

DOCUMENT RESUME

ED 084 178

SO 006 453

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TITLE If It Ain't Survival...It's Catastrophe: A Social Studies Curriculum for a Modern World.
INSTITUTION Marin County Superintendent of Schools, Corte Madera, Calif.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 1 Sep 70
NOTE 129p.; Marin Social Studies Project

EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS Cognitive Processes; Course Content; *Curriculum Development; *Curriculum Planning; Educational Change; Educational Improvement; *Educational Objectives; Learning Characteristics; Models; *Program Descriptions; Projects; *Social Studies; Student Characteristics; Teaching Methods

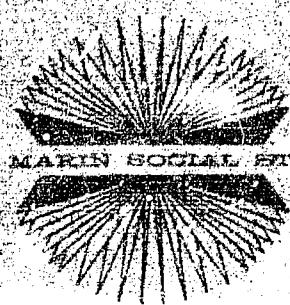
ABSTRACT

The goal of the Marin Social Studies Project was to present a relevant and comprehensive design for American social studies education and to serve as a change agent by providing rational and viable alternatives to present practices. This paper documents the development of this curriculum design, defining the purpose of teaching and the nature of students and learning. A model by which educators can identify general objectives necessary for a humane survival social studies curriculum is presented and each prerequisite for a curriculum based on education for survival in a civilized and changing world is discussed. Emphasis is placed on how the interdependent discipline of social studies can best function to develop self-actualizing learners into more rational decision-makers about human behavior and social interactions. Related documents are SO 006 450-SO 006 454. (Author/SHM)

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MARIN SOCIAL STUDIES PROJECT

IF
IT
AIN'T
SURVIVAL . . . IT'S CATASTROPHE:

A Social Studies Curriculum for a Modern World

by

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September 1, 1970

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The work presented or reported herein was performed pursuant to a grant from the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

IF IT AIN'T SURVIVAL . . . IT'S CATASTROPHE:
A SOCIAL STUDIES CURRICULUM FOR A MODERN WORLD

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I. A SOCIAL STUDIES CURRICULUM FOR A MODERN WORLD: THE PERSPECTIVE

The task is to redesign American social studies education: present a design that is relevant and comprehensive. The goal seems commendable. It proves to be an overwhelming assignment. We wish to share with classroom teachers the size of that task, the weight of that burden. We think that by our experiences we can convey some propositions which may make the job of social studies classroom teacher more understandable and more effective.

The Marin Social Studies Project was funded under ESEA, Title III. The designation is for innovative and exemplary programs. Initially conceived by Penrod Moss, subsequently at California State College, Dominguez Hills, it adopted the formal title, "A Social Studies Curriculum for a Modern World." Within the limits of the Project title and related behavioral objectives, the Project, directed by G. Sidney Lester, had much leeway.

The great potential given by the broadly encompassing nature of MSSP required that our perspectives on social studies curriculum be different from those of most people in social studies. We consciously became a staff of generalists in a world of apparent specialists. Our perspectives emerged as different from the classroom teacher worrying over tomorrow's lesson plan,

stacks of papers to be graded, timing Friday night's basketball game, and moonlighting to pay off last year's bills. Our perspectives became different from curriculum developers concerned about selling their subject matter packages. Our perspectives were unlike those of college professors facing publish or perish.

Our perspective encompasses social studies education writ large. We actively cultivated that perspective. We nurtured it when we made our first decision. That decision was to protect no sacred cows: our intention was to tell it like it is, or more properly--like it has to become.

Initially we set out to field test new social studies programs. For its accomplishment we identified over two hundred teachers willing to use these materials. The result saw new social studies materials, whose authors ranged from Angell to Taba in more than seventy programs, used by over six thousand students in Marin County, California.

The flood of new materials presented temporarily difficult problems. Since most teachers were not oriented toward the new social studies, MSSP held county-wide workshops, bringing in nationally known consultants to give their perspectives about the latest ideas and techniques in social studies education. The staff organized two county-wide committees to deal with different aspects of the new social studies--the resultant nucleus of persons helped attune others. Local colleges and universities sought staff support for extension programs in social studies innovation.

As an evaluation project we developed an evaluation instrument appropriate to a variety of curricular programs. This entailed an examination of literature and contacts with persons in the field of evaluation. The result

was the development of two instruments, each designed to meet the special requirements of MSSP criteria.

The Marin Project established a resource center to display new projects, materials, newsletters and publications dealing with the latest in social studies education. The center became the focal point over a wide area for disseminating new developments in social studies. It was necessary to identify curriculum development projects around the nation so we could communicate with each. No one had systematically put this information together, so we published the nation's first comprehensive directory of social studies research and development projects. To deal with the larger dimensions of the purposes of social studies education, a conference of leading names in social studies education was convened to help formulate a proper rationale for a social studies curriculum for a modern world. This paper is greatly influenced by that enlightening conference.

Covertly we gained a number of perspectives. One comprehensive target of MSSP is a rational K-12 curriculum. Based partially on our field test data, we found that we had to examine both psychological and epistemological bases of the new social studies, including learning activities and teaching strategies. The works of Piaget, Maslow, Gagne, Festinger, Bloom, Scriven, and a host of others became central in our curricular design.

The staff entertained many discussions about the distinction, if any, between facts and values. We examined relative teaching strategies. We found it necessary to tighten up social studies definitions, so often carelessly tossed about. We came to appreciate the role of elementary school teachers. The apparent trends in social studies education were examined. We argued

relative merits of new textbooks--particularly those considered for adoption in California elementary schools.

Our intention is to transmit the conclusions from these efforts to important people in the education process, particularly those on the firing line in the teaching-learning environment--the classroom teacher. The means of transmission is a change package consisting of four major documents. One is the evaluation of field test materials. A second means is through an in-service training program designed to acquaint teachers with what is happening in social studies instruction and methods. The third document is a self-diagnosis instrument by which individual teachers or entire departments can compare their practices with positive trends in social studies education and thereby identify means to remedy the discovered theory-practice gaps. The fourth is this document focusing upon rationale for the modern social studies curriculum.

Much said in this rationale document may seem odd. Much is critical. Most screams "No!" to present practices. Indeed the ultimate goal of the Marin Social Studies Project is to serve as change agent by providing rational and viable alternatives to present practices. It is our purpose to reorder priorities so that mankind can successfully negotiate its way into the twenty-first century.

This is our perspective!

II. WHY?

How does one pursue the job of developing a systematic articulated K-12 social studies curriculum? How can the social studies curriculum operationalize a program of curricular options of a scope and sequence which are both pertinent and functional for students maturing in tomorrow's world? Since students will inherit a world dramatically different from that found today, proper curricular options become a question of prediction for the curriculum designer; he must begin to order curriculum priorities on a reconstructive basis as he estimates tomorrow's world.

It is expecting too much to demand that a group of overworked school teachers single-handedly develop that kind of social studies program. They are loaded with students, extra-curricular activities and receive little support from administrators in the form of released time, released duties, or outside resource personnel. By the very nature of their job, the perspectives of teachers are tied to nitty-gritty events in individual classrooms. Furthermore it is unrealistic to expect teachers to determine

a comprehensive scope and sequence when professionals in the field who should feel that obligation, have failed to provide guidelines capable of halting the aimless meandering of social studies.

Present social studies curriculum practices slipped in through happenstance. The curriculum oozed forth from day-to-day work habits in the public school system. Day-in, day-out routine has been unable to provide direction. As a consequence American social studies curriculum has become a headless giant, unthinkingly consuming and rejecting on whim. There have been few concerted efforts to provide the whole body with purposeful substance. Today it is recognized that the time has passed when any part of the curriculum can continue to unwittingly devour.

Educators must take immediate stock of what has caused social studies to meander, both in direction and function. By careful examination social studies can begin to be comprehensive, functional and directional. To achieve this, criteria will have to be established for a legitimate rationale.

Tragically, the topic of rationale, as normally discussed among educators, finds itself in the category also occupied by off-color stories. Rationale, to educators and curriculum developers, has been a shibboleth. The verbage has been used to cover up the inclusion of the most trivial and ludicrous activities and exercises in the schools. It is time to look at the evidence and commence talking about substantive, convincing arguments for social studies rationale. Rationale is serious business.

A rationale is, in large part, a statement presented so that it encompasses everything for which the curriculum is potentially responsible and accountable. The function of rationale is to establish the argument

of ultimacy in the curriculum. It is much like the device used by the three year old child who wants to know why something has occurred. He is insistent in his pursuit of the question "why?" Regardless of the parents' response he has another "why" waiting in the wings. He is seldom satisfied with any answer, since it presupposes a cause and effect relationship. While the analogy may overstate the cognitive capacity of a three year old for cause and effect relationships, the pursuit of "why-why-why" is not an exercise in futility for the curriculum. Indeed, it is the essence of rationale. Rationale is the last "why" in the line of arguments for any activity and/or objective in the classroom. By its function it sets down a statement of ultimate ends for the instruction employed. To function properly a rationale clearly indicates why everything is done--whether it be a K-12 curriculum design, or the first twelve minutes of next Tuesday's Man: A Course of Study lesson. If what happens in social studies is not directly answerable to that rationale, then no rationale exists. Evidence clearly indicates that in social studies classrooms across this nation, no rationale exists.

A cautionary note is in order concerning the full dimension of a rationale. It is misleading to suggest that rationale is limited to a single, compact statement. It is much more. It is itself an entire process. The process encompasses the focal statement, particular objectives, classroom activities and all connections between these and other variables. Rationale, in its complete form, is a complexity of activities, ideas, attitudes and other ingredients which combine in a grand fashion to make for a proper curriculum.

Morrissett and Stevens¹ in a forthcoming book, Social Science in

¹Irving Morrissett and W. William Stevens are Executive Director and Program Director, respectively, The Social Sciences Education Consortium, Inc., Boulder, Colorado.

the Schools: A Search for Rationale, pursue the problem of rationale and its relationship to curriculum. To them the statement of rationale has the function of establishing guiding criteria, criteria which provides for the determination of all content/process in the curriculum. In their context content identified what is learned; process is that part of the content which is concerned with how the learning is achieved. Quite simply, then, Morrissett and Stevens say that the content covered and the processes engaged in must be responsible to the higher and controlling "why." We agree. However, we expand the limitations inherent in this concept and suggest that rationale includes not only the interactions of content and process, but additionally incorporates these interconnections with the guiding and controlling criteria.

It is only after understanding this complexity that rationale can begin to provide guidelines for the systematic inclusion and/or exclusion of content or process offered. No content or process can ever be justifiable for its own sake; it must fit the basic requirements of the rationale. A proper rationale, therefore, would shut out many classroom activities and strategies currently practiced. The task is to clearly and concisely spell out a proper rationale so that doors are properly secured.

Social studies rationale became the driving force of the Marin Social Studies Project. Numerous hours were directed toward its enunciation and clarification. By sharing the conclusions we reached, we hope that we can help modify classroom activities in such a way that social studies becomes a newfound, relevant place for learners. By indicating what should be and what must not be a part of the curriculum, we can help delineate

some watersheds which have too long gone unmapped. By describing the parameters, we can develop teacher retraining programs which can have direct effect upon social studies instruction.

We are opting for a rationale which will allow us to educate our young. Specifically the social studies program must be devised so that it consists of the right content, with the right subject matter, learned in a reasoned sequence, focusing on achievable objectives, and based on firm psychological and epistemological grounds. Those conditions are possible only after formulating a sound rationale.

III. THE CONSERVATIVE AS REVOLUTIONARY

Where are the parameters within which we find the right content, the right subject matter, the right sequence, achievable objectives and experiences which are psychologically and epistemologically sound? The focal point for those guidelines is simple. They are the same guidelines which have initiated curriculum development over the generations, summarized in one concept -- SURVIVAL.

Properly, societies have educated for survival. It is a moderate view, but the fundamental consideration. Historically survival has meant fitting into the status quo--preparing to take the place of a community elder, protecting the tribe from without, becoming a functioning political-economic person in the established system. Always these criteria were nominally legitimate because they functioned within a system which had no reason to anticipate major changes in the societal structure.

The technological revolution of recent decades makes it abundantly clear that survival today requires a radically different approach. To attempt to maintain the status quo in today's world will result in the proliferation of unresolved crises because the world is changing all

about us. (To those denying the salvageability of the basic structure of existing educational institutions, this paper is too establishment since its thrust is to evolve a redirection from within.)

Conceptually survival does not present a critical problem for curricula. The problem has its source in the new dimensions of the world, dimensions which make the preparation for survival totally different from any mankind has previously acknowledged. These new dimensions have been triggered by the knowledge explosion.

The explosion of knowledge opened for scholars wondrous discoveries about human behavior and the world about them. Concurrently, the accelerated rate of new knowledge broadened the terrifying gap between the truth that scholars know vis-a-vis the mythological perceptions of the citizenry. This gap is not an astounding revelation. Americans have known for years-- though denials have been profuse--that great distances exist between value claims and empirical evidence. Take for example, civil rights, religious commitment, employment opportunities, the sanctity of marriage. That there is a credibility gap with less emotional areas of knowledge may be upsetting but it shouldn't be surprising.

Defeatists declare that because people are prepared to live with these credibility gaps, disaster will be the result for any effort which has survival as its goal. They have sound evidence for this position. Americans appear to live comfortably in the abyss. The only time John Q. Public attempts to bridge the gap between knowledge and practice is after problems scream for remedy. Americans have thus far been incredibly fortunate by our success in meeting crisis-time problems. We have always managed to do a passable, if clumsy, patchwork job. We have successfully muddled through. The threat, however, is that one day patchwork efforts will very likely be too late. One day a crisis will hit that is beyond repair. One

day there may be no one day. Yet Americans have a profound faith that things will work out all right, because they appear to have done so in the past.

Scientists - those who deal with empirical evidence, not soothsayers - are evangelically proclaiming that our day of atonement may have been reached. Several say it is already too late; some say that if we don't start today, it will be too late; many say that if we don't start within the next decade there is virtually no hope for survival--not just for America, but for all existing living matter on the earth. All the time more and more scholars are moving to more pessimistic positions. All scientists - physical and social - concede that the world is undergoing drastic changes and, regardless of when each forecasts doomsday, all assert that we must begin today to look at survival in a way unimagined before.

We can no longer afford the luxury of waiting for the next crisis before seeking resolution. Action today on the basis of available evidence is necessary to solve each potential problem. This is the only means to prevent any instance from becoming the fatally permanent solution.

In more idyllic times a similar compounding of problems was not particularly crucial; today it breeds disaster. When man did not burn tons of hydrocarbons, before he discovered DDT, when it took minutes to load a blunderbuss, as weeks went by in getting from New York to California, when mortality rates were more in line with birth rates, when wire-tapping was illegal, problems were not compounded in a crisis by instantaneous effect upon the whole population. Recent changes have seen the pollution of our spaceship earth, the destructive potential of ICBM's, instantaneous worldwide communication, efficiency in the medical profession. Each has helped create a world leaving little, if any, lead time for human error. Decisions

must be warrantable each and every time. Sound decisions must be made on the basis of immediately available empirical evidence. The alternative is clearly suicide.

Survival means much more than biological continuation of the human race, though that is prerequisite. Survival is substantially more than passing on genes. The modern world requires an operating philosophy of humane survival. As a concept humane survival seeks the implementation of conditions which do not impede the development of rational men. Its purpose is to allow men to live full, enriched and potential-achieving lives. To achieve the goal of humane survival will require an earnest attempt by men to desire the achievement of the concept as the norm for themselves as well as all other humans. That will require an extensive reeducative program. Such an orientation will allow the social studies curriculum to assume a relevant perspective.

Some may question the specific elements of humane survival. We can't specify each. The world is changing too fast to know with certainty what tomorrow will bring. We only know that if it arrives, it will be much different from today. It will be outlined as enlightened and humane.

Some propositions can be formulated about the kinds of things which will deny humane survival. We can't afford polluted sky, water, or land. We can't afford war. We can't afford totalitarian political systems. We can't afford persons making judgments which deny empirical evidence. We can't afford a lot of today's practices.

Do we advocate the antithesis of each? This would cause specification of each reversal. That is the job of mankind--not a messianic decree from the Marin Social Studies Project. There are a range of possibilities which would be acceptable alternatives to each negative category identified. Each

proposal must be judged on its merit. We have indicated some conditions mankind ought to avoid--it is the function of the curriculum and society to develop positive courses of action. These considerations must be addressed by a modern social studies curriculum.

Contemporary literature, art forms and mass media constantly tell us of the difficulties which threaten man's survival. The enumeration of several of these is included here only that they may bring insight and, thus, demonstrate how the survival crisis demands dramatic social studies revision in the semesters ahead.

The problems man faces today exist because he interfaces two worlds: the physical and the social. A change in either setting increasingly has dramatic effects within that dimension as well as reciprocal effects with its counterpart. In the twentieth century dramatic technological changes have set off continuing reactions within the physical world, but have caused even more catastrophic reactions in the social world of human perception and understanding. The result has seen man's social interactions take on various and even deadly aspects. The social difficulties are compounded because man exists in the gap between knowledge and practice. Today these psycho-social considerations are identified as increased personal psychological problems, interpersonal polarizations, institutional aloofness, and a rising climate of anti-intellectualism. Each imperils man's survival potential.

The doubling of knowledge each seven or ten years has created an apparent fathomless chasm between the uncoverers of knowledge and today's suburbanite. Technological breakthroughs and increasingly sophisticated skills on the part of the former only serve to widen this gap. As western man has sought new and efficient ways, he achieved innumerable dramatic sets called "progress." Today's problems, however, are not to be blamed on

technology since technology contains nothing which is inherently evil; it is neither good nor bad, it is neutral. The basic problem is that as technological development continues, unfortunately the corresponding political, economic, and social attitudinal changes which will allow man to understand, appreciate, and live with the new relationships have not developed.

It is of prime interest that the first noticeable impact of the technological/knowledge explosion reverberates in the corridors of the schools in technologically advanced nations. It may be that although textbooks remain many years behind the actual uncovering of the most recent knowledge, books, in combination with the impact of the mass media, already reflect cognitive input unknown to parents of school children educated years before. The result is a tremendous credibility gap between generations over knowledge about the world. This has serious implications.

The western world may be in the midst of a historical period very much like the Protestant Reformation. Radio, television, automobiles, the airplane assume roles today comparable to that played by the printing press in the sixteenth century. As social studies education in the public school attempts to assume the role of mediator of the new knowledge, it finds itself in much the same position as the protesting clergy did several centuries ago. The new truth is based upon the empirical evidence which scientists have uncovered. Social scientists now have the responsibility of spreading the word of the implications for mankind to all men. Much of mankind, however, will deny the evidence and seek simpler solutions. To those who deal with the social world the realization that survival is at stake requires that "the buck stops everywhere." Most assuredly the buck stops with the teacher of social studies. It is in the social studies classroom that the political, economic, and social dimensions of the world are

expected to be understood by the present curriculum. If the analogy with the Reformation is correct, it will bring with it the Inquisition and Star Chamber--many are already experiencing this phenomena.

This threat of inquisition, which can be expected from the tradition-oriented populous, is by and large, not the result of an apparent conspiratorial plot against holders of the new knowledge, but rather the result of a psychological functioning of the human brain. Studies have shown that when faced with more information than man can comfortably comprehend, he is forced back to more primitive means of problem solution. These non-premeditated retreats are psychological schemes which operate because individuals do not have the secure base necessary to make rational decisions. Ambiguity created by accelerated technological and social changes forces many people into primitive reliance on external authority (rather than their intellect) to offer counsel. A fundamental fault of the traditional school curriculum is its failure to make provision for its graduates to consciously acquire the skills which will allow them to rationally cope with the world in continuous flux.

Man's existence and survival has resulted because his ancestors were able to adapt to changing conditions. Eons ago fortuitous S-R interactions allowed for survival and subsequent evolution. More recently man proceeded toward his elevated position in the evolutionary pyramid because this intellectual capacity allowed him to make highly complex and rational decisions, decisions which structurally entailed much more than preordained responses to particular stimuli. Consequently man emerged capable of weighing alternatives. This intellectual attainment provided his means for

survival.²

It is hopeful to suggest that man's apparent inability to weigh all alternatives today is due, at least in part, to his lack of education. His education appears to have failed to provide him with the tools needed to carry on the unique function man has among the living creatures--his intellectual capability.

Yet another crisis faces man. He is confronted with a world of increased inter-personal polarization. This danger has assumed many dimensions. Prominent polarizations are seen in the generation gap between parent and offspring, the alienation between intelligentsia and citizenry, racial confrontations between various racial and ethnic groupings, other confrontations pairing doves against hawks, the widened gulf between the poor and the affluent, the dynamics of women's liberation, and the increased disparity between developed and underdeveloped nations.

Each difficulty has arisen as the established order played the conventional wisdom game to solve problems which it was forced to confront. In recent years changing circumstances have caused a spiraling flood of new groups to make demands upon the established order. Crises have arisen because the rate of change has proceeded so fast that the older, regimented societal segment is unable to comprehend the changes which the new groups use as the basis for their demands. Typically the entrenched power structure

²Jerome Bruner has raised the eerie possibility that as man has traveled the evolutionary trail, his nervous system has become so efficient that this autotomical arrangement now biases all input. As a consequence objectivity is denied most humans. If Bruner's hypothesis is correct, man would have gone full circle evolutionarily. The simple S-R of homo sapien's ancestors which evolved so that man could weigh alternatives has been reinstated, because he now programs out any data which he finds too discrepant. The result is to have emotions direct most responses. If Bruner is right, then survival today demands efforts to cause man to retro-evolve; retroevolve so that he accepts all critical information. Only by this means can man once again weigh alternatives.

has attempted a conventional wisdom solution. The solution fails because the old structure has been unable to recognize that it no longer serves a static society--for better or worse, the scenery has changed. Old line perspectives are no longer applicable; a new setting is on stage. Chronological age no longer provides sufficient applicable insight on a set totally redesigned. Dated oratory is outlandish on the newly restructured stage. The inappropriate dialogue is itself enough to prevent solution of any crisis. Kenneth Benne, sums up the present circumstance graphically,

Men have lived through most of human history under the direction of largely unexamined traditions. These traditions have been capable of ordering processes of human living because men could reasonably assume that the principal conditions of life would remain the same. Oceans or mountains would present substantial barriers in the defense of my group against other groups. "Natural" energies, of wind and water, of manpower and animal power, would present limits to man in performing his works of construction and destruction. Most men could live out their lives in the localities where they were born. Men could rationally assume that chosen vocations, with whatever changes and refinements slowly accumulating new knowledge and inventions might bring to these, would be available throughout a lifetime. It could be assumed that experience accumulated by parents and grandparents could and would be distilled into wisdom, which, communicated to children and young people, would furnish applicable and sane guidance to their future lives. Young people and older people would find stable and justifiable role relationships in such processes of cultural transmission and social indoctrination.

All of these "certainties" have become "specious certainties" in our generation or in the past few generations of man. Traditions built upon these specious certainties no longer give sane guidance to people in the choices they must make, individually and collectively. And accelerating changes in the conditions of life continue to occur.³

³Kenneth D. Benne, "The Major Tasks of Contemporary Thinking," in Jean Fair and Fannie R. Shaftel (eds.), Effective Thinking in the Social Studies (Washington, D.C.: National Council for the Social Studies, 1967) pp. 9-10.

Present institutions--political, social, religious, economic, educational, legal--were structured by conventional wisdom. If mankind is to survive, the institutions must be altered when they can no longer deal legitimately with contemporary problems.

Most institutions are responsive to a relatively small number of people. Historically the number of people responding to an institution was in part the result of a small population; today the number responding remains numerically small as a decreasing percentage of the population is allowed the benefits of legitimate participation. Modern technology has played a major role in this situation. The function of the federal government was relatively insignificant to the Californian at the turn of the twentieth century since it had little effect on him. Conversely, he seldom had need to affect it. While physical distance and institutional impact remain stabilized, there was little difficulty. In the waning decades of the twentieth century the federal government is at the family television set where its acts of commission and omission effect each and every American. Simultaneously the citizen has been blended into the masses. The result has been alienation of the citizenry as individually they realize an inability to effect institutional decisions. The federal government, as well as all large bureaucratic institutions has become too remote, too impersonal. The continuation of democratic institutions under circumstances hampered by the bureaucratic heap is left in serious question (e.g., confrontation politics, riots, anarchy).

Bureaucratic and self-serving aggrandizement by politicians, in

turn, have fostered bizarre alternatives. Hippie communes have become a national phenomena as an attempt to provide the alienated with a renewed sense of identity in a world of outdated, irrelevant institutions-- institutions unable to generate positive accomplishment. The hippie culture has equated technology as synonymous with the out-of-date, bureaucratic institutions. While there are clear relationships, the subculture has failed to distinguish cause and effect relationships. That makes their withdrawal absurd; no small group can solve its own or society's problems by ignoring the larger society. The bureaucracy continues, the technology continues. The air and water and food consumed by the estranged group continues to be polluted. The totality of interactions dicates that they cannot ultimately escape--the scenery will continue to change regardless of their intentions.

A last category of social problems triggered by the technosphere centers on the rising climate of anti-intellectualism. Anti-intellectualism has found its way into a variety of societal forms. It is the result of the aforestated psychological functioning of the human mind: so much input causes persons to seek simplistic solutions to their problems. Variously they have the form of prescriptive admonitions based upon what idealized forefathers are hypothesized as wanting, or absolute submission to an external force, or some comparable straw in the wind. Each of the methods rejects confidence in the scientific method of investigation. Billy Hargus, Timothy Leary, Gavin Arthur, and Spiro Agnew all advocate the same line. Each personality holds out hope to his audience that he has found the means by which the masses can escape from a world intolerable to their

perceptions. It is mandatory that education focus its attention on developing the skills which will allow men to deal with the real world. The alternative is clearly to force people into a position where they have to rely upon escapist methods of organizing that world.

That's a list of some survival problems which demand solution now. It is evident that the crisis of survival has reached preponderous proportions. It is incumbent upon educational institutions to directly deal with these problems. Consequently, to base a curriculum on a rationale other than survival is ludicrous. Basic survival presupposes any other goals the curriculum might attempt to advance. If we don't take care of this consideration first, others will never see the light of day.

In order to deal with collective as well as individual problems man must critically analyze himself, his environment, his institutions. He must base his every action ~~upon~~ these analyses. He must then direct himself toward appropriate goals. The alternative to a humane survival curriculum at the present point on the time-space continuum is a curriculum for catastrophe--regardless of the label applied to it.

IV. SOCIAL STUDIES: FUNCTIONING DISCIPLINE

Having established that humane survival is the top level rationale concept, what means can social studies education use to assault the summit?

The role to be played by social studies has been implicit in what has been said. However, any of the gaps which exist in human experience are there because man fails to make his implications explicit. Frames of reference easily distort positions. Past distortions have caused social studies educators to develop the whim syndrome, the patchwork curriculum, and the sad state of the field today.

Recent social studies education has seen increased lobbying by the social scientist for his particular discipline. The goal has been to entrench each discipline in as much of the school curriculum as possible. Economists confront harried teachers to push their discipline, the sociologist does the same, the anthropologist, the....Why the cut-throat competition? These social scientists see their disciplines as more important and more relevant than various areas now allotted time in American classrooms. They are right--but many of their substitutions are ultimately as unimportant.

and irrelevant. . .yet they push, too.

Tugging and pulling on the curriculum adds to the confusion which American education already faces. It has resulted in an interdisciplinary squabble between "the establishment" of the curriculum on the one hand-- history and geography--and "the revolutionaries" in the form of economics, political science, anthropology, sociology, and psychology. The behavioral sciences are demanding equal, if not larger, billing. This fighting has served to pollute the already murky waters of the curriculum, because it blocks social studies educators from getting to the fundamental premise why. On what basis should any program be in the curriculum? Until social studies education moves beyond immediate interdisciplinary fights effective social studies education programs will not be developed.

The push for independent disciplines in the public school curriculum rests on the premise that social studies is properly the social sciences simplified for pedagogical purposes. Since the newer social science disciplines are today the most dynamic, they demand inclusion on this basis.

Shirley Engle has expressed three concerns which are cause for American education to reject the definition of social studies as simplified social science. His argument is that (1) to simplify the social sciences is to destroy their integrity and distort them (2) this definition ignores the process of decision-making in the social studies curriculum because the social sciences are not, as such, concerned with decision-making, and (3) social studies as social science ignores the value process--the ought of the evidence presented.⁴

⁴Shirley Engle, Tapescript of Marin Conference held October 18-19, 1969 pp. (8)-(9). Copy in possession of author.

One alternative is to view social studies as an interdisciplinary subject. This, however, does not solve the basic problem. The primary consideration under these circumstances forces the separate, though arbitrarily delineated, disciplines to be meshed together. The criticisms raised by Engle remain valid for this approach. The only difference is that by viewing social studies as interdisciplinary, one achieves a new mixture. Rather than place the disciplines in separate containers, they are forced into the curriculum as an immiscible solution. That mixture is incapable of combination, its internal structure requires that each retain its distinct identity.

Another alternative is the patchwork curriculum so prevalent in the American classroom. Briefly it reads like this: the Women's Club is having a Bill of Rights essay contest so all students write an appropriate essay; the Native Daughters of the Golden West have a fabulous collection of local memorabilia so a unit is developed; Bank of Our Town has developed a series on "The Consumer and His Investments" so a place is found in the curriculum; the AFL-CIO has speakers available on collective bargaining so an appropriate day is set aside to hear them; ecology is big this year so it is examined; ad nauseum. The point is that while any of these may be very important, it is more important to consider why each is important. To place each in the curriculum as an end in itself is to confuse and frustrate the student. The result is a hodge-podge of tenuously connected sessions which make no sense for the learner-participant.

A different orientation is needed to subvert social studies. Professional literature already seems to point the direction. In recent years there has been a new emphasis to find a proper definition for social studies. Prior to the mid-1960's definitions of "social studies" were descriptive.

(The definition above described social studies as the social sciences simplified; others describe social studies as the study of man, or man and his environment; or they cite each of several academic disciplines.)

The recent trend has been to define social studies functionally or operationally. Such a definition says: The social studies is that portion of the curriculum the purpose of which is to make the learner more rational in decisions he makes about human behavior and social interactions. This functional definition presents a focus by which social studies educators can examine what happens in the classroom from a more appropriate perspective. By the use of such a functional definition everyone can determine where social studies is headed.

This definition for social studies raises questions. Why have a functional rather than a descriptive definition for social studies? The response is not meant to be flippant, but it is simply that functional definitions are just more functional. A functional definition provides a clear goal orientation rather than a coverage orientation. Where does this functional definition of social studies leave the rest of the school curriculum? Is not this definition the goal of all education? We can only hope so, but in fact, most areas of the curriculum do not directly address themselves to this focus. The key element in the social studies definition is its concern with "human behavior and social interaction." If the concern was wholly with rationality on a purely impersonal dimension, then math or science would offer a more productive method of achieving rationality. The functional definition for social studies demands that the focus be solidly on humans and their behavior. The curriculum must examine human behavior directly: math and science rationality has not transferred to human experience.

Organizationally the functional definition of social studies means that individual social science disciplines will no longer exercise exclusive sway over social studies classrooms; the inclusion of any academic discipline is subject to the extent it allows social studies to properly function. The functional definition allows areas traditionally left to the other departments to be properly included within this definitional area (e.g., humanities, logic), but again only as each fulfills the fundamental prerequisites.

Many people concerned with social studies education may retreat from this definition in its call for new organizational structures. Many disciplinarians obviously have too much at stake to accept a generalist position for the public schools. Others will retreat for historical reasons. To seemingly cut adrift from the social sciences smacks of a return to the failure several decades ago of "social studies" and "social living" courses in the era of progressive education. The complaints about these courses were legitimate, but the problem was not in course titles. The problem rested with the non-direction given to that curriculum, a concern with learning activities for their own sake. Still others may retreat because the functional definition gives an appearance of being anti-humanist. Later discussion should prove such an interpretation to be illegitimate.

James Shaver offers a strong argument for making social studies an independent discipline. To be successful he says that social studies must start by redefining its relationship with the social sciences. His contention is that social studies instruction will continue to be dominated by the social sciences "until a definition of social studies that does not use the social sciences as a starting point is adopted." He proposes that such a new definition will become the "basis for the philosophical examination of social studies priorities."⁵

⁵James P. Shaver, "Social Studies: Where Are We?" Paper presented at Marin Conference, October 18-19, 1969, p. 5

The functional definition which states that the purpose of social studies is to cause students to become rational decision-makers about human behavior and social interaction fits Shaver's requirement. To be rational means that decisions must adhere to logical-empirical rules and procedures for the solution of problems. To deny logical or empirical data or procedures is to be irrational. Rational decisions must be made for social studies in light of the survival crisis. The importance of the functional definition is that it closes another door on many activities and much content currently tossed about in the classroom; those activities are not designed to help students become rational human beings. It allows thereby for the entry of only that content, subject matter, processes, skills, etc., which are directly concerned with the establishment of rationality.

The compulsion is to defend the rational orientation position from humanists. If the definition is seen as a coldly calculated, narrowly reasoned strategem for social studies, then it is rightfully subject to attack because that would be mechanical. Logical-empirical rules and procedures result from human rationality, this rationality only results as man considers with warmth, empathy, and emotive understanding the problems for which he must make decisions. This interpretation is based on the premise that the humanist position is part of the logical-empirical problem solving continuum: man's humaneness is logically and empirically derived. In summary, rationality has as its roots the logical-empirical rules and procedures by which man solves problems. By this rationality, man draws his unique human characteristics (e.g., intellectual powers, empathy, aesthetic appreciation, personality).

The functional definition places rational decision-making as a paramount consideration in the social studies classrooms of the schoolhouse.

It encourages the incorporation of social sciences, "independent" units, humanities and the arts, etc., into the curriculum, but only as each provides for the development of the social studies rationale. The social sciences, as one example, should be used by the social studies, the academic disciplines must not, however, dictate the direction of social studies content.

An integrative approach which will not lead to the study of a discipline for the sake of that discipline is the demand. The curriculum is limited to those areas of content/process which provide for the general development of rational human decision-makers who are not only capable of survival, but can live a full life in a constantly changing world.

Thus far several cardinal requirements for a social studies curriculum in a modern world have been described. The results of numerous investigations and research cause the alarm to be sounded for what passes as social studies learning in America's classrooms. Starting with the premise that mankind is in a survival crisis which the United States, because of its world-wide influence, is in a position to exert pressure to solve, a humane survival curriculum is the only warrantable alternative available. To attack this fundamental problem social studies must be redirected so that it ceases as a descriptive conglomerate of vague studies.

Certainly the social studies has a great deal it can contribute for the correction of this crisis of survival. By assuming the stance which is explicit in the functional definition of social studies, the social studies can immediately move to create students who will base their decisions, judgments, and loyalties on those things for which there is cognitively verifiable evidence.

V. THE RIGHT OBJECTIVES

For the casual reader the discussion on the next several pages may sound esoteric and appear to be unrelated to practical classroom use. Its inclusion is necessary, however, to justify and understand the approaches which later sections of the paper advocate. Its urgency is based on the fact that the direction which social studies curriculum and instruction currently takes in the public classrooms must be abruptly halted. The alternative direction advocated in this paper entails a much more comprehensive plan than any previously attempted. It is for this reason that the major components of the new direction be fully explained. This procedure is the only available means by which subsequent discussion can avoid being esoteric. The demand is that the humane survival curriculum become the basis for actual classroom practice.

The knowledge explosion has brought with it a reassessment of knowledge's totality. For centuries men argued that to arrive at the whole he had only to add together all individual parts. Recent investigators have revolutionized that concept. No longer is knowledge understood as the

sum of the parts: it includes all the interrelationships which exist amongst the components. At first blush, the facade of knowledge results from a physical additive process. In reality the construction of knowledge is infinitely more complex than any illusionary gross arrangement.

This revelation has caused a new look to be taken at what were previously viewed as rather simple systems. Curriculum development is a case in point. The new orientation toward the magnitude of knowledge forces curriculum workers to examine more closely the complexity which is formed by curricular structure. Each dimension of the structure is known to have important effects on every other dimension. Educators can little afford to continue blissfully stating vague propositions about curriculum, expecting these statements to fall together in a comprehensive, systematized, dynamic whole having meaning in the modern world. It is time to identify and assess the relationships among educational propositions.

To be able to identify at a functional level the relationship between survival rationale and the seventh question on a mid-term exam is now a demand--not only from within the profession but also from students, community, and governmental funding sources. A simplified method for showing the relationships between day to day activities and ultimate goals is represented in the model for curriculum development diagrammed in Figure 1.

The development of curriculum should follow the route indicated by the left side of the model. As described above, curriculum design must begin at its point of ultimacy, i.e., humane survival. From that cardinal position flows every subordinate action, each included only as it helps

CURRICULUM DESIGN JUSTIFICATION MODEL

PRACTICE

DEVELOPMENT

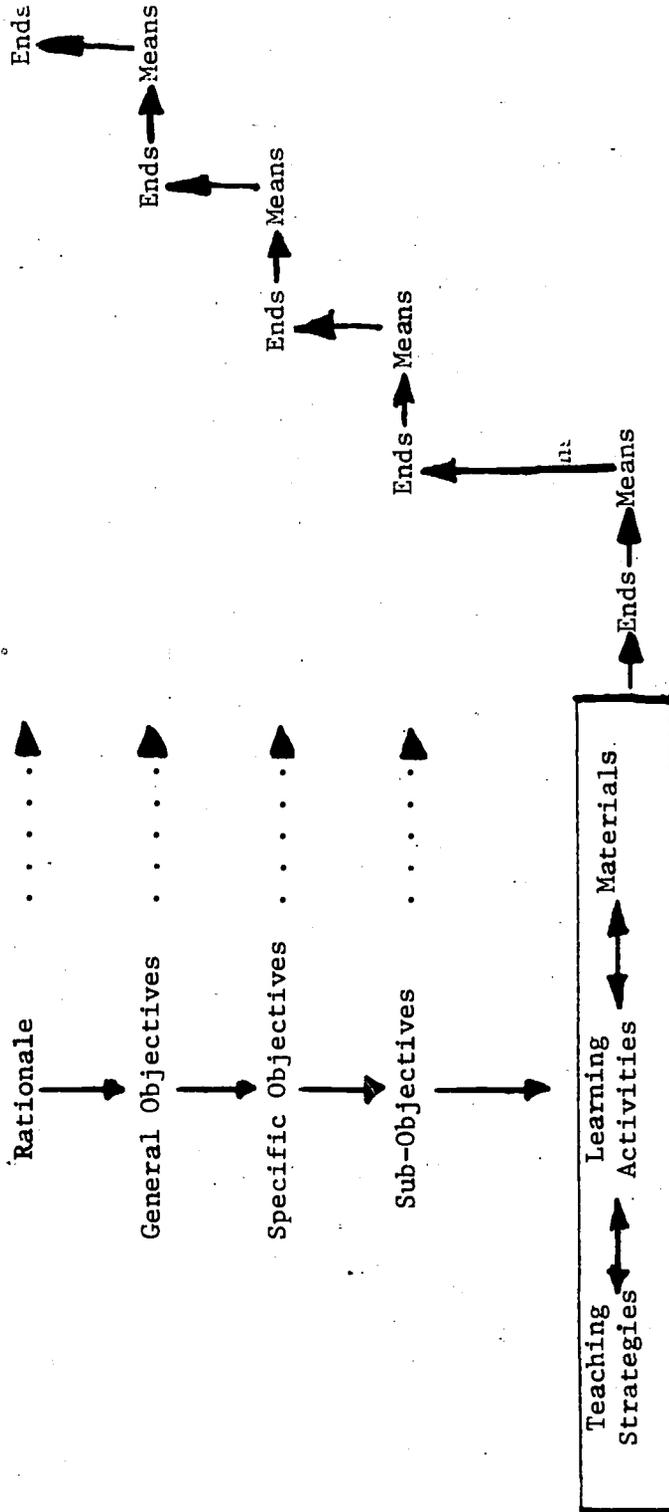


FIGURE 1

attain the ultimate rationale. Subsequently, blocks which best build reality to the rationale must be systematically identified--identified to flow logically and realistically from the rationale. By this process specific objectives will emerge which develop the curriculum. Such a comprehensive format makes it possible for teachers, students, administrators, legislators, or any other person to see how every minute of every day fits the rationale pattern.

Once the curriculum has been developed, the task is to put the design into honest practice. Quite simply, its comprehensive implementation is achievable only as each lower level successful step simultaneously becomes a means to attain higher level ends. These, in turn, become the platform for attaining higher level ends. . .until the rationale is achieved.

Unfortunately, classroom observations graphically show us that most teaching strategies, learning activities and materials are treated as ends in themselves. The design of Figure 1 on the other hand, shows all content/process to be part of a continuing system for the rationale's achievement. It means that every activity must be directed toward survival. The number of connectors required to move the learner from his entry into kindergarten to the final ideal is infinitely complex. It embraces a multitude of interconnecting experiences: cognitive-affective-psychomotor; content-process; psychological-epistemological; teaching-learning. In each case the set of alternatives must be weighed which will provide for the most advantageous means to attain the next level objectives. The discipline of social studies must make the journey as simple and efficient as possible.

The need for these sub-rationale objectives in the social studies curriculum is analogous to the needs of a hiker traveling cross country. On

more accessible and heavily traveled terrain his journey is easy.

A detailed map keeps the voyager abreast of his every move, allowing him to anticipate each obstacle. Since he knows the destination, the route to follow and the amount of time it will take, he needs only enough baggage to help him reach his destination. A curriculum designed to achieve this objective needs only a minimum of interconnections because of its direct applicability.

On the other hand, a hiker going into uncharted territory faces a very different problem. He doesn't know what to expect, though he has the same goal--survive the experience. He is unable to map out a precise route. He seeks a quick traverse of the territory, while dependent upon his own devices. While he can anticipate some potential obstacles, he knows neither whether nor when he may encounter each--indeed he is likely to find some difficulties for which he is unprepared, while avoiding others he had anticipated. He knows that he will need to revise his route as he goes since he cannot predict what any particular bend will bring. His problem is complex because his degree of predictability is much lower than if he were traveling within the known. In much the same way the curriculum must be designed to allow learners to deal with eventualities.

Social studies education is today in the position of that adventurer going into the unknown. It was formerly enough to draw upon previous experiences to provide some assurance for a successful exploration. The classroom must today provide students with alternative actions for probable/possible conditions encountered. It is self-defeating to examine

particular trails, except as they may give predictable insights into the world of the unmapped. New curriculum design demands the rejection of the practice of skills which are unnecessary for journeys within the known alone; simple maps solve that difficulty. Analogously, the most important skill the hiker might acquire is a technique for climbing very tall trees. Climbing to full height he could survey the terrain and assess a best route. That skill was unnecessary when journeying within the known. The problem very simply is that if the tree climbing skill objective is not considered for the curriculum it will not find its way in. It can get into the curriculum only as it is developed with the rationale goal firmly in mind.

Education is seeking to make these changes. Social studies education certainly must. Many specific changes are outlined in Figure 2. If these changes are not made in light of a humane survival rationale, social studies will not improve the quality of the educational experience.

Traditional Education
Leads to:

Rote Learning
Acceptance of Authority
Love of Tradition
Regimentation
Search for Security
Fatalism
Terminal Education

Modern Education Tends to
Give:

Problem Solving Ability
Belief in Experimentation and Empiricism
Love of Innovation
Creativity
Self-Confidence
Optimism
Ability to continue Learning Throughout Life

(continued on next page)

(continued)

Traditional Education Leads To:

Uniformity of Training
Imposed Discipline in Classrooms
Rejection of Handwork
Family or Group Morality and Responsibility
Avoidance of Decisions
Following of Routine or Accepted Ways of Doing Things

Modern Education Tends to Give:

Bringing Out Individual Abilities
Self-Discipline In Work
Coordination Between Hand and Brain
Public Morality and Responsibility
Management and Decision-Making Ability
Ingenuity and Inventiveness

Figure 2⁶

Social studies curriculum can begin now to outline general objectives in a manner which provides guidelines for attaining the rationale. Such a sketchy structure is diagrammed in Figure 3. In that paradigm each block represents a subordinate function or condition needed for the rationale achievement. Each sub-category is prerequisite to the accomplishment of its higher level instantiation. The lines of flow represent the most direct and apparent connections needed; they fail to connect all instantiations.

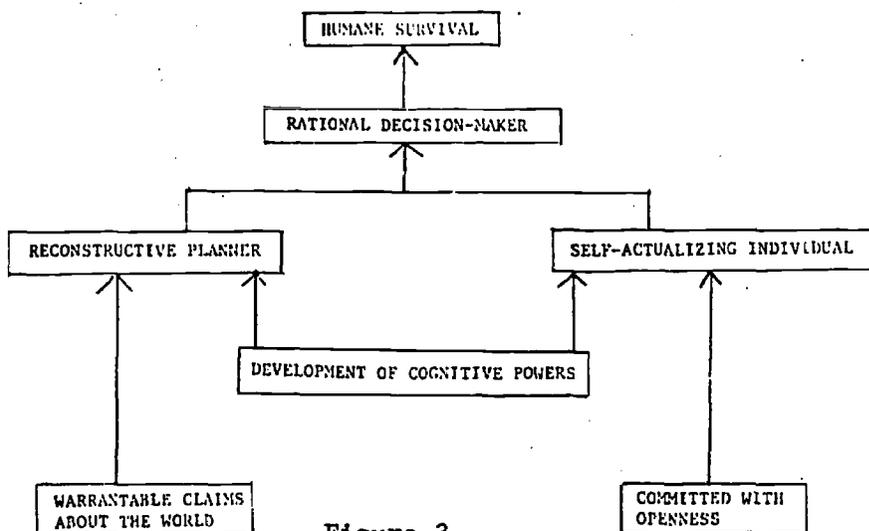


Figure 3

⁶Roger Revelle, paper presented to U.S. House of Representatives Committee on Science and Astronautics, January 26, 1966, published in New Directions for School Administration (Burlingame, California: California Association of Secondary School Administrators, 1969.) pp. 6-7.

The routes for the achievement of the human survival rationale, by way of the paradigm, fall roughly along three major paths. The track beginning at "committed with openness" focuses on human qualities necessary for survival. The track issuing from "warrantable claims about the world" focuses upon what we know as subject matter content. The cohesive element is the "development of cognitive powers." Each of the pathways is examined in a following section. Each of the routes described by this paradigm has serious limitations because in reality all three tracks are inseparably interconnected and highly interdependent. The function of the next three sections is to decipher and give precise meaning to each prerequisite for a humane survival curriculum.

VI. TO BE UNLIKE PARENTS

Education for survival in a civilized, enlightened, ever-changing world is the only warrantable rationale for curriculum. In view of that, it is no help to say "every minute in every classroom needs justification in terms of survival" if we are unable to make it meaningful for each and every learner. Unfortunately, until recently the student has been one of those elements forgotten by the education system. Educators seemed to forget that students are the learners who are the focus of the curriculum. The learner as an individual is of primary importance to the development of the humane survival curriculum.

Humane survival requires the school to produce what Abraham Maslow and others call self-actualizing individuals. Established schools have made little or no effort to approach this objective, though they have given lip service to "the whole child" concept. Survival social studies requires its accomplishment. Conceptually, self-actualizing individuals are persons who function more fully and live more enriched lives than the contemporary average person. As an individual the self-actualizer accepts himself, is creative and open, and functions by fundamental democratic character qualities. He has the capacity for a purposeful approach to life in its

multiplicity of dimensions. He has a guiding purpose and a dedication which give human life the human ingredient.

The self-actualizing individual may well be the salvation of the public schools. Too much evidence indicates that the school cannot survive as the follower of society. Its only alternative is to move to the front. Movement will not begin, however, until schools become committed to developing self-actualizing individuals. To reduce this task to its simplest command, schools must produce students unlike their parents. The achievement of this general objective will occur only as institutional education is prepared to concern itself with the direct development of each student's potential. It must cease its narrow preoccupation with extrinsic, cognitive dimensions and actively embrace self-actualizing goals as equally integral parts of the curriculum. Developing self-actualizers will mean that students will become public persons of internalized commitment. There will emerge a new breed of person who possesses five distinct characteristics.

First, self-actualizing persons function as lifelong, self-inquiring learners. This is essentially the characteristic John Gardner identified as the "self-renewing man."

We are beginning to understand how to educate for versatility and renewal, but we must deepen that understanding. If we indoctrinate the young person in an elaborate set of fixed beliefs, we are ensuring his early obsolescence. The alternative is to develop skills, attitudes, habits of mind, and the kinds of knowledge and understanding that will be the instruments of continuous change and growth on the part of the young person. Then we shall have fashioned a system that provides for its own continuous renewal.⁷

7. John W. Gardner, Self Renewal: The Individual and the Innovative Society, (New York: Harper and Row, Publishers, 1963), p. 21.

Survival education functions in order for knowledge and social change to become enraptured. The method by which we achieve this goal needs greater specificity. The basis for the achievement of the self-inquiring learner rests on the success of the school in providing skills which will allow them to achieve the ability to withstand and adapt to uncertainty and stress. By this means the self-inquirer develops the attitude that life is a continuous educational process, a process endless and fun-filled. The ability to withstand and adapt to uncertainty and stress is a direct prerequisite for the self-inquiring learner, but it also has indirect consequences. A by-product of this major consideration is the development on the part of the learner that he has some degree of control over his own destiny. Once he gains this orientation it is a logical step for him to establish himself as a causal agent in the affairs of man, and most appropriately through a role as citizen.

Second, schools must allow students freedom to develop individual cognitive powers. Students need an environment which will allow them to attain cognitive skills and maximum use of intellectual capacities. This means students will need to understand learning processes so that they may more fully develop appropriate concepts. They will need to understand the function of generalizations in the form of truth, hypotheses, and value claims. Development of cognitive powers further means the encouragement of open-ended thought processes, rather than traditional educational stress on conforming, manipulating convergent processes. Man's uniqueness is his ability to use his intellect to solve the problems he faces. He does this by determining and weighing available alternatives (i.e., evaluating what he finds out). Society, at least through its schools, must encourage the

development of the cognitive powers of all citizens.

Third, students must acquire the ability to function efficiently and fully in a world of accelerated change. Survival education requires a positive orientation toward change. For society this means that individuals live with and, indeed, even anticipate ambiguity. The orientation toward change suggests the capacity of the individual to live in a world that says that what is learned today will, in all probability, have to be unlearned tomorrow. One of the roadblocks which impedes survival is man's traditional supposition that education consists of unchangeable universals. Society has an apparent anathema to change. Mankind won't continue if it bases its continuance on myths which are now known to be false, despite the apparent applicability of old universals to solve past circumstances. It is therefore mandatory that man base his judgments on the most recent empirically based data. It is from this perspective that the curriculum can begin to provide learners with opportunities to gain psychological control over their destiny. This orientation should become the basis for establishing a positive self-image for each student, as he examines himself in light of empirical evidence. At this point he can discover his own legitimacy and allow himself to seek solutions which meet the requirements of new conditions. It is this intellectual versatility in a world of continuous change which will remain man's ultimate resource. Curriculum is needed which insures that man does not lose that vital characteristic. Students who look toward tomorrow and can accept and adapt to its uncertainties are a prerequisite for survival.

Fourth, the self-actualizing individual maximizes interpersonal relationships. He does this as he is able to base his actions on a firm commitment to openness. As a consequence man needs to establish empathy with his fellow human beings. In order to work toward this goal, society's educators must strike out against ethnocentrism and prejudice. It is a

minimal function of social studies curriculum to sensitize students so that they accept and then encourage human differences. Students should be encouraged to interact positively with persons who are different, both with peers and mankind writ large. By these means American schools can help the greater society approach the American Dream and thereby achieve some very real democratic ends.

Historically man is ethnocentric. He has always lived among his own kind and consequently evaluated other persons by the standards of his culture. Technological innovations of the past two decades provide mankind with the potential to de-ethnocentrize. Man's circumstance causes him to evaluate fellow humans on the basis of what he perceived as he matures. Modern technology, primarily through the media, can provide a vehicle which will allow all persons to grow in a world culture. That culture would be one based on a broadly human ethnocentrism--a world which maximizes interpersonal relationships. This potential provides for a vital empathetic attitude which will allow us to accept others--both strange and intimate--as well as ourselves.

Fifth, the self-actualizing individual functions productively because he fully understands himself. The understanding results because his positive self-image has remained intact--or indeed, if significant harm has been done to it, somewhere along the line, he has been able to rebuild it. The process allowing for this positive self-image evolves from his basic democratic and open personality. Pushing this development back yet another step we can say that this outlook results from his sense of empathy and his fundamental commitment to empirically based judgments. It means that the values he lives by are values which he has openly tested to be the most warrantable within his world structure--yet he is prepared to accept

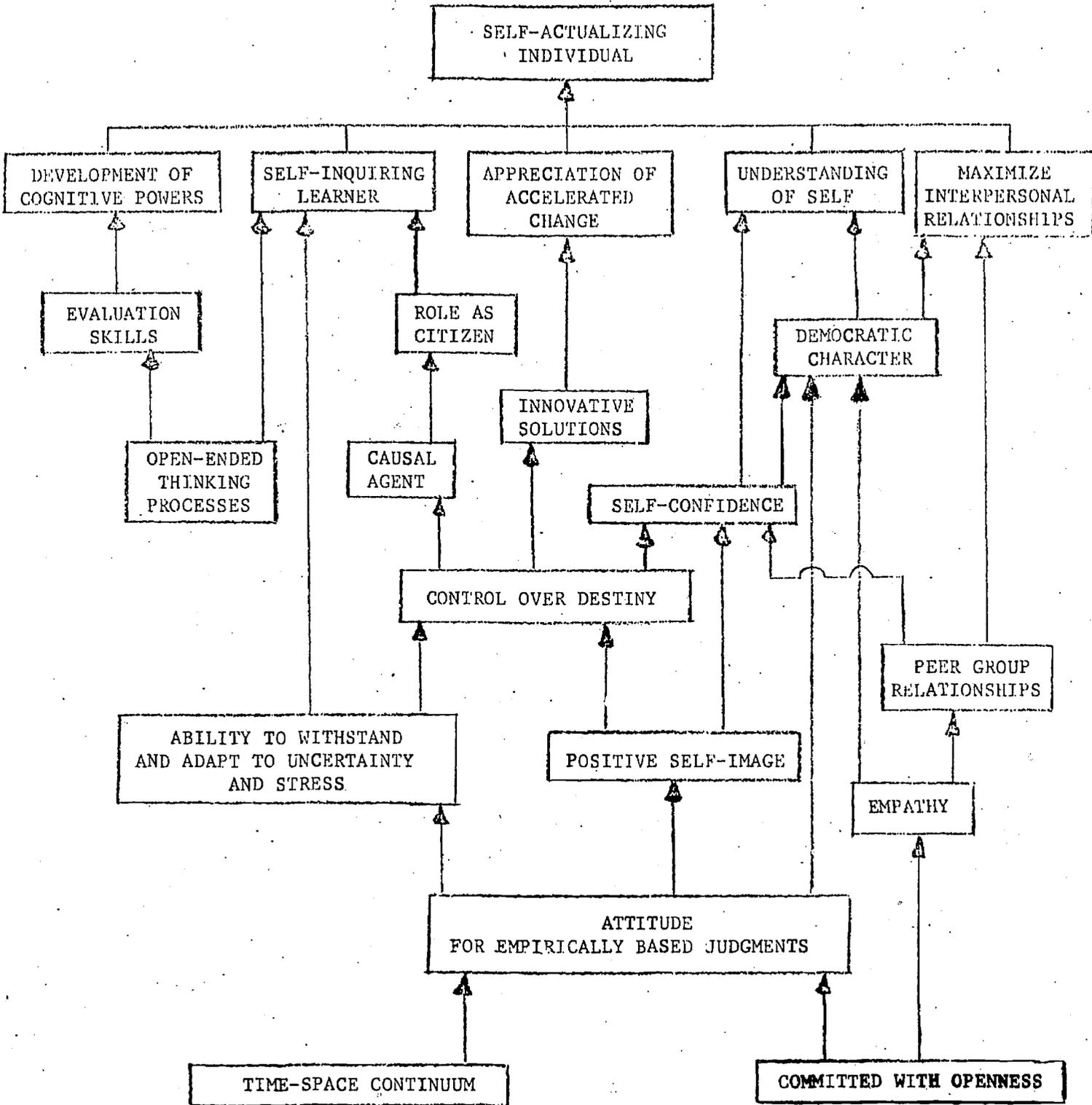
alternatives if they are found to be more warrantable. Children are helped to achieve this goal by being allowed--yes, encouraged--to deal with themselves, their cognitive structure and their feelings. The social studies curriculum can no longer shirk from the responsibility of cultivating these characteristics in all children. A social studies curriculum can be designed to provide for these and the other dimensions which have been so briefly outlined in this section.

The sum of all these characteristics will result in individuals who are totally unlike the present generation. That same present generation has the responsibility for the condition the present society is in. It is obvious that radical changes must be made to correct the glaring ills. Unless future education is directed toward allowing the school children of today to be different from those in the adult world, the youngsters have no chance to survive their three score and ten.

The creation of the self-actualizing learner is an extremely high level objective for any curriculum. Its accomplishment is mandatory. If we continue to shape all students from the same mold, our end is predictable. However if we build from the innate and differing shapes and strengths of all individuals, we shall surely design a better and more pleasurable world. Figure 4 describes the fundamental relationships which form the self-actualizing individual. The curriculum has to systematically direct positive efforts at these dimensions.

The shape of students who come out of the social studies classroom must be unlike that of their parents. That dissimilarity will result when students acquire the ability to use tools helping them effectively deal with the ambiguity of the changing world. These individuals, as a consequence,

FIGURE 4



will look to the future, not the past. They are confident, self-actualizing inquirers.

Having a curriculum based on survival is a conservative goal. Times, however, dictate that humane survival depends upon the emergence of students different from their parents, and that is revolutionary because no society has ever undertaken a job of that magnitude.

VII. SURVIVAL CONTENT

We have elected a survival curriculum by which the interdependent discipline of social studies functions to make self-actualizing learners more rational decision-makers about human behavior and social interactions. It is evident that much of what happens in the classroom today is not only irrelevant by this criteria, but is actually dysfunctional in the attempt to attain a rational survival education. As a consequence, content objectives are needed that are specifically directed for the ultimate achievement.

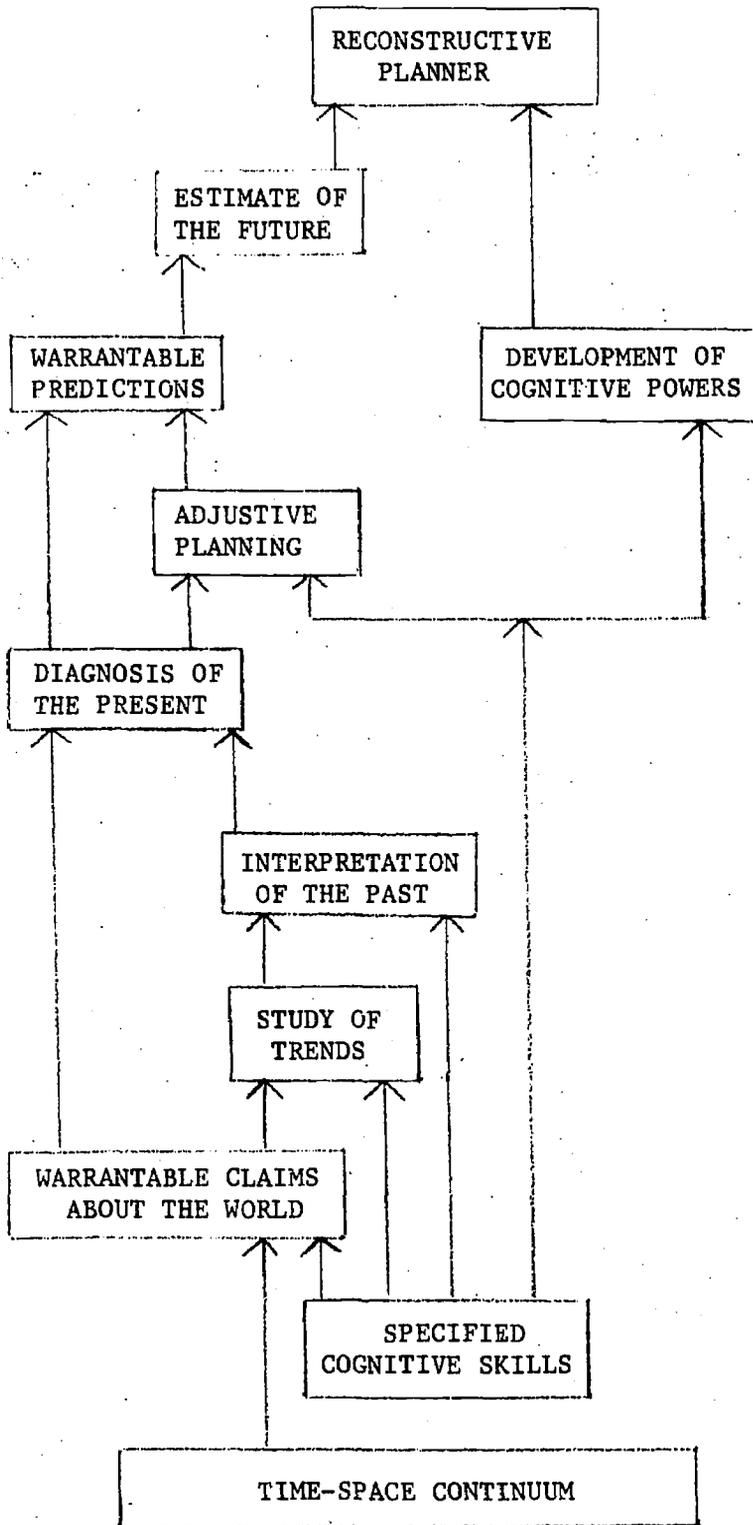
Traditionally social studies has stressed memorization of knowledge of the past and knowledge of the present as the reason for the existence of social studies. The survival curriculum demands that knowledge of the past and present be functional. Specifically it should provide the means by which society can implement reconstructive planning. Reconstructive planning is that planning which anticipates the problems of tomorrow and attempts to solve them before they become actualities. If past-present subject matter content falls short of that objective, it cannot be retained by the curriculum. The design of the curriculum, by stressing reconstructive planning, would then guarantee that the learners of today will

continue to seek solutions for the problems of tomorrow. Such a curriculum design anticipates the future and provides types of experiences which will make eventualities as understandable and rewarding to the students as possible. The functionality of content can therefore be evaluated by the degree to which it measurably allows for reconstructive planning. A method for approaching that goal is diagrammed in Figure 5.

Clearly this set of content objectives plays havoc with the traditional social studies program. As seen in Figure 5 subordinate instantiations are useful only as they help achieve specific future-oriented goals. The major implication of this prescription is that subject matter content which has been traditionally transmitted in the classroom will have to undergo drastic reorganization. That old content will have to assume either the new purpose or be replaced. This does not cause any subject matter to be eliminated a priori, but the criterion for inclusion is very clear. Is the subject matter content efficient and relevant for achieving the higher level objectives?

Social studies is founded in man's knowledge of what has happened over the time-space continuum. It is prerequisite that students get much of this knowledge in the curriculum; the question is, which parts on that continuum and what magnitude the examination? There are unnecessarily serious handicaps that prevent the curriculum from readjusting priorities and thereby adequately relaying needed knowledge: purely nationalistic and ideological perspectives act as blinders at the expense of survival demands. The advent of the knowledge explosion makes that narrow focus a criminal and/or insane act. Priorities need to be readjusted so that kids can learn, without narrowing their focus, those things they must know in order for mankind's survival.

FIGURE 5



The paradigm in Figure 5 outlines a series of filters which can help curriculum designers make decisions about subject matter content. The first subject matter content criterion filter, warrantable claims about the world, eliminates all but those dimensions of the continuum which are warrantable; that is, those things which evidence says have the greatest probability of being true. (It identifies the empirical world.) It is impossible for the curriculum to include everything over the time-space continuum; it is therefore imperative that social studies instruction deal only with knowledge which examination indicates to be warrantable (i.e. tentatively valid). Passing along known myths as having warrantability preordains survival difficulties. Social studies subject matter content must be limited to empirically derived warrantable claims.

The second filter for survival content in the public schools restricts pre-contemporary claims to those areas productive for the study of trends. Essentially this is a call for transmission of warrantable claims which clearly demonstrate trends in man's physical/social world. This requirement fosters a curriculum which is building toward reconstructive planning. As Figure 5 indicates, mankind's knowledge of the past, present and future has as its principle basis the ability to trace developments which have been cause for events over the time-space continuum. Man's ability to make warrantable plans of the future is seriously limited if he does not have information about evident trends. Knowledge of trends thereby provides him with one sound basis for making warrantable predictions.

The study of these trends serves two immediate purposes: (1) it allows for an understanding of the past and (2) it aids in comprehending the present. It is of particular importance that in neither his consideration of the past nor his consideration of the present can the exercise be allowed to culminate in a study of that period for its own sake. In any examination

of the past, coverage must be limited to content which has a high degree of utility for understanding subsequent events. In sum, knowledge of the past is warrantable in the social studies curriculum only to the degree that its interpretation directly increases the students' ability to diagnose the present.

Diagnosis of the present is derived from its two subordinate instantiations, i.e., interpretation of the past and direct observation of warrantable claims about the world. The former makes use of data which has been shown to have an impact upon the contemporary world. This is derived from man's ability to accurately study historical trends to understand why the present exists under the conditions it does.

There are some warrantable claims which are directly important for diagnosis of the present but are not filtered through trend analyses (study of trends) and interpretation of the past. Since the present is always unique, it may not be advantageous to constantly seek out cause and effect trend relationships. Many contemporary circumstances apparently have little identification with past events--at least the relationship seems quite tenuous. It may be more efficient to diagnose a situation on the basis of direct warrantability.

Using the cognitive skills associated with contemporary diagnosis and an examination of the non-antiquarian past, man can gain a diagnostic understanding of his contemporary state. Such an understanding operates within the limits providing directly for survival. Criteria is determined, by the extent to which the content employed provides for attaining knowledge which is useful in adjustive planning (i.e., correcting today the problems which developed yesterday). If the knowledge of the present which is transmitted is not directly concerned with adjustive planning, it is illegitimate

in the social studies curriculum.

Adjustive planning is the practical extent of most contemporary planning. It is the typical American method for resolving a difficulty. . . . after it needs solution. It is, however, a needed method of surgery if mankind is to survive. Its measure of success is directly dependent upon the degree to which the planners are able to diagnose the present--there is no other route by which adjustive planning may be implemented, unless there be an allowance for sheer luck.

The development of the survival curriculum requires dimensions seldom reached in current social studies practices. Moving beyond what is, survival social studies moves to the realm of what will be and what can be--the essence of future orientation. The curriculum has developed with a solid footing in the time-space continuum. Time-space information functions as data to be used in preparing for a better world. The key to the curriculum's -- and mankind's -- success lies in man's ability to make warrantable predictions--i.e., predictions about tomorrow which result from his best estimates of human behavior and social interactions as evidenced over the time-space continuum.

When he is able to make empirically warrantable predictions, man can make realistic estimates of the future. While these estimates will be much more accurate for the short-term than the long run, the procedure does allow man to first anticipate and then consciously and systematically make plans to avoid potential problems. Only by becoming reconstructive planners can mankind hope to avoid catastrophe in view of today's most warrantable predictions.

Developmentally all subject content considerations serve to result in each individual making warrantable predictions about himself, his society, and the world he lives in. This process makes it possible for him to develop

some reasonable expectations about the world of tomorrow.

The content structure, as diagrammed in Figure 5, presents some apparent philosophical difficulties. The curriculum is based upon recognition of an empirical world. Empiricism is founded upon what apparently is, not what ought to be. This concentration upon what is, what can, and what will be, however, forms the framework by which self-actualizing learners can begin to deal with what ought to be. By identifying what can be and then setting out to make sound policy decisions among the alternatives which appear available, the planner deals with ought. That is where rationality takes its rightful place--the interaction between the reconstructive planner and the self-actualizing individual.

The ideal social studies curriculum is limited to that content which permits the emergence of students able to put together a set of reconstructive plans which will intercept and solve potential problems. By this strategy every student of reconstructive planning can make tomorrow's world a better place for him and his offspring.

VIII. PUTTING IT ALL TOGETHER

The third pathway of the survival paradigm for social studies curriculum follows the contours dictated by man's cognitive structure.

Cognitive structure has received much attention in recent years-- indeed it is that attention which has resulted in the differences which exist between traditional social studies and new social studies. Cognitive psychologists have dissected man's intellectual structure, determined its modus operandi, and developed learning theories based upon its perceived functioning. Piaget, Guilford, Bloom, Gagne, and Skinner are among these scholars.

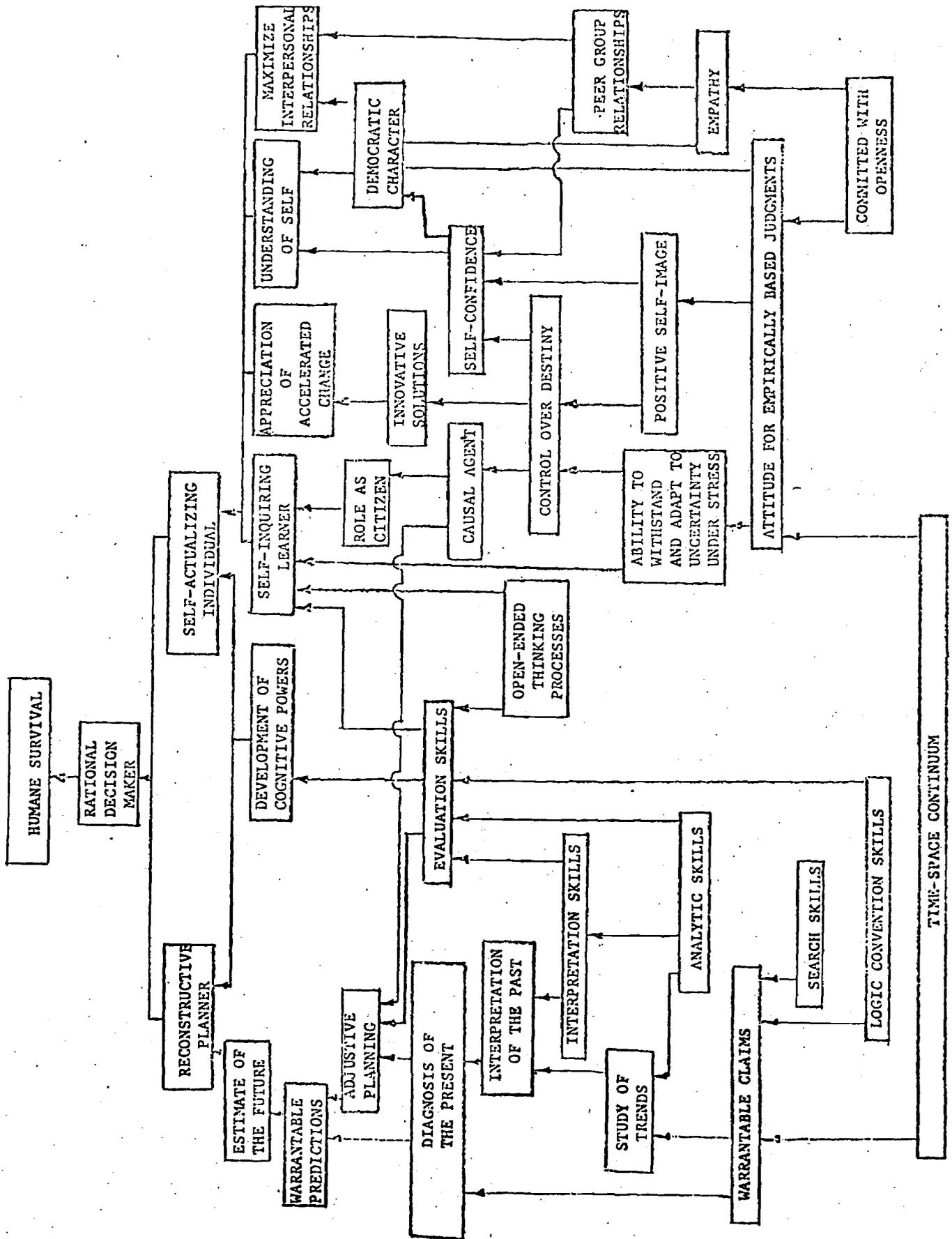
In the curriculum development paradigm for humane survival, cognitive structure is inseparable from either content or the development of self-actualizing individuals. It is the crucial criteria in the human experience. Cognitive process is a part of content; self-inquiring learners inquire by means of their cognitive processes. Essentially, cognitive structure cements content and the affective individual together. The development of cognitive powers permits the rationality of the decision-maker.

In the survival paradigm six categories of cognitive skills/processes fundamental to rational decision-making are specified. These processes include logic convention skills, search skills, analytic skills and interpretation skills which make up the processes usually associated with convergent thinking. The fifth cognitive instantiation is the open-ended thinking process, commonly identified as divergent thinking processes. The sixth and definitive process is evaluation.

The structure of the entire humane survival paradigm (Figure 6) identifies the relationship between each process skill and its most direct effect upon the content and self-actualization components of the model.

Logic convention skills are those processes which are followed by logicians to ascertain truth. As diagrammed in the paradigm these skills function primarily to establish the warrantability of claims. Logic convention skills are also a major component in the skills associated with evaluation. The paradigm is so constructed that once a factor is programmed into the model, it remains effective through the sequential instantiations. Therefore logic convention processes continue to function at subsequent content instantiations on the paradigm, even though specific connectors are not identified.

Search skills are those processes which are concerned with all information. Learners need to know how to search for information, but they also need to know how to set up a strategy to find the answer to a question which concerns them. Particularly as the knowledge explosion takes on grosser dimensions, the ability to collect information is of greater survival potential than the ability to remember specific pieces of knowledge. It is



the learner's capability to search out the empirical world and establish warrantable aspects which is paramount. He must know what to look for so he can decide whether the data he has collected is relevant to the inquiry he has undertaken.

Analytic skills function principally in the social studies curriculum when learners are confronted with claims and must determine the warrantable trends which these claims indicate. Analytic processes revolve around the ability to detect the organization and structure of the material under observation. Bloom points out that analysis functions "to distinguish fact from hypothesis in a communication, to identify conclusions and supporting statements, to distinguish relevant from extraneous material..."⁸ As discussed in the 1968 proposed California Social Sciences Education Framework these analytic skills are concerned with "isolating selected phenomena for study, making specific observations of the phenomena, classifying the phenomena by precise definition, and examining the relationships among [them]."⁹ It is this latter function which makes analytic skills an integral part for both interpretation and evaluation skills.

Interpretation skills offer the individual the ability to integrate a variety of phenomena so that there emerges a newly relevant meaning for the material observed. Essentially this is what Bloom identifies as synthesis in this cognitive taxonomy. It is the process by which elements and parts are put together to form a new whole. It is through this process that the time-space continuum begins to make sense. Interpretation skills are directly functional in interpreting the past and diagnosing the present. The achieving of interpretation skills is prerequisite to evaluation skills.

⁸ Benjamin S. Bloom, et al. (eds.) Taxonomy of Educational Objectives: Cognitive Domain. (New York: David McKay Company, Inc., 1956) p. 144.

⁹ John U. Michaelis, et al. Social Sciences Education Framework for California Public Schools (Proposed) (Sacramento: n.p., 1968) p. 10.

Open-ended thinking processes cover a wide continuum of possible intellectual activities. Basically they are identified as processes which have less structure than those described above. The processes usually result in totally new ways of analyzing or organizing claims and often result in no single right answer. Of many alternative answers, each may be good. Open-ended processes are the result of release from conventionally structured approaches to problem resolution.

Evaluation skills are those which allow man to make judgments about the value of observed phenomena in relation to his purposes. It is the determination of whether the phenomenon is good or not within a contextual setting. It is through evaluation that man determines what can, will and ought to be. The skill is requisite if man is to close the gap between knowledge and practice. It is only as man is able to intellectually evaluate his observations that he can become a self-inquiring learner-- the alternative is that he has no reason to inquire, since he could do nothing about what he finds. Evaluation is the application of criteria to allow him to make judgments about the products of convergent and open-ended processes.

By the humane survival paradigm those higher level objectives mandatory for the accomplishment of the survival rationale have been identified. To fall short on any of those instantiations is to seriously impair survival possibilities. If schools and man are to survive, the curriculum must be such that these factors and functions are consciously implemented. It is only by the careful examination of each instantiation that curriculum developers can begin to articulate specific classroom objectives to effect the reality for humane survival.

Before leaving the higher level objectives of a social studies

curriculum, some generalizations can summarize its development.

1. Traditional social studies has concentrated on past and present knowledge as an end in itself. (This includes only three or four of the instantiations in Figure 6.)

2. New social studies makes conscious use of the individual's intellectual processes as he looks at past and present knowledge. This stance has allowed learners to reach the level of adjustive planning. (This includes roughly the extreme left side of the paradigm, approximately one-third of the instantiations.)

3. Humane survival social studies concerns itself with the human aspects of decision-making. It is a necessary addition to the relatively sterile and mechanistic, though vitally important, cognitive process and subject matter aspects of curriculum design advocated in new social studies programs.

The implementation of specific and practical resolutions to higher level objectives must be detailed. Subsequent sections discuss some actual day to day implications and procedures which may prescribe practices which allow the paradigm to leave the printed page and move to the classroom.

IX. TEACHING IT: AT THE NITTY-GRITTY

If the preceding sections interpret the soul of the newest in social studies education, the next several sections bring physical reality to a metaphysical structure.

A primary question is "How does one go about implementing a humane survival curriculum?" The broadest answer really offers little direct remedy: social studies practices must change drastically in the ways prescribed in the first sections of this paper. The question is then begged: "How can one systematically institute these required changes?" The answer, again outwardly insufficient: a comprehensive plan must be carried out.

Therefore a plan must be devised. The chosen plan moves toward implementation by examining three interrelated components: humane survival teaching, humane survival learning, and humane survival curriculum. This section examines methods and implications of teaching for humane survival. What methods are most effective to meet the challenges identified? What are specific types of classroom environments which need to be developed? What types of reeducation need teachers undergo to feel confident in the new structure?

The next section examines the learner. What is he capable of learning? How can knowledge of teaching strategies be dove-tailed with

appropriate learning activities? What learning experiences are psychologically and epistemologically sound?

The third discussion is a prototype K-12 humane survival social studies curriculum. What are its parameters? In its step-by-step progression how does the sequence allow for the right content, with the right subject matter, outlines with achievable objectives, all of which are psychologically and epistemologically sound? What are the built-in provisions for individual flexibility?

To begin, teaching needs scrutiny. Traditionally teaching has been defined as those acts undertaken by certificated individuals before groups of students. The temptation is to continue with that definition. That type of shortsightedness must be avoided, however, at all costs. Teaching must, as you must by now expect, be defined in its functional aspects. In that light teaching is defined as that process by which one brings about intended changes in the behavior of another. Quite simply stated, change in behavior results when an individual can do something he could not previously perform--in this case something he could not perform prior to the teaching act.

Consequently a teacher may teach students to list all wars fought by the United States since 1789, state the pledge of allegiance to the flag, use an analytic mode to understand the role of minority group pressure in Kenyan national elections, or color within the lines in the coloring book. Teaching is not involved when the student "learns" to fall asleep every day during social studies or when Bill hits Johnny every time the teacher says "recess"--providing, of course, these behaviors were not programmed

as outcomes by the teacher.

The job of the teacher, then, is outwardly simple. Take students from their entry performances to clearly planned, specifically-stated terminal outcomes. The journey from where a student is to where he needs or wants to get is largely the responsibility of the teacher. If the journey is beset by either digressions or great leaps which confuse the student, teaching does not transpire, regardless of the efforts undertaken. To fall short of the intended outcome is to fail to teach. That simple and direct criterion makes the teaching act clear-cut.

It is prerequisite then that before teaching can begin the entry competencies of students must be identified (e.g., concepts, generalizations, modes of inquiry, skills, attitudes). Once these are identified the appropriate points for beginning instruction can be assessed. Concurrently terminal outcomes specified in behavioral terms must be prescribed so that all will know when each outcome has been attained. As student entry points and lesson outcomes are determined it is possible to establish a step-by-step programmed procedure so that the learner reaches the desired termination through appropriate means.

The humane survival paradigm (Figure 6) is directed at identifying the steps to a prescribed termination. That paradigm identifies various components prerequisite for attaining the terminal goal (i.e., humane survival). The humane survival paradigm does not differ substantially from that undertaken by a teacher for a curriculum development (whether one day, one semester or K-12). The construction process identifying the necessary ingredients to reach the desired outcome is essentially the same that would be used for organizing a unit in fourth grade social studies.

How do individuals develop lessons systematically to get at these prescribed objectives? A procedural plan was outlined in Figure 1, the Curriculum Design Justification Model. It identified how to move from educational goals to objectives of a very specific nature. By following the design, goals and objectives culminate in overt learning activities, materials and teaching strategies. The model demonstrates a means-ends-means-ends process. By employing this type of development continuity for that which is undertaken in the curriculum, lessons may stop resembling isolated sets of unrelated experiences and build on one another in a cumulative fashion.

Instruction needs to be derived directly from the embracing rationale. The result will be to have each class period clearly interrelated with every other--the interconnections becoming explicit, sequential and logically supportable. This goal is attainable as lesson objectives (be they for a ten minute or five week lesson) are clearly and behaviorally stated. By forming lessons through this procedure there emerges an added benefit. The teacher (and/or learner) will be able to establish a checklist which clearly indicates the increasing competency toward each objective. Specific tasks can, as a consequence, be identified which best help every student achieve each prescribed objective.

A Hypothetical Lesson

Following the design of Figure 1 let's examine a hypothetical social studies lesson. (Some may see it more clearly as a unit because its accomplishment would likely take several classroom hours.) The basic objective of this particular lesson (non-behaviorally stated) is to instruct

students to have perspectives necessary for subsequently designing reconstructive plans for the peaceful resolution of international crises. Following the design model, we can trace the non-behaviorally stated objective from its relation with the rationale to the guidelines for systematic classroom operation.

Our rationale declared that social studies must provide means by which students can help initiate a humane survival in a world which is worth surviving in.

One general objective, derived from the humane survival paradigm, could be to allow students to suggest reconstructive plans resulting in alternative methods for the international resolution of conflict.

One specific objective (i.e., terminal objective for this period of instruction) might read: "The student will evaluate, either in a 500 word essay or five minute presentation to the class, the roles taken by three or more heads of state at the time of one of the following international crises: Cuban Missile Crisis, the attack upon Pearl Harbor, exploration of western North America, the Great Depression, World War I, or another of mutual teacher/student agreement. The substantive criteria for the evaluation must be on that established by the class."

So far, so good! The process now requires the teacher to determine how to help students achieve the specific objective. That entails two steps. The first is to break the specific objective into component parts, showing the cognitive, affective and/or psychomotor relationships which are prerequisite to its accomplishment. It is a task analysis. A simple way to describe this relationship among various tasks is to develop a paradigm. The lower categories become those which are required before the learner can accomplish the higher level categories. Each lower component is in reality a sub-objective. They must, therefore, be stated in behavioral terms.

To approach the specific objective described above, examine the humane

survival paradigm (Figure 6). The focus of the specific objective is on "Interpretation of the Past." The nature of the terminal objective places necessary attention on "Warrantable Claims," "Analytic Skills," "Interpretation Skills," and "Self-Inquiring Learner." And because the lesson is ultimately designed to get the student to "Reconstructive Planner," the "Evaluation Skills" component plays a major role in the objective, since the students will be evaluating the roles played by national leaders in the past. Entry competencies of the students must then be determined so that the detailed areas of teaching necessary to achieve the specific objective can be identified.

Presume for this example that students have had sufficient success with the components requisite for "Interpretation of the Past" and "Evaluation Skills." This enables the teaching/learning effort to be placed upon that demand of the paradigm. (If the teacher finds a disproportionate amount of teaching must be undertaken on the lower components, then the terminal objective is unrealistic. The terminal objective would best be reconstituted to examine the identified area of difficulty, since prescribed terminal objectives cannot be accomplished without satisfaction of prerequisite objectives.)

One analysis of the content of the specific objective shows that the subject matter for the lesson centers on the dual concerns of national leadership and international crises. The concepts basic to satisfaction in this area of study might include "decision-making," "role," "nation-state," "leadership," and "crisis." Consequently a paradigm for this lesson can begin to take shape. Its focus is upon the terminal objective and relates a number of preconditional knowledges which are necessary before the student

can achieve the objective.

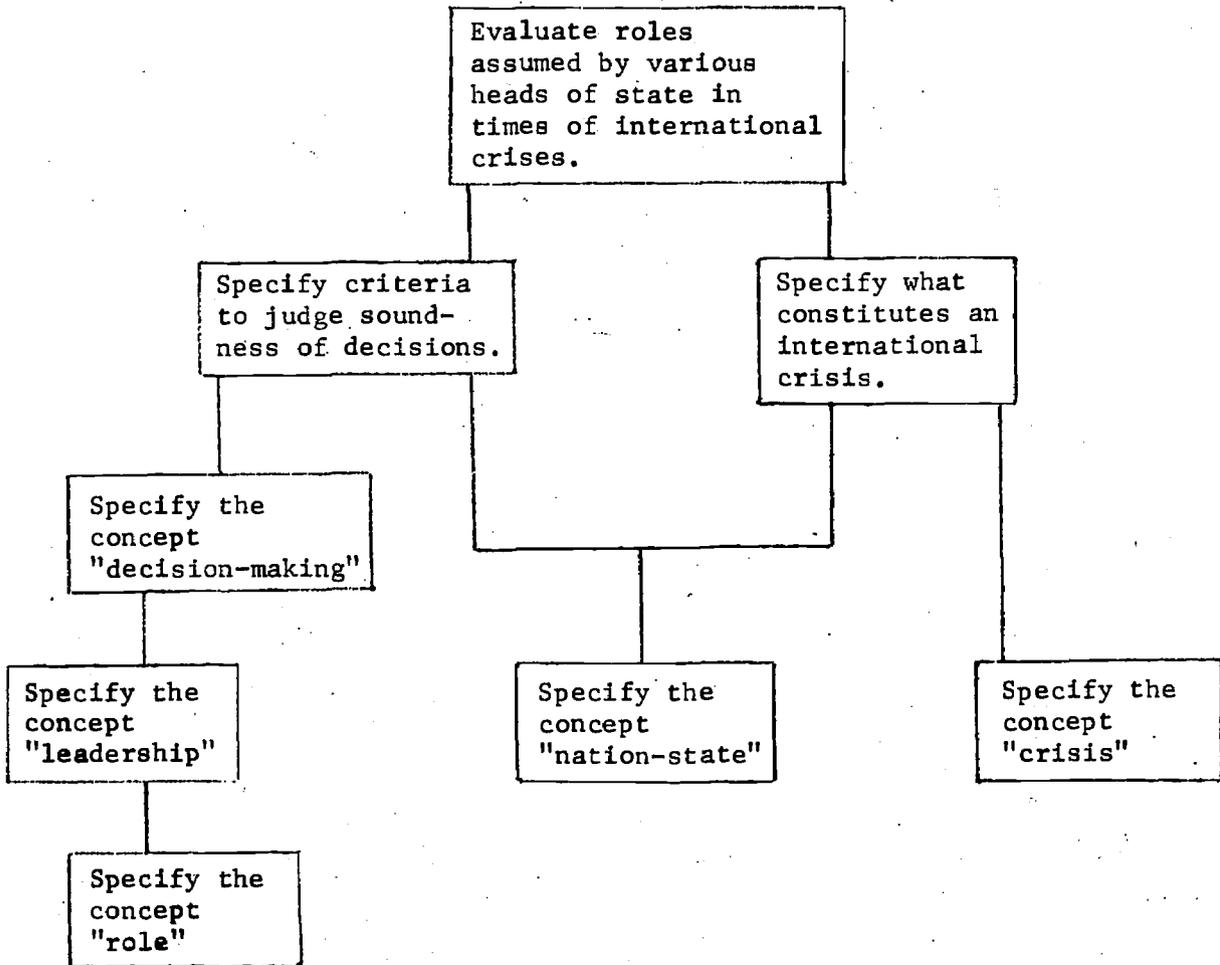


FIGURE 7

Each component is truly a building block for those above it. Each can break down to establish sub-components. As an example, the box associated with "leadership" could be broken down and diagrammed. And as the specificity increases, clearer tasks are spelled out--including alternative content selections.

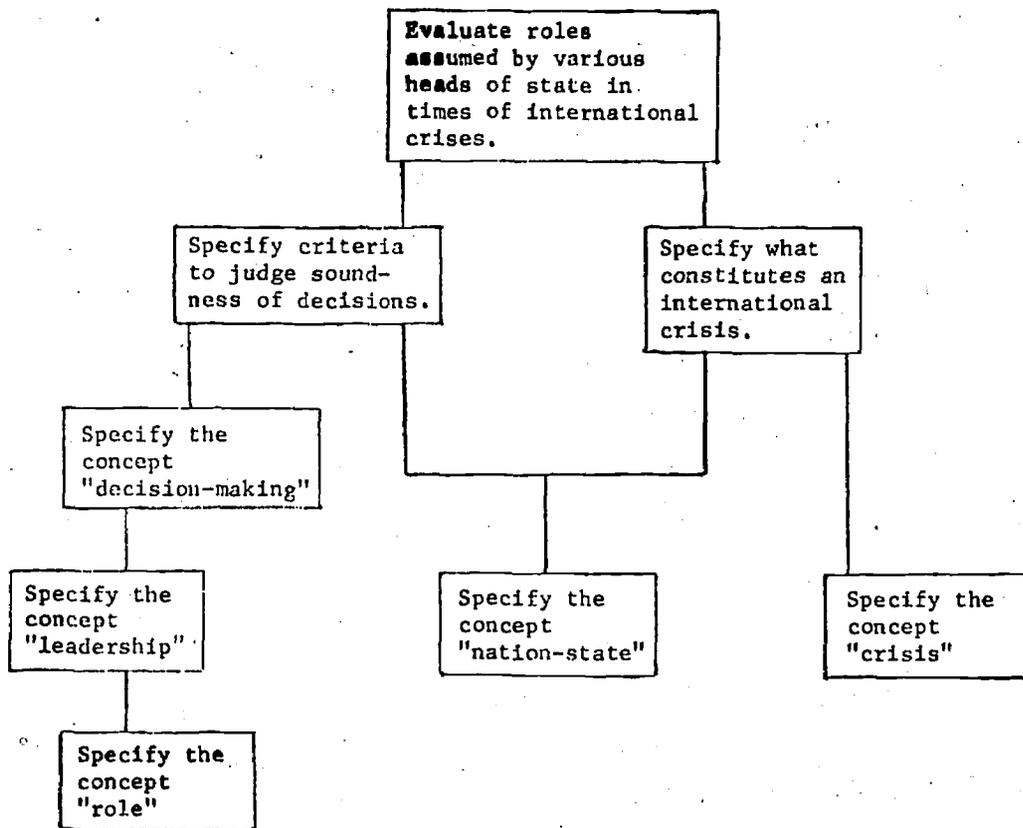


FIGURE 8

Obviously each of these can be still further broken down, e.g., basic skills which are prerequisite to doing each of the components: observing, communicating, hypothesizing, etc. Teachers must be prepared to break each down to the entry points of the students. The teacher can't stop until the point has been reached which puts the projected learning experience in equilibrium with the competencies of the students. When teachers begin instruction above this balance point all teaching efforts are wasted since intended changes in behavior cannot come about. On the other hand, it is nonsense to go through all the efforts in Figure 8 if the students already

have the concept attained. How do we determine whether the students already have the concept? The criteria is established in Figure 8 (e.g., "Apply analytic investigation . . ."): give a pre-test.

One of the major reasons for the development of behaviorally stated outcomes is so the learning process and product ceases being a mystery. The criteria for success is openly stated beforehand.

The student's primary responsibility begins when the teacher is prepared to begin instructional preparation.¹⁰ From this moment the learning experience becomes a necessary joint effort in which the teacher diagnoses student competency and prescribes further experiences; the student demonstrates his full capabilities.

Through task analyses, the specific guidelines provide a maximum of efficiency--the terminal objective is so specific that the road to reach it is clearly defined. These guidelines also provide a maximum of flexibility--they provide for constant learner diagnosis allowing teachers to cut instruction corners where appropriate and build stronger foundations where necessary. Task analyses permit individualized instruction when learners are identified at particular individual stages on the paradigm, clearly dictating appropriate experiences. Task analyses allow for large group instruction when it is determined that learners are at a common point. The ultimate potential of the paradigm is reached as constant feedback is obtained from learners, showing where they are in relation to the intended

¹⁰This is not to suggest that the teacher in any way precludes the participation of the students in the preceding stages. It may well be that the students can give perspective and form to the terminal objectives by pointing where they want to go to achieve the ultimate rationale. The responsibility for articulating the sequence--from rationale through task analysis--rests, however, with the teacher.

behavior change (terminal objective).

When task analyses and student diagnoses are completed, the teacher can begin to make plans for specific lessons. To have done so prior to diagnosis is dysfunctional. The job is to determine, from among the variety of potential learning experiences, those which may be the most appropriate. The teacher must look at the methods, materials and deployment options available.

Teaching methods encompass inquiry, simulation, guest speakers, role-playing, didactic, inductive, open discovery, programmed instruction, community visitations, and model construction as some alternatives. In view of the tasks to be completed and the competencies of the learners, the teacher can begin to make some crucial decisions on which methods are most appropriate.

Materials include data brought to the learning situation by the teacher, by the student, by the textbook, by the supplementary books, by the transactions in the classroom--either staged or spontaneous, by the media, by simulations, and by a variety of other resources--both hardware and software. Teachers need not be concerned because they haven't the money to buy the precise book which will bring about the intended change, because there are many, many readily available resources which have never been tapped.

The varieties of deployment are likewise numerous. Individual carrels, team teaching, seminars, independent study, media dictated arrangements of various sorts, field trips, large group instruction and flexible scheduling are but some of the possibilities when teachers examine

time-space distribution.

The number of alternatives available to the teacher seems endless. It is a far cry from the thirty-two foot by thirty-two foot classroom with its six rows of six chairs, all students reading from the text, answering the even numbered questions at the end of the chapter then continuing to the next chapter--whether in receipt of good, bad or indifferent marks.

Essentially the construction of a lesson plan for a specific period of teaching resembles the model expressed in Figure 9.

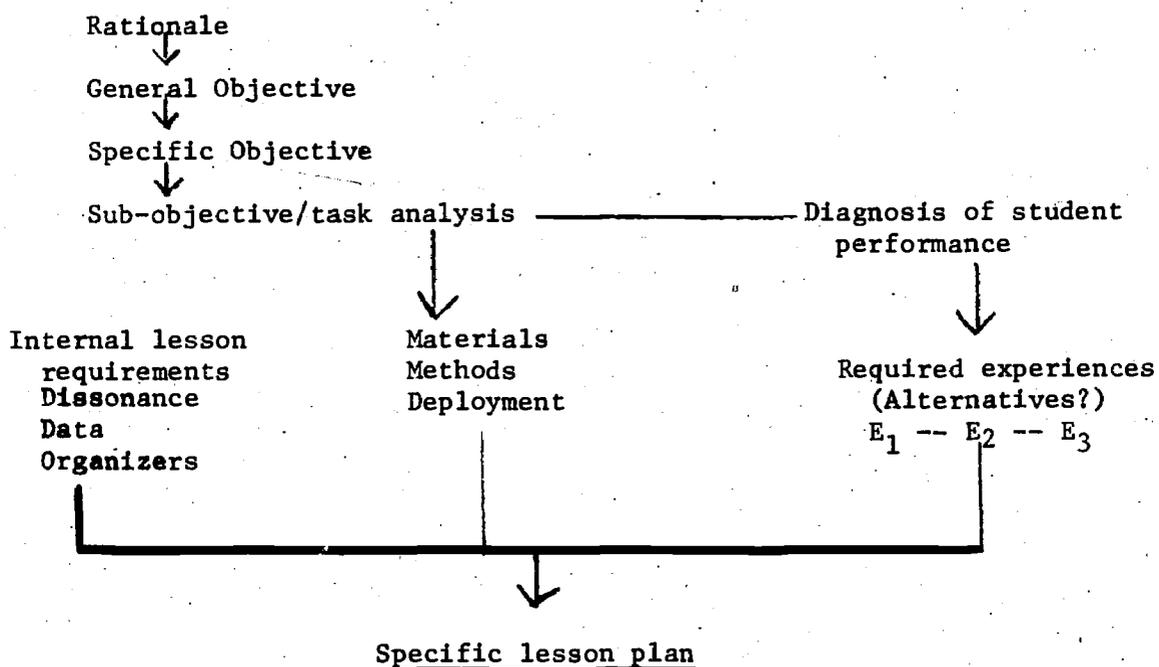


FIGURE 9

The teacher setting out to plan lessons on "leadership" is faced with implementing the task analysis. After diagnosing student performance the teacher must make some judgments about the number of contacts the students should have with the concept as described in Figure 8. Since concepts are most efficiently induced (either through direct experience or

by a programmed instructional sequence of some kind), limitations are placed on the types of methods employed. If it appears that some students will learn the concept with a few experiences while others may need several, it is probably most appropriate to use teacher-manipulating, inductive lessons with all students. Appropriate programmed text lessons can be assigned as homework for those who need additional experiences. It would probably be inefficient to do the opposite, i.e., give everyone the programmed text and then call aside for group instruction those who need additional experiences.

In group experiences students could deal with their perceptions on the characteristics which make for good and bad classes. To engage in that type of discussion would allow them to explicate their understanding of the qualities of leadership. Alternatively, the students might experience the inductive lessons developed by "A High School Social Studies Curriculum for Able Students on the Stoerpenberg Camp" or the Sociological Resources for the Social Studies episode on "Leadership in American Society," or the Taba Curriculum as it deals with societal control and power. The list is endless: case studies of contemporary leadership processes and problems, the Bible, the Constitution, Das Kapital, as they provide leadership; the role of the principal at the school or the student body constitution of the school. Each example permits students to analyze the concept "leadership," providing the students simultaneously learn, or have previously learned, intellectual tools to achieve the concept. The resolution of the concept allows the learners to make the learning experience a cohesive, viable instantiation in the paradigm.

Dissonance - Data - Organizers

Every lesson undertaken demands the inclusion of three critical components: dissonance, data, organizers. To fall short on any component in any lesson erects instructional roadblocks which may prevent teaching (because intended changes do not result). This in turn will hamper the achievement of the rationale position. If more than one dimension is missing, teaching has little chance of occurring.

Dissonance is the concept scrutinized by Leon Festinger¹¹ and a host of followers. The function of the concept in the teaching act is best described by the first of Festinger's basic hypotheses, namely: "The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance [psychological stability]."¹² In essence cognitive dissonance is the device by which the student is confronted with an experience which he cannot readily explain. The student must become engaged in order to seek resolution, e.g., motivated to find an answer letting him put his cognitive structure back in order. The caution for the teacher is to avoid the second of Festinger's basic hypotheses: "When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information which will likely increase the dissonance."¹³ Again, it is necessary for the teacher to know the students so that predictions about appropriate dissonance (its level and variety) can be made.

In the hypothetical lesson the students could be engaged in examining the concept "leadership" simply by having the students explain why some

¹¹Leon Festinger, A Theory of Cognitive Dissonance. (Stanford, Cal: Stanford University Press, 1957).

¹²Festinger, p. 3.

¹³Festinger, p. 3.

campus organizations accomplish much and some accomplish little (when situational circumstances make that generalization valid). Or they might attempt to explain why one bill before the legislature is expected to pass and another to be defeated. Or why one team in a league is a consistent contender and another is a consistent also-ran. To be sure, the engagement will raise student responses dealing with other than the desired concept. But the confrontation forces students to consciously attempt an explanation of the circumstance. As they fall short in explanation, further pursuit of the concept is opened up. In this vein, Shirley Engle has observed that

a particular student, on a particular day, carries in his mind's eye, quite innocently, a complete picture of society, which, however inaccurate and limited, nonetheless, in terms of his theory, can be used to explain any situation which he may meet. This is the structure upon which the extension of learning is possible.¹⁴

It may result that students have a ready explanation for the teacher presumed dissonant event. When that happens the teacher must provide additional input if the student explanation is in error so they may see the dissonance, or the teacher must realize that the pretest was invalid because the students have recognition of the concept and are able to apply it.

In summary, cognitive dissonance is the device used by the teacher "to trap the kids into wanting to study the material," as an elementary student recently expressed it. Learning in itself is a confrontation with the unknown, and dissonance provides the spark for individual pursuit. If teachers never get the kids turned-on, which occurs far too often in social

¹⁴Shirley Engle, "A Redefinition of the Social Studies." Paper presented at Marin Conference, October, 18-19, 1969, p. 4

studies classes, then the chances for learning are seriously diminished. Many curriculum developers are realizing this deficiency. Several are making conscious attempts to remedy the failing. Most notable efforts are through Suchman's "discrepant event," Taba's "openers" and Brandwein's "confrontation."

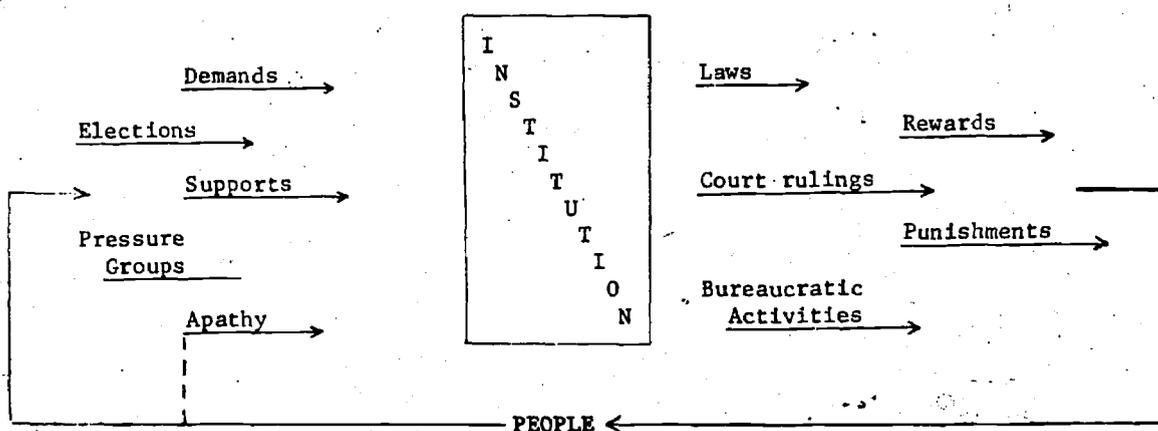
A second requirement for every lesson is to provide learners with sufficient data. Sufficiency is achieved when learners can have free reign within their cognitive make-up in pursuit of the variety of alternatives presented by the problem. Each must be allowed to establish the most warrantable conclusions. It is not enough to have the students stop as soon as they get the "right answer," for they must work with enough additional data to verify the warrantability of the claim. Data encompasses a multitude of resources. Many of these were included in the discussion of Figure 8. The job of the teacher is to make available to students that data which will best help them solve dissonant problems.

The third characteristic needed in a teachable lesson is an organizer, or set of organizers. Organizers can take many forms, though all have the requirement that they help the student put his intellectual house in legitimate working order. By the use of an organizer the individual is able to operate on data so that perceptions are coherent, retrievable, and integrative with previous and subsequent observations.

The basic cognitive organizer is the concept. More sophisticated systems for organizing the cognitive domain recognize this. These other systems attempt to devise ways to help learners most efficaciously process concepts. Thus Bruner and others call for a structure for the disciplines;

the proposed California Social Sciences Framework identifies three intellectual modes which the individual can use to process concepts, others call for the use of the scientific method, there are those who advocate strictly epistemological models, Bloom's taxonomy of cognitive levels is another appropriate organizing set. The most warrantable of these organizers is still open to some speculation, though there is no longer any question as to whether or not teaching strategies can be devised to require the learner to process his observations in a more legitimate way.

In the hypothetical lesson the type of organizer which the teacher chose to employ would have some influence on teaching strategies and learning activities. If the California framework were used, the examination of the concepts would take place in the analytic mode with the final critique employing an integrative setting to make policy decisions.¹⁵ If Bloom's taxonomy were the model organizer, then the bulk of the effort would center on analysis and synthesis, culminating in evaluation.¹⁶ If a discipline structure were followed the organizing model might resemble this from political science:



¹⁵John U. Michaelis (Chairman), Proposed California State Social Science Framework (Sacramento, California: State Printing Office, 1968.)

¹⁶Benjamin Bloom (Editor), Taxonomy of Educational Objectives: Cognitive Domain (New York: David McKay, Inc., 1966.)

All, and others, are apparently legitimate (though each has drawbacks). From both the teaching and learning perspective the terminal objectives, and therefore all other more general objectives which lead to the humane survival rationale, will be facilitated as successive teachers use similarly derived organizers throughout the K-12 years.

In Figure 9 the alternatives for designing a specific lesson have been examined. It is recognition of the complexity this entails which makes teaching so difficult. The profession has gotten fat and sassy over the years because it has been able to fly by the seat of its pants: individual teachers have kept one page ahead of the students. That is no longer tolerable; the stakes, in learners' lives, are now much too high.

The teacher must choose from among alternative learning experiences potentially available. The one which will get the most mileage must be picked each and every time. Will the selection of one alternative raise so much dissonance, that students will cut class? Will the selection of one appear to be "what we studied last year" that too much time is spent trying to convince the students otherwise? Will the selection of one alternative so rattle the school administration that its reaction results in the desired concept experience? Will the selection of one alternative require that the students spend forty minutes reading a selection which is four grade levels above their tested reading ability? The teacher has to be able to make warrantable predictions about what will work best with the students in the class.

By putting together dissonance, data, organizers, materials, methods, deployments and alternative experiences, derived from student diagnoses interfaced with terminal objectives, the teacher can develop the most powerful lesson plans imaginable. Together, lessons of this nature will help to establish a humane survival social studies program.

The Teacher's Repertoire

The strategies employed in the classroom have implications for the type of environment established in the classroom. To believe the literature one gets the idea that all teachers of social studies are flocking to the inductive and/or inquiry teaching strategies. Yet, as Bruce Joyce points out, "One is rudely reminded that the teaching styles of most teachers do not adapt well to inductive teaching procedures," and he cites several studies which have pointed this out, then concludes, "A curriculum reform, then, which depends entirely on inductive teaching will almost surely fail."¹⁷

Distinctions need to be raised amongst various teaching strategies. The range extends from catechisms on one extreme to open discovery on the other.

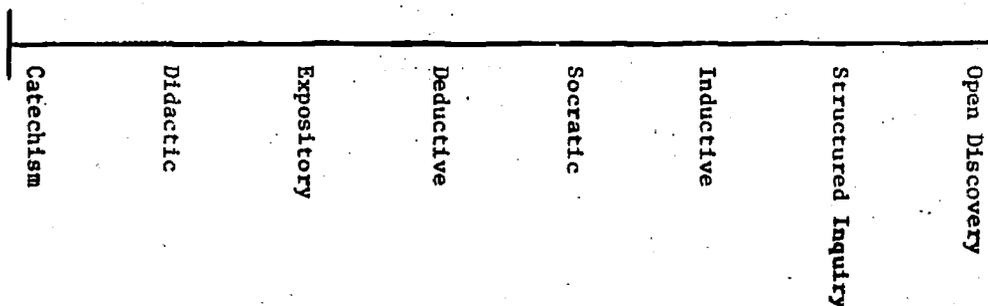


FIGURE 10

From left to right the strategies engage increasing autonomy for the learner. The amount of teacher dominance in the teaching/learning interaction decreases as the student becomes increasingly responsible for the behavior changes. Provisionally, by suggesting what the teacher might

¹⁷Bruce R. Joyce, "Curriculum Reform Strategies in the World Affairs Domain," in James M. Becker, An Examination of Objectives, Needs and Priorities in International Education in U.S. Secondary and Elementary Schools (New York: Foreign Policy Association, 1969). p. 336

say, each of the teaching strategies can be described.

- Catechism: "Repeat after me. . . Now you have the truth."
- Didactic: "It has been written, and most scholars agree that this is the truth, so live by it."
- Expository: "This is what the evidence seems to say is the truth. You will do well to remember it."
- Deductive: "After studying the situation, this truth is the most warrantable. Here is the evidence which makes it warrantable." (Or, "Find the evidence to support it.")
- Socratic: "How do you know that that evidence proves it true?"
- Inductive: "Now that you have looked at all the evidence, what is true?"
- Structured Inquiry: "What more do you want (or need) to find out about the truth you have found warrantable?"
- Open Discovery: "You are free to pursue the truth, regardless of where it may take you."

Teaching strategies overlap, yet in eight steps the route to opposed positions has been traversed--total teacher direction to total learner direction. It is not the function of this document to suggest that the teaching strategy is found somewhere between the extremes.

Each strategy is appropriate under particular circumstances. (For example, it may be necessary to employ a catechism teaching strategy for students on what constitutes and what the penalties are for statutory rape, while it is equally valid to allow students to pursue social conflicts which are of personal concern to them after they have the intellectual tools to conduct a legitimate independent inquiry.) The teacher needs knowledge of each teaching strategy so that each may be incorporated when appropriate. The ability to use any or all enhances a teacher's ability to teach.

Researchers continue to find means to enable teachers to increase their teaching strategy repertoire. The development of microteaching and

observation systems such as Interaction Analysis, provide means for increasing the repertoire. When used in collaboration they become powerful tools to help teachers develop classroom skills now demanded. The Far West Regional Laboratory for Educational Research and Development has produced a set of minicourses by which teachers can pursue specific areas which they diagnose as needing assistance. Through a series of videotaped teaching sessions, played back and evaluated, then retaught, teachers are able to change in prescribed ways. At the University of California, Davis, Douglas Minnis uses a similar technique in conjunction with Interaction Analysis.

CATEGORIES FOR INTERACTION ANALYSIS

TEACHER TALK	INDIRECT INFLUENCE	<ol style="list-style-type: none"> 1. ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included. 2. PRAISES OR ENCOURAGES: Praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying "um hm?" or "go on" are included. 3. ACCEPTS OR USES IDEAS OF STUDENT: Clarifying, building, or developing ideas suggested by a student. As teacher brings more of his own ideas into play, shift to category five. 4. ASK QUESTIONS: asking a question about content or procedure with the intent that a student answer.
	DIRECT INFLUENCE	<ol style="list-style-type: none"> 5. LECTURING: giving facts or opinions about content or procedure; expressing his own ideas, asking rhetorical questions. 6. GIVING DIRECTIONS: directions, commands, or orders to which a student is expected to comply. 7. CRITICIZING OR JUSTIFYING AUTHORITY: statements intended to change student behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.

(continued on next page)

STUDENT TALK	8. STUDENT TALK-RESPONSE: talk by students in response to teacher. Teacher initiates the contact or solicits student statement.
	9. STUDENT TALK-INITIATION: talk by students which they initiate. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.
	10. SILENCE OR CONFUSION: pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.

According to Minnis, classroom behavior associated with teacher-oriented social studies classrooms can be modified to those associated with learner-oriented classrooms by making step-by-step changes in Interaction Analysis patterns.

Step 1	5 - 5 - 5	behavior	catechism, didactic ↓ inquiry
Step 2	4 - 8 - 4	behavior	
Step 3	4 - 9 - 4	behavior	
Step 4	4 - 8 - 3	behavior	
Step 5	4 - 9 - 3	behavior	
Step 6	6 - 10 - 10	behavior	
Step 7	5 - 9 - 5	behavior	
Step 8	9 - 5 - 9	behavior	

The classroom environment is successively changed so it becomes much more open and receptive to different orientations and to a commonality of teacher/learner interests by the final step. This sequence, however, shows that teachers can learn the skills of changed classroom interaction. As Joyce pointed out, many teachers may have difficulty implementing the more inquiry oriented patterns in their classrooms.

The difficulty is critically true for social studies teachers. The reluctance is most noticeable when lessons revolve around subjects which Hunt and Metcalf term "closed areas," i.e., power and the law, economics, nationalism, patriotism, foreign affairs, social class, religion, morality,

race, minority group relations, sex, courtship and marriage.¹⁸ Society seems to want these areas taught as catechism or at least didactically-- and being products of the society many social studies teachers are also of this persuasion. Consequently it becomes difficult for most to teach these areas by other than the more authoritarian strategies. Massialas, et al., have verified this phenomenon.¹⁹

One explanation for the phenomenon comes from O. J. Harvey, social psychologist at the University of Colorado. According to Harvey there are four basic personality types, determined by the referent the individual uses in the decisions he makes.

The first personality category consists of persons who make decisions as a direct response to what society's authority figures say. These persons have a need for structure and a rigid adherence to rules which these authorities provide. The authorities may take the form of community or national personalities, written documents, or the perceived norms of the larger society.

The second category of persons use the same referents, only they reject the authorities and the standards of society and will decide in opposition to them.

The third personality category uses personal relationships as the referent for their decisions. These people base their decisions on the values of the persons with whom they are immediately in contact.

The final category of individuals are associated with an open personality: relative independence from the environment, flexibility,

¹⁸Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies (New York: Harper & Row, Publishers, Inc., 1968).

¹⁹Byron G. Massialas, Nancy Freitag, Jo A. Sweeney, "Belief in Authoritarian and Traditional Values and the Discussion of Social Issues. (Ann Arbor: The University of Michigan) mimeographed.

interest in novelty, avoidance of acceptance--rejection behavior, the tendency to respond to referents in terms of multiple alternatives or interpretations.²⁰

Harvey found a preponderance of teachers in the first category. It is no wonder that so many researchers have gathered overwhelming evidence that most teachers find it difficult to teach by other than traditional means--that is their referent; it is the norm of society.

The last category of personality types represents the individual who is best suited to the open, democratic society. It is that same individual who is closest to achieving self-actualization. Education thereby finds itself in a dilemma: how can basically authoritarian institutions, manned by basically authoritarian individuals, teach students to be democratic human beings? Harvey's research clearly indicates that the school, along with the family, abets and hampers this achievement.

Teaching for Self-actualization

There are a variety of strategies, techniques and deployments which the teacher can use to aid students in developing as individuals capable of knowing themselves. These tactics will be useful in helping the child push aside his own defenses which would otherwise prevent him from seeking alternatives for problem resolution. Though falling into the same basic personality category, teachers can have different degrees of comfort with each prescribed behavior or technique. The more of the behaviors an individual teacher is able to incorporate in the classroom, the greater the chances of success in helping develop humane individuals. Exhorting teachers to make basic character changes is hopeless. There are, however, general guidelines for which

²⁰O. J. Harvey, David E. Hunt, and Harold Schroder, Conceptual Systems and Personality Organization (New York: John Wiley & Sons, Inc., 1961)

all can take into account.

The teacher should strive to be open, one to whom the students feel they can come when in need of help--whether dealing with subject matter or non-school related problems. Students want teachers to be consistent, without being slavishly so, and admit inconsistencies when they arise. Hopefully, the teacher will be tentative in judgments, offering the air that he is constantly searching for better criteria and/or better answers. Each teacher can get the standards for student performance outside of himself--student established criteria, teacher/student established criteria, outside authority as criteria. Above all the classroom should be characterized by curiosity and inquiry on the part of the students--the teacher must permit, indeed encourage, this to occur. The teacher can aid this development by asking questions of students which require the student to give conclusive reasons and personal opinions. Ask questions which are related to higher level cognitive processes and to the affective domain. Students should be encouraged to weigh the information they are presented. Many of the suggestions may be difficult for some teachers because they require a basic reorientation. There are other alternatives.

Students need to be treated as persons of intrinsic worth. This can be done by encouraging independence, while providing each student with a basic sense of security. The teacher can encourage students to express their new and tentative ideas and allow a diversity of opinion to emerge without threat of animosity. As appropriate, students should be included in the decision process. Students should be permitted to choose their goals and levels of achievement.

There are yet other tactics which the teacher can employ to foster

open personalities. Students can be encouraged to search for data, to develop skills which will allow them to seek out evidence rather than rely solely on the judgment of authorities. The teacher can also encourage students to explore the world about them: their physical world, their social values and assumption. Teachers should recognize and deal with value conflicts.

The latter creates much consternation for teachers in American classrooms; it is all unnecessary. There is prevalent the notion that a person's values are somehow sacrosanct, that they are untouchable. Any teacher who dares tread in the area of values is either above the angels or beneath the devil. Western society has developed the outlook that facts and values are categorically different. That orientation has prevented teachers from dealing with the issue. Facts and values are essentially in the same bag, the difference is that persons hold a degree of commitment to values, whereas facts are "neutral." Under closer scrutiny, however, it is apparent that what is a fact for one may be a value for another, and vice versa. To examine value conflicts with that roadblock, however, will not solve the difficulty. Value statements and so-called statements of fact should be seen for what they are: claim statements about the world. From that understanding individuals can examine each for warrantability (i.e., does empirical evidence and/or logic support the claim?). This pursuit is perfectly appropriate, whether the claim falls within the concept of fact or value.²¹ If the claim is found to be unwarrantable, then a dissonant event has occurred which the teacher must help the learner resolve.

There is another dimension to this area. It revolves around the

²¹David J. Bond, "The Fact-Value Myth," Social Education, Volume XXXIV, Number 2 (February, 1970).

distinction between objective and subjective claims. An objective claim is a claim about the external world, i.e., the world outside the internal make-up of the individual. A subjective claim is a claim in which the individual tells about his ego-self. Thus claims can be portrayed as in Figure 11.

CLAIMS

WARRANTABLE			UNWARRANTABLE	
	Analytic, Descriptive	Value	Analytic, Descriptive	Value
Objective	"When two nations disagree over an issue, which one or both deem important to their national security, war often breaks out."	"The United States was wrong in demanding '54° 40' or fight."	"In the United States the House of Representatives must ratify treaties with foreign nations."	"The United States has been right in everything it has done in Vietnam."
Subjective	"The threat of nuclear holocaust disturbs me."	"I like to see international confrontations settled by peaceful means rather than by war."	<u>Psychotic</u>	<u>Psychotic</u>

FIGURE 11

Each objective claim can be investigated because it is a claim about the external world beyond the claimant. Evidence can be collected and weighed and then a decision made as to the warrantability of the claim.

The problem the teacher creates develops when the primary separation is made between fact/value rather than warrantable/unwarrantable or objective/subjective. When teachers allow students to think one opinion is as good as

any other regardless of how unwarrantable the claim, rather than cause them to pursue truth, is to do irreparable harm. Learners must be taught to seek alternatives and demand better decisions. The teacher who confuses objective and subjective claims also runs the risk of the student learning that one opinion is as good as another in dealing with value claims, i.e., "The United States of America has been right in everything it has done in Vietnam." Typically the teacher sets that type of claim as off-limits for investigation, though it is a claim for which evidence can be weighed. It is a claim about the external world. It is pursuable by defining the concepts used in the claim, i.e., "right" and "everything" and then stacking the concept criteria up against the evidence available. The warrantability of the claim can then be determined.

On the other hand to force upon the student the claim "the threat of nuclear holocaust does not disturb you" is to deny to the student his own identity. If such a subjective claim is to be pursued, it can only be done by examining some related objective criteria which may result in changing subjective tastes. To do otherwise is to ravage the student of his own being.

Humane survival teaching is very complex. It requires more than keeping one page ahead of the students. It requires more than using an occasional simulation. It requires more than developing one or two more teaching strategies. It requires more than a textbook. It requires more than a commitment to the scientific method. It requires more than knowing each student and his potential. It means all of these things, and it means much more.

Humane survival teaching requires a unique way of life. It requires first commitment to the learner in helping him interface acceptable

surroundings. It requires a systematic, cognitively logical development of curriculum. It requires humaneness in the classroom to help each individual make the most rational decisions in face of the available evidence.

To become a teacher of humane survival demands that most teachers undergo extensive reeducation along the lines set forth in this section. It means that teachers will have to undergo extensive self-investigation to assess personal strengths and weaknesses. It means that qualified personnel be used to help teachers attack specific problems which they identify as needing resolution.

X. AH-HA! I UNDERSTAND, I U-N-D-E-R-S-T-A-N-D!

By humane survival learning, based on rational inquiry, social studies can create an environment where concern will not be on whether children win or lose in school (get A's or F's) but rather whether they are able to learn the game of life (e.g., the degree to which they are able to inquire, deal with a changing world, reach valid conclusions, to achieve their own ah-ha's!). By allowing students to experience the value of learning rather than right-wrong paradigms, life takes on a wholly different perspective--both in the classroom and in the larger outside arena.

A great revolution in education research in the past two decades has unlocked many secrets about how people learn. The education field today knows much about learning, probably more than about teaching. A major challenge is to get this knowledge into systematic practice through improved teaching. A roadblock seems reflective of the fact that the teacher is old and the learner is new. The adage about old dogs and new tricks may not be entirely applicable, but there remains a point of diminishing returns when inscribed mind sets make it very difficult to change. This section describes learning dimensions which enable humane survival implementers to plan curricula corresponding with learning processes.

Social studies is that portion of the curriculum the purpose of which is to make learners more rational about human behavior and social interaction. Social studies must start on the premise of man's rationality, his ability to learn in lawful, organized methods. If he is incapable of rationality, it is irrational to go further. Man appears to often act irrationally. He does, however, have the capacity to collect data, weigh evidence, decide legitimate courses of action, determine warrantable alternatives, and distinguish right from wrong in a variety of cultural systems. He appears to have some control over his destiny. It must be concluded that man is able to use his intellect rationally. The schools, particularly social studies, must aid that development. In fact they must take that development one step further:

The most significant need for our citizenry...is some training in the capacity to rationally discuss emotionally loaded political and social problems and materials.²²

It is not an ivory tower proclamation; it is the challenge of survival.

Teaching and learning are not two sides of the same coin. Teaching calls for intended changes in learner behavior. Learning is the process by which people produce a measureable change in their behavior.

Persons learn things never taught. Teachers must be able to identify learning processes to incorporate its structure in their teaching--to make an increasing proportion of student learning explicit, rather than leave learning to happenstance.

The learning model of Figure 12 illustrates how an individual thinks. This is not to suggest that every input results in this complete process--indeed it may not. The model is designed to show graphically how an

²²Michael Scriven, "Environment Education" in 13th National Conference of the U.S. National Commission for UNESCO, Man and His Environment...A View Toward Survival (n.p.: n.p., 1969) p. 3

individual, given free rein is able to use his cognitive powers.

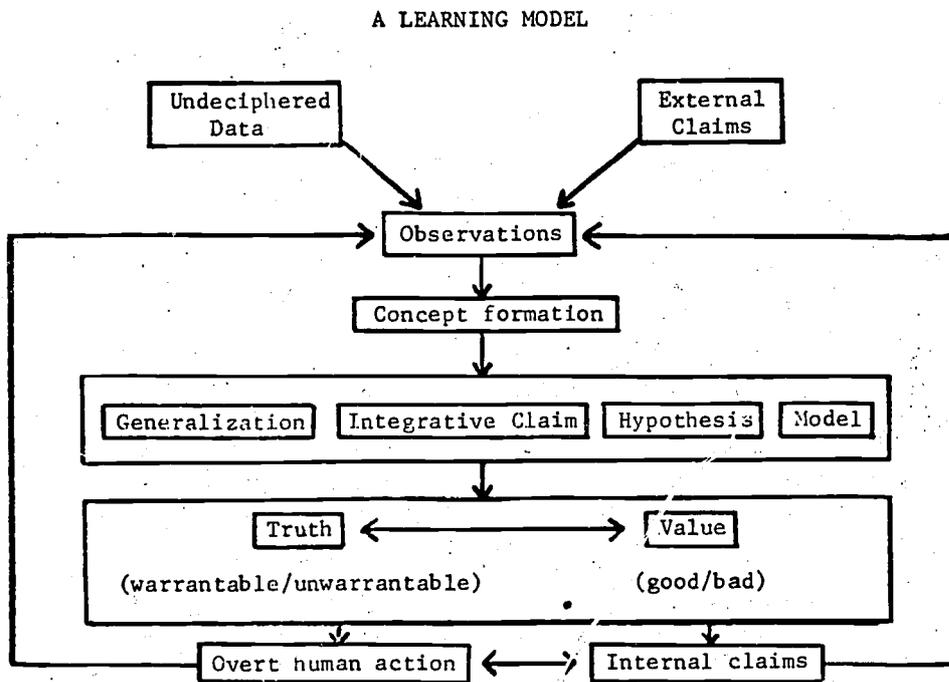


FIGURE 12

Man's cognitive ability is principally dependent upon his observations. The sources for these observations are varied. Undeciphered data are random selection of an observer's perceptions. Data may range from sensing the sliver under the nail of the forefinger on the right hand, to being faced with a set of numbers in an opinion poll, to the realization that the car has stopped running, to the picture of Adolf Hitler in Bohemia in 1933.

In addition to undeciphered data the individual is handed claims from associates, peers, authorities, parents, teachers, textbooks, the media, etc. These external claims take the form of conclusions and generalizations about the world ("Chocolate ice cream causes acne." "The Second World War resulted in the defeat of the Japanese." "History repeats itself." "Mrs. Brown is a good teacher."). Warrantable or unwarrantable the individual is exposed to these elements and is forced to respond to each.

Consequently, the individual receives input in the form of claims and data. He collects, selects from and relates these observations to previous inputs. Schematically the process is shown in Figure 13.

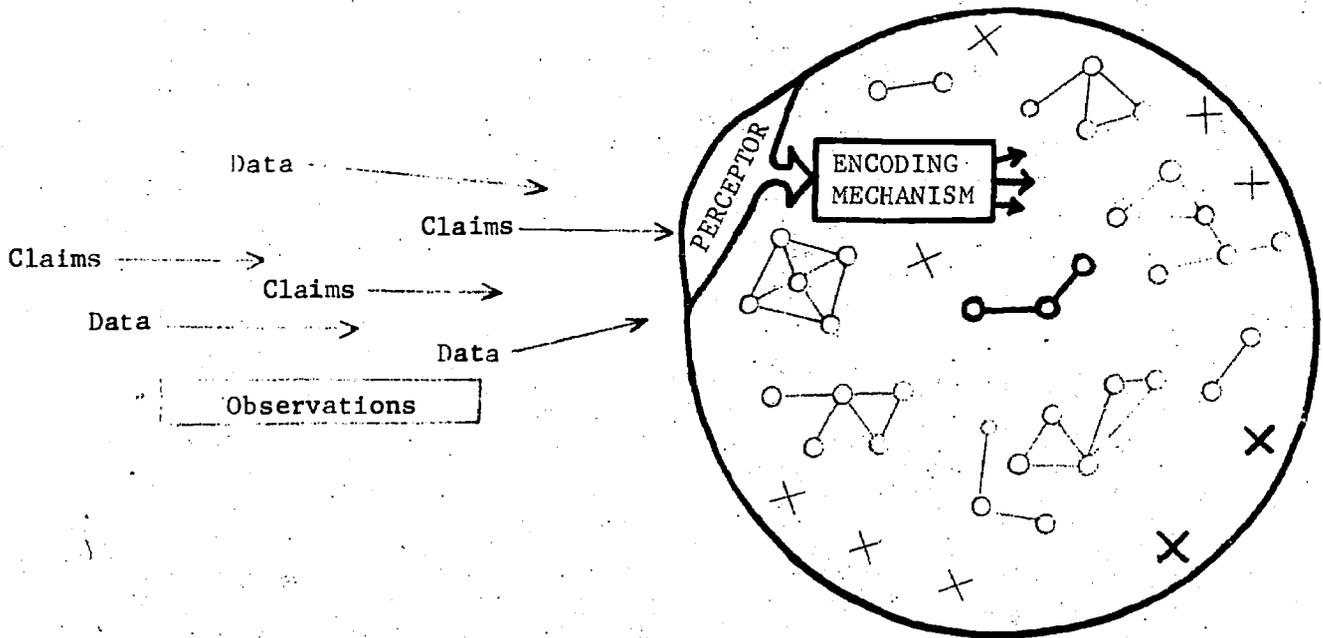


FIGURE 13

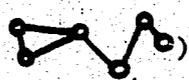
Claims and data are received in the brain at a point where they are encoded. The encoding mechanism accepts, scans, sorts and sends on most observations, regardless of their complexity, to locations for potential retrieval. In the process some observations are dismissed. On some occasions the encoding mechanism is severely shaken. The latter occurs when the individual is unable to legitimately integrate the perceptions within the learned structure of the brain. When individual internal claims and new observations are at odds, he has encoding problems. He is in a state of cognitive dissonance. When observations are contradictory to previously derived internal claims, the individual is required to put

the encoding mechanism back in smooth working order. According to Festinger, the individual may take one of three courses of action to resolve the dissonance.

1. Change one or more of the elements involved in the dissonant relation;
2. Add new cognitive elements that are consonant with already existing cognition; or
3. Decrease the importance of the elements involved in the dissonant relations.²³

Thus the student who has just participated as the leader of an obliterated nation in the simulation, "Dangerous Parallel," based on the Korean War, might resolve the problem of establishing criteria for the proper role of national leadership at the time of an international crisis by one of the following means, based on the three alternatives respectively:

1. "It is obvious that a country's leader should never threaten to use atomic weapons, as I did, because the opposition fully believed the bluff and saw that its only salvation was to strike first."
2. "The SALT talks are designed to prevent this type of miscalculation from ever happening. That shows good leadership qualities on the part of our nation's leaders."
3. "I can't tell anything, it was just a game."

Individual resolution of the problem (regardless of which of the solutions was attempted) points to the learning process. The brain is a gigantic jigsaw puzzle, though no one has ever seen the complete pattern. Observations come as individual pieces (x) and clusters (.

²³Op. cit., Festinger, p. 264.

Since there is no prescribed pattern for the puzzle, the encoding mechanism seeks legitimate location cues for each observation. Often isolated observations, e.g., "the Battle of Saratoga was fought in 1777," are misplaced since they don't tie in with other pieces or clusters. Some observations are readily encoded with previous observations. Part of this process, termed concept formation, is the basis for man's intellectual integrity.

Concept Formation

A concept is a mental abstraction by which an individual organizes observations in a category. Observations are placed together when men recognize that they share some commonality. Observations are never the same in all dimensions, though the person forming the concept realizes enough similarity to treat all as one. For example, international crises come in a whole range of confrontations, precipitous events, immediacies of threat, degrees of concern, numbers of nations involved and length of engagement, but they all have a commonness which causes them to be treated together as the concept "international crises."

The process by which the encoding mechanism sorts out inputs and delegates each to potential residence with similarly encoded observations involves three sequenced steps.²⁴ First it requires that observations be enumerated or listed. This demands that the individual differentiate observations from one another and break the observed phenomena into

²⁴This section is adapted from William Ward (Chm.), "Report of the Cognitive Processes Advisory Panel to the Statewide Social Sciences Study Committee" (Sacramento: California State Department of Education, 1967) pp. 13-14.

specific elements having specific properties. A particular observation might see a group of men sitting at a table. The observer can see chairs, coats, ties, men, the table, etc. More specifically, the observation might include President Nixon who, in turn, can (as an example of all other objects noted) be variously broken down into specific categories such as "president," "American," "Quaker," "Republican," "middle class," "Whittier College Alumnus," "commander-in-chief," "over-30," "taco eater," "Californian," "anti-Communist," "male."

The second step in concept formation is grouping. This calls for abstracting particular characteristics which the observations have in common, though the observations may outwardly appear to be dissimilar. It is these common characteristics which are the bases for grouping observations. Wars, events which precipitate the breaking of diplomatic relations and assassination of government officials are grouped together as having something to do with international crises. It is also possible to place the same observation in different categories. That the observation can be broken down into these and a myriad of other elements is the necessary first step in concept formation. If the observation of the individual, President Nixon, could not be associated with any element, it would be encoded by itself, unattached to any other observation, and probably be soon lost-- unless similar observations were forthcoming before the initial observation was lost (i.e., forgotten). The ultimate result is that groupings can be sub- and suprasumed.

Categorizing, combined with subsuming, is the third step. It calls for an awareness of a hierarchical system of super- or subordination in

which observations of a lower order of generality are subsumed under categories of a high order of generality. Thus the lower level observation "war" is subsumed under the higher order "international crisis." Individuals attain the ability to perform scientific classification and conceptual organization when their observations, as well as categories, are arranged in hierarchical systems of super- and subordination.

The steps are sequential because the first must be accomplished before the operations of the second can be performed: differentiation and listing of observations must be mastered before the individual can identify common properties which allow them to be grouped. To group on the basis of commonalities is a necessary prerequisite for categorization and subsuming, i.e., concept formation.

The dissonance-data-organizer strategy is validated by this learning process. New observations are often dissonant with previous observations. The individual seeks to resolve dissonance when he has no encoded category-- at this point much learning can take place, the potential for establishing a new category or seeing new relationships with older categories is increased. As the encoding mechanism is disturbed, the teacher can help students establish categories (i.e., concepts) which social scientists deem warrantable. Concepts, while not unchangeable, are not going to change as rapidly as individual observations. A concept, as a most basic organizer, helps the individual put observations in meaningful, manageable order.

Social studies educators have attempted to differentiate concepts to aid teachers in prescribing those legitimate for learning activities. One initial effort was undertaken by Roy Price and associates at Syracuse University. Price describes concepts useful for social studies as falling

into three categories--substantive, value, and methodological. There is no readily apparent reason for making the distinctions that Price makes between substantive and value concepts, though the concepts themselves are an excellent listing.²⁵

Observed concepts, inferred concepts, and ideal-type concepts are distinctions Bruce Joyce makes. Observed concepts are "those that can be perceived directly from available data." They are the easiest to form; learners need only first hand experiences. Inferred concepts are "those that describe unseen conditions that can only be guessed at on the basis of more immediately observed data." Inferred concepts require a hunch or inference between the observation and the encoded category. Ideal-type concepts are "those representing broad categories and formed by classifying large quantities of data." They can be formed only after considerable experience with examples of one concept in comparison with examples of others. Ideal-type concepts require superordination over other concepts.²⁶

Hunt and Metcalf in Teaching High School Social Studies also describe three types of concepts. Conjunctive concepts have "the joint presence of several attributes." Conjunctive concepts have their definitional attributes connected with "and" while disjunctive concepts separate the attributes with "or." The third type of concept described by Hunt and Metcalf is the relational concept: it is defined by a relationship among attributes. Relational concepts are more often found in the physical sciences than in the social sciences.²⁷

²⁵Roy A. Price, Warren Hickman and Gerald Smith, Major Concepts for Social Studies (Syracuse, N.Y.: Social Studies, 1965)

²⁶See Bruce Joyce, Strategies for Elementary Social Science Education (Chicago: Science Research Associates, Inc., 1965) Chapter 4.

²⁷Maurice Hunt and Lawrence Metcalf, Teaching High School Social Studies (New York: Harper & Row, Publishers, Inc., 1968) Chapter 4.

Another method of subdividing concepts, and possibly the most powerful, is the distinction used by the California Social Sciences Study Committee. That committee identified two basic sets of concepts: analytic and integrative. Analytic concepts are those which Price, Joyce, and Hunt and Metcalf have described. They are types of concepts which social scientists employ; they are basically unrestricted by time or space. They are universal. The concept "role," for example, can be explicated by examining those functions carried out by the father and the mother at home; the principal, the teacher and the student at school; the chieftain in a 'primitive' East Indian territory, Julius Caesar in the Roman Empire, the policeman in New York City in 1907 and the fishmonger in London in 1534. Role, as a concept, is not bound by time or space.

Concepts which are time and space bound in human experience are identified as integrative concepts: the Reformation, Manifest Destiny, Age of Exploration, the new social studies revolution, Tanzania. Integrative concepts are distinguished from single events in that integrative concepts are not one shot episodes, but demonstrate analytic characteristics over a measured though limited period of time and/or space.²⁸

Concepts are the key features in the pattern which the cognitive jigsaw puzzle is to ultimately design in an individual's head. Because of its great importance, the concept formation process in school must be simplified to include input of relatively small, yet powerful amounts of data when possible. When the teacher systematically helps the encoding mechanism channel the pieces into a proper locale, the cognitive structure is greatly facilitated.

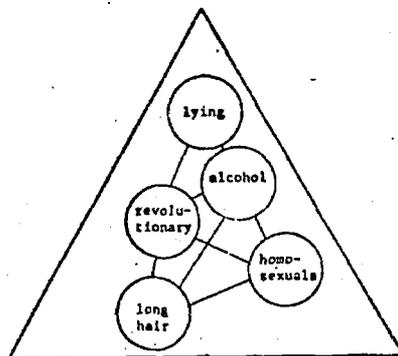
²⁸ John U. Michaelis (Chm), Social Sciences Education Framework for California Public Schools (Sacramento: State Department of Education, 1968)

Unfortunately the attempt to deal systematically with basic cognitive building blocks is a recent phenomenon. Life always has, and always will hand persons whole handfuls of puzzle parts. The individual is expected to deal with his observations rationally. Traditional education has operated under what is today a dysfunctional expectation: the individual will find proper locations for every puzzle part. Today if we were to continue that method, these handfuls would grow to basketloads and shovelfuls...and tomorrow would see the dump truck and the continuous conveyor belt. Such overload causes havoc with the encoding mechanism because the mechanism has little time to direct the avalanche of data to proper locations, much less identify erroneously placed observations and relocate them in more legitimate categories as the pattern emerges. These bushels of data, previously handed to students at a casual pace, continue to increase dramatically by way of media and expanded personal contact.

Mind Set and Claims

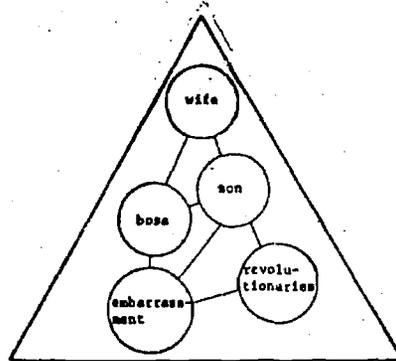
Data input was low when the farmer worked long hours behind the plow drawn by his horse. Under those conditions the encoding mechanism could handle its load with little assistance. The input was light enough and required such relatively simple concepts that a few dissonant pieces caused little disruption. Thus the brain could be confined to typically generalized cognitive categories: e.g., law, economy, war, religion, loyalty, frontier, work, good, love, foreigner, honesty, bad; these were satisfactory for nearly all observations. When an external claim was made, to wit, "work is good," it was easy to encode because the concepts were outwardly very clear. Today's human condition of great mobility and instantaneous world-wide communication requires a reevaluation of what properly constitutes work and

what is good. The rub comes when persons continue to operate under the old constructs--which were initially pretty legitimate and stable. Persons have difficulty handling new data puzzle parts because these don't match up with old constructs. The psychological term for this condition is mind set. It means that observations are colored by internal claims. This causes potentially conflicting claims, externally forced on the encoding mechanism, to be rejected as having no import, or manipulated to fit the previously derived pattern--no matter how forced the pairing. For example, a hypothetical, though possible road-block to implementation of the humane survival curriculum may be illustrative: an individual has an internal construct which has determined the concepts "bad" and "children" and "questions." It is legitimate to suggest that the categories were originally established by something resembling the old adage "Children are better seen than heard." Over a period of time various other inputs more firmly establish categories for "children," "bad," and "questions." One day the individual gets the external claim, "Revolutionaries are bad." Cognitively, "revolutionary" gets tied in the concept "bad."



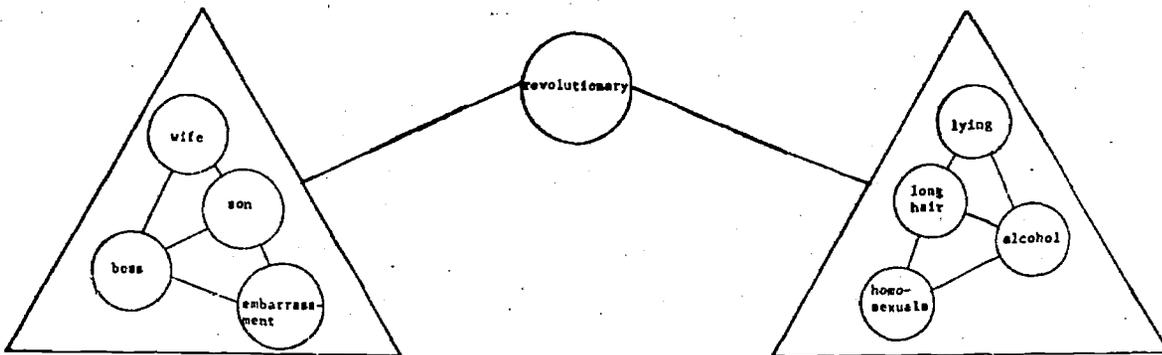
BAD

Later the external claim: "revolutionaries ask questions;"
 "revolutionary" now gets tied to the concept "questions."



QUESTIONS

In reality the intermediary "revolutionary" has tied "bad" and
 "questions" together so the linkage begins to resemble

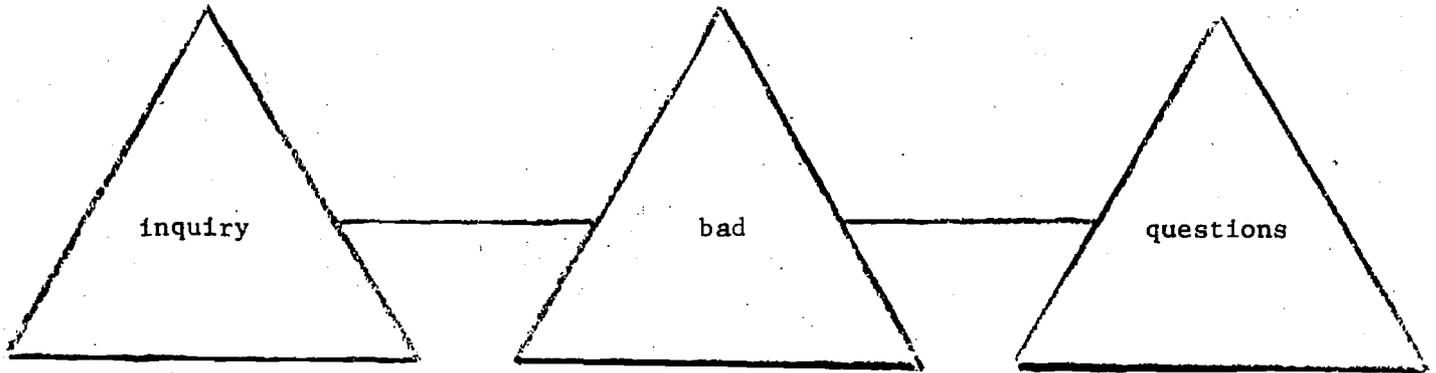


QUESTIONS

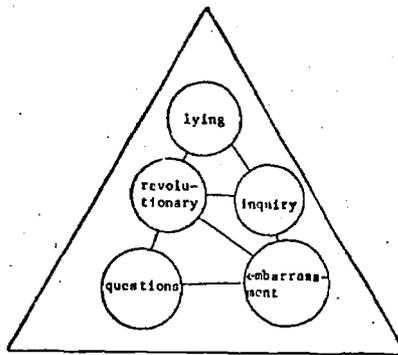
BAD

Then comes the input "an inquiry curriculum is a question asking
 curriculum." This claim gets tied to the question category and there

emerges the following relationship.²⁹



Or maybe even more properly, "bad" subsumes both "inquiry" and "questions," so that the construct becomes



BAD

One possible conclusion for the observer (by way of the puzzle parts he has put together--regardless of how randomly) is "Inquiry is bad; in fact inquiry was dreamed up by a lot of revolutionaries, or long hairs, or alcoholics, or liars, or bosses, or nagging wives."

Specified connections are indescribable since there are an infinite variety of possibilities. The major point to recognize is that

²⁹ These symbols are used to signify specific mental constructs

	analytic concept		integrative occurrence
	integrative concept		direct connector
	subconcept (either analytic or integrative)		

inputs come to rest somewhere, it is to mankind's advantage that the most powerful concepts (i.e., those which can be predicted to have longevity with continued validity) be encoded early to get a fast start on forming a clearly functioning pattern.

Concept formation activities demand three requirements from teachers. By the accomplishment of each criterion the observer can transfer his learning most efficiently, enabling him to keep his cognitive house in order. First the developed concept must have predictable future warrantability (as a teaching strategy, though, it would probably best be developed for immediate usage). Second, examined concepts need to be developed in their legitimate construction--that is, the concept is so specific that an individual will not encompass totally inappropriate data with the concept at a later date. The third criterion is for the formal experience with concept construction to recognize the hierarchical nature of concepts, enabling the individual faced with a particular claim to understand that one concept may be subordinate to another in one claim, while in a different claim the situation is reversed. The following claims show this swapping of subordinate and superordinate positions.

1. "The Vietnam War is an international crisis, a drain on the American economy, a cause for President Johnson's refusal to seek reelection and an example of the ineffectiveness of the United Nations."
2. "Recent international crises include the Vietnam War, World War II, the Cuban Missile Crisis, the Korean War, and the kidnapping of European diplomats in Latin American nations."

In the first example the integrative concept "Vietnam War" assumes the superordinate position--in this case the claim states specific analytic concepts

(e.g., "international crisis," "economy," "election"), specific integrative concepts (e.g., "American," "United Nations") and an integrative occurrence (e.g., "President Johnson") which together make up the integrative concept. Correspondingly the second claim identifies integrative concepts which are subordinated to the particular analytic concept (e.g., "international crises").

The tragedy of social studies education is that it has made little attempt to require students to form warrantable concepts. The criticism is through hindsight--though individual detractors have been heard for over half a century. Traditional education skipped the concept formation stage in its attempts to force external claims off on the student as though they were his internal claims. The result was to see entire claims processed through the encoding mechanism and generally accepted as legitimate because there were few, if any, dissonant claims for the observer. In today's world--when so much is so dissonant--students collect their own data, process all observations, many conflicting, through their encoding mechanism and come up with explanations. They need to have help at each stage.

Making Claims About the World

Explanations take the form of generalizations, integrative claims, hypotheses, and models. All are claims with varying degrees of tentativeness, warrantability and commitment.

Generalizations are claims which show relationships between two or more analytic concepts. These claims are not limited by time or space. They are, therefore, analytic claims which have a universality of application. Some examples of analytic claims (generalizations):

1. Wars are destructive of human life.
2. Every social event is unique.
3. All human societies have a prohibition against incest.
4. The farther the distance between social classes, the less the movement between them.
5. People use their own changes of opinion as blocks against further modification of opinion under the pressure of communications.
6. Problems are difficult to solve when they require the use of the familiar in an unfamiliar way.
7. A person's culture, its mores and traditions, affects his thinking, perceiving, and feelings throughout life.
8. Civilizations rise and fall.

Integrative claims, on the other hand, are statements which incorporate one or more integrative concepts in relation to one or more analytic concepts. Applicability of the integrative claim is limited by time or space. Some examples of integrative claims:

1. The Vietnam War is destructive of American and Vietnamese lives.
2. The election of 1948 was unique in American history.
3. The State of California makes incest a felony.
4. Few lower caste Indians associate with Brahmans.
5. Having changed from liberal to conservative, it is very difficult for government officials to hear what students at Berkeley are saying.
6. It is harder to teach parents the new math than it is their children.
7. It was very difficult for Virginians to think of themselves as Americans for the first half-century after independence.
8. The Roman Empire rose and fell.

The integrative claim has a degree of generality but its applicability is restricted by time and/or space.

The integrative claim is distinguished from the integrative occurrence in that the latter is a single instance which in itself has no generalizing quality. Some examples of integrative occurrences:

1. Bill's brother was killed in Vietnam.
2. Harry Truman won the election in 1948.
3. Jim Roberts is in San Quentin for incest.
4. Martha married her childhood sweetheart.

5. I didn't hear a thing that wide-eyed radical said.
6. I don't understand what a "set" is.
7. 93.7% of American citizens think of themselves as Americans first.
8. Barry Goldwater, in his speech in Chicago, called for a return to the old virtues.

A hypothesis is a tentatively held claim about the world. Each of the above claims (whether generalization, integrative claim, or integrative occurrence) becomes a hypothesis simply by raising it as a legitimate claim for investigation. Any claim is subject to investigation.

A model is a visual diagram showing relationships between concepts. Again, a model may be analytic or integrative. A model is particularly useful because it allows the learner to eliminate verbiage and realize key relationships between concepts and/or specific events.

It should be evident that students cannot begin to understand claims if they do not comprehend the individual concepts which the claims contain. It is for this reason that concept formation is so basic to social studies education--humane survival or no.

Following the model in Figure 12, we must note how the student forms claims--operating from the total range of observations which impinge upon him. Once the individual has formed a claim he either accepts the claim en toto or synthesizes it with previous observations, forming a new claim--in either case it becomes a claim affecting the encoding of further observations.

As a claim is formed, the individual theoretically processes it two ways: he determines whether it is warrantable or not, and he determines whether the demands made within the claim are good or bad. The former is associated with truth, the latter with values.

If an individual were to accept every observation as being equally

warrantable, he would become a psychotic because all potentially conflict with others. Claims are therefore filtered for their warrantability. Procedures have been established for, achieving this, they were specified in the section on teaching. The need is to provide learners with empirical and/or logical models for resolving these difficulties. Otherwise observations and the subsequent statement of new claims is left either to chance or gut-level policy decisions, regardless of how evidence marshalls on the claim. Models developed by Fenton, Bloom, Senesh, and others are efforts to help students filter out unwarrantable data and ultimately make decisions which are themselves warrantable.

The other dimension of claim scrutiny (i.e., how good or bad the claim) is generally avoided in the social studies classroom except on the most superficial or generalizing level. Values are thought to be off-limits for investigation. Value claims are investigative (i.e., they can be scrutinized for warrantability)! A value claim is a claim about the world. It is distinguishable from a non-value claim only as it gives a quality of good or bad to the characteristics enumerated. The following sequence shows progression from an obvious non-value claim to one which is a clear value claim:

1. Russia has a larger population than the United States.
2. The United States has a higher GNP than the Soviet Union.
3. Capitalism is better than Communism.
4. I'd rather be dead than Red.

Each claim can be investigated. The student needs to see that the chief impediment to resolution of any claim's warrantability stems from the fact that men have different connotations and denotations for the concepts they verbalize. It is a definitional problem. We fail to find out from the claimant what each concept means. In the examples above, one is

clearly able to determine the populations of the U.S. and the U.S.S.R. and therefore determine the warrantability of the claim (i.e., do a head count). The second example is only slightly more difficult; indeed that minor difficulty centers on the fact that one has to convert the GNP to a constant monetary unit and must be sure that the total goods and services produced in each country in a given year are determined by the same criteria. The claim that capitalism is better than communism requires that each concept be clearly and undeniably stipulated. The task's complexity is increased only to the extent that the claimants meaning of "capitalism," "communism," and "better" must be spelled out, i.e., put into behavioral terms whenever possible, then evidence can be collected. That is also the case in the final claim--each of the terms can be specified and examined. The latter claim does have a potential subjective dimension about which a teacher needs to be cautious: does the claim mean "all people would be better off dead rather than Communist," or "I feel so strongly against Communism that I would rather die than live under Communism"? If the latter is the case, it would be immoral for the teacher to force the student to deny his own feelings and accept a contrary claim.

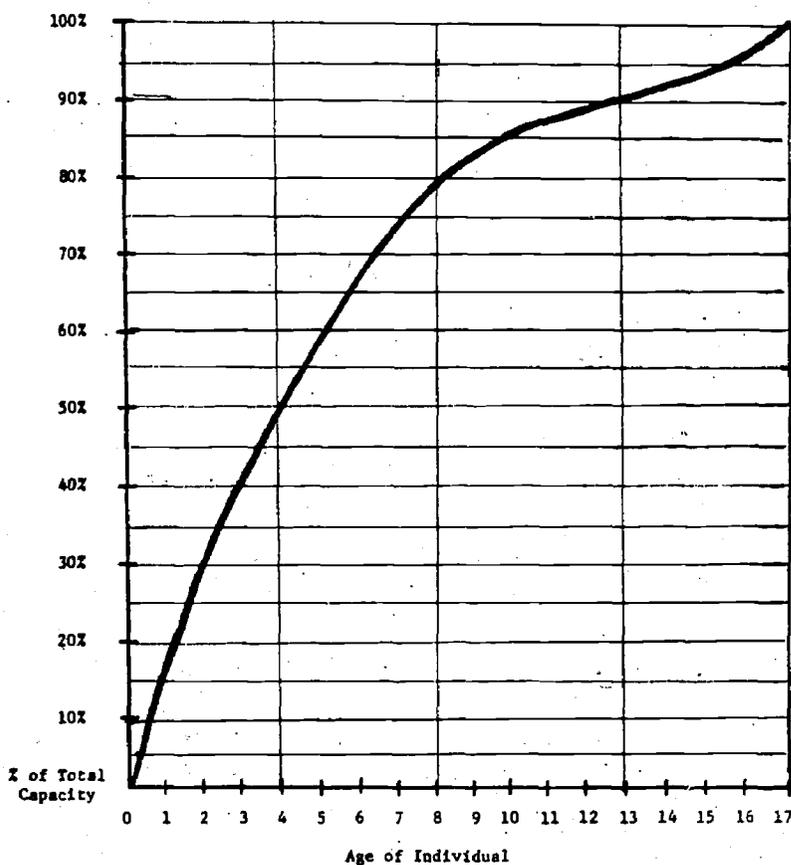
The subjective nature of the latter interpretation does raise some problems in the classroom. It tells about the learner, not the claim. Pursuit of the claim must be through an objective examination (e.g., what would Communist-like conditions be?). It is only as mankind is able to process data in this way that he can come to "rationally discuss emotionally loaded political and social problems and materials."

Cognition and Development

We know some of man's capabilities in concept and claim formation. A crucial consideration for teachers, however, has been omitted. Obviously, a four year old is not able to form the concepts of a forty year old. A ten year old cannot make the claims of a sixteen year old. Some of these differences can be attributed to experience. Others are the result of individual development.

The primary grade teacher functions at a particularly crucial junction in the life of children. Benjamin Bloom has forwarded the claim that very early in the life of a child the potential growth dimensions of his cognitive development is determined. That is, the early experiences a child encounters determine the extent and sophistication by which the individual will be able to cognitively handle himself later in life. This cognitive development is similar to physical development which is heavily dependent upon the nutrition and physical mobility of the individual as he is developing. From cognitive development research, it appears that something in the neighborhood of fifty percent of an individual's cognitive capacity is determined by the age of four,³⁰ eighty percent by the age of eight, between ninety and ninety-five percent by thirteen years, and all by age seventeen (see Figure 14). In view of other research (e.g., I.Q. studies, Piaget) the claim of an early determination of an individual's capacity is warranted. The claim places much responsibility for cognitive development on primary and middle grade teachers.

³⁰ Alexander Frazier, "Curriculum Making for Children: Elements and Issues" in Alexander Frazier (ed.), A Curriculum for Children (Washington, D.C., Association for Supervision and Curriculum Development, NEA, 1969) p. 4.



DEVELOPMENT OF COGNITIVE CAPACITY

Following the groundbreaking efforts of Jean Piaget, educators have identified some rough, but explicit, guidelines for determining when learners are initially able to perform various cognitive tasks.³¹ The first stage of cognitive development lasts from birth until the child is two or three years of age. This stage of development is dominated by sensory-motor

³¹ Most of this section is adapted from Gary A. Knox, "Child Development and Social Studies Curriculum Design: Toward a Rationale" (Corte Madera, Calif.: Marin Social Studies Project, 1970)

perceptions and constructs.

After leaving the sensory-oriented stage, the child enters the preoperational or representative stage of development. It is at this stage that the individual first attempt is to make order out of his observations. Often erroneous and fumbling, their attempts are the beginnings of cognitive housekeeping. In this stage the child will often categorize observations on the basis of single characteristics. At the earlier points in preoperational development this focus on single characteristics means the child is unable to form concepts because he cannot differentiate various characteristics. The child thinks transductively--he goes from particular to particular. The reasoning employed might say, "A is like B in one respect; therefore, A is like B in all respects." One danger for the child's psychological development is that as adults recognize this type of thinking they inform the child that he is not thinking right--the child is, however, thinking the only way that he can. Various observers have noted that this reaction by teachers does much to destroy the child's effort to think for himself. The disposition of the schools is toward convergent thinking patterns is soon instituted. The child comes to question his own thought processes. It is this orientation at school which robs most individuals of their inquiry incentive and ability to use divergent or open-thought processes. In line with Harvey's personality categories, there is ample evidence to suggest that this basic manipulation of students does much to develop the authority-oriented personalities. Certainly kindergarten and first grade teachers need to be particularly aware of this orientation. Transduction allows persons to explain things on the basis of a single characteristic. Consequently, everything is explainable

(e.g., by color, or "they're both hard to say," or location, or condition). Cognitive dissonance is inappropriate; discrepancies will not be evident to the child.

Between the years of kindergarten and second grade, learners usually grow to the concrete operations stage of cognitive development. Given their freedom, the children will not lose the cognitive abilities developed in the previous stage but will build on them. Flavell has shown how this stage, which usually lasts over the second through fifth grades, allows the child to form the kind of warrantable concepts identified by social scientists.

Here, the child's conceptual organization of the surrounding environment slowly takes on stability and coherence by virtue of the formation of a series of cognitive structures called groupings. In this subperiod particularly the child first begins to "look" rational and well-organized in his adaptations; he appears to have a fairly stable and orderly conceptual framework which he systematically brings to bear on the world of objects around him.³²

As the child consciously begins to structure his world, it is possible for the teacher to employ cognitive dissonance in measured form. It is, however, cautionary that the child not be given too much dissonance because it could upset his developing cognitive appercept.

The final stage of intellectual development is variously called conceptual, reflective, or formal thought. As the child approaches eleven he may begin to take on attributes of this development. The stage is best characterized by the ability of the child to deal increasingly with abstract observations. Prior to this stage, every observation must be concrete

³² J.H. Flavell, The Developmental Psychology of Jean Piaget (Princeton: Van Nostrand, 1963) pp. 86-87.

(i.e., direct previous experience and/or physical proximity)--any attempt to deal with abstractions can, at best, result in only verbal mastery. According to Piaget there is no inborn necessity to advance to this formal thought stage. The development of this stage appears to be the result of the complexity of the society and the learning opportunities of the individual. Piaget has stated, however, that the stage may become

necessary once the child possesses the concrete operations. As soon as he can perform the concrete operations, sooner or later he will...construct a classification of all the classifications, and thus he will end up by producing the combinatorial, which is a necessary form of formal thought.³³

It is not until this formal stage that the child can deal with abstract hypotheses and claims. Prior to this stage the child remains dependent upon first-hand, concrete experiences. Typically a student reaches achievement of this stage by the end of the tenth grade. From that point forward, the child is able to employ adult thinking processes.

Generally, developmental studies say that cognitive development in the earliest years requires learners to deal with concrete, familiar observations--indeed at the earliest level these should be objects which the students can physically manipulate or possess the qualities of a concrete and explicit referent. Until about fifth grade referents need to remain concrete, first-hand observations--though they can often get farther from physical proximity. After the sixth grade, referents can begin to take on increasing abstractness.

Greta Morine has identified several lesson types which teachers can employ at appropriate levels of cognitive development.³⁴ These lesson types

³³Jean Piaget, The Theory of Stages in Cognitive Development (Monterey, Calif.: CTB/McGraw-Hill, 1969) pp. 8-9.

³⁴Greta Morine, "Discovery Modes: A Criterion for Teaching," Theory Into Practice, Vol. VIII, No. 1 (February, 1969) pp. 25-30.

and other summary data about cognitive development are summarized in Figure 15.

CONCEPTUAL GUIDELINES FOR INSTRUCTION

Grade	Developmental Stages (Piaget)	Appropriate Lesson Types	Apparent Cognitive Abilities	Maturational Stages	Age
Preschool	Pre-operational Representations	Transductive	Concrete/Familiar	Early Childhood	3
K					4
1					5
2	Concrete Operations	Open Inductive	Analytic Concepts as Organizer Observed Concepts	Middle Childhood	6
3					7
4					8
5					9
6					10
7					11
8					12
9	Formal Operations	Structured Inductive Semi-Deductive	Ideal-type Concepts	Late Childhood	13
10					14
11					15
12					16
13					17
14	Formal Operations	Simple Deductive	Inferred Concepts	Puberty	18
15					19
16					20
17					21
18	Formal Operations	Hypothetico-Deductive	Cognitive Dissonance Appropriate	Early Adolescence	22
19					23
20					24
21	Formal Operations	Hypothetico-Deductive	Scientific Method as Organizer	Later Adolescence	25
22					26
23	Formal Operations	Hypothetico-Deductive	Integrative Mode	Early Adolescence	27
24					28
25	Formal Operations	Hypothetico-Deductive	Historical Understandings Policy Mode	Later Adolescence	29
26					30
27	Formal Operations	Hypothetico-Deductive	Highly Abstract	Later Adolescence	31
28					32

FIGURE 15

A COGNITIVE MODEL

An actual cognitive pattern for any one individual will probably never be made. A hypothetical structure can, however, be diagrammed, showing observations in theoretical distribution for retrieval. Initially, integrative occurrences would appear to be randomly distributed.

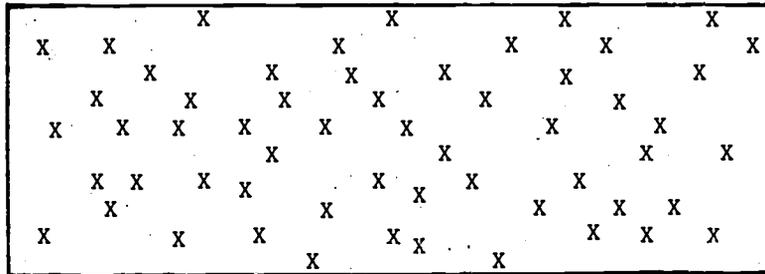


FIGURE 16

Given their distribution, there are a variety of ways by which the cognitive structure can be divided, but for purposes of a social studies curriculum there exist two major methods of division. The first is to view observations as a social scientist would. He dissects data analytically-- that is, he identifies the concepts which appear to have great warrantability and predictability. Thus by the analytic model, observations fall into innumerable patterns, consistent with encoded analytic concepts.

	X	X	X	X	X
Analytic Concepts, e.g.,	X		X	X	X
		X	X		X
Political behavior	X	X		X	X
		X	X	X	X
Culture	X	X	X	X	X
	X	X	X	X	
Democracy		X	X	X	X
		X	X	X	X
Morality	X	X	X	X	X
	X	X	X	X	X
Inventions	X		X		X
		X	X	X	X

FIGURE 17

Integrative occurrences and concepts established in the example are historical; it would be just as appropriate to substitute geographic occurrences or concepts, e.g., Marin Civic Center, Los Angeles, Communist China, South America. If learners knew that these are the two basic ways by which external data is legitimately examined by the disciplines most concerned with the social studies, it would help them to see that what the historian does is much different than what social scientists do, consequently in problem resolution the individual can be helped to use appropriate precedures. Typically, social studies has followed the model established in Figure 18, but evidence now shows that the method identified in Figure 17 is the most practical since it has transferability to new settings--it is not so bound by time/space limitations.

Drawing upon knowledge encoded by both the analytic and integrative schemes, the individual can begin to improve his warrantable predictions and prescriptions about the future. The difference in the use of the two schemes is seen in Figure 19.

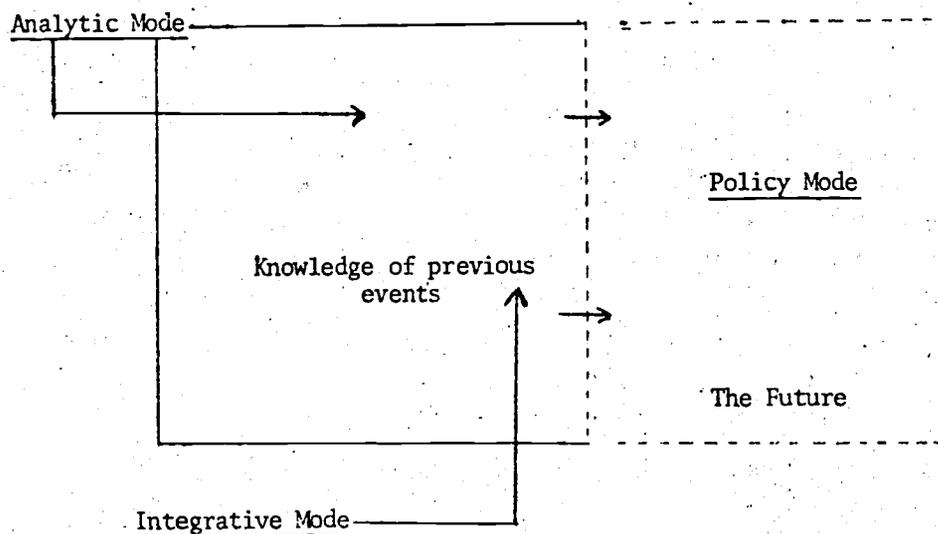


Figure 19

As applied to developmental studies, analytic modes should be employed vigorously between first and ninth or tenth grades, integrative modes (i.e., showing how particular analytic concepts come together to form unique irreplicable events) are appropriate beginning about the tenth grade. The policy mode, which employs the weighing of alternatives for future action, may be employed appropriately throughout, but it must be limited to very concrete experiences in the early years. It can only be effectively used abstractly after the learner has attained the formal thought stage of development and has achieved a firm grasp on both analytic and integrative cognitive structures.

Students can learn a great deal--much, much more than they now exhibit. Despite social commentators' pronouncements that the youth of today is more knowledgeable than previous generations (the claim would appear to be warranted), the school system has not developed process elements in learning to the point where learners can effectively resolve dissonance in human encoding mechanisms. If society is to keep from committing some catastrophe, learners must be aided (and we know they can be aided) in ways to legitimately process the barrage of external claims and data. It is at that point that teaching strategies, as discussed in section IX, can be dovetailed with learning potential to implement a social studies curriculum for a modern world--a curriculum of humane survival.

XI. HUMANE SURVIVAL IN THE CURRICULUM

The function of any social studies curriculum must be to make the learner more rational about human behavior and social interaction. It would be a violation of a responsibility if we were to follow a less than rational procedure in providing guidelines for social studies curriculum design. It is incumbent on each and every curriculum designer--whether in a commercial curriculum project, a district-wide institute, an intra-school effort, or as an individual standing alone--to program as systematically as possible, within constraints dictated by student limitations and professional expertise, those experiences over the thirteen years of public schools which are necessary for the development of rational, self-actualizing learners.

Typical curriculum design has a surety for failure. Thirteen years from now--if not before the curriculum gets down on paper--any rigid curriculum will be outmoded. We have to approach curriculum design on a systematic basis, giving full weight to the present world in constant, and often irritating, change. It would be irrational, in view of available evidence, to expect students to have the same curricula in five decades which students have today (whether before or after revision). Curriculum design must, therefore, be a dynamic process demanding constant attention and revision.

Were one to ask why can't curricula once written be everlasting is like the person asking why the dinner dishes have to be washed, they'll only get

dirty again. While the use of dirtied plates over several days may cause no difficulties, eventually there will be a toxic reaction which can do the user no good. Demands on the curriculum likewise change from day to day. And just as the housewife daily cleans the dishes to keep her family fit, so the curriculum designer-implementor must be prepared to make necessary modifications in the curriculum to keep it healthy.

To anticipate and thereby avoid difficulties in seeking an appropriate social studies curriculum the developer needs an intellectual tool to allow him to follow a flexible, yet systematic procedure. The procedure must evolve which can account for the dynamics that curriculum currently faces and then allow for proper and systematic curriculum modification. Figure 1, the Curriculum Design Justification Model, is such a tool.

Curriculum Design Justification Model

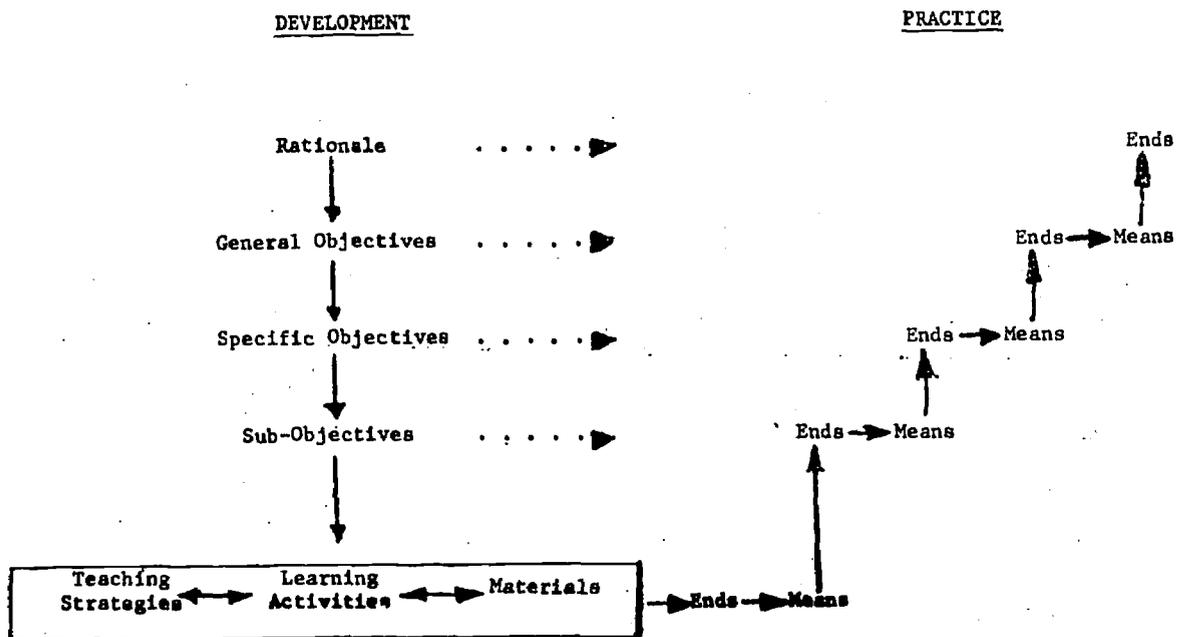
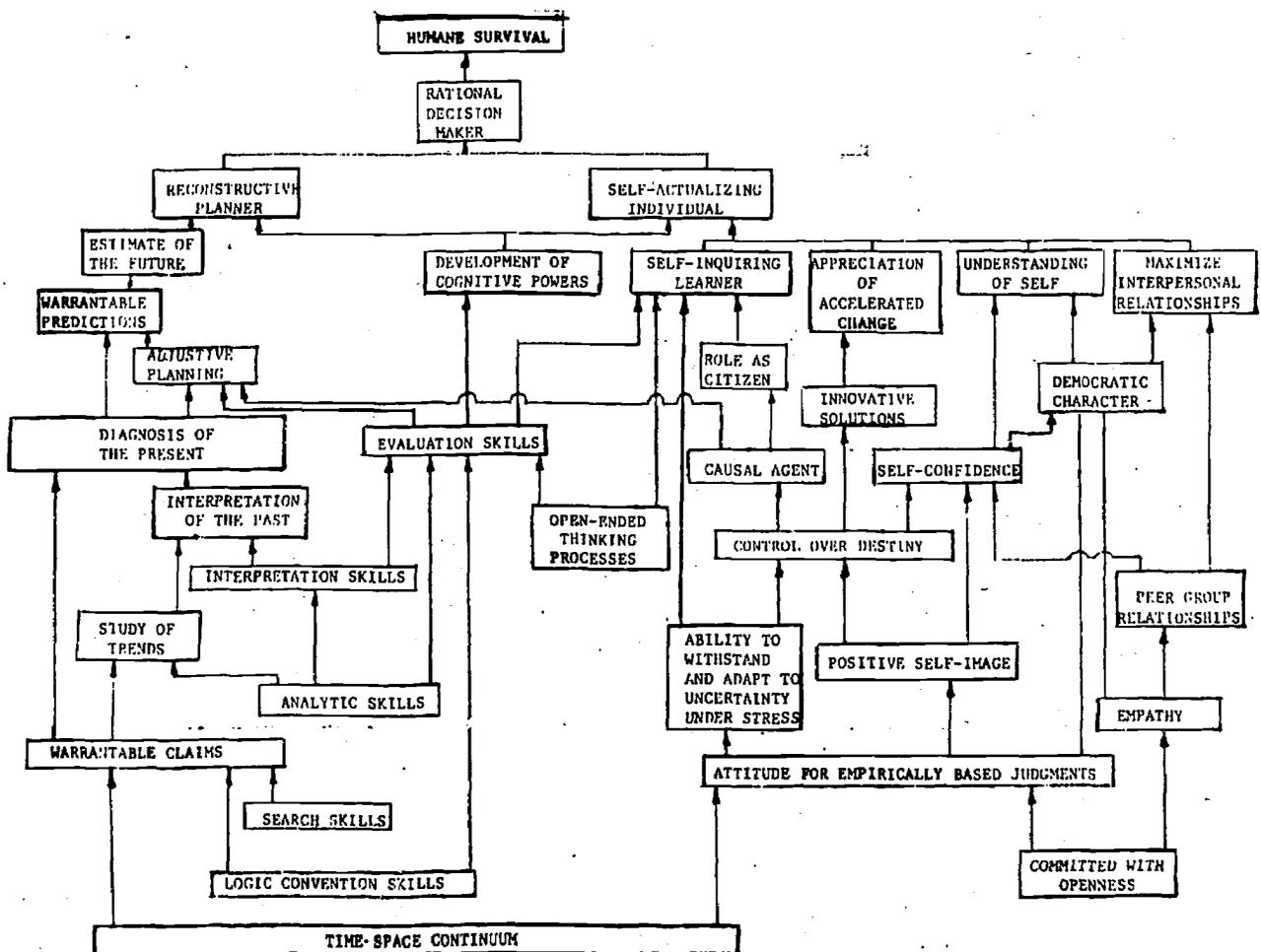


FIGURE 1

As discussed in Section V, the only defensible way to develop curriculum is to start by determining the ultimate, encompassing goal (i.e., rationale) for the curriculum. That statement of rationale must deal with what students need to be able to do directly--not what they can learn which may indirectly lead to that end. In view of this fundamental concern, this document has advocated a curriculum design based on the humane survival paradigm.



The development of such a paradigm (when seen as a means-ends-means process) is a necessary initial step in curriculum development. It provides a means for developers to make rational decisions about a curriculum's limits. By delineating these broadest dimensions and ascribing their relationships, designers can effectively illuminate the highlights in their proposed program.

As noted previously, increasing focus in social studies research and development says that student process of data in a complex world is vastly more important than the traditional concern with disciplinary-, spatial-, or time-oriented subject matter. Professional curriculum developers and cognitive psychologists are increasingly vocal asserting that what students do with their observations is of paramount importance. How much they can store is of relatively little consequence--books and data banks now have that function.

The result is that social studies curriculum must be process-oriented, insuring an active learner curriculum. That is to say that teachers need to be concerned with what the student will be doing with subject matter content he comes in contact with. The learner needs to be helped to act upon data at his disposal to keep his cognitive house in order. A process-oriented curriculum is easy to implement in social studies because it is concerned with truth claims. It is probably premature to advocate a particular structure for validating truth claims because a variety of structures appear acceptable. Therefore the process chosen could be any one of several methods of investigation, e.g., Bloom, Taba, California framework, Fenton.

Regardless of the methodology to be employed in the design the paradigm begins to get meat on its skeletal outline when the designer goes further to apply hard criterion questions to topics, themes, concepts, generalizations, disciplines, et al which vie for inclusion in the curriculum.

*Does the subject matter provide direct means by which the learner can come to grapple with immediate survival threats?

*Does the subject matter provide means which will aid the student for living in the twenty-first century?

If each of these questions can be answered in the affirmative when applied to subject matter items fighting for inclusion, then progress toward an articulated scope and sequence curriculum is begun. If the answer is no to one of the criteria, then the item may be appropriate, though it would best be placed in a ready reserve category. If the answer is no to both questions, that item must be discarded.

It makes absolutely no sense to have students interface learning experiences which are unprofitable for them either today or tomorrow. Curriculum content items must have high probability for direct day-to-day applicability. It is an outmoded notion that social studies teachers should expect any student to memorize the place of birth of every American Secretary of State because he might end up on a T.V. quiz show someday and win lots of money when the M.C. asks, "Where was Philander C. Knox born?". It may sound ludicrous here, but that justification has been used for many student assignments.

Clearly a major concern in curriculum development rests in the potential for the transferability of learning.

*To what extent will the learning activities dictated in the curriculum be transferable, enabling the student to be rational about human behavior and social interaction?

The highest degree of certitude for affirmative responses to this question occurs when process becomes proper content, simultaneously with the development of replicable analytic concepts. The former is concerned with intellectual tools which equip individuals to solve problems related to human behavior and social interaction, while concepts aid the individual in keeping his

cognitive house in order. Process tools and analytic concepts are minimal requirements for any social studies curriculum. Their identification and employment may be the key to a curriculum's success.

The next step in curriculum development is to construct some outlines which can result in a potent K-12 articulation. Social studies finds itself in a particularly frustrating position because it has adopted neither a common terminology nor a scope and sequence, as have many other areas of the curriculum. It is only as an articulation is agreed upon that students will be able to easily transfer their knowledge and intellectual tools from year to year with a minimum of confusion. K-12 articulation will provide for the common use of terminology (whether intellectual processes or concepts) which the child can expect to use over the thirteen years. By relying on a common problem-solving process, the student can begin to make significant headway over the years. If, on the other hand, the child is confronted with Taba's terminology one year, Fenton's another, Oliver-Shaver-Newman another, the California framework another, Bloom's in another, followed by Brandwein's, there will probably emerge nothing but confusion. This is not to suggest, however, that the student should not learn that there are various intellectual structures to solve problems. Indeed an individual may find that an eclectic approach is best for him--but a set of commonly agreed upon terms will ease the learning burden in the meantime.

Articulation can also provide some guarantees for a diversity of subject areas--whether discipline-oriented, time-oriented, or spatially oriented--which a non-articulated program may run into. The typical scope and sequence which established U.S. History in grades five, eight, eleven (and the freshman year in college) is a classic example of such a faux pas. The kids get the same discipline-time-space content at least three times--no wonder the social studies curriculum ranks at the bottom among student favorites.

If articulation fails to be implemented K-12, there is serious chance of new curriculum maintaining this status.

*To what extent will the student be exposed to a range of human and social settings in the K-12 scope and sequence?

To use Taba's terminology, a spiral curriculum is the most functional. Such a curriculum builds year after year on process skills and major concepts needed for human understanding. This type of design gives some assurance that specific skills, concepts, and learnings are appropriately placed, regardless of settings established. Thus the more basic levels of the humane survival paradigm would be introduced and developed as soon as developmentally possible and then programmed into a dynamic sequence. The most basic and predictably functional concepts for the learner can also be sequenced. Concepts concrete in the learner's experience followed by those which require more abstract experiences can be planned. The subject matter is then appropriately determined. The subject matter becomes illustrative of the processes and concepts the child is able to handle. The question to be asked as the curriculum is developed is:

*Is the curriculum based on a scope and sequence reflecting learner development of intellectual capabilities and predictably useful concepts which guide subject matter selection?

As a tangent to the above, yet a fundamental consideration,

*Do the content areas selected have potential for appropriate cognitive dissonance?

All of these criterion questions point out the tentativeness with which curriculum plans must be developed. Warrantable curriculum decisions once made may change dramatically in a few short days or months. The curriculum demands constant vigilance by teacher and student.

Nothing has been said about materials. Their omission has been deliberate--the reasons should be evident from our position on curriculum

design. In view of the warranted prediction that events (i.e., potential subject matter) are going to come at us even faster than at the present, the teacher might best prepare him/herself to take up guerilla teaching-- i.e., develop the ability to depend upon his/her own resources to teach rather than to depend upon the book, the unit, or the course outline.

It is to say that the success of a social studies curriculum of humane survival rests with the teacher implementors.