THE FEDERAL GOVERNMENT AND EDUCATION

4 October 1954

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Publication No. L55-33

INDUSTRIAL COLLEGE OF THE ARMED FORCES

Washington, D. C.

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COLONEL PRICE: General Niblo and gentlemen: Our interest this morning will be centered in the school systems of our Nation and the huge role being played by the Federal Government in education. To give us an appreciation of this complex educational apparatus, we are fortunate in having again with us Mr. Ralph C. M. Flynt, who has specialized in this field since 1934. Mr. Flynt is now Director of the General and Liberal Education Branch in the Department of Health, Education and Welfare.

We are glad to welcome you back, Mr. Flynt.

MR. FLYNT: General Niblo and gentlemen of the class: I consider it a real privilege to meet with you today. I know that I speak the views of our Secretary and of the Commissioner of Education when I say that we hope that the Office of Education, through my presence here, may in some small way be able to help you solve the problems that you face. As picked men, we know that you carry a very heavy responsibility. I hope that what I shall say will bear in some small measure upon the fulfillment of that responsibility.

Before we reach the question of the part which the Federal Government plays in our educational program in the United States, I think it might be worth while if we discuss a few things concerning the educational system of this country.

First, I think we should give consideration to the American philosophy of education--the place and function of education in our society. The American school system is the product of rather recent times. We generally say in education that the American school system is a product of nineteenth century intellectual optimism rather than of eighteenth century liberalism. Our public school system, and particularly our elementary school system, became generally prevalent in this country no earlier than about 1870, although we can find the roots of its growth much earlier than that. We have had secondary schools and colleges with us since colonial times. But our modern concept of education is of rather recent growth. It grew out of the philosophy of the last century and out of the need of the times.

The American people have committed themselves to the utilization of education as an instrument of national policy to a greater extent than any other nation in contemporary times. Some of our colleagues in England and in Europe believe it still to be an experiment. We do not think so. We are attempting to educate a larger percentage of our people than any other country in the world. We are attempting to do it in the elementary schools, in the secondary schools, and in higher education. I think we should keep those concepts in mind as we think about what part the Federal Government plays as a national government in the field of education.

Secondly, I would like for you to have some concept of the dimensions of the problem. The following chart gives the enrollment.

CHART 1

ENROLLMENT--PUBLIC AND PRIVATE SCHOOLS

Item	1949-1950	1953-1954	1959-1960
Elementary (K-8)	22,232,000	26,265,000	33,651,000
Secondary (9-12)	6,392,000	7,203,000	9,168,000
High school graduates	1,200,000	1,356,000	1,767,900
Higher education	2,659,000	2,444,000	2,853,000
First degrees	434,000	282,000	343,000

You see that this includes both public and private schools and at all levels. That gives you some idea of the scope of the program and of the dimensions of growth that can be expected.

For example, we had over 22 million pupils in elementary schools in 1949-50. In 1954-55 we have 26 million. In 1959-60 we will have 33 million. That is a line of growth that is remarkable. It shows that on the average we are taking in about 1,150,000 new elementary school pupils in our school system every year.

I think you can see the effect of the low birth rate of the thirties as we follow down through the growth in secondary and higher education. You will notice that in 1949-50 we had 6,392,000 in the secondary schools. We have only 7 million today, and we will reach only 9 million by 1959 and 1960. We have that lag because of the lower birth rate of the thirties and early forties.

Let us see what has happened in higher education. In the colleges and universities we had 2,659,000 in 1949 and 1950. It fell to 2,444,000 today, and is not expected to rise above 2,853,000 by 1959 and 1960. But by 1970 it will have doubled, and we can expect approximately 4.5 million in our colleges and universities by that time.

These additional figures give you some idea of the number of graduates we are producing. The high school graduates were 1,200,000 in 1949-50; 1,356,000 in 1953-54; and 1,767,900 in 1959-60. That line is very important, because it is from this group that we draw our students in higher education.

I have indicated here to some extent how many college graduates we can expect annually for the same selected years. It was 434,000 in 1949-50; 282,000 today; and 343,000 by 1959-60.

The strange character of this curve, of course, is accounted for by the fact that this represents the peak of graduation for the World War II veterans who returned to college. That is what caused this big hump in the curve. We won't continue to graduate such numbers. From this point we come back to a more normal curve.

It does indicate, and I intend it to indicate, that, despite these very large numbers going in, we still have very small numbers coming out at the end. We will come to it again at a later stage of the discussion. I want to call attention to that in relation to some other manpower problems that are affected by education.

I shall discuss a few more things about the scope and extent of the program. One of them is that education is big business. I think you can see from the number of people in this program that education is bound to be big business. There are 1.5 million people engaged in teaching and in administration at all levels in education. About 1.3 million of those are in the elementary and secondary school programs and about 200,000 faculty members and administrative and other personnel are in higher education.

The annual budget for the Nation for education is in round numbers 12.8 billion dollars. The sum of about 9.6 billion dollars of that amount is expended in the public and private elementary and secondary schools, and about 3.2 billion dollars in higher education.

That gives you some idea of the comparative size of education in relationship to other public activities. Compare it with the military, if you wish; or you can compare it with any other professional group, private or public. It is by far the largest group of professional people in the country. It is the largest group of employees in municipal, state, and other activities.

I also think we ought to keep fairly clearly in mind what kind of organization exists in the United States to accomplish the educational objectives that we referred to in the first problem which I delineated--that is, the reliance of the United States upon education as an instrument of national policy.

We do not have, as you know, a centralized educational program such as they have in France and most of the Continental countries. Education was not a prominent factor in the problems that our Revolutionary leaders faced. When our Constitution was written, education was scarcely mentioned. We had to presume it under the general welfare clause, and under the clause which states that all things not delineated in the Constitution as granted to the Federal Government are reserved to the states. So you can see why educators are constantly saying that education is a function of the states and communities and that it is not a function of the Federal Government. The constitutional authority and power to operate our schools resides in the states.

The Federal Government, however, since the very beginning of our time, had had an interest in education. In the Survey Ordinance of 1785 provision provides for the setting aside of public lands for education in the public land states. In the Ordinance of 1787 this same action was taken. In 1862 the Land-Grant College Acts were passed. In 1917 the National Vocational Education Acts were passed. We have therefore always found an interest on the part of the Federal Government in the educational program.

Chart 2, page 5, attempts to some extent to show what kind of interest the Federal Government has taken in education.

CHART 2

PROGRAMS OF ASSISTANCE TO SCHOOL SYSTEMS, INSTITUTIONS, OR INDIVIDUALS

1. Department of Health, Education and Welfare:

   Land-Grant College Acts.
   National Vocational Education Acts.
   School Assistance Programs.
   Research and Service Programs.
   Vocational Rehabilitation Program.
   Surplus Property Utilization Program.
   Research Grants and Fellowship Program in Health Professions.

2. Veterans Administration:

   Veterans Readjustment Assistance Acts. (Public Law 346 and Public Law 550)
   Veterans Vocational Rehabilitation Acts. (Public Law 16 and Public Law 894)

3. Department of Agriculture:

   Agricultural Extension Service.
   Agricultural Research and Experimental Program.
   School Lunch Program.

4. Department of State and Foreign Operations Administration:

   Educational Exchange Program.
   Occupied Areas Program.
   Technical Assistance Program.

5. Department of Labor:

   Apprenticeship Program.

It is somewhat difficult to show any consistency or any fairly delineated philosophy in the action that the Federal Government has taken vis-a-vis education throughout its existence. I think that, generally speaking, educators feel that the Federal Government's conception of education is a very good example of American pragmatism--that it solves specific problems at specific times and in specific ways. It doesn't propose to develop a complete system of education. It couldn't do so under our Constitution.

Let us take a look at some of these and see if we can find in them some exemplification of the various principles involved. I suggest that we think first of the Land-Grant College Act as one example.

Our colleges and universities came down from colonial times. They were largely modeled on the European and English models. The general concept of higher education in Europe was that it was education for the aristocracy. Our colleges were generally institutions of higher learning in the strictest sense of the word. They did not offer any natural or applied sciences. They had no engineering or other applied programs.

Throughout the first half of the nineteenth century there grew up, especially in the Midwestern States, tremendous pressure for the development of a new kind of higher education. It met with great resistance. The older universities clung to their traditional conception of higher education, and did not include any training for farmers or any training for artisans.

The time came when the people of the country, through their representation in the Central Government, considered it a problem which could not be allowed to wait upon the action of the states. So in the midst of our great Civil War we had the first Morrill Act passed, which established the nearest thing we have to a national system of education--that of the land-grant colleges.

These colleges, generally speaking, are colleges of agriculture and what were called the mechanical arts. All of you are familiar with them. They represent some of the greatest institutions in our country today. But, until this act was passed, we had nothing faintly resembling this form of education.

There is general agreement now that where the Federal Government has seen a national need, it has taken steps to fill it. It has not

done this through actually establishing these institutions itself. Rather, working through the states, it provided land grants, and subsequently funds, to stimulate the development of this great system of higher education.

The next program I have listed represents another approach that is very similar. Our secondary schools came down to us from colonial times. They were modeled on the old academies or Latin schools of the English type. They did not include in their own philosophy anything like vocational education. Again, in 1917, the Congress saw a national need which was not being met and apparently was not going to be met; and our great system of vocational education was established.

The money size of these programs is very small. The Federal Government puts only 5 million dollars into the land-grant program. It puts about 25 million dollars into vocational education below college grade. The states have demonstrated how effective the stimulus has been. They put in five dollars for every Federal dollar.

This next one is another type of program that we have with us today. For many years our Federal Government has had to use land for military training and for other purposes to a very great extent. Large populations have grown up on reservations. Property has been removed from the tax rolls. The Federal Government has stepped in and provided a program of assistance to offset this impact. In some years there has been as much as 250 million dollars spent for the functioning of those schools on lands that are a direct Federal responsibility. That again illustrates the principle that the Federal Government does not run any schools. Funds are given to the states for that purpose where the states are inherently unable to do it themselves.

Here is a program which fulfills another purpose. This illustrates again the principle that the Federal Government steps in where the states and local communities do not act. We have literally scores of thousands of handicapped people, who normally would make no contribution to their own support or that of the country. The Federal Government has stepped in with a program which has more than paid its way, by providing training and occupational opportunities for handicapped people.

This program is one of the interesting illustrations of how our concept of the place of education in the national scheme has changed. After World War II we had a great deal of surplus property left over

which was of very great value for education. The Surplus Property Utilization Act of 1944 provided for the donation of much of this property, including buildings and grounds, to educational institutions. Many of our colleges have secured necessary grounds and buildings in that way--by donation by the Federal Government since World War II. Part of that program was administered by our office. Without this donation by the Federal Government, many of our colleges and universities would have been unable to absorb the tremendous enrollment represented by the veterans who went to the colleges after World War II.

Here are two acts that are generally spoken of roughly as the G. I. Bill of Rights, with which most of you are thoroughly familiar. Again I call your attention to this because I think that represents a most complete change in the attitude of the American people toward education of any of the acts that you see on the board.

You will recall that in the previous wars that we have had we have always recognized our obligation to the returning veteran for the time he had lost from his work, from his occupation, from his business. We have generally tried to make up that loss by lump-sum payments or bonuses or some form of contribution of that sort. In the early wars they were given free land. That was done after the Revolution. Large parts of new states were populated by Revolutionary officers and soldiers. But again, representing the American people's feeling that it is through education that we have and are going to make the country great, we have expended untold billions to put some 7.5 million of the 15 million people who served in World War II through this program.

I don't think there is any better example than that of how the American people have felt the need for education, and how that has been recognized as an obligation of the Federal Government when it could not be done by the states. Only the United States Government could have accomplished that program. The Federal Government did not establish an educational system, but it provided the assistance necessary for the training of the individuals. It represents a Federal-State partnership.

Now, here is another approach to the concept of the utilization of education as an instrument of national policy. I refer to the foreign exchange program. The occupied areas program, and the technical assistance program, usually spoken of as Point Four, but now carried on by the FOA.

Our national policy has been that we want to help backward countries to help themselves. We have hit upon this approach, which assumes from our point of view that our educational program and our vocational and technical training are exportable; and that such countries as Greece, Ethiopia, Libya, even Turkey can profit most by being taught to help themselves, by learning how we do it. This, again, illustrates the concept of how we use education for our national purposes.

The subheads on chart 2 indicate groups of Federal activities. This is an arbitrary grouping that won't be found in any Bureau of the Budget document or any other. It is simply my way of trying to give you an idea of how we can divide these into a logical division from the standpoint of their impact. I have put in here groups of programs where the Government assists school systems, institutions, and individuals.

Now, the Federal Government, as I said, uses education for its own purposes. I have listed on chart 3, page 10, the programs of training that the Federal Government participates in for direct Federal purposes. Obviously, you can quarrel with some of these classifications. But by and large this is intended to indicate here the extent to which the Federal Government uses education.

Under the Department of Defense we have, first, the service academies and graduate schools. That is one of the prime representatives. Then you see Reserve Officer training, general and specialized service training, the United States Air Force Institute, and military research.

Under the National Science Foundation we have the research and fellowship program. Under the Department of State the training of foreign service personnel. Under the Department of Commerce the Merchant Marine Academy and maritime schools. Under the Treasury the Coast Guard Academy and schools. I list those merely to show you that the Federal Government has two kinds of approaches to the program of education.

Now I want to come back and tell you a few things about what the Office of Education does and what part it plays, and in a sense what part the Department of Health, Education and Welfare plays in this picture.

CHART 3

PROGRAMS FOR TRAINING OF FEDERAL PERSONNEL OR TO SUPPORT A DIRECT FEDERAL PURPOSE

1. Department of Defense:

   Service Academies and Advanced and Graduate Schools.
   Reserve Officer Training.
   General and Specialized Service Training.
   U.S.A.F.I.
   Military Research.

2. Atomic Energy Commission:

   Research and Fellowship Program.

3. National Science Foundation:

   Research and Fellowship Program.

4. Department of State:

   Training of Foreign Service Personnel.

5. Department of Commerce:

   Merchant Marine Academy and Maritime Schools.

6. Department of Treasury:

   Coast Guard Academy of Schools.

The Office of Education was established in 1867 largely as a research and statistical bureau. One of the other comparable functions of the Government is, let us say, the Bureau of Labor Statistics in the Department of Labor. The Office of Education was established because the people who were sponsoring education wanted to know what they were getting. So its primary or traditional function is that of providing national research, particularly statistical. We have been

doing that for nearly 90 years. It is published in documents, many of which you have been using here. We publish the "Biennial Survey of Education," which comes out in alternate years, or has since 1918.

That is the largest aspect of our work. On the other hand, we administer the land-grant college acts, the national vocational education acts, and the school assistance programs.

For the first time in our history, we now have authority to conduct joint research with colleges and universities and with the state school systems and city school systems. Congress, however, didn't give us any money; so we have to wait a little time before that one will go into effect. But, again, it illustrates the concept that the Federal Government stimulates education rather than runs it.

That, then, is a rundown of some of the kinds of things that we do that might be of help and interest to you.

We provide a complete annual survey of the enrollment of pupils at all levels--elementary, secondary, and higher--especially in the field of higher education. We publish every year an official and authoritative fall enrollment survey of the enrollment in higher education. We publish at the end of the year what is called "Earned Degrees Conferred by Higher Educational Institutions," which is a standard document for manpower use in determining how many and in what fields the universities produce graduates.

We produce a great variety of statistics in the field of finance and in the field of pupil costs or student costs. And we produce a great deal of material concerning the administrative program and the best practices in administration.

We do not produce a great deal of material for teacher use. That is left to the states and local communities. The Federal Government does not have a great deal to do with instruction. You will read that in nearly every one of these acts. Under "Administration" you will find a section which usually reads that "This act does not confer upon any Federal official authority over any state or local government."

But, be that as it may, the Office has grown substantially. In the partnership between the Federal Government and the states and local communities, the part which the Federal Government plays in that partnership is administered by the Office of Education.

The House Committee on Education and Health is studying the problem of how much of this ought to be put in one place. Very obviously, a lot of it could not possibly be put in the Office of Education. But at any rate, the mere fact that such a committee exists represents the growth of this concept that the Federal Government's responsibility for education is no longer one of hit or miss.

Just a word with regard to the cost of these programs. There is a wide variety of estimates of how much the Federal Government spends for education. The sum of about 3.5 billion dollars is as near an estimate as we can get.

Of course we can total up the cost in dollar values. But for some of these it is nearly impossible to separate the cost of education from the cost of some other operation. After all, I think that troop training is education. But to segregate the cost of education from other operations at the Infantry School, for instance, is very difficult.

We have never succeeded in putting a dollar value on this effort. But, at any rate, we usually estimate that the Federal Government, despite the fact that we do not operate any educational system and we do not run any schools, not even service schools, still is putting about 3.5 billion dollars into education a year. So it cannot be said that the Federal Government is not in education.

I would like to talk for a moment about some of the problems that we face in American education and try to bring before you some of the things we think you will be concerned with, leaving you to judge whether or not the Federal Government can, should, or will ultimately have to take part in some of these programs.

I would like to divide that into about three things. First is the problem of servicing the load.

You will observe that our elementary school program is growing at the rate of 1,150,000 pupils a year. In order to bring those children into schools, it is estimated that we will require 50,000 new teachers each year, merely to meet that additional increase. It will take a total of 125,000 new teachers each year to cover the increase and to replace those who retire or die or are separated for other reasons.

It is estimated that it will cost our Nation 28 billion dollars, on the basis of present costs per square foot of school buildings, to

erase the backlog and care for the growing needs during the next 5 years. We are not including the additional cost that will be incurred when those pupils get into secondary schools and into higher education. We are spending about 1.7 billion on new construction. We estimate that it will take more than three times that amount to complete the schools, or 5.5 billion dollars a year. We must step it up some way.

I think those two things represent probably the greatest problem we have. The states, according to our present view, must pay for this. But let us keep in mind that the ability to pay is widely varying. Take two states as examples--Mississippi and New York--I believe that the average annual expenditure per pupil in the public elementary and secondary schools is about $247. Mississippi spends $103 and New York $356. But Mississippi had a per capita income of, I think, for 1953, $834. New York had a per capita income of $2,158 for the same year.

That is not the whole story. Mississippi has 266 children per thousand of population and New York has 170. That gives you some idea of the extremes in both ability to pay for an educational program and the load that must be carried.

In the light of the mobility of our population today, and the fact that the military will take boys from Mississippi and put them into all units, wherever they may be--and that you will find people from Mississippi all over the United States--it is something of a problem to know what to do in meeting this great need. I think you should keep before you, not just how much of a national problem this represents, but also what the Federal Government's part in it is going to be.

I would like now to turn to the second of these problems. We might call this the problem of meeting unfulfilled possibilities. Let us put down a few specifics under that.

May we turn again to the first chart for a moment. I think by following this down, you get a rough idea of the birth rate. We have virtually all the children in school under our compulsory system. We have about 815 out of every thousand children in our elementary schools. But in 1950 we graduated only 63 percent of the youngsters who entered high school in the ninth grade. When it came to the twelfth grade, we had only about 5 out of 8 left.

We are improving that performance very rapidly. In June of this year we will graduate 66.3 percent of those who entered in the ninth

grade. In other words, we will graduate 663 out of every thousand who entered high school.

However, that picture is somewhat distorted. I myself have spent the last few weeks working on a problem involving the losses of brilliant pupils from the secondary school population. On the basis of the best estimates we can gather today, 50 percent of the top quarter of high school graduates do not go to college; and a number equal to about half that, who are of the same ability, do not graduate from high school. In other words, taking this age group, it runs about 250,000 pupils in the top quarter who do not go to college; and about 100,000 of equal ability do not even get out of high school. From the standpoint of the purposes which our educational program is intended to service, that, I think, is one of the most serious problems that we have before us.

I would like to remind you that these problems should be thought of in terms of our manpower pool, a thing which I think most of you know a great deal more about than I do. But I would like to point out to you that in 1940, when we had a population of 130 million, we produced about 2.5 million 18-year-olds each year. Today when we have a population of 160 million, we have only about 2.2 million 18-year-olds. In 1960 it is estimated that our population will be about 175 million, but we will only have reached the same number of 18-year-olds that we had in 1940--2.5 million.

In the light of the problem which we now face in the world, we in education think that we cannot afford to lose one able pupil, one able student. We will within a few years have returned to a manpower situation which is comparable to that of other countries in the world which may be regarded as somewhat equal with us in power and strength. But for the moment we have only about half that number. From the standpoint of education, we simply must step up our ability to reach these brilliant and able people and see that they are trained for the highest possible job for which they are capable. I don't wish to stress that beyond our other concept--that education exists to improve the intellect and training for citizenship. But, after all, it is out of this pool that we are going to get our officers and our trained men for the armed services, for our professions, for our technical and scientific programs, and for our leadership in general. If this trend keeps up, our shortage of trained people in the next 20 years will be very great. That is not to say that we will have underemployment or unemployment. It is not related to that. It is related to the source of numbers of highly trained manpower.

There are some other aspects of this particular problem that I think are worthy of consideration. I am going to discuss this purely on the basis of quantity. We have large groups of our population who are not receiving training to the same extent as other groups. Some of our immigrant population in our great cities are obviously undertrained. Our rural population as a whole is undertrained compared to the urban.

One of the great bodies of our population which is undertrained is the Negro. There is no question but that this group is not contributing in terms of its numbers in anything like the same proportion at the higher levels of occupation and profession as other groups of population.

Another area that is obviously definitely undertrained, particularly in higher education, is that of women. Only about one-third as many girls are in college as boys, despite the fact that more girls graduate from high school than do boys.

This is also a matter of regions. We have certain regions of our country that are worse off than others. In the Middle West and the Far West the educational level of the population is higher than in the South.

Now, there is a third problem. Obviously, this is a problem primarily of the professional educators but it is worthy of citizen interest, too. How do we upgrade our teaching staff to provide improved instruction? We must have a better teaching corps year by year. We have to improve our instruction materials. We have to do the job faster and better.

That looms very importantly to us. Let me take a few examples to show what it means to all of us. Let us take a doctor. When he graduates as a young man from high school at age 18, he must first contemplate four years of college--87 percent of the people who enter medical school have a bachelor's degree, although some have only three years of college. You might as well say that the young man preparing for medical school must spend four years in college and then four years in medical school. If he is 18 when he graduates from high school, he enters medical school at 22 and gets out at 26.

At one time the medical profession was satisfied with one year of internship and he could enter the practice. But that is no longer

true. Now they require two years of internship, or one year of that plus one year's residency. So he is at best 27. But he usually spends three years in further preparation. So the young man is 29 years of age before he begins to practice medicine and rear a family. Sociologists regard this as presenting extreme difficulty.

The same thing is true in the case of an engineer. The engineering curriculum is tremendously crowded. Take a look at any of the curricula. You wonder how any one man can complete it in four years. Most of the time an engineer is going to spend five years at it.

If you were a dean of engineering, obviously you would want on your faculty not only an electrical engineer, but one in the whole new body of electronics, which has been introduced into the electrical engineering curriculum. Another aspect is that in the field of physics at the college level you have the whole field of atomic physics that now has to be introduced into the curriculum, plus the physics that we learned when we were undergraduates. Considering the time element and the demands of our civilization, retarding the age at which a man can enter his profession has certainly introduced a tremendous problem.

Now, I bring this out because these things are related in our minds very much to the responsibilities and activities in which the Federal Government ought to engage. I hesitate to say too much about them, because I am not a policymaking official. I am only pointing out possibilities and trends.

There is no question but that, both in the legislative branch and the executive, this responsibility is recognized. As you know there was passed in the last Congress a bill which provided for a series of state conferences on education, to culminate in a great White House conference approximately one year from now, in which it is expected that state by state careful study will be given to most of the problems I have talked about here this morning.

This great White House conference will supply something we have never had before; that is, a thorough and complete citizen's look at education. Obviously, some stocktaking will be done. It will thus become known that in this mammoth Nation we do attack this kind of problem.

Committees of the two branches of Congress have a great deal to do with this. The two principal ones are subcommittees of the House

and Senate committees on education and labor. I think every member of those two committees is constantly at work studying and thinking on this problem. As you know, some bills were introduced to solve some of these problems. They did not get passed, but it represents the trend of the times and the approach that is being taken. There are two subcommittees of the House Committee on Education and Labor that are now studying the problem.

COLONEL PRICE: Gentlemen, Mr. Flynt is ready for your questions.

QUESTION: The part of the chart for which I would like to put in a plug for the Department of the Army is that portion about the Occupied Areas Program. Putting that under the Department of State and FOA is improper.

The Occupied Areas Program was in Japan primarily. The Army brought about 800 students to the United States during that period. The State Department took over in April 1952. Prior to that time we had the Occupied Areas Program.

I was reading one of the mobilization assignments published by this college, and one of the committees makes the statement that the Navy's V-12 program and the Army's ASTP program are a noneconomic use of military manpower under a total mobilization concept. Will you comment on that, please?

MR. FLYNT: I have not been unaware of that program, as the Office of Education has participated in it. I feel that a very fine job was done in the leaders' program. Certainly in Japan and Germany there are great bodies of people who understand American education in a way that they didn't before. On 1 July 1954 this program was removed from the Office of Education and turned over to a private agency--the American Council on Education.

Regarding your question about the Navy V-12 and the Army ASTP in connection with the use of military manpower, you shouldn't ask an educator that. My observation is that the Navy V-12 program, covering such things as medicine, dentistry, and engineering, was almost interchangeable with the civilian programs. On the question of whether you would be able to absorb at that time any large body of that manpower in your combat forces, it depends on what your needs are for that kind of training.

The Army ASTP program is of an entirely different character. It has been said that the services were using as a standby program, a manpower-holding program. No doubt it was of very great value. But I am afraid that a conclusive answer to that part of your question is not one that I can give.

QUESTION: On chart 1 it shows roughly a 25 percent fallout from your high schools, not the 60 percent that you pointed out, of the high school graduates going into higher education. If you get a 30 percent fallout in the freshman year, you would get seven-twelfths of your higher educational requirement. What do you propose to put into higher education?

MR. FLYNT: I don't think you should read this chart from upper left to lower right.

QUESTION: I didn't.

MR. FLYNT: There is a certain wastage each year. But, to answer your question directly, we are doing a better and better job every year holding people in the schools.

I think your question can be answered somewhat in this fashion: What is the level of training that is required for our specialized occupations, our technical occupations, and our professions? What is the minimum level of training that a citizen needs to complete it successfully and do his job well? The answer to that is that there is also no upper limit on the numbers that should be drawn into secondary education and higher education.

Now, we are barely able to produce enough trained manpower with this enrollment. If you bring up the question of wastage in college, something like 50 percent of the people who come into college drop out before they graduate.

I think the total numbers that we draw above the elementary school education are related to the tasks to be done. Certainly we might agree that no one with less than a high school education would be satisfactory for higher training today.

QUESTION: In anticipation of our future mobilization requirements in education, the requirements in 1960, coupling that with the background you brought out of the dropout, is there any program being considered of a screening process in the secondary schools to steer some

MR. FLYNT: Of course, we have counseling and guidance services. We have psychological tests. We know, too, that our ability to advise people to go into the area of their greatest accomplishment has developed very rapidly.

I think that taking the country as a whole, small high schools and large high schools, we would still have to regard it as unsatisfactory. There is no overall system, no automatic system. It depends entirely upon the student advisory services in the high schools. That is obviously good in the big ones and generally poor in the small ones.

High school graduates divide up about this way: Of the high school graduates about 35 percent go to college. About 20 percent go into skilled trades for which they receive some kind of vocational training in high school. The number that goes into apprencticeship is comparatively very small. The program has never reached great numbers in this country.

That is about 55 percent. The other 45 percent generally goes into sales work and other general types of occupations, for which no specialized training is required.

We have a great problem with the curriculum in our American secondary schools. In the United States we have come to believe that we ought to have a single vertical line in the growth of education. We have not differentiated our secondary schools.

In England they have three kinds of high schools, in France several kinds, and in Germany several kinds. They are all specialized. Some give technical and scientific courses, some literary courses, and some vocational courses. Some lead to the university and some don't. There is an absolute cutoff point at age 12, by examination. We have never been willing to accept that in our educational program. We think we should allow each individual to go as far as he can. We never interpose a point at which we say, "You absolutely can't go any further." Even the poorest high school graduate gets some encouragement to go further.

The problem of how to run an undifferentiated secondary school is a very difficult one. There are conservative educators who believe that we might as well break down and divide our high schools up, and separate them into vocational institutions and college-preparatory institutions. But the prevailing thinking, both civic and professional,

is against it. We think back to the small communities and realize that we would not be able to support both kinds of high schools in a small community.

QUESTION: Whenever educational statistics are quoted, they always look pretty bad. But I still think we are getting a pretty good education.

You stated that education in the West is two grades better than in the South. What does this show as to the low cost for the white population; and is this by necessity or by choice?

MR. FLYNT: Of course, the large Negro population pulls the average down somewhat in the South.

I don't know what you mean by "necessity or choice." Certainly we have to consider that the presence of a large body of Negroes at a very low educational level pulls down the general average. I don't recall what the level of education of whites in the South is, but it is not as high as in the West and East.

Your question mentioned lower cost in some of the states. I would like to make a point about that. When you talk about lower cost, you are referring to lower salaries for teachers since this item is 70 percent of current operating costs of schools. I don't think we can accept the idea that there ought to be any differentiation in salaries between the different areas. I don't think that teachers in the South ought to be paid any less than elsewhere. I am not willing to accept low-cost education at the expense of teachers' salaries.

QUESTION: You mentioned the views of educators about increasing the percentage of the population enrolled in the colleges. Will you comment upon the view, held in some circles, that we have too many people in colleges?

MR. FLYNT: There are all sorts of views, professional and otherwise, about how many people ought to be educated. There was a time in our country when we held the same views about higher education that the secondary school educators have held in some European countries--that education is an aristocratic privilege. It was held in the eighteenth century that education is a privilege of the gentry.

I think a gentleman is entitled to an education, but education for all is a social necessity. I have been speaking this morning from the standpoint of education as it pertains to manpower and the development of the population our concept in the United States is that every man ought to be given an opportuntiy to prepare himself on the basis of his highest level of ability, measured by whatever instruments we use to measure that by.

By and large, we have not made it possible for our population to develop the individual in terms of his own enjoyment as a citizen and as a person until we have given him an opportunity to bring his general education up to the highest level that his own intelligence quotient will permit. I think also that we have not reached the highest number of people who can be trained in the specialized occupations and professions until we have again enabled every man to be trained to the highest level which he can expect to reach.

Now, obviously, there is a ceiling somewhere. We cannot go on forever educating a larger and larger percentage of the people in colleges or in secondary schools, because, obviously, the intellectual level of the population doesn't change to a very great extent. We have no particular reason to believe that the percentage of brilliant people in the population is any higher now than it was in Greece 3,000 years ago. Man has not changed very much in 3,000 years in basic intelligence. So someday there will be a limit on the number of men that we can profitably put in higher education.

The only estimate I know about of the number of persons who might be put through higher education is one made some six years ago, which indicated that some 4 million people, on the basis of the population estimates then prevailing, were capable of finishing two years of college.

Obviously, there is a ceiling on the capacity of each individual to receive training. I think we should go forward until we reach that ceiling for each individual.

QUESTION: You indicated some concern about quality as against quantity in American education. I notice that the European schools do a much better job in turning out more qualified persons, from both the secondary and the primary schools. Have there been any test run to prove or disprove that belief?

MR. FLYNT: We have no international body of data, but we generally have a good deal of comparative data.

I think the instruction in the first six grades in our school systems in the United States is as good as any in the world elsewhere, if not better. I think we can be very proud of our elementary schools, both private and public.

I don't think we have any real basis for comparing the average European student with the United States student. Most Europeans and our British colleagues feel that they have a superior type of education. I submit, however, that at age 12, if you force every boy to take a qualifying examination, and then go up to a certain point and allow no one to go further, it means that you have to select your students at a very early age. Let us get this down to one country. Let us take England. We had in higher education, in both private and public schools, something on the order of 2,444,000 students enrolled last year. The British had 120,000. We have a population roughly three times the population of England. But if they had the same proportion of people in higher education that we had, you can see quickly how many they must have. They had only a fraction of the number of people in the secondary schools that we had. They were all highly selected.

We are not trying to do the same thing. If you were to take half a million of our best college students, found in our best colleges and universities, I am convinced that they would be as good college students as Europe can produce. But whey they take a pupil at age 12, as the French do, and exclude him from all outside activities, make that student study 12 or 14 hours a day, at age 18 you have produced a youngster that is the equivalent of our college students. So in that respect he is superior. But that is for the French.

QUESTION: We have some information from a previous speaker that Russia is graduating twice as many with engineering and scientific degrees as we are today. Would you like to comment on that?

MR. FLYNT: I am not an authority on Russian education. It is true that they have greatly expanded both their full professional engineering program and also their technical institute types of programs. Certainly on the second type of program, that is, roughly two years, in the technical institutes, they have expanded that far beyond what we have. I think we have to balance this with the fact that with the Russians, who have not the machinery to train with and the occupational

experience that our youth have had, the level of training has to start a little further back.

QUESTION: What is your view of the quality of the first six grades in our education as compared with other countries, including the progressive type?

MR. FLYNT: I don't think you can any longer differentiate between what is progressive and what is not progressive. The influence that modern psychological knowledge has had on our methods has permeated even the most conservative school system. The modern elementary school program in the United States is our most mature professional program. It is no longer experimental now. The struggles between progressive education and conservative education, as far as I can see, are really over now. The extremists on both sides have modified their views. I am not an authority on elementary school education; but by and large, it has pretty well averaged itself out. There is a tendency for all extremists to drive way out ahead in any program. Their influence has been felt. We have pretty generally throughout the country adopted those aspects of it that would work, that successfully fitted into and did not completely disrupt our traditional program.

QUESTION: You gave us the current figures on teacher demand. Perhaps I missed your figures on new teacher supply. What is the prospective trend in the immediate future?

MR. FLYNT: I believe I said that we need about 125,000 new teachers a year, and that about 50,000 of that number will be required to staff our increase in pupil load. I have a rundown of this here that I can give you quickly.

The expected supply of elementary teachers for this particular year, 1954-55, is 45,000 new teachers, trained in the colleges as against the need for 50,000 new teachers for increased enrollments, alone. The statistics at hand generally indicate that 4 out of every 10 of those can be expected to enter some other field. So we are not going to get all of those who are enrolled in departments of education in liberal arts colleges or in separate teaching colleges. The shortage of elementary teachers, including replacements for teachers leaving the profession, is approximately 125,000.

COLONEL PRICE: Mr. Flynt, thank you again for coming over and giving us this information on the educational system. We are very glad to have you with us.

(16 Nov 1954--750)S/sgh

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