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ABSTRACT

Perspectives regarding education for the gifted and talented and excellence in education are addressed in this second volume of a 1982 public hearing. In addition to reports from Rhode Island, Maine, Connecticut, and New York, education of the gifted at the Massachusetts Institute of Technology is discussed, along with a study about programs for high-ability students. Testimony provided by state representatives, administrators, teachers, curriculum directors, researchers, and students covers the following topics: Rhode Island's concept of incentive funding for gifted/talented programs; elementary programs; students' views on the development of their critical research and problem solving skills; the effect of the "back to basics" movement on gifted/talented education; distinguishing characteristics of the creatively gifted child; issues pertaining to specialized training and certification of teachers of the gifted/talented; high school and college articulation; the need for financial support for the education of the gifted/talented and the federal role; a concept of giftedness that includes specific talents, creativity, leadership, and physical ability; and a proposal that a national effort be undertaken to replace current measures of general academic promise with more refined, specific diagnostic instruments. (SW)

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NATIONAL COMMISSION ON EXCELLENCE IN EDUCATION

Education for the Gifted and Talented

Cambridge, Massachusetts

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I N D E X

Afternoon Session

Case Studies in State Approaches

Commissioner BAKER. After the excellent preparation that we have had this morning and which we have related to our total mission, we are anxious now to proceed to the specifics of case studies and to relate to the actual operational centers for education which are, of course, the states and communities throughout the nation. This connection on the part of the Commission has been one of its major policies and intentions, and the way we are going to be able to do it for this particular subject of the education of the gifted and talented is extraordinarily appealing to us, because we have been joined by very distinguished groups of experts in these fields.

And we find that the first one is the Rhode Island Panel on Gifted Education led by Dr. Arthur Pontarelli.

Rhode Island Panel on Gifted Education

Dr. ARTHUR PONTARELLI. Thank you, Chairman

Baker. Honorable members of the Commission, their staff, ladies and gentlemen:

I am Arthur Pontarelli, standing as the Commissioner of Elementary and Secondary Education in the State of Rhode Island. It is indeed a privilege for me to be here on behalf of the Department of Education and our State Board of Regents, to give you an idea of what a state thrust can be as it sets its priorities, first, for equal educational opportunity for all youngsters in the state and, secondly, as it picks a segment of that population that has indeed been in great need, in dire need, of assistance in developing programs and getting all of the support, starting as a commitment from the Board of Regents, the involvement of the General Assembly. And what we have done today -- and this follows a session that I had at a previous meeting of the Commission and meeting with Cliff Adelman. And Cliff indicated that nowhere had he anticipated that a state could put all of its act together.

And so, today, we are going to try to do that for you in our limited period of time.

What we will do is work right from the table. You will see that we will have representation

from our General Assembly, a representative who has championed gifted education in our State, a superintendent, school committee representation, a school principal, teachers, curriculum directors, and, indeed, students, the consumers of our programs.

And then, as a wind-up, hopefully, I will have two minutes to give you some of the recommendations as the staff has put forth.

So, without further ado, let me present to you Representative Armand Batastini, who has been one of our leading legislators in developing programs and legislation at the state level for gifted and talented youngsters. Armand.

ARMAND E. BATASTINI, Jr.: Thank you very much, Mrs. Commissioner. I would like to express my sincere appreciation for the opportunity to participate in today's hearing, and I also feel deeply honored to be representing the Rhode Island General Assembly before such a prestigious forum.

And I might add that, finally, I can tell my mother that her son finally made it to Harvard.

Now, to get to the matter at hand, during my tenure in the General Assembly, I have demonstrated a very keen interest in gifted education. In 1979,

I introduced legislation that appropriated funding for gifted/talented youngsters and directed the Board of Regents to develop regulations. The 1979 allocation of $100,000 was the first time in twenty years that the State allocated funding for gifted education. The General Assembly appropriation has since increased to over half a million dollars.

This is, undoubtedly, progress. But we must continue to make progress. According to research studies, 54 per cent of gifted children in America are functioning below grade level. Seventeen per cent of our gifted children are high school dropouts. These are certainly staggering statistics and it certainly indicates that this issue should be aggressively pursued. In Rhode Island, we are presently serving the needs of about 3,000 students. We estimate that there are another 15,000 students whose needs are not being met. We feel we have, in Rhode Island, a responsibility and an obligation to meet these needs.

Presently, Senator Anthony Marciano is chairing the Rhode Island Study Commission on Gifted Education. I am serving as the vice-chairperson on the Commission. The Study Commission proposed new

legislation for 1982 that was partially adopted. We proposed permanent funding of gifted/talented programs based on the Rhode Island concept of incentive funding.

The incentive formula removes the competitive nature of funding and it offers an equal opportunity for all LEA's to participate. The General Assembly has supported increased appropriations for gifted and talented programs. This funding concept provides a greater incentive for LEA's to offer programs and services for gifted and talented, plus it provides assurance of greater equitability in the distribution of funds.

Local control remains with the local school district to offer programs that address the needs of the gifted/talented child.

Rhode Island has made progress in serving the gifted and talented population. To make continuing progress, we need your support. It is in our national interest to assure the development of the gifts and talents of our children.

We in Rhode Island have made and are continuing to improve our state commitment to gifted/talented education. We need to have a national commitment. The government which educates its youth

as they ought to be educated ultimately realizes the benefit.

This is my message this afternoon, and I consider it a very important message. Thank you very much.

Dr. PONTARELLI. Thank you, Armand. Our next participant is Dr. William Holland, a Superintendent of Schools, who is here on behalf of the Superintendent's Association and, also, bringing a message for the School Committees' Association. Dr. Holland comes from a district that has made a significant commitment, K through 12, in this field of gifted and talented education.

Dr. WILLIAM R. HOLLAND. Thank you, Commissioner Pontarelli. It is also a pleasure to be addressing the Commission this afternoon.

I have been asked to indicate what I think is needed to support gifted and talented education on the local level. And, in pondering that question, quite simply, I feel that the biggest need is to sustain the commitment that Rhode Island has made since 1979 in meeting the special needs of its gifted and talented student population. Currently, I feel our ability in the future to sustain that

commitment is in jeopardy. But, before expanding on the need for a continued commitment, I would like to take a few quick seconds to explain the present state of affairs in gifted education on the local level in Rhode Island. For instance, the bulk of our local gifted and talented programs initiated in recent years were on the elementary level, many of them in the intermediate grades. Most of us, in fact, locally, are currently in the program "refinement stage" and are concerned with sustaining the new momentum that has been created. New parent, student, and teacher expectations have been created, new commitments have been made, and new issues have emerged.

For example, using seed money from state and federal grants, several school districts have hired and trained teacher specialists in gifted education in the past three years. These "gifted" teachers have established resource programs and worked with selected elementary students improving their critical and creative thinking skills. In many of these programs, micro-computers were an integral part of the instructional design.

Now, junior high science and math

teachers are suddenly finding themselves with students who know how to quote them in basic language while these same teachers do not, since this type of instruction is normally offered in the eleventh and twelfth grades. Many small high schools, in fact, have just begun the initial purchase of micro-computer hardware and software to support the senior high curriculum.

Illustrations of this nature, in addition to challenging our creative talents in a very healthy way, also raise some questions about our continued commitment to gifted students, and how we are going to meet that commitment. Firstly, can Rhode Island school districts continue to support the gifted and talented programs they have undertaken in recent years and, at the same time, expand that commitment to those gifted youngsters who have acquired new skills and understandings and are now at other points in the school system? Secondly, with diminishing fiscal support for education on all levels and "retrenchment" the new catchword in educational circles, can local school budgets adequately support the new initiatives in gifted and talented education without state and federal assistance? Can local

budgets provide for the additional staffing, increased teacher training, and advanced curriculum programming that will be required?

The answers to these questions are "No," unless a genuine and sincere partnership is formed with both the State and Federal Governments. My fear is that the local school district will be asked to meet its commitment to gifted students pretty much on its own.

Recent State budget problems, and those that are looming on the horizon in Rhode Island, the dissolution of the Federal Office for Gifted Education, and the Federal consolidation thrust, which has directly reduced Federal dollars for education, support this fear. Without continued financial assistance and support from the State and Federal levels, the current momentum in gifted education will end and the quality of all educational programs will suffer. Similar to disadvantaged, bilingual, and handicapped education, gifted education is more expensive than regular education and is extremely vital to the special population that it serves. It sorely requires special State and Federal fiscal support and leadership. A genuine shared commitment

by local, State, and Federal Governments is therefore critically necessary if the full potential of our gifted and talented student population is to be realized and this country is to prosper from their future leadership. Thank you.

Dr. PONTARELLI. Thank you, Bill.

I might point out, for the general public, that the statements you are hearing are abbreviated statements. The full text has been prepared for the Commission members and there are some extra copies that will be made available later for some of you who might be interested in obtaining the full documentation.

For instance, Representative Batastini has a formula in his that we asked, "Please don't get into the formula."

One of the nice things that has happened to us today is the fact that, in bringing the team from Rhode Island, we thought it might be appropriate to take a look at the consumers of our programs and, through the courtesy of the Bristol School Department and, specifically Joan Souza, who is the coordinator of the gifted program in that community, we are pleased that two of their students have been excused from their classes for the day. It will count as part

of their 180 days.

We have Melissa Lawton and Rachel Christina with us, and I think it would be most appropriate to hear a few words from them. Melissa, why don't you start in?

Miss MELISSA LAWTON. I am here today to share with you my positive feelings regarding special programs for the gifted and talented. Participating in one of these special programs has been a rewarding educational experience. I have been exposed to critical research skills, problem solving and synectics and through these experiences have been motivated to achieve to a much higher potential. Programs of this nature give students a chance to express their opinions on a variety of different topics. Students have the opportunity to select areas they are to research, thereby making these experiences more enjoyable. Projects and discussions are geared to individual interests and abilities, creating a level of enthusiasm that I never witnessed in my regular classes.

The regular curriculum often addresses low level skills such as memorizing, whereas project participants work on skills of analysis, synthesis and

evaluation. Topics range from an overview of futuristic life styles and metric simulations incorporating problem solving techniques to the portrayal of mock governors preparing budget allocations in conjunction with statewide resources.

In conclusion, support for special Gifted and Talented Programs is essential to provide appropriate provisions for the Gifted and Talented population. I have been told that the youth are the leaders of tomorrow. I feel that support of gifted and talented programs will not only benefit people like myself, but in years to come, this country will be repaid by a new generation of adults with a higher degree of motivation and commitment. Thank you.

Dr. PONTARELLI. Thank you, Melissa.

Now, let us hear a few words from Rachel Christina. Rachel?

Miss RACHEL CHRISTINA. I am here today to speak in favor of Gfited and Talented Learning Programs. I, myself, am a member of one of these programs, and I feel that they are very beneficial to gifted and talented students.

Our program offers students a learning experience outside the regular classroom, and a

chance to be with other students of similar caliber who will be able to recognize their intellect. Students have the opportunity to study subjects of interest and expand their field of knowledge on a variety of topics other than the traditional course offerings.

Students whose classroom teachers regard them as different or unusual people can communicate with others who encournter similar problems and work out ways to solve them. An open atmosphere of understanding is essential in allowing students to express their views, something which is not always fostered in a regular classroom setting.

We have produced a variety of enriching programs promoting community interaction, specifically, an instructional ballet presentation targeted for young children, a mock trial written and executed to parallel an actual courtroom situation, and a cultural exchange with students from foreign countries.

In conclusion, I have presented to you today only an overview of my experiences as a participant in a Gifted and Talented Program. It is not a special design, nor specific area of giftedness

that I am advocating, but rather a basic educational right. It is the right of students to be granted an optimum educational learning experience. Programs for the gifted and talented provide this opportunity. Thank you.

Dr. PONTARELLI. Thank you, Rachel.

Now, let's listen to a viewpoint from a curriculum director, the Director of Secondary Education in our North Kingstown School Department, a member of our State Advisory Commission on the Gifted and Talented, Cathy Valentino. Cathy.

Mrs. CATHERINE VALENTINO. Thank you, Dr. Pontarelli. I think that Rachel did not take her complete four minutes, and she promised me that I could have part of it, especially since there are people in the audience who have told me that I cannot do this in four minutes.

As a Rhode Island educator who has had an opportunity to travel to other states to speak on the topic of public school curriculum for gifted children, I am becoming increasingly concerned about the back-to-basics movement in this country and its effect on education for our most capable children. Too often, this movement is being used as an excuse to cut back

on services for the students. I feel fortunate that I am employed in a state which includes programs for gifted children in its definition of basic curricula and has substantially increased funding for gfited programs in the past several years.

At a critical point in the history of this nation, when curriculum should be expanding to meet the varied needs of the students, I find that in many areas of the country it is contracting. Both financial and philosophical constraints are feeding a "back-to-basics fire" that is resulting in cutbacks in vital areas of the arts and sciences, guidance and career counseling. These cutbacks have far reaching consequences for gifted children and their families.

In the 1960s and early '70s, many public school children and many public schools were learning centers which focused on a wide variety of courses in literature, social studies, and the sciences. The "new math" curriculum, for example, focused on the concepts and theoretical structure of math as well as computational skills. Science fairs were alive and well. Performing and fine arts programs were considered basic to a balanced education. Open education opened the door, despite its reputation,

for many academically talented children in this era to progress vertically and horizontally through the curriculum.

For some teachers and students, this period became synonymous with educational chaos. For one group of students, however, gifted students, it marked the beginning of a period of growth. As a group, they thrived on new math, they delighted in open education and the academic freedom which it provided. Unfortunately, many other students and teachers did not thrive in this relatively structureless, individualized educational environment.

The national reaction in curriculum for the past five years has been a return for all children to the "basics" of reading, writing and arithmetic -- and very little else, in some cases. As a consequence, the plight of gifted children has surfaced, once again, as a major national problem. Parents and sympathetic educators are now uniting in ever-increasing numbers in an attempt to focus attention on the needs of these children. Many more universities and school systems are also beginning to respond to the needs of teacher training in the area of gifted education. These efforts must be recognized and supported by the

National Commission on Excellence.

Back to basics must be redefined as an effort to raise the standards in all areas of the arts and sciences for all students, including our most capable ones. I would like to close with an example of the national battle which we face in our attempt to do so.

I recently asked a resource teacher in my district to contact NASA, the National Aeronautics and Space Administration, to arrange a special day-long seminar for adolescent gifted students on the topic of the effects of weightlessness on human behavior. I specifically and specially requested someone who had been directly involved in or who at least was knowledgeable about the research in this area. Local funds were available to fly a speaker to the district for the day.

We were told on three occasions by NASA officials that NASA could not provide such a speaker. A pre-designed basic program for an entire student body was all that was available. Under no circumstances and for no amount of money would NASA provide or recommend a speaker for a select group of students on any topic. They did, however, agree to speak with

teachers on any subject, including the one requested.

Now, was NASA's problem philosophical, financial, or just an inevitable result of a lack of national commitment to these students? For one student, the answer was irrelevant. She is currently writing to the Russian Embassy in search of a cosmonaut who is more foresighted. Thank you very much.

Dr. PONTARELLI. Thank you, Cathy. Maybe that will change the weightlessness of some of the activities there.

Our next presenter is an individual who has worked in the area of giftedness for many years, who has worked in the private sector in our state and who has been a member of our State Advisory Commission for the Gifted and Talented, and also the founder of the National Foundation for Gifted and Creative Children, Marie Friedel. Marie?

Ms. MARIE FRIEDEL. Thank you. I am always very happy to have an opportunity to talk about the way our gifted suffer. We work with the children who come at the two ends of the Bell Curve. I think there are programs today that meet the needs of the moderately gifted, but, when it comes to the highly gifted, with the 160-plus IQ, or the creatively gifted

child, which is the most misunderstood child in our nation today, they are not getting any kind of help. Therefore, we are dealing with potential suicides and counseling children who have all kinds of behavior problems. We are talking about not having money for programs for the gifted and our country is wasting millions of dollars on the cure, these people who are destructively channeling their creativity because they haven't had the understanding that they need in a humane society.

I would like to see the creatively gifted child more understood, but I think, before that can happen, we have to have a new definition other than what our leaders in this field accept today. I believe there has to be a psychological definition.

The creatively gifted child, while having some cognitive development, also thinks differently, feels differently, and becomes very bewildered in his or her attempt to get an edducation in traditional systems.

If these children are to be understood and if they are not to be drugged for hyperactivity, called children with mineral brain damage and soft neurological impairment, behaviorly disordered, it

seems that our country is treating the creatively gifted child as one with a pathological affliction. These negative labels are very bewildering to the child and to the parents, as well as to some of the teachers.

We have to clear up this muddle, if we are really and truly going to meet the individual differences among the gifted.

I believe that many of us are too nice when we talk about not doing for the gifted. I think it is one of the greatest national disgraces that I have seen and been intimately involved with, potential geniuses that we have allowed to suffer no end. Arnold Toynbee has said, "It is a matter of life or death to any society what you do with your creative minorities," and I hope that we wake up some day. Thank you.

Dr. PONTARELLI. Thank you, Marie.

Bringing the perspective of an institution of higher education that is making an effort to put together a program of teacher training for teachers in service and some pre-service activities is Dr. Sidney Rollins, Professor, Rhode Island College.

Dr. SIDNEY P. ROLLINS. I am here to address

three concerns related to the training of teachers of gifted and talented children. The first concern involves the acceptance of a rationale for requiring teachers of gifted and talented children to have specialized training. The second concern involves the need to provide college and university pre-service and in-service academic programs for teachers of gifted and talented children; and the third concern is with the question of certification or endorsement.

Concerning a rationale for requiring teachers of gifted and talented children to have specialized training, I will not belabor a point that already has been made. Gifted and talented children are different than other children in many ways; they also are very different from one another. Assuming that you accept the fact of these differences, I ask your Commission to recommend recognition of a need to provide special preparation for a special group of teachers in order that they can teach effectively this special population of gifted children.

The second concern is with pre-service and in-service academic programs for teachers of the gifted. For the past three years, as dollars were sown in the fertile soil of Rhode Island, overnight,

It seemed, teachers of gifted children sprang from the earth in full armor, ready to teach gifted children. I respectfully submit that, before teachers begin to work with gifted children, they should have, at a minimum, the following kinds of preparation:

Teachers need to know a gifted and/or talented child when they see one or hear one.

Teachers need to know how gifted children learn.

A third, teachers need to know how to develop and present content to gifted and talented children.

Fourth, teachers need to know what learning resources are available for gifted and talented children.

And, fifth, teachers need to have actual experience teaching real, live gifted children. Of all of the desirable experiences I have listed, this one is, without question, the most important.

I ask your Commission to support the idea that special preparation programs are needed for teachers of gifted children and such programs require an experience component.

The third concern is with certification

and/or endorsement. We already seem to be over-certified and over-endorsed in education, but there are at least two compelling arguments for certification of teachers of gifted and talented children. Or at least for endorsement attached to standard certification. One argument suggests that, since gifted children learn differently from other children, such gifted children should be taught by teachers who are aware of these differences and who have developed skills to cope with them. A second argument suggests that, if teachers are required to fulfill certification (or endorsement) requirements, these teachers will have a vested interest in maintaining effective programs for gifted children, thereby insuring the institutionalization and continuity of programs.

I ask you to support the idea that teachers of gifted and talented children should be required to hold appropriate certification and/or endorsement. Thank you.

Dr. PONTARELLI. Thank you, Sid.

Moving on to an individual representing the parents' organization, one of the parents' organizations in our State, appropriately named SAGE; it is a group identified as State Advocates for

Gifted Education, and Dr. David Laux is here representing that group. Dave.

Dr. DAVID LAUX. I would like to speak briefly today on the parents' perspective of gifted and talented education and our perception of some of the problems that have hindered development in this area.

Although parents have expressed a wide variety of concerns regarding the education of gifted children, most of these concerns can be summed up as relating to some of the most fundamental aspects of gifted education, and I think it is something that people who work in the area sometimes lose sight of. First of all, there remains a failure on the part of most of society to even recognize that gifted children have special educational needs. Until we can overcome this indifference, it is going to be very hard to move forward in this area and to give gifted education the priority it deserves.

Secondly, most of society continues to resist or continues not to accept the fact that, if we don't provide for the educational needs of these children, the effects can be very harmful to the children.

We know that, at best, these children

won't reach their full potential and, at worst, they can develop rather severe emotional and behavioral problems. Our understanding of these two very basic concepts has, in the past, and continues to be hampered by the very widespread misconception that gifted and talented children will do well in any case and their talents will become self-evident. An abundance of evidence indicates that this simply is not true, yet this misconception continues.

A third area of concern for parents involves measures which are often taken in an attempt to deal with the abilities of gifted children. Due to a lack of resources and training, the measures which are taken are often stop-gap, temporary types of measures that, all too often, are ineffective, and may do more harm than good.

So, as parents, we see a very clear need for an increase in awareness of the needs of gifted and talented children, particularly among teachers and administrators and, most especially, among those teachers and administrators who are already in place.

Secondly, we see a desperate need for increased training on ways to meet the needs of these children and, thirdly, we see an overall need for a

systematic approach to gifted education, one that provides for some degree of continuity and which takes into account the individual strengths and weaknesses of these children.

We think, in order to implement this, it requires a great deal of cooperation between Federal, State, and local agencies, but we think it is imperative for the Federal Government to lead the way in this area.

Dr. PONTARELLI. Thank you, David. Our last presenter is Jim DiPrete, Principal of Coventry High School, and a person who has headed up a State-wide committee on School and College Articulation. Jim.

Mr. JAMES A. DiPRETE. Thank you very much for this opportunity to address the Commission and to present a principal's perspective on gifted and talented programs.

First, as Chairman of our State's Chapter 2 Education Block Grant Advisory Committee, I would like to point out that the Federal funding effort in the area of gifted and talented is now defused. There are no longer, as of this year, targeted funds from the national level to support gifted and talented programs. While the new Education

Block Grant program permits expenditures for gifted and talented programs, it does not require any expenditures on this population. Although I don't expect any change in this pattern of Federal funding for gifted, there are other Federal, state, and local developments that could greatly improve gifted programs.

One such state and local development is an on-going activity in Rhode Island called the Joint Committee on School and College Articulation. I feel privileged to chair this committee; and the Joint Committee is composed of educators from both the postsecondary and elementary/secondary sectors in our state. This committee meets regularly to develop recommendations in the following areas: Preparation of High School Students for College; Meshing of High School Graduation and College Admission Requirements; Strengthening High School Curriculum; and Current Enrollment.

Although there is a definite need to set high standards for our students to achieve along the educational continuum, there will be an even greater need to provide the kinds of programs from which educationally talented youngsters can benefit as the

existing body of knowledge continues to all but outstrip our ability to comprehend, let alone teach. This development alone will necessitate bold, tough, imaginative in-service programs for faculty and administration.

I could go on, but I have been told that I cannot. I just want to close with one plea from a secondary school administrator. I think that educational research has demonstrated to many that the educational leader in the school can be the high school principal, if he is allowed to, that sometimes we get tied down with endless streams of minutiae, and that has always been a problem.

I say to you that, if you read the current work that has been done in the research of a high school principal, you will find that, if he is free to do the job he is supposed to do, to work in the curriculum area, then you will see some great changes come about, with the help of all of you who are out there. Thank you.

Dr. PONTARELLI. Thank you, team members.

Mr. Chairman, and members of the Commission, you have heard just a brief snapshot of the concerns of many of the people in our community.

But, quickly, to wrap up, let me point out some of the things that individuals have indicated.

A concern about the identification, the proper identification of youngsters;

Curriculum, and the involvement of all of the parties -- teachers, administrators, parents, youngsters -- in the development of the appropriate curriculum;

A concern about teacher training, in-service and pre-service training of teachers;

A concern about certification;

A concern about funding, and so many of these other areas.

But, paramount to all of these is the one that keeps coming out, time and again, and that is that it has to be a total commitment, a commitment at the national level, a commitment at the state level, and a commitment at the local level. And this is the plea that we would be making to you, if this country is to continue to prosper and to move in the direction that it has in the past. Thank you very much.

(Applause.)

Commissioner BAKER. Our deep thanks to you, Commissioner Pontarelli, and your distinguished

associates. Your contribution has been invaluable in showing us what can and has been done on the one hand, but what needs to be done on the other, and what the sobering factors in achieving that are.

And, so, in that admirable vein that you have launched us on this afternoon, we move to the next session on the Education of the Talented and Gifted in the State of Maine:

Perspective from a rural state, led by Mr. Harold Raynolds, Jr., the Commissioner of Education for the State of Maine.

Education of the Talented and Gifted in the State of Maine: Perspective from a Rural State

Dr. HAROLD RAYNOLDS, Jr. Mr. Chairman, members of the Commission:

I would, if I dared, move this podium so that it faced the Commission, because my remarks are addressed to the Commission primarily, and I welcome this opportunity to do so.

I live in a rural state, a million people and 9,000 square miles, with 210,000 children in our public schools.

As I drive from school to school in the

State of Maine. I have lots of time because of the distance between some of the very small schools and others to do three things which I have tried to discipline myself about, so that I will do them, and make some progress while I am using that time on the road.

One of my favorites is fantasizing and facing my fears and anxieties. I do that some of the time, and there is generally joy in it because fears are easier to handle under those conditions and, of course, fantasies are always fun, if you have really developed a capacity to produce them.

Second, I write speeches, and give them, and I criticize them, as I am going along. I do epigrams, editorials, and a lot of other things that never appear anywhere except in my mind in my car, as I travel from place to place.

Third, I make some important efforts, because my professional job, most of my life, has been shepherding scarce resources for use in public education. I try to make -- and I realize that perhaps I was not well enough educated for that very important responsibility; I try to make creative efforts to secure resources, and I am often struck

because I ride accompanied, sometimes, when the dialogue slows down, or the monologue, or the triologue, or however many of us there are in the car; and I am always alone -- the question, for example, that came to me when I heard the announcement, several months ago that the Bath Iron Works, which is one of the very distinguished shipbuilding companies in the United States, -- always finishes under budget and ahead of time, something that is not characteristic of the defense industry -- and I realized that they were getting $900 million for three nuclear cruisers, and I realize that we had received the biggest grant that the National Endowment had ever given to public education in Maine, $156,000, and my creative energies which, clearly, were not sufficient to the job were directed to the question of how would I be able to get some of that $900 million for those three ships, and turn a little piece of that change into another grant, similar to the one that we received from the National Endowment.

Also, as I was going along one day, -- and, here, I composed one of my better speeches -- a paradox occurred one day. I heard that Secretary Bell had appointed a distinguished Commission on

Excellence, and I was immediately struck by the paradox of that situation because, at the maximum, the Office of Gifted and Talented had $6 million, but, at the minimum, under the Block Grants, it would have nothing.

And I was aware that there was a plan to close up the Department of Education.

So it struck me as an interesting paradox that, while those things were going on, a Commission as distinguished as yours would be charged with such an important responsibility as you had.

So I naturally practiced some speeches. There were angry speeches, there were friendly speeches, there were positive speeches, there were all kinds of speeches. And, unfortunately, the one I am going to be providing you with for another few minutes is probably not very distinguished, but it certainly has a good deal of feeling and a lot of practice behind it.

Commissioner Holton asked a question, what are you advising us, this morning, to the other panel.

I would like to make it very clear, right at the outset, what I am advising this Commission to do. I realize that people who give advice, although

you did, to some extent, ask for it, can expect not to have that advice taken; so I won't be wounded, either way. If that should happen, it happens.

I have three simple statements of what I believe are important considerations for your Commission as you move toward the end of your very important charge. My first suggestion to the Commission would be that this nation needs a passionate statement about the important of public education made at the highest possible level of our government. It does not need interesting and extraordinarily wrong-headed statements about how the U. S. Constitution does not contain any suggestions about education.

Anybody who would believe that the fact that the word is not delineated in that particular document and is not repeatedly underlined and then given a secretarial position or something in the original Constitution signifies that the framers of the Constitution did not believe public education was important has either not studied history or has wilfully neglected that study. There is no question that a man like Jefferson clearly understood, in working on things like the Declaration of Independence and his colleagues and cohorts involved in the

development of the Constitution, meant that we should take as a given in a free society that public education is important.

My first suggestion, once again, we need a statement of purpose and mission about the importance of public education in this kind of a society.

Second, we need modest financial support -- I wouldn't even ask more than $6 million, which was the high point, the heyday, of funding for gifted and talented -- for exemplary programs to exert that kind of leverage, which I will demonstrate in a moment or two, if I don't run out of my time, and the effect of that leverage on Maine's educational programs.

Because of the statement which was made at one point, when those $6 million were put in the budget, and because of the financial commitment of $6 million, the Legislature in the State of Maine, which does, in fact, listen to words from Washington, -- not always does it applaud violently over some of those words, not always do they receive what is suggested that they do in quite the way that those in Washington would like them to, but they passed into law the fact that one of the categorical aid areas in our Finance Act, which happens to be one designed to

provide equity and which produces 50 per cent of the total dollars spent on education in the State of Maine from state coffers, and leaving the remainder to federal and to local property taxes, they included gifted and talented under a very special provision of categorical aid, which includes special education, vocational education, and transportation.

That means that a local school district can spend money on approved programs for gifted and talented and have it part of the costs which will be reimbursed on a 50 per cent basis by the State.

Now, why did that happen? It happened because the Federal Government made a statement that this was important. It didn't happen because some Legislator came to Augusta and said, "We ought to do this."

So, I urge you to consider that in considering my second suggestion for you to, I hope, consider before you conclude your report.

My third one is that there is no other place but the Federal Government and Federal support for the construction of a network for the exchange of knowledge and ideas among the states, among our school districts, among superintendents, among teachers,

except for the Federal Government's support.

So there are my three suggestions. Now, I should spend a moment or two trying to justify your consideration of those three. But, before I do, -- and it has already been mentioned and I would like to take a brief side road on that -- I am very much concerned about homogenized texts, I am very much concerned about bland and useless materials which are foisted on public education by a combination of factors which you know better than I, and I would urge that one thing the Commission might suggest at some point -- not that it be another job for you to take on -- but, it might be useful for you to suggest that a happy cooperation or coalition between universities and colleges and public school teachers would be a useful one to try to enrich the materials of education in the public schools. I am not referringsolely to texts.

I say that because I am so aware that many of our texts, at the present time, you could really classify them in three ways, it seems to me. One of the ways in which they may be classified is that they do help, in spirit, support the teacher in his or her activity, but, if they don't do that, they

may at least not get too much in the way and they provide kind of an anchor to windward; but, if they are bad, and many of them are, and you consider the possibility of being a teacher with all the questions at the end of the thing, they may sap the fundamental fire regarding good teaching in our society.

You deserve, at least, in my last five minutes, three specific examples.-- this is what I was supposed to do and this is what the title says -- of how the Federal Government's efforts impacted on the State of Maine and why I consider it important enough to welcome this opportunity to talk to you about the importance of this kind of mission statement at the highest level and support.

I would like to cite first a gifted and talented program, funded by gifted and talented Federal money, conducted at Bowdoin College, with some six distinguished professors meeting with 60 juniors, carefully selected from our high schools. I want to tell you how carefully we selected the faculty. We used the well-known National Humanities Faculty List.

If you know about the National Humanities Faculty, you know that you do not have tenure in that

group. There is no way you can retain a position, if it turns out that, when you go and present in a local high school, that your efforts, no matter if you are the greatest scholar in your field, you do not remain on the National Humanities Faculty unless you prove to be not only a scholar, but a first-rate teacher.

So we utilized that particular list and those standards and selected six outstanding teachers to come and meet in widely differing areas with those 60 young people, who then would have a year to go back and make their presence felt in their schools.

A small story. Girl, rural community, northern Maine, meeting with a man by the name of David Birdsong, an extraordinary teacher, linguist, University of Texas, I believe, at the present time, a man who is so quiet and unassuming that, if he were to walk into the room, you would not probably look up. If you did look up, he would look down.

David Birdsong created, as he did for us now, three years in a row, a magic in the classroom. That girl was so frightened when she came down from our potato country in Aroostook County, that she could not deliver, that she wouldn't be able to do

anything, that she didn't know enough, that she had no confidence. But she also knew that, when she was in her high school, nobody paid any attention to her when she raised her hand. They didn't seem to give her credence.

Within a day, -- she cried, that first little briefing that they had in Bowdoin College, when I met with her. Her parents were very upset. They had come from Northern Maine. They did not have a high regard for the possibility for her going to Bowdoin College. They knew it was a man's college, and they were concerned about that, their girl, alone, in a man's college, for two weeks. Terrible things could happen.

The terrible thing that happened was that that girl learned from David Birdsong that she had a first-rate mind, that her questions did make sense and, at the end of the time, I met with her again, or I sought her out, because she had been weeping, and I wondered if she was still weeping, and she was; only, this time, she was weeping tears of joy. She was going back up there, but she had some sadness. She was afraid, for her senior year, she would have to go back to behaving the way she had had to behave before,

when she was too unusual, her ideas were a little too much, and her questions were a bit beyond what her teachers could deal with.

A second example, a state university program, an excellent one, perhaps stimulated in part by the State University when they saw that Bowdoin College was getting a look at some pretty good students, -- I am not opposed to the competitive idea in this sort of thing. So the Chancellor of the State University determined that it might be useful if they ran the same kind of a program, only they put up the money this time. But where would we have been without the national focus at this time? That is what happens.

A very distinguished classics teacher, who happens to be in the audience, as a matter of fact, put together a program called, "Civilization on Trial," and invited 60 students to come. Three primary materials were chosen. Again, 60 carefully selected juniors. The trial of Socrates, the trial of Galileo, and Franz Kafka's "The Trial".

The repercussions of that are still going on. Tomorrow, Saturday, teachers from the schools where those students went will meet with that

particular teacher in the college and go through what the experience was all about.

Let me give you one last one -- and then I am done. That grant that I talked about of $156,000 was for ten rural high schools to select -- this was from the NEA, another organization of the Federal Government which is not getting the funding it might be able to use; its funding is not exactly in the same league as one nuclear cruiser.

The program, three teachers, carefully selected from ten rural high schools. The principal had to come; very important. Must be three teachers, not one, because, when they come back and they get into the faculty room, it may go back to the Boston Red Sox and how they are doing, and that is always a matter of some concern in New England.

The principal, the three teachers, forty people, working together with people like David Birdsong to learn how to do their work better. Here is what this kind of an institute does.

It reinspires the faculty of a small school, and in Maine. Have any of you attended a faculty meeting of a public high school recently?

What are the characteristics of many of

our faculty meetings in public high schools is that we discuss small changes in the bus schedule, when graduation can take place, whether or not there have been some disciplinary problems lately, and whether we are collecting all the hot lunch money on time. After forty minutes of that, if you are lucky, you could go home, if you are on the faculty.

We have a faculty of a high school, now, in Maine, as a result of that program I just told you about, again, a rural high school, where every faculty meeting gets that stuff out of the way in fifteen minutes in a very simple way, by using some paper and getting it done. And then they go to requesting of the three teachers, and now, it is all of the faculty, that they present something of significance, intellectual or other kinds of artistic interest to the faculty.

Three examples: Last Christmas, just before Christmastime, the music teacher presented a program of Elizabethan Madrigals. They listened, they discussed them and got some background on each one. Does that tell something about the quality of a faculty, the next day, when they come in?

A second one that I know is a short story

Ambrose Bierce, which was read in advance and then discussed by the faculty. This is a faculty made up of industrial arts teachers, economics teachers, physical education teachers, social studies teachers, et cetera, et cetera.

The third one, the math teacher put on a program called, "Ethics, Science, and the Computer." I don't really have to say much more about that.

I end where I began. I do welcome Commissioner Holton's request for some specific suggestions. I hope mine are not so mundane in the sense that I am always seeking additional resources for public education. I suspect that that is about all that I will ever do, professionally, for the rest of my life. That is why I urge a clear, passionate statement at the national level, from the highest levels, in support of public education, and that, of course, includes gifted and talented.

Second, some modest financial support so that those exemplary programs which I have just cited can continue, not necessarily in Maine, -- we certainly have had our share; that includes NEA, the National Science Foundation, because I want to make it clear that we don't need to invent any new bureaucracies to

accomplish this. All of the pieces are in place. All they need is a little nurturing.

If that statement and that support is there, I will not face the problem in the Legislature for the next biennium of Legislators saying, "The Federal Government doesn't really believe that gifted and talented amounts to much or they wouldn't have folded it into something called a Block Grant. Why should we continue to fund it under our State Aid bill, Mr. Commissioner?"

The answer would be easier if the Federal Government had a clear statement of national purpose.

Finally, that construction of the network is important.

There are my three suggestions. I hope that you might take a look at a suggestion regarding texts, textbooks, materials, because that is a very serious concern in the public schools.

Thank you very much for the opportunity to make one of my speeches that I worked on in the car. (Prolonged applause.)

Commissioner BAKER. Thank you; Commissioner Raynolds, for your eloquence and emphasis. We have one request to make to you. Do you mind if we bug

your car? (Laughter.)

Connecticut Programming for the Gifted

Commissioner BAKER. We move now to the testimony from Connecticut, Connecticut Programming for the Gifted, under the Chairmanship of Dr. Goodman.

Ms. JUNE K. GOODMAN. It is not fair to have to follow Mr. Raynolds. He says it all.

Thank you for the "Doctor", but I am not. I am here as the Chairwoman of the State Board of Education of Connecticut, and with me are Mary Hunter Wolfe, who is Chair of the Connecticut State Task Force on Gifted and Talented, and William Vassar, State Director of Programs on Gifted and Talented.

We have also with us as resource people Joe Renzulli, who spoke this morning, from the University of Connecticut, and Rosalyn Jacovitz, who is doing a study on talented youth in vocational technical schools.

I am glad to be here as part of this team of experts in regard to gifted and talented. I am the non-expert member. I am part of that great American institution, boards of lay people who stand between the educators and the government. We, in

theory, represent the citizens.

As a member of the Connecticut Board, I am glad to say that education for the gifted and talented is a priority for that board for the whole state. Year after year, we submit bills for mandation of funds to the Connecticut Legislature for gifted and talented and, year after year, we have been turned down.

They are beginning to listen. We got some public hearings now; it doesn't just get blocked in the committee; and we are going to persist.

As the legislation now stands, the State will reimburse local districts for gifted and talented programs on a permissive basis. 10-76 reimburses, on an equity formula of 30 per cent to 70 per cent of the cost of a local program. Today, Connecticut is a leader in the field.

We serve 15,000 children with programs that vary from a once-a-week special class to an integrated program. We started with four programs that served 200 children in '66, and now there are 162 State-approved programs. We have made a lot of progress, but we still have a long way to go.

Our program began in '66 seeded by Federal

funds. The funds provided the funds for the salary of the consultant for gifted and talented. We got $30,000 a year from Title V. We had workshops and were able to do some studies to develop legislation for gifted and talented.

It was in 1967 that our exceptionality statute was passed, and that statute covers all exceptional children from handicapped to gifted.

Programs for handicapped are mandated, while gifted and talented are permissive.

Not only does the State Board of Education petition the Legislature, but as part of its commitment to excellence and equity, it encourages local districts to be creative in developing programs, program models of excellence for the gifted and talented, which others will spell out for you.

The Board provides a full-time professional staff member to assist school districts with their gifted and talented programs.

The Board also encourages a close-working relationship with institutions of higher learning and private non-profit organizations to bring their resources and expertise to the public schools.

Finally, the Board encourages the articulation and coordination of all efforts in Connecticut so that equity and excellence may be brought about for the gifted and talented through a unified effort. Connecticut's program is terrific, by comparison, only. There is a lot missing and Federal dollars can make the difference.

I note, in the Federal Handicapped Budget, there is a listing of Special Purpose Funds, which includes special studies, regional resource centers, innovation, and development, and such funds for gifted and talented would provide supplementary services for research and staff development, model programs, printing and dissemination, which the states cannot afford today.

Finally, I would like to state, as many of us have today, that the needs of the gifted and talented are a national concern. These youngsters are a national resource. I know of no other country that gives such short-shrift to its talented youngsters, our future leaders, Nobel Prize winners, the Einsteins, you can complete the list.

It is time for national leadership in this area and national commitment that includes dollars,

so that we in the states can do a better job.

Ours is a mobile population. Without the national concern, there will be no equity. Many youngsters will be lost and the ability and talent they represent. Thank you.

Mary Hunter Wolfe will speak next.

Dr. MARY HUNTER WOLFE. If it is comfortable for everybody, I would like to speak from here, if it is all right, because I really want, first of all, before I talk specifically to the problems of the Task Force of which I am fortunate enough to be Chairperson, about my own experience in gifted education.

I had the really wonderful experience of coming from the private non-profit sector to develop two model programs, paid for by the Federal Government, one for the identification of potentially gifted students in Grades 7 through 9 in a substantially black population, a support program, where the support, the identification, the work was the process itself. That lasted for three years.

I was again fortunate enough to get a second one for a substantially Spanish culture-oriented group, again for 7 through 9 and for three

years.

That was a marvelous experience. I came to it timidly and with a great feeling of confidence that the proper tools to use were to go through the arts, using the arts as the mechanism, not necessarily for the purpose of training professional artists, but to use theater arts because it brings them together all in one family and because it is also a socializing art.

So that that combination of using that as a methodology was a wonderful experiment because it gave me an opportunity to do something that I had longed to do all my life, because it had been a self-discovery for me that that is the function of the Director, and I happen to have been a professional Director for many years. And that is to elicit the performance and to support it to its highest level of achievement.

And that is capable, it is perfectly possible to translate those skills into general education, into skills in many other fields and capacities in many other fields.

In Connecticut, it is a very fortunate situation in many respects, though largely unrealized,

especially in the arts and humanities for gifted.

We are fortunate in our legislation because it has the basic principles of equity, required service to individual children, education appropriate to individual needs, in the arts as part of the core curriculum, or mandation of special education, including the identification of gifted defined as being sought through the arts and humanities.

Three years ago, our Task Force was established as an instrumentality. It was created under the leadership of Dr. Vassar and our present Chair of the State Board of Education, June Goodman, and Commissioner Mark Shedd, the purpose to provide a vehicle for the discussion and dissemination among professionals in the field, teachers and administrators, lay persons of influence and special skills among the general public and, also, to elicit their concerns.

The Task Force make-up is essentially as follows: Business and industry is represented, professionals in terms of trained teachers and administrators, then professionals in the general public, with special skills in counseling, early childhood, artists, scientists, legislative specialists, and those were selected by appointment and by self-

nomination.

This body, conducted quite informally, has been gathering its strength for three years, but we find that we face certain very specific concerns, and those are the things that I want particularly to share with you today.

We have to define our priority issues. We want to promote excellence in education among the gifted and talented, in the hope that a great deal of that will rub off on the general field of education, because it is a model, and we do find, in many instances, that where a gifted program is really functioning in a particular school population, it does rub off on the teachers, on the parents, and on the administration. So that such a program can really be a sharing device in operating excellence in general education as well.

We effect our linkage to avoid, in particular, the accusation of elitism, through such organizations as regional service centers, the State Department of Education, itself, and in the various professional and lay advocacy groups in the fields of the arts, the sciences, and the humanities.

The Connecticut Advocates, Citizens'

Advocacy for Gifted Education -- and I must say that I tend to mix the two immediately, and I hope I can leave this as a message that they are an essential part of gifted education. I put this in as a second underlining because, when you look statistically, the bulk of the education is for the academically gifted, and the process of trying to find and support gifted in the arts and the humanities is only just beginning.

Our other purpose is to encourage educational research in a pursuit of excellence for all of the gifted and talented, and to lay the basis for successful programs for the demonstrated gifted. A constant search for potentially gifted students must be maintained to equalize opportunities for both rural and urban minorities. This is an extremely important point in a state like Connecticut because of the wealth of opportunities that exist in state, both in terms of the general population having a strong commitment to excellence, to professional work in the arts, to a high degree of representation in all the professions, and then, on the other hand, areas of extreme poverty, of urban decay, of really dire need in terms of minority populations.

We also contain in the state rural

situations which are extraordinarily remote and that share in many respects the same needs as urban minorities, because their horizons are low, the models are few. It seems hard to say that when the distances are not so great as in the State of Maine, but it is true. The isolation in the rural communities and within urban neighborhoods produces very similar lacks and very similar tensions.

So that the opportunity in sort of almost like a laboratory situation to work at the basic needs of gifted education is certainly provided in the State of Connecticut. And I, myself, and the programs that I am interested in are certainly a wonderful illustration of what Federal funds can do. Those programs would not have been achieved without Federal funding.

And, to my interpretation, that funding came because of concern in regard to equity and in regard to taking care of neglected populations of the gifted.

One thing that occurred to me during one of the really absorbing speeches this morning was the need for someone to do a study on why it is that the great geniuses in all fields of endeavor always had

some department in their growth in their personalities, and in their ways to spend their time that was devoted to the arts. I think that partnership is due to the fact that the arts offer a process, an actual living experience, dealing with materials that are resistant, solving problems in dealing with those materials, adjusting to them, making them work for you, and moving smoothly through conceptualization from one media to another. And that process through which artists work is a commonplace to them, and it is frequently missing in a great deal of education and desperately needed for the development of gifted children. Thank you. (Applause.)

Commissioner BAKER. Thank you both very warmly, and the Connecticut group has shaped their program so that we would have a few minutes for discussion.

Dr. WILLIAM G. VASSAR. I think we had a mistake in the program. We have corrected that with Mollie. We were supposed to have three people on.

We just have a short statement to make relative to the different kinds of things we thought the Commission would be interested in, some models for excellence.

When one can take an old Nike site and some Federal money and some State money and some private money and turn it from a thing of destruction to a center of instruction, -- you know, Connecticut never had a Westinghouse winner before, and there is a young man sitting right here on this campus at Harvard who won the Westinghouse award two years ago because of some of the kinds of things that are happening at Talcott Mountain Science Center in Avon, which many of you from the New England area and other places have visited.

This is an opportunity for kids from all over the state to go and study things like chrono-biology, and to get into computer science, to get really hands on kinds of information in the sciences and in the mathematics areas. It is truly, in and of itself, a terrific model for excellence.

We also took over an old synagogue in New Haven. It serves as an eighteen school district Regional Service Center for the talented in the arts. We really disagreed a little bit with New York in terms of having a complete high school like you see on "Fame". Ours is based on the idea of the youngsters maintainingtheir status in their home high

schools and spending a half day, every day of the week in the Center, in the craft areas with their peers in the arts areas.

So, again, we look to this as a model of excellence in the arts. So, we are not only concerned about the academic areas, -- I was talking to Dave Feldman about this -- but also about the arts areas. We are one of the few states in the country with a specific definition to take care of demonstrated and potential ability in extraordinary learning ability and, also, in outstanding and talented creative arts.

We talk about Federal funds, and we have certainly taken advantage of those over the years and had the opportunity at one time to do some w[illegible] with Senator Javits in developing those bills. And we would be without these little folders that we can send out to the mother of a pre-schooler who yells out, like I was talking about to Connie Steele at lunch-time. And we get the phone calls. Joe Renzulli has the same kind of phone calls at the University. What happens when a mother calls you on the phone and says, "My daughter is reading the New York Times and she is only eighteen months old."

And the first time she called I had a little bit of cynicism in here. The second time, she wrote, and you could see the sincerity in her letter.

And we sent her to Al Solnik, and you should all be familiar with Dr. Solnik at the Yale Child Study Center, and his work.

We sent her to Al to be evaluated by his team and we truly found her to be gifted at a very early age. And we are uncovering more and more of these today.

And so, we say to the Commission, if you read "Great Expectations", which talked about the baby boom, we are now inheriting in our schools, in Connecticut and throughout the country, in the territories, we are now getting the sons and daughters of the baby boom. Even though the "boom" generation itself did not connect, their generation is going to connect because we are getting the calls on the phones saying, "Hey, we have bright kids. What are you going to do for us?"

And I think, when people talk like Dr. Steele talked about certain kinds of parenting, these are the kinds of things we are looking for. And we are looking into United Technology and other kinds of

places to try to drag money out to get some research done. We sorely need research and development. Even though we have crystallized a large number of programs, good programs in our state, like many other states, we need that kind of support money to carry on and bring these models about.

I think we are one of the few states in this country -- and I know this sounds parochial -- but I think we are one of the few states and, when Mollie called us and asked us to talk to organization, how do you develop an organization that will take the theoretical framework from the institution of higher learning level and bring it down to a practical level so that the public knows what is going on and the public schools know what is going on, I think we have done this.

You heard Dr. Renzulli talk this morning as we like to call him, Joe. As Joe did at the University with his very excellent graduate students, took and developed that particular model, -- I am not here to sell Joe's model. I am here to tell you that we researched that model with him for four or five years, and his students. I am saying it is another option that our districts can use, and we made it to

the State Board and to our policymakers, and had their support. And they said to us, "Hey, it looks good. Go ahead with it." And, this year, they said it is good enough so that we can take the legal services people, we made the arrangements with the Assistant Attorney General to get a ruling, and now we have broadened our concept to include certain aspects of this RDIM model.

Again, we were one of the first states to go into handicapped gifted. Someone talked this morning about IQs. I hate IQs. Someone asked me, "What do you think about IQs?

I said, "I think they are interesting. I think they are good for what they do. But I think you have to know the limitation of an IQ test."

And I happened to ask this graduate student at the School of Education which happened to be in another state, I said, "By the way, are you a graduate student in the School of Ed?"

He was against them, by the way; it was during the hippie generation. And he said, "Yes, I am violently opposed."

I said, by the way, what is the cut score in the Miller's Analogy in the School of Education

that you now attend?"

End of argument.

Okay. Labeling. Hey, we have been labeled since we were in the crib. I was labeled as a "preemie." I was labeled as a "jock." I was labeled as a football player who had half a brain. Okay?

I am labeled as a Kiwanian or as a Rotarian. We label every single day of the week.

Now, ladies and gentlemen, I ask you, what is wrong with labeling when it is part of the American way of life? We label every day of the week.

I go to certain country clubs to play golf. You are labeled. If you are a part-time member, you are labeled; you can only play here at certain times. This happens every day of our lives.

I see nothing wrong with using the label of gifted and talented youngsters.

All we wanted to say is that we are breaking barriers every day. Sitting to my left, Rosalyn Jacovitz is with us this year under a special contract. We felt a great need, since we run our vocational technical schools, our 17 vocational technical schools in the Department; we feel a great need to screen and identify youngsters in the shop

areas, -- not in the academic areas, in the shop areas -- to find some kind of screening and identification criteria, so that we can better meet the needs of youngsters in those vocational technical schools.

Someone was quoting -- I forget whom -- this morning from Gardner on Excellence about plumbers and philosophers. Well, we are ready to start dealing with those plumbers so that we don't have some of the leaks in Connecticut any more.

And the thing is that what we would like to say is that we have tried hard for 16 or 17 years to become a program of excellence. We haven't reached that goal yet. We may never reach it, but we are always aspiring to it.

I want to pay very definite homage to the tremendous cooperation -- I am not saying it because they are here; I don't have to, at my age, you don't have to say anything about anybody -- but, when you have an advocate like the Chairor of the Board, and you talk about the lady who was a director on Broadway -- I might let you in on a little secret about a very wonderful person today for all of you in the audience. She directed Mary Martin in "Peter Pan". She was Marge on Easy Aces for a number of years, on

radio, for those older folk. She has done everything. She is known as the Grande Dame of the arts in Connecticut. And I will tell you, without her support, we wouldn't go anywhere, without this support over here.

Also, the cooperation with the University of Connecticut. This is where we take the theory and put it into practice. We work together, we continue to work together. We differ philosophically at times, but, one time, when we had a certain Director of the Office of Gifted and Talented, she made a visit to the State of Connecticut and she said to us, "You know, I don't find any dirty laundry about Connecticut."

And I said, "That's right, because we wash it at home."

That is what I am saying to you today as members of the panel. We are looking for ancillary assistance, just as Jim Gallagher said. I won't repeat what Jim said this morning, but we need that R and D, we need that teacher training; these are the extra kinds of things that the Legislature will not fund. We are putting from seven to nine million dollars in state and local money into the third smallest state in the Union, into gifted programs.

We feel that the extra $30 million that Jim talked to, and the Commissioner from Maine talked to six, and I will buy six; if we can't get thirty, we will buy six. But, we need that kind of extra money. It has made the difference.

It has made the difference in these publications that we can send to parents, to make them understand what they can do with their youngsters.

We have twelve to fourteen different publications, and people around different parts of the country say, "How do you do it?"

We did it with Federal funds. We can no longer do it with Federal funds, unless we steal a little bit from the handicapped.

But the point is that we are very happy as a panel. You might want to address Dr. Renzulli and Mrs. Jacovitz on specifics with the State. They are our resource people. They are the people that we turn to and we really appreciate your having us with you today. Thank you.

Commissioner BAKER. Thank you, sir. We still would have time for any queries from the Commission about this very challenging program that they have undertaken.

Commissioner HOLTON. As a point of information, you spoke of the difficulty of funding, is there a publication or something which exists as an underground document circulated among people like yourselves which is a guide to funding for the gifted. I know that one can buy the Whole Earth Catalogue for almost any subject whatever, but it occurs to me that, when it comes to supporting our gifted children and helping mothers who find that their children need some attention in that field, I don't know where to send them.

Now, maybe that exists. If not, we ought to really commission it.

Dr. VASSAR. Well, obviously, you know, like any administrative structure, and especially a state department or a local school district, there is the informal structure and the formal structure. Obviously, we are in a formal setting today, as we are when we go before a Senate Subcommittee or a House Subcommittee in Washington. But I would be more than happy to talk to individual members about the informal structure that we utilize to provide those services.

Dr. WOLFE. That sounds like some kind of Mafia operation.

Well, we have one fortunate thing in Connecticut because there is a very powerful industry headed by United Technology. And, when they buy space in a Hartford newspaper talking about the fact that, in high technology, you need arts and arts experiences, then I think we have got some, shall we say, undercover support.

Commissioner HOLTON. If there is a group of parents or teachers that wants to get into this field and needs funding and, as you have pointed out, the Federal funding is very low now, -- that might change, but, for the time being -- they might have to turn to private or corporate funding, is there a way in which you can start other groups like yourself by giving them a hand up and giving them a handout, as it were, perhaps a set of sheets, as a starter?

Dr. WOLFE. I think you are presenting us with a very good challenge. We have individual bits of material here and there and our Task Force should put such a paper together. Thank you.

Chairman GARDNER. We don't have time, I am afraid, to invite a response today, but perhaps you might be kind enough, one of you, to respond in writing to this question, if you are disposed to do so.

Connecticut obviously enjoys a leading position in the country with respect to efforts in this area of our educational endeavor. Why is that? What is there about Connecticut that permits you to accomplish this?

Dr. WOLFE. Well, it isn't in the water, I assure you.

Chairman GARDNER. Or in the air, I presume.

Dr. WOLFE. That is right. The air comes mostly from New York.

Chairman GARDNER. To the extent that you could provide us with a profile of those things that you tend to think may be unique, as against those that tend to be less unique, in ways that would be helpful to us to understand what is occurring there and what might be transmittable elsewhere we would clearly appreciate receiving this.

Dr. VASSAR. Since the World Series begins again tonight, take yourself back three or four years ago to Willie Stargill and the Pittsburgh Pirates, when he went along with that song, "We Are a Family." And I think this is what it is in Connecticut. I think it is everyone working together, the advocacy groups, the University, the State Department, the

Board, the Task Force. And we are small enough to keep it a rather cohesive group and we are small enough that we are able to get out and visit schools and work with school districts to develop these programs, and we would be more than happy to develop a paper on that subject to send to you.

Commissioner FOSTER. I am glad you are going to address that problem in your paper, sir. Would you add a section as to what appear to be objections to going the Block Grant route as opposed to earmarked funds for the gifted and talented?

Dr. WOLFE. We would be very glad to, because we have very strong feelings on that.

Commissioner FOSTER. Thank you.

Dr. WOLFE. As you have already gathered.

Commissioner BAKER. Thank you, Commissioner Foster, and thanks to our colleagues from Connecticut.

Education for the Gifted in New York State

Commissioner BAKER. We move to New York with Paul Regnier, Assistant to the Deputy Commissioner for Elementary, Secondary and Continuing Education, speaking on behalf of Mr. Gordon Ambach.

Mr. PAUL REGNIER. My name is Paul Regnier. I

am Assistant to the Deputy Commissioner for Elementary, Secondary and Continuing Education, and I am here representing Gordon Amback, Commissioner of Education for the State of New York.

I had thought I was coming alone, but Emyln Griffith, a member of the New York State Board of Regents, Chairman of the Regents' Committee on Elementary and Secondary Education, who is in Boston to attend the meeting of the National Association of State Boards of Education, has managed to break away and come to help me represent New York State, and has brought with him Harriet Malloy of the Montana State Board of Education.

The testimony that I am going to read, Commissioner Amback's testimony, I think really kind of sums up or at least deals with many of the issues that I have heard raised today, and I have been here since 8:30 this morning.

This statement is succinct, it is short. I will read it and, if there are questions from any members of the Commission afterward, I will try to deal with those.

A drive to provide special programs for educating gifted and talented students is gaining

momentum throughout the nation. Our State is a part of that movement as indicated by Legislative action last year to appropriate State funds earmarked for such programs to all school districts.

Advances in the education of disadvantaged and handicapped children have taught us valuable lessons. Providing a challenge to children who have different capacities and opportunities requires additional resources and special class arrangements. To challenge gifted and talented children also requires programs and services that are different from those for most students.

While programs for gifted and talented students may be different, they must be developed and implemented as integral parts of a school's entire academic and artistic program. Such programs should help improve the quality of academic and artistic programs for students of all ability levels. Programs for educating the gifted and talented ought to meet the following criteria:

1. The program identifies students who are especially able in academic disciplines or in artistic fields. Identification methods must be sufficient to find children from racial and ethnic

minorities and from deprived socio-economic circumstances who have high potential in academic and artistic fields.

2. The program is more intellectually and/or artistically serious and rigorous than would otherwise be offered to these students in regular classes. The greater effectiveness may be in the form of wider breadth or stronger depth of knowledge or understanding or more sophisticated levels of critical thinking.

3. Scholars of academic disciplines and those recognized as experts in the various arts by professional practitioners should prepare the courses of instruction for the gifted and talented and evaluate their effectiveness.

4. Courses of study for gifted and talented students should serve as models for courses for all students. They should provide an opportunity for experimentation and demonstration of content and technique which can be adapted to other courses.

In New York State, commencing with the 1980-81 school year, the State Legislature authorized funding to help all school districts to meet the educational needs of gifted and talented students.

While the total amount of money allocated is limited, it does authorize all school districts to assess their needs and begin program development.

For the 1982-83 school year, the State Legislature empowered the State Education Department to help districts in the following ways:

Providing information to school districts about development of programs, curriculum resources, instructional procedures and strategies to identify and encourage gifted pupils.

Providing technical assistance and in-service education for teachers and administrators.

Maintaining a record of available programs.

Developing and distributing a handbook for parents of gifted pupils.

Establishing procedures to evaluate the quality and educational effectiveness of programs for gifted pupils.

We have appointed an Advisory Council to help the State Education Department develop policies and procedures for providing education to the gifted and talented throughout the State.

Many New York State school districts are spending their own funds to develop new programs for

gifted and talented students, while other districts are using their own funds to maintain offerings that were previously funded by the Federal government. Local interest in education of the gifted is high, but how long can we anticipate school districts will persist in their efforts, as resources continue to decline and other pressures on the local budgets increase?

A number of problems need to be addressed to improve the education of gifted and talented students. The Federal government must support this work through research and analysis. Federal actions should include:

1. Research to develop better ways of identifying gifted and talented students. This is especially true in relation to several groups which are under-represented at present in programs for the gifted and talented. These groups include economically disadvantaged students, minority groups, culturally different students, and handicapped students.

2. Sponsoring preparation of appropriate curricula for gifted and talented students.

3. Identifying ways to ensure that courses of instruction for gifted and talented students

help improve courses of instruction for all students.

4. Support the training of teachers of the gifted and talented.

5. Disseminating information about appropriate programs for the gifted and talented.

These problems can be solved, but the resources available to the separate school districts and state education agencies are not sufficient nor are they adequately aggregated for this effort. The Federal government has an appropriate role here to ensure extra efforts for high-quality elementary and secondary education for the gifted and talented. As part of your report on excellence in education, I hope you will stress the need for this national commitment. Thank you.

I believe we have some time. Are there questions from anyone?

Commissioner BAKER. Thank you. We will be glad to have any special items, but we also take very warmly your proposals and we will follow those up as well.

Commissioner MARSTON. Mr. Chairman, may I ask a question, please? If it is not appropriate at this moment to answer the question, could you send the

Commission and to myself some of your material on your evaluation of your gifted program as they relate to continuity across school districts and as they relate to improvement for the student? I would be very interested in that evaluation.

Mr. REGNIER. I must say, of all the aspects of the program and I think you are probably aware of this, evaluation is a most difficult one and one in which we have made the least amount of progress.

Commissioner MARSTON. And I didn't know any states had done anything on it and I am very interested in that. Thank you.

Mr. REGNIER. We are working on it.

Commissioner MARSTON. Thank you.

Mr. REGNIER. Thank you.

Commissioner BAKER. Thank you.

Issues and Themes in Education of the Gifted and Talented

Commissioner BAKER. We will all note that our speakers up until now have dealt with a very excellent sampling of the compelling issues in this vital field.

Accordingly, the Commission is appreciating strongly the opportunity to have the next section of

the report on a kind of overview, a kind of commentary and, indeed, any other feature that our speakers wish to inject.

On Issues and Themes in the Education of the Gifted and Talented, it is a pleasure here to call on Dr. Benson Snyder as the first speaker for this section, Professor of Psychiatry and Director of the Division for Study and Research in Education at the Massachusetts Institute of Technology. Dr. Snyder.

Dr. BENSON R. SNYDER: It is a pleasure for me to be here this afternoon. I just found out that I get a beep at ten minutes and that I must stop at twelve. And I will honor that, so long as it is not in mid-sentence. The problem is trying to say a lot in a short period of time and, actually, it occurs to me that it may benefit from such excisions.

In discussing excellence in education, we have to be specific about what we mean by excellence, what qualities in the "to be educated" are being addressed. The referent needs explication -- excellent hunter, excellent scientist, excellent poet. I have spent well over three decades in institutions which have clear notions about excellence, at least at a superficial level. At MIT (and it is very different

there than it is at Harvard and Wellesley) the ability to both recognize and pose problems and to develop high competence in solving them in the areas of science, engineering or high technology is the basis for virtue, another definition of excellence. Drawing on extensive interaction with both faculty and students, some as part of the longitudinal study which I began in 1961, I would like to sharpen the definition of excellence by contrasting two modes of thought, two ways of knowing which illustrate the importance of making a distinction about the kind of excellence that is being sought.

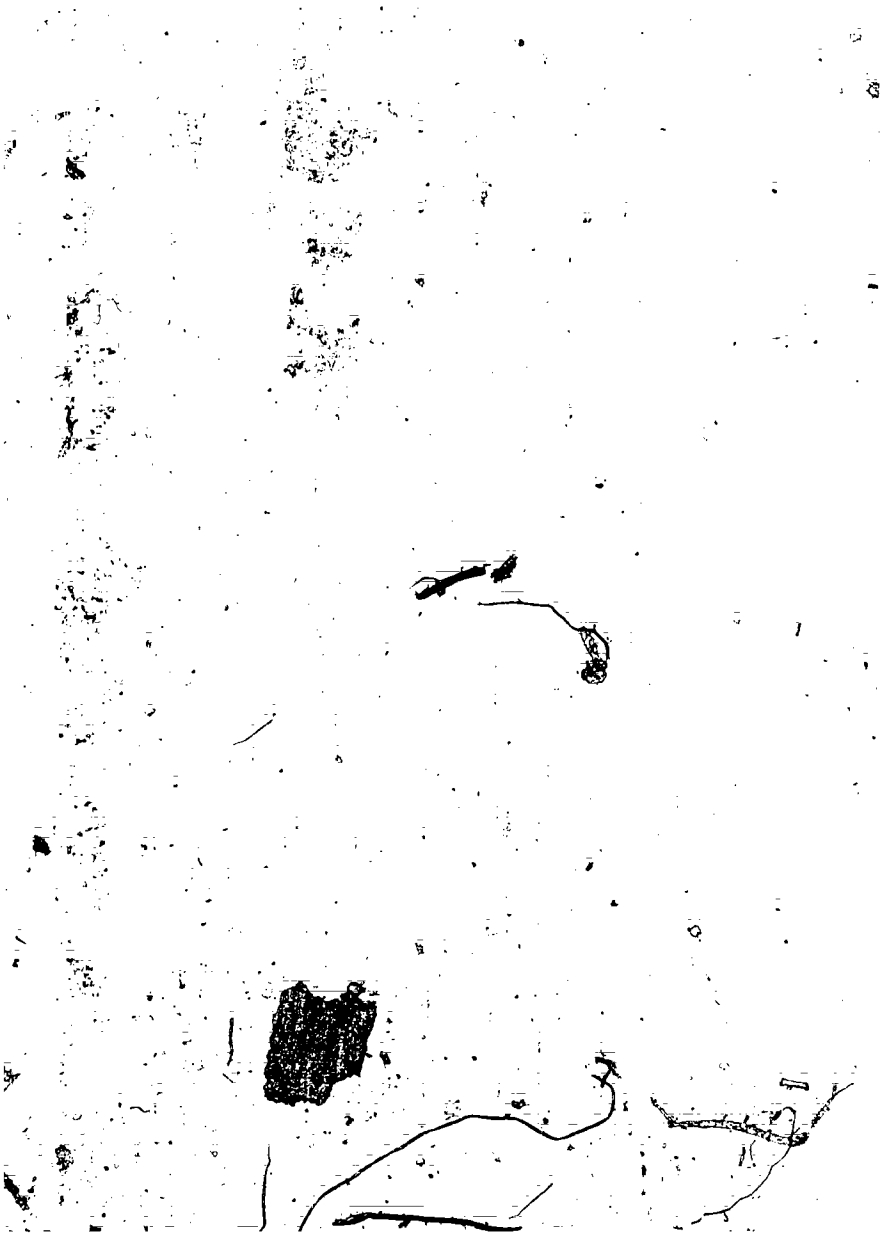
The human mind seeks certainty in varying degrees. Those who seek it most are very likely to be attracted to those technologies and branches of science where causes are most regularly connected with effects and predictions are least likely to be disturbed by historical or contextual patterns. I am particularly referring to natural sciences here.

On the other hand, and contrasted to this, the human mind varies in its concern for other human beings, their thoughts, feelings, as well as their actions. These concerns are likely to be felt most keenly by those capacities for empathy and

and intuition, and in particular for the grasp of contextual as distinct from causal situations, are most fully developed. The mix of these two modes of thought or ways of knowing got worked out in quite different ways in individuals, often depending on their field of primary expertise.

I am going to skip and just give a headline. There is a very interesting development on the way in which the language and the mode of thought in the various disciplines, computer science, particle physics, theoretical mathematics, for example, is developing an increasingly separate set of metaphors and ways of understanding, so that communication, not just between science and social science becomes more problematic, but even within the disciplines. Clifford Geertz has discussed this, and a number of other people, and it is amply borne out by the trend over the last two decades as I have listened to these people who I started talking with when they were freshmen, and they are now 38, 39 years old.

My current interviews with these students that I first talked with twenty years ago strongly suggests that the ability to think about problems that



are rooted in the embedding of a physical reality, where predications can often be tested in minutes, needs to be, and is, for many tempered, over time, with the ability to grasp contextual issues, to understand a human situation through empathy, where the final answer, if it ever comes, may be measured in years.

I need to briefly discuss some of the earlier work, in which we found what we called "the hidden curriculum" underlying the formal curriculum, which determines to a significant degree what becomes the basis for a student's sense of worth and self-esteem. This hidden curriculum, more than the formal curriculum, influences the adaptation of students and faculty, affects their cognitive style, their mode of thought, and even their language.

Students come to MIT having done everything they have been asked to do easily and well. They are faced with an overwhelming overload, more work than they can do, and therefore must learn to selectively neglect much of what they are asked to do. This presents both a cognitive and psychological hurdle. The presence of this covert task structure is linked in important ways to the institution's

supports and penalties, for both students and faculty. In the early sixties (and I think this is still the case today), many students developed an instrumental approach to their education, finding out what worked, which strategy would pay off with the highest grade. In engineering and in science, making discriminations and separating out the critical from the trivial is, in fact, a central cognitive skill, so learning to selectively neglect actually has its place. However, these late adolescents who are told to do everything and do it well and who find that this is a clear impossibility in the context of their freshman year, face a high level of dissonance. One student, not having read the literature, called it cognitive dissonance.

Let me illustrate one impact of the hidden curriculum on two groups of students that differed in the degree to which they sought certainty, one right answer, or took to light in open-ended questions and were challenged by ambiguity. The two groups of students were selected on the basis of their scores on a psychological test given them early in their freshman year, actually, their first day. We had been interested in seeing whether students with

different adaptive patterns and similar academic fates as they moved through four years at MIT. One group was chosen because they were marked by a desire to seek out new, complex social and cognitive experiences while the other group's responses to the same items in the personality inventory suggested that they were careful, orderly, avoided ambiguity where they would, and appeared to take minimal risks. The group seeking new experiences lost three times as many students through withdrawal or disqualification, mostly withdrawal, as the non-risk takers during the first year. There was no significant difference between the two groups in subsequent years.

The high risk takers, so to speak, did, however, follow very different paths through the institution, took different measures than those who sought out more certainty. However, the grade average for the latter students, the more orderly students, was consistently higher, despite the fact that there was no statistically significant difference in the scholastic aptitude and achievement tests upon admission.

In the first year, as I said, about a third of the students from the risk-taking group left

eloquent -- I sat in on all the classes -- about a particular paper, and explaining one of them, from 1903, and a student had his hand up, which he finally saw.

He looked up from his paper and the student said, in an absolutely flat voice, "Have you marked last week's quiz yet?"

I counted twenty seconds before the professor was able to go on. It really threw him. So, it wasn't subtle. let me say that.

The absent students did well enough academically; only the professor was directly concerned about these students.

There was no feedback to the rest of the institution that there was a problem. This experiment was embedded in an intensely demanding curriculum. Those who cut class were simply responding to the pressure to produce in other subjects. Binding themselves to the syllabus and working by the clock did not come as naturally to the creative students. It took, as one student put it, "constant vigilance to keep up," but he thought that after graduation there would come a time to pursue the intriguing questions that he had heard raised in his few appearances at the

the institution. The restless curiosity which characterized them is a quality that many faculty members sought in students, so the institution wanted them, admitted them, and then saw many of them leave. Indeed, there is considerable evidence that we cannot document right now that it, in effect, forced them out; not adaptive.

A professor in one of the science departments, in part as a result of this kind of discussion, developed an experiment, and restructured his course in order to engage the more creative students in what he called a dialogue. He freed them from extensive assignments, made the course pass/fail, limited the number of students to twelve, and had them sit around a table, with less structured interaction. And they were to read Einstein's early papers as a way of learning physics. The attendance of the creative students dropped off, since they could selectively neglect the attendance requirement, while their more conservative classmates came regularly throughout the semester. The professor felt that his experiment was, by and large, a failure. I can tell you how that happened.

Toward the end of the class, he was waxing

seminar. For the present, he had to ignore the questions and the seminar in order to make time to keep up his grades.

I am sorry to report that, in interviewing many of these people through graduate school, that was not a consistent pattern. Some managed it quite a bit later.

Educational innovations and experiments that ignore the hidden curriculum simply do not succeed, at least not at MIT. And the initiator is often disturbed and depressed by the failure and doesn't learn much about why it didn't work; nor does the institution, typically.

In marked contrast to this vignette, I understand that you heard from Professor Margaret MacVicar in Chicago at one of your hearings, who is at MIT, who developed and administered the Undergraduates Research Opportunities Program at MIT over a twelve-year period, still. This program, which involves negotiating work settings between faculty and students in a way that is somewhat analogous to graduate research assistance, has thrived and has made a profound difference in the quality of interaction between the faculty and the students precisely

because the hidden curriculum at MIT works for it and not against it.

Now, let me trace out one aspect of the longitudinal study which bears on the two modes of thought that I began with. Certainly for those students at MIT in the period from 1961-65, when they were there, the predominant mode of thought to which they linked their sense of worth and self-esteem would be the one characterized by seeking certainty, where causes were regularly connected with effects and making and testing predictions largely undisturbed by context. The vast majority of students, in the order of 80 per cent, -- and I haven't finished the interviews; this is just giving you a rough, quick picture -- were in this same category over four years. Approximately 10 per cent were much more concerned with human beings, with empathy, with intuition, and a grasp of contextual situations. Then there were 10 per cent who showed really both qualities clearly from freshman year all the way through.

On the basis of my interviews with these former students during this past year, about two-thirds of those who had been in the first category now employ both modes of thought. Ten per cent of the

students with student certainty as undergraduates remain rooted in that mode. One of these students is in a situation in which his sense of worth and self-esteem continues to be heavily linked to using a particular set of cognitive skills. He finds himself now, because of changes in his discipline, in what he described as a cul-de-sac. It is particularly ironic because he had made a contribution to his field shortly after completing graduate school, which significantly influenced the rapid obsolescence of his own particular mode of problem solving. And that is not common, but it is by no means rare in this population.

Ten per cent of the students who exhibited both modes of thought throughout MIT continue to maintain this facility. They are now the most creative in their adult careers. One has been remarkably successful professionally, having developed a technological breakthrough in his field two years ago, and another was recently appointed a MacArthur Fellow in the last round, which means that he had some independent validation of my judgment, if they made the right judgment.

The development and elaboration of these

modes of thought requires significantly different contexts. They were affected by the tasks that were assigned and by what "paid off" in particular institutional settings. They were sustained by the appropriateness and availability of various supports and human networks at crucial periods at MIT, and beyond.

Let me signal my concern: There is a danger that excellence too narrowly defined will trap students in a particular cognitive mode that will limit them ten years after graduation. Obviously, the combination of these two modes of thought requires a broader definition of excellence; and both the hidden and the formal curriculum must be attended to.

Let me just jump over to some practical summary statements. The early experience of being challenged, of finding that one can really do math, or physics, or take apart an engine and put it back together, or a clock, make a radio, and to come to know what it means to master a cognitive or kinesthetic task, is a critical first step on the path to excellence; there is a vast amount of confirmation of that in this material. For many students, this early experience involved a teacher; more of this material

comes out now then it did back in '37 and '38, when they were talking to freshmen and sophomores at MIT. And that is that many were challenged by a National Science Foundation Summer Program -- a special course.

One of my subjects, who completed his Ph.D. in Science and then changed into a professional field -- actually went to law school and left the science -- reflected on what it might have meant if he had had as good a teacher in English in the tenth grade as he had had in math. He felt that he might have made the change much sooner.

Excellence involves taking delight in the exercise of a cognitive skill, in using the competence to explore, move around in, expand a network of related problems, puzzles and concerns. The sense of worth and self esteem of these former students derives in increasing measure from the act of thinking productively about problems that, in time, they set. The most creative of those interviewed link their sense of self worth to their ability to both pose and solve increasingly complex problems. They did not base their self esteem on grades. This contrasts with the science major who linked his self worth to

his B.S. cum at MIT and to the A's he consistently made in graduate school. Now a software engineer, working far below his level of competence, he says he had a calculator mind, and was good at sums, but was not challenged to think creatively.

In conclusion, this leads me to urge you to consider the overriding importance of combining both basic and applied research, which will necessarily involve a number of disciplines. Excellence in education involves cognitive skills, psychological adaptation, the nature of support systems, the quality and extent of human networks, and all of this view from the perspective of human development. The rate of change in the disciplines does mean indeed that today's excellence can become tomorrow's obsolescence. Too narrow a definition of excellence, one that allows for only one mode of thought, one right answer, without regard to context, to empathy, to human networks, will surely leave us "wanting". Excellence has more than one dimension, and we need to consider the totality of human development in our measurement and pursuit of what we seek as excellence. To do less is to take the path, only to wind up, as the former student found he had, in a cul-de-sac.

Thank you. (Applause.)

Commissioner BAKER. Thank you, Doctor, for your far-reaching and excellent comments. You have illuminated our pathway in this quest for understanding excellence in the education of the gifted and talented.

And, if you would stay with us for a moment or so, we will have time for a bit of discussion after Dr. Cox's comments, the Director of Research at the Sid Richardson Foundation.

Ms. JUNE COX. Thank you. I never got around to getting a doctorate, so thank you for giving me one today at Harvard.

Commissioner BAKER. Have you ever noticed that anybody as wise as these participants this afternoon certainly has a terminal degree of some sort, and we have been conferring it here.

Ms. COX. I think the task that you have accepted is a tremendous one and I appreciate the difficulty that faces you, and I am pleased to have some part in the day's activities. I just wish that I had been using my time more wisely in my automobile in practicing some speech-making. It would have come in handy today.

You have heard proposals today for research and development, for demonstration centers, for attention to early childhood education, and to the identification of minorities and the disadvantaged. You have been urged to consider larger numbers of students as gifted than we currently do. You have been cautioned to think in more specific terms about how children are gifted. You have heard about how a student's self-concept improves in challenging programs such as those offered at Johns Hopkins University.

We have all been reminded that intellectual deprivation may be even more damaging than nutritional deprivation, and we have heard a raft of other ideas.

Some of the ideas that you have heard seem to conflict a bit with some others, but all of us here today agree that entirely too little attention has been paid to the education of the gifted and talented.

From the perspective of my own study, I feel that some apparently conflicting ideas might be resolved by distinguishing between the issues which need to be addressed by improving the quality of education for all children and those issues which need

to be addressed by the development of special programs for the gifted and talented.

I am in the second year of a three-year study for the Sid Richardson Foundation in Fort Worth, Texas, focusing on this issue.

This is not an ivory tower study, thank goodness. I am ably assisted by some people that many of you know, by Dr. Getzels at the University of Chicago; Marvin Gold, Editor/Publisher of G/C/T; Dorothy Sisk of the University of South Forida and Bob Sawyer at Duke University.

We bring these people, and others, in to meet with me in Fort Worth several times a year. The meetings now last for about three days, and they are very productive.

Each meeting now focuses on a specific practice or program model, and we bring in several teachers and administrators involved in the issue under discussion to work with us. We carefully select participants from various geographical locations and from diverse socio-economic communities. To date, we have included teachers and administrators from California, Pennsylvania, Virginia, Arizona, Massachusetts, Utah, and, of course, Texas.

The specific goals of our project are these: To discover the nature and location of existing programs for high-ability students; to identify those programs that are particularly effective; and to suggest additional approaches to the education of able students.

We decided early on in our study, to explore two very different kinds of programs: (1) Those designed specifically for gifted students, and those of us in the field are probably more accustomed to thinking in those terms, but also others that meet the needs of gifted and talented students, but are not labeled "Programs for the Gifted."

Included in the latter are such programs as continuous progress, advanced placement and concurrent enrollment in high school and college, and we have heard about some of those programs today.

To gather some basic data, we mailed comprehensive questionnaires to every public and parochial district in the country. We also mailed questionnaires to a sampling of private schools, a total of about 16,000 questionnaires.

We are visiting as many schools as possible. Committee members assist with these on-site

visits, but the major responsibility for this task is mine, and keep in mind that this is a national study, not a Texas study. The responsibility for writing the report is also mine, unfortunately, although the committee helped determine the method of reporting.

The report will be published as a series of articles in G/C/T. The first article, focusing on continuous progress and non-graded schools will appear in G/C/T's November/December issue.

Following the publication of the final article which will address implications of the issues involved in educating the gifted and talented and recommendations for programming, the series will be collected and published in a single volume for national distribution.

What are some of the issues our study has identified to date? One major issue, and it has been referred to a bit today, but not much emphasis, I think, has been placed on it, but one issue that those of us concerned about the education of all students, including the gifted, must confront is what Julian Stanley at Johns Hopkins calls our age-in-grade lock step education. Our practice of requiring all students

of the same age, regardless of their ability, to study the same content for the same period of time dooms the slow learner to failure and chains the gifted to a distressingly slow pace.

I hope this doesn't come across as heresy, as if I am not pro-programs for gifted students. In addition to my work for the Foundation, I direct the Gifted Students Institute. So, keep in mind that what I am saying is coming from a proponent.

But the needs of many gifted youngsters, especially the moderately gifted, could be met without special programs, if we could allow students to move ahead as they master content and skills. Stanley urges K-12 teaching teams. Whether we call these programs continuous progress, non-graded, flexible advancement, flexible progression, or whatever, the concept deserves a top priority. Someone mentioned earlier today the work of the late Hal Robinson, and he referred to this concept as optimal match strategy.

We in the specialized field of educating the gifted emphasize the importance of teacher selection and teacher education. As crucial as the teacher is in the gifted child's education, I submit that we must also educate the administrators, and School

Board members. The colleges of education must provide more leadership, if we are to introduce the kind of flexibility the school structure desperately needs.

When we launched our study with a small, invitational conference of leaders in the field, John Ehle, North Carolina novelist, and John Silber, here at Boston University, addressed the group. Silber challenged the participants to raise the quality of education for all children. "What we have to do is to offer a variety of educational experiences to the students in our classes and examine them individually and personally to see to it that they move to the highest level of their capacity. And when they are clearly at the level where they are doing the work that we have assigned them, ship them on, ship them out, ship them into a higher level of the regular program so that they can become an impetus (to the older students)."

None of what I have just presented should be interpreted as advocating that we rush students through the curriculum without regard to its context. Both the content and the pacing should match the student's abilities.

One of the most interesting aspects of the

study to date, and I wish I had time to tell you about it, has been interviews with MacArthur Fellows, which was referred to earlier, and I think we really have a great deal to learn from some of those people.

One of them said, for instance, "There is very little similarity between what is expected of the student and what is expected of the scholar." We reward students for doing what they are told to do. Scholars must first find the question and then the answer. I think this Fellow identified an important issue for us.

Moving right along, since I have had that little warning, none of the issues that any of us have raised today can be addressed with the fragmented approach currently in vogue throughout the country. I second Commissioner Raynolds' call for a commitment to excellence in education at the highest level in our government, and I second James Gallagher's level of funding that he urged.

A gifted child is entitled to a rigorous, sequential program from kindergarten through the twelfth grade. Isolated patches of "gifted programming" are not good enough.

Our task is to educate all children,

including our brightest, give careful attention to their specific abilities, and help them achieve their potential. They deserve the best our country can afford, and our country can afford to do no less. Thank you. (Applause.)

Commissioner BAKER. Don't leave, Ms. Cox. I think there is a bit of time for questions. I don't know what they will be. Does any member of the Commission have one?

I might start off, because, after all, you are putting the accent on our whole themes today, and we do have to come back to the question of what happens to the gifted and talented, the noted studies of Dr. Snyder have begun to illuminate some of this. What proportion, offhand, would you say, amount to something?

Dr. SNYDER. What proportion of the graduates?

Commissioner BAKER. The ones you have identified quite early, freshman year, or whatever, as having high potential?

Dr. SNYDER. I took a random stratified sample of the class that entered, so it wasn't selected for creativity. So it was a cross-section, on those measures that were relevant.

Well, my first answer is that it depends a lot on what you mean by matters, what your criteria or mine are for what constitutes success. The man I referred to in my address who got a doctorate from a leading university and is now the programmer could be viewed, certainly, in formal terms, as a failure. He is actually reading deeply in related disciplines and is very likely to find his road back into the field he was in before, but I don't know. It is like a mid-career crisis, and I can't tell.

But there are roughly fifteen per cent who are experiencing a sense of really not knowing where they are headed or where they are going. Now, that seems to me like a remarkably small percentage.

Some of those come from internal issues that haven't been worked out. I was not seeing these people as a psychiatrist; I want to make it clear. Someone, however, did tell me that he went through -- when he was in graduate school, he had trouble writing papers and getting his thesis done. And, being out on the West Coast, someone said that he ought to go into analysis. He knew that I had had this training, so he told me that he had gone through two years of analysis and that he had paid for it --

I don't think he was kidding me, but he may have been by winning at poker. They have legalized poker in California, and he worked out a system, and he never told his analyst.

I could give you many, many anecdotes that would say to me that it is a complex and varied story in formal terms. The thing that surprised me and pleased me so far is the number of people who were very narrow as undergraduates who have been able to move and shift, and a large part of that had to do with life experiences, having a child, having a divorce, or threatened with a change in jobs.

And some solved that by becoming even more narrow and more instrumental in the way they dealt with people. Most of these people are male, white males. We are doing another study of the Class of '75 which includes a much higher proportion of women and minority students.

There is one other part that I am intrigued with and would like to do a sub-study on, and that is the group that come more from the Class of '75 who have been extraordinarily successful in the computer field, developing new companies. And there are three of them.

One of them is, at 29, a multi-millionaire, and he knows what he wants to do ten years from now. He solved his problem and he is making his money and he has got it all laid out and he told me which journal -- there is a piece of scientific work that he wants to go back to and do in the right way, and he is going to fund it himself, that kind of fantasy.

And this theme runs through those three people. They see themselves as having done something that was useful and paid off, but they are not caught up in building an institution, at least, not at this point. I suppose that is just as well in the computer field.

That is a long answer; I am sorry.

Commissioner BAKER. Well, you were touching on just the exciting issues that we need to understand, and it is heartening to know that you have identified these ranges of behavior. I wonder if Ms. Cox would feel that her study has identified things that you would expect to have to recognize in the future support of the gifted and talented and the development of their careers, similarly. What do you think about their futures?

Ms. COX. Well, of course, their future depends

so much on what we do. And one of the reasons I found talking with the MacArthur Fellows so interesting was that I just felt sure that these creative adults could tell me something about their own educational experiences and we could learn from that, and then we would know exactly what we ought to be doing.

So, I asked questions such as, did they go to public school, private school? Were they recognized achievers? Did they value grades? Did they do homework? The whole range.

There was no consistency whatever.

There were some things, however, that I think we have touched on today, and that is that, almost without exception, they referred to a supportive home environment and the fact that, in many cases, parents were supportive into their adulthood.

So, it is certainly a complex issue and there aren't any easy answers, and I think the one thing that we probably should guard most against is trying to be simplistic, although we would all like an easy answer, so that we could say, this is exactly what we should be doing for all gifted students all over the country.

Dr. SNYDER. I wonder if I could just tell you

a word about the MacArthur Fellow, how he talked when he was 18, before they had a MacArthur Fellowship. His way of going through MIT was very different from most students, that is, he went around and sought out all the senior faculty in areas that he was interested in and sat down with them and talked with them and got to know them, and didn't ask what was on the quiz. He was free of that. He had a kind of genuine curiosity which led people to respond.

Well, I will stop at that. I just throw that in.

Commissioner HOLTON. Dr. Benson Snyder's talk reminded us that excellence so narrowly defined could select out rather narrow geniuses that might be not sufficiently connected to the human situation. And, of course, as soon as he says that, we remember all kinds of examples from this country, from abroad. After all, one of the most expert, near genius persons in Germany was Admiral Speer and another one was Dr. Goebbels, both having higher degrees from good places, using their genius to very poor purposes. And that we know from the earliest literature we have read.

What he reminds us is that we must be really careful that we don't take the easy way out

with these gifted by insulating them from the total function, which is to civilize them, not only to educate them and, as Commissioner Raynolds, also, I think, stressed, we need an across-the-board approach, so that you don't just get into the crash program for mathematics, when you really have a much wider potential.

This is very, very difficult to conceptualize in terms of a national program or national recommendations, but I do think that we had better think about this very carefully, that we get examples of what does work with those narrow, easy to educate geniuses or near geniuses, or the talented, and what does work to keep them in class instead of opting out because they have so much else to do in another challenge.

If you have programs, and I am sure you have collected them around the country, that we should look at, we would like very much to have them in the record.

Commissioner BAKER. Very good. We now thank you again most warmly, and have a brief break. We shall resume at 3:45.

(Short recess.)