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# School/Community Cooperation: Action-Involved Learning

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SCHOOL/COMMUNITY COOPERATION:  
Action-Involved Learning

A Thesis Presented

By

Joyce Elaine Pearson

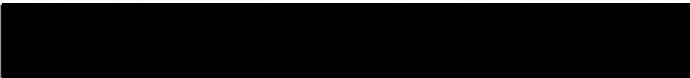
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## INTRODUCTION

Since education/learning occurs before and after formal schooling, schools have no monopoly on it. In fact, education happens as people live and change and wherever there is intelligent action. Schools can benefit from wider intelligent action and can increase young people's learning through co-operation with the changing world.

Such changing speaks to action-involved learning and encourages a concept of a dynamic, interactive world. It contrasts to the Alexandrian and Platonic/Aristotelian concepts of a static, closed universe, where ideas are unchanged and fixed and where an external (authoritarian) authority pre-determines knowledge. The latter system puts the cart before the horse, by decreeing learning through order regardless of interest. An interactive, more democratic system engages one's interests first, letting progress proceed by student initiative.

The contrast between a priori/traditional education and action-involved community education is great.

### ACTION-INVOLVED LEARNING

All life is education

Education requires participation

Public school should be primarily concerned with the improvement of community living and the improvement of the social order.

### A PRIORI/TRADITIONAL LEARNING

Education is gained only in formal institutions of learning.

Education is adequately gained through studying about life.

School systems should be primarily concerned with passing on the cultural heritage.

The curriculum should receive its social orientation from major problems and areas of community living.

The community should be used as a living laboratory for learning.

Public school classrooms should operate democratically, encouraging student initiative.

The curriculum should be oriented in relation to the specialized aim of academic subjects.<sup>1</sup>

The community relates to students only as representative of the life they are preparing to enter.

Public school classrooms should be conducted by subject matter 'authorities' who know what students ought to learn and who teach by precept.<sup>2</sup>

As this thesis espouses, it is action-involved learning that can well be reinforced in the public schools. The great end of life is not knowledge, but action (Montaigne), i.e. thought tested out in action. To leave out actual living from public school education is to leave out its heart. For it is active living that makes people what they are. In so involving young people in active living, schools will teach young people HOW to know rather than what to know.<sup>3</sup> Such 'HOW LEARNING HAPPENS' is the heart of education.

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<sup>1</sup>The first eight statements (four in each column) belong to Samuel Everett (1938), In William Van Till, SECONDARY EDUCATION: School and Community, p. 270. (The column headings are mine.)

<sup>2</sup>The last four statements (two in each column) are my own additions to Everett's ideas, adding further pertinence to my thesis.

<sup>3</sup>Dayle M. Bethel, MAKIGUCHI, THE VALUE CREATOR: Revolutionary Japanese Educator and Founder of Soka Gakkai, (New York: Westherhill, 1973) Makiguchi expresses the distinction similarly, between the 'dialectical model' (learners as passive recipient) and the 'dialogical model' (learner as dynamic organism interacting with his environment and changed because of it. There are many parallels between Makiguchi's thought and that of school/community co-operation.



To do this, educators who believe young people to be our most valuable asset and who are interested in both how learning happens and the implications behind findings regarding how individual consciousness develops will do well to carefully assess and consider the methods by which they influence those individuals whom they encounter. Four very important questions for them to consider are: 1) what 'learning' is (i.e., what individuals perceive), 2) how learning happens (i.e., how it becomes part of an individual), 3) what they want young people to learn, and 4) how they can help them do that.

The first consideration - perception - deals with consciousness and how individuals see things. Psychology and philosophy as well as our own experiences reveal to us that we see things autochthonously, no two people constructing their world in the same way nor learning from the same information. Each person constructs his world from his perceptions (those things he selects from his environment) and transforms only significant and meaningful experiences into learning. His consciousness, therefore, consists of a "system of vital relations which binds (him) the subject to others and to the world."<sup>4</sup> and he uses these perceptions as directives for his actions.

The second consideration for educators to be concerned about deals with how people fit information and experiences into their world, i.e., how they use their perceptions. Since people learn ONLY from the

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<sup>4</sup>Henri Ey, CONSCIOUSNESS: A Phenomenological Study of Being Conscious and Becoming Conscious, p. 3

perceptions they themselves make from their experiences, their perceptions spring from what their experiences mean to them. They do NOT learn from another's perception or knowledge unless it also has meaning for them. Nor will they necessarily ascribe meaning to something just because another does. Their realities become functional for them and are based on the USE they can (and do) make of their perceptions, i.e., how they fit these perceptions into their world. People change as they learn, nothing having been learned if no change takes place<sup>5</sup> it is only those perceptions upon which people act in some way that become learned. All others become extraneous unless they too can later be sifted out to have meaning. Although innumerable data comes to an individual, his brain uses its capacity to disregard those which have little or no significance to the reality he is constructing. The brain goes through a natural selection process, constantly making patterns and paths of those elements which influence the individual's life.

The third consideration - what educators want young people to learn - is individual and will differ amongst educators. For me, an educator's job is to help individuals develop patterns which enable them to deal well with life, to know how to deal with tomorrow and to think situations through in terms of consequences to themselves and to others.

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<sup>5</sup>To be expected on tests to repeat these facts as they were written down (to repeat them as memorized) instead of seeing how one can USE them misunderstands the nature of learning and the (conscious) mind.



The fourth consideration deals with how educators can help young people learn. In order to do this, educators will have to discard assumptions that are antithetical to learning, such as the assumption that knowledge is only handed down on authority, is fragmented and meant to be dissected, is segregated from daily living, involves right answers, and must be quantitatively measured.<sup>6</sup> They will have to replace these assumptions with methods that correspond to actual perceiving: to take into account that one's education depends on the environments he encounters and that it consists of the patterns and arrangements he makes based on these environments; that one's knowledge is what he extracts and creates from situations only in respect to the experiences and purposes he already has and understands; and that one only learns and retains that which 'fits' (positively or negatively) into his experience and purposes. When educators take these into account, then, they can help young people learn HOW to use necessary skills for life, both academic and social, and to gain the confidence and interest to be in charge of their own learning. They can

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<sup>6</sup>Earl C. Kelley, EDUCATION FOR WHAT IS REAL, p. 15-23, listed ten assumptions in 1947 that, by and large, still are evidenced in the methodologies of educators today. In his book, his major hypothesis is that one can not learn by authority but only by experience. He documents Adelbert Ames' very significant findings on perceptions and writes implications for education. In the preface of this excellent and noteworthy book that should be required reading for all educators, John Dewey writes that these principles are more significant regarding the growth of human beings than any previous ones. Postman and Weingartner in their book, TEACHING AS A SUBVERSIVE ACTIVITY, refer to Kelley's book as the best book on education in the past 20 years (1947-1967). Its principles apply with no less importance/vigor to the present educational world. See Appendix for these ten assumptions.

do well to help them do these things by arranging for them to have concrete experiences to relate to and by 'conducting' education under real life conditions whereby young people will learn to use information that is important to these situations. They can help young people arrange and initiate experiences with different kinds of people who use concrete data and who have concrete 'problems' that already have meaning for students because they have chosen to be involved in that situation and either see or are curious about the purposes and experiences these situations entail. They can let young people develop their own needs through contact with these 'real' people doing real and relevant things and can let them experience living in a co-operative setting rather than a competitive one.<sup>7</sup>

Others have defended a point of view that formal learning ought to be done in an academic setting. They make favorable arguments for an academic education, these arguments, of course, needing to be considered (although not in this thesis). This thesis speaks to community involvement as being a good and rich setting for learning; it does not declare that school/community co-operation projects are essential for learning either for increasing one's skills (thinking and other), data, or attitudes or for increasing one's responsibility and ability to make self-directed decisions.

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<sup>7</sup>Earl Kelley again speaks so well in this regard. "(Co-operative living) is the only way of life we have never tried on a large scale, and becomes our only remaining alternative." We can not afford to train our young people to be isolated in the world nor to be unconcerned about anyone but themselves (to be strictly competitive). loc. cit., p. 107



Those who have not had the opportunity for formal education have put together their education from the experiences that came their way and from those they sought out. Since we are all constantly 'putting together our education' in this fashion, schools can well tap into this natural method, both 1) increasing the percentage of learning by thus using this more natural method (learning through relevance), and 2) legitimizing the 'instinctive' way of learning. Students often dichotomize education into that which is done in school and that which happens outside schools. A school/community co-operation project offers a bridge between these two elements of life. It provides an illustration that the two need not be separate and that 'academic' learning made relevant and 'daily' learning made increasingly academic strengthen one's learning. It would indeed be difficult and taxing to construct all of students' learning into school/community co-operation projects. But, on the other hand, it would be unwise to ignore their worth.

If we only hear a thing  
We soon forget it;  
If we see it,  
We remember it,  
But if we actually do it ourselves  
We know it.

(Chinese proverb)<sup>8</sup>

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<sup>8</sup>Samuel Tenenbaum, Ph.D., p. 195

Commensurate with the aforementioned considerations, this thesis provides a rationale for the ten-week school/community co-operation project I directed and facilitated at Arlington High School, Arlington, Massachusetts in Spring 1985. The rationale is shaped by three main concerns: responsibility and responsible decision-making, community involvement, and underlying critical thinking and creative thinking skills. Besides elaborating on each of these concerns, I relate the Arlington project to each concern in the chapters devoted to them.

## Chapter 1

The Arlington High School school/community co-operation project was an experiment in integrated learning and an involvement in the PROCESS of learning, using a focus on community involvement and communication skills to achieve a goal. The process involved students not as static learners but as active learners gaining information beyond the classroom and traditional way of learning and moving towards an end they had a part in creating. The project extended students' lives into the community by letting them undertake a project which entailed and involved the community in order to complete it. Students initiated contact and used community members as resources, those community members becoming an integral part of both the learning and the end product - a 60-minute video documentary on their town Arlington as projected for the year 2000.

In chapter 1, I discuss integrated learning, the reason for the project (the student needs it fills), the proposal that initiated it, its master and hypothetical plans, including aspects that were not covered, the actual project with its week-by-week activities and comments as to its results. Chapters 2, 3, and 4 elucidate the principles that guided it.

## Chapter 2

My primary concern related to the idea of responsibility is to emphasize the concept of 'Responsibility FOR' - that of understanding one's responsibility for his own direction, involving the need for establishing one's dependence on self for making decisions. I see the crux of the responsibility issue revolving around the direction of the mind - with the parameters of one's life being constantly created, and a person having a clear influence on his own life - where one is the creator of his own personal reality. I explain responsibility FOR and decision-making as the key and central notions of the concept of responsibility, 'Responsibility FOR' being divided into causation before and causation after events and both having additional meaning in the phrase 'being responsible'. After discussing the pre-conditions of a responsible person and the problems in the 'hidden curriculum' of schools that hinder responsibility, I show that responsibility entails making responsible decisions and understanding the sequences and consequences of actions and relationships, and I discuss the situations



and activities that encourage such decision-making. Lastly, I discuss projected outcomes of responsible decision-making and how they were enhanced in the Arlington project.

### Chapter 3

The communities in which we live are our windows to the larger world. They help develop for us our underlying approach to the world and help create our vision of ourselves in it. Without a community, we live in an island of isolation that stifles mature development.

In chapter 3, I explain the community and relations within it to be everyone's environment and to be the basis for all learning. I expand on opportunities implicit in community involvement - social action, character development, multi-dimensional learning, the addition of affective learning to that of cognitive learning, and the taking of initiative - following this with a definition of the different focuses of a school/community co-operation project in which I also explain its difference from several other types of programs. I conclude the chapter with an explanation of the community involvement in the Arlington project and benefits of such a project on both students and the community.

### Chapter 4

Although we all think by virtue of being human, we can fine-tune our thinking by fostering specific attitudes and attaining

specific skills. While converging at all points, these skills and attitudes comprise the two faces of a 'thought' coin, both reflective and both assertive, one face being that of critical thinking, the other that of creative thinking.

In chapter 4, I discuss these related and compatible ideas. The first, critical thinking, involves 'reflective scepticism'. To this definition, I add the background of prominent writers on critical thinking, grounding their thoughts in an environmental example. From these thoughts, I discuss critical thinking attitudes in the classroom, including their contradiction, indoctrination, followed by a focus on the development of critical thinking in students through the critical spirit of teachers and their teaching for critical thinking. I, then, show the values of critical thinking in the community and illustrate the critical thinking that occurred in the Arlington school/community co-operation project.

The second, creative thinking, involves seeing a 'whole' where before there had been just parts. Within a definition of creative thinking, I discuss both the creative process and the creativogenic milieu, completing the definition with an explanation of attitudes and methods that enhance creativity and those that inhibit it. I specify how the Arlington project encouraged creativity, how it was creativogenic, and that it culminated in a creative product.

The thesis also includes an appendix. In it are included initial proposals, curricular aids<sup>9</sup> letters and an article regarding this project, Ennis' 1984 paper on Critical-Thinking/Reasoning, Kelley's ten assumptions, and Postman and Weingartner's remarks on a community as a living laboratory.

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<sup>9</sup>This 'curriculum' was created as it evolved, not pre-packaged, 'canned' or pre-determined. The Arlington students were not given the opportunity to move into an already furnished education resulting in 'comfortable minds' but to furnish their own minds. (See e.e. cummings' poem "the cambridge ladies".) This method not only supports my philosophies of learning as discovery and of the role of educator as a guide/facilitator but also of students as intelligent beings who need to be able to use their capacities of thinking. This idea of a developing curriculum makes use of dispositions, skills and strategies of intelligence and exhibits confidence in leaders and students to gain from bringing about X goal.



## C H A P T E R I

### THE ARLINGTON HIGH SCHOOL SCHOOL/COMMUNITY CO-OPERATION PROJECT

#### Integrated Learning

An integrated view of learning and maturing is not new. John Dewey emphasized it in the early 1900's, decriing the isolation of school from life where education was thought of only as a preparation<sup>10</sup> and advocated reform in education.<sup>11</sup> William Heard Kilpatrick, one of Dewey's followers, also sought reform and spoke for co-operative activities for community improvement as the best educational vision.<sup>12</sup> Other humanists, likewise, have put emphasis on relevance in education and have stressed integrating the affective and cognitive aspects of a person's life. In the US in the 1970's, increasing numbers of private and governmental organizations experimented with alternative methods of educating young people, using identity education, increased physical

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<sup>10</sup>John Dewey, DEMOCRACY AND EDUCATION. p. 1-9 See also John Dewey, HUMAN NATURE AND CONDUCT, (New York: Modern Library, 1922) where he speaks of one's surroundings as forming him and where he decries the unreal separation of man (students) from his surrounding.

<sup>11</sup>John Dewey, EDUCATION AND EXPERIENCE, in Reginald D. Archambault, (Ed.), JOHN DEWEY ON EDUCATION, Selected Writings, p. 373-74

<sup>12</sup>William Heard Kilpatrick, EDUCATION FOR A CHANGING CIVILIZATION

and social interaction, values clarification and various methods of practical evaluation (Simon, Raths, Weinstein & Fantini, Kozol, Leonard).

Throughout history, people have always learned skills and knowledge from practical experience within their immediate environment. They have come to know their world by knowing how to use elements in it. These elements, in turn, have increasingly connected their lives to the world around them and have infused their lives and world with meaning. This type of learning, i.e., integrated learning, surpasses the incomplete, theoretical head knowledge method and makes sense to the learner by having immediate purposes, results and rewards.

Necessary to this learning is the ability to confront ideas personally and with a view towards a new way of seeing. This new way of seeing, in turn, necessitates thinking skills - critical thinking skills and creative thinking skills. These thinking skills (discussed further in Chapter IV) complement and round out the ideas of responsibility (sequences and consequence) and decision-making (re-ordering one's actions towards a goal). These thinking skills and the ideas of responsibility and decision-making are mutually compatible, i.e.,

an understanding of being accurate and seeing connectedness increases an understanding of responsibility; an understanding of how to accomplish a goal increases an understanding of decision-making;



individuals who see connections, and accomplish goals can fashion something new out of raw materials, be in charge of their actions and be creators, makers, designers, initiators.

In addition, accompanying attitudes foster new relationships between student and self, student and information, and student and other people.

Arlington High School School/Community Co-operation Project

I espouse learning approaches that increase the understanding and integration of cognitive and affective elements in one's world and firmly believe that meaningful learning occurs when a person explores his developing knowledge and skills (both critical and creative ones) through application to his immediate environment/world. Compatible with this and out of a solid belief that young people not only need to be more aware of their community and more in contact with members of their community, I proposed and devised a school/community co-operation project to be implemented in a high school setting. The project plan took shape as early as October 1984 by way of initial contact to Arlington High School, grew into a specific proposal written to the superintendent, principal and school committee in November and was approved in late December.<sup>13</sup> The project commenced on February 4, 1985.

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<sup>13</sup>See Appendix for letters and proposal

Reason for project: student needs. The reason I became interested in such a school/community co-operation project was that I strongly saw capacities within young people that needed to be increasingly addressed and saw such school/community co-operation projects as facilitating these needs. I saw an increasing need for young people to be exposed to self-initiated learning, whereby they could be agents of their own growth, pursuers of their own educational goals, and pathfinders/pathcutters rather than passive followers of a course set down and laid out by someone else for who-knows-what aims. I saw an increasing need for young people to accomplish challenging and meaningful tasks and to come to better understand the ideas of responsibility and decision-making by actually making an increasing number of practical decisions and by learning first-hand what is involved both in making one's own decisions, and in carrying out decisions to bring about X end. I saw a need for young people to have a broader scope in learning than just learning data - a scope that connected them to the world around them, that strengthened harmony within themselves and between themselves and other people, that lessened friction (and/or enabled them to handle friction) and that allowed for personal growth/maturity, i.e., growth through contact with lives as opposed to contact with data. I saw an increasing need in our technical and mechanical (even robotic) world for people to be able to use their intrinsic capacities and inner resources of curiosity and

resourcefulness and to search for more learning than they currently had. I saw a need a) to combat alienation and isolation caused by feelings of uselessness and disconnectedness which sometimes resulted in vandalism, other youthful offenses, estrangement (dropouts, kickouts, and actouts), wasted and untapped talent, and b) to enhance positive social attitudes towards living and working together.

I believe that in order for young people to be responsible decision-makers, i.e., to not only initiate learning but to be critically aware of it - to be responsible for initiating and understanding the consequences of what they do or will do AND to make critically thought-out decisions - it is necessary for them to exercise thinking skills; and that in order for them to enlarge their world and to greater understand and make a positive contribution within their community, it is necessary for them to combine the aforementioned cognitive skills of critical thinking and creative thinking with the affective interpersonal skills that come with contacting members of the community and evaluating and reflecting on such contact.

Therefore, the overall thrust of this school/community co-operation process, this working towards a product in the community, was to aid in students' personal growth and maturity, i.e., making decisions and taking responsibilities, while having them engage in an academic and community pursuit.



Arlington project proposal. The proposal that was sent to Arlington High School highlighted goals, rationale, objectives, projected outcomes and results, a projected week-by-week breakdown of activities and several options of topics that could be explored. Fundamental to any of the options was the opportunity for direct involvement with members of the community. This direct involvement necessitated a 'going beyond' the walls of the classroom and desks in rows and involved learning IN the community rather than learning about it. It required living one's learning rather than learning about the living others do. This became the point around which the school/community co-operation project hinged - community involvement. Without this element, any of the possible projects suggested in the proposal would have relegated the experiment-in-living to a looking-glass view and discussion of it. In addition to community involvement the suggested projects involved as much as possible putting together a product in the manner professionals do - by being actively involved, not solely passively observant.

The proposal was designed to have a language arts/humanities focus, although the idea of school/community co-operation applies to all disciplines. It stressed direct language arts skills of listening, interviewing, speaking, and writing and more general, more indirect skills of collaborating, planning, making decisions and taking initiative.

The topic of the original proposal was to investigate the future impact of a growing number of older people on their community. The proposal was broken down into ten weeks thus:

- Week 1 - project definition                      We will set goals (what we want to do and know) and clarify the issue. We will also discuss how to present the results of our efforts and how to evaluate them.
- Week 2 - brainstorming                              We will define the situation, choosing from alternatives what specifics to focus in on. We will plan for and discuss interviews and research techniques.
- Week 3 - preparation                                Small groups will plan their own part of the project and participate in role play (mock/pre-interviews).
- Week 4-8 - investigation and guidance        The instructor will meet with small groups for guidance, feedback and evaluation.

|  |  |
|--|--|
| Week 9 - presentations of findings<br>and research | Students will report their findings by way of oral or written work, e.g., mini-magazine, video show, etc.        |
| Week 10 - overall evaluation                       | Students, school, and community members will have an opportunity to evaluate the overall benefit of the program. |

The proposal was flexible and spelled out only as a framework that would, of course, be filled out and altered as soon as teacher met students.

Integral to my philosophy and to this proposal is/was the idea that learning is a living experience not to be too specifically prescribed beforehand, although pre-mediated. It is to be lived and experienced as daily life is by one who has an overall plan and who has willingness, an ability and a growing knowledge of how to explore opportunities. Integral to the methodology is/was the idea that learning occurs best when ideas are combined with actions, that knowing is doing and doing is knowing and that a holistic approach integrating knowledge from many fields provides quality learning. The project called for a leader/facilitator rather than a curriculum.

The proposal was accepted and a project (a video documentary) decided upon. The students had expressed their desire to their regular teacher, (the co-operating teacher in this project) to make a

television documentary even before I met them after having been given vague knowledge of my proposal. Immediately when I met them the very general idea of thinking about the year 2000 emerged. My proposal topic of studying the future impact of a larger percentage of older people in the community was, therefore, broadened to include a more general look at the future, i.e., the year 2000.<sup>14</sup>

Master plan. After this initial student-to-teacher contact, I then devised a hypothetical week-by-week, day-by-day plan. The following hypothetical plan speaks to the general topic of the year 2000 and represents a master plan from which students and teacher would work out actual activities. Both the master plan and the subsequent actual day-by-day workings constantly evolved, as living interaction between students, teacher and goals does. In retrospect, the master plan includes areas/activities that were not actually covered.. However, I feel that the master plan (parts or whole) can also apply to other future student-initiated school/community co-operation projects with only slight alteration, scaled, of course, to the time allotted.

Hypothetical week-by-week plan. The first task of the student-initiated project was planned to be BRAINSTORMING - brainstorming on

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<sup>14</sup>However, eventually students came to see the age factor as almost central to their study.



what possible tasks might be undertaken, with a view to encouraging and promoting as many alternatives as possible, letting students' minds be open to more and more possibilities and setting the tone for future choices to be student-initiated. This planned objective of the first week would include prompting as much thought in and from students as possible related to the task (both positive and negative thoughts) and helping students culminate their ideas into a CLEARLY-WORDED STATEMENT OF PURPOSE. Students would brainstorm and decide not only on the OVERALL TOPIC but on the METHODS OF APPROACH and on the END PRODUCT expected.

Also in the first week, students would be exposed to some obstacles that might hinder their progress. A number of PROBLEM-SOLVING PUZZLES would be used - to point out restrictions people assume they must work under and conventional and customary patterns and methods people readily use to approach situations. The number of such puzzles that would be used would depend on the receptivity of the class. Short discussions as to how one tried to solve the problems and why they were difficult would follow all problems.<sup>15</sup>

In this week also, students would CHOOSE PARTNERS to work with, with a view to enhancing the sociability and interdependent idea of community, and students would make initial decisions as to what SUBTOPICS they and their partner would explore and investigate.

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<sup>15</sup>See Appendix



Week two and three would include HISTORICAL RESEARCH, students using the school library, the town library, and any other sources that would aid them in their information-gathering. The emphasis would be on getting a grounding in the recent (and perhaps even somewhat distant) past so as to have a base to understand what changes have occurred in the town and why, to project into the future and to predict changes that may/may have to occur.

During these two weeks and, if necessary, into the next weeks, GUEST SPEAKERS would be scheduled to give insight into the topic and subtopics. Students would initiate as many of these meetings with outside speakers as possible, although a great deal would depend on how familiar and comfortable they felt with knowing how to set up these opportunities. The teacher and students would ROLE-MODEL and practice how to make contacts (how to initiate action).

Each student would begin a DAILY JOURNAL, recording thoughts and information pertinent to his topic. This journal would not be graded but would indicate students' progress. In it could be included:

newspaper and magazine articles on the future and student comments on them,

newspaper and magazine articles on students' subtopics and students' comments on them

comments elicited from family and friends,

lists of questions to find answers for,

people important to their subtopic,

an appropriate title for the project and why,

and, anything else pertinent.

The journals would be turned in at the end of the fourth week to check students' progress. The teacher could best help students know how to keep a journal by spending a few minutes each day displaying articles she had collected on one of their topics, mentioning comments from her own family and friends, and perhaps having them write for five minutes on a related issue (for inclusion in their journals). Students should not be assumed to know how to keep a journal. A MASTER JOURNAL kept by the teacher and displayed in the room as an example would be helpful.

Week four would include the VIEWING OF FILMS and other media (in this case, documentaries<sup>16</sup> to give students an idea of similar end products. Discussion would follow in each case, regarding what parts of these media presentations they could use in planning their own product. Entries could be made to students' journals.

Teacher preparation in a community collaboration project would be ever-constant, changing with the situations that arose each day. Although this is true, nevertheless, the following preparation would need to be done: a) a teacher would need to make groundwork contact with members of the community to facilitate students being able to contact them and to be successful, b) plans would need to be made 2-3 weeks in advance in order to schedule films and videos, c) a teacher would need to help students know whom they might contact and how to do so. The teacher, as colleague, would need to initiate many of the

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<sup>16</sup>See Appendix

activities so that students would, then, be able to be successful in completing them.

Week five would be planned around INTERVIEWING, learning how to set up interviews and how to conduct good interviews. MOCK INTERVIEWS with teacher and classmates would give students confidence, find necessary weak points and work things out before actual community contact. Practice interviews could be continued into the following week in front of video cameras.

Week six would be spent with MEDIA SPECIALISTS, learning how to OPERATE VIDEO EQUIPMENT, learning tips on interviewing people and learning something about how to produce a documentary. Students would have several opportunities for hands-on experience in the studio and classroom so that they would feel more comfortable and knowledgeable in actual circumstances.

Emphasis during the next three weeks, weeks seven, eight, and nine, would be given as needed. The following needs would be met. How the tasks would be done would be decided by students and teacher.

1) Students would need to continue any 'historical' research they discovered to be pertinent to their subtopic. Most of this work would have to be done outside of class time because of individual and subtopic differences.

2) Students would need to CONTACT MEMBERS OF THE COMMUNITY that they wished to interview. It would be suggested that each student interview three people, using tape recorders if possible, gathering



notes to, then, use (along with their partner) in their subtopic script. They would also have to decide between them which 1-2 people they would like to re-interview on video for the final production. This would be difficult to do during class time.

3) Students could spend group time DISCUSSING what they will have discovered so far. (Since this will be a group effort, they all will be able to benefit from knowing what the others are doing and such knowledge can spur them to initiate their own actions.) They could also spend time CRITICALLY ASSESSING the information and issues they are encountering. (See Chapter IV of this thesis.)

4) Students would need to VIDEO SCENES OF THE TOWN to complement the interviewing they would do and to give an overview of the town in the introduction and conclusion. Some of this could be done during class.

5) Students would need to DO FINAL VIDEO INTERVIEWS with the interviewees they chose. Some of this also could be done during class, although time schedules would, no doubt, conflict and require out-of-class time.

6) Students would need to WRITE THEIR SUBTOPIC SCRIPTS, the introduction to the documentary and the conclusion. Students could work separately on this out of class and then bring their efforts together with their partners for in-class collaboration and refinement. In-class script writing could nicely alternate with class time videoing (scenes of the town), different students electing to do X one day and Y the next.

It is important in student-initiated work that it not be pre-planned by a teacher but that teacher and students both know and decide the tasks that need to be done and make decisions as needed. Although activities proceed more slowly when they are not teacher-decided, the trade-off of accomplishment and pride on the part of students when they have done something on their own is worth it.

7) Students would need time TO SHARE WITH THE GROUP as a whole the gains/results and obstacles they were encountering. This would not only give them moral support and new ideas for them to try but would create a sense of solidarity among them supplementary to the increasing community spirit sought for in the project as a whole. One day a week could profitably be spent doing such sharing.

Week nine would need an additional time set aside for students to put the FINISHING TOUCHES on their product. Script editors would need to consult with each group, read group scripts, giving comment on understandability and continuity with other scripts. Narrators would need to write or get help writing the introduction and conclusion and any intermediary segments that needed doing. Music co-ordinators and student video editor would need to decide which scenes should go with which section and what might be still needed.

Week ten could be well-spent making AN EVALUATION of the project as a whole, the process of learning, and the benefits gained. Thank you letters to participants would need to be written and time set for viewing the end product, inviting all participants and crucial

people. A few days of discussion should focus around what was particularly helpful and what could have been done more smoothly. Participation by all members of the student cast would be important, perhaps putting discussion ideas in writing for the sake of clarity. To further concretize some of the important learning points of the project, a questionnaire/evaluation sheet could be devised, touching on many aspects. A student-devised evaluation would further support the thrust of student-initiated learning; a teacher-devised evaluation would add stress to other aspects, such as organization, fact versus opinion, critical thinking, consequences, community-mindedness and problem-solving.

If time permitted, a check list of what was necessary to make this documentary happen could be devised, could be made available to all and also could be made visible in the classroom for all to see.

The final product would be teacher-edited and viewed after several weeks. Other suggestions as to its use could be discussed.

Actual school community co-operation project. Out of this hypothetical (master) plan came the actual 12-week project that the nine self-selected senior students at Arlington High School (five girls and four boys) and I did. The students participated in the project in lieu of writing a term paper for the Advanced Journalism class at Arlington High. They agreed to participate solely because a suggested outcome of such a project could be that of a video documentary. The project started, materializing from that wish.



The project consisted of three basic parts: a) work I did on my own, 2) work students and I did together, and 3) work students did on their own. Initially, after the school had approved the proposal, I contacted:

town employees, soliciting their support,  
Town Hall and its departments,  
town libraries,  
businessmen through the Rotary Club,  
the Chamber of Commerce,  
and, some private citizens.

Through them I compiled a list of names of people students could then contact for their part of the project. (Throughout the project I found it necessary to aid students in soliciting information. Perhaps their long school experience of having information ready-made in book form contributed to this situation. In addition, the 45-minute bell-bounded sessions students were organized through during the day contributed to their difficulty in soliciting information.) I also contacted media specialists who could help us make our ideas a reality, specifically WGBH, the well-equipped and managed media center at Arlington High School, and Arlington Cable Television.

Townpeople expressed great interest and willingness to cooperate and the school system's media center offered to provide video training for all of us. WGBH also offered to provide a 2-hour information/presentation of the making of documentaries and a tour of

their studios. The project met no resistance. Its implementation was not always smooth, but that was part and parcel of the learning experience. My self-assigned role was to be a facilitator of learning, helping the students draw from their own knowledge and common sense and from group collaboration to plan what they were going to do and how they were going to do it and, then, of course, to do it.

During the first week, students brainstormed topic, methods, and end product, what they knew, what they thought they knew, and what they needed to know, recording each other's ideas. By consensus they arrived at an acceptable statement of purpose for their project - "We are going to explore important changes the town of Arlington may encounter by the year 2000." (A study of the impact of an increasingly older population, my original proposal to the school, was tabled and left out of the statement of purpose but kept in mind as an underlying situation. The population distribution, in fact, became more meaningful to students as their project progressed.) My approach was to ask open-ended questions for them to think about,<sup>17</sup> to discuss among themselves and with others at home, and to work into their project. I was the catalyst (although not unchanged in the process). Classes always began by re-arranging the desks into a more learning-conducive circle. Students generated most of the ideas (though teacher-guided) and were given charge of implementing them.

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<sup>17</sup>See Appendix



After deciding on a statement of purpose, brainstorming and deciding subtopics each would take as his/her part of the project (students worked to two's except for the ninth member), students were given the second week and a third (vacation) week to begin historical research, finding out relevant information on their topic from library research (at least 15 years backwards to then go 15 years ahead).

Students chose the subtopics of:

- environment
- medical needs
- community safety (fire and police)
- fashion (later broadened to 'trends')
- education (added), and
- entertainment.

Students were required to keep a journal of information, possibly including research, magazine articles, comments from family and friends, and a list of questions to ask and people to use in their interviews. They were encouraged to collect material to decorate the room with - ideas and pictures related to the project. Each student was given a guide sheet<sup>18</sup> to aid him in his search, i.e. related topics, questions to think about and possible people to interview (my groundwork). They were also given sheets on where to find information at the school library, at the town library, and elsewhere,<sup>19</sup> and a

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<sup>18</sup>See Appendix

<sup>19</sup>See Appendix

sheet on experts on Arlington (gleaned from my groundwork research).<sup>20</sup> One day was spent listening to, asking questions to and taking notes from a talk by a town official (Director of the Town Hall Office of Development and Planning). It was because of this speaker that one student on his own initiative decided his topic of 'fashions' was unsuitable and unimportant to a study of 'important' changes the town may encounter by the year 2000 and decided to explore the topic of education.

During the fourth week, students shared with each other what they had done and what they had discovered so far, wrote about what they liked about Arlington and what community involvement they had been involved in, brainstormed on what needs a town has to accommodate, discussing which student would include which of the these town needs in his part of the documentary, and viewed and discussed four films on city and town life - an animated film and three documentaries. Students were able to choose these films from a cache I obtained from Boston Public Library.<sup>21</sup> These films gave them ideas on interviewing techniques, visuals, musics, and general documentary possibilities.

During the fifth week, students started planning their own interviews, visuals, and music. They chose their additional production tasks of narrating, co-ordinating music, co-ordinating visuals, editing scripts and editing the end product. Each student was to be

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<sup>20</sup>See Appendix

<sup>21</sup>See Appendix

responsible for doing video taping and for interviewing several townspeople on his topic, choosing one to be video-ed for the production. They decided the sequence of the video, projecting its time sequence to the approximate minute.. (It became longer, however.) Students also discussed how to contact interviewees, practicing mock telephone situations with their classmates, ending the week with an excellent two-hour talk at WGBH (public television), by one of WGBH's documentary experts regarding making documentaries and including a tour of the studios.

During the sixth week, students spent time discussing ideas for interviewing,<sup>22</sup> spent four days learning how to operate the video equipment (hands-on experience) and interacted with another townspeople on the bi-centennial oral histories he had made for the town.

Week seven was spent listening to another media specialist (from Arlington Cable Television), viewing students' first video 'shoot' (done over the weekend), doing more practice interviews with and without video, and making student-initiated timetables for completing the project, including many options and alternatives and contingency plans.

Week eight was spent alternately by students video-ing town scenes and writing their scripts. They video-ed as much as they could on each subtopic:

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<sup>22</sup>See Appendix



|   |                       |
|---|-----------------------|
| (e.g., scenes of ponds, parks, wetlands | police tracking room, |
| last remaining farm,                    | schools,              |
| hospital,                               | posters on alcohol,   |
| Visiting Nurses,                        | Friends of the Drama, |
| elderly,                                | cinemas)              |

and about the town in general

(e.g., historic monument,  
 historic buildings and cemetery,  
 annual April 15, (1775) parade, i.e., Revolutionary War  
 Commemoration and Paul Revere's Ride.)

One day was spent interviewing on video the Assistant to the Town  
 Manager and the Director of the Council on Aging. Weeks eight, nine  
 and ten were spent video-ing, scheduling interviews, writing scripts,<sup>23</sup>  
 and gathering loose ends.

The following week (spring vacation) students spent additional  
 time coming in to the school to finish interviewing and video-ing and  
 to finalize selecting music. Students eventually video-ed the  
 following people:

Director of Public Works - Environment Section,  
 Director of Nursing, Symmes Hospital - Medical Section,  
 Safety Officer/Community Safety - Community Safety Section,  
 Executive Director of Alcohol Awareness - Trends Section,

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<sup>23</sup>See Appendix

Town Selectmen - Education Section

Project originator (me) - This section was not originally planned but later added through student initiative,

Volunteer leader in charge of arranging entertainment for  
Arlington

Entertainment Section,

(the group interview with the Director of the Council on Aging and the Assistant to the Town Manager was also included in the final product.)

Time was spent during the first week after the spring break taping students' scripts. This was done during their classtime, extending the project to twelve weeks (counting two vacation weeks in February and April).

The students' part of the process had been finished, only to be brought together by me in final editing. (The school media center had specified that students could not use the editing equipment). The media center provided excellent help and guidance and as much access to editing equipment as I needed.

Duration of project. It is the duration of any project that decides, in large part, how much can be accomplished. Therefore, an interested teacher will use as many of the ideas as she and her students can use in the time allotted. This being so, many issues that

could be addressed will not get addressed. Nevertheless, a heartening thought - one trained in thinking critically and creatively will be able, through numerous opportunities, to help students focus on a particular attitude or skill, e.g., a fallacy of thinking or a common misconception or a controversial issue, and will be more effective for being able to take advantage of the moment.

In addition, knowing that any one project or even any one year in students' lives is not the only opportunity to expose young people to responsibility, responsible decision-making, a sense of community and accompanying critical and creative thinking skills is another heartening thought. A teacher will begin the process slowly and will build from there. She will not fill students' plates with wonderful, nutritious and beautiful food (ideal and hypothetical curricula). Such a plan does not guarantee that the food (all or any) will be digested. She will, instead, help students decide and carry out their own plan of nutrition.

#### Summary

Although activities had been arranged for students, integral to the project was the idea that as much as possible was to be student-initiated. Students DID plan the documentary, do library research, interview town employees and other people informally, video one interviewee for each section of their documentary, video scenes of the



town for background use, choose the music they wanted and write all of the scripts. They were helped to take on more and more responsibility for making this project their own. Teacher-oriented classes were minimized but teacher leadership needed to aid students who had less familiarity with task management.

### Evaluation and Assessment

It is not the purpose of this thesis to expand and elaborate an assessment of the project. Rather the thesis is a rationale on a thinking-oriented project. Nevertheless, comments on evaluation are pertinent and helpful.

Students gained more than a sense of facts and information. The facts they gained were valuable and broadened their picture not only of their town but also of its operations and of some of its people. However, a major part of their learning came from having to be responsible for making this production as much as possible their own product. They encountered obstacles in organizing and in co-ordinating with each other and with contacting town members. These obstacles/learning experiences could never have been encountered had everything been done for them. They assessed information as to its relevance to the project; they engaged in risk-taking throughout the entire project (in attempting the unknown and untried in projecting into the future, and in making themselves vulnerable through the

community involvement); they experienced more planning than they thought necessary, considering:

- a) sequences of action,
- b) options and alternatives to those actions,
- c) skills needed in order to be increasingly successful completing those actions (e.g. skills in interviewing), and
- d) their responsibilities for the entire project; they learned the responsibility of doing what needed to be done (no matter who had been scheduled to do it).

Evaluation of the project occurred throughout the 12-week time period. We assessed our needs, our shortcomings and our findings about the town. Students worked in two's, naturally coming to know at what stage they were, if they had fulfilled their self-chosen responsibilities, what needed to be done and how to do it. Since the school specified that the co-operating teacher would grade the students on the project, I could more easily maintain a chiefly supportive role (although students were geared to external coercion), leading them to understand more, rather than marking their performances on a scale of expectation. Because of the close-knitness of the group, students knew how they were doing and aided each other. Had we had more time and smoother time management, more thorough evaluation would have been done, helping us look at and learn from our mistakes and being able to 're-do' what we weren't happy with.

## Results

As the principal, the co-operating teacher of Arlington High School, and Director of Community Relations at WGBH all wrote,<sup>24</sup> the documentary is very good but it was the process of learning that made this project so unique. This process of the learning experience is argued for more thoroughly in succeeding chapters. Basically, it involved students learning to be in charge of more and more of their own learning by discovering their own strengths, using critical and creative thinking skills, i.e., using effective means to an end -- e.g. strategies, timetabling, planning, and interview techniques -- and by using members of the community as sources of information and as sources of learning experiences. How one 'plays the game' became more important than what one 'played'. The information one gained became less important than the manner in which one gained it. The thinking skills (both critical and creative) became the means by which everything was done. (See chapter IV)

The HOW's of this project outweighed the WHATs.

ACTION: gained experience

HOW TO: make strategies and time tables and meet project deadlines,  
 make group decisions as to what needed to be done,  
 explore research materials,

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<sup>24</sup>See Appendix



run a video camera and equipment,  
relate information to a topic,  
make relevant subtopics,  
collaborate with a partner,  
conduct a good interview,  
resolve group conflict,  
make assessments and decisions on one's own about X topic,  
take initiative,  
do something because it needs to be done,  
make educated guesses based on research and common sense,  
bridge the gap between talking about doing something and  
actually doing it,  
project into the future,  
think critically,  
hypothesize,  
organize,  
separate fact from opinion,  
brainstorm,  
create a product,  
interact with the community,  
solve a problem,  
tackle a task.

INFORMATION: gained knowledge

WHAT: facts about Arlington,

facts about X topic and subtopics (environment, medical,  
etc.),  
information on town needs and town living,  
information on people in Arlington, their jobs and ideas.

An additional result of this project was a very obvious solidarity among the nine members of the class. They saw themselves as a team with a goal, separated themselves quite distinctly from the other half of the class (not hostilely so, just unifiedly so) and formed bonds that will, no doubt, have lasting effects. In addition, they regarded me as a quasi-colleague who gave advice and assisted them in what they did, rather than as a teacher. Their interaction with each other, the community and the topic and all the action they became a part of more than compensated for the passive book-and-paper experiences they could have had connected with writing term papers. The pride the students animatedly exhibited when we debuted the documentary at a student's home in May clearly showed another result. One added bonus of that debut was when an interviewee excitedly suggested the town use this as town PR not only for its members but also for visitors and newcomers (e.g., Sister City in Japan). This was a timely year in which to do such a project -- the 350th anniversary of the town. (Arlington Cable Television showed the production three times during the month of June.<sup>25</sup> More than just a timely year, it was a methodology/program that believed in young people.

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<sup>25</sup>See Appendix

## C H A P T E R I I

### RESPONSIBILITY AND RESPONSIBLE DECISION-MAKING

Since both thinking makes our actions intelligent, but the power of thought also allows for error and mistake it is more than mere thinking that we need to cultivate in ourselves and others. The thoughts that guide our actions need to be deliberate, understood and unified towards a goal. Cultivating attitudes for the development of thinking (see chapter IV on critical and creative thinking) and learning strategies through which these attitudes can be channeled change disparate or random thinking into ordered and meaningful thinking. Such thinking with emphasis on systematic and positive responsibility can be achieved by decision- making. This decision-making increases our integrity and vision (perspicacity) and, through our efforts, evidences our willingness to be in control of our own learning.

It is to the techniques and strategies and to the consequences of such action that this chapter speaks - 1) to the strategies that connect us, with foresight, to a distant goal and that give us a greater sense of control over our thoughts, actions and lives, 2) to positive decision-making, and 3) to taking responsible roles in a project in the community. Through such strategies, we can give our goals meaning by connecting what we know with what we are seeking to better understand, we can explore the relation particular thoughts and



actions have to our developing ideas and actions and, then, we can use these strategies to carry through our ideas to completion. In turn, these strategies will themselves have been meaningful and relevant. They will, through the process of deliberation, have prevented us from jumping to conclusions or from clinging to X beliefs while refusing to acknowledge or accept the consequences of them. They will have unified our values (ideas of reality) and will have kept us from falling into the irresponsibility and hypocrisy of holding our thoughts separate from our experiences.

It is experience that gives responsibility three-dimensional and spatial dimensions; it is the relationship of experience that gives the concept meaning.<sup>26</sup> Because physical experiences give us such good learning experiences, when we experience physical dimensions we can comprehend the dimensions of responsibility.

In this chapter, I discuss different connotations of the concept 'responsibility FOR', both temporal and polar (positive and negative), involving causation before and causation after events. I speak of 'being responsible, the pre-conditions of a responsible person, problems in the 'hidden curriculum' of schools that hinder responsibility, situations conducive to responsible learners, activities aiding responsible decision-making, projected outcomes of

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<sup>26</sup>Words and physical experience (i.e., experiential learning) are as different from each other as seeing a painting is from experiencing the scene itself. Three-dimensional and spatial worlds (the scene itself) increase and improve our scope of vision, the scene itself adding the dimension of affect and enlarging our value systems by making them personal and physical.

responsible decision-making, goals of a school/community co-operation project, and how the Arlington High School school/community co-operation project enhanced responsibility and helped students be responsible decision-makers.

The following discussion of responsibility develops a framework for better understanding that responsible decision-making is the causal means that aids one to achieve his goal. In the discussion, I elaborate on this understanding of causality as the key that enables one to determine beforehand what he is going to do to achieve his goals.

#### Responsibility FOR X

Although there are two basic categories of responsibility - 'responsibility TO X' and 'responsibility FOR X' - with sub categories within each, this thesis, as well as school/community co-operation projects in general, speaks primarily to the ideas of 'responsibility FOR X'.<sup>27</sup> Responsibility FOR X is the key and central notion that links responsibility with decision-making.<sup>28</sup> For it is in decision-

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<sup>27</sup>Actually, since in situations involving choice, no person is obliged by a covenant who is not also partly author of it (Hobbes), all ensuing obligations, then, lead back to a responsibility to oneself. One has a chance to think about a situation, to choose positively or negatively about it and to begin that situation or not.

<sup>28</sup>Educators have a 'responsibility FOR' their students and for guiding them. But this hierarchical relationship is implied as a given and not the main focus of this thesis.



making that one engages his responsibility. The concept of 'responsibility FOR X' speaks of actions and motivation and refers to causation, which can be temporally divided into before an event and after an event. For example, a person is concerned about causality before an event when he plans a journey beforehand. He decides not only the direction in which he will go, but also points of interest he wants to encounter along the way. Also, as in the case of two Boston policemen who rescued a man from the Charles River,<sup>29</sup> a person may be responsible (causally connected) because X happened, i.e., responsible after an event. The two policemen were responsible for saving a life (and, of course, carrying out the rescue). Similarly, a person is responsible after an accident he has consciously or unconsciously caused and can be held accountable for it.<sup>30</sup> This kind of responsibility reveals a particular understanding of the nature of one's reality, one's position in it and his 'response' ability (ability to respond).<sup>31</sup>

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<sup>29</sup> \_\_\_\_\_, "In a Day's Work," Boston Sunday Globe, April 27, 1986, p.38.

<sup>30</sup>In France, a person is responsible to the government to pay for damages he caused by leaping in front of a subway train (attempted suicide). In Japan, even the family of the victim of a subway suicide is responsible to pay the damages incurred.

<sup>31</sup>Of course, an understanding of 'responsibility TO X' also reveals a particular understanding of the nature of reality, etc. Sometimes 'responsible TO' connotes a 'subject TO'; sometimes it connotes a compliance with a philosophy or a worthy ideal one has chosen (hopefully, one being able to transform it into his own). Regardless, whether one is subject to another or exercises choice in following, 'responsibility TO' involves a link and a relationship between oneself and another.

Philosophically, when one claims responsibility TO' another, he actually abrogates his responsibility and gives it to that other person or group. William Horosz, in THE CRISIS OF RESPONSIBILITY strongly states as the main theme running throughout his book that 'responsibility TO' is only a dependence on systems, on 'totalities' and is not really responsibility at all, that only 'responsibility FOR'



With regard to 'responsibility FOR X', X represents an action or situation that one himself influences to happen by his own willing. It can be temporally divided into before an event and after an event. Realizing the consequences of something before an event is generally taken to be the more mature, hence what good educators seek, but will be shown to be inseparable from an understanding of after effects.<sup>32</sup>

Responsibility before an event. Responsibility before an event speaks to a conscious or subconscious motivation for what one wants to achieve, this motivation being either external or internal. External motivations are the promise of reward or recognition and the fear of consequences. Both of these engage one's attention and increase his understanding of the necessity of what he is doing. External

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can truly be called responsibility. He says that man has become confused about what the source of his responsibility is - to systems or to self - and argues for man to become an 'orderer' not a 'responder' or a 'submerged self'. He says that when totalities (systems and institutions) set the standard, we don't have a 'purposive being in search of his wholeness' - one who searches through action and experience and exercises a say about his experiences. Horosz stresses that only when one is self-directing is he responsible and his readiness for responsibility is evidenced by his grasping of goals, ideals and meaning. In other words, responsibility is an acquiring process, an increase in self-directedness.

<sup>32</sup>With regard to 'responsibility TO X,' X represents either a person, persons, a personified being or a less personal factor such as an institution, a corporation, a religion, a group or a philosophy. 'Responsibility TO X' can be both external and internal, its external element referring to dependence on another, its internal element referring to self-direction. Its internal element represents voluntary dedication TO the chosen goal or ideal and a dedication to fulfilling X and/or bringing about X result. This internal element, representing a voluntary commitment, is similar to responsibility FOR X as discussed in the thesis proper.

motivation may, in fact, be transformed into a primitive type of respect that acknowledges Y's power (the power of the action) and begins to show one his part of a larger whole. This respect is unlikely, however, if the sender has instilled fear through negative threats, manipulation (indoctrination) and force, especially on an individual on whom a more intellectually, more humanely-oriented method would have been more effective. The harsh method of coercion is more necessary to use in circumstances of extreme danger and on those who, for one reason or another and to one degree or other, are learning-impaired. It does not aid maturity and limits one to depending on external forces for results and transferring control to another.<sup>33</sup>

Internal motivation comes from willing and produces results only as it is accompanied by action. These acts of will, i.e., one's own thoughts transformed into action, reveal self-generated purpose, lead towards accomplishment and hasten self-actualization. The willing becomes the means and these means, through commitment and dedication, create a series of ends to reach yet another end. Consequently, when a person's will and dedication are engaged, he automatically seeks to discover what is necessary in order to accomplish X.

Internal motivation for achieving goals is the core notion in this thesis. It derives from the ideas of being responsible to oneself and of thinking about means, ends and causality before an event. Causal responsibility before an event means being responsible FOR

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<sup>33</sup>A type of responsibility TO X, as earlier explained in footnote



bringing about events, situations and arrangements. For example, Sonja may want to make a new product for her firm. After deciding to do this, she needs to discover the necessary causally-connected steps to take and to set about them. It is her decision-making that engages her responsibility, as opposed to having 'magic' happen. Her decisions involve planning for a number of sequential acts and exploring the consequences of each step. Instead of being ignorant of these consequences and letting 'will-nilly' happen or letting someone else make the decisions, she can understand herself as being the instrument for occurrence. Subsequently, these causally-connected sequences will contribute to bringing about X result and will aid their happening; they will be the components that become the basis for the result.

Responsibility before an event projects into the future. It represents a choice made through a decision-making process and one made before the person is influenced or the event is caused. Subsequent actions will then be the 'working out' of this 'willing'. (Although Hobbesians say nothing is brought about that is not previously willed, it's hard to objectively prove that. It is easier to understand and agree with the idea that persons seldom achieve more than they aspire to.) In addition, the influencing agent becomes doubly responsible if he has both decided what should be done and that he should do it.

Besides means-and-end and subsequent causally-connected subacts, there is another component important in the process of responsible decision-making - that of values, i.e., thinking about



one's goals.<sup>34</sup> Although mentioned in this thesis by way of positiveness, and certainly underlying to my philosophy of education, the topic of values is essentially outside the scope of this thesis.

Responsibility after an event. In contrast to responsibility before an event, responsibility after an event is a response to actions, be they negative or positive. It is responsibility BECAUSE X happened. It concerns the past and speaks to facts.

After negative actions, one can be attributed liability for that which was caused. For example, if Sonja made a wrong transaction, she can be held accountable BECAUSE she was the causal agent and can also be expected to be responsible to correct the situation or to create a better one, causing actions that are more positive. She will, consequently, be referred to as responsible if she, then, both admits her causal responsibility and makes efforts to compensate for the situation. In other words, consequences result from her prior act whereby if she does not bring about more positive results, negative consequences will happen to her.

In like fashion, after positive actions, one can be attributed praise for his actions - actions that have demonstrated commenable values. For example, Sonja may succeed in devising a new product or in

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<sup>34</sup>See Gayle M. Bethel, MAKIGUCHI, THE VALUE CREATOR: Revolutionary Japanese Educator and founder of Soka Gakkai for an excellent discussion of values in education. "Creation of values ('So Ka') is part and parcel of what it means to be a human being," p. 49

finding a new way of doing or making X, thereby greatly increasing the productivity of her firm. She is then the cause, the productivity having happened BECAUSE of her. Having been responsible FOR the results, she is deserving of the praise for them. In this case, she will have already brought about the positive results, and as a consequence, positive results can happen to her.

Distinct as these two are, it is often through knowing the sequences that caused X that one then comes to a better understanding of how to create X result. One gains responsibility as he is responsive to the information communicated to him, thereafter, using it and working it into his own experience.

Collective responsibility. There are issues that have been raised regarding responsibility on a collective scale. Collective responsibility emphasizes community-oriented and expresses a parallel philosophy to that of school/community co-operation. Just as there is no hurting one member of the family without hurting all, likewise, there is no benefitting one member of the family or community without benefitting all. Similarly, an increase in responsibility and personal growth by a member of the community or group (individual causal efficacy) benefits the entire community. My stance is that community members, including students, are not only individually responsible for what they do because it affects others, but, as part of a group, are collectively responsible for and can be held responsible for actions



that affect others in their group. If we can be held responsible as active, or even, through our omission, silent/inactive accomplices<sup>35</sup> for having aided the result of negative events, can we not be held responsible as gold star accomplices for having aided and brought about positive community benefits, thereby being held responsible for having helped bring them about?<sup>36</sup>

### 'Being responsible'

The common understanding of responsibility - that of 'being responsible' - expresses an important semantic change -- from the abstract (responsibility) to the active and concrete (being responsible). The term 'being responsible' reveals that a responsible person is one who uses his abilities and shows evidence of working on a positive goal. He initiates situations and leads them to their end result, if not knowing what needs to be done, at least, being able to find it out and aiding in its getting done. He arranges for what

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<sup>35</sup>Collective responsibility is currently being discussed by US lawmakers in four states of the US. "Citizens who do not respond after witnessing a serious crime against a person could be fined, jailed or sued depending on how the law is written...Such laws might reduce diffusion of responsibility by making bystanders realize that they will be held responsible for their inaction." Lance R. Shotland, "When Bystanders Just Stand By", In "PSYCHOLOGY TODAY, June, 1985, p. 50-55

<sup>36</sup>Hopefully, a teacher who uses a school/community co-operation project, as well as understanding the benefits to the students, also will feel a responsibility and will have a commitment to bringing about collective and community gains.



happens and has direct experience with life (objects and persons in a community) around him. He finishes a task that has been begun and continues with a worthwhile task even though it's hard. He does not forget his goal, and does what he says rather than makes statements that sound good and may be true while doing their opposite. He lives good values and consistently responds well to circumstances he is confronted with.

#### Pre-conditions of a responsible person

Five very inter-related pre-conditions of a responsible person that are important for this thesis are: freedom, the ability to make decisions, independence, self-reliance and caring. Each one is contingent on the one before it and all lead to responsibility, hereafter defined as 'responsible decision-making.'

A person cannot really be responsible unless he is free.<sup>37</sup> The situation of freedom refers to the available latitude one has to use his own capacities, this situation, however, necessitating the lack of coercive and thwarting obstacles. This free person can, then,

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<sup>37</sup>Although many like to think of freedom as the opposite of the situation they currently have or of freedom as a state where they are 'free and unrestrained', they misunderstand what freedom implies and instead use this argument to give themselves license to engage in any action that seems feasible at the moment. They fail to see that freedom and responsibility are the sides of a coin, both being made out of the same metal (and a person out of the same mettle).

exercises his freedom in three ways: 1) by deliberating; i.e., considering choosing; 2) by decision-making, i.e., acting voluntarily; and, 3) by endeavoring, i.e., having the power to perform the action intended. (Hobbes) His freedom is not devoid, however, of a relation between himself and his actions. His decisions obligate him to them and make possible the sequences and consequences that follow. A responsible person, therefore, comes to see his role in making events happen, both initial events and the ensuing events (consequences).

A person who is free to make his own decisions and who is free from the inability of managing without coercion is therefore an independent person and one who can initiate relationships to others.<sup>38</sup> His inner attitude reveals a self-directedness and clearly indicates that he is dependent on his values and on the pattern of his life that he has worked out thus far.

This resultant self-reliance reveals that one trusts himself to set his own goals, to set about them and to consider the consequences of what he does. Such a confident person is alert to the possibilities in situations, trusts these possibilities to lead somewhere and responds to the occasion.

Through this ability to make decisions, one can demonstrate his positiveness in caring. His freedom and independence can combine with a chosen interdependence and a connectness with others and can evidence

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<sup>38</sup>This independence does not mean 'apart from others' but rather 'stable within himself', stable to relate to others in a meaningful rather a sycophantic way.



a caring person - i.e., one who experiences another as an extension and mirror of his own self worth and who recognizes a bond between himself and that other. His caring can develop as he conjoins what he feels he should do with what he wants to do.<sup>39</sup>

Problems in the 'hidden curriculum' of schools

Problem areas in the 'hidden curriculum' of schools that hinder the development of responsibility in students and that are pertinent to this thesis are:

1) the kind of participation of students, 2) a focus on externals rather than internals, and 3) segregation of fields of study, lack of depth and disconnectedness.

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<sup>39</sup>Milton Mayeroff in his book CARING enumerates the ingredients of caring as - knowing, alternating rhythms, patience, honesty, trust, humility, hope, courage, selflessness, responsiveness. He shows how caring develops into taking responsibility for one's own life, which, in turn, is fulfilled by caring for another. He orders the whole of existence around caring, but caring only through action, i.e., actualizing one's own ideals, thereby transforming oneself and others (how what one does evidences what one says). He explains caring as the only way to discover the meaning of one's life and says that the consequence of a life of caring and living one's values is to see oneself in a continuum of purposeful fragments of life that make a unified whole, and to discover a place in life. He stresses that a life of caring develops a reciprocal role of being cared for where growth and actualization occur mutually. But foremost, he says, a person is master of his own life through caring and making vital contact with what is around him and through taking responsibility for his life.



1) By the very arrangement and type of chairs in a room and by the percentage of active participation, students receive an initial and clear message as to the type of responses that are expected of them and to what learning is. Traditional seating focuses all eyes on the teacher as 'expert' (external source) and minimizes the importance of the students, who are not only not focused on but who are not even encouraged to see each other (the backs of some heads and some heads and bodies not at all). The response is expected to be a listening and accepting one, the participation a passive, inert one where ideas are merely received into the mind "without being utilized, or tested, or thrown into fresh combination".<sup>40</sup> Learning comes to be thought of as exclusively involved with head activity and theory and as a possession that can be acquired vicariously from an external source; body movement and personal interaction are implied to be antithetic to learning.

Education is implied to be a mental process rather than a way to handle objects and ideas in the world and a way to direct one's own life. This situation of passivity denies students an opportunity to design actions that furnish "the stabilizing axis about which their knowledge, their beliefs and their habits of reaching and testing conclusions are organized".<sup>41</sup> It fails to provide a justification and a sensible means for learning X. It keeps students aloof from

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<sup>40</sup>Alfred North Whitehead, In Silberman, TEACHING AS A SUBVERSIVE ACTIVITY, p. 148

<sup>41</sup>John Dewey, INTELLIGENCE IN THE MODERN WORLD, p. 616

responsible living where one comes to realize the relation between means and methods employed and results achieved. It separates learning into thought and action, theory and practice, resigning students to amassing information into a jumbled heap in their minds with the hope that someday they may re-organize it and use it. Furthermore, such a passive situation erodes students' confidence in their own abilities to initiate situations in the present and in the future. When this happens, both freedom and self-reliance are curbed and independent decision-making is stifled.

Since lack of action and body movement is, actually, antithetic to growth for young people, classroom situations soon necessitate rules, enforcement, obedience and the breaking of rules. Students' education is dichotomized into what the teacher wants and what the students want, often creating a game atmosphere, focusing students' attention on whose side they're on, one side being thought of as negative, the other positive, in so doing, minimizing any sense of caring.

2) The emphasis on the dissemination of information for its own sake and the focus on the system, curricula, books, grades, report cards and scores on standardized and other tests (the thought behind back-to-basics) rather than an emphasis and focus on students' abilities and their growing and increased learning isolates students from the learning process, makes learning mechanical work doing what someone else wants them to do and stunts students' growth, eroding the



ability to make decisions and denying one the pleasure derived from doing so.

3) In addition, the 45-minute bell-bounded sessions often interrupt good learning and by dismissing students to a class that is usually not shown to have any bearing on what they just 'studied' can imply a separateness, an unrelatedness and a discontinuity of subject matter rather than a holistic, inter-related approach to learning. Students become too accustomed to entertaining divided interest (even pretending to be listening to a teacher whose material does not hold their interest, while their thoughts are really elsewhere) and to having little time to weigh ideas and to bring them into perspective. Bell-bounded sessions can limit one's wholeheartedness and absorption and can foster a disparate concept of one's world. They can limit freedom and independence and can stifle inter-relatedness (perhaps caring) and make students rely on time rather than self to teach them.

#### Situations conducive to responsible learners

In order to circumvent these problems and help students become responsible people, educators can do the following:

- 1) They can set up an atmosphere of democracy<sup>42</sup> whereby

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<sup>42</sup>Kurt Lewin, a pioneer in social psychology, as early as 1947 discovered the effects of different styles of leadership on school children. The results identified qualities of three different styles of leadership and revealed the effectiveness of these styles. Of the three styles - 1) directive/authoritarianism, 2) *laisse faire* and 3) participative/democratic - the third, democratic, gave the most positive effects on primary school students engaged in the task of mask making. These students responded with less apathy, less aggression and more group unity than students in either of the other two groups of students. Students in the third group, all of whom were given a



students participate, learn how to follow their own interest and make their own decisions based on guidelines that help them in their quests. (See the following section on 'activities aiding responsible decision-making')

Rather than asking students to meet teachers in their territory, teachers can best meet students in theirs and begin the 'ride' from there. Teachers will help students most by abrogating their tempting right of sovereignty, by expressing more interest in students and their interests than in the subject matter (the dissemination of information) and their own interests, and by encouraging independent thinking and co-operativeness. This can be done by developing a course with the students, (See chapter III on community) and by believing in the students and evidencing a conviction that they can learn.<sup>43</sup> When students experience this greater self-direction, a greater freedom to communicate and discover they CAN learn, they can change from being slow learners to being fast learners, can become independent and self-reliant and can develop values, attitudes and standards of behavior on their own.<sup>44</sup> They can think

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 participative role in their learning, evidenced higher motivation than students in the other two groups and more positive attitudes towards the leaders.

<sup>43</sup>Robert Merton's self-fulfilling prophecy holds true in the positive as well as the negative.

<sup>44</sup>Carl Rogers gives a good example of such learning in the methods used by a sixth grade teacher Miss Shiel who risked giving freedom to her students with a student-based, unstructured, non-directive learning approach. Carl Rogers, FREEDOM TO LEARN, p. 11-27

through and make decisions on their own and can increase their sense of caring for others in the democracy.

2) Educators can set up situations whereby students participate and collaborate with their peers and members of the community to accomplish a worthwhile goal.<sup>45</sup>

The percentage of time students contact not only each other and the material but also members of the community is in direct proportion to how much they learn; the percentage of time teachers dominate the situation, requiring attention, passiveness and blind obedience is in inverse proportion to the amount learned. Since students have developmentally reached the stage where they can feed themselves, schools do best to avoid spoon-feeding them information and keeping them in an infantile dependency that will actually prevent self-reliant, self-motivated mature individuals.<sup>46</sup> Students need and want to

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<sup>45</sup>Victor Vroom in a doctoral dissertation on participation found all six of the hypotheses he had made regarding the effects of participation on a person's attitude towards his job to be true. His hypotheses and findings were that: 1) The more an individual participates in making decisions in his job, the more positive will be his attitude toward that job, 2) Hypothesis 1 relates strongly for high independence persons, 3) Hypothesis 1 relates weakly for high authoritarian persons, 4) Participation in decision-making increases individuals' motivation to do well, 5) Hypothesis 4 relates strongly for high independence persons, 6) Hypothesis 4 relates weakly for high authoritarian persons. In addition, he noted that participation works on two very important areas/aspects of a person. 1) It satisfies his need to be valued and appreciated, 2) It gives his goals validity. He found that job performance also depends on the degree of expectancy that one has that his effective performance will lead to the successful execution of the job. Victor Vroom, SOME PERSONALITY DETERMINANTS OF THE EFFECTS OF PARTICIPATION

<sup>46</sup>A good ratio of student to teacher participation is 80% students participation, including initiative towards 'experts', i.e., people in the community, and 20% teacher participation, although sometimes teachers need to do lots of preparatory work and can also participate as colleagues to the student, thereby having a larger percentage of participation.



develop themselves and to know what their own capacities are.<sup>47</sup>

A teacher need be cognizant of the fact that his knowledge can not be transmitted to the students by telling. His knowledge and understanding is vastly different from the students', like a veteran seaman's is from an inlander's. The teacher's role is to help the students find experiences from which they can put together their own learning, where they can enlarge their own world, and be authors of their own education. The accompanying attitude gives students the right to discover the world themselves and to explore how it relates to them and they to it. It orients students to the process of learning and offers them a part in its making. Rather than subjecting students to (solely) listening to lectures, teachers need to encourage students to use knowledge for their own discoveries, not to expect to just remember or recall what someone said. (Lectures often deny growth and may only glorify the lecturer for having X knowledge.)

Teachers can encourage students to make contact with members of the community (especially through their own initiative). This reinforces the idea that knowledge is to be sought in order for one to accomplish a purpose, not given out as 'words of wisdom' or something to possess. It expands students' understanding of the scope of

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<sup>47</sup>Irwin and Russell explain a model of a community-centered curriculum as three concentric circles, the community being the largest, the school the next and the classroom the smallest where 1) students seek through inquiring in the community to find answers to X problem, and 2) students gain first-hand experience that then becomes re-inforced in the class and activities (moving from the known to the unknown). Martha Irwin and Wilma Russell, THE COMMUNITY IS THE CLASSROOM



knowledge, of the methods of obtaining it (participating in its discovery) and of the people who are the 'purveyors' of knowledge. (See chapter III on community.) It lets young people tap their developing capacities of understanding the society in which they live by actively (not vicariously) engaging in activities that touch their lives and are relevant.

Participation enhances whatever matter one participates in. In order to learn anything - (swimming, mountain climbing, democracy, independence, caring) - one must live that matter. "Only so much do I know as I have lived."<sup>48</sup> The matters to be enhanced here are the ability to make decisions and linking to the community (caring).

3) Educators can orient students to the present and future rather than to the past and let them explore the relevance of X material to their present and future lives.

People's images of what their futures might be shape them and are a related idea to self-fulfilling prophecy, i.e., the very expectation of something is a cause in its fulfillment. Those who see themselves as subject to forces outside their control, who cannot project into the future but have a feeling of futility about their lives and their future, do not make good decisions and become underachievers and rebels.<sup>49</sup> Students who are future-oriented believe

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<sup>48</sup>Ralph Waldo Emerson, In Samuel Tenenbaum, WILLIAM HEARD KILPATRICK, p. 279

<sup>49</sup>Sociologist Arthur L. Stinchcombe found in his study of 'Rebellion in a High School' that adolescent rebellion results from adolescents' images of the future. Wendell Bell, 'Social Science: The Future As a Missing Variable,' LEARNING FOR TOMORROW, The Role of the Future in Education, ed. Alvin Toffler, p. 78

more in themselves, are more often able to make decisions, to set goals and to think of consequences, and see these goals as accessible to them instead of seeing themselves as locked in a pattern. Those who are able to think about the future become higher achievers and are more responsible FOR what they do and willingly more autonomous and confident.<sup>50</sup>

Besides a greater ability to make decisions and to be responsible for one's actions, an orientation to the future emphasizes making a commitment to a goal and prompts one to think about causative factors that may bring about that goal, thereby stressing internal motivation before an event.

4) Educators can use a multi-disciplinary approach where students gain an 'historical' sense, a 'mathematical sense', etc. rather than 'take' history, math, etc. and only deal with subjects in a rather segregated way (separate from other subjects)<sup>51</sup> (See chapter III on community.) They can even combine classes and extend them beyond

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<sup>50</sup> Benjamin D. Singer, "The Future-Focused Role-Image", LEARNING FOR TOMMOROW, The Role of the Future in Education, ed. Alvin Toffler, p. 26

<sup>51</sup> John Dewey suggested in 1931 that educators (primary, secondary and college) introduce 'projects', problems and situations that come within the scope and capacities of the experience of learners - projects, etc. which would 'raise new questions, introduce new and related undertakings and create a demand for fresh knowledge'. In these projects, he says material would be drawn from any field as needed (historical, geographical, biological, mathematical) to carry out intellectual enterprises and the central question would be the magnet drawing them all together. In 1931, Dewey understood this to be a very far left alternative to traditional education. Reginald D. Archambault (Ed.), JOHN DEWEY ON EDUCATION, p. 423



the 45 minute bell-bounded sessions. Such a multi-disciplinary approach strengthens goal-making for students and necessitates that they be more independent and exploratory in weaving the different disciplines together.

5) Educators can gear students to success through structure (student work plans), feedback and evaluation, stressing that the student is the author of his own education. Students need to make plans from which to work in order to see how to bring about X result and to explore their own potential for decision-making. (See following section on 'Activities aiding responsible decision-making.')

Such planning and decision-making will enhance in them learning self-discipline and responsibility TO themselves.

Decision-making is not an isolated activity but the beginning of a path out of which everything else flows. Throughout this path, students will progress well as they receive feedback (evaluation) from their efforts, and they will develop self-esteem as they experience success. Self-esteem and success are interwoven, as are they both with one's perception and involvement in his environment.<sup>52</sup> Students will come to understand responsibility through a self-made plan that is geared to success rather than through one (traditional education) that promises rewards through obedience but administers failure.

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<sup>52</sup>William Glasser sees as the basic needs of individuals the need for love and for self-worth. He says schools must find ways to make success more possible for students and give young people a successful identity. William Glasser, SCHOOLS WITHOUT FAILURE



6) Educators can diminish the number of tests and competitive approaches which only focus on externals and short-term results (products) rather than on the process of learning. Although competition may evidence decision-making, independence and self-reliance, it does not foster the positiveness of caring that is necessary for one to become responsible. Teachers can better foster responsibility through co-operation and collaboration than through competition of grades and test scores. Rewards in and of themselves are not bad, but grades and test scores may divert one's attention from learning to only attaining these external rewards. Cooperation and collaboration will be increased as they are experienced and will increase students' experience with decision-making and with caring.

#### Activities aiding responsible decision-making

By the same token, educators can help students become responsible decision-makers. Following is a list of activities teachers can use:

1. Brainstorming

to gather wide and various options from which to choose,

2. Weighing pros and cons

to form a basis for understanding options and for creating a direction in which to move, (such as in discussing what to do about the growing crime rate in B's young people or how to combat current myths about police, old people, etc.)

### 3. Planning and sequencing

- a) to design and consider how to approach and organize their central topic,
- b) to devise and propose strategies to use to bring about X results,
- c) to understand and work through steps in a process,
- d) to know how to fill the gap between wanting something to be so and working towards that end,

### 4. Researching

to gather information from a variety of sources including people in the community who are working in the field (See chapter III on community.)

### 5. Hypothesizing

to make initial statements based on their research and then test them out,

### 6. Monitoring

to check their progress and understand the consequences of what they do,

### 7. Projecting

to think about distant goals and to orient themselves to their own future (including thinking of consequences of X actions).

### 8. Exploring relevance

to measure the relation of what they study to their lives,

### 9. Assessing values

to probe the reasons behind statements and conclusions they encounter (See chapter IV on critical thinking),

#### 10. Evaluating

to reflect on the decisions they make, the steps that they take and the results that they find or cause.

Educators can help students learn by having them make independent choices of goals and means, by having them make these choices in terms of what will be valuable to them and by having them take the initiative in implementing these choices.<sup>53</sup>

#### Projected outcomes

Students will benefit from such opportunities of increasing their responsibility and their responsible decision-making in a number of ways.

They will:

- 1) increase their facility with the above academic activities (brainstorming - evaluating), thereby developing advanced cognitive skills beyond the acquisition of knowledge. (See Bloom's taxonomy)<sup>54</sup>

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<sup>53</sup>Carl Rogers uses as an example Professor Faw and his method of giving freedom and responsibility to his college psychology students where the students' curiosity, their desire to learn and their ability to select and follow their own path of learning were the basis of the course and where goals and purpose came from the students not from the instructor. Carl R. Rogers, FREEDOM TO LEARN, p. 29-55

<sup>54</sup>Benjamin Bloom, TAXONOMY OF EDUCATIONAL OBJECTIVES



- 2) increase in pride as they feel their presence to be important in a group,
- 3) gain greater inner freedom, developing independence of thought and action,
- 4) increase their resoucefulness and their application skills,
- 5) increase in self-discipline and diligence,
- 6) gain personal experience with democracy and problem-solving,
- 7) gain an increased self-image and feeling of self-worth and self trust in knowing they CAN (and did) accomplish X - a project of worth to others besides themselves<sup>55</sup>
- 8) gain relationships and bonding to others in a group,
- 9) increase their likelihood of success.<sup>56</sup>
- 10) enlarge their understanding of their world.

The Arlington High School school/community co-operation project.  
responsibility and responsible decision-making

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<sup>55</sup>Self image is often gained through parental (and educator) image. A study by Radin and Sonquist found that more than anything else, parental image determined the children's actual success in the Operation Headstart. The parental image determined the children's intellectual growth more than the parents teaching them to read and write. Benjamin Singer, "The Future-Focused Role-Image", in Alvin Toffler (Ed.), LEARNING FOR TOMORROW, the Role of the Future in Education, p. 24

<sup>56</sup>Controlling one's environment was found to be one of the strongest factors conducive for achievement in a study by Coleman. Alvin F. Poussaint, M.D., "The Black Child's Image of the Future", Alvin Toffler (Ed.), LEARNING FOR TOMORROW, The Role of the Future in Education, p. 65

One of the general goals and projected outcomes of a school/community co-operation projects, stated in the proposal to the high school<sup>57</sup> was for such a project to allow for greater student responsibility through decision-making. This referred to students' abilities to decide on and set up their own learning situation, to discover, set up and carry out steps to bring about X result, to bring together various fields of study into a unified approach to a topic, thereby making students' academic (communication) skills relevant, and to respond to both members of their own group and members of the larger community. It spoke to an increased bonding between student participants and participating members of the larger community. It also presumed and commended a school's responsibility to give their students alternative approaches to learning and commended their response in doing so.

How did the Arlington school/community co-operation project enhance responsibility in its students?

It gave them opportunities to be responsible to themselves, to be responsible FOR bringing about X result, by discovering and implementing the causally-connected subacts that would help accomplish X and to respond to each other and to members of the larger community

How were students responsible decision-makers?

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<sup>57</sup>See Appendix

They chose their own topic - Arlington, the year 2000 - and its end product - a video documentary - and chose their own subtopics - environment, medical, community safety, trends, education, and entertainment. They brainstormed about what they knew and needed to know and about how to approach their topic. They planned and devised their own strategies that would help them accomplish their goal. They researched from both primary (community members) and secondary (library) sources in order for them to be able to make better predictions. They hypothesized on their part of the topic, speculating on what they thought might happen based on their initial (secondary source) research. They collaborated (not competed) with a partner, experiencing themselves as interdependent, caring and linked to another and were able to monitor each other's progress and help each other to bring about X result. They were given and took charge of all of the tasks of producing the documentary. (except the editing. The school's media center prohibited them from using the editing equipment.) These tasks were: planning, researching, interviewing, video-ing, writing scripts, selecting music, writing introduction and conclusion, and selecting visuals. They explored matters of relevance to them as town citizens. They had a chance to assess value judgments in regard to their subtopics. (See chapter IV on critical thinking.) They weighed the values of important issues to their town. They had a spirit of evaluation while engaging in the project and had opportunity to further evaluate their efforts. They became future-oriented through their



choice of topic. They initiated actions outside of the usual academic pattern of writing a term paper. They expanded their role as student by initiating action with members of the community, increasing their confidence and self-image. They used a multi-dimensional approach to learning, extending their responsibilities. They increased their understanding of the process of learning.

Students in the Arlington project experienced both sides of the 'thought' coin - freedom, with its latitude to use increased independence to make decisions and responsibility, with its employment of self-chosen and self-directed means and ends (causative factors) to achieve a goal, both of these involving a sense of caring about the result and its consequences. All areas previously discussed were involved - five pre-conditions of a responsible person, situations conducive to responsible learners, activities aiding responsible decision-making, and projected outcomes. The most important was understanding HOW to adequately and carefully plan and develop means to reach an end.

#### Summary

Responsibility and decision-making both allow for and evidence an increased awareness in a person. Using methods and strategies, a person sets up meaningful response patterns to facilitate X result, thus engaging in a learning process. He sees and even foresees the

consequences of his actions and responses, this giving him greater awareness of both his topic and, more importantly, the means of accomplishing an end. He sees a differentiation between following others' (authoritarians) requests and being oneself dedicated to accomplishing something. He further sees the results of his responsibility and how that applies to his learning, realizing with greater intensity the necessity of responding and of choosing.

## CHAPTER III

### COMMUNITY INVOLVEMENT

#### Community -- the basis for learning

Learning is facilitated and students change, increase responsibility and become more self-actualizing individuals when they explore their own interests and when they contribute their own energies to achieving a self-chosen goal, i.e., when they work out their own education rather than strictly follow what another says. Learning is facilitated even more so as students interact with and affect others and as they are affected by them. Consequently, contact and involvement with people in the community is an excellent way to enhance the development of the aforementioned skills, help students grow and mature and fulfill their needs.<sup>58</sup>

Of the two ingredients that comprise a school/community co-operation project, it is the community aspect that speaks directly to action, interaction and social realities - the bases for all learning - and is, therefore, that which gives young people the most opportunities

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<sup>58</sup>Earl C. Kelley, an excellent youth and community co-operation advocate of the 1930's, states these needs as: the need for people, the need for good communication with other people, the need for loving relationships with other people, the need for a workable concept for self, and the need for freedom. Neil Postman and Charles Weingartner, TEACHING AS A SUBVERSIVE ACTIVITY, add an additional need, the need to know how to learn. Neil Postman and Charles Weingartner, TEACHING AS A SUBVERSIVE ACTIVITY, p. 68



for enriched learning.

Learning is more than contacting books, a few teachers and subject matter; it is contacting oneself and one's own interest through interacting with people regarding the knowledge important to their lives and one's own. There is an instructional program implicit in the community, and perception of it and involvement with it give students a range and quality of experience that passive learning alone cannot offer. This perception and involvement facilitates integrated learning both in regard to integrating fields of study and in regard to integrating with people.

Young people need the community to help them grow and mature and to help them build their world. Likewise, the community needs all of its citizens to co-operate with each other and to contribute to its welfare as well as to their own. In this chapter, I discuss the community, learning experiences it offers for students in a school/community co-operation project, the focuses of a school/community co-operation project (what it can be and what it is NOT), the community involvement in the Arlington project and benefits to students and to the community of such a project.

A community is, in essence, a social unit and the means by which most people live. Not only is it the place we live, it is the environment that helps shape our lives and that represents a part of us. However, it is not just a collection of people - like a collection of parts - but is a corporate body with parts that are connected into a whole. Its parts share a commonality and make up an organization, a body that functions together and joins together for mutual benefit and

co-operation. A community implies a purpose to life of making life pleasant and useful, of improving living and of improving the community. It is also a living example that we make the reality we perceive rather than passively receive it, and that reality is constantly being created by our perceptions and action.

The community is constantly making its reality, working from a present historical base and future vision to create something new for tomorrow. It is a working example of how people co-operate with each other for successful living and offers a model for co-operation. It illustrates that together people can pursue and establish what individuals alone cannot, and that none of us exists alone or in a vacuum -- we are all products of a civilization and a culture and are molded by our environment.

The community works well when its parts work and co-ordinate with each other and when they come to understand themselves, others and ideas to be in relationship. Community members plan, set goals and work together in order to implement and to bring about desired results and they build networks and bonds between each other. A community does not function well with disconnected members working towards disparate ends, only through good group dynamics, which, in turn, cause good results and happier, more fulfilled individuals. Furthermore, it has no completion and no end. It has only growth and uses its knowledge to obtain more knowledge, progressing by accomplishing goals along the way.

Although the above general comments refer to a municipal, political community such as the students in the Arlington



school/community co-operation project interacted with, with only slight alteration, they can apply to smaller community operations or to only part of a political or economic network, to random individuals in an amorphous community or to people in a neighborhood. A community may be geographic, including those individuals who comprise X business, school or neighborhood (large or small) or it may be demographic, including those who comprise a particular population in an area (e.g., elderly, pre-school). It may be focused around those affected by X problems (e.g., X toxic waste dump or X legislation). The opportunities and benefits of reaching out to others outside the walls of the school are the same.

#### Opportunities through involvement with a community

Since young people are a part of a larger community in which they live, they need a real life contact with it. They can come to see that many of the same facts are true for them as individuals as for individuals in a community - interdependence, a need to plan and work together to bring about goals, the usefulness of building bonds, the fact that we make the reality we perceive and that there is no completion or end, only growth to our learning<sup>59</sup> We are all 'meaning makers' - people who are uniquely involved in a process of learning/living.<sup>60</sup> It is through such involvement that young people

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<sup>59</sup>This stands opposed to 'taking' X class and thinking that it is, then, finished or not needed any more.



expand their learning.

It is helpful to re-iterate a few points. Involvement with the community gives opportunities for social action and interaction and allows young people both to encounter a variety of real people and to experience mutual sharing and caring towards their goals. By consulting with people who themselves are involved in community issues, students can learn better what the issues are and which ones affect and will affect their lives. "Change is generated out of difference and learning arises out of discontinuities, discrepancies, separations, and gaps;...homogeneity is not possible in reality."<sup>61</sup> Community involvement gives young people opportunities to see how they fit into and have a place in the community and how, by acting upon their learning, they can make it a part of them. It lets them experience what people really do (the Discipline of Culture)<sup>62</sup> and lets them

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<sup>60</sup>To Neil Postman and Charles Weingartner, TEACHING AS A SUBVERSIVE ACTIVITY, p. 91, 'meaning making' best represents the constant change our perceptions undergo and constitutes our learning - our creating and transacting with our environment that builds our world. The meaning-maker metaphor puts the student at the center of the learning. In speaking about the 'metaphor of the mind', they indicate that it would even be more realistic if we instead used the term 'minding', distinguishing a thing (mind) from a process.

<sup>61</sup>The Parkway Program of Philadelphia offered community learning to public school young people in grades 9 through 12, placed the responsibility for organizing their learning on the students, was carried out in groups rather than by individuals and involved a program, a process and an activity rather than a school, a place and a location. John Bremer and Michael von Mochzisher, THE SCHOOL WITHOUT WALLS, Philadelphia's Parkway Program, p. 23

<sup>62</sup>Holt explains that the 'Discipline of Culture' is a natural 'discipline' because young people want to understand what people around them are doing and want to do the same. They learn through observing and participating in these actions and imitating them. John Holt, FREEDOM AND BEYOND, p. 112

become more aware of agreements, customs, habits and rules that bind the community together.

Present living and involvement with the community, in so doing, offers young people a means of building character and personality skills through the idea 'we learn what we live'. These joint efforts between young people and others impact on both of them, showing young people that they are not isolated but affect others and are affected by them. These efforts can build in them habits of doing things for intrinsic reasons (not extrinsic grades) and will also build in them habits of making decisions based on actualities. 'Situational' learning hastens their ability to speak a new 'language' as much as putting them in a foreign environment hastens their ability to speak that country's language. These life situations provide the building blocks for building a strong 'language' and approach to life. Students attempt to do something and either get or fail to get results. Their behavior also changes and character is developed - by following through with a worthwhile action, by responding appropriately to the reasons of a situation, by regarding the implications involved through the concomitant learning of attitudes, ideas and perceptions.

Involvement with the community offers multi-dimensional learning and broadens not only their education but also their concept of education. It speaks to a gestalt or wholeness of both the indissoluble person and of undivided learning. It operates on the principle that it is the whole cat that catches the mouse and that individuals are not separated into two eyes, two legs, two ears, etc.



but are whole human beings. "Man can only be understood as a total goal-seeking, purposive organism, who by his intelligence seeks to satisfy desires and wants and goals."<sup>63</sup>

Furthermore, multi-dimensional learning necessitates and lets individuals experience the interrelatedness of areas of learning and encourages concomitant learning - the covert and simultaneous learning one does while studying X. Studying in the community lets students bring all areas of learning together around a self-chosen community-involved goal and lets them see the horizontal relationship between different areas of study, i.e., the connection of all areas of learning, rather than their separateness or isolation. Learning by means of the community actually marries learning to life rather than divorces or separates it. It encourages the idea that all of life is learning and defuses the idea that learning in schools is only to prepare one for later 'real' living when one is in the workforce or holds X degree(s) from X institution(s). It lets students build an 'effective intelligence' - one that is inclusive, functional and problem-solving in character<sup>64</sup> and is not fixed or limited to the few skills tested on IQ tests.

While encouraging concomitant learning and stressing horizontal articulation<sup>65</sup> community involvement also gives young people the

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<sup>63</sup>Samuel Tenenbaum, Ph.D., WILLIAM HEARD KILPATRICK, P. 278

<sup>64</sup>Kilpatrick speaks adamantly for an 'effective intelligence' which is opposed to mere innate intelligence - an 'effective intelligence' that grows and grows and expands endlessly. Samuel Tenenbaum, Ph.D., WILLIAM HEARD KILPATRICK, p. 277



opportunities to combine the affective and the cognitive domains of their lives, expanding learning to more than purely mental exercising. It appeals to the whole person and indicates that when feelings (the emotions) are engaged a person remembers most.<sup>66</sup> It affords the opportunity, through relationships with community members, for young people to become more involved in their own learning by interacting and feeling - not by mechanically acting the way the system prescribes but by acting with their own feelings to real persons.

In addition, involvement in the community gives opportunities for young people to be in charge of more of their own education and to experience greater freedom, independence and self-reliance. This 'being in charge' necessitates using inductive methods of thinking whereby students are the innate authorities in their education through an inquiry environment -- asking questions and finding answers for themselves<sup>67</sup> It indicates that ideas are not sacrosanct with ready-teacher-made answers or axioms nor come from a priori thinking but are

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<sup>65</sup>Maurice Seay, COMMUNITY EDUCATION: A Developing Concept, uses this concept to refer to the relationship between subjects one 'takes' during the same year, rather than the 'vertical articulation' of moving from one grade to another.

<sup>66</sup>Psychology tells us that a person remembers material better when it is encoded with some meaning in regard to his life. Emotions and interactions provide such meaning.

<sup>67</sup>Neil Postman and Charles Weingartner's "What's Worth Knowing Question Curriculum" in TEACHING AS A SUBVERSIVE ACTIVITY, p. 59-82 speaks about the art and science of asking questions as the source of all knowledge, emphasizing that questions should deal with useful and realistic problems (seen to be so by learners). Their inquiry environment is always about the learner (he, being the real content), the meaning he has in his head and the possibility of his modifying and extending those meanings.

to be experimented with to see what works by projecting a goal and by planning causally-connected steps (causation before an event) to achieve it. It emphasizes that learning is a process not an acquisition of X knowledge. Such an actual involvement in learning gives students an experience with democracy (inductive discovery) and lets them be active participants to help make their community, both connecting to something real and feeling that they belong. All of these areas of learning -- internal motivation, freedom etc., action-involved learning, causation, democracy, participation - involve decision-making and are detailed earlier in this thesis. The key factor is intrinsic motivation. Involvement and participation with the community offers this.

Involvement in the community offers young people:

- a part in decision-making,
  - a part in carrying out decisions,
  - a part in discussing unsettled, controversial issues that are pertinent/relevant to their lives,
  - a means to gain meaningful feedback for their efforts, both by way of any final result and product and by way of in-process commenting (not pseudo rewards of A's and B's),
  - a laboratory in which to test out learning and developing skills
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- a means of building an 'effective intelligence',
  - a means of helping to develop a future,
  - a part in making a contribution to their world, a contribution that is useful to them and affects them as well as others.

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<sup>68</sup>Neil Postman and Charles Weingartner, TEACHING AS A SUBVERSIVE ACTIVITY, have excellent suggestions of how the community can be used as a laboratory. I include their ideas in the appendix as supplement.



Through community involvement, young people:

- can see the benefits and consequences of making decisions and can increase their maturity by making decisions;
- can learn how to focus on pertinent data and how to sift out irrelevant, unsubstantiated, biased or harmful information;
- can learn how the past has brought about the present and (perhaps) how the future may develop;
- can develop increased responsibility for their work by being involved in a 'real' undertaking;
- can learn skills (investigatory, analytical, empathetic, and problem-solving) that will transfer for use at any time in their lives;
- can see the interdependence of people in a community on each other;
- can gain a sense of pride of accomplishment that exceeds any accomplish that affects only their own lives.

#### Focuses of a school/community co-operation project

There are five primary focuses of a school/community co-operation project, out of which all others spring:

to let (1) any student in the (2) regular public schools use and develop his (3) academic skills by (4) initiating learning situations around his own interest and by (5) contacting community members as resources to help him accomplish his self-chosen goal.

(1) By focusing on any student, a school/community co-operation project extends beyond 'gifted and talented' elitism or remedial special needs. It represents the philosophy that all young



people need to see relevance to their 'studies' and to see a way to use their abilities and knowledge. It recognizes that all students need 'real life' situations from which to learn and to see how they can fit into their present world.

Such a focus, being on any student in any educational setting, also extends beyond other 'special students'. It contrasts with work-study programs,<sup>69</sup> whereby students get experience in a particular business that they have interest in, hence aptitude for. Instead of making students aware of the skills they need in order to succeed at X job (this, in turn, hopefully, motivating them to study more in order to do that,) a school/community co-operation project orients students towards thinking through problems, towards increasing and acting on their knowledge, towards accomplishing an academic and community goal, and towards feeling useful, both academically and socially. Similarly, it is the reverse of competency-based learning, whereby special students gain credit for their life skills and seek to further their understanding of academics. The student project focus makes the acquisition of life experiences and the use of academic skills one and the same, aiding students to meet challenging situations with increasing skills of intelligence.

2) A school/community co-operation project is viable for the public schools and is meant to be an adjunct to regular classroom studies. The opportunities it offers are general public needs, opportunities, actually, to expose young people to as early as possible

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<sup>69</sup>Distributive Education and similar courses offer students 1/2 time school and 1/2 time office work.

and in as much of a 'mainstream' manner as possible.

It is not to be confused with community schools which operate in the school buildings after regular school hours and give innumerable opportunities (teacher or student-oriented) to all ages in the community, changing the school-centered concept of education to the more comprehensive community-centered concept of education for all the people.<sup>70</sup>

3) A school/community co-operation project is directly educational, while also focusing on character development. Its primary focus is academic for the student, rather than business and economic for the school.<sup>71</sup> It can evolve out of any field of study or out of a combination of them. It helps students to use their energies to discover more about their immediate environment through these fields of study (e.g., communications skills, in the Arlington project) and to discover their relation to their environment. It links them with thoughts and actions of adults while necessitating the use of learning  
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<sup>70</sup>Although the community education concept has a broader focus and is meant to service the entire community, many of the ideas are similar to mine and can be adapted to use in the public schools to young people of school age, e.g., the community as laboratory, problem-solving programs, projects to improve the community, education as a 'social institution' using many educational agencies in the community, and the community as resources for the instructional programs of the school. The major differences between the community school philosophy (as envisioned by Seay) and that of a school/community co-operation project is that the later is set up to be used in the ordinary daytime schools and that it also relies heavily on student-initiative to decide on and implement projects. Maurice Seay, COMMUNITY EDUCATION: A Developing Concept

<sup>71</sup>Currently, school/business partnerships, both in consortia and business councils, seek community/business co-operation for funding for schools, including facilities and programs.



and problem-solving skills to jointly accomplish a community-oriented goal. (See Chapter I on the Arlington project and Chapter IV on Critical and Creative Thinking.) Such a project strengthens and develops young people's intellectual, social and physical muscles, increasing both students' sensitivities and their abilities to respond, but only by means of fulfilling academically-oriented goals in the neighborhood/community.

A project also helps develop character. However, it stands in contrast to character development programs, volunteer or paid, whereby young people get acquainted with community social needs (elderly, retarded, day-care, mentally maladjusted) and ameliorate employment problems in these areas.<sup>72</sup>

4) A school/community co-operation project is an

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<sup>72</sup>Innumerable examples attest to the value of these social projects, although some exploit youth, having them do what paid employees should do. Those that come closest in spirit to a school/community co-operation project are:

- a) those that include an academic thrust, [e.g., a community newspaper run since the 1930's in Pulaski, Wisconsin by high school students (CHILD AND YOUTH SERVICES, p.105-109); "Mosaic" a journalism project at South Boston High School where students directly contact community members to obtain information for this school magazine (similar to the Foxfire project); a consumer advocacy group run by high school students at the St. Paul, Minnesota Open School (CHILD AND YOUTH SERVICES, p. 93-103); and special studies done in conjunction with an area of community service students worked in ("The School in Action", In "Community Service Volunteers")];
- b) those that are initiated by young people, [e.g., "New Expression" a monthly publication of Youth Communication/Chicago Center, teenagers making up the entire staff (CHILD AND YOUTH SERVICES, p. 111-118)];
- c) those that include a time of evaluation to help students process the experiences, [e.g., "Planning an exam course", (i.e., a written student evaluation, "The School in Action", in "Community Service Volunteers"); and results of a quantitative study of 30 experiential learning groups in 1978-79 (CHILD AND YOUTH SERVICES, p. 57-76)].



experiment for young people to create their own learning by setting out to accomplish a task. The community involvement assists the students in what they are doing, hence praising them, rather than having students see what adults are doing, hence glorifying the adults. This methodology is as-strictly-as-possible student-oriented and student-directed and gives young people opportunities to participate in the learning process by way of initiating, planning and conducting projects (organizing and implementing their own activities) to fulfill their self-chosen goals. Students use situations only as they fit into their goals, in contrast to being given enriching experiences of life, regardless of how relevant they are to what students are 'studying'.<sup>73</sup> Students incorporate members of the community into their projects and use them as resources to help them in what they have already decided on and started doing.

Such a project is a students' unit and necessitates that the teacher be a consultant and facilitator rather than an organizer of elaborate units of broadening social effect.<sup>74</sup>

5) Students in a school/community co-operation project work with community members to fulfill their self-chosen goals. These

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<sup>73</sup>An example of this is being taken to see the bay or the country or to hear X speaker from the 'real' world speak on X problem, situation or topic in order for students to gain a larger perspective.

<sup>74</sup>A broad study of man's development in different environment, even though remote from students' lives - e.g., Eskimo's treatment of old people or Arab's adaptation to the desert, or a romantic escape from the present world into ancient societies, again often showing no relevance to the students' world - may be insightful, elaborate and entertaining, but does not fulfill the 'student initiative' goals of a school/community co-operation project.

community members may be paid or unpaid employees, may be young or old, may be part of a neighborhood or part of a larger political, business or social network. Their role is that of consultants, giving information and showing expertise. Students use their contact with them to produce a product, such as the video documentary the Arlington students produced.

These five focuses are compatible with the philosophy of education mentioned briefly in the introduction and with the decision-making model as outlined in chapter II. They culminate in a school/community co-operation project which, then, integrates all of the points so far mentioned -- action-involved learning commensurate with how learning happens, strategies chosen through intrinsic motivation and evidencing the process of learning (responsibility before an event) and an emphasis on relevant learning.

#### Community involvement in the Arlington project

The involvement of the community in a school/community co-operation project depends on the type of project the students decide to do. In the Arlington school/community co-operation project, community involvement enhanced students' social and community skills both during the process of learning and in its end product, a video program.

Initial contact was mine - to check out willingness of community members to participate in the project and willingness to let young people contact them for researching and interviewing. (Almost)



all those contacted showed willingness in both aspects. During the students' process of setting out to make a video documentary of their town as projected for the year 2000, the community did the following:

The director of planning and development of the town gave a 30-40 minute talk to the class, giving a general overview of the town and gearing his remarks especially to the topics he knew the students had chosen and to those areas he felt to be especially pertinent to their consideration of the future of the town. He also included questions and answers.

The town newspaper made its archives available to the students beyond what students could obtain at the library.

As usual, the town library was helpful, offering suggestions as to where students could obtain information, offering personal assistance and letting students use regular and special library facilities.

The greater area public television director of community relations gave an hour talk to the students on the making of a documentary, followed by an hour tour of the television facilities.

The school district's media specialist offered and conducted four 45-minute class periods of training in video equipment usage and video interviewing techniques.

A town oral historian spoke to the class about the oral history project he had undertaken and tape-recorded ten years before for the US Bicentennial, giving insight into interviewing techniques.

An employee from the local cable television station gave students hints about video-taping and gave them feedback on their first



'shoot'.

Two town hall employees answered questions and spoke generally on their specialties (budget and environment and the elderly) at a class interview in the classroom.

Nine townspeople gave interviews (through student initiative and organizing) on the six areas students had chosen, six of them agreeing to be interviewed on video tape for use in the video documentary.<sup>75</sup>

The school media center made its equipment available for use in the town during school time and during weekends almost any time we needed it (plus making editing equipment available to me as much as I needed).

The community safety department offered to let the students video-tape their special tracking room as well as let them interview the safety officer in his office.

The public works department allowed students to video-tape their town yard and its disposal process.

The community alcohol education director allowed students to video-tape an alcohol awareness training session at the high school.

The local cable television station made available two auxiliary video tapes for students' use if they were needed, one of which, a special 350 year birthday celebration of the town, students had not known about far enough in advance to get permission to attend and video-tape. (We didn't use these tapes, but the offers were most

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<sup>75</sup>Students also asked me to be interviewed on video since I had originated this project idea and was guiding them through it.

generous.)

It seemed that whatever we asked, we were allowed to do. It's a pity students didn't ask more! We were not beset by any major restrictions on the part of the town. Even within their busy time schedules, townspeople found time to help students learn about the town and to help them accomplish their task. A few were able also to view the documentary and to give feedback on it. The documentary could not have been completed without the help of the townspeople. They were an integral part of the learning for the students - learning about the town, learning about how to learn and learning about themselves as growing, learning people.

As mentioned earlier, the Arlington school/community co-operation project incorporated those ideas spelled out in chapter II on responsibility and responsible decision-making and in chapter III on community involvement. For example, student chose the goal, brainstormed how to attain it and interviewed members of the community to expand their own knowledge and give them a basis for completing their end product.

Benefits to students and community

There is a plethora of information - in theory, through examples, from results and from conclusions - regarding young people in the schools working with people in the community in various ways. But this thesis is not designed to document or summarize them. Experience has always been the best teacher. That experience-based learning extends students' breadth and intensity of learning and fills part of the vacuum of experience created from institutionalizing them away from the community is without question. Not only they, but also the community benefits from the two groups working together. Students gain a greater sense of responsibility and decision-making (See Chapter II on Responsibility and Responsible Decision-making), gain more experience with thinking skills (See Chapter IV on Critical and Creative Thinking), increase their community-mindedness, increase their bonding with people in the community, thus lessening feelings of isolation from them, increase in self-esteem, and perhaps gain a heightened career awareness. (See opportunities section of this chapter for further explanation of these.) The community gains increasingly aware young people, increases its bonding to young people, thereby lessening feelings of estrangement from them and lessening anti-social activities, gains the services of young people to a community project and, perhaps, gains productive community members.

Although this has been proven over and over again in the conducting of experience-based and school/community co-operation projects, results have also been empirically documented. During the



1978-79 school year, a quantitative study was conducted of 30 experiential learning programs.<sup>76</sup> (The authors limited the range of programs to those:

educational programs offered as an integral part of the general school curriculum, but taking place outside of the conventional classroom, where students (were) in new roles featuring significant tasks with real consequences, and where the emphasis (was) on learning by doing with associated reflection.<sup>77</sup>

Their results show 1) an increase in personal growth and self-esteem, 2) an increase in moral reasoning scores, 3) a positive movement towards more responsible attitudes and behavior, 4) more positive attitudes toward adults, 5) an increase in general attitudes towards being active in the community, 6) a positive effect on student learning and intellectual development.<sup>78</sup> I conclude with them that experience-based programs (school/community co-operation projects) should be adopted and expanded.

Corresponding to the idea of collective responsibility mentioned earlier (See chapter II) is a collective intelligence, the building of which is aided by projects of 'discovery' such as a school/community co-operation project. Earl C. Kelley's words cannot be improved upon:

Everytime a new invention comes into being, a new technique, a new process; everytime society or an individual makes an advance in knowlege or insight; each individual - every one of us - becomes more intelligent, better able and more intelligently able to

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<sup>76</sup>Daniel Conrad and Diane Hedin, "The Impact of Experiential Education on Adolescent Development", CHILD AND YOUTH SERVICES, volume 4, numbers 3 and 4, 1982, p. 57-76

<sup>77</sup>Ibid.

<sup>78</sup>Ibid.

grapple with the problems of living. This is the really important intelligence, not the mere innate but the effective, functional intelligence. There is no limit to the growth of this kind of intelligence; it depends on the collective wisdom of individuals and groups....The effective intelligence of individual members of the group can be raised by learning what the inventive geniuses have thus placed at their disposal...This is the process of building intelligence: First, the group culture is enlarged and enriched by certain ones who are more capable along that line; second, the rest of the group (in greater or lesser degree) learn what culture has to offer. Throughout, the process has been a social affair; and the result, the new intelligence is a social product. Strictly private intelligence is a chimera. Effective intelligence is socially contrived and socially transmitted. Actual communication - shared efforts is the effective process.<sup>79</sup>

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<sup>79</sup>Samuel Tenenbaum, WILLIAM HEARD KILPATRICK, p. 279

## CHAPTER IV

### CRITICAL THINKING AND CREATIVE THINKING

Very important for the educational process is the teaching for thinking. That young people should learn to think is not argued. Curricula and model lesson plans list tasks that are meant to increase students' ability to think. Courses on thinking are taught, workshops are given, books are written. As far back as mankind can think, people have been admonished to think. But how thinking is to be taught and encouraged is less clear than that it should be done. How to do so so as to engage young people's interest is also not clear.

In this chapter, I discuss two aspects of thinking - critical thinking and creative thinking. First, I give a definition of critical thinking, including what constitutes the teaching of it, followed by an explanation of how a school/community co-operation project evidences critical thinking, giving specific examples from the Arlington project I conducted. Then, I expand critical thinking into its larger whole creative thinking, explaining both current views on creativity and how the Arlington project was an example of creative efforts. Those who in the future will guide students in a school/community co-operation project will, of course, use a different percentage of the attitudes and skills here explained and others will use them in different ways. Nevertheless, pertinent attitudes and skills need be clear.



Definition and example of critical thinking

A broad view of the idea of critical thinking seems most sensible to me. John McPeck comes closest to a broad sensible definition when he says that, "the core meaning of critical thinking is the propensity and skill to engage in an activity with reflective scepticism" specifying that 'reflective scepticism' like 'healthy scepticism' refers to both the purpose and the quality of the thinking in question."<sup>80</sup> It is reflective because it pauses long enough to look for an alternative or more. He goes on to say that the purpose of this scepticism/criticism is not to be 'disagreeable' but "to advance progress toward a resolution of a problem."<sup>81</sup> The quality of the critical thinking I advocate includes efforts towards a positive (unselfish) and community end.

The larger scope of critical thinking is broad enough to include mountain climbing, acting and acts of primarily mental effort. One clear example of a broad view of critical thinking will suffice - that of Rene' Haller in Kenya, a Swiss agronomist and now independent advisor to the UN Food and Agriculture Organization and other organizations.<sup>82</sup> That Haller thought critically, assessing the limestone conditions (coral and silica residue) of the soil raped and

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<sup>80</sup>John E. McPeck, CRITICAL THINKING AND EDUCATION, p. 8

<sup>81</sup>Ibid.

<sup>82</sup>Edward Girardet, "From the rubble of a Kenyan quarry comes a lush, green park", In "The Christian Science Monitor," August 8, 1985, p. 1 and 36.

laid barren by a concrete company, and making it live again as a lush green 70 acre forest/park with a complete new ecosystem - bugs included - is without question. (That he and his product exhibit creativity is also without question. See Section on Creativity.) He was reflectively sceptical that nothing could be done to correct the terrible ecological dilemma. He engaged in measured action, haphazard at first but with a solid background of scientific knowledge, which proved to himself and to others the correctness of his scepticism. He worked, creating what he did from a disciplined and original mind. His critical spirit and calculated (disciplined) thinking lead him to his action and to the steps that brought about the resolution of the problem.<sup>83</sup>

#### Views on critical thinking

Haller is the kind of 'very critical' person Passmore, a prominent writer on critical thinking, speaks about - one who is alert to the possibility that the existing situation (the established norm) should be rejected, that changes should be made, and that the criteria used in judging performance should be modified. Passmore speaks of one who possesses such a critical spirit as much more than trained in analyzing certain kinds of fallacies or engaging in exercises to assess

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<sup>83</sup>It should be obvious that by 'disciplined' I do not mean the common interpretation pertaining to punishment but rather 'ordered and purposeful'. See Vernon Jones and Louis S. Jones, RESPONSIBLE CLASSROOM DISCIPLINE



statements or pursue truth. He implies that being critical describes a person's nature, encompasses an attitude of alertness and curiosity beyond the conventional and is much different from the critical 'skill' of finding fault with that which does not fulfill standards. His view of critical thinking is that it becomes transformed (as Haller's did) into a new way of looking at things - i.e., one that conjoins imagination and criticism. Haller's words, "One just needs a bit of imagination,"<sup>84</sup> reinforce Passmore's idea of a critico-creative spirit, a spirit that, Passmore goes on to say, speaks of originality, initiative, independence, courage, and imagination. (See Section on creative thinking for a fuller view of this project. Critical thinking and creative thinking can not be separated in reality. Even in discussion, any separation made seems artificial.) Haller embodies the critico-creative spirit by his capacity 1) to work towards coping with any situation or problem in his field and 2) to suggest alternatives to do so. Haller says, "It's absolutely nonsense to say that a situation is hopeless. There is always a way of working with nature, helping her along."<sup>85</sup> His critico-creative spirit goes far beyond just accepting or rejecting ideas or assessing statements of 'truth'.

It was Robert Ennis, a respected pioneer in writing on critical thinking (1962) who had set the tone for critical thinking to be understood as the 'assessment of ideas', using logic as a tool to

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<sup>84</sup>Edward Girardet, "From the rubble of a Kenyan quarry comes a lush, green park", In "The Christian Science Monitor", August 8, 1985, p. 36.

<sup>85</sup>Ibid.



uncover fallacies of thought. In his 1962 paper, he listed twelve aspects (abilities) of critical thinking and focused on the correctness of one's assessment.

1. Grasping the meaning of a statement.
2. Judging whether there is ambiguity in a line of reasoning.
3. Judging whether certain statements contradict each other.
4. Judging whether a conclusion follows necessarily.
5. Judging whether a statement is specific enough.
6. Judging whether a statement is actually the application of a certain principle.
7. Judging whether an observation statement is reliable.
8. Judging whether an inductive conclusion is warranted.
9. Judging whether the problem has been identified.
10. Judging whether something is an assumption.
11. Judging whether a definition is adequate.
12. Judging whether a statement made by an alleged authority is acceptable<sup>86</sup>

In 1981, McPeck, pleasingly so, enlarged the understanding of critical thinking. He wrote of 'knowing how to do something' -- to make decisions, to use methods and techniques specific to each discipline, implying that being critical describes a person's nature and the 'way' he pursues his result. McPeck disagreed with Ennis by saying that "thinking is a task, which may or may not result in the achievement of its desired end," that "critical thinking cannot be divorced from the skills that make the activity what it is" and that "critical thinking is shot through with value judgements at almost every level."<sup>87</sup> McPeck formulated his analysis of critical thinking thus:

Let X stand for any problem or activity requiring some mental effort.

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<sup>86</sup>Robert H. Ennis. "A concept of Critical Thinking", In "Harvard Educational Review, p. 84

<sup>87</sup>John McPeck, CRITICAL THINKING AND EDUCATION, p. 43, 9, and 55 respectively

Let E stand for the available evidence from the pertinent field or problem area.

Let P stand for some proposition or action with S.

Then we can say of a given student (S) that he is a critical thinker in area X if S has the disposition and skill to do X in such a way that E, or some subset of E, is suspended as being sufficient to establish the truth or viability of P."<sup>88</sup>

In 1984 in "Goals for a Critical-Thinking/Reasoning Curriculum", Ennis revised his earlier paper, including twelve abilities and thirteen dispositions, and changed his earlier 'assessment' definition to read the 'reasonable going about deciding what to believe or do'<sup>89</sup> Ennis reverses the order that I would make and puts Strategies and Tactics as a category listing within critical-thinking/reasoning abilities. I would prefer to list strategies and tactics as a main heading with clarification, support and inference as sub-categories, intermingled and interwoven with 'defining the problem', 'selecting criteria', 'formulating alternative solutions', 'tentative decision-making', 'reviewing and deciding', and 'monitoring'. To me, using strategies is the over-riding ability we innately use when we think, fitting everything into the framework of reality we have developed so far. (See the introduction to this thesis on perception and consciousness.) Teaching with strategies as the underlying concept of learning involves guiding young people in thinking through problems in an orderly way and giving them practice in

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<sup>88</sup>loc. cit., p. 9

<sup>89</sup>See Appendix. Ennis also included 'making and judging value judgments as one of his 'abilities'. He had excluded it before as an unwieldy area and had been sharply criticized by McPeck. The academic ferment between Ennis and McPeck seems to have been instrumental in producing the Ennis' superior 1984 list.



using appropriate skills to do so. It involves all three of the classifications Ennis makes for critical-thinking/reasoning -- abilities, strategies and attitudes<sup>90</sup>

#### Critical attitudes in the classroom

This 'going about deciding what to believe or do' is best done in an atmosphere of teaching for critical thinking. It seems a tautology to say that learning through critical thinking can occur best in an atmosphere of teaching for critical thinking. But the statement makes clear where the emphasis needs to be. The teacher in charge establishes the attitudes and actions of the students.

John Passmore emphasizes that a critical spirit does not come about through the teaching of facts. More specifically, he says, "Being critical is not only logically but empirically dissociated from being in possession of certain facts about criticism."<sup>91</sup> He speaks instead of the task of a teacher 1) to break down the tendency of students to either accept or evade (reject) authority, 2) to make his students puzzled by setting them a task to which the answer is not already known and 3) to teach to 'open capacities' that aid students be able to meet and tackle situations they have never seen before.<sup>92</sup> Such

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<sup>90</sup>See Appendix for Ennis' 1984 paper.

<sup>91</sup>John Passmore, THE PHILOSOPHY OF TEACHING, p. 166

<sup>92</sup>loc. cit., p. 177 See also Passmore's previous chapter on cultivating habits and cultivating imagination.



a teacher establishes a classroom that not only can improve students' intellectual abilities to understand, assess and participate in our rapidly changing society, but also, as demonstrated in the community aspect of the school/community co-operation approach I advocate (See chapter III) can give students direct experience in creating a better society.

Indoctrination. Such a critical classroom stands directly contrary to one using ideas and methods of indoctrination and static thinking. Indoctrination imposes certain accepted ideas on a gullible and captive person, a young person being that more than others, and seemingly aims at producing a docile and uncritical, and possibly an undoubting, state of mind. Under methods of indoctrination, students move into furnished, comfortable minds<sup>93</sup> taking what's been already established and are not lead to understand the value of furnishing their mind themselves based on their developing intelligence. The use of such methods of indoctrination may produce students with lots of knowledge and admirable basic skills, but it does not encourage individuals to be independent thinkers who know how to ferret things out for themselves and/or to question the reliability of information given them.<sup>94</sup> It does not encourage the weighing of ideas, values, and purposes. In this methodology, learning becomes re-defined to mean

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<sup>93</sup>see e.e. cumming's poem "the cambridge ladies'.

<sup>94</sup>The acquisition of learning skills such as grammar, basic terms and math concepts, (i.e., concrete and basic skills) does not constitute indoctrination.

'accepting what X says and remembering it'. It evidences an authoritarian teacher who may be unaware herself of how to think critically. (See footnote in Chapter II, section on 'Situations conducive to responsible learners,' on results of authoritarian, democratic, laissez-faire methods.) Minimal critical thinking, if any, can take place in an atmosphere of indoctrination.

Likewise, minimal critical thinking can exist within a framework of teacher-oriented learning where students live within a setting where only teachers are responsible to give out knowledge and who give approval or disapproval for all of a student's endeavors. Such a setting, like that of indoctrination, discourages independent thinking and encourages dependency.

Critical spirit of teachers. Developing critical thinking in students is aided, therefore, by the existence of a critical spirit -- including attitudes and methods -- of teachers. This involves setting the groundwork for critical thinking attitudes of openness and open-mindedness, scholarship, inquiry and evaluation by having the teacher display them herself. It means scheduling activities that require procedures of learning - e.g., brainstorming and the sequencing of events and procedures to bring about a desired end. It entails providing a format for developing arguments, reasoning and for making assessments. It means helping students understand that opinions flow out of evidence and that they are not valuable without evidence. It



involves helping students experience how evidence is obtained by letting them obtain it themselves. It involves helping students examine their evidence and letting them have experience fashioning conclusions (as opposed to asking students about conclusions teachers have already drawn.) It involves helping students formulate and examine statements that are examples of incomplete or fallacious thinking or that are controversial and/or value-laden (in contrast to giving them such statements and directing traffic on their critical thinking.) It involves letting young people make their own discoveries.

Teaching for critical thinking. Teaching for critical thinking entails helping students in the ordering of their minds so that conclusions they entertain might be rational and somewhat methodical. It does not exclude allowing for insight and intuition but relates these to experience and previous knowledge.<sup>95</sup> Teaching for critical thinking gives students a format to use to develop and use a method for understanding new (and old) ideas. It lets students explore the reasonableness of ideas and to examine what being a 'reasonable' idea means. In addition, it involves helping them examine prejudices and other unexamined judgments on information and knowledge and helping

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<sup>95</sup>By intuition, I mean the ability to quickly bridge gaps between knowledge and conclusions, based on familiarity with the information/knowledge and the open-minded exercise of 'letting the mind work' rather than making it work in standard empirically-proven methods, i.e., the 'eureka' ability (part of Rene' Haller's ability) constitutes the higher use of intellect, outside the scope of the methodology I am advocating here.



them avoid accepting fantasies that 'sound good' or support one's desires, fears or feelings of guilt but are equally unexamined.

Thus, teaching for critical thinking involves establishing criteria -- criteria for actions and for ideas, i.e., learning how to sequence and understand events to bring about a desired end and how to judge the reliability of a source. Teachers can help establish these criteria for scholarship rather than give out ready-made answers or accept free-for-all ones. They need to encourage a seriousness on the part of students to look on what they do as a search to find as clear a picture as possible and the best possible solution and to exhibit it themselves.

One cannot teach the process of critical thinking by explanation; one can only give opportunities for it through experiences. A student learns critical skills by engaging in tasks -- tasks that are specific to one discipline or that are interdisciplinary. Therefore, critical thinking has most meaning when related to a real task.

With such teaching, a student can become a better critical thinker in X area. He will broaden his attitude (scope) of ideas and scholarship. He will, by suspending ready-made conclusions, arrive at a more satisfactory solution or answer to, or insight into, the situation under investigation. He will enlarge his skill, knowledge and experience in X area, thereby giving him the propensity to further engage in activities in that field. He will have been able to consider the causes of information and the effects and consequences this

information may have. He will be able to look at both external and internal 'established' ideas, checking them for accuracy, strengths, weaknesses and relevance. He most likely will be exposed to analysing, interpreting, distinguishing, making judgments and justifying them and may get experience in clarifying, supporting and making and implementing strategies. He will hopefully be able to promote a better, more desirable world for everyone to live in.

#### Critical thinking and a school/community co-operation project

An underlying theme in a school/community co-operation project here advocated is the necessity of interrelatedness between people in a community -- i.e., a healthy community with healthy members comes from intercommunication. All tasks, knowledge, strategies and procedures herein described and philosophically advocated and admired are geared to such interaction. In addition to being my personal underlying philosophy, this idea of an improved world is inherent to the ideas of critical thinking. The teaching of critical thinking addresses itself not only to the clearer understanding of X field or fields by using advantageous procedures that bring about X result but also to the furtherance of interaction. The school/community co-operation project herein discussed also addresses itself not only to the clear understanding of elements of communication and skills of investigation (as well as to the broader knowledge in X field) but to

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intercommunication between people in a community. It goes beyond traditional academic circles into real life situations.<sup>96</sup>

1) The possession of a critical spirit brought about through knowledge, intellectual curiosity, initiative, courage and imagination, and 2) the scientific epistemological method of knowing how to do something and engaging in that activity with reflective scepticism (going about doing this task, including scrutinizing information, finding evidence for ideas and evaluating these ideas) IS evidenced in a school/community co-operation project. Indoctrination is minimized by the necessity for student initiative, first-hand investigation and student-made hypotheses, students' curiosity is peaked through the discouragement of blanket statements, and social prejudices and prevailing attitudes are exposed and examined through the introduction of interaction with community members.

School/community format. The format of a school/community co-operation project provides students with a project to be completed in co-operation with members of a community and upholds critical thinking in the following ways: The very existence of such a project to bring about and discover X result in the community, like Haller's 'project', expresses an admission that aspects of the community are open to investigation, in this case, not only by 'experts' but also by 'learners', thus exposing learners to controversial community issues to which their developing thinking is given importance. Such a project

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<sup>96</sup>Both Ennis and McPeck remain in academic circles.



also suggests that particular existing situations need changing and that criteria for establishing these situations can be made. The format requires students to independently investigate and to discover useful procedures to arrive at their conclusions. It actually lets them more-than-vicariously participate in striving towards a better society through working with members of the society and through creating an end product.

School/community experiences. Students' experiences with the school/community co-operation format further uphold a critical spirit. These experiences provide students with a new way of looking at things by the very way that they pursue their result, i.e., the strategies and methods they use. The experiences increase order in students' minds not only around a topic but with the community in mind. First and foremost, they rely on and make it necessary for students to initiate as much of their learning as possible.

The objectives stated in the project proposal<sup>97</sup> speak to the project's critical thinking element. These objectives are:

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|------------------------------------|-------------------------|
| brainstorming,                     | speculating/predicting, |
| engaging in information gathering, | coming to closure,      |
| making analyses/assessments,       | exploring values.       |

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<sup>97</sup>See Appendix

The Arlington High School school/community co-operation project and critical thinking

Specific examples from the Arlington project illustrate these aspects of critical thinking. In this project, students decided, after generating ideas through broadening brainstorming sessions, (what do you know, what do you think you know, what do you need to know), on what areas to study, how to go about finding information and what procedures to follow to accomplish their tasks. They exhibited scholarship by doing historical research, obtaining evidence first-hand and consulting with experts in the field. In making timetables for themselves, they allowed for alternative action should changes occur. They had opportunity to find inconsistencies in their data and to deal with them. They became more 'scientific'/critical in their thinking by discussing what questions to ask in their interviewing and what hypotheses to construct to help them to project on Arlington in the year 2000. They demonstrated concern about the reliability of the information they obtained in regard to whom they interviewed and sought to justify the ideas they put in their scripts. They sought to discover the causes and consequences of the information they gathered, such as the cause of a near defeat of the proposed new high school in the 1970's and the consequences of a current 23% of the town being over 65. They realized relationships between different parts of their investigation and exploration, e.g., they realized how both financial constraints and demographics influenced the town in the past and

present and how they would continue to do so in the future. They generated hypotheses of their own about the town in the year 2000, e.g., speculated and predicted that 1) the community hospital would enlarge its facilities only for the elderly and for chronic cases and would no longer have obstetric or even child care units, that there would be more private agencies catering for the elderly; 2) that the high school may consolidate into a six year school and/or a community college may be established on the high school premises; and 3) that perhaps the age of working people in the community would have to be increased. Students sought to support or refute these hypotheses. They evaluated, analysed and assessed information, distinguishing between fact and opinion, between reality and fantasy. In all, they used high levels of cognitive development than pure knowledge acquisition.

Students became exposed to biases and prejudices through the subtopics they chose. They assessed beliefs about six areas of the town - 1) environment, 2) medical, 3) community safety, 4) education, 5) general trends, and 6) entertainment, as well as beliefs about the role of old people, about the workings of town government, and, hopefully, about their attitudes towards community living and their need to be involved in creating a good future. In keeping a journal into which each of them was encouraged to include newspaper articles, magazine articles and informal entries, they had the opportunities to confront these controversial issues and to assess particular statements. Such statements as the following could have been generated in follow-up lessons.<sup>98</sup>



- 1) Persons are by law encouraged to retire at age 65 or even earlier. What assumptions are being held here? How valid are they? Do you think this will change in the future? Support your reasons.
- 2) A businessman in town says the \_\_\_\_\_ Swamp (a local important wetlands) just breeds mosquitoes, disease and is a spot for delinquents. He wants to fill the swamp and build a shopping mall on the spot. Do you think his arguments are good ones?
- 3) The town denied all school teachers of the town an increase in salary in 1984-85, even a cost of living increase. Does this mean the town is anti-education? Discuss.
- 4) It is known that Joe \_\_\_\_\_ was in prison in 1980. The parents in the new neighborhood where he lives won't let their children play with his children. What issues are involved here? What would you do? What do you suggest?
- 5) The newspapers often report a higher percentage of acts of juvenile delinquency than of positive action of young people. How would you respond to someone who then concludes that young people are chiefly troublemakers and need to be brought up with a great deal of 'discipline'?
- 6) Advertisements showing children sitting in front of a computer terminal, then handing their parents a good report card are used to persuade parents to buy home computers. How is this a good or bad argument?

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98 The time allotted to making the documentary didn't allow tangential exercises.

- 7) Clara Pella ('Where's the beef?' advertisement) presents an older person as a simple, laughable character. This supports many people's stereotypes of older people. How would you combat such a stereotype?
- 8) 'White collar' (business and administration) crime results in fewer convictions and jail sentences than street and 'blue collar' crime. From this can we conclude that 'white collar' crime is less serious? Support what you say.
- 9) You have planned a Halloween party. You know many kids at your school say that unless you have marijuana at you party, no one can have a good time. Is this good reasoning? Explain. What will you do about marijuana at your party?
- 10) Our country is a democracy, where everyone is 'free'. Making school compulsory violates this right to be free. What assumptions are there in these statements? Is this a good argument?

With regard to both the journals and to the information obtained through interviews, students had opportunity to encounter other self-generated discussions prompted by the question: What are some examples of fallacious reasoning with regard to your subtopic that people need to re-examine - with regard to: medicine, illness, death; town government and politics; police and fire; young people and education; old people; entertainment and entertainers. Students could have, of course, brought in more newspaper articles, magazine articles, editorials, and cartoons to discuss these issues.

### Learning through Revelance

The Arlington school/community co-operation project gave students many critical thinking opportunities and experiences. It gave them opportunities to make inquiry without ready-made conclusions in mind; it demonstrated the need for a methodological approach to the 'problem' by requiring student timetabling, (goals and objectives); it integrated learning by having students see relationships between their chosen subtopics. Students were involved making decisions about what needed to be done, considering the consequences of decision-making, suspending judgment until several inquiries had been made, supporting conclusions with data and justifying what one said, discovering more about one's own system of values, seeking to solve a problem, evaluating peer efforts based on criteria, and knowing that further information and inquiry may alter one's conclusion. The project necessitated a flexible mind, constantly willing to re-group. The project gave students a feeling of being in charge of their own learning rather than relying on dogmatic authority. It gave them increased confidence in knowing where beliefs and ideas come from - that they come from an inner process.

In speculating on the future, all was opinion, but opinion with a solid basis rather than an unsubstantiated one. Since looking at the future opens all beliefs and ideas to revision in light of new



evidence, students found an open atmosphere whereby one's present beliefs were encouraged to be re-evaluated. Everything that was explored was controversial, but most things were tied to facts rather than beliefs and values such as 'Is abortion right?' or 'Should Heinz have stolen the drug for his ailing wife?'<sup>99</sup>

Although the maxim "you can lead a horse to water but you can't make him drink" is true, if he is working in the sun he will get thirsty and will drink. Leading him to water when he is not thirsty and has no need for water is rather silly. Making sure there is water there when he needs it is more sensible. So it is with students. Students learn critical thinking and other skills when they are put in a situation where these skills become relevant. They can become better critical thinkers in X area when their learning becomes real-life and felt. As McPeck says, "...teaching someone to be a critical thinker entails both the cognitive and affective domains of a student's learning in an area."<sup>100</sup>

McPeck distinguishes two tasks that confront a teacher who is trying to promote critical thinking:

On the one hand, he is teaching how, which issues in procedures or skills; and on the other, he is teaching to, which issues in dispositions, propensities, or tendencies...In short, he is trying to provide the student with both a capacity and the will to use it.<sup>101</sup>

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<sup>99</sup>Lawrence Kohlberg uses this as one of his moral dilemmas for students to discuss. These moral dilemmas deal with students' level (of 6) of moral awareness.

<sup>100</sup>John E. McPeck, CRITICAL THINKING AND EDUCATION, p. 17

<sup>101</sup>loc. cit., p. 18

A project students have opted to do and in which they have the pride of taking a lot of initiative has a good chance of providing the disposition to use the skills it entails. When such a project entails critical skills, students receive a good education. When the same project includes community interaction, the benefits are multiplied, both within the student and within the community.

#### Definition of creative thinking

Both critical thinking and creative thinking indicate a new way of seeing life. But creativity is the capacity within us to bring new life. It is creativity that is the unifying sphere of life, critical thinking being one of its parts. Rational functions can lead us to understand only as they are creative.<sup>102</sup> One can pick ideas, facts and concepts to pieces in an attitude of reflective scepticism. But the pieces will not then 'represent the truth' or bring about a result. This process may give more insight and heightened awareness. But it is the fulness of creativity that completes and unifies an incomplete Gestalt (oneness, togetherness) (See 'Definition and example of critical thinking' section in this chapter.) Creativity seeks to make wholes out of disparate, unclear, unknown or chaotic pieces. But it does not spring from a new way of seeing; it IS both the fountain head and the gush. Critical thinking exists within creativity; creativity is the larger sphere.

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<sup>102</sup>Rollo May, THE COURAGE TO CREATE, p. 161



Creativity is a word, a concept, a process, a product, and experiment. Creativity is also an exploration and a working out of the relation between self and other. It evidences the fluidness of awakening understanding, the fluidity of understood continuity, of newly-perceived relationships, of discovery being expressed and an increasingly personal relationship to the world. Creativity is all of these and more. It is that ever-latent capacity with us that produces 'effective surprise.'<sup>103</sup>

We, no doubt, all like to think of ourselves as potentially (and sometimes actually) creative; and why shouldn't we? For creativity is a spark from within,. It develops from our uniqueness and our original (both meanings intended) perceptions of our world. It is a response to the energies around us which, in turn, reverberate in response. It, together with its subpart critical thinking, represents a shift to another (a thinker's) mode of perceiving - a new mode of information gathering - that enhances awareness, causing a fusion, (sometimes a profusion) of ideas, in contrast to fission or breaking apart.

A creative mind re-orders those elements that surround it, this perception in return increasing both its own and others' understanding of them. It opens doors previously not even acknowledged as being there and expresses itself in daring, searching and non-ordinary ways. It searches beyond convenient habits and functional fixity. By perceiving critically and creatively, one liberates himself from the

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<sup>103</sup>Jerome S. Bruner, ON KNOWING, p. 186



'cataract of accepted belief'. (Koestler)

Creativity results from more than combinatory play; it results whenever present potential is unlocked and a person comes to be aware of greater capacities, in turn giving him a renewed belief in himself. It results from a working with elements (self being one) that enter into new relationships and new awarenesses, transcending self and becoming useful.

Creativity is not limited to acknowledge artists; it is rather an attitude that permeates the universe, finding responsiveness in willingness and in a spirit of discovery. It is a mentality in search of self-discovery. It is a mind actively forming and reforming the world. It is enhanced through a receptivity and sensitivity and a quest for newness, for one-ness, for a deeper understanding of the elements one already knows. It is a struggle with these elements and relationships in order to discover and reveal meaning between and out of them. It is our heritage, our need for self-expression and ought not be spoiled by denial, conformity or sameness nor be discouraged by someone else's perception of more basic 'needs.'<sup>104</sup> It evidences a mind generating using its own powers (capacities) and being responsible for itself. It demonstrates independence but is born of interdependence between elements and/or people. Creativity, the mother of all attitudes, comes out of and taps the inner self and seeks a synthesis from which the self emerges more whole and will then have

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<sup>104</sup>Those schools which emphasize the learning of basic skills through acquisition of knowledge are devoid of meaningful involvement on the part of students and do not focus on or even evidence the teaching of thinking, critical thinking or creative thinking.

experienced more of itself. It represents a mind prepared to take advantage of serendipity.<sup>105</sup>

Many people have talked about the creative process and a creative product. They have inquired about the character traits that co-exist with creativity and that encourage it and have generated numerous lists identifying these traits. Similarly, they have asked how one fosters creativity and how a teacher can do so in the schools. By exploring these ideas, I will put some substance to the theoretical creativity. Because the topic is so vast, I will limit my exploration to that which establishes a basis for explaining how a school/community co-operation project is creativogenic.

The creative process. Alex Osborn, in his 1953 book APPLIED IMAGINATION listed seven stages to explain the creative proces.. They are:

- |                |                              |
|----------------|------------------------------|
| 1) orientation | 5) incubation                |
| 2) preparation | 6) synthesis                 |
| 3) analysis    | 7) evaluation <sup>106</sup> |
| 4) ideation    |                              |

Jules Henri Poincari, one of the great mathematicians of the late 19th and early 20th centuries, spoke in the early twentieth

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<sup>105</sup>Albert Rosenfeld, In Stanley Rosner and Lawrence E. Abt (Eds.), THE CREATIVE EXPERIENCE, p. 5

<sup>106</sup>In Silvano Arieti, CREATIVITY: The Magic Synthesis, p. 16

century of characteristics of the creative experience - of a creative product as coming out of:

a suddenness of illumination  
 an occurrence against what one has clung to  
 a vividness  
 a brevity, conciseness and certainty  
 hard work prior to the 'breakthrough'  
 a period of rest  
 an alternation of work and relaxation<sup>107</sup>

Characteristics of a creative person. J.P. Guilford in 1962

spoke of a creative person. He isolated and explained four aspects and traits of creativity -- fluency, flexibility, originality, and elaboration. Guilford explains fluency as evidenced through the fertility of one's thoughts, i.e., how MUCH/what amount one can generate on a given topic. (He isolated associative fluency, i.e., synonymous ideas; expressive fluency, i.e., production of phrases and sentences; and ideational fluency, i.e., production of ideas on request on a given topic.) He explains flexibility (both spontaneous and adaptive) as evidenced in boldness and varied divergent thinking, and as exhibited by one who will search for ideas in new directions and will explore an idea in unpredicted and unfamiliar ways. He speaks of originality as implying uniqueness, i.e., expanding ideas beyond their ordinary limits or suggested possibilities -- involving playfulness, and evidencing thought of doing old things in new ways or doing things not thought of before, i.e., not being tied to what has previously been said or done. He generally predicted and found that a quality co-

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<sup>107</sup>Rollo May, THE COURAGE TO CREATE, p. 71



existent with creativity - a base from which everything else can start - is an ability to evaluate, to judge that everything is not right, and to be sensitive to problems (See Passmore's comments in the section on 'Views on critical thinking').

Creativogenic milieu. There is no prescription for the pursuit of creativity and its characteristics. What is important is to contribute to, and create and work in a creativogenic milieu. Certain general principles can be stated but, perhaps, none are sufficient or even necessary. Although identifying personality traits is useful, creativity will not be engendered directly but by preparing a general climate for it (not necessarily identifying traits, testing for creativity or discussing its aspects at all). It is promoted in a roundabout fashion rather than directly.

Such a general climate which both a teacher and the community can provide includes:

- 1) a stress on becoming, not just being,
- 2) exposure to different and even contrasting cultural stimuli,
- 3) the interaction of significant persons,
- 4) the promotion of incentives and awards.<sup>108</sup>

More specifically, it includes:

- 5) showing a child that his ideas have value,
- 6) providing opportunities for self-initiated learning including the use of open-ended questioning,
- 7) providing periods of nonevaluative practice or learning<sup>109</sup>

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<sup>108</sup>Silvano Arieti, CREATIVITY: The Magic Synthesis, p. 313-325.

<sup>109</sup>Torrance, In Silvano Arieti, CREATIVITY: The Magic Synthesis, p. 364

Attitudes of creativity

Creativity-producing attitudes that both creative students and teachers displays and/or seek to employ include:

- 1) curiosity,
- 2) self-confidence,
- 3) common-sense,
- 4) tolerance for uncertainty and ambiguity,
- 5) respect for evidence,
- 6) sensitivity to problems,
- 7) playfulness (not to be confused with or represent a lack of sincerity/lack of encounter or an indifference to the outcome of what one is doing. When employing the unpredictable, trying new things, creativity remains tied to existing truths, thus differentiating it from bizarreness.),
- 8) tolerance for, interest in and openness to divergent and unfamiliar views (openness to surprises),
- 9) willingness and courage to try new untried things, i.e., to avoid the obvious, perhaps to produce something novel.

A teacher needs both to be aware of and evidence these attitudes to set the tone for students' psychological readiness for creativity. She need be a co-participant with students in creativity and creative endeavors.

Creativity, by means of openness, etc, taps the most personal,

therefore, serious areas of a person and connects him to himself. Creativity will not result from indifference or from the expectation of magic. Nor will it result without the seriousness of constructing a method/design, a plan/pattern, an attempting, an ordering of one's efforts to achieve a goal. The creative attitude immerses itself in chaos in order to bring something into form. It isn't wildness, unrestrained, un-formable and unguided. It requires limits, like the banks of a river. It has a dual role to enlarge one's universe by adding or uncovering new dimensions (thereby enlarging the larger world) and to enrich and expand man who will be able to experience these new dimensions inwardly.

#### Methods that enhance creativity

How does creativity work? What is its process? We don't really know. But the employment of basic methodological techniques combined with conducive attitudes result in more and more creative efforts. Creativity does not just happen! It happens in areas in which persons consciously have worked laboriously and with dedication -- with purpose. It happens when a person makes a serious and intense encounter with his world.

Methods that both educators and students can use to enhance creativity are:

- |   |  |
|---|--|
| 1) brainstorming,   | 3) being selective,  |
| 2) information-gathering (implying<br>predicting/generating<br>knowledge and memory), | 4) setting goals,<br>5) persevering,<br>6) keen observation, |



- |   |   |
|---|---|
| <p>7) problem-solving, including<br/>         imagining, hypotheses,<br/>         redefining/modifying, re-<br/>         arranging, synthesizing,<br/>         analyzing/reasoning,</p> | <p>8) the suspension of both quick<br/>         judgments and quick solutions,<br/>         9) originality and imagining,<br/>         10) spontaneity.</p> |
|---|---|

These methods and creativity itself are well stimulated in a realm larger than the classroom. In addition, the effectiveness is multiplied when the classroom becomes enlarged to include the community as subject and as a co-educational force. The traits and methods mentioned above may only represent impressions manifested on a teacher or on another outside source or represent hopeful techniques used but may not represent creativity. Educators can provide oxygen to the flame, i.e., provide a proper milieu. But the truth is -- creativity is internal; it is more than its outward signs.

#### Inhibiting factors to creativity

Just as indoctrination prohibits and, perhaps, prevents critical thinking, there are teaching styles that inhibit the creative process, the chief of these being authoritarianism. (See 'Situations conducive to responsible learners' section in Chapter II) Teachers hinder the creative process by restricting curiosity and other traits on the above list, by over-emphasizing prevention, fear and timidity, by orienting students to success rather than to achievement for its own sake, and by emphasizing a work-play dichotomy, i.e., the idea that work and play are antithetical.<sup>110</sup> Adolescents hinder the creative

spirit through peer pressure to conform to group standards.

In a study on creativity in 114 teachers Myers and Torrance concluded that teachers do not encourage, perhaps unconsciously discourage creativity when they are:

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|--|--|
| authoritarian  | defensive  |
| dominated by time  | lacking in energy  |
| insensitive to their pupils' intellectual and emotional needs  | pre-occupied with their information-giving functions                                   |
| intellectually inert   | disinterested in promoting initiative and self-reliance in their pupils <sup>111</sup> |
| pre-occupied with disciplinary matters and unwilling to give much of themselves in the teaching-learning compact |  |

Alex Osborn listed factors that individuals themselves possess that cramp their latent creativity as 1) sticking to previous habits, 2) self-discouragement, 3) timidity, 4) a loss of belief in the idea that hard work pays.<sup>112</sup>

#### Community ideology

Creativity, including both critical thinking and creative thinking, suggests an underlying ideology of improving and enlarging human experience. Imaginative thinking alone may result in only

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<sup>110</sup>loc. cit., p. 363-64

<sup>111</sup>In Gallo, "Traits and Techniques of Creative Production" p. 117

<sup>112</sup>Silvano Arieti, CREATIVITY: The Magic Synthesis, p. 367

bizarreness without a goal or methodology. But the same imagination and originality juxtaposed with form and used with vitality enhances creativity.<sup>113</sup> Its playfulness aims at achieving insight rather than causing sensation or distraction. It becomes tied to creativity by demonstrating and fulfilling a social need, by being tied to society, not just by being unique or bizarre. It does not just play but, by imaginatively relating new ideas to ordinary thinking, seeks greater understanding, acceptance and appreciation. Both critical thinking and creative thinking in this light ally themselves with a type of utilitarian (community) ideology.

School/community co-operation and creativity

How does a school/community co-operation project encourage creativity? How is it creativogenic?

The very ideas behind a school/community co-operation project -- that of exposing young people to cultural stimuli outside the classroom, of interacting with 'significant' members of the community, and of culminating in a product of use beyond the classroom -- help provide a climate for creativity. (See general climate, numbers 2, 3, and 4 of 'Creativogenic milieu' section of this chapter.)

My goal through this particular project of 'Arlington, the year 2000', was to stimulate students' powers of taking initiative in an

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<sup>113</sup>Rollo May, THE COURAGE TO CREATE, p. 144



academic endeavor, to increase their knowledge of HOW to make goals to achieve what they set out to do, to be more in control of their own learning, and to help them increase their abilities to elaborate and to break down material in order to understand it more thoroughly, i.e., to be more independent learners. This was a communication project, aimed at helping students become more expressive and methodical. It was also a futuristic project, exploring the future of Arlington and stressing the idea of becoming in every stage.

Initially, students were given five thought-provoking questions to think about. Their responses, as a student aptly remarked, required imagination, variety, a spirit of playfulness/openness, and flexibility. This exercise set the tone for stimulating fluency, flexibility, originality and elaboration. Following this, a few problem-solving brain twisters were used to encourage students to beware of limiting themselves and of not looking for imaginative answers, e.g., the hazard of holding wrong assumptions and the problems of being unable to see new approaches, of being able to divorce oneself from the obvious.<sup>114</sup>

The next task gave them opportunities to spark these qualities in others by asking another person the same question (in the class and at home), giving them experience in knowing how to elicit good answers and in drawing their subjects out through good investigative interviewing techniques. Students drew out as much as possible from themselves and elicited good responses from their subjects.

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<sup>114</sup>See Appendix

A lot of brainstorming was done to discover where their interests, knowledge and lack of knowledge lay.<sup>115</sup> These brainstorming times elicited ideas about what topics and subtopics to explore, what methods to use, what aspects of the town were considered necessary to explore for the study, including for whom and why these were necessary and set the tone for student inquiry. Students were encouraged to brainstorm more and more ideas -- ideas that only later would be evaluated, used or thrown out.

Students did a bit of research to blend the knowledge they already had with knowledge they obtained through library research and from personal information they received (one student on his own initiative changed his entire subtopic from 'fashions' to 'education' as he came to see the irrelevance of his previous topic 'fashions' to the future of the whole town). They looked for relevant information to help them make predictions and projections on the future, looking at both causes and possible consequences, they set their own goals of how they were going to accomplish their tasks, and they questioned experts in their fields about the past, trends of the past and expectations for the future (experts who, if they didn't work in the field, at least, had more knowledge than they did on the topic). A major focus of the study was learning how to ask good questions and, then, actually asking questions of both informal and formal experts. During training sessions and, of course, during actual interview sessions, students got

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<sup>115</sup>Alex Osborn in 1939 established brainstorming as a technique to enhance creativity/originality, stating that the ideal number of participants was between 5 and 10. In, Silvano Arieti, CREATIVITY: The Magic Synthesis, p. 367



experience in spontaneity and in knowing how to meet unexpected situations. They re-arranged investigative techniques by using a reversal technique to find out what changes there would be, i.e., they modified their searching to question what aspects of the town would NOT change and/or what aspects town members did NOT want to change. They made informal hypotheses and predictions based on their study, synthesizing information from all sources into their scripts and had opportunity for originality. They experienced much perseverance in both the ever-so-long planning stage and in the actual making of the documenary. (Students persevered with obstacles, errors and responsibilities they hadn't planned on.)<sup>116</sup> They got practice in deferring judgments and avoiding quick solutions, by waiting until they had gathered more informaiton to make tentative conclusions.

Students put the pieces of the study (their discoveries) together into their scripts, commenting on what they had discovered to be relevant with regard to their subtopics. They evaluated what they did continuously although more could have been done. Rather than a

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<sup>116</sup>Preparation time for making the documentary (although students were actually 'doing it' all the time) extended for longer than students had expected (although their expectations were not based on having done this before). Students' thoughts were based on anxiousness, expectation and readiness to have immediate hands-on experience, not yet understanding other less 'fun' planning, which involved making decisions, taking responsibilities and seeing consequences. Students exhibited a learning gap between wanting to do something, and being able to get it done. That gap was in learning HOW to accomplish the chosen task. Much was expected of me as teacher and many reasons were given, explaining things that stood in the way of accomplishing the HOW of preparing oneself for working through the project. But this lengthened preparation was a learning experience and gave students an opportunity to become more sensitive to the problems involved.



formal evaluation which time did not permit, they maintained an evaluative spirit. The illumination students gained from their study came from a natural blending of the whole process. Through all of this students had a lot of opportunities to become sensitive to problems.<sup>117</sup> Not only did they find out about problems through their subtopic investigations, but they found out from real people whose involvement with the problems and whose enthusiasm over their field could not help but be contagious.<sup>118</sup>

All in all, students gained personally and creatively from opportunities to be self-assertive. The activities, especially the video-taping and the interviewing increased students' confidence and self-esteem visibly. They became more observant, both physically through the eye of a camera and mentally, through questioning and meeting situations as they came, both of these increasing their perceptual openness and awareness. They increased their adaptability through goal-setting and timetabling, meeting obstacles and thinking of using alternative actions to still achieve their goal.

I had a chiefly supportive role which, by not worrying students about grades, provided them a climate of freedom and psychological security in their exploratory thinking. Students knew they were respected for their ability to accomplish the tasks, were never penalized for their work, and were always encouraged and aided.

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<sup>117</sup>The majority of the students came to see, perhaps for the first time, the importance of an age distribution in their town and how it would affect any major operations in the town.

<sup>118</sup>The response of the town to these youngsters interviewing them in these topics was wonderful.

Creativity will not always culminate in a creative product. But when it does, the creative product comes to have a special aliveness of its own. Yet, the creative process, satisfactory product or not, does bring aliveness. Although creative thinking does not always evidence an ability to effect closure or produce a given product on demand, nevertheless, it still remains creative thinking. There is an important ingredient that, although not precluding a creative product, seems to be a pre-requisite for one. It may also cause the suspension of closure. This ingredient is that of incubation, quietness, and a 'letting the mind work' in its own inimitable way - perhaps through daydreaming, perhaps through sleep in order for there to be a creative product (See Poincaré's comments in the 'Creative process' section of this chapter).

This being true, a good teacher allows for creativity but never demands it. However, having other goals as well as creativity, she will work to frame closure into the learning process. Waiting too long for the 'eureka' experience is detrimental to growth and impedes further learning. The task of a public school teacher is not to require creative thinking processes or products beyond students' limits. Instead, her task is to help students develop the attitudes and tools to make useful contributions to their world. A teacher best not exceed these limits and demand more than the students can give. But she must encourage closure. Students themselves can 'wait for the 'eureka' experience' on their own time doing their own projects. But a public school teacher must consider the broader aims of teaching and learning



and the broader needs of the group. When closure comes, the learning experience may fall short of ideal critical and creative thinking expectations. Nevertheless, good work will have been done and the tone set for even greater progress to take place at another time and place.

#### Summary

The Arlington school/community co-operation project -- Arlington, the year 2000 -- did culminate in a rather creative product. It not only required creative efforts to produce it but clearly exhibits them as well. The documentary represents a synthesis of old and new information to form a basis for new knowledge and demonstrates and documents students' searching spirit by which they reached their syntheses. It visually gives evidence of students' inquiring minds and flexible thinking, and reveals the openness of its creators in their search for ideas about the future. The study of the future, alone, by its stress on becoming, not just being, represents expansive, futuristic thinking, revealing it to be creativogenic and to promote growth. In all, this project represents an inquiring, flexible methodology to achieve its ends, although this flexibility is not a guarantee for creativity. "Education for creativity is nothing short of education for living." (Erich Fromm) Furthermore, a practical education for living (a Dewey concept) integrates people into society and culture and mirrors a wholeness. The Arlington school/community



co-operation project was an exercise in living. It related students' to their own lives and surrounding community and made everything they did part of a larger whole.

Learning through projects and activities, particularly activities involving members of the real community, accelerates young people's learning. It is up to educators to see that the projects are rich and have rich opportunities. After that, students with only key guidance will accomplish the rest. It will, of course, be important for a teacher to be ready to provide X when it is needed. But when learning situations come out of what students choose to do and what they can participate in, they will bear fruit.

## CONCLUSION

"An individual has within himself the capacity and the tendency, latent if not evident, to move forward toward maturity."<sup>119</sup> An educator's task is to bring out this capacity and this tendency. To do this he need set the stage for growth and encourage young people to learn by discovery.

This thesis has given an example of a community-involved learning situation in which students chose a goal, were guided in learning HOW to achieve their goal and used academic skills in the process. But the academics were not the object. . They were the tool. The objects were the process of increasing one's ability to use his self-directed capacity for discovery and the delight one gains when he learns through his own process. Those who delight in seeing others learn through their own processes continually use this process.

One learns when he meets a challenge; he discovers with a well-prepared mind.

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<sup>119</sup>Carl R. Rogers, ON BEING A PERSON, p. 35

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APPENDIX

37 Brunswick Road  
Arlington, MA 02174  
November 24, 1984

Dr. Stephen Dlott, Principal  
Arlington Senior High School  
865 Mass Ave.  
Arlington, MA 02174

Dear Mr. Dlott:

As a resident of Arlington and a Master's degree student in the Critical and Creative Thinking program at UMASS/Boston, I would like to propose to implement a project (see attached) at Arlington High School with local businesses and the newly-formed business/school consortium.

Attached please find a copy of my proposed ( and flexible) project of school/community co-operation. Briefly, the project aims at increasing student participation and responsibility in their own education by linking them to a real but future community problem, the investigation of which necessitates interaction in the community, and an integration of learning skills and subject matter. Student initiative, self-esteem, responsibility and practical investigative skills will be highlighted.

Having conducted a research study through the Human Resources Department at Town Hall in the fall of 1983, I am aware of the civic-mindedness of the town of Arlington and of the fine reputation Arlington High School has. Also, I endorse the idea of a business-related consortium. I believe that my involvement with the school, the community and the consortium will both benefit the students, school, community and learning in general, and encourage other school districts to be as forward-thinking. This approach to education will have more than an isolated impact on education; it is a future trend in education envisioned by individuals throughout the US and encouraged in such programs as Critical and Creative Thinking in their Master's and Doctoral programs and in the recent 'Teaching for Thinking' Series at UMASS/Boston.

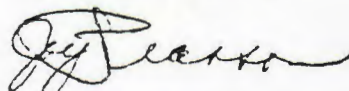
I have contacted several people who have been generally supportive regarding this project. In October, I spoke to Mr. Tervisani, head of the English Department at Arlington High, sending him my initial paper outlining a school/community co-operation program. He referred me to Dr. Joanne Gurry, Assistant Superintendent of the Arlington Schools. In late October, I spoke briefly to her. I have also mentioned this proposal to Mr. Stephen C. Farrell of the newly-formed school/business consortium who is interested in the idea. I plan to also contact the Arlington Rotary, President-elect James Long, regarding their participation.

Thank you for your attention. I will be contacting you by telephone shortly regarding this matter.

cc: Dr. Joanne Gurry  
Dr. Walter Devine  
Mr. Stephen C. Farrell  
Mr. James Long  
Mr. Trevisani

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Sincerely yours,



Joy Pearson  
646-1608



## PROPOSAL FOR SCHOOL/COMMUNITY CO-OPERATION PROJECT

### PROJECT SUMMARY

Believing strongly that learning increases in proportion to the opportunity one has to observe and experience real life situation, I propose to set-up through a school/community co-operation program such opportunities for a small number of high school students in a special program as an adjunct to their social studies, English or humanities class. This project will be conducted under the supervision of faculty of the Critical and Creative Thinking program at UMASS/Boston and will be a part of my MA thesis work.

### STUDENT PARTICIPATION AND PROJECT STRUCTURE

The project will involve 10-25 students within a social studies/language arts/humanities classroom for a period of 10 weeks (flexible). This time span will be broken into three blocks of three weeks: Project exploration and preparation, Investigation and guidance, and Evaluations (throughout and at project end).

### PROJECT GOAL

The task will be, through guided but student initiated projects, to gather information and to confront the issue of the future impact of an increasingly older population on the community, i.e. on individuals and on businesses. The focus will be inter-disciplinary with students being able to focus on the impact using problem-solving skills. They may approach the topic through many disciplines, investigating social, demographic, medical, and/or vocation aspects of the situation.

### RATIONALE OF THE PROJECT

I believe a good education is one that is inter-disciplinary and relevant to students' lives, having as its focus the teaching of thinking. The national increase in an older population will necessitate an increasing use of problem-solving techniques and thinking skills. I feel that such a school/community oriented project as this that I propose fosters these skills. A wholistic, inter-disciplinary approach to teaching both is in tune with teaching for critical thinking and also allows for creative thinking. For me, critical and creative thinking skills are not only the most important skills a person can learn but are the basis for sound continued learning. (far superior to the acquisition of terms and data.) It is the process part of any lesson that students will remember; in fact, the process is more important than the experience. Coupled with this, I believe that a higher percentage of quality occurs when skills are learned by way of an interesting activity and that a depth of knowledge is increased. It is a truism that people gain valuable experience with practical issues. Therefore, I believe students in high school need be exposed to the practical aspects of the learning they are receiving.



GENERAL GOALS OF THE PROJECT

My aim is to co-ordinate a learning situation for young people with individuals and businesses in the community in order to:

- 1) allow for greater student responsibility
- 2) - give students practical experience with members of the community in which they live,
- 3) lessen the feeling of isolation and estrangement of both young people from their larger community and the community towards them,
- 4) encourage practical application of academic skills, and
- 5) bring isolated areas of young people' lives together into a more meaningful whole,

as well as a host of other unverbalizable objectives.

OBJECTIVES

Student skills to be exercised are those of:

- 1) speculation/predicting
- 2) brain-storming
- 3) information gathering
- 4) interviewing/relating
- 5) exploration of values-weighing of values and reasons
- 6) analysis/assessment
- 7) decision-making/problem-solving/coming to closure  
(justification of ideas) (even if only a short time was spent on the project)
- 8) evaluation

Basic to all of these operations are the underlying skills of COMMUNICATION:

- |              |               |
|--------------|---------------|
| listening    | writing       |
| interviewing | collaborating |
| speaking     |               |

PROJECTED OUTCOMES

Projected results for students include not only the exercise of the above skills but also opportunity for increased responsibility, application of academic skills from a variety of fields of study to a community issue, and increased contact with members of the community, thus heightening career awareness.

End products, such as a mini-magazine containing articles and results of the project undertaken or a video show commentary or documentary based on their work, will tie in nicely with their current course and demonstrate the students' understanding of basic skills.

Projected results for the community includes:

- 1) heightened career awareness on the part of its young people,
- 2) an increased bonding between members of the community and its young people,
- 3) recognition of community-mindedness by the exposure of this project to other communities - by way of media and other coverage,
- 4) the services of students through their investigation of the solution of a future problem.

COMMUNITY RESOURCES TO BE DRAWN ON

Possible resources to choose from are:

- |                         |                                     |
|-------------------------|-------------------------------------|
| parents                 | governmental agencies and employees |
| businesses              | Council on Aging                    |
| Rotary Club             | clubs and organizations             |
| nursing homes/hospitals |                                     |

PROJECT EVALUATION

Integral to the project will be both continual evaluation and the opportunities to report and assess the experiences students encounter. This will include criteria to generate self-evaluations, opportunities to participate in formative evaluations and in community evaluations. I believe that student results will increase as they are given a role in the evaluation and assessment of their learning. Responsibility is thereby heightened and sincerely encouraged. This area will, of necessity, be open to suggestions from all those who participate.

PROJECTED PROJECT\*

- |          |  |  |
|----------|--|--|
| Week 1   | project definition                     | -- We will set goals (what we want to do and know) and clarify the issue. We will also discuss how to present the results of our efforts and how to evaluate them. |
| Week 2   | brainstorming                          | -- We will define the situation, choosing from alternatives what specifics to focus in on. We will plan for and discuss interviews and research techniques.        |
| Week 3   | preparation                            | -- Small groups will plan their own part of the project and participate in role play (mock/pre-interviews)   |
| Week 4-8 | investigation and guidance             | -- The instructor will meet with small groups for guidance, feedback and evaluation  |
| Week 9   | presentations of findings and research | -- Students will report their findings by way of oral or written work, e.g. mini-magazine, video show, etc.  |
| Week 10  | overall evaluation                     | -- Students, school, and community members will have an opportunity to evaluate the overall benefit of the program   |

Important to goal-oriented learning is that students define the individual tasks they undertake. This gives them more responsibility and makes evaluation possible.

\*amount of time outside their regular classroom for this new approach to learning to be determined with the school







37 Brunswick Road  
Arlington, MA 02174  
December 6, 1984

TO THE ARLINGTON SCHOOL COMMITTEE

As a Master's degree student in the Critical and Creative Thinking program at UMASS/Boston, I would like to propose to implement a school/community co-operation program for a small number of high school students in a special enrichment program in conjunction with their current studies. This program will be conducted under the supervision of the faculty of the Critical and Creative Thinking program at UMASS/Boston and will be a part of my MA thesis work.

The project -- investigation into the future impact of an increasingly older population on the community, i.e. on individuals and on businesses-- will relate activities in an English, social studies, or humanities classroom with focus on literacy and will lend itself to an integration of learning skills, subject matter and community involvement. Student initiative, self-esteem, responsibility and practical investigative skills will be highlighted.

The project will involve 10-25 students for a period of 10 weeks. This time span will be broken into three blocks of three weeks: project exploration and preparation, investigation and guidance, and evaluations (throughout and at project end). Methodolgy will focus on the following skills: 1) speculation/predicting, 2) brain-storming, 3) information gathering, 4) interviewing/relating, 5) exploration of values, 6) analysis/assessment, 7) decision-making/problem-solving, 8) evaluation. Basic to all of these operations are the underlying skills of COMMUNICATION: listening, interviewing, speaking, writing, collaborating.

Students from the 11th and 12th grades will be invited to participate on a volunteer basis endorsed by parental consent and signatures.

Parents, teachers and the community as a whole will benefit from 1) increased student responsibility, 2) a greater sense of bonding between young people and their community, and 3) a relevant and practical application of academic skills to students' lives.

The following people have been generally supportive of this project:  
Mr. Stephen Dlott, Principal of Arlington High School,  
Dr. Joanne Gurry, Assistant Superintendent of Curriculum Arlington  
Mr. Thomas Trevisani, Chairman of the English Department, Arlington High School  
Mr. Stephen C. Farrell, Co-ordinator of new business consortium, (4 towns)  
Dr. Robert Swartz, Co-Director of Critical and Creative Thinking program  
Dr. Delores Gallo, Co-Director of Critical and Creative Thinking program

Thank you for this opportunity and consideration. I will be happy to speak further to any of you on this matter.

Sincerely yours,

Joy Pearson 646-1608

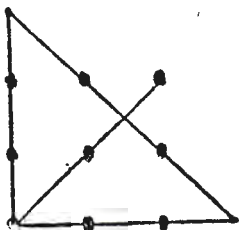
2. Outside Chance

Without lifting your pencil from the paper, join all sixteen dots with six straight lines:



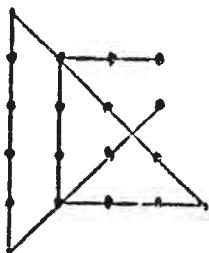
Variation on a Variation

The problem above is a variation of the more common nine-dot problem, in which you are asked to connect the dots using four straight lines. Though most people do not at first think of going outside the confines of the dots, the puzzle is actually solved quite easily:



But can you solve it using only *three* straight lines?

10



Since each dot is actually more than just a point, they can be connected as follows:



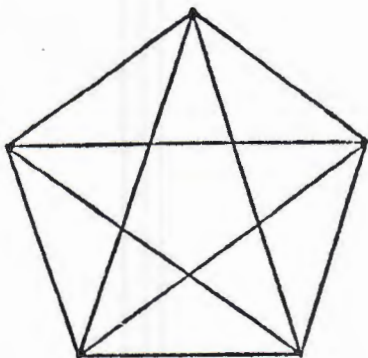
10

Chapter III, Puzzle 5: In this one you are asked to join sixteen dots with six straight lines without lifting your pencil from the paper. Any puzzler, no matter what his intelligence, will no doubt find a pencil and start fiddling. (It always makes sense to get a quick view of the magnitude of things.) In a short time it will be clear that this one isn't going to be easy; there always seem to be too many dots and too few lines. If you are knowledgeable about puzzles, you will recall that in some problems of this general type the solution can be reached only by resorting to extraordinary measures—folding the paper, for example, or piercing it with a pencil point and letting a line snake its way through the hole from one side to the other. But there is nothing in the language of this puzzle to suggest that such lawbreaking is called for. Furthermore, solutions based on such methods would unquestionably constitute trickery, wouldn't they? (There will be time enough later, if things start to go really badly, to ask if we are being tricked.) For the time being, better to treat it as a straightforward question, neither more nor less complex than it seems to be. What, therefore, can we do that we aren't now doing? Practically anyone, regardless of his intelligence, will no doubt stumble onto the answer sooner or later, but the superintelligent, having got this far, will probably find it almost immediately. (Mental quickness, psychologists agree, is an important component of brightness.) The reason is that it will probably occur to him to ask himself whether he is by chance working under some unnecessary restriction. Of course he is—no one told him that he had to stay within the imaginary boundary of the square created by the sixteen dots!

Principle 6: Work only within those restrictions that are explicitly stated. All others are irrelevant.

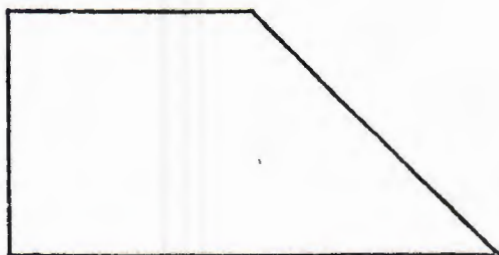
**11. Knowing the Angles**

How many triangles can you find in this figure?



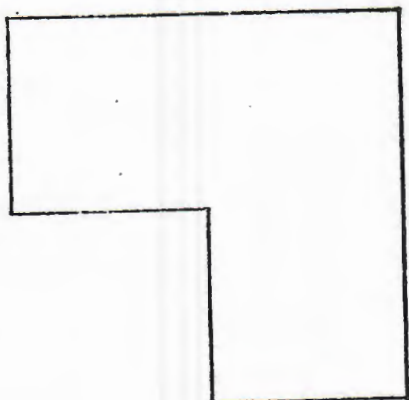
**12. Playing the Angles**

Divide the figure into four equal parts, each one the same size and shape:



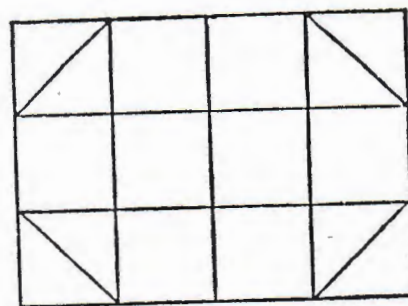
**13. Four in One**

Now divide this figure into four equal parts of the same size and shape:



**14. Once Over Lightly**

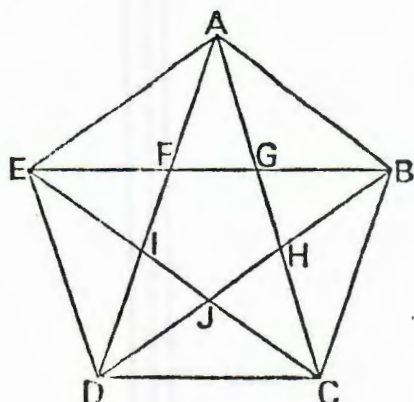
Without lifting your pencil from the paper, or folding the paper, make the following figure, going over each line only once:



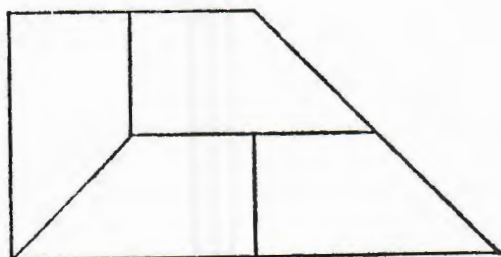


11. There are 35 triangles. In alphabetical order, they are: ABC, ABD, ABE, ABF, ABG, ABH, ACD,

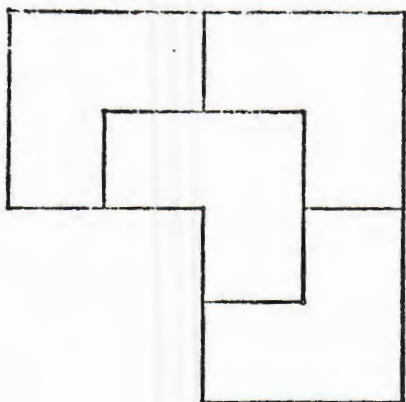
ACE, ACI, ADE, ADH, AEF, AEG, AEI, AFG, BCD, BCE, BCG, BCH, BCJ, BDE, BDF, BEJ, BGH, CDE, CDH, CDI, CDJ, CEG, CHJ, DEF, DEI, DEJ, DIJ, and EFI.



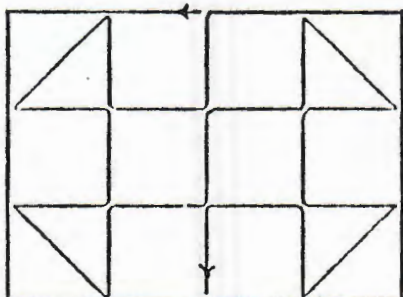
12.



13.

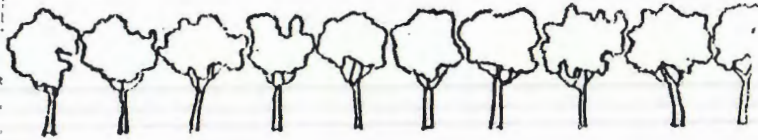


14.



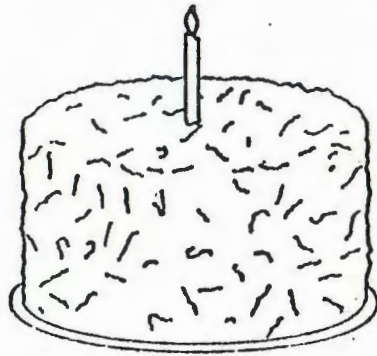
**6. Garden Spot**

Plant ten trees in five rows of four trees each.



**7. Pieces of Eight**

Cut a cake into eight equal pieces with only three cuts.



**8. Wolf Pen**

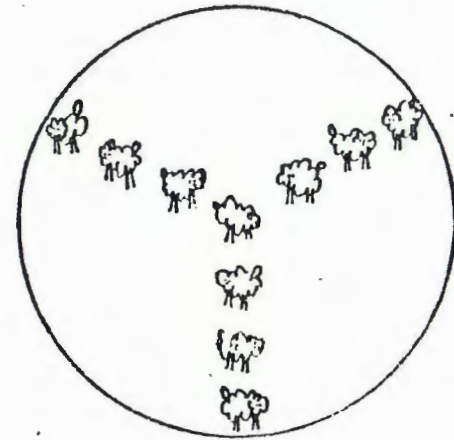
Nine wolves are in a square enclosure at

the zoo. Build two more square enclosures and put each wolf in a pen by itself:

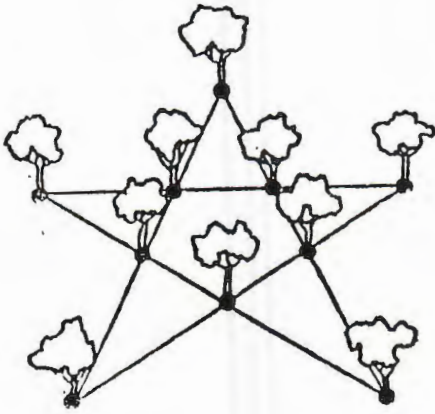


**9. Counting Sheep**

Sheep, on the other hand, are kept in a circular pen. Draw three lines and put each sheep in a pen by itself:

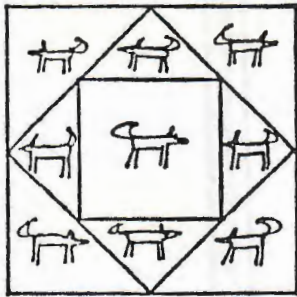


6

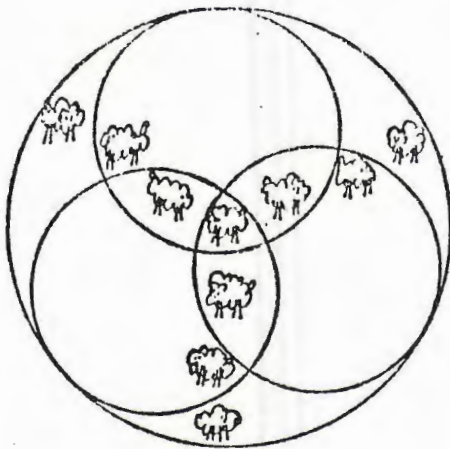


7. Make two vertical cuts at right angles to each other along the diameters and a horizontal cut through the middle of the cake.

8



9





⑥ *Chapter III, Puzzle 1:* At first glance it appears that this puzzle is simply impossible to solve. Five rows of four trees each adds up, after all, to twenty trees, or so it appears. Even allowing for the use of a few trees in more than one row, it seems exceedingly unlikely that the number of trees required can be reduced to a mere ten. Then, however, the principle becomes clear: it is necessary to plant the trees as densely as possible, making each tree serve in as many rows as possible. Diagram after diagram is tried; none works—not at first anyway. But then, sooner or later, the wondrous symmetry of nature and mathematics asserts itself and there it is, that simple and elegant answer: a star.

*Principle 4: Keep at it.*

⑦ *Chapter III, Puzzle 2:* You are asked to cut a cake into eight equal pieces with only three cuts. Any three cuts made vertically will, it is apparent, yield six pieces at most. Two cuts made vertically and a third cut made along a radius will yield only five pieces. Three cuts that fail to intersect will yield only four pieces. Things seem to be getting not better but worse! At this point the person of ordinary intelligence is likely to imagine that he is faced with something as clearly impossible as trying to separate two interlocking rings; mathematically, it simply can't be done. But it is precisely here that the superintelligent puzzle solver begins to rise to the challenge. He looks first at the components of the puzzle: (1) a cake and (2) a knife for cutting it into those elusive eight pieces. He reminds himself that the puzzle can, after all, be solved; it would not be in this book if it could not (see Principle 1 above). Furthermore, he knows there is nothing tricky or misleading about the question. (He has been assured that all the tricky questions have been sequestered in Chapter VI.) So he knows it is worth his while to treat the puzzle in a straightforward way—he need not suspect an ambush. He is, at the same time, certain by now that it cannot be solved by making three cuts of the kind we customarily make in cakes. Well, what other kinds are there? A rough sort of answer comes to him at once; vertical cuts, horizontal cuts, cuts taking various improbable directions through the cake. It is a matter of only a few moments before he sees that two vertical cuts, at right angles to each other, and one horizontal cut will do the trick neatly.

Two vertical cuts, at right angles to each other, and one horizontal cut will do the trick neatly.

*Principle 5: If something has always been done one way, look for another way.*

1. If you won the lottery tomorrow, what would you do?  
How would that affect your life?  
How would it affect others' lives?
2. How does your sex affect the way you communicate with others?
3. If only 50% of the present work force were to be able to continue working, what changes might there be?
4. What would you do if you weren't even allowed to work?
5. If you work up tomorrow and suddenly were a) 40 years older than now,  
b) a man instead of a woman (or vice-versa),  
how would your life be different?

- "The City and the Future," 1966, 28 min.  
Urban sprawl or a new kind of regional city?
- \* "The City," 1939 World's Fair, 43 min.  
Classic documentary; urban and suburban neighborhoods. A visionary film. Aaron Copland's music.
- "Smalltown USA," 27 min.  
3 small towns, economic and social problems, rapid changes in technology. Keeping alive the small town.
- "The Image of the City," 1962, 16 min.  
Smithsonian Institute exhibition models to plan needed changes.
- \* "Urbanissimo," 6 min.  
Animated commentary on city growth.
- "John Kenneth Galbraith. . . ," 28 min.  
History of modern city from pre-industrial.
- \* "Townscape"  
Documentary of Victoria, B.C. - citizens changed their city for the better.
- \* "Roots," 22 min.  
Somerville's multi-ethnic neighborhoods. For Bicentennial.
- "Organizing for Power," 34 min.  
A community organizer Saul Alinsky on effective organization and citizens' groups.



## TIME FRAME

|           |   |
|-----------|---|
| Feb. 4-8  | Introduction  |
| 11-15     | Historical Research   |
| 18-22     | Historical Research (vacation time)   |
| 25-Mar. 1 | Continue research <u>and</u> Prepare for interviewing (classwork)   |
| Mar. 4-8  | Independent work = research (out of class)<br>interviewing (out of class)<br>Learning video handling (in class) |
| 11-15     | Same as above (Mar. 4-8)  |
| 18-22     | Putting it all together - organizing  |
| 25-29     | Putting it all together   |
| April 1-5 | Making the video  |
| 8-12      | Evaluation  |
| 15-19     | Spring vacation - enjoy   |

Robbins library

Ellen Lenart  
Tom Gilchrist

vertical file - Arlington history  
microfilm of Arlington Advocate  
(Dec. and Jan. - year end review)

census - statistics  
5 year projection (1980)

Documents Depository

community analysis  
clippings file  
town reports  
budget  
MBTA

974.44 town reports

Symmes Hospital  
annual report  
Police Department - Community Safety  
Police log of crime  
Historical Society

for Interviews

Dr. Carey - Symmes  
Allan McClennan - town hall  
Arthur Johnson - town hall  
Charlie and Elizabeth - Chamber of Commerce  
Scott Plum - Council on Aging±  
Ruth Mahon - youth and crime and education and media expert

Books to use

FUTURE SHOCK \_ Alvin Toffler  
THE MEDIUM IS THE MESSAGE - McLuhan  
SCHOOL SURVEY 1971  
ARLINGTON INFORMATION DIRECTORY - AID

Arlington High School library

card catalog - future, Arlington  
Arlington history collection

Encyclopedia  
SIRS files

Readers' Guide

## WILDLIFE/ENVIRONMENT

### RELATED TOPICS:

protected lands  
nerve gas from Arthur D. Little±  
MBTA and changes  
water and sewer  
parks and ponds - wetlands  
Great Meadow  
Reservoir  
garbage collection/waste  
building permits/zoning

### QUESTIONS TO THINK ABOUT:

How much can we do to the environment?  
How do we keep our environment clean?

### PEOPLE TO INTERVIEW:

Mr. John Crowley - oral history of Arlington  
Dick Bowler - Public Works  
Cathy Rezendes - Arthur D, Little problem  
Parks Department  
Engineering Department, Grove Street





CRIME/COMMUNITY SAFETY

RELATED TOPICS:

community service for offenders  
vandalism  
facilities for youth  
clubs and organization  
protection for elderly - bus services  
protection for retarded-bus services  
courts  
transportation changes - MBTA and T  
Alcohol Awareness and Education

QUESTIONS TO THINK ABOUT:

What changes are happening in criminal justice?  
How can we prevent anti-social behavior?

PEOPLE TO INTERVIEW:

Bob White - Community Safety  
Kathy Walters - Arlington Advocate  
Kay Jorgenson - Arlington Advbocate ( before end of Feb.)  
Ellen Lennart - Robbins Library  
Patsy Kramer - Youth Consultation Center  
Elizabeth Oppedisano - Alcohol Awareness

## FASHIONS/TRENDS

### RELATED TOPICS:

social life  
housing - town layout/space  
changes in - family life (test tube babies?)  
                  marriages (teenagers, living together)  
                  politics (conservative, liberal)  
                  businesses  
                  morals (from t.v.?)  
                  employment

### QUESTIONS TO THINK ABOUT:

How is the young generation being brought up?  
What different viewpoints will people have? (adults, children)  
How will people's life styles have changed?

### PEOPLE TO INTERVIEW:

Patsy Kramer - Youth Consultation Department  
Peg Spengler - 350th celebration of Arlington Committee  
Joan Gross - Housing Authority  
Howard Davis - Housing  
Janemarie Hillier - Selectman candidate  
Ann Powers - town clerk  
Bob Bowers - Rotary - 661-3300 ext. 389  
Carol Burns - Jobs for people over 55 - 862-6200 (Lexington)  
MAUREEN Capithorne - real estate - 643-7478



## ENTERTAINMENT

### RELATED TOPICS:

media  
technology  
newspapers  
cable  
recreation  
education  
clubs  
culture and the arts

### QUESTIONS TO THINK ABOUT:

How does it change today's kids?  
How does it change today's world?  
How might it change tomorrow's kids (world)?  
What's it doing to our kids? (world)

### PEOPLE TO INTERVIEW:

Dan Brosley - Arlington Recreation - Skating rink  
Debbie Hayes - Arlington Recreation - Skating rink  
Ruth Mahon - "Up With People", School Volunteers, t.v. work  
Kathryn Jorgenson - Arlington Advocate - before end of Feb.

## Ideas for Interviewing

### Possible topics

length of time in Arlington  
length of time in XX field  
reason for choosing XX field  
needs they see  
trends in XX field  
problems they see  
problems Arlington faces  
assets Arlington has  
positive ideas about Arlington  
positive ideas about XX field  
predictions  
suggestions  
things to preserve in Arlington  
most important ideas/facts  
    people should know about  
    their field

### Possible questions

I understand you have . . . .  
How long have you worked . . . .  
How long have you lived . . . .  
Based on your experience with . . . .  
In some communities there is a trend for women to have their babies at home. Do you see that happening in Arlington?  
I understand there is much greater use of the Emergency Room on an outpatient basis. What do you foresee will be the role of the Emergency Room in the future?  
Arlington has been very clear about preserving its wild open spaces. What do you . . . .  
Would you like to see Arlington change from being a town into being a city?  
What do you think would/could draw people to move to Arlington?  
Do you think XX will ever come to Arlington?  
Do you think XX will ever happen in Arlington?  
Why does Arlington . . . .  
Do you think that will change?  
Do you want that to change?

Possible topics

co-operation with other communities

community groups

church

youth

arts

theatre

new businesses in future

community centers

for elderly

for young people

for families

Possible questions

-In what way do you hope/think the children of the future will grow up differently?

-Do you predict/see any changes in the law?  
the judicial system?

-Do you think the family structure, marriage, divorce will change?

-Do you think people will become less materially-minded?  
richer, poorer, \_\_\_\_\_?

-Do you think parents will have a larger/smaller part of their child's education?

-Will the community become more involved in education?

-What special activities will continue? will not continue? (e.g. special olympics, sister city in Japan).

Notebook for Interviews with the Recorder

observations of surroundings

\*question 1  
answer

# on tape

\*question 2  
anser

# on tape



Before you start writing, do an outline. Ideas come much faster that way.

Outline:

- topic
- subtopics
- dates and facts on topic - e.g. 'in the 70's,' 'in the 60's'  
(as much as you can - you can check later)
- current situation and reasons for them
- current problems and causes of them (speculative)
- 5 questions on topic - for interviews
- 1-3 projections/predictions and reasons for them
- 1-3 suggestions and reasons for them
- 1 or more fantasies - How far out is this fantasy?  
Why do you fantasize this way?

- 1) Write outline
- 2) Write sentences for each part of outline
- 3) Go back and fill in in between comments for each sentence (reasons)
- 4) Get feedback from your partner
- 5) Combine your script and your partner's script
- 6) Check with editors for COHERENCE
  - Is it understandable?
  - Does it need more detail?
  - Does it fit in with others' scripts?
  - What interesting things does it have for the audience?
- 7) Go back and fill in details for each topic
- 8) Time your script - 12-15 minutes
- 9) Re-work your script to 8 minutes - HOW?

## Script writing

Look at each sentence - Always talk about Arlington

Expand each sentence - like drawing out a person in an interview

Give reasons for that sentence idea OR  
examples OR  
causes OR  
consequences

USE DATES AND SPECIFIC INFORMATION.

Explain what age group you are talking about. (Give specifics)

Explain problems that may happen, why they may happen and what might be done about the problems.

Explain how different age groups fit in to this idea. (Give specifics)

Compare/contrast as many sentence ideas as you can to sentence ideas you have already written.

Explain how the information in one sentence is the same/different as in another sentence.

Make predictions and projections.

Give reasons for the predictions/projection.

Give possible consequences of the prediction.

Make suggestions.

Give possible consequences of the suggestion.

Give the source of all written information.

What message do you want to leave with the idea? Make it clear, without using the word 'you'. (don't speak to the audience personally)

### AVOID

speaking directly to the audience

monotonous sentence structure

using AND, SO, THEN

unsupported sentences

very general statements with no reason/cause/ etc

### WRITE

using declarative statements

(questions, active voice)

some long sentences, and some short ones.

connect everything you say to

the town of Arlington in 2000

make a mini-summary half-way through (for the audience's sakes)

for audience

questions

tone of voice

key words

exclamations

dramatic pause

laughter - humor

quotations

dialogue

repetition of important points

how to re-work script

be imaginative

use questions

use exclamations

vary length of sentences (some long, some short)

combine related sentences

cut out unnecessary words, e.g. I think, and, so

compact a thought using fewer words to say  
the same thing

think of audience

Write as much of your script as you can (see other mimeo sheet).

Review tapes and notes from tapes and add more information to your script.

Decide which part of the video taping you want edited into your section.

Schedule time during facation to help edit your section and/or do more taping.



40 Fox Street #3  
Dorchester, MA 02122  
June 24, 1985

Mr. Stephen Dlott  
Principal, Arlington High School  
Arlington, MA 02174

Dear Mr. Dlott,

Thank you ever so much for the opportunity to share some of my school-community co-operation ideas in Arlington via the project with nine seniors in Herb Yood's Advanced Journalism class. It was challenging and rewarding for me to initiate this new approach to learning with these students. I also thank the media center at the high school and Eddie Sullivan for his invaluable technical assistance and Arlington Cable Television for broadcasting our effort three times on cable t.v.

The focus for the project was double-fold: 1) the active and collaborative contact of the community with students at the high school, and 2) the process of learning, involving student initiative, goal-setting and planning and carrying out calculated steps needed to arrive at a goal. The students can be proud, as I am, not only of the 60-minute documentary that resulted but also of the link they made with the Arlington community.

I feel such a link to be an increasingly important part of the education of young people because it involves opportunities for students to have added responsibility and to use necessary decision-making skills. It was a worthwhile project and I am sure it will have long-term effects on some of the students.

As well as thanking you all for this opportunity, I would like to express my interest in working with the newly-formed L.A.W.W. partnership-in-education program. Its stated aim of developing 'a comprehensive and unique school/business partnership program to assist in maintaining and improving high-quality educational school systems' speaks to the same ideas that I speak to in my master's thesis - school/community co-operation.

I would be pleased to work in Arlington again (and in the other three towns) and to assist in setting up contacts and programs between the schools and businesses. I have been preparing myself for such an opportunity through my master's program in Critical and Creative Thinking at UMASS/Boston and through my own personal and professional development. I would like to be considered for a position that becomes available in the L.A.W.W. partnership.

Thank you again for your support.

Sincerely,

Joy Pearson  
265-9565

cc: Mr. Walter Devine, Superintendent  
Ms. Joanne Gurry, Assistant Superintendent  
Mr. Tom Trevisani, English Department  
Mr. Herb Yood, Co-operating teacher

Arlington High School  
Arlington, MA 02174  
May 21, 1985

Dear ,

Thank you for your part in our show. The project which nine Arlington High School seniors and I worked on for three months and which you were a part of is now finished. We would like you to be able to see the entire 60 minute show, especially if you feature in it. We think you will be interested.

You are cordially invited to a pre-viewing of this show

Arlington, the year 2000

on May 29 at 9 am in the Old Hall of Arlington High School.

(Inquire at the main office about the location of Old Hall. The main office is directly to the left as you come in through the pillared part of the school.)

Hope to see you there.

Sincerely,

Joy Pearson

P.S. If you are unable to come, you still have a chance to see the show. Arlington Cable Television is planning on showing it on cable in June. Watch the Arlington Advocate for the exact date and time.

We hope you can pre-view it first, though!



ARLINGTON HIGH SCHOOL  
869 Massachusetts Avenue  
Arlington, Massachusetts 02174

*Office of the Administrative Headmaster*

*Telephone 646-1000*

July 10, 1985

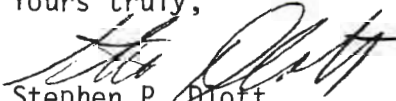
Joy Pearson  
40 Fox Street #3  
Dorchester, Ma 02122

Dear Joy,

On behalf of the administration, I would like to thank you for leading a media project with Mr. Yood's senior journalism class. I think the product was excellent, but the process was what made the experience so unique.

I have forwarded your letter to Steve Farrell. I've informed him that you are interested in a staff position, and I told him of your dedication and enthusiasm.

Yours truly,



Stephen P. Blott  
Principal

SPD:jg



June 12, 1985

TO WHOM IT MAY CONCERN:

Ms. Joy Pearson has asked me to write a reference regarding a special project she carried out recently at Arlington High School. I am happy to do so.

The project was the production of a television documentary, focusing on the "best guesses" of community leaders as to what the year 2,000 will be like for the town of Arlington. The documentary utilized student camera crews, interviewers, script-writers et al from an Advanced Journalism course I teach at the high school.

From the outset, Ms. Pearson's task was formidable. She had to secure the permission of various officers in the School Department by presenting a proposal; persuade me to give the project a try; and secure volunteers from my Advanced Journalism course since I required no students to participate. In addition, she had to obtain full cooperation of the high school media staff; contact various community leaders and groups; lead discussions in which students set goals and deadlines; run a small class on a daily basis; and accompany students when they were out "shooting."

The best measure of her success is, first, the documentary itself. While it may not be of "Emmy" quality, it certainly ranks with some of the better efforts of high school groups that I have seen. Considering she was inexperienced at television production at the beginning, and was dealing with equally inexperienced students, none of whom had expressed an interest in television production prior to her arrival, this is a stunning achievement.

The group with which she worked was composed of second semester seniors, normally labelled an average group but because of the timing in their school careers almost certainly below average in motivation. Ms. Pearson's initial approach to this group might be described as attempting to secure willing cooperation. I think she has learned compulsion is sometimes a necessity when dealing with students of average or below average motivation, but it should be noted that she did, in fact, attain a large measure of voluntary cooperation. For example, students did conduct interviews and other camera work on weekends, holidays and vacations without "compensatory time off."

Ms. Pearson also did succeed brilliantly with a couple of otherwise unmotivated students, much, I confess, to my surprise and pleasure.

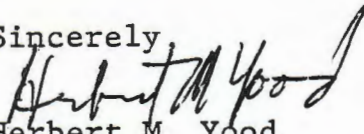
2.

In terms of general work habits, Ms. Pearson was always a good colleague; punctual, pleasant, cooperative, and with an enduring sense of what the real task was--educating students by giving them the means to educate themselves. The documentary was the vehicle, and the most tangible product, but the goal was always the students' learning.

By the way, the documentary was good enough to be aired three times on our local cable station, and has received favorable comments from various townspeople.

If any further information is required, please do not hesitate to contact me.

Sincerely,



Herbert M. Yood  
Department of English  
Arlington High School ('B' House)  
Arlington, MA 02174

617-646-1000







## Students' Cable Show

One June 12, 17 and 27, Arlington Cable Television will show a 60-minute documentary titled, "Arlington, the Year 2000," made and produced by Arlington High School students.

Nine Arlington High School seniors and Joy Pearson, master's degree candidate in the critical and creative thinking program at UMass Boston and a former Arlington resident, worked together for three months to

produce this documentary.

Student participants were: Mark AuBuchon, Suzanne Coughlin, Carol Ann Harotunian, James Hillis, Renee Mariani, Deborah Redmond, Edward Rutkowski, Angela Sullivan and James Whittier.

The cooperating teacher was Herb Yood. Television facilities were provided by Arlington High School Media Center.

Students sought information from

## Examines The Town

the Arlington community on major issues involving the town, finding out about the present and exploring possibilities for Arlington's future.

People interviewed were: Dick Bowler, public works; Janemarie Hillier, town selectman; Ruth Mahon, a volunteer involved in bringing entertainment to Arlington; Christine McKay, assistant to the town manager; David McKenna, safety of-

ficier; Elizabeth Oppedisano, executive director of Arlington's Council on Alcohol Awareness; Joy Pearson, initiator and director/producer of the project; Scott Plum, director of the Council on Aging; and Kay Sonnenberg, director of nursing at Symmes Hospital.

Students planned what they wanted to do, did research, and operated video equipment to create the documentary.

September 17, 1984

## GOALS FOR A CRITICAL-THINKING/REASONING CURRICULUM<sup>1</sup>

Robert H. Ennis  
Illinois Critical Thinking Project  
University of Illinois, U.C.  
1310 S. 6th Street  
Champaign, IL 61820

**WORKING DEFINITION:** Thinking critically is reasonably going about deciding what to believe or do.<sup>2</sup> It involves abilities and dispositions:

**ABILITIES** (Classified under these Categories: Elementary Clarification, Basic Support, Inference, Advanced Clarification, and Strategy and Tactics)

### Elementary Clarification

1. Focusing on a question
  - a. Identifying or formulating a question
  - b. Identifying or formulating criteria for judging possible answers
  - c. Keeping the situation in mind
2. Analyzing Arguments
  - a. Identifying conclusions
  - b. Identifying stated reasons
  - c. Identifying unstated reasons
  - d. Seeing similarities and differences
  - e. Identifying and handling irrelevance
  - f. Seeing the structure of an argument
  - g. Summarizing
3. Asking and answering questions of clarification and/or challenge, for example:
  - a. Why?
  - b. What do you mean by "\_\_\_\_\_ "?
  - c. What would be an example?
  - d. What would not be an example (though close to being one)?
  - e. What is your main point?
  - f. How does that apply to this case (describe case, which might well appear to be a counterexample)?
  - g. What difference does it make?
  - h. What are the facts?

Basic Support

4. Judging the credibility of a source; criteria:
  - a. Expertise
  - b. Lack of conflict of interest
  - c. Agreement among sources
  - d. Reputation
  - e. Use of established procedures
  - f. Known risk to reputation
  - g. Ability to give reasons
  - h. Careful habits
  
5. Observing and judging observation reports; criteria:
  - a. Minimal inferring involved
  - b. Short time interval between observation and report
  - c. Report by observer, rather than someone else (i.e., not hearsay)
  - d. Records are generally desirable. If report is based on a record, it is generally best that:
    - 1) The record was close in time to the observation
    - 2) The record was made by the observer
    - 3) The record was made by the reporter
    - 4) The statement was believed by the reporter, either because of a prior belief in its correctness or because of a belief that the observer was habitually correct
  - e. Corroboration
  - f. Possibility of corroboration
  - g. Conditions of good access
  - h. Competent employment of technology, if technology is useful
  - i. Satisfaction by observer (and reporter, if a different person) of credibility criteria (#4 above)

Inference

6. Deducing, and judging deductions
  - a. Class logic - Euler circles
  - b. Conditional logic
  - c. Interpretation of statements
    - 1) Double negation
    - 2) Necessary and sufficient conditions
    - 3) Other logical words: "only", "if and only if", "or", "some", "unless", "not", "not both", etc.
  
7. Inducing, and judging inductions
  - a. Generalizing
    - 1) Typicality of data: limitation of coverage
    - 2) Sampling
    - 3) Tables and graphs



## b. Inferring explanatory conclusions and hypotheses

## 1) Types of explanatory conclusions and hypotheses

- a) Causal claims
- b) Claims about the beliefs and attitudes of people
- c) Interpretations of authors' intended meanings
- d) Historical claims that certain things happened
- e) Reported definitions
- f) Claims that something is an unstated reason or unstated conclusion

## 2) Investigating

- a) Designing experiments, including planning to control variables
- b) Seeking evidence and counterevidence
- c) Seeking other possible explanations

## 3) Criteria: Given reasonable assumptions

- a) The proposed conclusion would explain the evidence (essential)
- b) The proposed conclusion is consistent with known facts (essential)
- c) Competitive alternative conclusions are inconsistent with known facts (essential)
- d) The proposed conclusion is plausible (desirable)

## 8. Making and judging value judgments

- a. Background facts.
- b. Consequences
- c. Prima facie application of acceptable principles
- d. Considering alternatives
- e. Balancing, weighing, and deciding

Advanced Clarification.

## 9. Defining terms, and judging definitions; three dimensions:

## a. Form

- 1) Synonym
- 2) Classification
- 3) Range
- 4) Equivalent expression
- 5) Operational
- 6) Example - nonexample

## b. Definitional strategy

## 1) Acts

- a) Report a meaning
- b) Stipulate a meaning
- c) Express a position on an issue (including "programmatic" and "persuasive" definition)

## 2) Identifying and handling equivocation

- a) Attention to the context
- b) Possible types of response
  - i) "The definition is just wrong" (the simplest response)
  - ii) Reduction to absurdity: "According to that definition, there is an outlandish result"
  - iii) Considering alternative interpretations: "On this interpretation, there is this problem; on that interpretation, there is that problem"
  - iv) Establishing that there are two meanings of key term, and a shift in meaning from one to the other

## c. Content

## 10. Identifying assumptions

- a. Unstated reasons
- b. Needed assumptions: argument reconstruction

Strategy and Tactics.

## 11. Deciding on an Action

- a. Define the problem
- b. Select criteria to judge possible solutions
- c. Formulate alternative solutions
- d. Tentatively decide what to do
- e. Review, taking into account the total situation, and decide
- f. Monitor the implementation

## 12. Interacting with others

## a. Employing and reacting to "fallacy" labels (including)

- |                              |                           |
|------------------------------|---------------------------|
| 1) Circularity               | 12) Conversion            |
| 2) Appeal to authority       | 13) Begging the question  |
| 3) Bandwagon                 | 14) Either-or             |
| 4) Glittering term           | 15) Vagueness             |
| 5) Namecalling               | 16) Equivocation          |
| 6) Slippery slope            | 17) Straw person          |
| 7) Post hoc                  | 18) Appeal to tradition   |
| 8) Non sequitur              | 19) Argument from analogy |
| 9) Ad hominem                | 20) Hypothetical question |
| 10) Affirming the consequent | 21) Oversimplification    |
| 11) Denying the antecedent   | 22) Irrelevance           |

## b. Logical strategies

## c. Rhetorical strategies

## d. Presenting a position, oral or written (argumentation)

- 1) Aiming at a particular audience and keeping it in mind
- 2) Organizing (common type: main point, clarification, reasons, alternatives, attempt to rebut prospective challenges, summary--including repeat of main point)

## DISPOSITIONS

## 1. Be openminded

- a. Consider seriously other points of view than one's own
- b. Reason from premises with which one disagrees--without letting the disagreement interfere with one's reasoning ("suppositional thinking")
- c. Withhold judgment when the evidence and reasons are insufficient

## 2. Take a position (and change a position) when the evidence and reasons are sufficient to do so

## 3. Take into account the total situation

## 4. Try to be well-informed

## 5. Seek as much precision as the subject permits

## 6. Deal in an orderly manner with the parts of a complex whole

## 7. Look for alternatives

## 8. Seek reasons

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## 9. Seek a clear statement of the issue



10. Keep in mind the original and/or basic concern
11. Use credible sources and mention them
12. Remain relevant to the main point
13. Be sensitive to the feelings, level of knowledge, and degree of sophistication of others<sup>3</sup>

#### Notes

1. This is only an overall content outline. It does not incorporate suggestions for level, sequence, repetition in greater depth, emphasis, or infusion in subject matter area (which might be either exclusive or overlapping).
2. Elaboration of the ideas in this set of proposed goals may be found in my "Rational Thinking and Educational Practice" in Jonas F. Soltis (ed.), Philosophy and Education (Eightieth Yearbook of the National Society for the Study of Education, Part I). Chicago: NSSE, 1981. A note on terminology: The term: "rational thinking", as used in that article is what I mean here by "critical-thinking/reasoning". In deference to popular usage and theoretical considerations as well, I have abandoned the more narrow appraisal-only sense of "critical thinking" that I earlier advocated.
3. Item 13 under "Dispositions" is not strictly speaking a critical thinking disposition. Rather it is a social tendency that is desirable for a critical thinker to have.

child is his parents and the other members of his family. If they regard him as something to do things *to* rather than *with*, and if they are determined to bend his personality to their wills, if they so treat him that he must fend for himself against them, this will have a profound influence upon him for the rest of his life. Indeed, throughout his whole development the atmosphere of the family probably has more to do with the kind of person he will become than any other one factor.

The child is likewise bent by all the other forces in his society. In modern times the movies have a great deal to do with establishing attitudes. The radio, the corner drug-store, playmates, the church, all contribute to the make-up of a human being.

We are particularly interested here, however, in the part played by the school in making fearful, prejudiced people. It is true, as has been shown, that the school does not carry the entire responsibility for the kind of people our society develops. But it is one institution that gets an opportunity to influence all people. The parents, who do not do too well by their children, all went to school at one time or another. The public school is the one place where we pool our funds and try to set up an institution that will redound to the benefit of all. Because it is so inclusive and because it is tax supported, it becomes the one institution which we should be able to modify. Since it is our major social effort to develop people who are competent to meet life adequately, to give more than they take, and to be capable of good citizenship in its largest social sense, the school must bear a major part of the responsibility for these outcomes. It might be profitable, then, for us to consider some of the major assumptions upon which our teachers and educators have so far acted and still too often do act.

These assumptions have been with us so long and are so firmly grounded in tradition that they have virtually become axioms to us. They are hard for us to dig out because they are so deeply embedded. We have believed them so long that we scarcely know we believe them. A few of these axioms or assumptions which I have been able to isolate are listed below.

It is not intended here to imply that all teachers and school administrators proceed on these assumptions. Many teachers have intuitively operated contrary to them, because of their high regard for human values, and because of the success they have achieved by this regard. The assumptions listed below are merely the usual, and not by any means the universal, bases for operation. They are so common, however, that they have succeeded in laying down too many of our present adult patterns.

1. *We assume that the child goes to school to acquire knowledge, and that knowledge is something which has existed for a long time and is handed down on authority.* Perhaps this goes far back to tribal days before the time of written records, when the elder who represented authority told the young what was known of human history. This assumption implies that knowledge exists before learning can begin.

Learning, then, under this assumption becomes a matter of acquisition and acceptance. We acquire that which is set out to be learned, and we do not question its validity because we have it on authority. These things which are set out to be learned become the essentials. They are essential because somebody thinks they are. When something is set out by a person in authority to be learned, it then becomes an absolute good.

Since knowledge is something handed down on authority and exists before learning can begin, it gives rise to

*Earl C. Kelley, EDUCATION FOR WHAT IS REAL, New York: Harper and Brothers, Publishers, 1947.*



many of the trappings of our education. The ordinary textbook is a good example of this. The textbook not only sets out what is to be learned, but it also eliminates that which is not to be learned. This brings comfort to the teacher, who like all of us, is a person of specialized and limited knowledge and understanding, because if the teacher can confine his efforts to the textbook, then he can maintain his pose as an authority.

2. *We assume that subject matter taken on authority is educative in itself.* This means that when the acquisition referred to above has been accomplished, the person almost automatically becomes educated. If this assumption is true, then the task of the teacher becomes that of seeing to it that acquisition takes place. Since such a fine thing as an education is to be the outcome, almost any method is justifiable. If the student will not acquire, then it becomes the teacher's business to see to it that he does. This often if not usually calls for coercion of one sort or another. This coercion may be brutal and overt, or it may be insidiously sweet. What we do to people in the process does not greatly matter, because the subject matter set out to be learned is an absolute good, and once it is learned the learner will be educated.

3. *We assume that the best way to set out subject matter is in unassociated fragments or parcels.* It may be that we really do not believe this, but we proceed as though we do. The heritage which we attempt to impart exists as a whole—the language, the mathematics, the science, the history are all intermingled to make a whole. Yet we take them apart and teach each one of them as something by itself. The English teacher cares very little what the student thinks about Columbus as long as he gets his phrases and clauses right. The history teacher concerns himself very little with the proper use of the language so long as

his essential facts of history are remembered. The mathematics teacher has so far departed from the concretions which give rise to numbers that he is virtually in a world by himself. If there is ever any process of putting these separate items back together where they were in the beginning, it has to be done by the learner. The learner's ability to synthesize is certain to be blunted by the analytical nature of this type of education.

This process not only does not use synthesis, but it "sets" the learner in the opposite direction.

Perhaps this analytical parcelling of the absolute goods comes from the notion that the mind is something separate from the body, and further, that the mind itself is divided into compartments. We do certain things in school which are supposed to train our will power, others to train our reasoning power or our memory, as though these functions were separate and resided in particular parts of the brain.

In much the same manner, we parcel or classify people as well as subject matter. We say all twelve-year-olds are the same and should learn the same things. They should make progress en masse. The only time we recognize growth is in May or June when most children are promoted at once. Others are told that they will have to do their growing over again.

4. *We assume that a fragment or parcel of subject matter is the same to the learner as to the teacher.* Thus we demand that children see the same significances in facts as we do. If I, as teacher, extract certain meanings out of an object or idea, I see no reason why a child should not extract the same meanings. That which is set out to be learned is absolute and therefore cannot have more than one meaning. So we say to children, "You heard what I



said, didn't you?" or, "You can see, can't you?" The teacher's bag of tricks has many such expressions in it.

Similarly, we assume that an object or fact, fragment or parcel, is the same to one learner as it is to another. That is, we can expect all the members of a class to learn the same thing, and to extract the same meaning from it. This assumption is really basic to all education that deals with subject matter which is "set out to be learned." It is implied in all of our factual examinations, our reliance on textbooks, and our efforts to educate large similar groups en masse. Later on, the bearing of this assumption will be more clearly shown.

5. *We assume that education is supplementary to and preparatory to life, not life itself.* The child is constantly in the process of preparing for something. He does not know quite what it is that he is preparing for, and the teacher is often ill-equipped to help him to know. Perhaps this comes from the situation which existed a century or more ago, when people lived in a world that was more concrete, and the school supplemented these concretions by furnishing the abstractions. Now we seem to be furnishing abstractions for concretions which no longer exist. To illustrate, we begin to teach a child to read when he is six years old. The abstract printed page has no relationship to any experience or need felt by most six-year-old children, but we know that sometime he will need to know how to read, and so we try to teach it to him regardless of his readiness or his purpose and without any relationship to the life which he is presently leading.

Since education is supplementary and preparatory, we build school buildings designed to shut out life so that the child can give complete attention to our abstractions or tools for conveying these abstractions, to books, blackboards, and chalk. The windows of the classroom are

often purposely built high so that the child cannot look out of them and be distracted. The whole atmosphere of the place where education goes on is exclusive and forbidding in its nature. We build our colleges out in isolated places where the world will not intrude. We segregate the most similar ones together, where they cannot learn from different kinds of people. Often we do not let them associate even with their own kind, unless they are also of the same sex. Perhaps the place where a visitor from another country could learn the least about life in America would be on a typical college campus or, for that matter, in a typical American schoolroom.

All of this isolation is consistent with the assumption that children are not living but are preparing for life, that knowledge set out to be learned can be acquired and kept in cold storage, that it is of no use now but will come in handy sometime.

6. *We assume that since education is not present living, it has no social aspects.* When a child is acquiring the abstractions which have been set out for him, all social intercourse is eliminated. He works by himself, at a desk, as much alone as though he were not surrounded by many other social beings. Of course we have some trouble keeping him from being social, and to the extent that he is social we regard him as an undesirable student. The one who pays the least attention to the fact that he is surrounded by other social beings is the one we value most. Particularly undesirable is the one who either gives help to or receives help from another social being.

The unsocial character of what goes on in school gives rise to competition as a way of life. When one works by himself and does not give or receive help, the need to beat the other fellow who is working by himself at a similar task is sure to be felt. Indeed, it is the only recourse left



The idea of beating the other fellow is the opposite of helping him, and when helping is inhibited, competition is certain to take its place. It is implicit in the assumption.

7. *We assume that the teacher can and should furnish the purpose needed for the acquiring of knowledge.* This necessarily goes along with the idea that the teacher shall decide what is to be taught. If knowledge is something handed down on authority then the question as to whether the student has purpose with regard to it is unimportant. The student not only has his knowledge set out for him, but at the same time he is provided with somebody else's purposes and goals. Since this knowledge is absolute and essential, the question as to whether the student is interested in it or not becomes unimportant. The teacher sometimes forgets that if he is going to furnish the subject matter and the purpose he must also assume all responsibility. He often rails against his students because they do not assume responsibility for his purposes. If the teacher forgets to make an assignment, the student is free and has no responsibility to pursue learning.

Getting students to work motivated by somebody else's purpose is something of a task. In order to make students learn what they would not learn of their own accord, teachers have invented all kinds of extrinsic rewards and punishments. This is, in part, the basis for our system of giving good and bad grades, stars, and medals, and for our honor societies. They are devised to get students to do things which they would not otherwise do, and in which they see little or no value. The motive is fear of failure and the accompanying social pressures that go with failure. The reward is the chance to feel superior to somebody else.

8. *We assume that working on tasks devoid of purpose or interest is good discipline.* We somehow have a notion

that working at disagreeable tasks will make people like them and be willing to do them later in life. We assume that making a child conform to the classroom atmosphere which we have established will make him want to conform when he gets out of school. We give our best grades and honors to our most submissive people, presumably on the assumption that submissive people are the best people.

There seems to be an idea among adults that children are naturally perverse and must be coerced, that it is our function as adults to make them conform to habits and procedures which we hold good. We start to do things to children (coerce them) in the cradle on the assumption that they will not do good unless we make them do it, and that making them do it is good discipline.

We assume that when a child has been submissive he has assumed responsibility. If we assign a lesson to be studied at home and the child studies it, we say that he is very responsible. We say that he is a good citizen. We like to feel that we teach responsibility because creating responsible citizens is a charge that has been put upon us by society.

9. *We assume that the answer to the problem is more important than the process.* In the abstract world which is the school we confront our pupils with a mass of synthetic problems which they are asked to solve. If the student gets the right answer we are often satisfied. He probably cares nothing about how much imaginary carpet it takes to cover a hypothetical floor, but if he comes up with the right answer he gets a reward. We seem to assume that this theoretical problem is the same to him as a real one and that he has been through a problem-solving situation. We assume that it contains the elements of cut-and-try, failure and revision. But the child, with his eye on the answer (to get the teacher off his back) often asks



the absurd question, "Shall I multiply or divide?" As long as he can ask this question, he has no concept of the process.

10. *We assume that it is more important to measure what has been learned than it is to learn.* The typical recitation where the student recites what has been read in a book is essentially an evaluative process. Since much of the time in school is spent in recitation we are really using our time evaluating what has been learned somewhere else. In our programs of testing and examining we are deceived by a student's ability to return abstractions to us, and we call it evidence of learning. We seem to assume that evaluation is an outside process—that is, that a person can truly evaluate somebody else, and supposedly, if he himself is to be evaluated, that it should be done by somebody else. Evaluation of what has been done hence becomes more important than doing, because more time is devoted to it.

169 These are at least some of the assumptions under which the school attempts to build people who will be courageous, resourceful, responsible, and adequate. We seem not too much disturbed by the fact that our students portray an increasing attitude of indifference to us as we go along.

The little child who enters school is infinitely curious, and he is willing, as a rule, to give adult proposals a trial. This curiosity, at least with regard to what is set out to be learned, gradually disappears. In the place of curiosity we accumulate resistance. It gradually comes about that scarcely any adult proposal receives consideration. Whatever it is we propose to set out for him, he is sure he wants none of it. Throughout his educational career, in many cases, he skips school as often as he dares. The joy of the

child when school closes in the spring and his sorrow when it opens in September is part of our regular way of life. When he reaches the legal age for quitting school he joyfully departs and does not even take his pencil and paper with him. He must proceed as he is, and use the patterns which he has established. If he has acquired habits of fear and coercion, if his learning is vague and disassociated, if his attitude toward people is one of suspicion, that is what he must use to meet the world. For if he has not had living experience in school, his departure from it will indeed be a "commencement," whether it is blessed by a ceremony and a diploma or not. If he has not lived in school, he will have to commence to live outside, as best he can. He can only be co-operative and social to the extent that by this time he has learned to be.



be of an "intramural" type, possibly under the aegis of a City Athletic Club, with a continuing round-robin series of contests; placing participants on an Olympic team might be one of the objectives of such a program;

5. a range of services in or to city agencies—hospitals, police, fire, sanitation, parks, museums, etc. (this might be extended into private business).

The school might also get into the production of stuff including clothing, food, and household and personal decorations. These products could be sold—or otherwise distributed—in the community. Students could operate vegetable and flower gardens as well as bakery, toy-repair, junk-conversion (even into "art"), millinery and dress, ceramics and jewelry, and photography shops, for example, with the whole merchandising process being added to the production process. Animal shelters and "pet libraries" could also be operated. The school process might even include a kind of *kibbutz* experience on public or privately owned land both inside and outside the city. The point to all of this is to give kids something constructive to do—and it could be on a continuing year-round basis, just like the rest of the community. Not only would the range of their kinesthetic experiences be widely increased, but the consequences of this would permit the development of "literacy" in a variety of ways conventional schools do not even admit exist. It probably needs to be emphasized that the foregoing is not a restatement of a plan of "vocational" education. We are suggesting here examples of a spectrum of activities addressed to community needs which could comprise a vehicle for a total education.

Private business and industry might be induced to provide "awards" in various forms to the students who participate in ways that ought to be recognized beyond the performance itself.

Arrangements could probably be worked out with public and private colleges and universities to admit students from such a school system on the basis of performance in these activities

rather than on the basis of "grades" in conventional "subjects."

Arrangements could also be made with various business enterprises in the city and state to provide some kind of "apprentice" opportunity at various points in the program. It might not be necessary to send students out in all cases, since business and industry could provide some "consultants" to assist students engaged in some activity they need help with.

Such a school process, then, has as its primary function the development of responsible community leadership through providing students with the opportunity for substantive participation in the invention, initiation, and implementation of programs intended to improve the community. This, in turn, produces various effects, including 1) freeing students from detention in a school that virtually insures their alienation from the community at large, and 2) minimizing the continuation of bureaucratic agencies populated by functionaries who are not part of the community ostensibly to be served. Such a process also would have the effect of channeling the energies and abilities of young (particularly male) adolescents into constructive rather than destructive directions. It could also produce a viable political network by maintaining direct communication with the community through its youth, thus minimizing the proliferation of competing "spokesmen" and organizations, especially from sources outside the local community.

A school system of this type has the potential for becoming one of the most useful social-political instruments possible for dealing fruitfully with the problems of the city as they presently exist and as it seems they will probably develop in the future.

In such a system you do not need school structures as they presently exist, nor school "curricula" as they presently exist, nor school faculties as they presently exist. Whatever the reasons were for the present form of public schools, they have little or nothing to do with the problems that the city faces now, and so they need to be changed. If *any* publicly supported institution does not help to resolve problems as they really exist, why have it at all?



thrown out—of it as soon as they reach an age where this is legally possible.

These “failures” do not disappear. They remain in the community, and they comprise an endless and growing population dedicated to “getting even” with the society that has reviled and rejected them in the school. The cost—just in dollars—we pay for dealing with these drop- or push-outs far exceeds virtually *whatever* cost would be entailed in modifying the school environment so as to produce attitudes and skills in these young people that would help them to become participating and contributing members of the community rather than its enemies.

However “impractical and romantic” the following suggestions seem, they are certainly no more “impractical” than the existing city schools which now contribute to the development of the greatest source of threat to the existence of the city as a viable community—its “disadvantaged” youth.

It is possible to view the “school” in the city, particularly in “disadvantaged” areas, more as a *process* than as a structure. There are many reasons for taking such a view, not the least of which is that of changing the connotations that the school conventionally elicits. Furthermore, if the process is viewed as having its primary objective the provision of direct and immediate service to the community, a number of otherwise “invisible” potentials become apparent. For example, the process could be structured around 1) identifying community problems, 2) planning possible solutions on a variety of levels, and 3) carrying out a plan the objective of which is to produce some immediate and palpable amelioration of the problems. In a way, such a school process permits the school to function as a kind of local “think tank” with the intellectual activity focused on problems the staff (students) identifies, and with all of this reinforced by the physical activity entailed in carrying out the solutions.

Such a school process has the immediate community as its “curriculum.” School, in this sense, becomes a primary instrument for dealing in services and products which the community needs.

There are no “subjects” in the conventional sense; the community and its problems and the students working to develop possible solutions embody all “subjects.” The students—across all of the age ranges now found in school—are the primary action agents, and they are paid (rewarded) not merely with “grades,” but with currency they value, including public recognition.

Adolescents, especially male dropouts, should have leadership responsibility throughout, with “teachers” playing a consultant or advisory role.

One of the functions of this kind of schooling is to open an avenue of constructive, responsible participation in community affairs to adolescents and young adults who are now usually denied such opportunity, and who, partly as a consequence, turn to anticommunity activities as an alternative.

This kind of schooling need not confine students to sitting in a classroom. The whole city can—and should—be a continuous “learning laboratory,” with the immediate community as the source of immediate reward for all activity.

The services such a “school” might use as a vehicle include:

1. community planning and action programs, running from information services that could include newsletters, magazines, and films, to rat extermination, with a bounty paid for each rat killed, and awards for better approaches to the problem;
2. a range of services geared to immediate daily problems, including repair services for household appliances and equipment;
3. a range of “cultural” services, including student-produced musical and dramatic programs, puppet shows, films, television programs, etc., on a continuing basis; there could be a city-wide talent program with the best performers and performances being showcased on a weekly TV program, or in other community facilities;
4. a range of “athletic” services (possibly adjunct to the “cultural” program) again on a city-wide basis; this might

Neil Postman & Charles Weingartner, TEACHING AS A SUBVERSIVE ACTIVITY, NY: Dell  
Doubleday Company (A Delta Book), 1969.