation, change and stagnation, as well as paradigms of past, current and future societies, would be important features of the new curriculum.

### **Personal**

The ability to evolve one's own set of values, short and long term goals, and personal positions with respect to issues in one's own life constitute what might be called personal literacy. This curricular element is designed to alleviate the purposeless anomie and alienation that has led to increasing breakdown and suicide among young people. Whereas major elements of personal literacy will evolve from the social and scientific literacies, there are aspects which are unique to each individual regarding his or her own needs, interests, aspirations, and approach to life.

Personal literacy can be provided for as much by its integration into social and scientific literacy and into the **process** of education as it can by means of specific content. If the curriculum involves personal action and the application of its principles in student everyday living and aspirations, the lack of personal control, autonomy, or authenticity in these young lives may be countered. Only if the curriculum process and instruction engage each pupil's own perceptions, purposes, and needs through joint pupil-teacher negotiation will personal development through school be enhanced.

### **A second order literacy - values**

Even the most superficial analysis of the problems of human life - social, psychological, and physiological needs - leads to a scrutiny of the current **modus operandi** of society - the industrial state. Underlying the environmental, social, and personal crises are values dysfunctional to human life; the amelioration of these problems depends on value shifts. The humanities, as a source of values, must be integrated into the curriculum. Students need such a basis upon which to judge what is appropriate or benign technology, and how such technology may best be applied to social life. This leads us to the



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notion of values literacy.

Values literacy is implicit as a common theme throughout the first order literacies. It arises from a study of the values that undergird

the scientific way of knowing

environmental health

past, present, and alternative notions of family, community, culture, and society

the current industrial state paradigm

the ethics of social issues having a scientific base, such as abortion, euthanasia, and cloning

the consequences of the use of various value sets and value shifts

### **A third order literacy - futures**

This curriculum would entail

the generation of possible, probable, and preferred futures for communities, societies, and individuals (Singer, 1974)

the elaboration of a future-focused role image for the learner; that is, how one individual's activities might influence change for future survival

the identification of value shifts necessary to achieve various future scenarios

the design of community action projects geared to the above

A curriculum for the three first order literacies and one second order literacy would not yet be sufficient to complete a curriculum's design which meets the present and the future aspirations for human life. The very momentum of our societal dynamics, the feelings of personal helplessness, and the lack of a positive vision for the future - all these impede the value shifts necessary for survival. Hence we need to be literate about possible, probable, and preferred futures and how we get there.

## Summary

The second part of this paper has attempted to critique the curriculum field, its process and design products, from the perspective of human survival and development. Curriculum, as one access point for human knowledge, should provide for a continuing improvement in the human condition. Existing curricula and the curriculum development process were felt to be lacking in content, design, and relevance to the basic problems of contemporary environmental, social, and personal crises. They are also devoid of suitable images of tomorrow's world into which our children will be thrust. In order to evolve elements of curriculum that would address these concerns, I have analysed the problems to suggest new curriculum basics.

If we are to survive and develop, curricula must engage questions of value in the lives of all humans, which means that the field of curriculum studies must do the same. Rather than remaining preoccupied with questions of a utilitarian nature for our existing industrial society, or for the dinosaur of academic rationalism, we must engage questions such as those raised in the initial portion of the paper. It is equally important that curriculum workers translate broad visions into concrete exemplars of local action.

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