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ABSTRACT

A transcript of a dialogue on independent, self-directed learning is presented. The three presenters, Ron Gross, Tom Hebert, and Allen Tough, and audience members discuss learning, schooling, discovery, motivation, public policy, and how all of these affect values and the quality of life. Nonformal, nonaffiliated learning--which takes place at home or in informal settings like libraries, enthusiasts' clubs, and organized networks of learners--is considered. Surveys of deliberate efforts by adults to gain some very definite knowledge and skill have found that 20 percent of adult learning is planned by a professional who leads a class or group, while 80 percent of adult learning is planned by the learner. Also included in the 80 percent are self-help groups of peers with the same problems or interests. Ways to facilitate the entire range of adult learning, including helping learners locate materials or information sources, are suggested. The philosophy of a group called "Writers in the Public Interest" is described. Suggestions on how to support independent self-directed learners and their "Invisible University" are offered. Other topics that are addressed in the forum include: the activities of people who are knowledgeable about a particular area, such as trains/transportation; the capacity of libraries to meet the needs of independent learners; and academic credit/degrees versus noncredit/independent learning. (SW)

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INDEPENDENT, SELF-DIRECTED LEARNERS
IN AMERICAN LIFE:

THE OTHER 80% OF LEARNING

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a presentation to the

June 6, 1977

PECA Monthly Dialogue on Lifelong Learning

by three self-directed learners

U.S. DEPARTMENT OF HEALTH,
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Prepared as a service to participants in the "Monthly Dialogue on Lifelong Learning," sponsored by the Postsecondary Education Convening Authority. The Dialogue is a monthly forum open to anyone interested in lifelong learning and public policy. For more information and a schedule of upcoming events, call PECA at (202) 833-2745.

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INTRODUCTION

On June 6, 1977, PECA brought its 1976-77 season of the Monthly Dialogue on Lifelong Learning to a grand finale. Three self-directed, independent learners, Ron Gross, Tom Hebert and Allen Tough, presented a sparkling colloquy on "Independent, Self-Directed Learners in American Life: The Other 80% of Learning." A little bit about our presenters:

- RON GROSS is author of the two Ford Foundation-sponsored reports -- Higher/Wider Education and New Paths to Learning -- and the upcoming The Lifelong Learner (Simon and Schuster). He is also adjunct Professor of Social Thought at New York University and Founder-Director of Writers in the Public Interest.
- TOM HEBERT is co-author of three books on lifelong learning -- This Way Out, By Hand (Crafts), and Getting Skilled.
- ALLEN TOUGH is Associate Professor of Adult Education at the Ontario Institute for Studies in Education where he authored Adults' Learning Projects. He is currently directing a long-term research project on independent learning.

What follows is a transcript of those proceedings. Those of you who attended will be reminded of the dynamic interchange at that session -- replete with props, signs, hand-outs, audience participation and the Gross-Hebert-Tough tee-shirts, specially lettered with "The Other 80% of Learning," "The Invisible University" and "Amateur League of Scholars -- a good book and a lamp to read it by."

To all its readers, this text provides refreshing, sometimes startling insights on learning, schooling, discovery, motivation, public policy and how all of these impact on our values and the quality of our lives. You will find out more about non-formal, nonaffiliated learning -- the 80% which takes place in the home or informal settings like libraries, enthusiasts' clubs and organized networks of learners.

If you would like additional copies of the Gross-Hebert-Tough presentation they are available for \$1.00 prepaid from

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Our presenters would welcome any comments, questions or reactions.
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PROCEEDINGS

Marilyn Kressel is Associate Director of the Postsecondary Education Convening Authority.

MS. KRESSEL: It is my pleasure at this time to introduce very quickly and then I am going to turn over the program to them, our presentors for our seminar, "Independent, Self-Directed Learners in American Life -- The Other 80 Percent of Learning." To my far right, Ron Gross, who is the Founder and Director of Writers in the Public Interest and author of "Higher/Wider Education," and "New Paths to Learning," both sponsored by the Ford Foundation, and of a new book coming out soon from Simon and Schuster, The Lifelong Learner.

Sitting next to him, Allen Tough, Associate Professor of Adult Education, Ontario Institute for Studies in Education, who has authored The Adults' Learning Projects and is directing a project in independent learning. And to him I would like to extend special thanks for his long journey down here from Toronto, Canada to be part of this session.

And finally, there lingering in the background, Tom Hebert, who has been a "Dialogue" regular, a free-lance writer, co-author of three publications: This Way Out (Alternative Education); By Hand (Crafts); and Getting Skilled (Trade Schools). He is also Education Consultant to the National Center for Appropriate Technology.

I now turn over the dialogue to our three American independent learners. Thank you.

MR. GROSS: Thank you, Marilyn. It is a delight to be here, but it is a little bit warm. Would anyone mind if we took off our jackets?

MR. TOUGH: Actually, up in Canada we rarely wear ties. We are very informal. Would you mind if we took off our ties?

MR. HEBERT: If we're going this far, I think I will take off my shirt, too. (This is called the Clark Kent act.)

[Laughter from audience] (The men are seen to be wearing T-Shirts with the following words emblazoned thereon: Alan Tough in "The Other 80% of Learning," Ron Gross in "The Invisible University," Tom Hebert in "American League of Amateur Scholars - a good book and a lamp to read it by.")

MR. TOUGH: I feel more comfortable.

MR. HEBERT: The three of us have awarded you all Ph.D.'s which you find stamped on your name tags. We feel more comfortable talking to Ph.D.s. He never got one. Dr. Gross, Dr. Tough. This is my big moment because I never got my Master's Degree.

One thing we would like to do today is dedicate today's program to a man that we didn't get down here in Washington. This program is dedicated to Paul Goodman.

MR. TOUGH: I have always earned my living as a classroom teacher. First I was a high school teacher. And more recently in graduate school, where I teach people from the age of 22 to 52. So I am very solidly grounded in classroom and institutional education. At the same time, in my research, I have become interested in the total range of adult learning. I said to myself, "Why don't we look at all the kinds of things that adults are trying to learn, all the methods they are using? Not just what they are doing in our classrooms and in our institutions."

And what I am going to share with you this afternoon is the picture that has emerged as I and others have gone and simply talked to adults in all walks of life, asking them what they have been learning in the last year, how they have gone about it, and how much time they have been spending on it.

What emerges is a picture that is dramatically different from any other picture of adult learning that has been in circulation. And I think the picture has rather dramatic implications for the services that we should be providing for adult learners.

First of all, I had to decide just exactly what I was going to ask people to tell me about, the phenomenon I wanted them to talk about. And the thing that interested me most was highly deliberate efforts to learn something. So what I focused on were major, highly deliberate efforts to gain some very definite knowledge and skill.

I was only interested if the person knew what he or she wanted to learn and went ahead and did so in quite a deliberate way. I also said that all these little bits of efforts to learn something had to add up to a total of seven hours. Now, in fact, it was fairly rare that we had to use that minimum cut-off because it turned out that the average learning effort by an adult is closer to 100 hours. Average learning efforts hover around 80, 90, 100, 110 hours. So these really are major learning efforts. And we didn't have to use the seven hour minimum particularly often.

What I have just described to you is number one in Figure 1., that is it describes the phenomenon, the kind of learning, that we focused on. It is really a major learning effort.

Now, I won't run through number two in figure one. But that is simply some of the populations that we studied up in Toronto, Canada and then some of the other populations that have now been studies all across the States and in several foreign countries, in West Africa, Australia, New Zealand and Jamaica.

Figure 1.

MAJOR LEARNING EFFORTS

1. A learning project is a highly deliberate effort to gain and retain certain definite knowledge and skill. The series of learning sessions (episodes in which the person's primary intention was to learn) must add up to at least seven hours.
2. Populations surveyed: adult high-school diploma students; clerks; college administrators; extension agents; factory workers; general populations in a geographical area (Tennessee, Nebraska, US nationwide); library users; literacy class members; managers; ministers; mothers; older adults; pharmacists; politicians; professional men; salesmen (IBM); school teachers; unemployed; union members; university professors; youth (ages 10 and 16).

Places: Canada (10 studies), Ghana, Jamaica, New Zealand, USA (14 studies).

3. The middle or average person:
 - conducts seven distinct learning projects in one year
 - spends an average of 100 hours per learning effort
 - spends a total of 700 hours per year
4. In whose hands is the day-to-day planning of what and how to learn? Twenty percent of all learning projects are planned by a professional (someone trained, paid, or institutionally designated to facilitate the learning). The professional operates in a group (10%), in a one-to-one situation (7%), or indirectly through completely pre-programmed non-human resources (3%).

Eighty percent of all learning projects are planned by an "amateur". This is usually the learner himself or herself (73%), but occasionally is a friend (3%) or a democratic group of peers (4%).
5. Most common motivation: some anticipated use or application of the knowledge and skill. Less common: curiosity or puzzlement, or wanting to possess the knowledge for its own sake. Rare (1% of all learning efforts): credit.
6. Details, integration, and implications are provided in The Adult's Learning Projects: A Fresh Approach to Theory and Practice in Adult Learning by Allen Tough. It is available (for about \$6.50 prepaid) from Publications Sales, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto, Ontario, Canada, M5S 1V6.

And you will also notice that the people come from all walks of life. For example, a study was done in New Jersey of 100 unemployed individuals to look at their learning efforts. And the same pattern emerges no matter what country you are looking at and no matter what group you interview. There are differences, obviously, but in general the picture remains confirmed as we move over these different groups.

As teachers, students, faculty members and others in the United States have picked up what we did in Toronto and repeated it, they get the same kinds of results. I was involved in some of the studies; others I was not. It doesn't seem to matter about my involvement, since they get the same results.

There was a national survey in the United States completed last Fall. I have seen the very preliminary figures. This was funded by the U.S. Office of Education and carried out by Patrick Penland at the University of Pittsburgh. He is in the Graduate School of Library Information Sciences there. One thing about the libraries is that they try to serve all learners, not just those who come and learn in groups or classrooms.

So I think it was appropriate that a library school be the one to carry out the national survey of adult learning. And the basic findings that are reported are in Figure 1. in numbers 3 and 4. The middle person -- that is, half the people were higher, half the people were lower -- conducts one of these major learning efforts in seven quite distinct areas of knowledge and skill in one year.

Now, right away that is a startlingly different finding than any other picture of adult learning that was in existence before we came along and asked a sort of simple-minded question: "Tell us everything you have been trying to learn and how you do it."

So we find people are learning 7 quite different things. Some things are connected with their home and family, some connected with hobbies or musical instruments, some connected with their jobs and possibly other areas of life as well, such as community or volunteer work.

Another finding is that each of these learning efforts takes about 100 hours, making the total about 700 hours a year, which is quite startling. And we were very fussy. We didn't accept just vague claims that they learned something. We wanted to know precisely what they did. We would ask people for particular information. We asked what they read or what particular film they used. People had to tell us the actual efforts in which their major intention was to learn about this particular knowledge or skill.

Now, I am going to use this flip chart. Maybe the simplest way to understand this picture of adult learning that we have come up with is to compare it to an iceberg. And the iceberg represents the total mass of adult learning, the total bulk of all the adult's learning efforts.

And as you know, as with a real iceberg, the highly visible portion above the surface of the water is only a small fraction of the total bulk of the iceberg. The same is true of adult learning. The highly visible part that we have all paid attention to for years is the people learning in classes, courses, correspondence courses, conferences, workshops, and so on. Or in a room such as this which is obviously set up for learning.

That is a very important part, but as we ask people to tell us about the full range of their learning what we find is that the bulk of it is below the surface. The bulk of it is not visible until we have gone below the surface and can really probe, can really try to get people to tell us about the other things that they have been learning and how they have gone about it. As it turns out, the visible part is about 20 percent, and the invisible part is about 80 percent.

Now, as you see in Figure 1., 20% of adult learning is planned by a professional, by somebody who is paid to lead a class or lead a group, by a driving instructor or someone else who is paid to teach in a one-to-one situation. Or it can be someone who is designated by an institution to lead a group, such as a church group, in which the person is not paid but it is his or her volunteer responsibility to lead that group. We considered any learning in which somebody was designated to be the official, responsible teacher as professionally-led.

The remaining 80 percent of adult learning, which is a highly conservative number, is not particularly visible. This is because most of it is planned by the learner himself or herself. Most of it is self-planned, self-guided, as the person goes along from day-to-day.

There are a couple of other things included in the 80 percent. There are self-help groups, which are becoming increasingly common. They are a fascinating phenomenon. AA is the old standard, but there are quite a few others now for all kinds of needs. These self-help groups are groups of peers with the same problems. There is no expert, there is no designated leader or teacher.

The other phenomenon I included in the 80 percent is learning from a friend. For instance, a friend teaches you how to drive a car or you ask your father to teach you how to drive a car. If you have a driving school instructor, however, this is included in 20 percent of visible adult learning. I discuss this more fully in my book, "The Adults Learning Projects." If you want to order it, the address is at the bottom of figure one and the price is actually only \$6.25.

Now, it may seem to you that I am talking about a survey in Tennessee, a survey in Nebraska, what we found in Canada, in Ghana, and so on. I think it would be a lot more relevant for you if you took a few minutes to look at your own learning efforts in the last year. What have you been trying to learn? What kind of knowledge? What kind of information? What kinds of skills? Take three or four

minutes, just to jot down some of the things that you have been trying to learn connected with your job, your family, your home, your sports, whatever. And perhaps some of you would volunteer to share this with the group in a few minutes.

Let's take a few minutes now to get your own data, your own information.

It can be any kind of knowledge or skill. It can be the kind of things that you learn in schools or classes. Or it can be other quite mundane things, raising kids, how to get a kid to sleep, coping with a particular disease, learning a foreign language, learning about a particular country if you are going to be traveling there. Anything at all.

If you start to run dry in your own list, look at figure two which is a list we used in our interviews to help people recall things that they have been trying to learn. It might help you to think of something that you have been trying to learn.

Figure 2.

SOME THINGS THAT PEOPLE LEARN ABOUT

a sport or game; swimming; dancing; bridge
 current events; public affairs; politics; peace; biography
 sewing; cooking; homemaking; entertaining
 driving a car
 home repairs; woodworking; home improvement project; decorating and furniture
 a hobby or craft; collecting something; photography
 raising a child; discipline; infant care; child's education
 nature; agriculture; birds
 mathematics; statistics; arithmetic
 speed reading; effective writing; public speaking; vocabulary; literature
 science; astronomy; man in space
 health; physical fitness; posture; clothes; appearance
 history; geography; travel; some region or city or neighborhood
 personal finances; savings, insurance; investing; purchasing something
 psychology; effective relationships with other people; groups; leadership; social skills
 typing; data processing; mechanical skill
 some personal problem; mental health; an emotional problem; an illness or medical condition
 various careers; choosing an occupation; finding a job
 gardening; landscaping
 something related to a job or responsibility or decision
 musical instrument; singing; music appreciation
 professional or technical competence; sales skills; how to teach or supervise
 some aspect of religion; ethics; philosophy; moral behavior
 current changes in society; the future; problems in cities; pollution; sociology

dating; relationship with the opposite sex; manners; marriage;
 relationships within the family
 art; painting; architecture
 business management; economics; business
 sensory awareness; human potential; communication; understanding
 oneself; efficiency
 new techniques; a new way of doing something; an innovation
 English; French; some other language

I think we can get some feeling for what people learn and what their motivations are by listening to some of these lists.

Now, would two or three of you share your lists with us and give us some real, live data in this room. It is always fascinating to get a total picture of one person's learning. Who is going to be our first volunteer?

SPEAKER: My husband and I recently bought a farm and we are learning about streams, construction, chemistry, and county records. We are getting a greenhouse so we are learning about greenhouse construction and all the related things that have to do with plants.

Work covers a broad range. I write a research column. I am trying to improve my writing skills. My husband and I have just adopted an Indian child so I am learning about early childhood development and the problems of adopting foreign children. And I am working on a committee trying to find out about immigration applications which are involved with these children in the United States.

And we are building a house. All the construction types of problems, electrical wiring, that kind of learning.

MR. TOUGH: That is a perfect list. It is very good because it has so many different things on it, from building a greenhouse to writing skills. Some of them are skills, some of them are knowledge, some of them are how-to-do-it things. It is a typical and a very useful list.

One or two others? Can you stand up and really shout?

SPEAKER: I have learned how to milk cows, I have learned about fishing, apple harvesting, how to raise turkeys, raise babies, cook for more than 100 people. I have learned how to drive a tractor, how to build a shelf and to landscape.

MR. TOUGH: Most of that was in Israel, I gather. Again, skills are in that list, like driving a tractor. But then there are also head things. One of the things that fascinates me about almost any adult's list is the range of things. I think so often with adult learning we fall into the trap of assuming that all adult learning is like this or it is all like that. But the fascinating thing is

that we find there is a range.

One more.

SPEAKER: I was blessed to become a parent last February, so you can imagine the incredible number of things I have learned about parenting, care of the child, human development; my wife is reading all the time and sharing her knowledge with me.

Another thing, is that we have our minds on perhaps buying a house, so we first wanted to find out whether we were prepared, financially and in other ways, to buy a house. I do an incredible amount of reading on my job. It is a new job I began in January. I do it just to improve my competence as an adult educator and an employee trainee and all the things in this area.

MR. ROUGH: Those are all very useful lists and give you some idea of the spread, the diversity. It is fascinating that most of the learning efforts that all of you have mentioned have been done on your own. I don't recall that any of them took place in a group.

Now we begin to get this picture then that the diversity, the amount of adult learning is quite astounding. And granted this group here is a particularly select one, but the amazing thing is that when we go and talk to factory workers, unemployed people, or housewives, we get the same picture. It doesn't seem to make a great difference.

They may not have quite as long a list as people like you, but they do have a list, not just one project. They have been into several things. And this is true in different parts of the country. It is true in the one study done in the poorest county, Monroe County of Tennessee and a study in Nebraska, and so on. It doesn't seem to matter where you go, you get somewhat the same picture.

Now, assuming this picture is correct, assuming these 21 surveys all across the States and other places are reasonably accurate, so what. What should we do about that? How can we change our institutions, our policies, our funding, whatever?

My goal is to try to serve this entire range of adult learning. I think so many institutions and as many efforts focus just on one particular kind of learning. And I am trying to step back and say, "Well, let's look at the total picture for a while." How can we facilitate and foster this total range of adult learning?

One thing I want to say at this point is that people do want some kind of help. People who learn on their own are remarkably successful. I am quite impressed at their success, their effectiveness. They somehow have the knack of finding their way around and choosing the right materials and finding the right people and so on.

But they do also tell us they would like even more help than they manage to get. And I would like to consider ways to provide that

better help, the additional help that people want in their own learning. And since I finished the research part of this in 1970-71, I have been trying in three or four different ways to develop better kinds of help.

I haven't had dramatic success yet, but at least I am beginning to see some of the things that we might work on in different agencies, in libraries and in colleges, wherever. And one thing is simply to develop further printed tools for people with their own learning. I am not talking so much about the actual learning materials, the actual books that you learn from so much as tools to help people make choices. That seems to me to be where they need the help, in choosing what to learn and properly choosing how to go about it.

So that some of the things that Tom will show you later probably are in a sense catalogs for adult learning. They show you the breadth of available opportunities. Not just in institutions, but in television and in reading and so on. And there are a few books that specifically try to do this. And Tom's book, This Way Out, is one book that tries to do that. It tries to widen horizons of the person who is approaching the end of high school or who is college age and says, "Look, there are an incredible number of things you can learn and there are a lot of ways to learn them."

And we need that for adults of other age groups as well. It is just a basic message that there are an incredible range of things you could be learning and there are a lot of ways to go about it. And I suppose, Ron, your book on lifelong learning will do this to some extent. It will broaden the horizons of people about their own learning. That is the kind of tool I would like to see us develop.

I also have a manuscript, that I haven't done much with, that tries to do this in the sense of showing the different broad areas of learning, everything from self-insight through raising your kids better to spiritual and religious growth. And then within each of those areas I am suggesting ways that people can go about it, not only through institutions but also on their own if they want to take steps on their own.

So printed material was one way. And I would like to see many educational places have little collections of appropriate materials, some that we produce ourselves, some that are already available on the market. Libraries might have special tools for adult learners or something like that.

But I think staff development offices should also do this for the employees in that particular organization. And colleges, night schools and so on should do this. So they would be saying, "Not only will we do the things we are already doing but also here are some tools that you might want to take along and look at your total range of learning and some other paths you might take."

The second way we tried to go about this is through one-to-one counseling, although I don't like that word in this context. I prefer the words "educational consultant." People come to us and ask us to help them take a look at where they are now, the things they have been learning in the last little while (the kind of thing we did this afternoon), and then we look at where they might go next.

We found this technique incredibly powerful. The impact we have had on some people in two or three hours of talking is just enormous. It has often changed their life quite dramatically. My favorite example is a fellow who is the vice president of one of Toronto's largest advertising agencies. And as a result of just about an hour and a half conversation, he reduced that job to one day a week and became a sculptor. And he is now a very successful sculptor. It was in his late fifties that he made this change.

So people can take startlingly different paths as a result of just an hour or two of personal counseling. The third method is through a group. And there are very few of these. One of the first things I heard about Ron Gross was that he was running one of these at New York University. It was a group that was not trying to teach a subject matter, but was simply a collection of a group of people who were learning on their own. And in this group they gave support to each other. They helped each other clarify goals and so on. That is the idea of the kind of group I would like to see because people learning on their own often lack the support. They often feel learning is somehow an isolated thing where they would rather be connected with some other people.

Well, again, just to help us get an accurate picture of the whole thing, I asked one person who was just starting learning something on his own to draw a picture of his learning path. And I had no idea it would turn out to be so complex, as you can see from figure 3. And I find this raises real implications for our understanding of adult learning. For one thing, it is not a linear path. It is not what you would call a nice, neat, simple straight line. Far from it, it is a very complex picture. He started with the top box. He has some paths that end up with a dead end and others that go on and branch and then merge with other branches and so on.

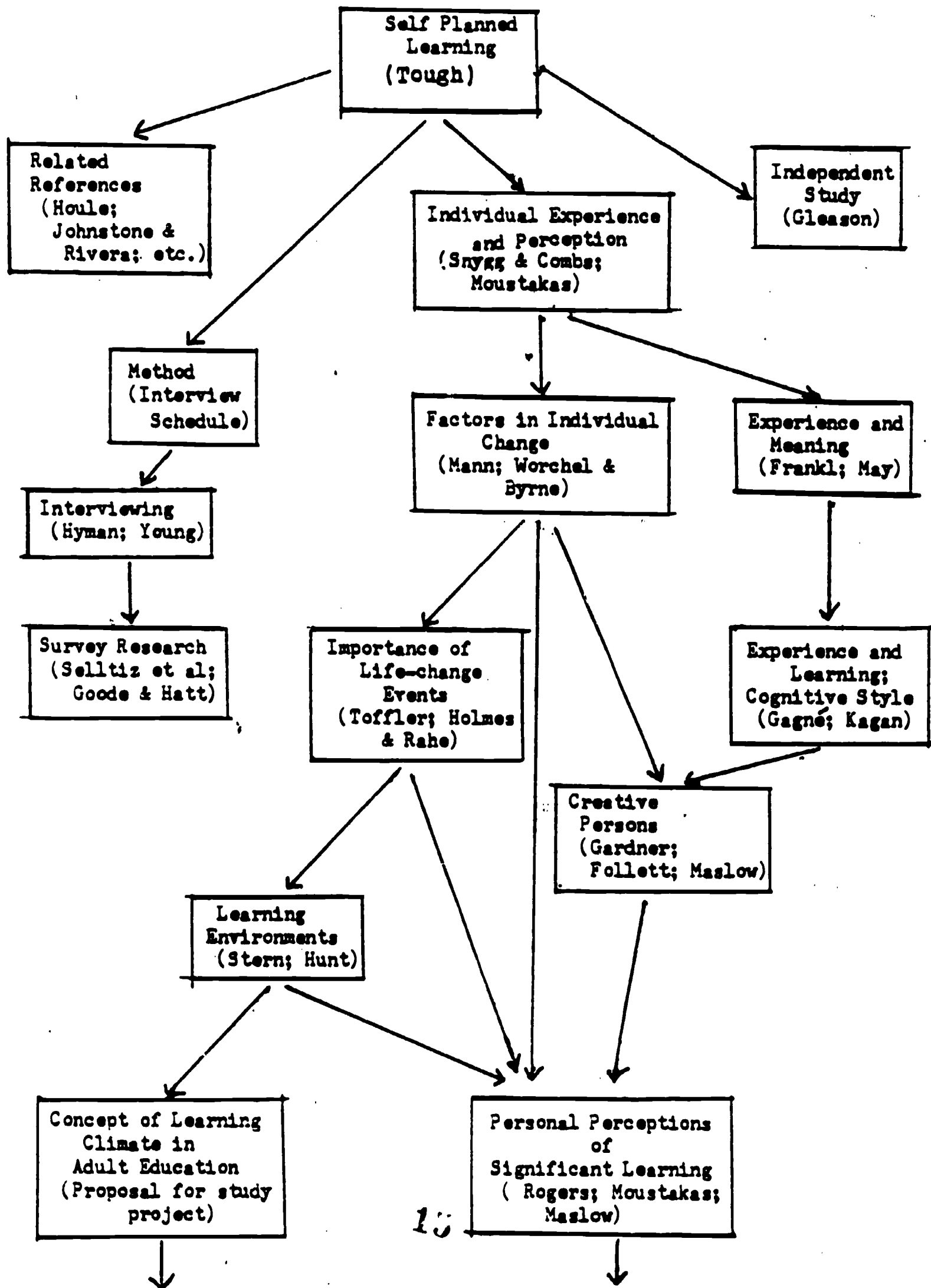
The second fascinating aspect of this is that there is no way that David could have sat down at the beginning of this learning effort and planned that whole thing. For one thing, it is too complex. But even more important, he didn't know how his interests were going to change as he went along.

And so when we talk about better help for adult learners, I think we have to give them help all the way along. We can't just get them going on a path at the beginning and expect that they will do all the rest on their own. David came to me two or three times during the learning to say, "Okay, I have read these things. I am getting some new questions now, some new interests. Where do I go next?" And we have to let our help fit into their process at various points as they go along. I will stop at this point.

Figure 3.

The paths followed in one learning project

David Yule



MR. GROSS: What Allen has just done implies everything, I think, that we have come here to talk with you about today. So in a way, I feel like a friend of mine who recently gave a speech which followed a number of other very good speeches. Someone came up to him afterward and said, "John, you were super...fluuous." But at the risk of being super...fluuous, I will make some brief remarks.

You exemplify what we are talking about. This Monthly Dialogue itself is a part of adult independent learning in an interesting way. That's no coincidence, since I stole the idea from Ken, and I conduct a monthly dialogue on a completely different subject and with a completely different type of group of people and in quite a different facility in New York.

Our group is called Writers in the Public Interest. We're interested in using what talents we have on behalf of socially significant organizations and causes. In other words, we write to promote a more decent society.

Like you, here, we are really a group learning process, completely open, flexible, inexpensive. Free, in fact -- there are no costs to anyone except that some of us do lay out small change for the things that do cost money. We have a little newsletter that we just started last year.

We have the usual kind of telephone and correspondence networks. We are now networking people in order to match writers with organizations that need help, writers who want to work in a certain field with organizations in that field that have expressed the need for help.

We have our teachers; people like Gloria Steinheim and Kurt Vonnegut are involved with us. But most of us are less well-known writers who are trying to shift our careers in that direction.

I believe you here are involved in part of what we mean by an independent learning experience, and secondly, that you are not as unique as you might have thought in that we have already stolen your idea up in New York.

What Writers in the Public Interest is, in fact, is a spontaneous professional school within what I call the Invisible University. And I will get back to that momentarily.

I really have four points that I want to make. They are all implied by what Allen has helped us experience.

First of all, the adult independent learner is the bedrock of learning and cultural development in any society. That is a startling, completely neglected and radical hypothesis. If true, it will take quite a while for it to sink into our individual minds, to say nothing of our social policies.

Secondly, independent adult learning has been the mainstream of

American education, historically.

Third, this mainstream of American education and of American cultural life, right now in our time, by a set of historical pathologies, this mainstream of adult independent lifelong learning is ignored, disparaged, unsupported, unrecognized, discriminated against by our fixations upon diplomas and credentials as evidences of learning. In other words, it is suppressed. It has had to go underground. That is why it is invisible.

Fourth, in building social policy in this field for the future, we can build on this very vital tradition of independent, adult lifelong learning as the foundation stone of our educational policy.

On the first point, that adult independent learning is the bedrock of learning, I think Allen has shown you the evidence for that. That is, it is most of learning and it is the kind of learning that actually keeps our lives and our society going.

As to it's being the historical mainstream of American education, I spelled this out in my American Education Bicentennial Essay, "A Nation of Learners," available in a book with that title.* There I argued, with historical documentation, that from the Founding Fathers through the Nineteenth Century until the struggle for the establishment of public education, the mainstream and growth in American society was adult independent learning.

John Dewey wrote in 1930, "Schools are not the ultimate formative force. Social institutions, the trend of occupations, the pattern of social arrangements are the finally controlling influences in shaping minds. Effective education, that which really leaves a stamp on character and thought is attained when graduates come to take their parts in activities of adult society." That was a fairly late conviction of Dewey's regarding where the really important educative force in a society is. But throughout our history this is a very vigorous tradition. Starting with Benjamin Franklin down through Abraham Lincoln, Thomas Edison, and Henry Ford, the self-taught predominated. Prior to say 1910, this country was run by people we would now call drop-outs. The people in charge were not processed through the kind of educational treatment we now consider essential. And of course, the tradition extends down to Eric Hoffer and Malcome X and people in our own day, some of whom we will be getting into later.

For the bulk of our history, Americans have acted on the principle that in the education of a nation as well as that of an individual, the really critical part does not go on in school and college but is a lifelong, independent activity.

*Available from the Superintendent of Documents, U.S. Government Printing Office, Wash., D.C. 20402. Stock # 017-080-01540-4.

In terms of government support of such activity, by the way, one of my favorite quotes from Thoreau is what he wrote about the Lyceum. "The \$125 annually subscribed for a Lyceum in the Winter is better spent than any other equal sum raised in town." The Lyceum, of course, was a kind of adult, lifelong, voluntary kind of education.

This tradition is exemplified today by what I call the Invisible University. I'll give out a little introduction to The Invisible University in the form of a letter of acceptance to it.* In fact, it is your official notification of acceptance into The Invisible University. And immediately upon picking up one of these sheets, all of the resources and prerogatives of the University are at your disposal. It goes into some detail on what the major components of the University are as well as what some of its disadvantages and problems are. Let me just mention here some of the parts of The Invisible University:

- * libraries
- * proprietary schools
- * community agencies
- * senior citizens' groups
- * business and industry
- * labor unions
- * federal, state, and local governmental agencies
- * women's groups
- * free universities
- * museums
- * religious organizations
- * professional societies
- * minority organizations
- * political groups and political education groups
- * consumer agencies and organizations
- * environmental groups

Finally, let me just say a word about the implication of all this for federal policy -- for helping to build a true learner's society for the future. Note that I use the term "Learner's Society" rather than the more familiar "Learning Society," because I am hoping for a society in which individuals are liberated and strengthened for learning, rather than one in which more and more adults are taught for longer and longer periods of time. It is my conviction that Government intervention could well do more harm than good in this field. The first thing that the Government should do is get out of the light, to paraphrase Thoreau again. It should adopt policies regarding public communications, the condition of our cities, the state of our families, which will remove current obstacles and flaws in the way our society and our lives function that effectively prevent many of us from learning, and particularly prevent the oppressed

*For a copy of this document send a stamped self-addressed envelope to Admissions Office, Invisible Univ., 17 Myrtle Dr., Great Neck, N.Y. 10021

from learning, because their learning would be merely futile if not impossible given the constraints of their lives. So one of the most liberating things to do for adult learning is to work to rectify those inequities.

On a very practical level, it is interesting to ponder the fact that adults as a constituency for educational policy have two important differences from the children and young people to whom our educational policy has been addressed in the past: (1) they can vote, and (2) they have money to buy a good product if they see it. To me, this existence of a political constituency and a viable market makes many things possible. Healthy things, not things that are imposed by fiat and legislation. Here's a list of suggestions on how independent self-directed learners and their "Invisible University" can be strengthened and better supported:

1. Acknowledge the existence, importance, and vitality of independent self-directed learners and their "Invisible University" of non-traditional resources for learning.
2. Stimulate, encourage, and provide recognition for independent, self-directed learning. Stop discriminating against adult, part-time students.
3. Remedy societal inequities which make lifelong learning impossible or futile for the oppressed: lack of opportunity, poverty, damaging upbringing, debilitating work.
4. Encourage mutual education of the population through government policies supportive of open communication (such as postal rates for small periodicals, postal service sale of radio and TV stations access to satellite communications devices, etc.)
5. Channel more public funds for adult learning through adult learners rather than through established institutions, to increase consumer choice. Don't depend on any one kind of institution or strategy. Design for diversity. Support truly innovative approaches to facilitating adult learning.
6. Support sensible research on adult self-directed learning.
7. Provide the capital required to produce needed materials and appropriate technologies for adult independent learning.
8. Orient the formal education system towards lifelong learning, through radical changes in the substance, style, methodology, and organization of schools and colleges. Resist the attempt of the organized teaching professions to take over the lifelong learning movement and capitalize on it for their advantage. Make visible the myriad existing resources and link them for maximum efficient usefulness to learners.

9. Make government service itself the model for adjusting the world of work to the needs and opportunities of lifelong learning.
10. Adopt a national "Education Bill of Rights" based on the above principles, to strengthen adult learners without compelling them to submit to institutional or professional treatment if they don't want to.

MR. HEBERT: In case you haven't been able to read our signs in the back of the room, I will go through them quickly. Ron recommended this one:

"I am a stubborn little auto-didact. My own way or not at all." -- Paul Goodman

This one we don't understand, but we know it has got to do with what we are about:

"Dig tunnels deep, store grain everywhere, never seek hegemony." -- Mao Tse-tung.

From the Georgetown University Library, a great little sign:

"The tape for Dr. Hitlin's class in in the Dial Access System." I wonder about Dr. Hitlin.....

"I live out of the way in Mexico. I write letters and get them. That is my Invisible University." -- Ivan Illich

I watch the Post Office very carefully, because when that begins to go we are all done. Allen is going to get one and Ron is going to get one and then we will have runners.

"Let nothing come between you and the light." -- Thoreau

I.F. Stone was compelled to rely on published documents, and his meticulous, incisive reading of them in gathering information:

"If you want to research, if you want to be an investigative reporter, just read what they say. It is all there."

Dr. Spock's Vulcan philosophy of IDIC. This is from Star Trek:

"Infinite Diversity, Infinite Combinations."

That was wrong?

SPEAKER: Mr. Spock.

MR. HEBERT: Oh, it was Mr. Spock! How many Trekkers do we have? How many people are Star Trek fans?

[Hands go up all around the room]

More on the Star Trek phenomena in a bit. In This Way Out I figured out that people learned by doing learning projects. (I didn't know that Allen Tough was demonstrating that and had thought of it years before.)

I created something called the Concentrated Independent Study Project. If you wanted to enroll yourself in a program you could say, "Well, I am in the CISP Program." If you are going to do that, there are certain incumbent requirements on you, and that was to finish, to do a project, to do a work to the end of it.

I am moving up to an apology here. I try to do that with my own learning projects, to make sure that something comes out of it. So I wrote a paper for today. Yesterday we had a meeting of the Invisible University and for three hours the fellows edited me. Here are some written remarks that I have created and some interviews, that, if the piano is in tune, will quickly tell my tale.

These signs I'm holding are learning aids. (We should have these done in Medieval triptychs, so we could move them around.)

Everywhere I go, particularly if I'm afraid, I take a few saints along. In my kit here, today's guardians that will show me the way and not let me down.

Paul Goodman:

"Liberty is, essentially, the exercise of initiative in a mixed city."

Maria Montessori:

"The greatest triumph of our educational method should always be this: to bring about the spontaneous progress of the child."

Charles Lindbergh:

"Go with what you have and keep it simple."

The French Chef,
Auguste Escoffier:

"Indeed stock is everything in cooking."

For some time now I've had doubts about the possibility of school reform, change, innovation, or improvement. It's not clear to me that the educational establishment that is now in place can do anything but what it's doing. Most of us in this room have been engaged at one time or another in conscientious attempts to affect the nature of the beast, to back it into a corner, to sit on top of it, to teach it humanity, to attach a leash to it, indeed to try to make it something that it's not. These days I'm more inclined to take a walk on it and to refer more and more to the above quoted saints. We have to recognize initiative as liberty, the necessity

of simplicity, the inevitable joy of learning, and the requirements of good stock for our learning soup. And our basic good stock that we have to work with? The fact that learning is self-initiated, inevitable, almost unstoppable, and sweeps all but the most vicious, Draconian measures before it.

My requirements for learning and education are getting fewer. With E.F. Schumacher I'm beginning to suspect that the most we can hope for is that our learning be:

- small
- simple
- cheap
- non-violent

with the added hope that it be appropriate.

Bufs, Cranks, Entrepreneurs, and Amateur Scholars: The The Little Used Reservoir

It was on a long train trip that I realized that I was a Buff Hunter -- someone who sought out, listened to, remembered, categorized fans of all species. It occurred to me that the word "buff" was a word to think about. Buffdom. To be a buff. Buffing. I have looked it up. American Heritage Dictionary: "One who is enthusiastic and knowledgeable about a given subject. (Originally a New York volunteer fireman, hence an enthusiast, from the firemen's buff uniforms.)"

John Walton - The Rail Fan

"I've always been a fan of the Pennsylvania. My grandfather took me down to the yards."

"What about your father?"

"My father doesn't like trains."

I'm sorry I couldn't bring John Walton to you today, stuffed and mounted, as a fine specimen of American Learner, but I can tell you how to find equally fine members of the specie. Take a long-line rail trip, hang around a freight yard looking for someone with a camera and a notebook, capturing images and movements of old B&O cabooses. Subscribe to magazines like Rail Fan and Trains. Go to a model-hobby shop, get close to the man who knows his trains. Rail fans are a retiring lot, but get inside their network, and you will get dizzy with the varieties and vast selection of fans.

I met John Walton on a recent railroad trip from Seattle through Butte to Washington. He's 22 years old, a public accountant, conservative in his politics, and secretary of his rail fan club in south New Jersey. John is the most knowledgeable rail fan I've met in years. I met him ~~over~~ ²² lunch just after I reboarded at

Butte. In the time-honored tradition of authoritarian dining car stewards I was seated at John's table. As we headed towards the Bozeman Cut I started the obligatory luncheon conversation:

"Terrific. Amtrack's only running two hours behind schedule from Seattle. One would think that..."

"It's not the engineer's fault. They're under new orders. It's the engines."

"Engines?"

"Yes. They're the General Electric E60 cp's. They're holding them down to 50 miles an hour for months now."

"Why is that?"

"At high speeds they suffer from vibratory yawing. They don't track well. A couple of the E60's have derailed. Essentially the E60 is a freight hauler modified to be the successor to the GG1. Their trucks just can't take the speed."

"I suddenly feel comforted that we're running late."

"You should."

The next couple of days, John Walton and I had such conversations:

"Which car are you in?"

"I'm in a slumber coach."

"Which one?"

"Three cars back."

"That's 2021."

John reached in his breast pocket, took out a thin volume. Carefully opening it he ran his finger down closely spaced columns.

"2021. Before Amtrack that was the CB&O #4901 built by Budd in 1956. I'm in the next one which was an SCL built by Budd in 1940."

"Good grief."

"Do you want more? This diner was built by Budd in 1949 for Penn Central."

"My name is Tom Hebert."

"I'm John Walton."

"What else do you know?"

"Do you know what a 'goat' is?"

"No."

"That's a small yard engine. A 'battleship'?"

"No."

"A big locomotive. A 'cornfield meet'?" He chuckled.

"No."

"That's a head-on crash. What else."

"How long have you been with trains, John?"

"Since I was little."

"Anything you don't know about 'em?"

"Sure. But I know what's possible to know about them."

"How much time do you spend each week study railroads?"

"I guess maybe about 15 hours a week."

"How?"

"I probably read into 10 magazines a month."

"Where do you get them?"

"Hobby shops, mostly."

"Why don't you subscribe?"

"A lot of us feel that we should support the shops because they're always getting us new members."

"What else do you read?"

"Fortune, New York Times, Business Week. I also learn by word-of-mouth. When one rail fan meets another..."

"I know."

"We talk a lot."

"Do you have any other hobbies?"

"Sure. Aviation, photography, New Jersey politics."

"What about your club?"

"We meet once a month."

"Any women rail fans?"

"I've heard of some but I've never met any....When you go out on a date and it comes out that you like railroads the girl will always say, you like what?"

"What aspects of railroading are you into?"

"Well, you have to know your train 'sets', you cars and their history. Basically, I like to ride trains. I take pictures of interesting cars, old time-tables, and menus."

"Menus?"

"I have about 45, clean. Our steward is getting me a fresh one this afternoon."

"How do you categorize other rail fans? What is their typology?"

"There are three kinds: those that collect paper (time tables, etc.), those that collect hardware (actual cars, lamps, controls, etc.), and those that collect old photographs, make home movies, or take stills like I do."

I had noticed that John carried his camera everywhere. Occasionally he'd cross the aisle, steady himself carefully, and take a picture of a nice piece of rolling stock.

I met up with John again after our overnight in Chicago. We were now on the Broadway Limited. We were in bar lounge #304 which used to be IR&P #89565, built by SLC in 1952. I asked him what he'd done during the day in Chicago.

"I went down to the yards, made some notes, took a few pictures."

"What's really a thrill, John?"

"When I get an article published in Block Line, the state magazine."

"What do you do at your monthly meetings?"

"We organize our excursions, maybe see a movie or slide-show, maybe have an outside speaker. For example, last month we had the New Jersey Secretary of Transportation. He thought he was going to talk to a bunch of 'history buffs'. He didn't understand we're issue-oriented too. We had done our homework. We nailed the bum. New Jersey has no railroads anymore. The truckers have it all. We're bringing pressure to bear to get the state government rail-oriented again."

"Do you have other issues?"

He chuckled, "Ever heard of the big Toilet Controversy?"

"Missed that one."

"Amtrack is designing new slumber coaches without individual toilets. We think that that's savage. We have a letter-writing campaign on that one."

"How many letters?"

"Don't know. I would guess at this point two or three thousand. Sometimes Amtrack hates to see us coming."

I tried to get John to talk about the old Hollywood Zephyrs. John's not a romantic. Being a rail fan is serious, up-to-date business with John.

"Why don't you get a job with Amtrack?"

"I'd like to. I'm thinking about it. But there's a sort of unwritten policy around Amtrack. They don't hire rail fans. They say we don't work out too well. [chuckle] You see we treat railroads like a natural resource."

Buff is a mediating term, running interference between being called a scholar on one hand and a nut on the other. Does anybody know how many buffs there are in the country? Have we studied their Daily Learning Routines (DLR's)? Do they have an economic value? What is their political power? Can or should we turn to Amateur Scientists once again since university science seems to be in trouble?

A recent report funded by the National Science Foundation, "The State of Academic Science," to be released next week in Change magazine and quoted in the May 29th Washington Post, says that there is a trend toward "a less speculative science, taking fewer chances, sticking with established lines of investigation. The situation seems to be the same for the established investigator, for the agency program official, and for the graduate student... Playing it safe becomes the path of least resistance." All that sounds like a Dry Hole.

The 1975 report of the Joint Economic Committee by Professor Robert Gilpin of Princeton, "Technology, Economic Growth, and International Competitiveness" comments:

"American innovation has become sluggish in commercial technology... a slowing down of innovative capacity relative to Europe and, above all, to Japan... a relative industrial decline."

I assume that our huge university-based R&D plant is at the end of its golden age, and that new economies are going to develop out of "intermediate technologies" rather than the capital-intensive high technologies of the recent past. Research monies might more appropriately be given to the backyard inventors, the "pig sh-t" and sunshine folks" as they're derisively known over at the Energy Research and Development Administration. The time is coming when the person who works alone will get the recognition, rather than the person with so-called "team work" skills.

Yet there is an area of high technology that has attracted my imagination. I must say that last summer's Viking Landers on Mars meant a great deal to me. Enough interesting work went into those machines to make them worthwhile. The ultimate question of extraplanetary life which they were trying to resolve we can't blink. The Landers were marvels of design and craftsmanship. Their cost was more or less spent wisely. There's a certain sadness about Viking -- not that it represents the end of a line, but because, according to close observers of the project, there had been a failure of imagination -- the imagination needed to develop bold new programs. There is no "skunk works," an existing group that is speculating and brainstorming about our future in space. There is a theoretical, technological, creative void inside NASA.

At the time of the second Viking Lander I went down to NASA headquarters to watch the little machine radio back its first views of its new home. The only place in Washington where you could watch "live" as the pictures came back from Mars, NASA Headquarters, was only two-thirds full -- about 150 people -- mostly local NASA employees.

As you may recall, there was an electronic gremlin and the pictures were many hours late in arriving. Earlier, NASA had sent me its pamphlets and press handbooks. It was deadly reading. About the level of an Oldsmobile owners manual.

Apparently, only the astronomer Carl Sagan knows what Viking is all about. For the people who manage our space program, it was merely clever electronics and plumbing. NASA can really get off on lifting ancient Brontosaurus towards the moon. It can't go beyond them into the efficient bird-like period of space discovery that we should now be entering.

A few weeks before the mission I realized I was beginning to learn a lot about the various chemistries of earth life, Martian meteorology, and x-ray spectroscopy. Careful reading of interviews with the various experiment team leaders yielded a lot of technical information digested for lay persons like myself.

I was in Bar Harbor and merrily learning away. Viking was becoming a nationwide experiment in open learning. NASA kept telling us how well its cameras were working, while we kept getting deeper into space physics. NASA was into technology while the rest of us were into learning. NASA was trying to justify its spending

and we, for the first time in the space program, were reaping knowledge, damn near uncaring about the expense.

I had an idea. Why doesn't NASA pick a handful of towns or neighborhoods and turn them into open learning classrooms, bring in their big gun scientists, and turn them into space teachers, bringing high school kids, Rotarians, Kiwanians, scouts, churches, indeed whole town populations into the space age.

I am convinced that such an attempt to create a township of learners would demonstrate that Americans can eagerly absorb large amounts of technical information.

Therefore, on the one hand we have the need of isolated scholars and inventors to be working away in their shops, and we have the concomitant need to bring us all into a learning society.

An article in the Seattle Times on April 16, 1977, "Amateur Scientists: Their Tradition Continues to Live On" makes two points: that snobbery from professionals continues to be a problem, and that many of the hobbyists' own children have gone on to become scientists themselves.

"We use only prescribed methods," said the Washington Archaeological Society president. "We report and catalogue everything we do." What more can we ask?

Star Trek Lives! Star Trek was produced and televised over a three-year period, 1965-68. There are probably ten million people today who exist in that particular fandom. They're Trekkies. There are conventions, magazines, books, scholarships, and now political and education activities. Where other science fiction shows tried to gloss over scientific inaccuracies, Star Trek fought to create a wholly believable technology, a real universe.

There are hundreds, possibly even thousands, of fan clubs, small and large. In the original sense they represent a university. Star Trek fans build entire, life-size working replicas of the Enterprise. They produce entire stage plays, make their own films. They write new scripts and have developed a sizable critical literature on the corpus of the Star Trek scripts.

In addition, it must be noted that much of this learning occurs in the fami y setting, or the Household Education System, as I call it.

It develops that all this amazing energy was not circulating in aimless orbit. Quoting from the science fiction magazine Analog, May, 1977:

"It should not have passed without notice that the summer of '76, besides being immortalized as the moment we first set footpad on Mars, will be

remembered as the watershed of something else -- the time when a group of space enthusiasts collectively decided to make its voice heard in official circles. This vanguard, under the unlikely heading of "Star Trek fandom," inundated the Office of the President with approximately 100,000 letters, asking that the first space shuttle receive a name in keeping both with its potential and our national tradition. The President, over NASA's indifference, responded to the expressed wish of this group, marking the first time a space constituency had collectively assembled to request something of its government -- and had been heard. Thus it came about that the first proud ship of a new line was christened ENTERPRISE. The meaning should be clear.

Star Trek fans in the United States number at least 25 million. If even ten percent actively lobby for a resurgence in the nation's space activity, their citizen perspective -- as opposed to the vested interest of the industries of aerospace -- can have enormous weight in determining where we go next, and when."

Thus we have the Trekkies. Just like the rail fans, getting involved in public policy because they know what the hell they're talking about. Such groups of people are probably burrs to officialdom. Something there is, about such scholarly groups, that keeps them pushing solidly for the common good.

Amateur Scholars, Briar Patch and kitchen table entrepreneurs, ham radio operators, inventors of every kind, appropriate technologists, steam boat fans, collectors, amateur folklorists, architectural buffs, bird watchers, amateur astronomers, and the Washington State Native Plant Society, are busy around the clock creating knowledge and watching out for us.

By the millions.

This seminar represents the commencement ceremonies of a very small university that resides in a literal historical succession going back to the Middle Ages, which Hastings Rashdall described as the "spontaneous products of that instinct of association that swept the towns of Europe in the course of the 11th and 12th Centuries."

The three of us here are the students and faculty of the same university. During one class session, Ron Gross and I were volleying ancient one-liners back and forth via Long Distance. This is the admissions costs of a lot of Invisible Universities. God, the phone bills. Right?

His last shot, which I have yet to return, "It is not I but the city that teaches." That from Socrates. That is the same city as Goodman's "mixed city of initiative." Our cities and our culture are in trouble. Teaching cities are therefore under threat. Our

ability to pass the genetic strands of our culture on to succeeding generations is not assured.

The reality of our situation is caught up in Princeton's Professor Gilpin's statement to the effect that our problem is the "relative economic and industrial decline of the United States."

Beyond that, there is Theodore Wertime's comment in his Washington Post article of April 24, 1977:

"How fragile or durable, then, is the fabric of our particular future? How does one demonstrate that, unless we move drastically and with great speed to apply a new ethic of extracting less from nature, but with more equitable distribution and a technology to match, we too can go the way of the Hittites and the Romans?"

Our cranky British observer Henry Fairlie speaks of the "collapse of vigor in the triumphant middle class."

Our schools: we don't have to go into a litany about the problems of the schools. But even in our world of lifelong learners, there is a problem:

This turgid, opaque, non-yielding language which I am going to quote, came, ironically, out of the Clearwater Conference in Adult Education.

"Much is already happening in this area. What are the regnant and the pregnant public policy imperatives relative to adult education? Studies must attend to current policy trends, both Congressional and state house, regarding stated priorities as to statements and actual enactments. The principle normative issues revolve around who should serve, who should pay, who should benefit, who should provide services, who should control post-secondary adult recurrent education systems? What should be the target of limited resources?"

Pray God it is not me.

Obviously, I am not much encouraged that our educational establishment is going to carry much weight in the good work we are going to be doing in our future. Until now, we have all been trying to make the schools function. We have been teaching and acquiring learning skills so that we can say to the ages, "Yea, our schools worked!" We seem to be saying, if our schools work, then our culture is working. Yet, we forget we are judging ourselves with an institution that is, as Ron has pointed out, a fairly recent one. Can we let the survival of our culture hinge on how our neighbor votes on the next school bond levy?

I suggest we return to an earlier, personal and family authority and tradition. Our schools are not responsible. We are. We know that in succeeding generations we are going to have to develop a self-reliance that does not now exist. Our future may be made of old timbers and relics. It may be shockingly frontier-like to some, but we would develop that self-reliance. Remember, our "stock" is good, because we are all learners. Thank you.

MR. GROSS: We will welcome your comments, questions, hostility, support, reactions, response, learnings.

SPEAKER: I would like to ask you, Allen, a question or I will ask it of the whole group. I am not sure I understand. It seems to me that you said that those learning experiences were already there, that people already were learning. And so I guess the question then is what is the purpose of this? So what. Do we just want to leave it alone and let it grow? Or are you saying that somehow this should be structured? It seems to me that each of you in some way said no. What exactly is the point?

MR. TOUGH: I like the way you talk because the struggle really shows through. I can sense that you are struggling with this issue, and I am, too. Certainly the worst thing that could happen would be for certain educators to take it over and make it very restricted and rigid and put the rubber stamp on all learning throughout society. That would be disastrous and we don't want that.

On the other hand, I don't think we should completely ignore the phenomenon, because people, men and women, do want additional help with sorting out their learning goals, their learning paths. They want further resources and so on. So I would like to try a small scale effort to find out what they need and to develop ways of fitting into their process.

The key is not to take over their process, not to make them fit into our process. If we could find ways to fit into their process, I think it would be useful to society, to jobs, to citizen action and so on, if people could learn even more than they are now.

MR. GROSS: If I may offer a response to that question, too, my response would be this. And here I think our minds are a bit boggled by what I refer to as the revolutionary boldness of what Allen has found and what he surmises. You see, it sounds like a lot, but I think it is just the tip. In other words, what people are doing now they are doing in unpropitious circumstances, to say the least. They are doing it in a situation where the activity is, as I said, ignored, denigrated. People, when he first asks them, don't think that what they later discover is learning, is learning, because they have been so, as Ivan Illich says, "schooled up" to the fact that learning is what goes on in schools. They don't even realize that they're learning. He has to pull it out of them -- not because they're not doing it, but because the culture has taught them that that is not what learning is.

So my response would be this. What seems in Allen's account to be a lot, is tragically little. It is almost impossible for us to even imagine what a society and what heads would be like in a culture that truly supported, encouraged, recognized and otherwise enhanced this kind of learning. And secondly, there are an awful lot of things that can be done at once, some of which I describe on this sheet, to liberate people from conditions which constrain against this kind of learning.

The whole point here is this: In terms of educational research, think of the libraries of education and what you find when you go to them. What do you find? What does this field consist of? It consists of literally millions of volumes on school curriculum and on school administration. By school, I mean any formal institution of instruction. It consists of philosophy of pedagogy, et cetera.

There are 21 studies of this kind of learning, of which, according to Allen, 20 are unnecessary because they all say the same thing. The libraries should be filled, the shelves should be brimming. There are obviously understanding, perception, and techniques to be developed in this field.

So that what Allen has caught a glimpse of is the smallest imaginable tip of what human potential could be, realized through the real cultivation of this capability.

SPEAKER: This has been really thrilling for me today to recognize what you said, Ron, about the fact that this is neglected and people need support for this kind of thing. I remember a wonderful speech that I think one of the library people made about the librarian and how important a counselor or a librarian is.

And it seems to me that if we were thinking about how to implement or how to give some backing, we ought to be trying to assist the library to develop this capacity. All libraries don't say they all have it. I am sure they do. But a lot of people aren't using them.

And if we were thinking of resources to back up the individual learner, as you say, a library would be a tremendous resource. Many people are testimonials to the fact that one librarian's point of view or counseling has turned them on.

So I think we need, and I don't know what the proper sex term is, I don't know what the male version of midwife is, but I think we need mid-husbands and mid-wives in this field and that these ought to be identified in many different areas.

MR GROSS: Yes, that is what Socrates thought a teacher should be, of course.

SPEAKER: Do you think one of the major characteristics of the 80 percent is a matter of preference?

MR. TOUGH: That is right. The fascinating thing for me is that only about one percent of all adult learning is motivated by credit, and the other 99 percent motivated by other things. And I think we should look at what those other things are and build on those motivations. It would seem much more natural somehow than working towards a piece of paper.

MR. HEBERT: Here is the thing that gets a lot of attention. GW offered this program, right? [Holds up a sign] "Experimental Humanities." That was an effort to keep kids in college, I guess. That sort of "experimenting" can't work.

MR. GROSS: Yes.

SPEAKER: I have quite a few problems with what you have just said about the academic credit. I think that there is a difficulty for me, in fact, I know there is a difficulty for me, to be able to do anything. We are so degree conscious in our field that you look at it sometimes as a union card or a right to speak. And I think that maybe if we clean up our own prejudice in this area that we could move out a great deal more into the community.

But we are so conscious of that degree and the college dropouts. I mean, I don't know if college dropouts are different from Ph.D.'s. It is judged. I could get out there and present something and someone would listen to me and think I had something to say. Thank you very much.

MR. GROSS: I think that not to put too fine a face on the matter, the degree system is a wicked and stupid system which is terribly damaging to people's lives. And I think it definitely does more harm than good and that it is an almost criminal conspiracy on the part of the educational establishment that continues to cooperate.

SPEAKER: You folks have caused me to start wrestling with some ideas that are going to unleash or determine a great deal of energy in this field. It isn't all going to be going in the same direction. One, your statement that only one percent of these people are looking for credit, another, that you have a declining pool of the people from which our colleges and universities draw their clientele, another, that there is an increasing perception that there isn't a necessary correlation between education and socio-economic status, there are other things that undoubtedly do the same thing. What I am thinking here is that there is energy in this. People will be propelled forward or backward or against each other or too close scurrying to get to market or whatever. Certainly there is no way to project what the revolution, if there is such a thing, is going to be.

There certainly is going to be a lot of activity.

SPEAKER: I have a big problem with the notion of benign neglect in our learning policy. But I am a little intrigued about the iceberg and I am a little intrigued about how you can talk about self-

planned learning without at the same time talking about learning that is not self-planned. Whether you call it learning, manipulation or persuasion, I don't see how you can come into what you talk about here without talking about the influence of newspapers, magazines, the radio and television and all of the impacts of persuasion and information on the person each day, what effect that is having on how he is responding. How do they participate in our society? Would it disturb you if you found out that the 80 percent beneath the tip of the iceberg were all studying how to cope with yellow wax build-up? Would you feel that there is a problem of somehow getting some of these people to learn some skills which will enable them to live together?

If we say just let things go, remove a few obstacles, are we really sort of turning our backs on a large population?

MR. TOUGH: Yeah, I certainly agree that people can be helped to learn more relevant things. I think often people don't know what is available. They don't think of what different things they could learn that would help them with their job or help them vote more intelligently or whatever.

In fact, most of the 80 percent now is fairly relevant, useful. I agree with you, that newspapers, television, magazines have an enormous impact on people, but they don't show up in our studies because people don't use them for their learning, not for their long-term learning. They learn bits and pieces from television, a half hour there and a two minute news article there.

But they don't actually use these in their longer term learning.

SPEAKER: That is part of the problem that I am not stating very well but that I think should be addressed. Your 20 percent who consciously decide, "I need to know how to do this" or "I need to know about that" for whatever reasons, they are taking an active step. Who is measuring the people who basically live a passive life, who stare at the tube, who similarly may respond passively to other events. They respond passively to conditions in society. They do not respond with action.

No one has measured the size or the degree of this but it has to be there. Classroom teachers find it when they are expected to be as entertaining as a TV show. And things wind up in type-cast happy endings, the way it is. There is a whole area here that raises the question: "Are these people going to self-plan learning when you make it easier for them to get a book or something like that?"

MR. TOUGH: Well, the fascinating thing is that although some people are passive, the startling thing in all this is that most people are active. The lowest figure in all of these studies, including the national survey, was 80 percent of people are active in their learning. The 80 percent is active. In a way it is more active than going and sitting in a classroom. You can sit in a classroom and be pretty passive.

The 80 percent are finding it and running it all on their own. So that in a way it is a new image of human beings, a new image of what people are like. It is that they are much more active in their own learning than we had any notion of before. And that includes people in all walks of life, all levels.

MR. GROSS: Can I speak to the benign neglect point very briefly? I am not advocating the benign neglect approach. As I said, I didn't want to go into this. I am advocating a re-structuring of the whole society to liberate this impulse. We are at a point where a choice that will consist of many, which will be the coagulation of hundreds of thousands of choices will be made. And the choice is, will the learning society be constructed around and by strengthening the formal education system?

Will it consist of a shift in emphasis and a strengthening of the existing, mainly of the existing formal and established educational institutions to "serve" adults, to deliver education to this "new clientele?" Or, will we do the far more difficult and I think correct and imaginative and creative thing of structuring a learner's society around individuals and around natural organic groups? Natural organic groups of convivial people, and find ways to support and liberate them.

Now, let me give you a very specific instance. I was in Wisconsin where a bunch of big thinkers in education were concocting an open university based on the British model. And these were good people who truly did want to serve people who had been unserved in the past. And their conception was that you have got to think big to capture the public imagination and to be cost efficient. And I used to believe that. In the Sixties when I was at the Ford Foundation, we put up a plane with an antenna sticking out of its rear and it broadcast to six states. I came out of the Sixties having learned the flaws of that kind of an approach.

And a couple of days later in Madison, right down the street from where these big thinkers were meeting, I found a group called People's Video that was teaching poor people to use half inch video tape to do cassettes of community decision making processes. And this was real learning going on around real human needs.

Now, someone has got to decide whether in effect, I know it doesn't come to that kind of a decision, they don't vote things on their desks. A decision will be made at some point as to whether some millions of dollars will go to the think big boys or to the think small people.

But these are the kinds of choices that are going to have to be made in Washington and in the states and throughout the country and in each of our heads as to which way we move in trying to develop a learning society.

It isn't to say we are going to develop a learning society or

to develop lifelong learning; it does not pose the question. It only starts the question. It is not a policy.

MR. HEBERT: I think we have time to run a quickie around this table of exhibits. I am interested in the process of lifelong learning techniques. People take in a lot of information, day in and day out, in many ways.

Here is some paraphernalia of lifelong learners, for example, "Encyclopedia Britannica" for \$400. Everything is in that set.

Tape recorders. Increasingly you can get tape recordings on just about any subject you want. You can stick them in you car, take them with you to work, whatever. Here is something that is very exciting. This is the new video disc. This may be the first time you have ever seen one. This is a photo of the machine here. It is \$600 now. It is going to go down. On this disc, the EB-3 could go on one side. It could go frame by frame, with 55,000 frames per slide. Here it is. It costs 40 cents, mass produced. A movie is contained in just three of these things, in color. And you can do just anything with it, walk on it, step on it. The information is buried deep. This system could have some impact, in ways we can't predict.

Record jackets. If you are a serious collector of records, if the publisher knows that, the jacket copies are generally quite good. More learning tools: Directories for trade schools, correspondence schools, "The Yellow Pages of Learning," which many cities have produced.

If you want to, you can buy college lectures from the University of California. Five lectures, \$5.00 You can find out what the accepted academic opinion is on any topic. Buy the lecture.

Magazines. "Super-Eight Film-Maker," "Women's Work," a whole new raft of very sophisticated and in-depth women's magazines coming out; and the old line "Family Circle," but with a million projects to help you through the week. The "CBER's News," of which there are about 125 now out. "Workbench," "Do-It-Yourself Projects," "Popular Mechanics," oh God, we love "Popular Mechanics!"

It is these things that I like. [Tears out mail-away postcard] This is access. This is the next thing to Ron's open admission, right? You just have to mail that thing off and the Post Office will take care of it. For a real enthusiast, this magazine costs \$2.50. "Sea Classics." It is about ships, mostly very technical, historical things. But it is a marvelous magazine. "Scientific American." If you want to keep up to date, if you want to learn the language of ongoing scientific inquiry, get this and dip into it occasionally. Here's "Mechanics Illustrated." Build a solar collector. This is not a solar collector, per se. This is for the home builder who wants to learn about solar collectors. And so he builds a test instrument.

This is just a test instrument and probably 100,000 of these things will be made. "101 Do-It-Yourself Electronics Projects," and this is the "Trains" magazine we were talking about.

Correspondence schools. Right off the old, what is it? Match books!! "Fifteen ways to get ahead," "Success without college." A lot of people have been bored in school, they pick this up, they write away and they are in a self-counseling thing already. Good, college-based correspondence courses exist. This is an example: "Composition and Literature, the University of Kansas." It's a great program.

Here's a proprietary truck driving course, a very good course. Here is a course for the vast health insurance establishment. From The Kennedy Center, a program guide. Next to useless. Let's see, the Nutcracker Ballet, that was it. About one page, it just really let's you down.

I am a Hoagy Charmichael fan. I want to be president of that club, too. Smithsonian had a Sunday concert. I open their program. There is nothing. Nothing for the enthusiasts. Even the Smithsonian didn't realize it. We really wanted to know where we could get Hoagy Charmichael recdrds and what some of his movies were.

I have written three commercial books now. I started, though, printing my own books. This was the first book I wrote. It cost me \$1,000. And this was because I wanted to write a book. So I made a book. I had an artist create 50 silk screen designs and then I bound it myself. I loved it. In the middle of the night I was binding it myself and mailing it off to my friends, right?

There is another one. And again, I hired an artist. It is the best writing I have ever done, probably. But that is the way it is, anybody can write their own book. Mail it off to your friends. Be like Thoreau, have the largest library of your own personal works.

And then these are the formal books that we wrote. But these others somehow are my "fun books." [Holds up hundreds of note cards] This is the greatest research that I have ever done. I am so proud of it. What is inside here? Let me tell you. This is my Master's Thesis. In there someplace is probably a Doctoral Degree, if I wanted one. I just don't look at it.

SPEAKER: I think that I am on a different planet. If we are a great lifelong learning society and all this, I have a notion that the purpose of learning is beyond the Government. Presumably the purpose of the United States of America is to govern ourselves with a degree of success so that we can improve the quality of our life and our freedom and peace. If all of this learning is going on so well, I guess at the bottom line, why do less than half of the people participate in this process? Why don't people vote? Why isn't there some pay-off from all of this self-planned learning in the

improvement of this society and increased participation in the government?

Does each individual live in his own little cocoon and live only as a result of fulfillment? I just think we are kidding ourselves that we are causing all this learning and producing all these people.

SPEAKER: Or it may be that all of this sounds very good in the alumni records. But something needs to be done. If you don't get a job, turn on the television and do all these fun things. If you get a job there isn't so much fun and leisure to it.

MR. GROSS: I don't have a job. I take it your real concern is that you think that we are asserting that there is all of this wonderful learning going on. You are saying, "So why is this country in such lousy shape culturally and politically?" Is that your question?

SPEAKER: I am saying that if learning got us where we are today, is learning going to get us out of it? Is learning a tool for self-government and in improving the society or is it a form of entertainment?

MR. GROSS: All right. My answer to that is what got us where we are today is the pathological over-reliance on schooling and credentialing, not learning. We have practically put learning not only out of business, but out of people's minds. So what got us to the situation that we are in today insofar as you can attribute it to education as being at fault is that we have gotten ourselves into one colossal mess with regard to what we do with our resources available for learning and how we use learning, that is formal educational processing, to screw up other things, such as admission to professions, admissions to jobs, et cetera.

So that I would say that to the degree that education takes the blame for where we are today, it is schooling, not learning that is at fault. That is my answer to that part. As to whether learning is a politically liberating thing, I believe with Califrany, yes, that they are coterminous. I won't get into more quotes.

The point to me is this, that the power to shape your own mind, the individual's power to shape his or her own mind, as the Stoics said, is the one, sure area of individual autonomy. It is the place to start. From there, I agree with you that the point of learning is to do something with the learning. And that is why the cheap learning project in which I am involved is called Writers in the Public Interest, in which activism and learning are so intertwined, it is impossible to describe them separately.

We are learning by doing. And we are trying to change the society. So I will agree with you completely. I just don't find that that's where the problem is. Tom?

MR. HEBERT: I will try to talk to an economic question. I said in my remarks that I thought the new economies were going to grow out of intermediate technology. That is, the technology that we can develop in our own basements.

Here is an interesting directory: "Appropriate Technology: A Directory of Activities and Projects." This is funded by the National Science Foundation. Hundreds of groups that are into alternative energy. They are educational organizations. And they are made up of people who also are trying to get into small business. They also are not getting any help from the Government.

They are crying for some recognition from the Government, small business assistance. And this is where the energy future is going to come from. And they all describe themselves as learners. So they form little organizations like the New Alchemy Institute and the Shelter Institute and the magazine called the "Adobe News."

They have documents like "Rain: A Journal of Appropriate Technology" which lists zip codes and people that are inventing things. It is a network. Here is another one, done locally, called "Self-Reliance." And again, they are trying to share technical information to get people started.

I think some of the stuff we are talking about is, sort of, entertainment. But this is nitty, gritty economic development; that and the independent learner.

MR. GROSS: If I may just tack one thing on to that because this is my answer to your question, I think. It is a couple of paragraphs, but I would like to just read from my book two short paragraphs.

Our politics, that is American politics historically, have been premised on the notion that each of us can function in however modest a degree as a free-thinking citizen, an independent center of understanding, judgment and action. Our commitment to free speech and to free press springs from this conviction that the best way to find the truth is for the full range of ideas and information to be openly debated by the citizenry.

Such a marketplace of ideas makes no sense if people cannot cope with information and ideas, probe for meanings, come to judgments and perhaps wisdom. In short, keep on learning. It is widely recognized that we live today in a society whose ubiquitous media and conformist pressures distract us from our deepest needs.

How then, can we lift ourselves in the society to a more human level? The answer lies in the capacity of individuals to conceive finer possibilities of learning and growth and then to share their adventures and their discoveries with the rest of us. Lifelong learners

constitute an independent sector of our intellectual life out of which arise many of the new insights we need."

So I think that generalizes what Tom was pointing to an instance of.

SPEAKER: I was going to ask you how this fits into the education of children. I still in my heart of hearts feel that there is a core of lack of information that you are forced to learn at an early age of your life. We are talking about a type of learning and I would like to get your views on lifelong learning in the early stages. Do you see any curriculum, do you see anything that we should be forced to learn to open up our minds a little?

MR. GROSS: I am afraid that my sad conviction after fifteen years of studying the schools, in which I include the colleges but particularly the schools, is that schools have failed dismally at their self-proclaimed function to open people's minds. And I say on one of my points that one thing we must do is orient the formal education system towards lifelong learning through radical changes in the substance, style, methodology and organization of schools and colleges.

And then just in case anyone might miss the point, resist the attempt of the organized teaching professions to take over the lifelong learning movement and capitalize on it for their advantage. Make visible the myriad of existing resources and link them for maximum, efficient usefulness to learners.

I think that the danger is that the educators are all too ready to find new clienteles, as they call it. This means new jobs for teachers. We've run out of kids to teach -- let's get our hands on some adults. Al Shankor has said this, its one of his great emphases. This is a considerable danger in this field. There are many able and earnest and sincere people with educational backgrounds who want to work in this field. But there are an awful lot of people who are just looking for a way to stay on the dole.

MR. HEBERT: We had a great debate about this yesterday. I maintain that we can't ignore the junior high school kids and those kindergarten kids. Somehow we have got to reach them. One thing we edited out was the family-based learning. I just think that the family has to start taking the responsibility and be given the responsibility for learning. As my mother said, and she has been teaching kids since 1917, "Show me a learning parent and I will show you a learning child."

We can't expect the child to do what the parents aren't doing. So if we can get some family-based learning things going on, somehow, then kids will start learning.

MR. GROSS: I don't want to ignore the schools. I have written six books on schools. But now it is our turn as adults.

SPEAKER: I think what is important about all that's been said is that the 80 percent are learning primarily voluntarily. And the 20 percent make up the public schools. We can't call colleges a requirement, but college is becoming required because of other kinds of structures. But the uniqueness and the thing that needs to be fostered and encouraged through a diversity of means, an example of what you are describing as the ways that this can be encouraged, is that 80 percent of the people who, despite all the other things that we do to educate them, are continuing to learn because they want to learn.

And that is what in any school or in any organization or agency that is doing anything they are calling education. You want to encourage the desire and to build it and the creativity for it so you have the results that you are aiming for. And it is the difference between voluntary and compulsory. And I think that is a very important distinction.

SPEAKER: I have also, at the college level especially, in my formal education found that a lot of informal education goes on. And I think that the increased competition to get into medical and law school and inflation have increased the things that colleges used to do. People learn more there perhaps than in their classrooms.

MR. GROSS: Tom referred to the "Britannica." Let me just read a quote. I don't think you know this one, Tom. When the "Britannica III" was reviewed in "Encounter," Maurice Cranston wrote after talking about it, "To those of us who work in universities and can read the signs of these melancholy times, the lights going out, the enrollments diminishing, the budget cut, the appointments frozen, it begins to look as if the only future for education is for self-education. The auto-didact, the Rousseau, the Jude the Obscure may well soon be the only young men with any intellectual culture."

MR. TOUGH: You had a reaction.

SPEAKER: Yes. I was going to make a comment a few minutes ago about society having some kind of input into our institutions and so forth. I am interested in the panel's point of view in connection with the idea of accountability in public education. If you have any ideas on how you might present your materials, the kind of presentation you made to us today, to perhaps people that are trying to work on accountability in public education.

Another point would be the idea that many of the state departments of education have these ways of basing the count of someone's ability to teach or whether a person has gone through a learning experience that is equivalent to a high school diploma, be credited in terms of these actual skills. This is more of a behavioral approach.

And this type of thing that you are talking about leaves me a little bit frustrated in a few points. You are talking in terms of the fact that certain kinds of learning require perhaps an experience within a group. And the problem of the institution, you are object-

ing to it because it hasn't been very effective. And yet certain individuals at certain times want to share experiences in group activities.

So you have a problem. I am wondering what you would think about this.

MR. GROSS: I have no problem with that because to me it is all the difference in the world between the usual kind of group that you find meeting on a campus constituting a course. It might look like a lecture hall, but it ain't because of the obvious reasons, voluntariness, commitment, et cetera.

So I don't have any trouble because to me they are completely different things. A group that is meeting, as I said, maybe didn't say it, but after rise in public interest got started, NYU asked us to make it a course. And we foolishly did. And it was terrible. It got a lot of enrollment and the people were happy to be involved in it. But from our point of view, it looked like the meetings we had been having but it was completely different.

First of all, we couldn't tell how many people were there because they needed the credit to meet some obligation. And who needs that? Who wants them in the room if that is why they are here? And secondly, it was inflexible. Once it was in the catalogue it had to meet at certain times. When we wanted to take it in a different direction, we couldn't.

It was expensive, it excluded people, it was horrible in terms of the values that the thing was trying to accomodate or realize. So to me it was all the difference in the world as soon as it was turned into a course. The thing was practically ruined. We barely survived the experience as a learning group.

SPEAKER: Well, I think the question I am really asking is if you are thinking in terms of trying to assist society in assigning some kind of better training activity, what approaches you are taking, what you see for the future. What are the kinds of things that you can do, the kinds of things that I could do as a part of this group to do the things we are all about, here? The theme that you are talking about in your presentation today, I have heard many different times over the last five or six sessions of our meetings. And the theme I hear is change. The process of change, the problems of change, why people don't change or why institutions don't change, and I think you are talking about this too.

MR. GROSS: Well, we are talking about things like shifting support from supportive existing institutions to support of individuals and community-based innovative institutions. I am talking about supportive sources that Allen can speak more authoritatively about. I can't. I am talking about removing conditions regarding credential criteria for employment that channel everyone through the formal educational system. I am talking about funding of libraries and other supportive

services. So, I am talking about a set of policies which I haven't taken the time to go into in detail but that I think would differ from what is usually propounded.

I am delighted if it doesn't.

MS. KRESSEL: I am sorry to have to interrupt, but the time is running out. And at this time I would like to pass the torch to Tom Hebert who is going to give us the closing remark for this panel.

MR. HEBERT: Yes, we are just going to be a permanent session. I have taken my last reading for today from the Training Corporation of America. They run programs for Government employees, I guess. This is their workbook. And this is going to be in our workbook when we have our permanent class.

"During the training sessions we will ask that you turn only to the pages that your instructor indicates. Please do not read ahead. The value of this workbook is measured in great part by your amount of cooperation."

We will be organized.

[Laughter]

MS. KRESSEL: Thank you. And thank you to all of you who have come to this last session. You will be hearing from us this summer and we hope to see you again in September. Have a nice summer.

[Whereupon the panel adjourned at 4:32 p.m., June 6, 1977.]

A P P E N D I X

Some Possible Initiatives

Tom Hebert

1. Someone should attempt to discover the economic and social value of independent learners to American society. For too long we've been worrying about our schools and not recognizing the importance of our learners.
2. Individual amateur scholars should be recognized and supported by government.
3. All federally supported research programs should be open to non-affiliated individuals. In a search of eligibility requirements for various federal programs, I found that it was rare that a grant or contract could be awarded to an individual. In the program announcement for the National Science Foundation's "Ethics and Values in Science and Technology" I found this bizarre paragraph under WHO MAY SUBMIT:

"Proposals may be submitted by colleges, universities, laboratories, industrial firms, citizen groups, State and local government, professional associations, and other profit and nonprofit organizations. Proposals from individuals acting independently of institutional sponsorship will be considered only under exceptional circumstances."

4. Perhaps we should have set-asides under every program for individual researchers. Who's to say a conceptual breakthrough in cancer research, for example, isn't lurking in someone's basement lab?
5. Maybe someone should tinker with a Learner's Bill of Rights.
6. Ron Gross and I thought a little about a nationwide 800 hot line that would network people with special learning interests and existing enthusiast organizations.
7. There was a point in the development of the Mondale Bill last year when I thought we might get some self-directed learning concepts built in. The language which I negotiated into one rewrite was eventually knocked out. The following is my testimony prepared for the written record of the hearings for Mondale's Lifelong Learning Bill. It was never included in the record. They told me it got lost.

CONCEPTS

That the bill itself and the activities of the office give recognition to the Adult Learner and his/her deliberate learning efforts.

That one of the initial activities of the office be to inventory America's total educational and learning resources to discover how America does learn. We say we are a learning society, but we know little about the actual processes.

There are two delivery systems for adult learning: the self-organizing self-directed learning skills-based system and the formal institutional based system. Today, the latter needs the competition of the former to help it adjust to the new demographic, economic, and political realities we face.

Another way of passing this is the Stanley Moses system of the Educational Core versus the Educational Periphery. This list includes the Periphery, where there may be as many as 60,000,000 learners in such various learning activities as corporate programs, military schools, dropouts picking up necessary skills, correspondence schools, service organizations, union programs and the private area of proprietary vocational schools and leisure schools like the Karate School phenomena.

FORMAT

These are to be studied, possibly assisted and strengthened.

- Park, national monument and museum learning activities
- Courses-by-newspapers
- Tax-incentives for night-time use of office and factory buildings as Learning Centers
- Free bus transportation to Adult Learning activities
- Free admission to some cultural events for Adult Learners, particularly the older learners
- Neighborhood, street-based learning helpers hired by local authorities
- Assistance for self-organizing autonomous learning groups or circles, i.e., women's groups, book review clubs, science and conversation clubs, current affairs clubs
- Assessing the modern role of Chataqua and Lyceum systems
- Learning Boxes for isolated adult learners
- Using the Library of Congress and the GPO to prepare and distribute self-study and group-study handbooks which would include topic-bibliographies, how-to-study guides and learning project descriptions
- Publishing local and national learning directories and educational calendars
- Transportation-based learning schemes, i.e., railroad commuter colleges, car-pool seminars and learning buses
- Projects to develop lifetime learning skills in undergraduate students

- Lifelong return privileges to schools and colleges
- Assessment of individual lifetime learning skills
- Local Learning Exchange Networks, based upon peer matching, skills exchange and access to hidden learning resources
- Store-front educational centers
- Store-front educational counseling centers
- Multi-screen Home Information Centers, such as Cable-TV, video cassettes and discs, audio-tape cassette distribution system
- Family-based Learning Projects
- Assistance in establishing communal or extended-family learning environments
- Assisting in the establishment of educational capabilities in suburban shopping malls
- Supporting suburban learning centers
- Support for individual and small group art and handcraft activities
- Investigating adult and family learning communities for new towns
- Determine what assistance or access can be given to Hotel Conference learning activities
- Assistance to Free Universities
- Encouraging Public Library Services for the Adult Learner (tutors, study guides and classes)
- Assistance for student learning collectives
- Assessing the role of Information Banks and the issue of privacy rights and protection
- And what about the Hobo Colleges of the thirties?