

# ECONOMIC EDUCATION

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HEARINGS  
BEFORE THE  
SUBCOMMITTEE ON ECONOMIC PROGRESS  
OF THE  
JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES  
NINETIETH CONGRESS  
FIRST SESSION  
PURSUANT TO  
S. Res. 316, 89th Cong., 2d Sess.

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APRIL 14, 17, AND 21, 1967

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VOLUME I

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# ECONOMIC EDUCATION

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FRIDAY, APRIL 14, 1967

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON ECONOMIC PROGRESS  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The Subcommittee on Economic Progress of the Joint Economic Committee met at 10 a.m., pursuant to notice, in room S-407, the Capitol, Hon. Wright Patman (chairman of the subcommittee) presiding.

Present: Representatives Patman and Moorhead.

Also present: John R. Stark, executive director, and James W. Knowles, director of research.

Chairman PATMAN. The subcommittee will please come to order.

Today the Subcommittee on Economic Progress begins its hearings on economic education, which we are conducting pursuant to Senate Resolution 316 (89th Cong., second sess.), which was submitted to the Senate by the Honorable Russell B. Long, the distinguished Senator from Louisiana, and the majority whip of the Senate.

The resolution, which will be made a part of the record at the end of these opening remarks, requests the Joint Economic Committee to make a detailed study of the adequacy and objectivity of practices of economic education at all levels, including adult education, and to make findings and recommendations.

The committee has welcomed this opportunity to hold hearings on the status of economic education in this country. Education and its relevance to the duties placed upon us by the Employment Act have long been a matter of great concern to us.

The Joint Economic Committee and its subcommittees have several times gone into matters of education, the latest time being last year when we held hearings and made a report on the relationship of technology to education. I recall only too vividly the impression made upon us all by testimony in connection with our study that this subcommittee conducted back in the 84th Congress, in 1955. At that time we had ample evidence, for example, that in Russia the training of professional engineers was nearly twice as fast as in this country, and that they were training technicians 30 or 40 times as fast as we were.

This was very significant to our problem of continuing technological advancement, and its importance was stressed to the subcommittee by the president of the Carnegie Institution of Washington, Dr. Vannevar Bush, who summed up the problem in these words:

We already have a shortage in this country of skilled men of various sorts. We also have a shortage of engineers and scientists. And not enough men are entering these fields. It has been brought out in these hearings that Russia is in some ways doing a better job in this regard than we are; they are certainly training

more scientists and engineers. (Joint Economic Committee, Subcommittee on Economic Stabilization, Hearings on Automation and Technological Change, 84th Cong., first Sess., p. 616.)

I believe that the attention we called to this problem had a very substantial bearing on subsequent efforts which led to improvements in the training of personnel in this country.

It is, therefore, with great interest and enthusiasm that we turn in these hearings, to the subject of economic education, at the request of the Senate, under the urging of Senator Long.

The committee hopes that these hearings will enable us to determine the extent of and the need for education in economics, and determine the reasons for this need. We will review present programs in this field as well as the Federal Government's programs that have some impact on improving economic education. We shall also attempt to determine whether the Federal Government should increase its own efforts in this field, and, if so, in what manner.

(Chairman Patman's announcement of the hearings and witnesses who are scheduled to appear, follows:)

CONGRESS OF THE UNITED STATES, JOINT ECONOMIC COMMITTEE

REPRESENTATIVE PATMAN ANNOUNCES HEARINGS ON ECONOMIC EDUCATION

Representative Wright Patman (D., Tex.), Chairman of the Subcommittee on Economic Progress, today announced that his Subcommittee will hold three days of hearings—April 14, 17 and 21—on Economic Education, which will review the teaching of economics in the United States, pursuant to Senate Resolution 316 (89th Cong., 2d Sess.), submitted by Senator Russell B. Long (D., La.), on October 19, 1966, which was considered and agreed to. It states:

\* \* \* \* \*

*“Resolved, That it is the sense of the Senate that the Joint Economic Committee . . . as a part of its continuing responsibility for study of matters relating to the Economic Report should (1) conduct a detailed study of the adequacy of practices in economic education followed at all school levels and in adult training; and (2) make findings and recommendations on the adequacy and objectivity of any curriculum relating to economic practices, leadership, and forces, and on the necessity and feasibility of large-scale Federal and private aid aimed at improving the skills of teachers and school administrators in the use of new technology for the dissemination of economic understanding at all levels, including adult education.”*

Representative Patman said that the objectives of the Subcommittee's hearings are four-fold: (1) to determine the reasons for and the extent of the need for economic education; (2) to review present programs to upgrade economic education at the State, local, and classroom levels; (3) to review the Federal Government's supportive programs in economic education; and (4) to determine whether the Federal Government should increase its efforts in this field, including support for private organizations which have demonstrated their ability to improve economic education. A schedule of the hearings is attached.

CONGRESS OF THE UNITED STATES, JOINT ECONOMIC COMMITTEE, SUBCOMMITTEE ON ECONOMIC PROGRESS

REVISED SCHEDULE OF HEARINGS, ECONOMIC EDUCATION IN THE UNITED STATES, APRIL 14, 17, AND 21

FRIDAY, APRIL 14, 10:00 A.M., ROOM AE-1, THE CAPITOL (ATOMIC ENERGY ROOM)

*The National Need for Economic Education*

Senator Russell B. Long, United States Senate.

Representative Wilbur D. Mills, United States House of Representatives.

James S. Duesenberry, Member, Council of Economic Advisers.

MONDAY, APRIL 17, 10:00 A.M., ROOM AE-1, THE CAPITOL

*The Community Views the Importance of Economic Education*

Business: Marvin Bower, Managing Director, McKinsey & Co., Inc., New York.

Labor: Nathaniel Goldfinger, Director of Research, American Federation of Labor and Congress of Industrial Organizations.

Agriculture: W. E. Hamilton, Director of Research, American Farm Bureau Federation.

Academic: Lawrence Scenesh, Professor of Economics, Purdue University.

FRIDAY, APRIL 21, 10:00 A.M., ROOM AE-1, THE CAPITOL

*Economic Education Programs*

National Programs: M. L. Frankel, President, Joint Council on Economic Education.

State Programs: Leon M. Schur, Director, Wisconsin Council on Economic Education.

School Systems: Lyle Stewart, Assistant Superintendent, Seattle, Washington, Public Schools.

Classroom Instruction: Mrs. Vincent Patrick, Coordinator of Economic Education, Tulsa, Oklahoma, Public Schools.

Adult Education: Eugene I. Johnson, Executive Director, Adult Education Association of the U.S.A. (represented by Hugh G. Pyle, assistant director).

FRIDAY, APRIL 21, 2:00 P.M., ROOM AE-1, THE CAPITOL

*Federal Government Programs in Economic Education*

Harold Howe II, U.S. Commissioner of Education, Department of Health, Education, and Welfare.

John T. Wilson, Deputy Director, National Science Foundation.

Chairman PATMAN. In these first days of the hearings we will have the benefit of a number of distinguished witnesses. On this, the first morning, we are particularly fortunate.

We have with us the distinguished sponsor of the resolution, the Honorable Russell B. Long, who will be our opening witness. He will be followed by the distinguished chairman of the Ways and Means Committee of the House of Representatives, the Honorable Wilbur D. Mills, Congressman from Arkansas. Our third, and final witness of the morning, will be a distinguished member of the Council of Economic Advisers, Dr. James S. Duesenberry.

Senator Long, it is a pleasure to have you with us this morning, and we look forward to having the benefit of your analysis and suggestions.

(Senate Resolution 316 is reprinted herein:)

[S. RES. 316, 89th Cong., second sess.]

RESOLUTION

Whereas a widespread understanding of the operations and problems of the American economic system is essential if our people are to meet their responsibilities as citizens, voters, and participants in a basically private enterprise economy; and

Whereas the successful operation of the Employment Act of 1946 depends upon a widespread understanding of the implications of taxation, government spending, monetary measures, employment, unemployment, and proper price, wage, and profit decisions: Now, therefore, be it

*Resolved*, That it is the sense of the Senate that the Joint Economic Committee, or any duly authorized subcommittee thereof, as a part of its continuing responsibility for study of matters relating to the Economic Report should (1) conduct a detailed study of the adequacy of practices in economic education followed at all school levels and in adult training; and (2) make findings and recommendations on the adequacy and objectivity of any curriculum relating to economic practices,

leadership, and forces, and on the necessity and feasibility of large-scale Federal and private aid aimed at improving the skills of teachers and school administrators in the use of new technology for the dissemination of economic understanding at all levels, including adult education.

**STATEMENT OF HON. RUSSELL B. LONG, A U.S. SENATOR  
FROM THE STATE OF LOUISIANA**

Senator LONG. Thank you, Mr. Chairman. Permit me to say in the beginning it is a great honor to appear before you and before your committee. I have been one of your admirers since the first day I heard the name Wright Patman, when I was a boy, and everything I have learned about you, Mr. Chairman, since that date has caused my admiration and respect for you to grow. I am proud to be a neighbor of your district. I was not sure for a while whether you came from Arkansas or Texas, but in either event, they have a very great man looking after their business for them. And I am just proud to be before you.

While we are looking at the Arkansas, Louisiana, Texas corner, may I say I am proud to have Wilbur Mills sitting behind me, because my impression is that he also is one of the great statesmen of all time in Congress. I am very proud of our part of the country, that it has produced statesmen of your caliber and the caliber of Wilbur Mills.

Now, Mr. Chairman—Senate Resolution 316 recognizes the importance of economic education to our citizens, and calls upon this committee to determine whether current efforts are adequate, and whether they can be improved.

As our Government has grown in importance in the economy, a knowledge of economics has become important to those citizens who strive to make intelligent decisions on matters of taxation and expenditure. Virtually all the Government's operations affect the economy in some way. As chairman of the Senate Finance Committee, I find that it is difficult to trace all the economic effects of proposals for taxes and expenditures. And if it is difficult for those of us who work with these matters from day to day, how much more difficult is it then for those of our citizens who cannot devote much time to these matters and yet who strive to make informed decisions on matters of economic policy? Yet unless they can reach informed decisions they cannot meet their responsibilities as citizens and voters. Furthermore, a knowledge of how the economy works is essential for those who would participate successfully in our free enterprise economy.

Economic education is also important if we are to live up to the mandate of the Employment Act of 1946. That act, as the members of this committee well know, declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means to coordinate and utilize its plans, functions, and resources to create and maintain conditions under which employment opportunities will be afforded for all those who seek work and to promote maximum employment, production, and purchasing power. Clearly, the pursuit of these aims requires a widespread understanding of the implications of taxation, Government spending, monetary policy, and other measures as they affect our free enterprise economy. This understanding is essential not only to Members of Congress but also to the voters. For unless Members of Congress receive support from the voters, they cannot pursue appropriate economic policies.

I would like to give one or two concrete examples at this point which demonstrate the high level of economic education required today for those who seek to understand Government policy. Three years ago, the Congress approved the Revenue Act of 1964. This legislation reduced taxes by over \$11 billion at a time when the budget was in deficit. The proposal was made and approved because we were convinced that the domestic economy was being dragged down by excessive tax rates that were a carryover from previous periods of wartime. We were convinced that the private economy would surge ahead when it was freed from the restraints imposed by tax rates that were too high. We were also convinced that the prosperity which would result from the tax reduction would eventually bring in enough revenue to balance the budget.

I believe the events since 1964 have proved that we were right.

May I say, Mr. Chairman, it might look as though I was wrong about balancing the budget, but had not the Vietnam war—a life-and-death struggle with the Communist effort to take over the world—broken out we probably would have a budget surplus right now which could be attributed to the wise economic policies that we adopted in 1964. Furthermore, since the economy would have reached full employment levels, the budget would not only be balanced but would have a surplus. We would probably be cutting taxes again if it were not for the war in Vietnam.

When the 1964 legislation was considered, Members of Congress received mail from constituents who did not believe the tax reduction would do anything except place the Government deeper in debt. Even though many of those who wrote such letters were not well informed on economic matters, it was difficult for Members of Congress to vote in opposition to this indication of constituent opinion.

I am sure that we will face even more complex economic issues in the future. If we are to make the proper decisions, it is important that our constituents understand the reasoning behind the proposals so that they can make an informed critical analysis.

To take another example, last fall the Congress approved the suspension of the investment credit. The suspension was not approved because Members of Congress were opposed to the credit as a permanent part of our tax system. Rather, the suspension was motivated by a desire to check inflationary pressures in a key sector of the economy. There was considerable debate on the merits of this legislation. To follow this debate and reach an informed conclusion required an understanding of the nature and causes of inflation, knowledge of the role of business investment spending in the economy, and an appreciation of the relative merits of alternative policies.

And may I say, Mr. Chairman, a lot of big plants are under construction along the Mississippi River between Baton Rouge and New Orleans, and also some in Shreveport, as you are well aware. At the time, it was hard to explain to the laboring men down there why we suspended the investment credit. They thought that it might slow down the construction of new plants and cause some of them to lose their jobs. It took quite a while to explain we wanted to get the interest rates down to a lower level, and protect the purchasing power of the dollar, and wanted to have some money available for a workingman to buy a home, and take them out of the trailer camps. It took quite a bit of explaining, especially since those men knew very little about economics.



Today, the Congress is considering the restoration of this very same investment credit. To voters ignorant of economic affairs, the proposal probably seems incomprehensible. The restoration is proposed, of course, because the economic conditions which necessitated the original suspension have abated.

These few illustrations point out, I think, how important a knowledge of economic affairs is for today's voters.

I am concerned that the level of economic education provided most of our citizens is not adequate in the face of the need. Recently the Committee on Education of the American Economic Association gathered information on this subject. On the basis of this information, Professors Bach and Saunders concluded that fully 80 to 90 percent of today's high school graduates do not take a course in economics. Since only a minority of the high school graduates go on to college and only a fraction of the college students take economic courses, this means that most high school students gain their knowledge of economics from courses in civics or the principles of democracy, if they get any at all. Instruction in economics is concentrated at the college level and therefore reaches only a small percentage of our citizens. This is a matter of concern to me.

I feel certain that when the committee has completed its investigation it will make useful recommendations regarding the adequacy of curriculums relating to economic practices, leadership, and forces. I would also hope the committee would make recommendations on the necessity and feasibility of large-scale Federal and private aid to improve the skills of teachers and school administrators in the area of economic understanding.

I would like to commend the work of the Joint Council on Economic Education to the members of this committee as they study this problem. To my knowledge, the Joint Council is the only national organization working to improve economic literacy in the United States which enjoys close ties with many educational and professional associations. The Joint Council is composed of affiliated State councils which enlist the voluntary aid of local citizens to improve the level of economic education. The council currently emphasizes programs for high school teachers. This endeavor offers the greatest promise of reaching the largest number of our citizens. The Joint Council is supported by the voluntary contributions of a large number of corporations and other organizations.

One question that will face this committee is whether or not the unsupported efforts of groups such as the Joint Council will be sufficient to meet the need for improved economic education. If it is the judgment of this committee that their efforts must be supplemented, I know it will make useful recommendations as to the nature of such supplements. If you decide that current voluntary efforts are sufficient, the efforts of this committee will, in any case, provide an important stimulus to those voluntary efforts.

I thank you very much, Mr. Chairman, for the opportunity to appear before this committee.

Chairman PATMAN. Thank you, Senator Long. We appreciate your coming.

Congressman Moorhead wanted to ask you a question.

Representative MOORHEAD. Senator, I first want to commend you on this resolution. I know when I came to Congress, the greatest

lack in my own education was in the field of economics, and the only consolation I took from my lack was that it seemed to be a lack that was shared by other Members. And I know one of the things I did when I went back home was to get together a group of economists from the universities and from labor unions and from the banks, to advise me—and I have such a committee that I meet with on an irregular basis. So I certainly share your concern for the Members of Congress and for the people.

Senator, I think that in your very key position as first a member and now chairman of the Senate Finance Committee, that I would like to ask you—what do you think of the economic record of this administration and its immediate predecessor? As I recall, in late 1960 and early 1961 we were in a recession. But I think the record since then has been a rather good one. Don't you think?

Senator LONG. We have enjoyed the longest continuous economic upturn that has ever been recorded in American history with the exception of the World War II period. In other words, since February 1961, we have had a steady increase. The economy has leveled off a little bit once in a while, but it has never taken a dip—it has been headed steadily up. This speaks very well for the economic policies of this administration.

As you know, we had three recessions in the previous administration. And I am sure that President Eisenhower did everything he could to recommend policies that he thought would avoid that result. If you look at the debate at the time of those three recessions, you will see that your chairman, Congressman Patman, Leon Keyserling, and a few others of us warned that policies of tight money and high interest rates were going to lead to just exactly the events that occurred.

I will say that while I have not particularly approved of the level of interest rates during this administration—I may have been very outspoken about that—the policies to achieve full employment have, I think, been extremely well handled. Using the tax system to stimulate the economy has been extremely effective. And a few subsidies where we thought it was necessary have been very effective. So I would say on balance it is clear that economic policies have been very well handled. Steady growth has been maintained for 6 continuous years, and we have averaged an annual gain after inflation of well over 4 percent a year.

Now, people like to talk about inflation and criticize it.

The workingman says, "I am against inflation. How about a pay raise? Yes; I am for a pay raise."

Somebody has to explain all this to him. If you are going to get that big pay raise, the other man has to have a pay raise, and that is going to increase the cost of the product. And that farmer over there, who is worse off than you are, he will have to get more for his labor. In the last analysis, the only way you are going to get a real pay raise is to produce more than you are producing and for him to produce more than he is producing. And in order to do that, and make all these wheels mesh and turn together, you may have to tolerate some price increases. "It might be to your advantage if we can double your income to accept 1-, 2-, or 3-percent inflation while we double your income."

But how does the workingman know whether to vote to support that policy or not at the polls if he hasn't been taught something about putting these pieces together?

Representative MOORHEAD. And if we are going to have a free enterprise system, with all of the decisionmaking really made by hundreds of millions of people, then they have got to have some education in the field of economics.

Senator LONG. I remember some of the final speeches made, particularly the ones that were apt to impress the workingman most, against the 1964 tax cut bill. It was estimated to be an \$11 billion tax cut at 1963 income levels. In full operation at higher 1965 income levels, it was a \$15 billion tax cut. Coming down the homestretch on that bill, a vigorous speech was made—a scathing speech—against it. That speech said here we were giving all this money to Rockefeller and all these millionaires. We were going to increase their take-home pay by this and that and it was just going to be terrible. We were doing so much for the rich and so little for the poor. And frankly, if I do say so, that sounded pretty good to the folks that used to scream and applaud for my old dad.

It made a lot of sense unless someone explained, That is all true, but how is that going to affect you, my friend? You are going to have a job, it is going to pay more money, you are going to have a better home, you are going to have a better automobile, and you are not going to be as deeply in debt as you are today. So while it is true that the millionaire is going to get some good out of this, the reason I am voting for it is because you, my friend, are going to get a lot of good out of this. I don't represent Rockefeller, I represent you."

But a man has to know something to understand what you are trying to tell him. And that is why it is so important that these people have a little bit of education in economics.

Thank you very much.

Chairman PATMAN. Senator, I would like to make one comment about this reduction of the taxes in 1965.

To the best of my recollection, it was contended at that time that, in the next period of tax collection, for every billion dollars that we reduced taxes, principally to the poor, that the Government actually collected back about a billion and a half dollars for the simple reason it was pouring money in or back to the poor people. Money percolates up; it travels around from five to 10 times in a local community, and then it starts up, and benefits the very rich, too; it benefits everybody. And since the velocity of money is from 25 to 50 times a year, every transaction pays a little income tax; that is the reason that the amount increased. Isn't that your understanding?

Senator LONG. That is correct.

Chairman PATMAN. And it was a good thing, because it was pouring in money at the bottom. Now, if you pour it in at the top, the trickle-down theory won't work. It was tried under a preceding administration, back before Mr. Roosevelt. And when money was expected to trickle down, it didn't trickle down. It went to one or two rich people, our big banks, or big business concerns. It would go back into their vaults, and it would not travel around.

But you put it with the poor people—it goes into the channels of trade and distribution rather quickly, and helps everybody, including the rich.

Senator LONG. Well, to be fair about it, Mr. Chairman, that 1964 act did it both ways. We just didn't want a recession. And we tackled it from both ends. We had some trickle down, and also

some percolate up. May I just say one thing about that bill that might be of interest to you, Mr. Chairman. As you know, I was the manager of that bill, because the late Senator Harry Byrd would not support it. Now, he was a wonderful fellow.

But he learned his economics before I was born, and he didn't learn it in school. He learned his economics raising apples as a boy and running a country newspaper. And the economics that Harry Byrd understood was: pay as you go, don't go in debt, keep that budget balanced above all.

It is a simple theory. Herbert Hoover followed it. As you know, Harry Byrd fell out with Franklin D. Roosevelt when Roosevelt in the depths of the depression departed from that theory which had gotten us in that deep depression and adopted theories more akin to the so-called Keynesian economic theories we talk about so much now. I think my old dad, Huey Long, by the way, had something to do with that.

In 1964, I wanted interest rates reduced, and I thought I could make President Kennedy use his power to reduce interest rates if I could tell him, "I am sorry, Mr. President, we are just going to kill that bill for you unless we cut these interest rates." But Senator Byrd wasn't as concerned with the interest rate problem as he was with the balanced budget. So President Kennedy tried to get me to support that bill and manage it for him. And finally I concluded that—sort of like my uncle Earl once said, "If you are not running anything but a peanut stand, run it well or you are going to go broke." We couldn't try to follow two or three policies all at the same time. I decided I had better yield to the President's judgment and go ahead and put that bill through for him if I could. And I am proud that I did, because of the results that occurred.

Now, I just don't think that you can get to Heaven in a single leap, not from where we are. But it is possible to make some headway in that direction, step by step, by educating people and improving their conditions. Then when you have taken one step, go a step beyond. That is about how you achieved what you have done for your people down there in Texas, Mr. Chairman. That is how we have done it in Louisiana. Now that we are in position to think in terms of the next step, it is of enormous importance to educate people so they can understand what is going on from the economic point of view. As I say, if in the end you want to recommend we put a little money into this, that is fine. But if you do no more than just give the people who are working on this problem a pat on the back, it would still be a very fine thing for your committee to do.

Chairman PATMAN. I don't want to take your time, Senator, I know how busy you are, but I would like to ask you one more question.

Isn't it a fact that we have enjoyed the longest period of economic growth and prosperity continuously of any country on earth so far—any of the advanced countries?

Senator LONG. Yes, sir. It just seems to me during the last 6 years, since February 1961, we have pretty well demonstrated that we know how to make democracy and free enterprise work. We have shown the whole wide world.

I was somewhat amazed by the news this morning. President Johnson told the people at Punte del Este, "If you help yourselves, we will help you." And one of these fellows walked away, shrugged

his shoulders, and said. "If you take in one another's washing, you will all get rich together." That is not the case at all. The President's point is a point I have been trying to make. There is no reason they cannot do what we have done, and we will be glad to show them how to do it.

They need a little economic education, may I say, Mr. Chairman. And my thought is: We are willing to help you if you will help yourself.

Chairman PATMAN. Very fine. Thank you very much, Senator Long. We appreciate your testimony.

We have as our next witness the distinguished chairman of the Ways and Means Committee of the House of Representatives, Congressman Wilbur Mills.

Mr. Mills, we are delighted to have you, sir.

If you will give us the benefit of your thoughts on economic education it will be appreciated.

#### **STATEMENT OF HON. WILBUR D. MILLS, A U.S. REPRESENTATIVE FROM THE STATE OF ARKANSAS**

Representative MILLS. Mr. Chairman, and Mr. Moorhead, I do appreciate the opportunity of being with you this morning to discuss the important subject of the national need for economic understanding.

I have not had any other opportunity recently to come back to the committee on which I served for many years with the distinguished chairman of this subcommittee.

Chairman PATMAN. You are one of the original members. I overlooked that. I am sorry.

Representative MILLS. That is right. One of the unfortunate aspects of becoming chairman of a standing committee of the House is that it restricts the time you can devote to other things. For this reason I regretfully resigned from this committee. But it is a pleasure to be back with you. I enjoyed and profited from the experience of being on this committee.

An understanding of the way in which our economy functions is important for all our citizens. It is important to them as participants in the economy, both as producers and consumers. It is also important to them as voters expressing their views on many of the basic issues of Government policy. Voters today must form reasoned opinions on tax and expenditure proposals which have complex economic implications. The task is more difficult than it was in the past. Many years ago when the size of government spending was small in relation to the entire economy, the chief problem was usually one of determining how to raise sufficient revenue to meet expenditures in a fair and equitable manner. From time to time, there was actually a problem of how to dispose of surplus funds.

As the relative importance of Government has grown in our economy, the importance of its operations to the economic well-being of the Nation has increased. The economic effects of appropriations and tax bills today are important and complex. Pursuit of the objective of a balanced budget is no longer appropriate under all conditions. There are times when a budget deficit must be tolerated because action to close that deficit would have severe adverse effects on the economy. At other times, it is appropriate to accumulate a surplus in the Federal budget in order to maintain a balance in the overall economy. Voters

as well as legislators must understand the relation between the Government's fiscal policy and the functioning of the economy if they are to form reasoned judgments concerning policy proposals, and vote in accordance with their own best interests.

A review of the important tax legislation which has come before the Committee on Ways and Means during the past 6 years illustrates the high level of economic understanding required today for those who seek a thorough understanding of Government policy. This legislation has ranged over a broad spectrum of economic issues. For example, it has dealt with the question of how to insure the proper level of investment for maximum growth in a free enterprise economy, how to close a gap in the balance of payments without imposing excessive restraints on the domestic economy, and how to alter fiscal policy rapidly and effectively in the face of sudden changes in the economic climate.

The first piece of legislation I refer to is the Revenue Act of 1962. The Presidential proposals which were the genesis of this act were introduced in the late spring of 1961. Public debate over these proposals continued until the fall of 1962. The chief provision of the bill was the 7 percent investment credit, which emerged from an administration proposal for an incentive to capital expansion and modernization. The discussion of the credit involved such economic issues as the determinants of investment and the best methods for encouraging sufficient investment to maintain high levels of economic growth within an economy in which individuals have freedom of choice. The proposal was criticized by some who argued that it would be better to stimulate consumption rather than investment. Other critics argued that a modification in depreciation allowances would be more effective in achieving the desired objective. Clearly, a thorough understanding of our economy was essential for those who attempted to follow this debate and to reach an independent conclusion regarding the proposal.

The Revenue Act of 1962 was followed by the even more far-reaching act of 1964 which, appropriately enough, was debated for over a year. The central feature of this legislation was a reduction in tax liabilities averaging 20 percent for individual taxpayers. This reduction in rates was proposed at a time when there was a deficit in the Federal budget. It was based on the belief that if the heavy weight of Federal taxes were reduced, the free enterprise economy would have the resiliency to expand to absorb idle resources.

This process in turn was expected to lead to an increase in revenues which would eventually balance the budget. This was a relatively new proposal and an understanding of it required a good knowledge of economics. I believe it is apparent from the subsequent record that the reasoning behind the revenue act was well founded. Full employment has been achieved and were it not for the demands of the conflict in southeast Asia, I believe the Federal budget would be in balance or nearly in balance today.

In 1963 the interest equalization tax was proposed as a part of a program designed to eliminate the balance-of-payments deficit. This proposal, which was subsequently approved by Congress, placed a tax on acquisitions by Americans of foreign stocks and bonds. Without some understanding of the balance-of-payments problem, a citizen might have had a difficult time understanding why this tax was

imposed, since no one approves of it as a permanent feature of the tax system.

It was approved simply because it provided the best available solution to a pressing problem. Other effective solutions would have involved changes within the domestic economy which would have retarded growth and prevented the achievement of full employment.

Within the last 6 months we have had still another demonstration for the need for economic understanding in the evaluation of Government policy. I refer, of course, to the suspension of the investment credit and of certain uses of accelerated methods of depreciation last fall, and to their proposed restoration now. To understand these proposals, one must have an appreciation of the causes of inflation and of the manner in which monetary policy was affecting the economy last fall. The suspension of the investment credit was proposed as the most feasible solution to the problem of restraining inflation in certain areas of the economy without imposing undue hardships on other areas.

Now, roughly 6 months later, the Congress is considering the restoration of these special tax incentives to business investment. These restorations are not proposed because of a conviction that it was a mistake to suspend the provisions last fall, but because the economic pressures which required these suspensions have receded.

During this period there were at least two other revenue acts which were approved in part to achieve economic objectives. The Excise Tax Reduction Act of 1965 was evaluated on the basis of its potential impact on the economy. In the same manner, the Tax Adjustment Act of 1966 was proposed in large measure to prevent the emergence of inflationary forces by siphoning from the economy some \$3 billion additional in the year 1966.

This list of important tax legislation illustrates the need for economic understanding in just one area. Other actions of the Federal Government, of State and local governments, and of individual and corporate businesses have also had important economic effects. I recognize that. I am merely referring to those things that have developed within the Ways and Means Committee.

While the need for adequate economic education among all members of the population is readily apparent, just how well this need is being met today is more difficult to determine. From the information available to me, I would say this need is not being met as well as it should be in many areas. With what I hope you will consider pardonable pride, I would assert that Arkansas is an exception. An effective program of economic education is being pursued there by the Arkansas State Council on Economic Education. But I will have more to say about the efforts of this organization in a moment.

If an adequate background in economics is to be provided our voting citizens, it must be provided in the high schools. Only a minority of the country's high school graduates go on to college and only a fraction of those who do graduate from college ever take a course in economics.

This is where the problem lies, for instruction in economics is concentrated at the college level and therefore fails to reach a large majority of the population, and in order for them to have an understanding of the problems they must do this study on their own.

Valuable information on the dimensions of the problem has been provided by the Committee on Education of the American Economic

Association. Professors Bach and Saunders have concluded that 80 or 90 percent of high school graduates today have taken not one course in economics. While more high schools, particularly those in the large school systems, now offer a separate course in economics, very few require that students take the course. Of course, some introduction to economics is gained from courses in principles of democracy and civics. The knowledge gained from these courses, however, is necessarily less comprehensive than that gained from a specific course in economics.

To meet the need for economic education, of course, it will not be enough simply to institute courses in economics in the high schools. Teachers must be trained to instruct these courses and materials must be supplied for the use of teachers and students. Far too often today, the instructors in high school economics courses lack sufficient preparation. Only 4 percent of the high school economics teachers and principles of democracy teachers majored in economics in college. Ten percent of them actually took no economics courses in college and an additional 32 percent took only one or two courses.

Even a well-trained economics teacher must have worthwhile materials to work with and must have the opportunity to keep up with developments in his field. Furthermore, the students who take these courses must be able to continue to follow emerging economic issues. Opportunities must be provided, therefore, for the continuing education of teachers and their former students.

Clearly, a great deal must be done before we can feel assured that Americans in general are receiving adequate opportunities to develop enough of an understanding of economics to follow properly and to participate actively in the debate on major national economic issues.

While the task is formidable, I am proud to say that in my State of Arkansas the voluntary efforts of interested citizens in cooperation with the State Department of Education have succeeded in providing a great deal of economic education to citizens of the State. The record in Arkansas provides, I believe, an example for other States to follow.

The Arkansas Council on Economic Education is one of a number of State councils affiliated with the Joint Council on Economic Education. The members of the Arkansas Council—and I am proud to say I am one of them—are appointed by the State commissioner of education, Dr. Arch Ford, on the basis of their interest in providing economic education.

Under the auspices of the council, workshops are held in various parts of the State for teachers. They are designed to improve the training of high school economics instructors. The success of this program is evident from the fact that in 1966, Arkansas teachers won 11 of 52 awards made by the joint council in recognition of their work to improve teaching practices in economics. An Arkansas teacher of American history, Grace Mosley, from North Little Rock High School, ranked first in the Nation in this award contest in 1966. In 1965, another Arkansas teacher, Adah Arthur, of Magnolia, won the top award.

Arkansas has also participated in the Developmental Economic Education Program. The Little Rock school system was selected as one of 30 school systems in which a pilot program would be launched.



This program seeks to build economic understanding into school curriculums, to improve teacher preparation in economics, to develop and test new teaching materials, and to disseminate economic information. The program is a cooperative one which draws upon the resources of the Joint Council, the State council, colleges and universities, and the local school system.

These are only a few of the activities and achievements of the Arkansas Council, whose able executive director, Dr. Bessie B. Moore, has been instrumental in keeping the council in the forefront of economic education efforts.

The program is a heartening example of a successful working partnership between educators, professional groups, and various business interests under the leadership of the State department of education. The program is maintained through voluntary support drawn from a broad cross-section of the community.

This program has resulted in a growing interest in economic education among Arkansas teachers. Professional organizations are cooperating with the council and are promoting economic education in their meetings. The Arkansas Council has been so successful, in fact, that Arkansas citizens have been asked to serve as consultants for programs in other States.

Much remains to be done, of course, in Arkansas as well as in other areas of the country. This committee will undoubtedly assess the dimensions of the job in the course of this investigation. In closing, I would commend the efforts of the Arkansas council to the committee as an example of a successful approach to the problem. I think you will enjoy looking into the Arkansas program and I hope you will help us to advertise its efficiency and the work that it does.

Thank you very much.

Chairman PATMAN. Thank you for some wonderful information.

I would like to ask you something about this Arkansas council—since the city that I live in is half in Arkansas and half in Texas.

The Arkansas council, I believe you called it. The members of the council won 11 out of more than 52 awards given in the United States last year?

Representative MILLS. Yes.

Chairman PATMAN. I think that is a wonderful record. I think you could well afford to have a lot said about that in different places.

Representative MILLS. We are very proud of it.

Chairman PATMAN. And I am proud of it for you, living right that close to you.

I just wonder how many States have economic councils like the one in Arkansas?

Representative MILLS. I am not certain, but it is my recollection there are now some 30 or more. That information will be made available to the committee by one of the later witnesses.

Chairman PATMAN. I think all of the States can well afford to pay more attention to what has been done in the great State of Arkansas.

Representative MILLS. We think we pioneered in this area, frankly.

Chairman PATMAN. Mr. Moorhead?

Representative MOORHEAD. Thank you, Mr. Chairman.

First I would like to say, Mr. Chairman, that I have enjoyed the testimony very much. And, of course, I would say that there is no Member of Congress for whom I have higher respect than the dis-

tinguished gentleman from Arkansas, not only for his knowledge of economics, but for his skill as a legislator. That is one of the reasons I enjoyed his testimony.

Representative MILLS. Thank you, sir.

Representative MOORHEAD. As I understand it, what you are suggesting would be that there should be a required course in economics for high school students, presumably for all students, at least all of those who have the capability of handling the course; is that correct?

Representative MILLS. That is not exactly what I am recommending. What I am trying to do is to point out the situation that prevails today, and to leave to the judgment of this committee the recommendations as to what should be done. That is what you are looking into.

Frankly, I am not certain that such a course could be required. I think the school districts that are in a position to operate a great number of courses are doing the best they can now to include this subject. I also think there is a growing awareness of the need for this type of instruction at the high school level.

To require an economics course at the high school level would, I think, impose burdens upon some districts that they could not carry. But I would urge at least that the subject matter be included in courses on American democracy and courses on civics in areas where specific courses on economics cannot be given. I certainly would also recommend that more economics courses be given. However, I would not require that such courses be given to all students because I don't want us to get into a position of requiring certain courses within high schools. I am sure the gentleman would not want to do that either.

Representative MOORHEAD. Not from this level, of course not.

I wonder, sir, if your experience in Arkansas indicates that the textbooks and other materials are adequate for high school courses, or do they kind of labor along with college or elementary school textbook material?

Representative MILLS. The department of education, working with the high schools where these courses are taught, is constantly seeking to improve the textbooks that are in use, and substantial improvements have been made over the years in this area.

In the workshops, we deal with teachers, not with students. We deal with teachers exclusively. One hundred and seventy-five or more teachers from over the State will be invited to the economic workshop that will be conducted during the summer period when the schools are not in session.

There are some regional operations within the State as well. The basic one, though, is the annual workshop that takes place in Little Rock to which about 175 teachers from high schools over the State are invited.

There they have the benefit of contact with numbers of people who are called from within and without the State to discuss various subjects that are related to economic activities. They have the advantage of discussions with not only the local people, but also with people from the outside. For instance, we have had Mr. Gardner Ackley appear at one of the workshops. We have had Mr. Henry Ford. These are just two of the many people from business and from government who have made a real contribution to the workshops.

They have helped the teachers attending to improve their understanding of just what it is that makes this economy of ours operate.

Representative MOORHEAD. And the teachers that would come to the workshop are not teachers exclusively of economics—they would be teachers of history and civics.

Representative MILLS. That is right. And they are all from the high schools of the State.

Representative MOORHEAD. Thank you, Mr. Chairman.

Chairman PATMAN. Chairman Mills, your statement is so interesting, about the Arkansas council, about these 50-some odd awards, and 11 of them going to members of your council in Arkansas, that I wish you would extend your remarks in the record in connection with your statement, and place the names of those people who received these awards—the names and addresses, and the councils they belong to.

Thank you very much.

(The material referred to was subsequently supplied and appears below:)

STATE OF ARKANSAS DEPARTMENT OF EDUCATION,  
STATE EDUCATION DEPARTMENT,  
Little Rock, Ark., April 24, 1967.

Hon. WILBUR D. MILLS,  
*Member of Congress,  
House Office Building,  
Washington, D.C.*

DEAR WILBUR: Enclosed are the lists of Kazanjian winners from Arkansas for 1964, 1965, and 1966. The following summaries are particularly interesting:

1965: Arkansas won 10 out of 40 awards . . . *one-fourth* of all in the nation and *one-half* of all the awards in the elementary division!

1966: For the second consecutive year . . . Arkansas has won First Place in the Senior High School Division, Arkansas has more winners than any other state, Arkansas is the only state ever to have a winner in every division . . . out of 52 awards—Arkansas teachers won 11!

Again we thank you for your willingness to testify in behalf of economic education before the Joint Economic Committee of Congress and we look forward to reading your testimony and the proceedings.

Sincerely,

Mrs. MERLIN M. MOORE,  
*Supervisor of Economic Education.*

1964: ARKANSAS WINNERS IN THE SECOND ANNUAL KAZANJIAN FOUNDATION'S  
ECONOMIC EDUCATION AWARDS PROGRAM

*Elementary Level:*

3rd Place—Mrs. Jimmie Nell Johnson, Lakewood Elementary School, 1900 East Avondale Road, North Little Rock, Ark.

Honorable Mention—Mrs. Faye Linan, Mrs. Grace Harvey, Mrs. Lois Dudney, Magnolia Public Schools, Magnolia, Ark.

Honorable Mention—Miss Catherine Miller, Oaklawn School, Oaklawn Boulevard, Hot Springs National Park, Ark.

Honorable Mention—Mrs. Henrietta Patrick, Star City Elementary School, Star City, Ark.

1965: ARKANSAS WINNERS IN THE THIRD ANNUAL KAZANJIAN FOUNDATION'S  
ECONOMIC EDUCATION AWARDS PROGRAM

*College*

Arkansas had no entries in this division.

*Senior High School*

1st Place—Mrs. Adah M. Arthur, Magnolia High School, Magnolia, Ark.

*Junior High School*

Honorable Mention—Mrs. Dixie E. Howard, Whiteside Junior High School, Camden, Ark.; Mrs. Estelle Parham, Mr. Don Marshall and Mr. George M. Henry, Magnolia Junior High School, Magnolia, Ark.

*Intermediate*

2nd Place—Mrs. Jeanetta Clerget, Woodrow Wilson Elementary School, Little Rock, Ark.

3rd Place—Mrs. Evelyn Bilheimer and Mrs. Opal Phelps, Lee School, Little Rock, Ark.

Honorable Mention—Miss Mamie Ruth Abernathy, Jones Elementary School, Hot Springs, Ark.; Mrs. Louise Baber, Arkadelphia Elementary School, Arkadelphia, Ark.; Mrs. Ola B. Blair, Mrs. Mattie F. Brigham, Mrs. Gwen Tudor, Mrs. Mattie Lou Wilson, Mrs. Dorothy Beene, Mrs. Helen P. Pittman, Mr. Eugene W. Hart, Mr. Foy C. Tate and Mrs. Ruth Rabb, Magnolia Public Schools, Magnolia, Ark.; Mrs. Faye Linam, Mrs. Lois Dudney and Mrs. Grace Harvey, Magnolia Public Schools, Magnolia, Ark. (4 out of 8 Honorable Mentions in this category).

*Primary*

Honorable Mention—Miss Catherine Miller, Oaklawn Elementary School, Hot Springs, Ark.

Arkansas won 10 out of 40 awards—*one-fourth* of all in the Nation and *one-half* of all the awards in the Elementary Division.

1966: ARKANSAS WINNERS IN THE FOURTH ANNUAL KAZANJIAN FOUNDATION'S  
ECONOMIC EDUCATION AWARDS PROGRAM

*Senior High Division*

First Place—Mrs. Grace Mosley, North Little Rock High School, North Little Rock, Ark.

*Collegiate Division*

Honorable Mention—Prof. John V. Terry, John Brown University, Siloam Springs, Ark.

*Junior High Division*

Honorable Mention—George M. Henry, Magnolia Junior High School, Magnolia, Ark.; Mrs. Dixie E. Howard, Whiteside Junior High School, Camden, Ark.; Mrs. Louise Gratiot Jackson, Cloverdale Junior High School, Little Rock, Ark.

*Intermediate Division*

Third Place—Mrs. O. L. Burney, Horatio Elementary School, Horatio, Ark.  
Honorable Mention—Mrs. Mamie Ruth Abernathy, Jones Elementary, Hot Springs, Ark.; Mrs. Eloise Calvert, Lakewood Elementary School, North Little Rock, Ark.; Mrs. Carolyn Inlow, Mountain View Elementary School, Mountain View, Ark.; Mrs. Jimmie Nell Johnson, Williams Elementary School, Little Rock, Ark.

*Primary Division*

Honorable Mention—Mrs. Ann Downs, Echols Elementary School, Fort Smith, Ark.

Chairman PATMAN. Mr. James S. Duesenberry, member of the Council of Economic Advisers.

We are delighted to have you, sir. I remember when you came here—I had the pleasure of visiting with you. I am glad to know you have gotten along so well in your work as a member of that great Council.

As you know, that Council was set up by the Employment Act of 1946, which I had a little—just a little bit of something to do with. And I am so proud of the Council, and so proud of the work that has been done by your organization.

You may proceed in your own way, sir.

**STATEMENT OF JAMES S. DUESENBERY, MEMBER OF THE COUNCIL OF ECONOMIC ADVISERS**

Mr. DUESENBERY. Thank you, Mr. Chairman. I am honored to be here, to have this opportunity to testify before you.

Let me say at the outset that no one has done more for economic education than the Joint Economic Committee, in its hearings and its special studies. It has reached many people who were never reached by any other form of economic education.

I am a little bit embarrassed to be here, because I think you won't find any professor of any subject who doesn't feel there is an urgent need for more education in his particular subject. But I do feel that there is a need, a particular need in economics.

I think these hearings can do much to advance the goals of the Employment Act, as the chairman mentioned.

The dissemination of economic information and the improvement of economic understanding will contribute greatly to the achievement of the goals of the Employment Act "to promote maximum employment, production, and purchasing power."

We have all been told often enough about the dependence of Government policy on the consent of the governed. But there can be no doubt that the capacity of officials to pursue sound economic policies depends critically on the economic understanding of the American public, not merely on its passive consent to the judgments of experts.

Public acceptance of sound economic policy cannot be based on faith in experts or on the idea that there is a ready-made set of prescriptions for correct economic policy. These attitudes can only reduce the discussion of economic policy to a conflict of ideologies. Public support for a rational economic policy depends on true understanding of the nature of economic issues and of the limitations—as well as the contributions—of economic knowledge.

The purpose of economic education is a modest one, perhaps best stated by the Committee for Economic Development 5 years ago:

\* \* \* the most important step toward understanding in economics—as in other branches of knowledge—is the replacement of emotional unreasoned judgments by objective, rational analysis.

It is important, I think, not to have misconceptions about what even the most extensive improvement in economic education will accomplish. It will not end disagreement on economic issues. However scientific economic analysis may become, there remains the indisputable fact that economic issues involve values and interests, and these will remain a source of disagreement. Even in the so-called exact sciences, disagreements run deep and bitter when matters of public policy engage the values and biases of scientists. We should not expect more from economists.

Improved economic understanding will, however, reduce the likelihood that discussion will bog down in misunderstanding about the probable consequences of a given action or event. But even such disagreements will not disappear, because economic data in many instances are too uncertain to support definite interferences.

Economic education will not make Republicans or Democrats, liberals or conservatives, of us all. For the mode of economic analysis is entirely neutral, however partisan economic practitioners may be.

If we are to make a sustained effort to extend economic knowledge, we must recognize first that economic education will not end disagreement and second that, if it is truly education, it is politically neutral.

I have some hope that economic education, like any good liberal education, will increase the number of pragmatic problems solvers and reduce the number of doctrinaires; that it will enable people who are mutually concerned about the formation of good public policy in economic matters to communicate in a language which all can understand; and that it will encourage people to state the goals they are attempting to achieve, to recognize the interaction and often the conflicts among those goals, to survey the methods available to achieve the goals—at what costs and with what benefits to whom.

Considerable progress has been made in developing this common language. The public debate now in progress about whether or not Congress should act favorably on the President's proposal of a 6-percent surtax is focusing primarily on the impact which it would have on economic activity. This impact is precisely the ground on which the surtax proposal should be judged. The discussion last year about suspension of the investment tax credit and accelerated depreciation rightly concentrated on the sectoral imbalances which have emerged.

In both cases there were and are varying opinions about the appropriateness of the proposal in light of prevailing economic conditions. Such disagreements are inevitable because economic policy must be made on the basis of uncertain forecasts of future events. But the willingness to evaluate tax legislation on the grounds of its probable economic impact, not its accounting effects, represents a notable advance in economic understanding and sophistication.

The need for economic education is not confined to the problems of fiscal and monetary policy which affect the whole economy. There is a need for public education at a level which deals with the problems of Government decision in individual sectors of the economy.

Fortunately, one finds economists engaged to an increasing extent in the business of hard research—of trying to ascertain the facts and to state goals so that reasoned decisions can be made. For example, the studies now going forward on the costs of alternative transportation systems, on the habits and desires of commuters, will help to take the discussion out of the area of prejudice and special pleading and will enable us to make long-range decisions with a greater arsenal of hard information than has ever before been available. Similar studies are underway in the economics of education, of medicine, and many other special fields.

All of these studies will have direct application to the planning-programing-budgeting system (PPBS), introduced at the behest of the Budget Bureau 2 years ago. This system offers great promise for improving the efficiency of executive planning and decisionmaking, not only in the Federal Government, where it has been used so far, but also in governments of States and their subdivisions, where it has not yet been applied. There have been problems and there will be more, some of them flowing from overambitious hopes, but many growing out of inadequate familiarity with the rather elementary economic concepts which underlie PPBS.

Where applicable, PPBS is a powerful instrument for increasing the efficiency of government expenditures. And our capacity to use

this instrument is almost wholly dependent on the spread of knowledge of basic economic precepts. The payoff there will be in more effective use of resources by governments. These gains will accrue as much through governments of States and their subdivisions as through the Federal Government—in better decisions about where to locate and how to construct hospitals, schools, and universities, in providing police and fire protection. Although not every citizen needs to be a budget expert, it is important that as many as possible understand in general terms the basic concepts of economic efficiency underlying a rational budgetary system.

On a more general plane, the news each day includes references to economic problems which can scarcely be understood without rudimentary acquaintance with basic economics, just as their solution demands considerable expertise—tariffs and quotas, balance of payments, international liquidity, foreign aid, income maintenance, taxes, pollution, wages and prices, collective bargaining, money markets, advertising, raw materials, urban problems, and so on virtually ad infinitum—topic after topic which share in common the fact that they are newsworthy, and that they are elements in the training of some or most economists. I am not suggesting that one cannot speak intelligently about these subjects without formal instruction in economics, but rather that improvement in economic education will raise the probability of generally better discussion and decisions on these issues.

In achieving the goals of better economic education, it is clear that different groups have different roles to play. Accordingly, the economic education necessary for one group may be inadequate or excessive for another group. First, there are the professional economists who acquire their expertise in colleges, graduate schools, and informally through the years in the practice of their profession. As anyone who has tried to hire an economist lately knows, there is still a shortage of professional economists for teaching, for research positions, and for business and government. But judging from the expansion of our graduate schools, it appears likely that the supply of economists will expand to meet the rising demand—at least in terms of numbers. There is, however, much room for improvement in the methods of instruction used in our graduate schools.

Second, there are the decisionmakers—political leaders, business executives, and union officials—who should be sufficiently expert to understand what the professional is doing and, when necessary, to appraise his work in a larger context.

I do not want to suggest that economic education of these two groups is satisfactory at present. There is much justifiable concern about the quality of economics instruction in colleges and business schools. But some progress has been made in these areas. Moreover, economic education for the decisionmakers has become a continuing process, carried on by such private organizations as the Committee for Economic Development and The Brookings Institution, by the Joint Economic Committee through its widely praised hearings and research, and through the rapidly increasing number of symposiums and conferences sponsored by universities, trade associations, and other private groups. Judging by the number of invitations we at the Council of Economic Advisers receive, such gatherings are one of the major growth industries of the entire economy. While we are

able to respond to only a fraction of these invitations, it is a heartening sign of the increasing awareness of economic problems that the number and quality of such meetings is increasing.

There is much more room for improvement in the quality of economic education for people outside the two preceding categories. The bulk of economic knowledge is not obtained in the college classroom. Only two-fifths of American youth of college age go to college. The proportion of adults who have not attended college is even larger. And only about a quarter of all college students are taking, or have taken, courses in economics. But nearly all Americans now attend high school, and the vast majority graduate.

So far as formal education in economics is concerned, high school courses in history, civics or social problems, and economics are much the most important influence on most Americans. Studies have shown that the economic content of the text books for these courses is, to use a charitable term, inadequate; that the training in economics of teachers of such courses is seriously deficient.

College instructors traditionally have preferred beginning students who received no economics instruction in high school because there was less need to uproot misconceptions and misinformation. Surely, such a situation is intolerable, and efforts to improve high school instruction deserve the highest praise and encouragement.

For most Americans, however, the major sources of economic information are the mass media—television, radio, and, most of all, the newspapers and periodicals. Virtually everyone reads newspapers or periodicals occasionally; most read them regularly. You will agree, I think, that although some reporting of economic events is excellent, a great deal is inadequate. This source of information is too important to ignore.

Thorough training in a particular field, such as economics, has not traditionally been a qualification which most editors sought in hiring reporters; hopefully, this practice will change. But it is vital that those newsmen—reporters and editorial writers alike—who control the daily and weekly pipelines of economic information for most Americans, have the opportunity to acquire expertise in the fields for which they are responsible. I do not know how this should be accomplished. However, I do know that such programs as the Neiman fellowships have done much to raise the level of reporting in general, and economics reporting in particular.

But professional economists cannot push the job of communicating entirely on to others. Much of the job must be done by economists themselves. We cannot expect public understanding of economic issues or effective use of our research unless we are willing to make an effort to communicate with people outside our own profession. Most economists think that economics is an interesting subject; we think we have effective instruments for tackling hard and relevant questions. Yet, most of us have not tried very hard, and few have been very successful, in making our subject interesting to a wider public. Too many of the public still regard economics as the dry, if not the dismal, science.

There has been an increasing number of attempts of late to alter this image. The American Economic Association has, in the last few years, been active in promoting better teaching in high schools.



It cooperated in the production of a successful year-long television course. But the basic problem—how to communicate to others some of the excitement about economics which we feel about it ourselves—remains to be solved. This is a responsibility which rests ultimately with the group most familiar with how economics works and what it can do—the professional economist. Although some progress has been made in bringing economic analysis back into style, it is urgent that progress accelerate.

Five years ago, President Kennedy called upon us not to be constrained by the “cliches of our forebears,” and he warned of myths concerning the size of government, the Federal budget, the public debt, and the relationship between government and business. Less than a year ago, President Johnson recalled that—

There was once a time when knowledge seemed less essential to the processes of good government. Andrew Jackson held the opinion that the duties of all public offices were “so plain and simple” that any man of average intelligence could perform them.

We are no longer so sanguine about our public service. The public servant today moves along paths of adventure, where he is helpless without the tools of advanced learning.

And, I might add, we as citizens need to know why public decisions are not “plain and simple,” why we must beware of cliches which permit us “the comfort of opinion without the discomfort of thought.”

Thank you.

Chairman PATMAN. Thank you, sir. I congratulate you on a very fine statement, which is thought-provoking. There are many thoughts suggested in this statement that we must expand on.

I desire to comment on your statement, wherein you say:

As anyone who has tried to hire an economist lately knows, there is still a shortage of professional economists for teaching, for research positions, and for business and government.

I happen to know you are correct about that, especially the Government.

During the 89th Congress I was chairman of two committees that needed economists—the Joint Economic Committee and the Banking and Currency Committee of the House. And although we have plenty of funds for the purpose in each committee, we turned back more than \$300,000 unspent, because we could not get the economists that we needed to do the particular work that we desired to have done.

There is a real shortage of economists in this country. I made some inquiry about it, and discovered that not only are a lot of economists hired by the different agencies of the Government, like the Library of Congress, which is one of the smaller ones, and the Federal Reserve Board, and the Comptroller of the Currency, and the Federal Deposit Insurance Corporation, the Secretary of the Treasury—but also the banks of the country are hiring more and more economists. And I suspect they are requiring the services of a high percentage of the number of economists available—wouldn't you say that, Professor?

Mr. DUSENBERRY. They are absorbing an increasing number.

Chairman PATMAN. And in addition to that the foundations hire a surprisingly large number. I am talking about the privately controlled foundations. When you consider that great demand for them, it is understandable why we were unable to get the economists that we

desired to do certain types of work, and we were just unable to do it. They were just not available.

Furthermore, the appropriations for congressional committees are usually for 1 year. I discovered, too, that you have to have a longer time than that, because all these economists are employed, and although they want to come with you, and do that particular work, it requires sometimes a year before they can get a year off. We were handicapped in that respect, too.

So I appreciated your comment about the shortage. I don't think that has been generally known.

Another interesting suggestion you made regarding the high school courses was:

Studies have shown that the economic content of the textbooks for these courses is, to use a charitable term, inadequate; that the training in economics of teachers of such courses is seriously deficient. College instructors traditionally have preferred beginning students who received no economic instruction in high school because there was less need to uproot misconception and misinformation.

Mr. DUSENBERRY. History and civics.

Chairman PATMAN. Yes.

In other words, you have to "unlearn" them before you can teach them.

Mr. DUSENBERRY. That is right.

Chairman PATMAN. I think that is worthy of consideration, too.

However, don't you think there is a place in the high school for economics of a certain type?

Mr. DUSENBERRY. Yes, indeed.

Chairman PATMAN. And through the use of certain respected and recognized textbooks, and with some uniformity in the selection of the material that they use, so you would not have to unlearn them after they receive these instructions?

Mr. DUSENBERRY. Yes; there is no question but that there is a place for economics in the high school. The problem is to design courses which are suitable for high school, both in the correctness of their contents, and also in the interest that they arouse in the subject.

I may say that while the American Economic Association has made some efforts in this area, we have not made an effort equivalent to the Physical Science Study Committee or the committees of the Chemical Society and the Biological Societies in trying to design courses specifically for high schools which would really arouse the interest and enthusiasm of the high school student. It is not just a matter of having something which is correct. Particularly at the high school level one has to work very hard to make the material interesting. If the students just pass through the course without taking any interest in it, it really wouldn't have any effect—even if they pass the examination.

Chairman PATMAN. Do you suggest that that particular suggestion be given particular attention by this committee in arriving at its conclusions—and trying to make a recommendation along that line?

Mr. DUSENBERRY. Yes. I think it might be interesting if the committee were to look into the work which has been done by the special committees in the physical sciences to improve high school instruction in their fields. From all that I understand, those new courses which are now 5 or 6 years old have been very successful in arousing much more interest than the traditional courses in the same fields.

Chairman PATMAN. Mr. John Stark, director of the Joint Economic Committee, was telling me a few days ago that there is so much interest in this study that it is probable that we should have at least a couple of extra days in addition to the time set aside. We have today and next Monday set aside for this purpose, also the following Friday. Then I assume, if we have these additional hearings, we will have a hiatus in the hearings, and take them up later on, at which time it will be a good time I think to expand on the suggestion you made about the economics in high school.

Would you like to ask some questions or comment, Mr. Moorhead?

Representative MOORHEAD. Thank you, Mr. Chairman.

First, Mr. Duesenberry, I enjoyed your statement very much. I think this is an extremely important subject. I know as a Member of Congress I have found that the most difficult problems I have had to face were those that had economic implications in them. Foreign policy, I suppose, is mostly handled by the Executive. But the Congress has more to do with the economic problems. And I do not think that Members of Congress as a whole have the kind of economic backgrounds that I wish I and the rest of my colleagues would have. I am reminded of Prime Minister Douglas Home—he said that the problems he faced were either political problems which were impossible, or economic problems which were incomprehensible. And we have this same situation here.

One of the problems we have is not only in the Congress, but back with our constituents. In your testimony, you refer to the emotional, unreasoned judgments—and you have referred to President Kennedy's talking about economic myths.

One of the questions I get frequently—and I would like to ask you how I should answer it—is when people say to me, “Mr. Moorhead, when are we ever going to pay off the national debt?”

What do you say to that?

Mr. DUSENBERRY. Well, I think first of all one can note the fact that the debt has not increased, indeed has decreased by comparison with the scale of our economy, and that it should be less of a concern now than it was, say, 20 years ago when it was relatively much bigger. I think that puts the matter in a little bit of perspective.

It may be, of course, that there will be a time when private demand is so strong that it will be appropriate to run substantial surpluses. But I think it is essential to point out that our choices on fiscal policy should be, as Mr. Mills said, directed toward their impacts on the economy, and that we really have to take these decisions one step at a time, judging in each case what the effect on the economy will be with the debt emerging as the result of those decisions.

Representative MOORHEAD. I am interested in your thoughts about the economics teaching in high school.

Are you thinking about a course in high school that would be called economics, or are you thinking of increasing the economic content of other of the more traditional high school courses of history, civics, and the like?

Mr. DUSENBERRY. I think we need both. It is probably not the case that every student should automatically take a specialized course in economics. But it is hard to read American history without passing by one notable economic decision after another. And at present, usually as I read these textbooks—and I do look at them a

bit since I have two children in high school who are reading them now—the political aspects of economic issues are brought out, but not the economic content itself. And much more can be done there.

In civic courses, of course, the emphasis can be shifted somewhat toward the economic content of policymaking rather than to the merely formal structure of the decisionmaking process—although it is important for students to understand that as well. And it is important for the teachers, too—who have to give interpretations of current events in a civics course, or of historical events, to have the proper background for making those interpretations as they pass by those events.

So I would say that we need much better education for teachers, and better materials for the economic content of civics and history courses, as well as specialized economics courses for those students who have some interest, and who want to take specialized courses.

Representative MOORHEAD. The first aim would be at the teachers, to teach them and to give them better materials with which to teach?

Mr. DUSENBERRY. Yes.

Representative MOORHEAD. Thank you, sir.

Thank you, Mr. Chairman.

Chairman PATMAN. Thank you very much, Professor. We appreciate your testimony. It will be very helpful to us.

Without objection a letter received by Senator Talmadge from Dr. Theodore C. Boyden of Georgia State College will be included in volume 2 of these hearings.

(The letter referred to appears in volume 2 of the hearings, part 4, exhibit II.)

The witnesses Monday will be, for business, Mr. Marvin Bower, managing director, McKinsey & Co., Inc., New York; labor, Nathaniel Goldfinger, director of research, American Federation of Labor and Congress of Industrial Organizations; agriculture, W. E. Hamilton, director of research, American Farm Bureau Federation; and academic, Lawrence Senesh, professor of economics at Purdue University.

We will stand in recess until 10 o'clock Monday morning, here in this room.

(Whereupon, at 11:25 a.m., the committee was recessed, to reconvene at 10 a.m. Monday, April 17, 1967.)

## ECONOMIC EDUCATION

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MONDAY, APRIL 17, 1967

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON ECONOMIC PROGRESS  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The subcommittee met at 10 a.m., pursuant to notice, in room S-407, the Capitol, Hon. Wright Patman (chairman of the subcommittee) presiding.

Present: Representative Patman and Senator Jordan.

Also present: John R. Stark, executive director, and James W. Knowles, director of research.

Chairman PATMAN. The subcommittee will please come to order.

This morning the subcommittee continues its hearing on the subject of economic education in the United States, with a panel of four witnesses, one, a representative from business; one from labor; one from agriculture; and the final one on the panel is from the academic world.

The first three of our panelists will try to provide us with a picture of how the community views the importance of economic education and what should be done about it. The fourth will speak not merely from the academic economist's standpoint, but also from his own work in developing curriculum and materials for use in the schools, both elementary and high.

Our first panelist this morning, representing business, is Mr. Marvin Bower, managing director of McKinsey & Co., New York; representing labor is Mr. Nathaniel Goldfinger, director of research, American Federation of Labor and Congress of Industrial Organizations; representing agriculture is Mr. W. E. Hamilton, director of research, American Farm Bureau Federation; and representing the academic community is Dr. Lawrence Senesh, professor of economics, Purdue University.

We will ask each of our panelists to summarize his views in about 10 minutes, after which we will have an opportunity to discuss the matter as a group.

I also invite each of you to extend your statement, or add related material for the record should you care to do so.

Gentlemen, we appreciate your coming this morning to discuss with us the status of economic education in this country.

Mr. Bower, you are recognized, and will you present your contribution in your own way, sir?

**STATEMENT OF MARVIN BOWER, MANAGING DIRECTOR,  
MCKINSEY & CO., INC., NEW YORK**

Mr. BOWER. Thank you, Mr. Chairman. I would like to begin with a brief but complete statement, which I hope is clear and possibly even interesting.

My statement is entitled "Why Economic Understanding Is Important to Everybody."

"You can't have your cake and eat it too." This modern version of an early English proverb is what economics is all about: *making choices*.

The welfare and happiness of our citizens are largely controlled by the economic choices—or decisions—they make in using the time, brains, brawn, material, money, credit, and other resources at their command.

As an international management consultant to both business and government in this country and in Europe—and as a student of management—I have an unusual opportunity to observe and analyze how people make economic decisions. As a result, I have developed a deep conviction about the importance of economic understanding to every citizen, businessman, farmer, labor leader, government official, lawmaker—to everybody. Most of them should know more in order to make sound economic choices—or decisions—and have a better understanding of the consequences of the decisions that they do make.

That is why I appreciate the opportunity to appear before this distinguished body and use your great auspices to try to convince others that economic education is important to every American.

### WHY MUST WE CHOOSE?

No individual has enough time or other resources to satisfy all his wants. Neither does any business, union, church, school, farm, city, state, or nation.

This basic fact of scarcity makes it necessary to choose or to "economize," that is, to decide how the resources that are available shall be used to satisfy the wants of people in the best possible way. For the resources used to satisfy one want cannot be used to satisfy another.

- The decision to purchase a new car may put off redoing the kitchen.
- The decision to build a new plant to expand production of one product may limit the production of another.
- The decision to add to the teaching staff and raise teachers' salaries may mean putting off school repair.
- The decision to put a man on the moon by 1970 means fewer resources for other needs and wants of our citizens.

### CONSEQUENCES OF CHOICE

In any society—and certainly in our modern, complex industrial society—the decisions or choices of people to use scarce resources in a particular way affect the choices of other people. The daily decisions of millions of people interact on each other.

- Decisions to buy new cars add to the needs for roads, parking, and traffic control.

- Decisions to build new plants create new jobs.
  - Decisions to add teachers mean more schools to train those teachers, more schools in which they teach, more taxes to build the schools.
  - Even though they may not realize it, the decision of a family to spend their vacation in Europe adds to the seriousness of the country's balance-of-payments problem.
  - The lawmaker who votes to raise the minimum wage may not appreciate that he is destroying jobs, adding to unemployment, increasing welfare costs, and adding to human misery.
  - Medicare and medicaid are putting new demands on our already overcrowded hospitals; and seriously ill patients are being kept waiting for long periods.
  - Decisions that produce inflation cut the buying power of those on pensions and other fixed income. President Johnson has termed inflation a "pickpocket."
  - Even the private act of conceiving a child has public consequences, as can be seen in countries where population is increasing faster than the food supply.
- For every economic choice, there is a consequence. In fact, usually a whole series of consequences reverberate throughout the economy.

#### CONTROLLING CHOICES AND THEIR CONSEQUENCES

Given the fact of scarcity and the fact that every choice has its consequences for others, all economic systems—capitalistic, communistic, or any other—face the same basic economic problems. The outstanding report of the national task force of distinguished economists and educators, appointed in 1961 by the American Economic Association and the Committee for Economic Development,<sup>1</sup> defines these universal problems in this way:

1. How shall the economy use (allocate) its productive resources to supply the wants of its people? In common sense terms, what shall be produced and how?
2. How fast shall the economy grow, and how shall it obtain reasonably stable growth, avoiding both depressions and inflations? In other words, how much shall be produced in total, and how many resources shall be devoted to increasing future capacity rather than to producing goods for current consumption?
3. How shall the economy distribute money incomes, and through them the goods and services it produces, to the individual members and groups in society? For whom shall the goods be produced?

We in the United States solve these problems with what is basically a private-enterprise, market-oriented economic system. Consumers largely determine what shall be produced by spending their money in the marketplace for those things they want most. Private businessmen produce the goods which consumers want to buy because in that way they make the largest profit; and competition from other businesses requires them to produce most efficiently—that is, at lowest cost.

This system—operating in our free society—has made ours the most productive and powerful Nation in the world, with the highest standard of living. Since most Americans want to keep it that way, we should all try to keep our economic system working well. In fact, our economic system is so effective that communistic countries are using more and more of its features."

<sup>1</sup> "Economic Education in the Schools," Committee for Economic Development (1961), New York, N.Y.

## NEED FOR KNOWLEDGE

Keeping our economic system working well is not easy, because that depends on sound economic decisions by individuals; by officials of businesses, unions, and governmental bodies; by lawmakers; and by voters. And they and others can make sound economic decisions only if they have sufficient economic understanding.

Getting the necessary knowledge for economic understanding is not easy either, because our system for making economic choices in a complex industrial society is necessarily a complex system. Over the years we have developed many principles, concepts, and mechanisms to aid people in making economic choices and in understanding and controlling the consequences of those decisions. Here are just a few of them:

- Demand, supply, price.
- Markets and competition.
- Labor productivity. The amount of work done is the ultimate determinant of the wealth of any society.
- Banking and credit.
- Saving, investment, capital formation.
- Government expenditures and taxes in allocating resources.
- Taxes of many types: corporate income, personal income, property, sales, and payroll, to name a few.
- Tariffs and trade quotas.
- Balance of trade and balance of payments.

Knowledge of these and other economic concepts, principles, and mechanisms will help in making and understanding economic decisions to achieve particular goals of individuals, organizations, and governmental bodies.

Moreover, in our society economic goals of people differ widely. Some value freedom highly. Others want security and are ready to sacrifice some degree of freedom in order to get it. In our democratic society everyone has an equal right to his own views—but in making his decisions he should know the consequences of those decisions to himself and his family, to other Americans, and to the world position of the United States. Also, he should know the consequences of his decisions to the economic system that has done so much for our citizens.

Every literate adult has many roles to play in making economic decisions; and he has many interests. He decides as an individual consumer what he wants to buy. But he may also have economic interests as an employee of a business or governmental body; as a proprietor of a business; or as a self-employed doctor, lawyer, farmer, or author. He may belong to a union. He may own insurance, have a bank account, own a house which is mortgaged, owns a car, own stocks and bonds, or live on a pension. In all those roles, economic decisions made by him and by others influence his welfare and his happiness; and he and they need knowledge to make them soundly.

And in a free society, the votes and attitudes of citizens will influence the economic decisions of lawmakers and governmental bodies on which the welfare and happiness of citizens vitally depend. Again, the individual should vote and decide with a knowledge of what his vote and attitude will mean to his own economic welfare and happiness, to the economic welfare and happiness of other Americans, and to the world position of the United States.



In short, every American should make intelligent and informed economic decisions, and his votes and attitudes should also be intelligent and informed. Such knowledge is desirable not only for his own self-interest but in the interest of every other American. The importance of economic understanding for voters is well summarized in a searching remark made by Frederick R. Kappel, then chairman of the American Telephone & Telegraph Co., in a speech to the Arkansas Council on Economic Education. There he said, "They can vote the country down the drain without even knowing it."

#### GETTING THE NECESSARY KNOWLEDGE

Fortunately, the basic knowledge necessary for sound and informed economic choices can be taught in our elementary and high schools—and taught in greater depth in our colleges and graduate schools. The scope and approach for doing this effectively is outlined in the report of the National Task Force entitled "Economic Education in the Schools," that I referred to earlier.

But getting economic knowledge and understanding actually taught in our schools and colleges calls for widespread recognition of its importance, and decisions—or choices—by many citizens, school boards, school administrators, teachers, college trustees, and lawmakers that economic education shall be included in school and college curriculums.

This does not mean pushing for an unbalanced curriculum. Economic facts, concepts, and reasoning can be taught as part of social study courses in elementary and high schools and in more specialized courses in high schools, colleges, and graduate schools.

And "education" does not mean "indoctrination" in any particular shade of economic theory. It is sounder to present all shades to the student objectively, train him to reason for himself, and let him reach his own conclusions.

#### SUMMARY

In summarizing the importance of economic education to everybody, let me give you a few more personal convictions:

(1) The wealth and physical strength of the United States is based essentially on the productivity of our manpower and brainpower, operating in a free society. Any substantial impairment of that productivity or freedom reduces our wealth and weakens our competitive position as a nation.

(2) Our manpower, brainpower, and other resources can best be harnessed to the service of our citizens through the private enterprise system. The profit motive, operating under competitive pressures, is the best way yet discovered for making sound economic decisions. Any substantial impairment of the private enterprise system or the profit motive does a disservice to our citizens and to the Nation. This does not mean that the system should not change with changing conditions and the advent of new social and economic forces at work. In fact, the system has shown remarkable flexibility and adaptability without departure from fundamental principles.

(3) At least a grounding in economic understanding is essential if our citizens are even to make economic decisions that are in their own interests, let alone decisions necessary to maintain the Nation's productivity and the private enterprise system on which it is based.

(4) As one who has had an opportunity to contrast in depth the management of business and governmental organizations in the United States and other countries, I am increasingly impressed with how our spirit of enterprise, our other values, and our private enterprise system all combine to make our manpower and brainpower productive and competitive. That contrast stimulates me to do what I can to encourage the underlying economic understanding that is necessary if our citizens, officials of organizations, and lawmakers are to do their parts in encouraging enterprise, deepening the dedication to our values, and improving the performance of our economic system.

(5) In the wars on poverty and unemployment, I believe that economic education can mount strong attacks. With greater economic understanding in their constituencies, lawmakers and labor leaders could more easily remove the restrictions that destroy business jobs and provide conditions that encourage businesses to create additional productive and profitable jobs. Productive jobs not only lower unemployment and welfare costs, but provide the individuals with the dignity and character-building benefits of work.

(6) The business community bears a particular responsibility for fostering economic education. A business organization benefits greatly from economic understanding and suffers quickly and severely from laws and economic and social forces that impair productivity, reduce competition, and dull the profit motive. That is why for the past 11 years I have been devoting interest, time, and my own money to improving the quality and increasing the quantity of economic education. This effort has been made chiefly through the Committee for Economic Development and the Joint Council on Economic Education—organizations that I believe are both objective and effective in fostering economic education.

Chairman PATMAN. Thank you very much, sir. We will now hear from you, Mr. Goldfinger.

**STATEMENT OF NATHANIEL GOLDFINGER, DIRECTOR OF RESEARCH, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS**

Mr. GOLDFINGER. Thank you, Mr. Chairman.

I am sure we will agree that a great increase in the volume, and vast improvement in the quality, of economic education is essential for meaningful citizen participation in the affairs of our Nation and local communities in the final third of the 20th century.

Simple reliance on inherited wisdom, cliches, and myths are no longer adequate—if they ever were adequate in the past. Ours is a time of vast, swift, and even accelerating change—in technology, for example, in urban growth, in race relations, and in the pressing demands of the peoples of the less developed countries of the world for a greater share in the benefits of economic growth and development.

These changes are occurring so swiftly that it is most difficult for individuals and communities to grasp their meaning, even in relation to their own lives. Moreover, workable solutions and adjustments to these deep currents of change are further complicated by the competing powers and promises of differing political and social systems.

As a free institution, which is a product of democratic rights, organized labor is wedded to the conviction that the complex adjust-

ments and solutions to these vast changes can and must be developed within the framework of a free society. As a result, organized labor which began the fight for a free public school system in the 1820's, is vitally concerned with the quality and quantity of educational opportunities.

An informed citizenry is essential for the development of workable adjustments to the deep undercurrents of change, while maintaining and improving our free social order—to know enough about the alternatives so as to choose and support policies rationally and intelligently and, hopefully, wisely, as well. An educated citizenry is a fundamental prerequisite, probably more important than ever before.

Despite its essential importance in this final third of the 20th century—and despite the efforts of some educators and economists—the current state of economic education in our school systems is far from good. The quantity of economic education has been slowly improving. An increased number and percentage of students in our school systems are being reached by economics courses or by a significant degree of economics content in social studies courses. However, the numbers and percentages of students who take economics courses in the school systems, are still quite small. And, despite the efforts that have been made, the quality of economic education is still rather poor, particularly in light of the pressing needs of the time in which we live.

Will Scoggins concludes his study for the University of California—Los Angeles Center for Labor Research and Education, in his report "Labor in Learning: Public School Treatment of the World of Work" with the following comment:

Young people are being taught albeit with melodramatic emphasis, what it meant to be an employee in the crafts or laboring class—up to 1935. They are not being taught, at least in their social studies classes, information which can realistically be applied, and which I deem vital, to their contemporary expectations of entering the work force.

What Scoggins found in the high school districts of Los Angeles County is probably representative of the country as a whole. And Scoggins' findings concerning the teaching of organized labor, man-power, labor-management relations, and related contemporary social-economic issues have an important bearing on the quality of economic education, in general, in our school systems.

As far as I know, the only significant national force for the promotion of economic education and improvement of its quality is the Joint Council on Economic Education, which was founded in 1948. The basic nature, structure, and principles of the JCEE, in my opinion, have been the secret of its growing importance and the substantial success it has achieved, when one considers its small staff and funds, by comparison with its task.

A key factor in the JCEE is that it is a joint council—with representation of business, labor, and agricultural organizations, as well as educators. And a related key factor is that the educators—and not the interest groups—have the responsibility for directing the program.

The following statement of principles is from a 1961 publication of the organization, and it deals with the issue of objectivity of representation of various groups in the community, and complete freedom of inquiry and discussion:

A. The viewpoints of all the major sectors of the economy—agriculture, government, business, labor, the consumer—must receive full consideration in the formulation of programs and in the development of materials.

B. When advisory committees or councils are used, such groups should include representatives from agriculture, business, government, and labor, as well as from education.

C. Leadership in the field of economic education, as in all areas of education, should be in the hands of the educators.

D. Economic education should encourage study of:

1. The concepts and principles of economics.
2. Economic institutions.
3. Economic activities.
4. Economic problems.

E. The study of economic problems should be conducted within the framework of:

1. Maximum objectivity.
2. Complete freedom of inquiry and discussion.

(From "Economic Education" by M. L. Frankel.)

While the national JCEE is the headquarters and clearinghouse, an essential part of the organization's structure is composed of State and local joint councils, which carry forward the work at the local level and which are supposed to be based on the national JCEE's fundamental nature and principles.

Dr. Frankel, President of the JCEE, and others, during the course of these hearings, will undoubtedly deal, in some detail, with the organization's work and achievements. I will mention only a few highlights.

The JCEE has aroused interest in economic education among educators, school administrators, and groups in the community. It prepares and recommends materials. It has helped to curb the inundation of our school systems with propaganda, indiscriminately presented as fact or as authoritative views. It has helped to educate teachers in economics and to improve economics training requirements for teachers. It enjoys a cooperative relationship with the American Economic Association and with several major educator and school administrator associations.

To us in organized labor, the nature and principles of the JCEE are of great importance. It is our firm conviction that economics can and should be taught objectively—with ample and adequate description of alternative and opposing views. Interest groups should have the opportunity to present their views, as part of the educational process, but the responsibility for education must reside with the educators.

These are principles of the JCEE. They are principles of organized labor. Moreover, the trade union movement has a direct self-interest in strict adherence to these principles. Organized labor has neither the funds nor personnel to compete with business, the banks, insurance companies, and consumer finance companies in a free-for-all effort to substitute viewpoints and propaganda for the process of education.

However, these principles are not easy to fulfill. They require daily vigilance. And they place a great burden of responsibility on educators. There are some occasions, in my opinion, when even the national JCEE does not completely fulfill these principles. At the State and local joint councils, the backsliding from objectivity and heavy emphasis on business representation and views are, in some cases, unfortunately much more than an infrequent occurrence—even within the structure of the JCEE with its basic nature and principles.

Organized labor, itself, has a direct responsibility to pursue the goal of objectivity in economic education—certainly, within the structure and principles of the JCEE. But, unlike business organizations, with their many officers and staffs and funds, organized labor, particularly at the State and local levels is frequently stretched very thin—with few full-time officers, little if any full-time staffs, a multitude of obligations, and very little funds.

This part of the reality of American institutions places a special responsibility on the educators to seek out and insist on fair and adequate representation of organized labor and other groups, as well as business. It places a special burden on educators to make sure that students of economics receive a fair and balanced presentation of differing and opposing views.

The JCEE's nature and principles offer some opportunity for achieving such balance and objectivity. Outside the JCEE, there is no such framework—except for the potential of the National Defense Education Act economics workshops for teachers, which were recently instituted. The major burden inevitably falls on the educators themselves, who are often ill-prepared for the complexities and controversies of economics—in addition to the many other obligations and burdens of educators.

Here, too—in the preparation of teachers for such issues—the JCEE has performed a great service in its summer workshops for teachers, its materials, and its aid in the development of curriculum projects.

Yet, despite the yeoman's work of the JCEE, hardly more than a beginning has been made in the uphill effort to promote economic literacy throughout the multitude of school systems of the Nation.

Will Scoggins' report on the treatment of the world of work in the Los Angeles County high schools points to a major problem in this effort—the biased nature of so many of the textbooks. Concerning the textbooks, used in the Los Angeles County high schools, Scoggins reports:

Strikes are usually portrayed as exceedingly violent and accomplishing nothing. Unions, as political activists and instigators of social-economic legislation, are adequately described by only two of the eighteen U.S. history textbooks and by only one-third of the "Government and Problems" books. Even an adequate definition of such words as "injunction," "arbitration," "closed shop," etc., is seldom given in the books. Although more care is exhibited in describing the labor-management laws now existent, little is said of the historical background, or the need for such legislation. Collective bargaining, which has established a system of industrial jurisprudence in most of American industry, whether organized by a union or not, is ignored by well over half of all books. Little is said of automation, and what is said suggests that a technological marvel is in the offing with little hint of accompanying labor dislocations. Social Security, although generally better handled than most other items of this study (perhaps because it is easier to chart with lists of benefits), still seems a bit paternalistic to some authors. Possible extensions of such legislation, or precedents set by other democratic countries, are usually ignored or dismissed as socialistic. Workmen's Compensation and State disability insurance are barely mentioned in most U.S. history books and adequately handled by only a minority of the "government and problems" books. Progressive taxation is treated with childish naivete.

If this study were to end with the perusal of textbooks, the question of what is being taught to prospective employees of America about labor and the economy would have to receive a rather unsatisfactory answer. The answer would be unsatisfactory not so much because of a lack of information, but because of what is included in the textbook so often invites, encourages, and even demands an anti-labor position from the reader.

("Labor in Learning: Public School Treatment of the World of Work," p. 55.)

To offset such omissions and bias in the textbooks, Scoggins reports that many teachers use selected readings from anthologies, current periodicals, and paper-backed books. Such initiative is to be encouraged in any case—to encourage students to move outside of official texts for additional sources are not always present.

Scoggins' conclusions concern much of the economic content of U.S. history, U.S. Government, and contemporary American problems courses. For over 90 percent of high school students, it is in these courses that they are supposed to learn some economics. For the majority of students—those who do not go on to college and those who attend college, but do not study economics—these high school courses are probably their last contact with economic studies.

It may be argued that a full semester of high school economics would be a great improvement. However, as an elective course, only a tiny minority of high school students take a semester of economics—perhaps only 6 percent. While this tiny minority probably receives much more detailed information, I doubt that the courses, at this point in time, are a substantial improvement over Scoggins' findings regarding the social studies courses—in terms of current issues and problems, the world of work, economic institutions, and objective presentation of controversial issues.

The national income accounts method of presenting economics—which the JCEE and most American economists promote—is a rational and intelligent framework for the teaching of economics. But it is only a framework. In itself, it solves no policy problems and presents no policy answers to questions. At best, it can help to present alternatives.

The presentation of alternative policies involves differences of viewpoints, economic and social interest, ethical and moral objectives—and, frequently, controversy. Basically, economics, today, is what it once was called—political economy. And the teaching of economics must include, therefore, a willingness to face controversial issues and to handle them with fairness and balance.

In this way, the teaching of economics can become meaningful and vital. And it can be presented with ample and adequate description of opposing views. As a representative of organized labor, I would hope that the overwhelming majority of students will adopt organized labor's views. Whether they will or not is a gamble. But organized labor, which has consistently championed a free public school system for over 140 years, is willing to gamble with the effects of genuine enlightenment.

The study of the real economic world and its institutions—its achievements and its problems, as well as alternative interpretations and recommendations—seems to me to be a proper function of the elementary and secondary schools. Up to now, there has been much too little of such emphasis—with resultant ignorance, bias, and reliance on inherited mythology.

Organized labor and collective bargaining need their "fair day" in the court of elementary and secondary school education. So do the realities of the economic world around us. And the students of elementary and secondary schools need such education, too—for a more adequate preparation for their own lives as adults in a world of vast and swift change.

As I see it, therefore, economic education is in need of considerable promotion. But it is also in need of a vast improvement in quality in vital meaningfulness to students, in fairness and objectivity of teaching, in relevance to the lives of students in the final third of the 20th century.

It took the Sputnik event, a decade ago, to produce the interest, concern, and funds for the updating and improvement of teaching of mathematics and the sciences. Let us not wait for a shock before we concentrate a similar degree of concern, talent, and funds for the teaching of the social sciences, including economics.

It seems to me that Federal support of institutes for teachers and curriculum development activities in economics—and in the social sciences, generally—should be expanded. The expansion of such institutes and curriculum development is urgently needed. The work of the JCEE as well as the more recent activities of the Office of Education and the National Science Foundation provide a foundation for moving ahead rapidly.

School systems should be encouraged to require at least one course of college economics for teachers of social studies. And, in this regard, it seems to me that the Nation's leading academic economists can help to upgrade the introductory college course in economics, by becoming personally involved in the teaching of such courses and in the preparation of materials for such courses.

School systems should also be encouraged to include an economics course in the high schools and to include economic content in social studies courses in both elementary and secondary schools.

The teaching of economics should be encouraged. The Federal Government's emphasis, up to now, has been on research, which, unfortunately, has attracted all too many teachers out of the classrooms. Federal support of graduate fellowships for the teaching of economics and the development of elementary and secondary school curriculums should be, at least, examined for feasibility.

In addition, it seems to me that there should be some Federal funds made available for studies of the effectiveness, meaningfulness, objectivity, and relevance of current public school courses in economics and the social sciences, generally. For unless the quality of such education is substantially improved, the promotion of economic education will add much to the quantity of courses but not very much to enlightenment.

It is time that America became concerned about the teaching of the social sciences, including economics, as it did about the teaching of mathematics and the sciences 10 years ago.

Thank you.

Chairman PATMAN. Thank you, sir.

Mr. Hamilton, you are recognized.

**STATEMENT OF W. E. HAMILTON, DIRECTOR OF RESEARCH,  
AMERICAN FARM BUREAU FEDERATION**

Mr. HAMILTON. Thank you, Mr. Chairman.

I appreciate the opportunity to participate in these hearings because I feel that economic education is an important subject.

The average individual is confronted with a constant need to make economic decisions, both in his own affairs and in his role as a citizen

who can influence public policy through the ballot box and through participation in various organizations.

A widespread program of economic education is needed to prepare students for the economic decisions they must make throughout their lives by helping them to acquire an understanding of basic economic principles and relationships.

Agriculture probably has suffered more than any other industry from an imperfect understanding of fundamental economic facts. If farmers and the general public had had a better understanding of economics, I am confident that we would have avoided farm programs which were destined to price our products out of important markets, misallocate resources, stimulate the production of competitive products, and pile up unwanted surpluses. More farmers and more Members of Congress should have known in advance that acreage restrictions would stimulate per-acre yields, that the accumulation of Government stocks would lead to serious problems, and that the assumed benefits of such programs would be capitalized into higher land values. More people should have known in advance that price support loans for cotton would stimulate production in other countries, encourage the development of synthetics, and attract a flood of textile imports.

The sporadic efforts of some farmers to increase farm prices by withholding perishable products from the market after they have been produced also seems to me to illustrate the need for a better understanding of fundamental economic principles.

The sensitivity of consumers to higher food prices, as evidenced by the consumer boycotts of a few months ago, is an indication of farmers' interest in better consumer understanding of the economic factors which determine market prices.

In broader terms, the continuing debate with respect to the Federal tax and expenditure policies that would best serve the objective of sustained economic growth without inflation is a good example of the need for general public understanding of economic principles.

The basic responsibility for economic education properly rests with public and private educational systems. Much of the job must be accomplished through primary and secondary schools in order to reach the students who do not go on to college; however, college-level economic education programs are needed to prepare teachers and improve the economic competence of other students who are not majoring in economics.

There also is a continuing need for out-of-school economic education programs for adults. A number of public and private organizations are in this field. Some of their efforts are excellent; others are basically efforts to further specific views on economic issues. The existence of competing efforts to convert people to specific economic viewpoints is a good illustration of the need for programs that equip students to think for themselves on economic issues.

In agriculture, the land-grant colleges and universities have long played an important role in economic education through cooperative extension programs. The fact that economic literacy is not as high as it should be among farmers does not necessarily mean that these cooperative extension programs have not been effective. The job cannot be done entirely by adult education programs. It is difficult to get more than a small percentage of any adult group into such programs. Furthermore, it is to be expected that adult education



programs will be more effective if they can build on a basic foundation of knowledge acquired through primary and secondary education.

The problem of improving economic education through primary and secondary schools has been fourfold: (1) To convince administrators that economic education should be included in school programs, (2) to find a place for it in crowded curricula, (3) to develop suitable classroom materials, and (4) to develop qualified teachers.

The Joint Council on Economic Education has provided valuable leadership in all of these problem areas. The Joint Council has demonstrated an outstanding ability to enlist the cooperation of educators and the support of organizations representing various segments of the economy such as agriculture, banking, business, industry and labor. Progress has been slow, but this is to be expected in view of the magnitude of the job, competing demands on school systems, and the need to develop workable procedures through experimentation. The increased acceptance of the need for economic education and the operating experience that have been gained through pioneering efforts stimulated and assisted by the Joint Council should lead to more rapid progress in the future.

I understand that the committee is interested in determining whether the Federal Government should provide financial support for private organizations which have demonstrated their ability to improve economic education. In my opinion, the financing of such organizations should remain a private responsibility. My view on this matter reflects both a belief that the Federal Government should not be burdened with responsibilities that can be discharged by private groups, and a concern with respect to the desirability of delegating responsibility for the expenditure of public funds to a private group.

If the Federal Government were to undertake to support private organizations engaged in economic education, it could easily find itself in the difficult position of having to choose between competing groups. There also is a danger that Federal support for such groups would be widely construed as a Federal effort to influence the content of educational programs. Actually, it is entirely logical that the Federal Government should exercise some control over any activities that it finances in order to assure that public moneys are spent in accordance with the will of Congress.

Thank you, Mr. Chairman.

Chairman PATMAN. Thank you, Mr. Hamilton.

We will now hear from Professor Senesh.

#### **STATEMENT OF LAWRENCE SENESH, PROFESSOR OF ECONOMIC EDUCATION, PURDUE UNIVERSITY**

Mr. SENESH. Mr. Chairman, today in the elementary grades a significant educational revolution is in process. This revolution started a few years ago when the scientists became curious about children's ability to learn about modern scientific theories. With the help of scientists we have discovered the immense abilities of our children to begin learning complex theories and applying them to the solution of problems. The scientists were followed by the mathematicians; the mathematicians were followed by modern linguists. In each case, a nucleus of competent academicians estab-

lished a working partnership with the educators to teach children the frontiers of knowledge in their disciplines, so that when the children grow up, less of their knowledge will be obsolete.

The elementary classroom offers a favorable environment for experimentation. Children are curious about the world around them. In contrast to adults' attitudes toward theory, children seek ideas that help them to make order out of a seemingly disorderly world.

The elementary classroom is also conducive to experimentation because elementary school teachers, more so than any other teachers, I am sorry to say, are committed to education.

Social scientists arrived belatedly in the elementary school classrooms. The reasons are many. Some communities are suspicious of social problems in the classroom. They are afraid that the classroom may become the battleground of competing pressure groups. Also many social scientists had reservations concerning the readiness of children to understand the social process. Some economists think that economics should not even be taught in the high schools. They think that only college students are capable of understanding economic theory. Many of these economists complain that undergraduate students are not able to comprehend economic theory. This attitude shows the underdeveloped state of economic education.

I am puzzled by the reluctance of social scientists to teach the nature of society in the elementary grades. Children by just being alive are a part of society. They are exposed to the successes and frustrations of society. Although they do not articulate their problems (and neither do all adults) they are wounded just as painfully, if not more than adults by poverty, discrimination, lack of education, or by unemployment in their families. The television brings the world in all its variety and complexity into the child's own room. Surely, equal time should be given for a rationale of the complex world.

So, social scientists should help teachers and children to articulate social problems to which they are exposed. Children should know that man is able and competent to face up to the problems in his environment and build a better world.

To develop the problem-solving ability of children is necessary in order to maintain the child's mental health and make him aware early that he is a shareholder in a free society. To develop the problem-solving ability necessitates knowledge and the use of analytical tools. The knowledge and use of analytical tools require a particular mode of thinking which requires a long process of conditioning. To start developing this analytical thinking through an economics course in high school or in college is a primitive idea. The conditioning process must start early in the elementary grades.

That is what I have been doing in the last 8 years—creating a curriculum design where the fundamental ideas of economic knowledge are incorporated in all grades with increasing depth and complexity. The curriculum design to which I am committed teaches teachers and children of the first grade the universal problem of scarcity and the way the problem is faced by individuals, by families, and by nations.

First graders are taught how men try to overcome the problem of scarcity by organizing and reorganizing the division of labor in the home, in business, in the nation, and between nations. The children are taught how the organization and reorganization are affected by technology. Making choices is an important exercise in the first-

grade classroom. Practicing making choices among alternatives at any one time and practicing choice-making between present and future needs prepare children for understanding the problem of economic growth.

In the first grade, interdependence resulting from the division of labor is studied. The children discover that trading leads to interdependence; that trading can be carried on if people have confidence in the medium of exchange, and if they have confidence in each other and live in peace.

Children of the first grade are also taught about the complexity of the market. They learn how prices help to allocate scarce resources. First- and second-grade exercises teach children the social and economic significance of market price and the way that the nature of competition varies in agriculture, retailing, and manufacturing.

The children act out the employment theory. They discover that many people are unemployed against their will, and that individuals, business, and the Government can act to help the unemployed find gainful employment.

First graders learn the importance of Government and the reasons families decide to produce some goods and services together instead of each family producing them. They learn that families together elect a government to act in their behalf to fulfill the desires which they have chosen to fulfill together.

Children also discover that different people have different ideas about which desires should be fulfilled by the Government. These differences are expressed in the choice of lawmakers. Here, children discover is the bridge between economics and politics.

These are the ideas which first-grade children are discovering through games, stories, experiments, and the study of their own community. These are the ideas which children are learning in increasing depth and complexity as they move from grade to grade. Using this knowledge, children in the primary grades study the problems of home, neighborhood, and city. Unemployment, rundown neighborhoods, air and water pollution, city transportation, urban sprawl, social stratification are just some of the problems which these children study. They study how the solutions are determined by the values of the interest groups.

Experience in many New York City public schools and in the model schools in Washington, D.C., has shown that the study of such problems stimulates the children's intellectual curiosity and aids their reading, writing, and speaking skills. In addition, this kind of social studies program establishes lines of communication between parents and children. Feedback from parents indicates how the learning of social sciences in the primary grades stimulates many interesting conversations in the home.

Children are ready to incorporate the tools of economic analysis into their intellectual tool kits. Unfortunately, there is a considerable institutional gap between the children's curiosity and the help adults give them.

Mr. Chairman, I should like to submit the following recommendations for your consideration:

1. Governmental grant-giving agencies should support the work of innovators who are engaged in designing economic curriculum from grade 1 through college. Such innovators enable teachers to build

their work on the learning experience of preceding grades. Today, the economic curriculum is atomistic. The only time the child is exposed to organized economic knowledge is in high school. Without previous academic experience in economics the high school courses are ineffective. The high school teacher has nothing to build on.

2. Governmental grant-giving agencies should not demand that the innovator build in an evaluating instrument into his experiment. Once an imaginative committee has found that a curriculum research proposal ventures on the frontier of new knowledge, and if the committee feels that this new knowledge is important, they should not compel the innovator to prove that his ideas will lead to success before he launches the experiment.

3. Innovators need time to develop ideas. They should not be harassed by crash programs. Many grants are terminated at the most critical stage of the work.

4. Governmental agencies should settle without delay copyright problems. Much curriculum material in economic education developed with government grants cannot find publishers because the innovators do not enjoy the same protection as inventors. Inventors and inventions are protected by patents even though government may have supported the research. Curriculum innovators in social sciences do not get such a reward. In many cases, their work becomes public domain. This means that their work ends in Government archives because of the lack of national distribution channels of private publishers. Most private publishers do not yet invest significant funds for experimentation. Probably publishers who engage in research and development of new curriculum design should be granted special tax benefits.

5. Governmental agencies should pay special attention to teacher-training programs and encourage innovations in this field. At present, many teacher-training institutions are turning out elementary and secondary school teachers with little or no competence in economics. The exposure of students to one- or two-semester courses in economics is inadequate training. Because of the expansion of knowledge in economics and other areas of the social sciences, appraisal of the undergraduate program in teacher-training colleges should be postponed no longer. New ways of structuring knowledge, new ways of relating knowledge to life, new ways of relating subject matter to classroom situations are known, but these innovations must be incorporated in teacher-training. The present feuding between specialists in methodology and in subject matter is a waste of resources. In many universities the academic departments have little sympathy for and understanding of the needs of future teachers. Academic departments have little appreciation of the great heritage of American education. Too often, the courses offered by academic departments have little value for future teachers. From the cooperation of the academician and the educator can come a new age in teacher-education.

6. Governmental agencies should give more support to educational organizations. The Government has given much support to professional organizations representing the academic disciplines. This was an important step. But the professional educational organizations should also be encouraged to become a part of educational reform movements since they occupy a strategic position in reaching school systems. This support should include institutional support to

organizations who pursue with academic integrity the improvement of social science education.

7. The Government itself could make an outstanding contribution to economic literacy. The Government is not only a storehouse of economic information but also a generator of much significant economic research. This economic information is sadly under-used. Very little of the valuable information filters to the public. For example, the Employment Act of 1946 enabled the Government to make surveys and do research in a broad range of national and international economics. Through the Joint Economic Committee the Government established a public forum for social scientists and the representatives of other professional and citizens groups. Neither the research nor the drama of dialog has found a way into the classrooms of America. The President's Economic Reports are not written for the general public. They are limited to an audience competent in economics. The large distribution of some of these publications is no proof of the use made of this invaluable material.

I should like to recommend that an ad hoc organization study the rich reservoir of economic knowledge produced by the Government and recommend communication channels for this knowledge.

8. The governmental agencies should support teamwork among the social scientists so as to develop interdisciplinary curriculum for the public schools. Although economics by its very nature will always play a prominent role in the social science curriculum, there is increasing recognition that most economic phenomena cannot be explained in economic terms alone. The Joint Economic Committee is a good example. This committee considers not only the advice of economists but also seeks the advice of a broad range of social scientists. The same multi-disciplinary approach should be used in the classroom.

When the American youth recognizes what an exciting intellectual experience it is to apply the analytical tools of the economist, the sociologist, the anthropologist, the political scientist to social problems, he will not only aspire to a better quality citizenship but he may also be inspired to choose from among the various areas of the social sciences a professional career.

Thank you very much for the opportunity to appear before you. Naturally my remarks were short and I would appreciate the opportunity to put into the record some of my writings. One of these publications is an example of the important work which is done by the Social Science Education Consortium, an organization established to promote interdisciplinary cooperation in the improvement of the social science curriculum.

(The materials appear in volume II, part 3, exhibit I.)

Mr. SENESH. Thank you.

Chairman PATMAN. Thank you, sir. Gentlemen, your statements are certainly appreciated. They will be very helpful to this committee. We appreciate your attendance.

We want to ask you some questions. I will first bring up a point and ask your opinion on it, and then I will yield to my colleagues.

The first question that comes to my mind is who is going to determine the kind of economics to be taught at the different levels like elementary, high school, college, and so forth, and who will pay the costs, how will you arrange that? Will you have sort of a board at

these different levels to determine the kind of economics to be taught or how will it be handled?

I will start on the left over here and you gentlemen just make a brief statement on those suggestions, if you will, please.

Mr. BOWER. Organizationally, the kind of economics to be taught in any school or college is determined by the school board or the board of trustees acting on the advice of administrators. One of the problems of economic education is there are 25,000 public school systems in the country; and to get economics taught and understood requires some motivation from the school boards, and those school boards are constantly changing.

Chairman PATMAN. Should we have some overall organization that would at least give suggestions to these local boards? Obviously, there are too many of them to deal with.

Mr. BOWER. It seems to me that the question of the kind of economics to be taught is such a complicated one that it is not very easily handled by a board. It is the same kind of question as to how people shall think about a lot of things in American life. I do not believe that any board should settle that. I think it has to be thought out by the individual citizen, and he will, in his voting and attitudes, determine it in the long run.

This is a very complicated problem because it involves so many interests of society, as all of our panel members have brought out. I do not believe, sir, that a board to determine the kind of economics is likely to be acceptable to American society because they do not want to be told by a board how they should think. They want to think for themselves, and economic education is the way to train them to think for themselves.

Chairman PATMAN. All right. Mr. Goldfinger?

Mr. GOLDFINGER. Thank you.

I agree with Mr. Bower that a national board probably would not be feasible, and I doubt whether it would be advisable.

However, sir, we do have a good deal of experience in the promotion of the quantity and quality of education in the sciences and in mathematics. This was not done, as far as I know, by any national board. It was done as the result of a good deal of concentrated attention partly by the Office of Education, partly by educators themselves, both in the public school systems and in the universities.

I do believe strongly that the Office of Education can and should be engaged in fostering and encouraging, and to some extent financing, the development of curriculum material, of teacher training, and other activities of this sort. But the basic decisions, whether we like it or not, are made and will be made by the school administrators, the boards of education, the teachers, and the local communities in the 25,000 or so school systems throughout the country. I think the Federal Government can be a real strong force, not in imposing any particular point of view and not in imposing any particular pattern, but in encouraging the development of interest, concern, and bringing talent into this area of the social sciences and economic education—in encouraging and helping to finance teacher training institutes in the social sciences and in economics, in encouraging curriculum development. I think in this kind of process we probably would get some better textbooks, too.

One of the appalling things in the social sciences and in economics, at this point, is not only the lack of good curriculum materials, but also the lack of many good objective textbooks in the sense that I indicated in my statement. I think there is a real role for the Federal Government here, but it is not in the sense of imposing its will. It is in the sense of stimulating ideas, stimulating development, helping to finance and encourage activity in the area.

Chairman PATMAN. Thank you, sir.

Would you like to comment, Mr. Hamilton?

Mr. HAMILTON. Yes, I would, Mr. Chairman.

I think that we are all in agreement that we do not want the schools to teach a particular kind of economics. I think what we want is for them to teach a problem solving approach, an approach which starts with saying what is the problem, what are the alternatives, what are the consequences of the different alternatives, what are the arguments for doing this, what are the arguments for taking a different course—an approach which causes the student to think of different problems and different alternatives and to make his own decision. This is a process which teaches a student to think for himself, but to recognize economic relationships in the process.

To give you an illustration, I do not think Mr. Goldfinger and I would agree on the policy question of what ought to be done about the minimum wage. But we could agree on an approach which would cause students to consider this problem. This would involve asking what is the problem, and what are the consequences of different courses of action. The reason Mr. Goldfinger and I would not agree is because we would weigh these consequences differently and I think different students coming out of this kind of a course would also weigh the consequences differently.

You are not going to get unanimity out of this kind of a program, but you are going to get more intelligent citizens who can think for themselves.

I have heard it said many times that economists do not agree. Well the reason economists do not agree is not because they do not agree on the facts so much as because they do not agree on what should be done, and you will get that kind of disagreement among your students with this kind of approach.

The fact that we are not all agreed on policy questions is the reason we do not want a particular type of economics taught. We want students to be taught to study the facts and the problems, the alternatives and consequences, and to think for themselves.

With regard to who should pay for it, I would just say briefly that it should be paid for in the same way that other educational programs are paid for.

I happen to be less enthusiastic about Federal aid than some other people, but to the extent there is Federal aid, we should not discriminate against economics. I think, however, that the bulk of the school costs by and large have to be paid by the local school districts and the States.

Thank you very much.

Chairman PATMAN. Thank you, sir.

Professor Senesh, would you like to comment, sir?

Mr. SENESH. Yes.

Mr. Chairman, I object to the way the question was raised or put. You have asked what kind of economics should be taught—

Chairman PATMAN. It was not prepared. It was just throwing out a thought.

Mr. SENESH. Yes. I do not think that the question of what kind of economics should be taught is really a problem. Mr. Kenneth Galbraith and Mr. Milton Friedman would have little disagreement on the fundamental ideas of economic knowledge or of the scope of economics which should be taught. They disagree on public policy issues which are a matter of value judgment.

In the classroom, we should teach the fundamental ideas of economic knowledge. These ideas are above or lie beyond partisanship. Then, the students should be exposed to the use of analytical tools in problem-solving situations. When it comes to making choices among alternative solutions of a problem, people are influenced by their own value preferences. At this point, children should be encouraged to bring their soap boxes to the classroom and reconstruct the political dialog between the many interest groups. This dialog will help them to discover that the choice of one solution does carry with it the sacrifice of some values while gaining in other values. The weighing of values in a problem-solving solution must be an important part of the curriculum.

I do not believe that 25,000 school systems can do too much by themselves to incorporate the cutting edge of knowledge into the curriculum.

This business of the grassroot curriculum annoys me. There was a time when we needed a grassroots curriculum—when we had strong regional differences in our economic structure and in our way of life. But this differentiation between towns and cities is disappearing. I think that today you can develop better universal guidelines to build curriculum than ever before.

As a matter of fact, I would not mind if the rural school system would teach more about urban curriculum. There is a good possibility that most of the farmers' children will find their way to urban areas anyhow. This is what the problems are today in the big cities such as in Chicago and New York. Many people come to these big cities from rural areas and they are not prepared for urban living.

Finally, what kind of practical recommendation one should give: I would like to see the Government support pilot schools throughout the country. These schools would be the generators of new ideas. Here teachers could come to keep their minds up to date.

Chairman PATMAN. Thank you, sir.

Senator Jordan, I am sure you would like to interrogate the distinguished members of this panel, so you may proceed, sir.

Senator JORDAN. Thank you, Mr. Chairman.

First may I say to all of you I commend you for the statements you have made here on a very exciting subject, one that I think is long overdue in being considered by Members of the Senate and House, but certainly by members of the public sector and private sector at all levels.

Three of you have mentioned the good work that is being done by the Joint Council on Economic Education.

Tell me, Mr. Bower, what is this organization, and who supports it?

Mr. BOWER. The Joint Council on Economic Education is a national organization with a board of trustees made up of educators, business-



men, labor leaders, agricultural leaders. It is designed to represent all shades of economic thought on its board.

The active management of the Joint Council rests with the executive committee, which again is represented by all shades of economic opinion and different interests in the Government.

The unique feature of the Joint Council is its intention to be objective. For example, I think it is quite remarkable that four people representing different interests and points of view—and not having compared their statements prior to coming here—should be as consistent as they have been here today. I believe this is the result of the influence of the Joint Council on Economic Education.

The Joint Council at the national level is designed to facilitate and service affiliated groups in various sections of the country, and there are 41 of these now. The Joint Council does not seek to dictate the type of economics. It fosters the development of the councils at the local level, and they raise their own funds.

You ask how it is supported. It is supported by contributions from foundations, from labor, from agriculture, and from business. The greatest amount of money raised to date has come from foundations. The foundations are withdrawing their support because they have taken the attitude that they should support new activities and leave it to the rest of the economy to take them over when they have become established. So at the present time business is in the process of raising funds to take the place of the foundations. They are being joined by contributions from labor and other sectors of the economy.

That is a very brief description, Senator.

Senator JORDAN. Yes.

Mr. BOWER. Perhaps you might pursue me a little more and I can give you more details.

Senator JORDAN. I knew something about it, but you filled me in here.

I think it is highly commendable that the movement has the support of men in business, men in labor, men in the farming sector, and educators as well. I think you must be doing some pretty good things with it in order to have that universal support.

Mr. BOWER. We have our arguments. But we try to remember that objectivity is one of our goals, and we resolve them against objective standards, as is brought out by various members of the panel.

Senator JORDAN. Yes. I think we all agree that economics is not an exact science.

Mr. BOWER. I think that is a very important observation, Senator.

Senator JORDAN. Like mathematics. Economics certainly can be slanted one way or another, and I think you summarized it pretty well in one particular sentence of your statement when you said "and education does not mean indoctrination in any particular shade of economic theory." It is sounder to present all shades to the student objectively, train him to reason for himself, and let him reach his own conclusions, and I think every one of you would agree to that.

I do not see any dissenters in the group who would say that that is not a proper approach.

The question that came to my mind as all of you talked was at what age we start this teaching economics in the schools. Mr. Goldfinger suggests that every teacher should be required to have at least

one course in economics before he or she is qualified to teach in high school. Professor Senesh recommends that economics be taught in the first grade—well, this is a completely revolutionary concept so far as I am concerned.

I would like each one of you to address yourselves to this matter, at what point should we start teaching economics in the schools and what in the present school curriculum is this study of economics going to replace.

I will start with you over on this end, Professor Senesh.

Mr. SENESH. I have already committed myself to the teaching of economics in the primary grades. The simple reason is that children are concerned with economic questions. Children are a part of a social and economic environment, and we should give them some kind of rationale for adult behavior in our society.

I am sorry, Senator, there was a second question that I had forgotten.

Senator JORDAN. I asked at what age you start teaching it and who is going to teach it.

Mr. SENESH. Oh, yes. I remember you asked me what subject will be replaced in the curriculum if we teach economics in the primary grades. I think this was the next question.

Senator JORDAN. Yes, that is right. What will it replace?

Mr. SENESH. Now, Senator, it actually does not replace anything because most of the elementary grades do teach social studies. They allocate space for social studies. All I am asking is that in the first grade when the children are playing grocery store that, instead of jingling the cash register, they should discover the nature of competition, the meaning of profit, the factors of production necessary to go into business. All I am asking is that the same stage setting be used meaningfully.

If I am teaching, let us say, the fairy tale of the three wishes, all I want to show is that this story is not so unreal after all. These fairy stories reflect the yearning of mankind for more. Children should know that these stories tell about a time when modern technology was not available and people thought that the only way they could fulfill their desires was through magic.

So, actually, I am not asking for anything to be replaced. All I am asking is to teach more meaningfully what is taught today.

In the public schools we teach the American Indians and the colonial period many times in American history. I want to teach children the colonial period in such a way that they will discover how the various philosophies shaped the thinking of our Founding Fathers and the evolution of our economic and political system. I do not mind if we start U.S. history with the Indians; but I would want to move on to more important learning experiences even in the primary grades.

Senator JORDAN. You would do it then without any special courses; without any special courses in economics as such but with an economic slant on history, arithmetic, on various subjects that are being taught already.

Mr. SENESH. That is correct, sir. I do not advocate special economics courses until the students get to the senior high school. Here, the economics course which is called an introductory course, will become a capstone course, a synthesis of the children's 11 preced-

ing years of classroom experience in economics which will have been taught in connection with other subjects.

Senator JORDAN. It sounded to me like you were going to give the first graders the equivalent of what I got in the first year of economics at the university.

Mr. SENESH. I may tell you that I have received a message from the west coast that my second grade book on "Neighbors at Work" is used as resource material by an instructor in a class for adults. The point I want to make is: If material written for elementary grades incorporates economic analysis with integrity, then the same material can be used for a broad range of age groups. The communication problem in the area of social theory is not much different between lower and higher grades. Once you know enough, the simplicity of communication follows mathematically.

Senator JORDAN. Mr. Hamilton, at what age would you start teaching economics to schoolchildren; and would you make a special course of it; and, if so, what would it replace?

Mr. HAMILTON. Well, Senator, some economic concepts can be introduced at a very early age. Mr. Bower referred to the basic concept of scarcity. That is one which can be introduced at a very early age; and, as Professor Senesh says, when they are playing store you can introduce the concept of profit and the concept of paying wages to labor and you can do this just as easily—if you know how—as you can teach them to play store the old way. I think any parent who has struggled through the new math has an elevated opinion of what the students can absorb at a very early age because if they can absorb the new math, I am sure they can absorb some basic economic concepts. When you get into history and geography, there are other opportunities for introducing economic concepts.

When a teacher talks about the tariff, legislative battles over tariff, and the extent to which the tariff may have contributed to the War Between the States it is very easy to bring in economic factors to explain why this was a controversial issue, and to encourage the student to think in economic terms.

When you get into geography, why are certain industries located in certain areas, and what attitudes do people have as a result of these economic factors?

So, as Professor Senesh says, it does not replace anything. It merely enlarges on the courses we now have by bringing out the economic significance of various factors and causing the students to acquire a knowledge of some basic economic concepts such as scarcity, profit and loss, and comparative advantage.

Senator JORDAN. Thank you.

Mr. GOLDFINGER, I want you to discuss the same thing. I thought you made a good point in your statement when you remarked that after Sputnik in the late fifties we concentrated our attention and our efforts in mathematics and science and we have made some great strides there; and I believe you suggested we might do the same thing or give a little more emphasis to economics because of its importance. I thought that was a good point. Would you care to discuss that further?

Mr. GOLDFINGER. Thank you, Senator. Yes, I believe that there are and there should be some economic content in the social studies courses running all the way through the school system, from the first

grade through high school. If there is to be a special course in economics, it should be in the senior year in high school; and probably realistically it will remain, at least for some time to come, as an elective course rather than a compulsory course. So the economics that is taught in the school systems inevitably comes through, as part of the content of the various social studies courses.

Senator JORDAN. You think it should be required in high school?

Mr. GOLDFINGER. A separate course in economics?

Senator JORDAN. Yes.

Mr. GOLDFINGER. I am not an educator in that sense, Senator. And I can only take a guess. At this point I would suggest that it probably would not be wise to require it, although I am not sure. I would bow to someone like Professor Senesh, who is an educator and knows a good deal about economics courses and the other courses that are required.

However, I do think that there should be an economics content in the social studies courses running all the way through, and I am convinced that some economics content can be begun in the first year of the school system. A child 6 or 7 years old can begin to get an idea about the division of work, for example, because the child knows about the milkman, the storekeeper, the letter carrier, and the other people that the child sees right at home and in the community. These are things which are possible.

The lack at present, I feel, is a lack of meaningful comprehensive work in this area, the development of integrated curriculums that would progress from the first year to the second year through high school. This is where I think we are missing the boat.

Children do get little odd bits and pieces of economic content in the school system. I do not think it is thought through, and I do not think that there is a progression built up. I do not think that there is much of a conscious effort to do this. What I am suggesting is that we need a good deal of national concern and interest in this area to build up a comprehensive, integrated kind of approach to the subject, all the way through the school system—tied in with social studies courses in history, civics, U.S. history, government, and so on.

Senator JORDAN. I think there is an increasing awareness of the need for economic education, and I am happy to see that some progress is being made.

*Newsweek* magazine, for example, has added three professional economists as regular columnists and this type of thing is getting to the people who need economic education. I wonder if our professional economists are doing all they can.

In this respect, Mr. Bower, what do you think about this and the other questions I asked the panel?

Mr. BOWER. I would agree with the answers given by the other panelists generally. I might go even further and advocate teaching of economics in kindergarten, because on an experimental basis this has proven to be worthwhile. It is worthwhile because an understanding of economics at any age is a better preparation for living at that time. The child can learn about saving by determining whether to spend his allowance on candy for that day or save it for something in the future. So economics is preparation for current living, and it is preparation for future living.

The exciting thing about it is that it trains people to think and, therefore, prepares them for citizenship.

So I would agree with the other panelists that it ought to be taught early, that it ought to be woven throughout the curriculum until we get to high school. Then, recognizing my bias, I would favor a required course in economics at the high school level—what Dr. Senesh calls a capstone to the economic education that has been threaded throughout the curriculum up to that point.

Senator JORDAN. I think all your answers point up the very grave need for more economics training for teachers at all levels. Would you agree?

Mr. BOWER. Yes.

Mr. GOLDFINGER. Yes.

Mr. SENESH. Yes.

Senator JORDAN. And training of a nature that will make their own teaching objective, certainly it must be objective, and not indoctrination or not slanted in any way, but objective economics.

Mr. GOLDFINGER. May I add something to that?

Senator JORDAN. Yes.

Mr. GOLDFINGER. I feel strongly about the importance of objectivity. I indicated in the paper I submitted that I do not believe much of the economics that is being taught in the school systems today is objective. Unfortunately, a good deal of the economics content in our public schools is biased, but more than the bias, there are the related issues of meaningfulness and relevance.

A good deal of our economic education is not meaningful and is not relevant to the lives of the children, as indicated by the Will Scoggins' comment that the kids are being taught to enter the world of work of the mid-1930's or perhaps even earlier, rather than the 1960's, 1970's, the 1980's. Economics is being taught as a dead kind of subject, an irrelevant subject.

In fact, the way it is being taught and the concentration on vague theories, I think, repel a good many students. It just chases them away from economics because the kids know something of the real world—they know instinctively and they know from their own lives a good deal of the realities of the economy, they have some ideas about the work their parents do, about what things cost, and they have some idea of family income.

You look at the average economics textbook—and this goes into the college level as well—you would get the impression that this is a country of people whose average income is somewhere about \$20,000, \$30,000 a year, with a vast majority of self-employed entrepreneurs or professionals. Contrast such myths with the reality that the average family income in this country is about \$7,000 a year, including more than one wage earner in the family, and that the average member of the labor force earns about \$6,000 a year, that some people are unemployed, that technology is changing, and that we are moving from an emphasis on muscle and brawn in employment to education and skills.

These are things that I think the children need, and certainly objectivity in approach, but I am afraid that a good deal of our economic education is not this. A good deal of our economic education, unfortunately, is a concentration on deadly abstract theories and concepts and on a kind of game playing. Playing games, rather than

confronting anything that approaches the real world, is what the kids are getting in economics and they are getting prejudice and bias, as well.

Senator JORDAN. Of course to me it is the most exciting subject of all.

Mr. GOLDFINGER. I agree with you, Senator.

Senator JORDAN. I believe also that if economics is to be taught poorly or with bias or prejudice, it had better be left out of the curriculum.

Chairman PATMAN. We are fortunate to have Mr. Brock of Tennessee on this committee, and I desire to yield to him for comments or questions.

You may proceed as you desire, Mr. Brock.

Representative BROCK. Thank you, Mr. Chairman.

I have enjoyed your statements, gentlemen, very much this morning. I think the thing that is exciting to me is the fairly general consensus, I believe, that economics is not a dead subject, as Mr. Goldfinger pointed out, but it is something that affects every facet of our lives and really must be incorporated into education from the very first grade all the way through, because mathematics, without the common horsesense of the economic impact of it, is irrelevant to life.

The same thing is true of English or any other course we are teaching in our schools today.

To me the importance of economic instruction is that it is, I think, the greatest promoter of intellectual discipline that you can give a child. You have to make the point when you are teaching him that there are choices to make in life. When you teach him that he is the only person who can make that choice, you begin then to bring him into society, as Professor Senesh has pointed out, as a relevant member of that society, and that is, I think, the exciting part of this whole discussion today.

The thing that I am trying in my own mind to rationalize or come to a conclusion about is how do we go about the program. I think we are all in agreement that we want to enlarge the scope of economic education from the very outset of the education of the country. Intellectually, as well as philosophically, it is important. But what steps do we take, what steps do we on this committee take? What steps does the Congress take to implement the objective?

I think Mr. Senesh has made some suggestions. Perhaps Mr. Hamilton has disagreed in the Federal involvement aspects of it. Mr. Goldfinger suggested that the education group, the governmental group, up here, should do more work on curriculum, teacher preparation, and so forth.

But we seem to be at sort of loose ends, there are a lot of piecemeal suggestions about getting this thing across. Why do we not really pull it together, how do we act from this point forward? What specific program can we undertake at this level? Is there some program, Mr. Bower, which would increase the contributions that this particular group, the Joint Economic Committee, might receive, so they could be more effective? Is there some tax program that might be effective, or are we going to have to continue the piecemeal approach of getting the Office of Education up here to send out more letters to the educators around the country saying "Stress economic education," or do we simply give out more press releases from the Joint Economic Committee saying we think it is important?

I am sort of groping for specifics. Does anybody want to comment on that?

Mr. BOWER. I think, Mr. Brock, you are taking a very good step by having this hearing and permitting people to appear before you and stress the importance of it. This will have an influence.

I am afraid that the economic education movement has to be a lot of little things as opposed to any one big thing.

I am in the group that feels there is no one single act that should be taken by Congress. I do not believe it is a question of taxation. Economic education must essentially depend on local action. Despite the forces at work that Dr. Senesh has brought out—and with which I am in agreement—education still is a local problem. However, while the Federal Government can provide leadership in a variety of ways, I do not see that this calls for Federal programs. Probably the Office of Education can provide additional leadership.

But it seems to me there is no single big act that the Federal Government can take or should take.

Representative BROCK. According to some testimony, the problem seems to be that economic illiterates are trying to give economic education to their children. Where do we begin? Is it going to be a one or two generation process? I am very much concerned with broadening this approach. But you cannot broaden it unless the teachers are educated so that they can teach adequately. You cannot implement it unless there are structural changes in your curriculum which incorporate some of these new concepts.

Mr. Goldfinger, did you have anything?

Mr. GOLDFINGER. It seems to me, sir, that the Congress has already begun to move in the direction that we are talking about.

A little over a year ago economics, for the first time, was included in Federal support for the NDEA teacher training institutes.

I believe that last summer was the first experience, the beginnings of NDEA's supported teacher training institutes.

This year will be the second year, and I think it is expanding a bit.

Well, I would suggest, for example, that as we build up some experience, this kind of program can and should be expanded. But this is just one small part of the need, because I think that another thing that is needed is the allocation of some Federal funds to the Office of Education for the aid and development of curriculum development activities.

This is something that was done in mathematics and the sciences, with great effect, about 8 or 10 years ago. I am convinced that it can be done in social studies and economics.

I think that the Office of Education can also encourage the teaching of economics, not only through the teacher training institutes and curriculum development activities but also by looking into the feasibility of setting up graduate fellowships in the teaching of the social studies, including economics, and in encouraging the development of these kinds of activities.

So much of the Federal Government's involvement in the social sciences up to now has been in the area of research, and this has been to the good. It has stimulated a good deal of social science research in sociology, in anthropology, and particularly in economics.

But one of the side effects of this process, unfortunately, has been a bad one. It has pulled teachers, including many of the best teachers,

out of the classroom into a concentration on research. But there has not been a concentrated effort on teaching. Teaching has been pushed all the way down and teachers have become experts in all kinds of things, other than teaching. I think that the Office of Education, with the aid of the Congress, can begin to shift this balance, by emphasizing the social studies and economics—not by downgrading the sciences and mathematics and social science research—but by placing some funds and some attention, some funds and some talent into the social studies and into teaching, where it is badly needed.

Representative BROCK. I could not agree more with your summary of the problem that the Federal Government has created in the past by its overdependence and emphasis on research, and this perhaps is why I tend to agree with Mr. Hamilton and Mr. Bower with my concern about direct Federal involvement.

It seems like every time the Federal Government comes out with a massive new program, we put so much money into research that we drain the basic talents away from the actual implementation of the program. We do not put it into the field where it is necessary, and actually we draw talent out of the area rather than putting it into it.

I think this might be a potential danger. The Washington agency has a built-in self-sustaining need to expand its own staff rather than to get into the field and get teachers actually working in seeking and testing new innovation, as Professor Senesh mentioned, the innovation, the new concept that has to be developed in practice, not in theory up here in Washington.

Mr. GOLDFINGER. Yes. This is what I think should be encouraged by the Congress and by the Office of Education.

Representative BROCK. Every time we try to encourage it with a Federal grant we seem to end up with more people in the Washington office.

Mr. BOWER. Mr. Brock, the question that you asked was addressed specifically by the National Task Force that I referred to in my statement. This is a task force made up of educators and economists. They concluded their report with 12 recommendations that are specifically addressed to what can we do about it. And out of that report has grown the activity of the Joint Council on Economic Education in developing an experimental program for high schools and elementary schools. (See volume II, part 1, exhibit I.)

Under that program curriculum developments are being experimented with on a broad front so they can be brought together by each school system choosing from the best experience of other school systems. This, of course, is a long-range program and it takes a lot of time. But it looks to the National Task Force, and it looks to me, as though that is the nature of the beast, that we have to take the time to do it.

The first thing is to arouse our citizenry that economic education is important to everybody, so that we don't have economic illiterates voting the country down the drain. I'm afraid that, unfortunately, it has to be done in that broad scale way and that there is no simple way to get the job done.

Representative BROCK. Thank you, Mr. Chairman.

Chairman PATMAN. Thank you, sir.

May I suggest that any member of the committee may have the opportunity to file with the committee within the next 48 hours any



question that he would like so have answered by the panel, and the panel will be asked to answer the questions, please, within 48 hours. I think we ought to have a limit on the time because otherwise it delays the transcript.

Next, several documents have been mentioned here this morning, very important ones, and I would like to have unanimous consent for the staff to take excerpts from these documents that are relevant and material to the discussion here this morning and insert them in the record. Without objection, so ordered.

(The documents referred to appear as exhibits I and II in part 3 of volume II.)

Chairman PATMAN. We have a very distinguished group here this morning, and I want Dr. John Stark, the executive director of our committee, to introduce them, please. We are doing something unusual here, something we do not normally do.

Mr. STARK. There is a group of young professional ladies, Mr. Chairman, who are sponsored by the League of Women Voters overseas education fund. They are from Providence, R.I., I believe, and 16 of the ladies are from Central America and two from the United States.

Chairman PATMAN. Have them stand up.

Mr. STARK. Would you ladies stand up, please? [Applause.]

Chairman PATMAN. Thank you very much.

Mr. STARK. The group is accompanied and sponsored by Mr. John Kreinheider, the chairman; Mrs. A. J. Foy Cross, administrator-director; and Dr. Mona Hull, educational director.

Chairman PATMAN. We appreciate your attendance at our hearing. Thank you for coming.

We certainly appreciate the attendance of you gentlemen. You have made some great contributions to what we are really going into, "studying," I guess is the word, not "investigating," and your testimony will be very helpful to us, and we are deeply grateful to you. Thank you very much.

Without objection, we will stand in recess until Friday morning at 10 o'clock here in this room.

(Whereupon, at 11:50 o'clock a.m., the committee recessed, to reconvene at 10 o'clock a.m., Friday, April 21, 1967.)

## ECONOMIC EDUCATION

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FRIDAY, APRIL 21, 1967

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON ECONOMIC PROGRESS  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The subcommittee reconvened at 10 a.m., pursuant to recess, in room S-407, the Capitol, Hon. Wright Patman (chairman of the subcommittee) presiding.

Present: Representative Patman.

Also present: John R. Stark, executive director; and James W. Knowles, director of research.

Chairman PATMAN. The subcommittee will please come to order.

This is the third morning of our hearings on economic education. This morning several experts are with us to discuss the various programs of economic education underway at all levels.

Our first panelist, Dr. Frankel, president of the Joint Council on Economic Education, will describe briefly the various programs underway on a national scale, how the programs are being coordinated and financed, and what progress is being made.

Our second panelist will be Dr. Leon M. Schur, director, Wisconsin Council on Economic Education, who will discuss the success and problems of the typical State, Wisconsin.

Mr. Proxmire is chairman, as you know, of the Joint Economic Committee during the 90th Congress. He wanted to be here today, but he is chairman of another subcommittee and he is compelled to be there this morning. He will be here later if he possibly can, because he is extremely interested in these hearings.

Dr. Lyle Stewart, assistant superintendent of schools, Seattle, will present an evaluation of the success of the program in the Seattle public schools.

Our fourth witness, Mrs. Vincent Patrick, coordinator of economic education in the Tulsa, Okla., public schools, will discuss economic education from a practical classroom point of view and tell us what Tulsa is doing.

We are sorry that Mr. Johnson, executive director of Adult Education of the United States is ill this morning. However, we are glad to welcome in his place the assistant executive director, Dr. Hugh G. Pyle, who will tell us what is being done to promote adult education in economics.

We will ask each of our panelists to summarize his views in about 10 minutes, after which we will have an opportunity to discuss the matter briefly as a group.

I also invite each of you to extend your statement or add related material for the record, should you care to do so.

Also, we would be interested in having any recommendations at the national policy level that you believe we should consider.

After a brief discussion, we are going to hear later this morning from two Government representatives who will describe the Federal Government's programs that promote or support improved economic education. Because of the necessity to cancel this afternoon's hearings, Dr. John T. Wilson, Deputy Director of the National Science Foundation, and Dr. Harold Howe II, U.S. Commissioner of Education, were kind enough to arrange their schedules so that they could be with us later this morning instead of this afternoon, as originally planned.

It is a pleasure to have you five experts with us this morning. We are anxious to have the benefit of your analysis and suggestions.

Dr. Frankel, you are recognized first. You may proceed in your own way.

#### **STATEMENT OF DR. M. L. FRANKEL, PRESIDENT, JOINT COUNCIL ON ECONOMIC EDUCATION**

Mr. FRANKEL. Thank you, sir.

The Joint Council on Economic Education is an independent, non-profit, nonpartisan educational organization incorporated in 1949 to encourage, service, coordinate, and improve economic education in our Nation's schools. Leadership in the Joint Council comes from educators, economists, business, organized labor, farm groups, foundations, professional bodies, research organizations, and Government agencies.

Financial support comes from foundations, business, organized labor, and farm groups. This diversity of support has been a crucial factor in the success of the Joint Council.

The American Economic Association is formally affiliated with the Joint Council, as are the professional groups within the National Education Association concerned with economic education; 30 other organizations actively cooperate in the work of the Joint Council.

The Joint Council's principal medium for improving economic education is the network of 45 regional, State, and local councils in 31 States. The councils were developed and modeled after the organizational pattern of the Joint Council. Each has its own board of trustees and does its own funding. The federated structure of the national council and its affiliated councils makes possible the maximum amount of local community support for the introduction and improvement of economic education in the schools.

The Joint Council has assisted in the establishment of 33 centers for economic education on college and university campuses. These centers are independent of outside direction. Centers emphasize research, publication, teacher education, and the development, evaluation and dissemination of materials. Councils and centers reinforce and complement each other.

The Joint Council program has three facets: (1) Cooperation with school boards, community groups, educational leaders, and teachers in stimulating the inclusion of economic education in the curriculum; (2) cooperation with colleges and universities in improving the preparation in economics for teachers; and (3) the development, evaluation, and distribution of materials.

This background has been supplemented by documentation submitted to the subcommittee members. The following is a brief overview of the Joint Council's major national program.

#### THE DEVELOPMENTAL ECONOMIC EDUCATION PROGRAM (DEEP)

The report of the National Task Force on Economic Education was published in 1960 under the title "Economic Education in the Schools." This is a landmark in the progress of economic education in the United States. Its recommendations spell out the minimum understanding essential for good citizenship and how such an understanding can be achieved. The report establishes benchmarks for economic literacy.

The following year the Joint Council's first Materials Evaluation Committee analyzed and recommended selected writings in economic education suitable for supplemental use in the schools. In 1962 the national television course, "The American Economy," was sponsored by the American Economic Association, Learning Resources Institute and the Joint Council. These lessons in the principles of economics were carried by the CBS Television Network and 59 educational TV stations during 1962-63 with a record daily audience officially estimated at over a million viewers. Thousands of teachers earned course credit through arrangements with colleges and universities. In 1963 a Special Textbook Study Committee of the American Economic Association reported on an examination and appraisal of the economic content of selected textbooks used in high school economics, social problems and U.S. history courses. In the same year the Joint Council's Committee on Measurement of Economic Understanding completed a test of economic understanding for secondary schools.

Now that these basic tools had been developed, the Joint Council addressed itself to the fundamental question: How can such tools be used effectively to insure that economics will be taught soundly and practically through the school curricula? The answer was the 5-year Developmental Economic Education Program (DEEP) launched in 1964 with the financial support of a broadened base of contributors representing all sectors of the economy.

The objectives of the DEEP program are to build economic understanding into school curricula at all grade levels, to improve teacher preparation in economics, to develop and evaluate new teaching materials, to identify diverse models of curriculum revision in the social studies, and to disseminate the results. Over the past 3 years, 29 school systems with over 4 million students taught by 174,000 teachers have been phased into the project.

In keeping with the experimental philosophy behind DEEP, the pilot school systems were selected for both geographic and organizational diversity. Included are two parochial systems (Chicago, Ill., and Trenton, N.J.); a State Department of Public Instruction (Wisconsin); three suburban schools (Downey, Calif., Manhasset, N.Y., and Quincy, Mass.); four county districts (Contra Costa and San Diego, Calif., Dade, Fla., Jefferson, Colo.); clusters of schools around a central city (Des Moines, Duluth, Portland); and the larger city systems of Atlanta, Minneapolis, Omaha, Pittsburgh, Seattle, Tulsa, Wichita, Baltimore, Chattanooga, Lansing, New York, Richmond (Va.), Gary, Granite School District (Utah), Little Rock, and New Orleans.

DEEP is a cooperative endeavor of the Joint Council, the affiliated councils, centers, colleges and universities, and—most important—the local school system. Educational reform in economics—or anything else—must take place in the school, meeting its own needs through curriculum change evolved by its own staff. The area council makes supplemental grants and works with nearby colleges or universities to provide consultant assistance by economists and educational specialists.

The Joint Council provides each school system with a financial grant, consultant time, a library, an exchange of information, and national meetings for pilot project personnel. Each school system appoints a project coordinator, initiates a teacher education program, designates policy, curriculum and advisory committees, and shares experimental materials with other DEEP systems.

Effective teacher education was recognized at the outset as an essential key to effective economic education. During the first year of the program, about 2,000 teachers were enrolled in courses of study. By the end of the second year, 1965-66, the number had risen to over 4,500. During the current year it is estimated that this figure will more than double. Literally scores of economists have become special instructors of teachers. As they bring to bear their expertise they, in turn, learn of the special needs and difficulties faced by the teacher seeking to enrich his classroom instruction with economic analysis.

Guides for teachers and learning materials for students are important products of the DEEP effort. Those school systems that entered DEEP in 1964 are in the second year of classroom testing of these materials. Based upon feedback from experimental classroom teachers and evaluation by consulting economists, several items are now in national distribution. Over 200 additional items are in the production process.

Although much of the material is still highly tentative, especially that of the schools entering in 1965, the number of excellent supplements is most encouraging. The DEEP design provides for sharing all usable items among pilot systems and the new project schools will benefit measurably by having access to the earlier efforts of others.

What of student progress? The first group of pilot schools entering the project in the academic year 1965-66 were administered the test of economic understanding at the 10th grade level. These students are being retested this spring. Sample testing indicates a considerable improvement in economic understanding. An external evaluation of DEEP is underway. Psychological Corporation of America and the Center for Instructional Research and Curriculum Evaluation (University of Illinois) will measure changes in student understandings, the efficacy of DEEP's curriculum design, and the impact of the joint council's services as well as those of affiliated organizations. These measurements are in addition to the evaluation and testing programs of the participating schools and Joint Council staff.

For the first 3 years of the DEEP program, Joint Council grants to the pilot school systems have amounted to a little over \$400,000. Beyond grants, a major additional fraction of the Joint Council's budget—estimated at slightly in excess of \$1 million—has been allocated to DEEP. This gives a total of \$1.5 million of expenditure by the Joint Council.

Conservatively estimated, the expenditures by affiliated councils, the school systems with whom they are working, and the cooperating colleges and universities, would equal a sum at least as large as that expended by the Joint Council. Therefore, the Joint Council and its partners have invested about \$3 million during the past 3 years. This is the financial outlay that has gone into DEEP. It does not count the unpaid hours of literally thousands of people associated with the project.

What of the tens of millions of students and their teachers beyond the DEEP school systems who are searching for improvement in economics instruction? DEEP Phase 2 is designed to bring to these students and teachers the new materials, patterns of teacher education, and general models of curriculum revision developed and tested in the pilot schools.

In DEEP, Phase 2, direct responsibility shifts to the Affiliated Councils and Centers for Economic Education with the Joint Council in supportive status. Beginning with 1967, it is anticipated that in each year 100 additional school systems will contract with Affiliated Councils for programs emulating DEEP.

The DEEP program represents a major effort to improve economic understanding by exposing a maximum number of students to basic training in economics. These students will be provided with appropriate materials; taught by competent teachers using the most efficient pedagogical techniques. These teachers will be motivated and supported in their efforts by an environment congenial to the discussion of economic issues within the framework of modern economic analysis.

Mr. Chairman, I have limited my statement to the Joint Council's DEEP program in deference to your time schedule and the continuity of statements that are to follow. Our college and university experimental program is of equal importance. Separate documentation on this and other Joint Council programs is being submitted to the subcommittee. I trust that your questioning will permit me to present my views of the Federal Government's role in economic education.

Chairman PATMAN. Thank you, sir. Your statement was very interesting. We will insert your supplemental statement in the record at this point.

(The supplemental statement follows:)

#### SUPPLEMENTAL STATEMENT BY DR. M. L. FRANKEL

Mr. Chairman I suggest the following as constructive activities of the Federal Government in support of economic education.

(1) These hearings in themselves and the work of the Joint Economic Committee are important contributions to economic understanding.

(2) The present Summer Institute Programs in economics of the U.S. Office of Education and the National Science Foundation should be expanded. These institutes play an important role in the education of teachers.

(3) The two Experienced Teacher Fellowship Programs in Economic Education (authorized by Title V, Part C, of the Higher Education Act of 1965) should be extended to other colleges and universities. From these advanced degree programs will come the economic education supervisors and coordinators so desperately needed by school systems.

(4) I concur in the recommendation that an *ad hoc* organization should study the economic knowledge and research produced by the Federal Government and should recommend communication techniques and channels for getting this knowledge into the schools and colleges.

(5) Established Centers for Economic Education should receive priorities for action research grants in economic education. In Centers economists and education specialists work directly with school systems in their area. Research conducted by the Centers has immediate and ongoing impact on economic education at the "grass roots" level.

(6) The Joint Council's success in improving economic education in the schools has been dependent on the leadership and financial support of representative civic and economic groups. The Council seeks no government support for program innovation and expansion. However, new programs expose areas of needed research best implemented by a national organization. Governmental grant-giving agencies should have the freedom to support such research when it merits consideration.

(7) From the Joint Council's Developmental Economic Education Program will come objective and tested curriculum materials for both students and teachers. The Joint Council encourages private publishers to market these materials. Many items that are invaluable to the furtherance of economic literacy are not profitable commercially. Our budgetary limitations preclude the wide distribution of these materials. We suggest consideration of an open grant to the Joint Council that will permit the placement of a working kit of these materials in school systems throughout the country.

(8) There is a growing interest in economic education among members of The Atlantic Treaty Association, Japan and the Latin American nations. Their educational leaders are seeking our materials and services. Our resources are needed for economic education reform in the United States. I suggest that Federal Government agencies might underwrite the export of the Joint Council's experience, techniques, and materials.

Chairman PATMAN. Dr. Schur, I believe you can give testimony on the State programs?

**TESTIMONY OF DR. LEON M. SCHUR, DIRECTOR, CENTER FOR ECONOMIC EDUCATION, UNIVERSITY OF WISCONSIN, MILWAUKEE**

Mr. SCHUR. Thank you, Mr. Chairman. My opening statement is a little long, so I will summarize it.

I believe that the most important movement taking place in the social studies in the schools throughout the Nation is what we call the teaching of the social studies within a conceptual framework and I shall argue that economics is leading this movement. In the State of Wisconsin, for example, the Wisconsin State Department of Public Instruction has set forth a conceptual framework for the social studies in Wisconsin schools and recommended that it be taught at all levels from kindergarten through the 12th grade. This framework lists concepts in economics, political science, history, geography, and sociology-anthropology, and sets forth the specific grade level at which each of these concepts should be introduced. For the first time we are giving a systematic structure to the social studies similar to the structure within which we have long taught mathematics and the sciences.

This means that a teacher at the third grade, for example, knows that in the first grade the students have not only had a unit on the home, but that a certain concept in economics has been introduced, such as specialization of labor. In the third grade the teacher can apply this specialization of labor concept to a simple example of international trade, or to the explanation of why Milwaukee is a center for the machine tool industry. Later on this concept can be applied to more complicated versions of international trade and the student can be taught why most of our trade takes place with the highly industrialized countries. Finally, it can be used to analyze

tariffs in American history or applied to a problem such as that of the Common Market in a discussion of current events.

Economics lends itself to conceptual teaching more than any of the other social sciences simply because economists have been able to a greater extent to conceptualize their discipline. The heart of economics is nothing more than a set of concepts or principles. It is what economists refer to as positive economics. These are the economic principles about which conservative economists or liberal economists are in virtual agreement. We separate these concepts from normative economics where we set our goals. This is where economists differ just as everyone else does in their ethical attitudes or their views of the role of government in the economic system.

The weakness of our schools in the conceptual teaching of economics can be demonstrated in many ways, but I would just like to refer to one question on the Test of Economic Understanding that Dr. Frankel mentioned. The question reads as follows:

Inflation is most likely to benefit (a) savings bank depositors; (b) debtors; (c) life insurance policyholders; (d) persons living on fixed pensions.

The answer is (b), debtors. On a national basis, however, 55 percent of our high school seniors who had not taken a separate course in economics, and this includes approximately 80 percent of all high school seniors, missed this question. In other words, a majority of our high school seniors believe that inflation actually benefits either savings bank depositors, life insurance policyholders or persons living on fixed pensions when, of course, it does the exact opposite.

I could go on and recite other evidence of this nature. For example, in terms of the commercial banks, we ran a test question on a group of social studies teachers a few years ago and found that 60 percent of these teachers did not believe that the ability of the commercial banks to create demand deposits should be regulated by the Government. I know Congressman Patman is very interested in the role of the Federal Reserve System and whether there should be additional Presidential and Congressional control of it. However, if most of our teachers and most of our students do not understand the basic cost of inflation and if they don't understand the creation of money by the banks, how can they reach an intelligent judgment upon the proper role within our Government of the Federal Reserve System? This is the type of conceptual learning that we are trying to introduce at all grade levels. It can't be introduced just in a separate course, but has to be introduced on a continuing basis from the kindergarten through the 12th-grade levels.

There are two institutions which I should mention that are very important at the State level in helping school systems introduce this type of conceptual understanding in economics. One is the councils on economic education. We have a Wisconsin State Council on Economic Education and there are over 40 local and State councils throughout the Nation. The councils are affiliated with the Joint Council on Economic Education and follow a prescribed format.

The board of directors of each state council is made up of representatives of business, labor, agriculture, and education. The teaching of economics and of the methods by which economics can be introduced into the classrooms is done by professionals, either educators or economists. We have found that the various groups represented on



the Wisconsin State Council share one thing in common: They have enough faith in the American economic system and in their role in the economy that they do not feel the need for emotional propaganda or special pleading. They are agreed that there should be an objective analysis of economics, a use of economics as a tool for logical thinking. This is what they are getting in our economic education programs in Wisconsin.

The Wisconsin State Council musters the support of the community behind these efforts in economic education and they raise funds to aid economic education throughout the State. The Wisconsin State Council, for example, supplies \$20,000 a year to the University of Wisconsin, Milwaukee, to help fund a center for economic education and has made funds available in the last year to 10 other universities throughout the State.

A second institution at the State level which I should mention is the center for economic education. We have a center at the University of Wisconsin, Milwaukee, which is attempting to mobilize the resources of the university in an attack on the problems in economic education. Economics departments are too often interested in teaching economics to students who will be majors in economics and will need to use the technical, and mathematical tools of the discipline. Educators are too often interested in pedagogy, sometimes divorced from the content area. What the centers can do is to mobilize the skills of economists and educators in a concerted attack on the problems of economic education. This is what we have done. We so often find that the economists and educators in a given university in Wisconsin have never met each other or cooperated with one another, until a program of economic education has come to their campus.

There are two distinctive things that the centers for economic education are trying to do. One is preservice work or attempts to improve the undergraduate training of teachers in economics. We are, for example, trying to improve the introductory course in economics for teachers. We have found through testing, and the testing is being done by and large by the people in economic education, not by economists, per se, or by the educators, per se, that the residual effect of the typical college course in introductory economics 5 years after it has been taken by a social studies teacher is just about negligible; that is, there is no significant, statistically measureable effect. Too often the introductory course in economics is overly encyclopedic, is directed at the economics major, and doesn't involve the undergraduates who will be future teachers. At universities and colleges throughout the country, especially those with centers in economic education, there is an attempt to restructure that course in economics so it will be meaningful for the teacher who must later relay the knowledge and concepts of economics to her students.

The other major thing we are doing in the centers is beginning an extensive program of research; for example, we can talk about good teaching and motivating students from now to the end of time, but we have to be able to measure what we mean by these words. I think the research area is one in which Congress should be especially interested, for it can pay great dividends in terms of the value received. Through testing and evaluation we will be able in time to say that a given economics course, a given teaching technique, a given set of materials, is better than another alternative.

At this point I would like to show very briefly how we are implementing the conceptual framework in economics in Wisconsin. As we reach the school systems, we find that there is a general lack of economic knowledge. A teacher is not going to introduce economics into the first grade, the third grade, or the American history course unless she feels comfortable in her understanding of economics. Therefore, the first thing we find is that we have to conduct inservice or on-the-job programs, and summer workshops in economics. This is what we have been doing for the last several years. For example, in the academic year in Wisconsin, we reached 1,500 teachers in 65 school districts with our programs in economics, and in the summer we enrolled over 500 teachers in workshops of from 2 to 8 weeks duration. So we are increasingly giving teachers the necessary economic understandings and showing them how these economic understandings can be introduced at the various classroom levels.

We are also participating in the DEEP project in materials development, which Dr. Frankel mentioned. In fact, Wisconsin is the first statewide system to be a part of the DEEP program. This will help the teachers tremendously, because in 3 years we hope to have materials, kindergarten through the 12th grade, showing teachers at each level how economics can be introduced into the classroom.

In my statement, I made some recommendations of what I believe Congress can do to support programs in economic education. For example, it can help the economic education programs by expanding the National Defense Education Act Institutes in Economics. Unfortunately, economics was one of the last of the disciplines to be admitted to the NDEA Institute programs and we are holding our first institutes this coming summer. But even here, because of a cutback in funds, the program was reduced from 32 to 22 institutes. In our own NDEA Institute, although it is limited to elementary supervisors of curriculum and elementary principals, we had over 300 applications for 36 openings. Some of the institutes that are less limited in their acceptance of applicants have had many more applications. Therefore, an expansion of the NDEA Institutes in Economics can make an important contribution.

I also hope that Congress may feel it necessary to make funds available to the centers for economic education so that the programs of research in economic education, which I describe in my formal statement, can be expanded.

Finally, I think one bottleneck we are running into is our inability to recruit people in economic education. For the last year we have not been able to get a competent professional educator in this area to head our Wisconsin State Council. As I call the other councils and centers in economic education throughout the country and ask them to recommend a person, the usual answer I get is, "We don't know of anyone but if you find someone, let us know, because we are looking also." I think a NDEA fellowship program to encourage people to take a doctorate in economics with a major in economic education would help eliminate this important bottleneck.

Finally, I simply want to say that I think these hearings, by themselves, can perform an important service for economic education. In the post-Sputnik area we concentrated on the teaching of mathematics, the foreign languages, and the sciences, in an attempt to keep ahead of the Russians. I think here the area of economic education is

one in which we have to excel, because we are a democracy. We have to educate our citizens continuously for intelligent political decision-making. When he comes to the ballot box, the average person needs only the most perfunctory knowledge of physics or chemistry. However, in economics a minimal understanding can be potentially dangerous to the Nation. So I would argue that this subcommittee and the Joint Economic Committee can perform an important function by these hearings and by affirming the need for greater efforts in economic education in order that the general levels of economic literacy in this Nation may be raised.

Thank you.

(Dr. Schur's prepared statement follows:)

#### PREPARED STATEMENT OF DR. LEON M. SCHUR

An unpublicized revolution called the conceptual teaching of the social studies is taking place in the schools of the country from the kindergarten through the twelfth grade levels and economics is in the vanguard of this movement. As a result of this revolution, increasing amounts of economics are being taught for the first time within a systematic structure which emphasizes analysis and logical thought and de-emphasizes facts and rote memorization.

An account of what is taking place in the conceptual approach to the social studies in the State of Wisconsin will make clear the purposes and advantages of this movement. In 1964 the Wisconsin State Department of Public Instruction published *A Conceptual Framework for the Social Studies in Wisconsin Schools*, the first state-wide, social studies framework in the country. This publication lists major concepts in economics, political science, history, geography, and sociology-anthropology and sets forth the grade level, kindergarten through the twelfth grade, at which a given concept or variant thereof should be introduced. It attempts to set forth, for example, an economic concept such as specialization of labor, the basic economic problem of scarcity, or the effects of increases in the supply of money and to show how these concepts or variants thereof can be introduced in the first grade and taught in progressively more sophisticated variations in the succeeding grades. It marks the first time that a strong attempt has been made to do in the social sciences what has long been done in mathematics and the sciences.

Economics has led the other social sciences in conceptual teaching because economics has been able more successfully to set forth the heart of its discipline in a series of concepts or principles. These are the basic principles of positive economics, about which economists, whether politically liberal or politically conservative, are in virtual agreement. These are the principles which every citizen must understand, if he is to achieve his own goals in terms of his personal ethics or his own views of the proper role of government. For example, in terms of the current national problem of inflation, it is difficult to see how anyone can intelligently take a stand for or against inflation unless he has some understanding of its effects. Yet, recent results that have been obtained on the nationally administered "Test of Economic Understanding" show that just such a lack of understanding exists. The "Test of Economic Understanding" is a 50 question multiple choice examination drawn up by a national panel of economists and educators under the auspices of the Joint Council on Economic Education. The "Test" attempts largely to measure not knowledge of economic facts or institutions but analytical and conceptual understanding in economics. The following question on the exam attempts to test a simple understanding of an important effect of inflation:

Inflation is most likely to benefit:

- A. savings bank depositors
- B. debtors
- C. life insurance policy holders
- D. persons living on fixed pensions.

On a national basis, 55% of high school seniors who had not taken a separate course in economics, and this includes approximately 80% of all high school seniors, missed this question. Without this simple understanding of the effects of inflation on assets which are fixed in money value, it is difficult to see how either a political liberal or a political conservative can choose the economic policy most compatible with his goals. In addition, to deal with the problem of inflation, one

should have some basic understanding of the causes of inflation, its effects on income and employment, and how it can be controlled by monetary and fiscal policy. In the recent protests of rising food prices by housewives, for example, how many of these housewives had any idea of the reasons why not only food prices but prices of most goods in the economy were rising and understood that events in the money and tax areas could force up food prices in spite of any reasonable effort by farmers, distributors or supermarkets. In our economy, a basic understanding of economic principles is necessary for intelligent behavior as voters at the ballot box and as consumers in the marketplace and it is the aim of the conceptual teaching of economics to provide such economic understanding.

Before describing how the economic concepts are being taught in Wisconsin schools, I would like to describe two unusual institutions which in Wisconsin and in most of the other states in the country have contributed to the more effective teaching of economics. These two institutions are (1) the local and state councils in economic education and (2) the centers in economic education.

The state councils on economic education in the last 18 years have done yeoman service in providing a strong impetus to the spread of economic education throughout the nation. There are now over forty state and local councils and they have demonstrated what can be accomplished by educators, businessmen, labor leaders and agricultural representatives working together in the area of community service to raise levels of economic literacy.

An understanding of the general organization of the state councils on economic education can be obtained by an examination of the Wisconsin State Council on Economic Education, for it follows the general format of the other councils throughout the nation. The Wisconsin State Council on Economic Education was organized four years ago because a group of businessmen were concerned about the need for increasing the amount and effectiveness of economic education in Wisconsin. Once they had made clear that they were interested in an objective program of economic education in the schools and in affiliation with the Joint Council on Economic Education, they had no trouble in enlisting the support of educators and representatives of labor and agriculture. The representatives of labor, business and agriculture had one thing in common—each felt confident enough of the American economic system and of their role in and contribution to the American economy that they could agree that a proper program of economic education was not one that engaged in special pleading or emotional propaganda but one that taught students how to use economics objectively as a tool for logical analysis. It was agreed that in Wisconsin as in the other councils throughout the nation the planning and development of the educational program would be in the hands of the teaching profession. The Wisconsin State Council on Economic Education is autonomous as are the other economic education councils but it is affiliated with the Joint Council on Economic Education and receives invaluable help and guidance from the parent organization.

The first president of the Council was the superintendent of the Milwaukee Public Schools. The present president is the Director of Educational Innovation of the Wisconsin State Department of Public Instruction. The three vice-presidents of the Council are representatives from business, labor and agriculture, and the Board of Directors has always included a wide representation from education, labor, agriculture and business. Over 150 individuals, businesses, and organizations contribute to the Council's annual budget of approximately \$45,000. The Council will not accept more than \$1,000 from any contributor in order to insure a broad base of support and to avoid undue dependence on a single organization. The programs of the Council are carried out under the direction of its Executive Director who is a professional educator. In addition, since 1964 the Council has contributed over \$20,000 a year to support a Center for Economic Education at the University of Wisconsin-Milwaukee. The economic education program of the Council will be described in detail but it should be noted that the Wisconsin State Council has in a few years established itself as an extremely effective catalyst in bringing various resources of the community together in an attack on the problem of economic illiteracy. Furthermore, it should be strongly emphasized that the Wisconsin State Council and the other local and state councils are out on the firing line where the battle against economic illiteracy is being fought and are in direct and continuous contact with the schools; given the local and independent organization of our American schools, the councils in economic education are a vital link in any comprehensive and effective program of economic education.

The second important and innovative institution in economic education at the state level is the centers for economic education. There are now over 30 centers

for economic education at colleges and universities in the nation and the Center for Economic Education of the University of Wisconsin-Milwaukee is typical of them. The director of the Center is a professional economist and teaches one course a semester in the Department of Economics. He has a possibly unique appointment as Professor of Economics in the College of Letters and as Professor of Curriculum and Instruction in the School of Education. This dual appointment was made by the University in order to bridge the gap between economics and education. The extent of the traditional gap between economists and educators was demonstrated at the Wisconsin Inter-University-Conference in Economic Education held by our Center in 1965. An economist and an educator from each of the teacher training institutions in Wisconsin were invited to the Conference and it was discovered that in almost every university represented there was little or no communication between economists and educators. A meaningful program of economic education must involve both economists and educators and the center for economic education with dual appointments and use of both educators and economists as consultants is an ideal way to accomplish this. In fact, the chief rationale for a center for economic education is that it is the most efficient means of mobilizing the resources of the university and securing financial support for a concerted attempt to improve economic education.

Many of the functions of the Center for Economic Education are carried out in cooperation with the Wisconsin State Council on Economic Education and these will be discussed shortly. However, there are two functions which are distinctively performed by the Centers for Economic Education. These are the efforts to improve the pre-service or undergraduate training of teachers and the programs of research.

The need for improvement of the typical undergraduate course in economics for teachers was clearly shown by the results obtained on the "Test of Economic Understanding". Testing of social studies teachers a number of years after they had taken college courses in economics showed that those teachers who had taken one or two courses in economics did not achieve higher scores in terms of statistical significance than those who had taken no college courses in economics. The typical college course in introductory economics is usually overly encyclopedic in its approach, too often emphasizes the technical and mathematical tools necessary for the future economist, and usually fails to convince prospective teachers that the principles of economics can and should be introduced into the elementary and secondary classroom. The centers in economic education throughout the country are attempting to persuade departments of economics that these courses must be altered for the non-economics major in general and for teachers in particular. At the University of Wisconsin-Milwaukee we have a separate course in introductory economics which is taken largely by non-economics majors. This course enrolls over 2000 students a year and attempts to teach the fundamental principles of economics and to show how these principles can be used to understand our economic system and to analyze rationally economic problems. In the immediate future we expect to add to this course a laboratory supplement for future teachers, in which they would be shown how the principles of economics can be introduced into the kindergarten through twelfth grade levels within a conceptual framework. Our Center for Economic Education plans to conduct this laboratory course and will attempt to evaluate by rigorous pre- and post-testing its effectiveness. Much experimentation and testing is taking place in the centers for economic education throughout the nation in an attempt to train undergraduate education majors more effectively in the teaching of economics.

A second function of centers for economic education throughout the nation is that of research. The centers are particularly qualified to do research in economic education for they can mobilize the skills of university economists, educators, psychologists, etc., in an inter-disciplinary attack on problems and bottlenecks in economic education. Currently, research in economic education is being carried out in at least four main areas: (1) research on the current status and practices of economic education; (2) research of an experimental or laboratory character to apply current educational theory to the teaching of economics and to discover methods of teaching economics more effectively at various grade levels; (3) further definition of the basic structure of economics as well as the rationale for introducing various parts of the structure throughout the curriculum; (4) research on the testing and evaluation of alternative courses, teaching techniques, and materials in economic education. There is probably no area of economic education where a given investment will pay larger dividends than in the research area. This is particularly true in the area of testing and evaluation. It is only as we develop more rigorous evaluation techniques in economic education that we will

be able to measure the relative effectiveness of alternative techniques, courses and materials in the teaching of economics in the classroom. The centers in economic education have made a beginning in this area of research in economic education but it is only a beginning in terms of the task that needs to be done.

Finally, one routine but important function of the centers that should be mentioned is the maintenance of an economic education library. Our University of Wisconsin-Milwaukee Center, for example, has an extensive library in economics materials, curriculum materials, films, film strips and bibliographic material. These materials are widely used by the teachers of Wisconsin and are an example of another function being performed by centers and councils in economic education in the nation.

The Wisconsin State Council and the Center for Economic Education of the University of Wisconsin-Milwaukee have worked closely together in an important part of their programs and these cooperative efforts will be described in the following paragraphs.

In the last few years the combined major effort of both our Council and Center has been an attempt to help the schools of Wisconsin teach economics more effectively with a conceptual approach. As a given school or school system has attempted to use the conceptual approach to the social studies recommended by the Wisconsin State Department of Public Instruction, one of the first needs has been to upgrade teachers in the content area. The reasons why this upgrading is necessary are not difficult to discover. A 1961 nationwide survey by the Joint Council on Economic Education showed that 40% of our social studies teachers had had no college courses in economics and that 77% had had less than six hours of courses in economics. In addition, we have previously noted that results obtained on the "Test of Economic Understanding" indicate that the long term effect of the typical college course in economics is minimal. Both these facts seem to demonstrate the present need for a continuous program of teaching and re-teaching the principles of economics to social studies teachers. This is what both the Wisconsin State Council on Economic Education and the Center for Economic Education, University of Wisconsin-Milwaukee, have been attempting to do in their programs.

The stress on a conceptual approach to the teaching of economics has put greater emphasis than ever before on the need for greater training in economics for both elementary and secondary teachers. For example, unless teachers in the high school American history course have confidence in their understanding of economics, the course will stress military battles and political campaigns with little emphasis on the functioning of our economic system, the reasons for our economic growth or the economic analysis of problems of depression and inflation. Consequently, a major effort of the Wisconsin State Council and the Center for Economic Education has been to teach more economics to more teachers through a widespread program of in-service or on-the-job institutes, one or two day conferences and summer workshops. It should be noted that in both the in-service institutes and summer workshops the "Test of Economic Understanding" is used on a pre- and post-test basis to evaluate the effects of the given program on the economic understanding of participants; in a three week workshop, for example, the economic understanding as measured by the Test is usually raised from 25 to 30%. The Wisconsin State Council has attempted from the beginning to encourage all colleges and universities in Wisconsin to embark upon programs of economic education and last year grants from the Council enabled ten Wisconsin colleges and universities to conduct programs in economic education. In the last academic year the programs of the Council and the Center have reached over 1,500 Wisconsin teachers in 65 school districts and in the last summer support was furnished for workshops of from two to eight weeks duration enrolling over 500 teachers.

At present the Wisconsin State Department of Public Instruction is embarked on a major program of developing materials from kindergarten through the twelfth grade to help teachers incorporate economics within a conceptual framework. The program was made possible by grants from the Joint Council on Economic Education and the Wisconsin State Council on Economic Education and is being carried out with the strong support of the University of Wisconsin Milwaukee Center for Economic Education. The entire program is part of the Development Economic Education program of the Joint Council on Economic Education in which 30 pilot school systems have been chosen in the last three years for a cooperative program of intensive materials development and general economic education. The selection of the Wisconsin Public Schools to participate in the DEEP projects marks the first time that the school system of an entire

state has been so selected. At the end of three years materials from kindergarten through twelfth grade will be published and distributed so that the teachers at any grade level in Wisconsin will be able to obtain specific curriculum guides for the incorporation of economics within the regular units being taught. A last step in this process will be a continuous evaluation and testing of the effectiveness of both the conceptual framework and the supporting materials. This is an area of economic education in which we are beginning to make progress and it is one that needs intensive cultivation; but it is only as we develop more adequate evaluation techniques and tests that we will be able rigorously to evaluate the effectiveness of our in-service and summer workshop programs, the materials that are being developed and the general effectiveness with which economic understanding is being introduced into the classrooms.

Therefore, the general state-wide program of teaching economics within a conceptual framework has involved the following four steps: (1) the publication of *A Conceptual Framework for the Social Studies in Wisconsin Schools* by the Wisconsin State Department of Public Instruction; (2) a wide-spread program of in-service institutes and summer workshops to develop in teachers at both the elementary and secondary a better understanding of the principles of economics and of the methods of introducing economics into the classroom; (3) development of curriculum materials for use in the schools, kindergarten through the twelfth grade; (4) a continuous testing and evaluation of each step in the program and of the impact of the entire program on the teaching of economics in the classrooms of Wisconsin. In important parts of this broad program in economic education, the Wisconsin State Council and the Center for Economic Education have played and will continue to play a vital role.

What Congress can do to strengthen economic education in the nation is implicit in the foregoing account of what is being done in Wisconsin and the other states. Congress can enlarge and strengthen the programs of economic education throughout the country through two main routes.

First of all, Congress can intensify and accelerate the pace of efforts in economic education in the country through the strategic expenditure of funds. There are many areas where additional expenditures would prove extremely effective, but the following are simply three key areas that would be of great importance at the state level:

(1) More funds should be made available for National Defense Education Act Institutes in Economics. Unfortunately, economics was one of the last subject areas to become eligible for summer institutes under the National Defense Education Act and the first large group of such institutes will not be held until this coming summer. Originally over thirty Institutes were to have been held, but a cut-back in funds reduced this number to twenty-two. Our Center for Economic Education will conduct an N.D.E.A. Institute for Elementary Supervisors of Curriculum and Elementary Principals this coming summer. Although only a comparatively limited number of people are eligible for our Institute, we received several hundred applications for only 36 openings. Increased funds for N.D.E.A. Institutes in Economics can greatly help to strengthen teachers in economics and in the methods of introducing economics into the classroom.

(2) The centers for economic education at colleges and universities have begun to do extensive research in the area of economic education. A wide array of problems and bottlenecks exist that can only be solved through further research. One particular area that needs attention is the area of testing and evaluation. It is only as we develop rigorous methods of testing the conceptual understanding of economics at all levels that we will be able to compare alternative materials, techniques and courses in economic education. An expenditure of funds for research in the area of economic education in general and for testing and evaluation in particular will probably result in greater returns than a similar expenditure in any other area of economic education.

(3) One of the great bottlenecks in economic education is the lack of personnel who have the training in both economics and education and are interested in a career in economic education. One of the most important factors holding back further development in economic education councils and centers in the nation today is this lack of personnel. A National Defense Education Act fellowship program to encourage universities to combine the fields of economics and education and offer doctorates in economics with a major in economic education is probably the best way to overcome this problem in a reasonable period of time.

In the last several years congressional expenditures have done much to improve the teaching of mathematics, the sciences, and foreign languages; similar congressional expenditures on the teaching of economics can bring results at least as beneficial.

Secondly, Congress can and should focus attention and lend support to a program of teaching the principles of economics in the schools of the nation from kindergarten through the college level with the direct aim of making our citizens more intelligent voters and effective consumers. In the post-Sputnik era, great attention was focused on mathematics, the sciences, and the foreign languages. No one would deny that it is important that we educate people in our nation who can man the frontiers of mathematics and the sciences and keep us abreast of and ahead of other nations in these areas. It is also important that in the area of economics we educate those who will expand the frontiers of economic knowledge; however, economics has an important function above and beyond this. Most of our citizens, for example, do not need more than the most perfunctory knowledge of physics or chemistry for intelligent behavior as voting citizens but no one can function as an intelligent citizen in our democracy without some understanding of the basic principles of economics. Economics is not the only social science needed for intelligent decision making in a democracy but it may well be the most vital and it traditionally has certainly been one of the most neglected. This Subcommittee on Economic Progress and the Joint Economic Committee can perform a vital service for Congress and the nation by calling their attention to what is being done in the teaching of economics in our classrooms from kindergarten through the college level and affirming the importance of greater and more widespread efforts in this area in order that the general levels of economic literacy in the nation may be raised.

Chairman PATMAN. Thank you. If you desire to elaborate on what you have said, or to include additional subject matter, it will be perfectly all right to do that.

I believe out next witness is Dr. Lyle Stewart, Assistant Superintendent of Schools, Seattle, Wash.

**TESTIMONY OF LYLE STEWART, ASSISTANT SUPERINTENDENT  
OF PUBLIC SCHOOLS, SEATTLE, WASH.**

Mr. STEWART. Mr. Chairman, we have been given a grant by the Joint Council to develop a program from kindergarten through senior high school. I have copies of this which, for the first seven grades, including kindergarten, will be available to each member of your subcommittee.

Chairman PATMAN. Thank you, sir.

Mr. STEWART. When we were given this grant, the Seattle school system took it with the understanding that it would involve most of the other schools of the State of Washington. We have been participating with them in workshops over a period of almost 15 years. We thus have a rather wide background of unified effort before this opportunity was offered to us.

We had the experience first of all of trying to teach our teachers—sort of a missionary effort—teachers and administrators, the importance of economics. Unfortunately, we in the State of Washington, I think, can rely on the data which Dr. Schur has suggested: that we are just about as ignorant of economic phenomena as the rest of the Nation.

We, in developing this report, have had the assistance of the many school systems throughout our State. We are concerned in developing it for this reason: that our teachers are not prepared to teach any economics. So as we prepared the materials, we had in mind that we would have to do a different kind of thing than we would do in any new course in mathematics, geography, or any of the common branches, because in these areas we could presume that teachers were prepared to teach them, but in economics we had to assume that they could not.



So this design, which is the first issue we have, spells out very clearly just how a teacher may go about this task, starting from kindergarten through the senior high school.

We have had very good evidence as to the success of this. In the Seattle School District, they began using it 3 years ago in mimeographed form. We started with the kindergarten, first, and second grades.

I would say in some respects we have been almost embarrassed that some of our people have suggested that we ought to do the same sort of thing with other areas of instruction. So we feel very comfortable that we are hitting the target. We have had a number of other evidences of the success of our efforts.

I think I could not enlarge very much on the suggestion that Dr. Schur has made concerning what I think Congress may do to encourage economic education. It seems to me holding these hearings will in themselves be significant. If Congress will affirm its belief in the importance of it, this will, in large measure, encourage all school systems to do a job in economic education.

Chairman PATMAN. Would you pardon me for an interruption?

This is the first time a congressional committee has had a hearing on this subject. We feel very proud of the fact. In fact, I am thrilled over it. I think it is very important and I think it is a good step forward.

Mr. STEWART. We are delighted that you are doing this, and we are delighted to be here this morning and have some small part in it.

I would suggest, also, that as you make funds available for other educational purposes, as you have done in foreign language, in mathematics, and science, where so much has been done, that economics be borne in mind.

I would also suggest that Congress needs to be aware of all of the private effort which Dr. Frankel has outlined here this morning, which has gone into this. We have been the beneficiaries of the efforts of other programs throughout the Nation and through the leadership of the Joint Council itself.

I would point out that some of us only recently have been planning and thinking in terms of programs that we hope to finish within 8 or 10 years. As we were thinking of this, we were mindful of the fact that in 1975 and 1976 this Nation will be 200 years old. We feel in terms of economics that if this is a nation so conceived and so dedicated that it can long endure, and it is pretty well demonstrated now, that one of the imperatives of the future will be economics.

If people are really to go behind the green curtain and exercise their duties as citizens, more in the future than ever in the past it will be imperative that they understand economics.

I think Dr. Schur has pretty well stated it here this morning, and I am certainly not going to enlarge upon that any further.

We in our State, as we have developed this, feel that we have ample success already in our classrooms, and we are looking forward to the efforts of these other school systems throughout the country to develop further materials. The materials that I have brought here this morning for the members of the committee which covers the teaching of economics from kindergarten through the sixth grade will be supplemented.

We have just finished this week our final drafts of the material for the junior high school, grades 7, 8, and 9. By the end of the school

year these will be submitted to the State and our State printer will put them out as the official course of study on behalf of our State superintendent of public instruction.

Our State superintendent of public instruction is one of the trustees of the Northwest Council for Economic Education. He assured us in the beginning that if we would develop these materials, he would cause them to be printed as a recommended course of study for the State of Washington.

As one of the pioneer States in this movement, we have involved the States of Idaho and Montana, and Oregon in the beginning, and the then Territory of Alaska, and we have had representatives from these States involved in our workshops.

We have been encouraged that there has been considerable demand for our materials just as we will be using the materials from other efforts around the Nation.

I think, then, Mr. Chairman, we feel we are engaged in a really important effort in this Nation, because we feel that economics, somewhat like salvation, is one that each individual must have for himself if he becomes a competent citizen. We can depend upon other specialists in chemistry, engineering, mathematics, and other such specialties. In economics every one of us must become competent if we are to fully discharge our duties as citizens in this Republic in the next 100 years.

(Mr. Stewart's prepared statement follows:)

#### PREPARED STATEMENT OF LYLE STEWART

##### THE SEATTLE STORY IN ECONOMIC EDUCATION

The Seattle story in economic education is also, for the most part, the story for the State of Washington.

During the school year 1964-65, the Joint Council on Economic Education gave the Seattle Public Schools a grant to design a pilot program for the teaching of economics from kindergarten through senior high school. In applying for this grant and subsequently in accepting it, the Seattle schools did so on behalf of other Washington school systems which had joined in the in-service training programs maintained by the Northwest Council for Economic Education. Twenty-two other school systems in the State assisted in the tryout of materials. In the Seattle system six elementary schools were designated to try out in full the materials developed and representatives from every junior and senior high school likewise tried out the materials. During the in-service training sessions from June 21 through July 9, 1965, representatives of all of these Washington school districts and one from Montana worked on the final revision of the materials.

The beginning of this program dates back to 1948 when the Seattle School System sent representatives to a three-week conference financed by the Committee for Economic Development. The purpose of this conference was to encourage economic education in school systems. Even before this some members of the administrative staff of the Seattle Public Schools were acutely aware of the need to do something in economic education. Recognizing that most political decisions rest upon economic ones, they felt it imperative that more than just a few college graduates have training in economics. They believed the future of the nation required that the average citizen become knowledgeable in economics. There was ample evidence regionally and throughout the nation that high school graduates lacked an understanding of our economic system and its operation.

During the school year 1952-53 representatives from the Seattle School System joined with representatives from the three institutions of higher learning in the city in an effort to organize a local economic council. It proved to be very difficult initially to finance such a work and it was not until the year 1954-55 that a permanent organization was perfected.

In 1955 the Northwest Council, a regional affiliate of the Joint Council in New York, sponsored the first three-week in-service training program on the campus of

the University of Washington. Participants in this program were drawn from all of the Northwestern States, British Columbia, and the then Territory of Alaska. Every year except the summer of 1962 the Northwest Council financed these programs for the in-service training of teachers and administrators and economics. During the year 1962 the Council sponsored a series of in-service presentations on the educational television station. There are now an estimated 600 alumni from these three-week workshops scattered largely throughout the State of Washington but a few in Montana, Idaho, Oregon, British Columbia, Alaska, and elsewhere.

During the latter years of this series of in-service training programs, serious efforts were made by the participants to develop teaching materials. The Seattle School District during this period conducted in-service training sessions for its teachers and assigned selected staff members to work on materials. Thus when the award of a grant was made to Seattle, it was possible to draw on a rather substantial body of experience and move rapidly into the task of developing a pilot program from kindergarten through senior high school.

No reference to these pioneer efforts should be limited to those professional persons involved. It would not be complete without an acknowledgment of the splendor, and in many cases, devoted leadership of men and women from labor and management. During much of the time business firms in the Northwest and labor unions have raised several thousand dollars to finance these workshops.

The grant from the Joint Council provided a small cash sum but most important was the consultative help and encouragement of the economists and curriculum specialists assigned to assist in the development of a pilot project. A substantial library was made available for experimenting teachers and teaching films in economics were also available for staff members. In addition to these resources provided by the grant, the Seattle School System budgeted and expended something over \$30,000.00 in the development of the materials. Other participating school systems provided staff time for try-out and in some instances consultation and editing. The Seattle schools retained the services of an economist from the University of Washington and the University of Washington provided the part-time services of another economist to the other school systems participating throughout the State.

Dr. Louis Bruno, State Superintendent of Public Instruction and one of the Trustees of the Northwest Council, urged upon the other Trustees of the Council and upon the professional staffs involved, the importance of this effort. He informed the Council that his staff would assist as consultants and that when the work was finished he would cause it to be printed as the official recommended course of study for the entire State. It was, therefore, with a great sense of satisfaction that the Executive Committee of the Northwest Council for Economic Education presented to the State Superintendent the materials which became economic education for Washington schools from kindergarten through grade six.

We who represented labor, management, and education in our region felt that our efforts to finance this program and to conduct these workshops had proved to be worthwhile and we believe that the content we presented, which has now been published by the State of Washington, will prove to be a significant aid in the teaching of economics to the children of the State. We are hopeful it may be of some use to other school systems throughout the nation since by terms of the grant by the Joint Council it must be made available for the use of all.

The material for the junior high school grades, seven, eight, and nine, has now been completed and will shortly be transmitted to the State Superintendent as the next step in the development. The senior high school grades will be submitted before the close of the current school year and the production of the new course of study will then have been completed.

While we would be very happy to have teachers in the secondary or upper elementary grades examine these materials carefully and employ them so far as may be appropriate, we are most anxious that the program be started from the very bottom and that teachers be adequately prepared by in-service training before they undertake to teach the new course of study. The Seattle School District, having in its possession the mimeographed materials which were submitted for printing, began to use these during the school year 1965-66 in the kindergarten, first and second grades. During the current school year it is in use in these grades and the third grade has been added. Next year it will move into the fourth grade and will continue in this progression until it has been extended through senior high school.

Preliminary to the introduction of this, the Seattle School System had carried on in-service training sessions most of which have been Thursday and Friday

afternoon and evening and Saturday morning sessions. These have involved presentations by outstanding economists and demonstrations of teaching economics at each grade level. Thus kindergarten or teachers at any grade level could see their peers teaching just what they, the observers, would later be teaching.

Last year the Assistant Superintendent for Elementary Schools and I planned and carried out a series of five regional meetings throughout the city to make sure our principals knew the purposes of the program in economics. We met twice with each group of principals for some two hours in the forenoon. In the first session we made a presentation of our objectives; we described the content and suggested ways of approach; and we reviewed what had been done in in-service training with teachers. By the second session, having met with their teachers, principals came back with questions which had arisen in the teaching of the new program. The principals and teachers were confident. The new program was instructionally sound and moreover they found pupils were interested and responded well.

During the current year we received the report from a committee called the Time-Use Committee which was a study of the entire elementary instructional program. This report, conducted over a period of two years, was submitted in its entirety back to our principals and teachers for review and comment. As a result of this, we have received thousands of pages of summaries from each of our eighty-five elementary buildings. In both the meetings last year and in this Time-Use analysis, which has just been completed, there were numerous questions, recommendations, and some criticisms concerning many aspects of our total teaching program but there was little or no criticism of the new program in economics. On the contrary, many of the reports from the Time-Use analysis commented on the ease with which economics was incorporated into the total social studies program. Comments indicated an awareness of the significance and importance of this new program. We therefore feel we have ample evidence that it is proving to be effective and is recognized as an important element in our instructional program.

There may be many who will question the advisability or even the possibility of teaching economics to primary children. I am sure I would have shared this view many years ago when I was in a sophomore economics class. I have now come to the view that maximum benefits can be achieved from a high school course in economics only if preceded by work beginning in the elementary grades. It seems to me now that it is necessary to introduce elements of economics as a thread throughout the entire fabric of the teaching in geography and history and any other social studies in the elementary and secondary years.

All of us feel the necessity of graduating high school seniors who understand economic phenomena and who have a kit of mental tools, and who have developed skills in analyzing problems. If the common schools do not bring this knowledge to their students, then the great majority of American citizens will remain ignorant and will actually be incapable of carrying out their role as intelligent citizens when they go behind the green curtain to vote.

Primary children can grasp the concept of the conflict between unlimited wants and limited resources. They also can grasp the concept inherent in a free market economy in which they, their parents, their friends and neighbors, and all the people are the ones who determine from their purchases what is to be produced in a free market economy. When pupils thus taught in elementary school reach high school they will be able to understand the basic difference between a free market economy and a society in which a central planning agency makes most consumer decisions.

Perhaps it is at this point appropriate to acknowledge the great debt we owe to the National Task Force on Economic Education which submitted its report, "Economic Education in the Schools," in September 1961. For the first time there was available to curriculum workers and planners an authoritative outline of the structure of knowledge in economics. Our planning, which is reflected in the "Economic Education for Washington Schools," the volume for Kindergarten through Grade Six which we are submitting to the members of the Joint Economic Committee, reflects the broad outlines spelled out by the Task Force Report. Within the total program from kindergarten through the senior high school, we have incorporated the concepts specified by the Task Force Report. Typically a topic is treated in very elementary fashion in the primary grades. It is repeated again at a more sophisticated level in later grades and treated finally at the senior high school level in a very comprehensive manner.

We believe that the amount of training in economics required of elementary and even junior high school teachers can be provided through refresher in-service

training but it is to be hoped that teacher training institutions, our colleges and universities, will take steps to assure that future candidates for teaching, at whatever level, have some training in economics. I foresee our greatest problem will be at the senior high school level and our Board has been so alerted. When our pupils progress up through the grades into the junior high schools and then into the senior high schools, our problem will be to assure ourselves that our teachers of the compulsory senior high social studies courses all are adequately trained in economics. Many applicants for social studies teaching positions are trained only in history. Many have had no economics whatever. Our position has been, as we have analyzed this problem, that those who will teach in our senior high schools must have Advanced Economics, History of Economic Thought, and their appropriate prerequisites before they are adequately prepared to serve our senior high school youth. This will mean much in-service training for some of our staff members and it will mean that we must look sharply to the requirements of those whom we employ to teach in our senior high schools in the social studies field to assure ourselves that they are adequately prepared in economics.

In asking us to be represented at this hearing, your letter, Congressman Patman, suggests that if we have any recommendations to be considered at the national policy level, you will be glad to hear them. I think we have very few suggestions to make but it seems to me if you, our Congress, would affirm a belief in the imperative of economic education for all of our citizenry, if in effect you called upon our schools to meet this challenge in serving the welfare of our nation, I think the outcome would be most significant. I believe it would be a great mistake for Congress to seek to legislate too specifically but, if you would, as you could provide funds for educational purposes, keep ever in mind the need for a nation literate in economics. You have done much, for example, in the fields of science, mathematics, and foreign languages. These are important and have already made great changes in curriculum, teaching resources, and in methods. I hope as funds are allocated in the future you will not forget the encouragement needed in the field of economics but do not forget the fact that economic education would not be where it is today had it not been for the voluntary contributions from labor and management, both regionally and nationally. Encourage the continuance of this private effort. Your holding of a hearing of this kind and considering the teaching of economics is in itself significant and will have an influence upon the educational programs of our country.

To sum up the Seattle Story in Economic Education, let me quote from Superintendent Bottomly's letter in response to an inquiry about the DEEP grant:

"The Joint Council's DEEP grant made possible the preparation of a highly effective program for the teaching of economics and Seattle began teaching it last year in the primary grades. Each year a grade will be added until the entire sequence is extended through high schools. Children have found the new curriculum to be vital and appropriate to their level of understanding."

We have long needed just such a curriculum design to enable our graduates to understand the society in which they will live.

Representative PATMAN. Our next witness is Mrs. Vincent Patrick, coordinator of economic education, Tulsa public schools, Tulsa, Okla.

#### **STATEMENT OF MRS. VINCENT PATRICK, COORDINATOR OF ECONOMIC EDUCATION, TULSA PUBLIC SCHOOLS, TULSA, OKLAHOMA.**

Mrs. PATRICK. Next month the Tulsa public school system will complete its third year as a pilot school in the developmental economic education program under the sponsorship of the Joint Council on economic education and the Oklahoma Council on Economic Education. Although we have accomplished many of our goals, much remains to be done. Building new concepts into the school curriculum takes persistence and time.

Our purpose was to improve economic education in all of the schools from kindergarten through grade 12 and if we were successful, to encourage and assist other school systems to set up a similar program.

We understood the need for improved economic education. We understood the value of it to the children and ultimately to our society. And we understood the part it would play in strengthening the values which the people of our Nation recognize as so essential to the preservation of a democracy.

A committee of educators, economists, and business leaders planned the project following, as well as it could, the flexible guidelines set up by the Joint Council on Economic Education. However, we did keep in mind that the instruction in economics must fit in with the philosophy and educational policies of the department of instruction under the direction of Dr. Hiram Alexander, assistant superintendent for instruction.

There was no doubt that economics could be built in as a part of the social studies offered in the elementary and secondary schools. Since the program would operate within the social studies department, it has been directed by Mr. Kenneth McCharen, supervisor of social studies in secondary schools, and Mrs. Laura McCall, director of elementary curriculum.

In the elementary schools, reading, one of the basic subjects, is taught in all the homeroom programs through individual social studies units developed by the teacher. The scope and content of these units are within the understanding of the students, are sometimes suggested by the students, and change from year to year to meet the changing interest of the students.

Our first concern was to determine the preparation of teachers and the quality of economics being taught. Data gathered from a research on the preparation of teachers showed that because there were no courses in economics required by the State for certification in social studies 51 percent of the elementary teachers had a limited background in economics, while 49 percent had neither college courses nor inservice courses in economics. With secondary teachers, matters were just as gloomy; 187 of the 217 social studies teachers in secondary schools reported their preparation in economics. Of the 187 teachers reporting, 47 had had no courses in economics. And when we instituted an inservice course at the beginning of the school term only 25 of the 47 enrolled.

Some teachers questioned the need for being involved in a project in economics because they felt that they were already teaching economics. Interviews with teachers, observation of their teaching, and reviews of existing curriculum guides showed that indeed they were trying to include economics in social studies units, and that some were very successful. But the greatest portion of the social studies teachers in both elementary and secondary schools were teaching economics that was not economics, or economics that lacked specificity, or was actually inaccurate. In elementary schools, especially, there were selected social studies units which were worn thin with repetition at every grade level. Some of these units, conservation, transportation, communication, and thrift, were descriptive in nature and contained few economic concepts and almost no analysis.

During the ensuing 3 years, six inservice courses have been offered and materials have been prepared. Development of materials and preparation of teachers would have been impossible without the assistance of experts in other fields. So again, we called on economists, educators, and business and labor leaders to bring about some order

and efficiency to the teaching of economics. Educators provided the know-how for developing units and encouraged better methods of teaching so that children could discover and apply the economic principles which govern their lives. The economists determined the order and correctness of economic concepts and understandings to be used. Business and labor leaders, in addition to helping finance the project, brought to it their working knowledge of our economy.

Committees studied tentative guides which teachers were using in social studies and determined that the best way to approach the problem would be to strengthen what was already suggested in the guides and add to it, or perhaps completely change it when materials were being revised. Classroom teachers and economic consultants revised materials, using Developmental Economic Education Program, Part I, prepared by the Joint Council on Economic Education as a guide.

It would have been an easy matter if we could have taken a suggested organization of economic concepts and understandings and prepared units to be distributed to the teachers for their immediate use. But we thought that if the understanding of economics and of the American economic system in particular were to become an integral part of the child's life, it must be done in relation to the child, at the moment it caught his fancy, and at all times it must be germane to the problem he was studying. We decided that the understanding of concepts should be cumulative, and not packages of information to be studied at specific grade levels.

At first there were gaps in the logical order of economic concepts being presented, but now at the end of the third year a system of economics is beginning to be evident. Yet it is a system which begins almost in its entirety in the primary grades and is reinforced and becomes more sophisticated as the child progresses through the middle grades. The skills in the use of economic principles for solving problems, and the understanding of the environment's influence on economics of regions is studied in world geography in grade seven. In grade eight a one-semester-required course in our American economy ties together all that the child has learned up to this point as he investigates the operation of the American economic system. During three semesters of U.S. history and one semester of Oklahoma history in grades 9 and 10 and world history in grade 11, the principles of economics which the student has learned, and is now able to apply, are used to determine the implication of economics on the story of the State, Nation, and world. In grade 12 the student uses his knowledge of economics and past history to study in depth the problems facing our economy and the economies of other nations and he tries to determine reasons for and the outcomes of the solutions offered for these problems.

With this arrangement of economic education in the social studies program we believe we can meet the ultimate goal stated by Dr. Charles C. Mason, superintendent of Tulsa public schools, at a meeting of Oklahoma Council on Economic Education. He said:

It is to be hoped that our students will finish high school with an understanding of the American economic system in all its operations. We believe that this will not be done by indoctrination but with the child coming to his own conclusions about the system and the freedoms and advantages it offers.

A child, at any age, can understand most economic concepts if they are presented in relation to his life. The kindergarten through grade

three pupils begin with an understanding of their families and their neighborhoods. Some go beyond to an investigation of the city in which they live. They study their school, the neighborhood police, and fire department and recognize that people often do together what they cannot do individually. The teacher does not stop here, but the children discover that the income needed by the group, or government, can only come from business firms or families unless the government itself goes into the business of producing and selling goods and services. Thus they develop an awareness of their family's role in business activity and they see the interrelatedness of families, business, and government.

In working with the circular flow of goods, services, and money among businesses, families, and government the pupils see income as coming not only from ownership of land, labor and capital, but also sometimes as transfer payments from government. When you think that, after discovering the basic idea, it took economists 150 years to make income analysis a tool for their work, it is gratifying to see the concept at work with elementary school children. The next step the children make is, "Where does the money go?"

Grade 3 students go far beyond the idea that money is saved in banks. We found it amusing that grade 3 children thought that when the money was deposited in the bank, the money laid there until the family wished to check it out and his own money then was withdrawn. They felt the same way about savings accounts. They understand that banks create money when they discover that banks only keep a part of the family's deposits in checking accounts and lend the remainder to businessmen who pay interest which is income to the family and to the bank. They have followed the loan and find that the business firm uses the money to buy new equipment for increasing its capacity to produce.

A primary class recently became interested in space projects. These children were  $6\frac{1}{2}$  years old at the time. When they came to the point of, "Who pays for it?" the teacher told them that because no one business firm could conduct a space program, people had to go together to pay for it. They did discover that certain goods, such as food the astronauts took with them, were prepared by the same business firms that prepared the orange juice and other foods for their own tables. A representative from NASA visited the classroom bringing packages of food the astronauts used and showed the children how they were eaten. The children, with the teacher's assistance, made a pie graph of Government expenditures. The wedge representing expenditures for the space program was made of a different color of paper. Although these children could not fully understand the enormity of the expenditure, they did understand the relation of its amount to the amount that Government spent for all other services it provides.

In grades 4 and 5, the students learn about the history of our country and the development of a money system, a banking system, and trade. Grade 6 students in a study of early civilization begin a very simple comparison of how a variety of economic systems operate. By using the chart of families, business and governments exchanging goods, services, and money, in their later study of specific countries in Latin America, Africa, and Asia, they can see the difficulties facing a young nation in our highly industrialized society.



The grade 8 required course, the American economy, intensifies the student's understanding of concepts and it is in this class that economics takes on real structure.

In the grade 12 problems course, the students use all of the tools they have learned in economics and attempt solutions to a myriad of economic problems facing the United States and the world. While I cannot summarize the major economic concepts now included in our curriculum, a few may be briefly alluded to: the differences between "real" and "money" costs; the central problem of choice in the allocation of resources; and the use of models to show economic relationships.

As we have said, the end of the 3-year project is not the end of improvement of economic education in Tulsa. Constant evaluation, improved materials, and better teacher education is needed.

Inservice courses are needed for teachers who are already certified but who do not have adequate background in economic education. Inservice courses should not be limited to economic content but should include the skill of preparing materials and presenting them.

Colleges and universities need to offer courses in economic education for teachers, and a minimum of 6 hours of economic education should be a requirement for certification in social studies.

Colleges and universities should improve the methods of instruction for economics courses or courses in economic education. Too often teachers teach children as they have been taught.

There is little material on the market that is adequate. Teachers need transparencies, filmstrips, and film. If these cannot be produced commercially, then financing is needed for them to be produced by teachers.

There should be financing for the services of teachers and economists for the revision of curriculum guides and other materials.

The effectiveness of the initial planning by the Joint Council on Economic Education which included the diffusion of the know-how and materials in economic education to school systems surrounding a pilot school is already evident. In Tulsa we have assisted with institutes in economic education in Texas, Louisiana, and Oklahoma. We have met with leaders who were organizing a council in Texas. We have consulted with coordinators in Little Rock, Ark., Baltimore, Md., San Antonio, Tex., Bartlesville, Okla., and have made suggestions as to how a project is planned and developed. We have shared materials with other projects and other school systems over the Nation. And they have shared materials with us. We have provided colleges of education in universities in Oklahoma, Arkansas, Texas, Arizona, North Carolina, Louisiana, Hawaii, and Thailand with materials which we have developed.

Tulsa believes that economic education is of tremendous importance to the preparation of our children for citizenship. A rosy picture of our Nation's economy is not painted, but students are given the tools to look creatively at the problems facing the Nation. They become convinced that there are no pat answers to the problems. But they begin to realize that for as long as we are allowed to openly state the economic problems of our Nation, and search for and suggest solutions, we are a truly free people.

Chairman PATMAN. Thank you, Ma'am. These statements are very interesting, each one of them.

Chairman PATMAN. Our next witness is Dr. Hugh G. Pyle, who is substituting for Mr. Johnson.

Dr. Pyle, we are glad to have you. You may proceed.

**STATEMENT OF HUGH G. PYLE, ASSISTANT DIRECTOR, ADULT EDUCATION ASSOCIATION OF THE U.S.A.**

MR. PYLE. Thank you, Mr. Chairman.

In testifying, I am not stating the official position of our association on the matter under discussion, but I am appearing rather as an individual in a position to be informed on this subject.

**WHAT IS THE AEA?**

The AEA is the largest professional member organization in the field of adult and continuing education. It has a membership of 4,000 individual members, an additional 4,000 subscribers to its publications, and more than 100 nonpartisan industrial, civic, business, labor, health, social and similar organizations interested in adult education. AEA serves as the secretariat for a consortium of national agencies of adult education. This consortium has representatives from all of the major organizations involved in the field of adult and continuing education. These organizations serve the 25 million American adults who annually participate in adult education programs.

AEA's membership is drawn from the following organizations and institutions: business and industry; the Federal Extension Service; correspondence schools, evening colleges; government agencies; labor unions; libraries; the mass media; men's and women's clubs; museum and art institutes; the public schools; religious institutions; social, welfare, and health agencies; university extension; voluntary organizations, and many others.

I might add that prior to July 1, 1965, I was on the staff of the Pennsylvania State University as assistant director of continuing education, so that I am familiar in some degree with programs in economic education being offered for adults by higher educational institutions.

**THE NEED FOR ECONOMIC EDUCATION FOR ADULTS**

It has not been many years since economic life in America was a relatively simple existence. The typical adult who had mastered his three R's and who was blessed with a normal supply of commonsense and physical strength, could expect to work out his economic problems with little help from the outside. But this simple life and pioneer isolation no longer characterizes one's economic existence. Economic problems, both personal and political, crowd upon all of us—problems that are bewildering and complex.

As a producer and wage earner, the citizen's welfare is closely tied to the program of his government, its fiscal and monetary policies and its social philosophies. A citizen in our society today is asked to make political choices that are economic. The issue may be a local one, such as a raise in property taxes, or it may be a national one, such as legislation affecting minimum wages and hours. High interest rates may affect his ability to build a new home. Even more perplexing, our economy is subject to factors which operate internationally. For example, ques-

tions arise such as: Should the United States participate in giving technical assistance to underdeveloped areas in the rest of the world? Should it distribute surplus cereal grain abroad, make international loans, or establish new trade policies?

Decisions on personal problems have a bearing on the total health of our economy and our world. Most people have to manage budgets and buy many things other than food. Through their composite decisions people can make or break markets, speed up or slow down the flow of consumer goods, influence tax policy, stimulate or curtail the flow of capital funds and decrease or increase employment and wages.

The development of economic understanding is enormously complex. It is intertwined with a mixture of social, ethical, moral, and political concepts. The view of many people on Federal support for education is tinged by their attitude toward States rights. Opinions about public power policy are influenced by the intensity of feeling on the efficiency of private enterprise in promoting the general welfare. A view of labor legislation may depend upon the concept held of labor unions, either as legalized instruments of interference with the rights of management, or as an exemplification of the right of a free people to join together.

The impact of government policy on our economy has become so critical that an informed public is essential to the support of measures that tend to stabilize economic activity and to avoid extreme fluctuations between inflation and deflation. So numerous and fundamental are our economic problems and so intertwined are they in the success of democracy that understanding of economics—its terms, its working patterns, and its significance—has really become a prerequisite to successful citizenship.

#### PROGRAMS AND MATERIALS FOR ADULT EDUCATION

As a consequence, materials and programs have been developed with varying degrees of objectivity to meet these needs. Materials may take the form of magazine articles, booklets, films, filmstrips, graphs, charts, maps, cartoon stories, pamphlets, annual reports, statistical compilations, and others. Programs which have developed take the form of formal classes, field trips, seminars, workshops, discussion groups, lectures, demonstrations, and counseling services. Economic literature has been enriched by research studies carried on by independent organizations such as the Brookings Institution, the Twentieth Century Fund, the National Bureau of Economic Research, the Rockefeller Foundation, Sloan Foundation, the National Industrial Conference Board, and others. A large number of universities have bureaus for economic, business and social research.

As to the amount of adult education going on in the country that might be categorized as economic education, we do not have definite information. One can refer to a 2-year Carnegie Corp. financed study of adult education in the United States made by the National Opinion Research Center at the University of Chicago. The category "economic education" was not even included in the extensive list of subjects which adults study. The survey did indicate that adults would be more interested in the study of applied and practical aspects of economic issues than in a study of basic economic principles.

We do know that there are many representative programs of economic education going on for adults. The American Home Economics Association and its member agencies attempt to develop more efficient home management and family economics practices. An organization such as the American Iron & Steel Institute compiles industrywide statistics and information to distribute to the public. The AFL-CIO attempts to develop an understanding of the labor union movement and the role of unions in the economy. Banks and brokerage houses organize classes in investments and issue publications relating to the health of the economy. The Chamber of Commerce of the United States issues materials designed to develop understanding and appreciation of the free enterprise system. The Cooperative Extension Service in the U.S. Department of Agriculture designs aids for the achievement of efficient agricultural production, adequate farm incomes and prosperous communities. The Committee for Economic Development, made up of academic, business, and labor leaders, studies principles of business and public policy to foster the full contribution of business and commerce to the general well-being.

Some years ago the Fund for Adult Education of the Ford Foundation prepared a special study-discussion course, hoping to make a frontal attack on the economic illiteracy of otherwise literate Americans entitled "Your Money and Your Life." Other organizations such as the Metropolitan Life Insurance Co., the National Council of Churches of Christ in the U.S.A., and the Twentieth Century Fund are making contributions to this field.

University extension divisions have workshops, seminars, conferences, send out field representatives, organize classes and supply lectures for the purpose of providing a general education in economic problems and the nature of the economy.

#### THE FEDERAL GOVERNMENT AND ECONOMIC EDUCATION

The Federal Government has enacted legislation that permits colleges and universities to carry on, among other continuing education activities, programs of this nature. Title I of the Higher Education Act of 1965 would authorize such adult education. Programs are also authorized under other legislation. A useful compendium of such information is contained in a 112-page directory recently published by AEA entitled, "Federal Support for Adult Education."

It does not follow that because of these programs American adults are literate in the field of economics. This activity only serves to point up the need for, and interest in, economic education. Agencies offering economic education for adults find that there are obvious disagreements in points of view. The eager learner finds himself struggling for understanding in the face of a crossfire of pressures and sometimes even emotional thinking. Though much of the material and many of the programs have a focus on utility in developing sound and practical economic insights, others subtly promote biased points of view—biased when exposed to economic principles as taught by professional economists.

Despite the activities carried on by many agencies and the mass of publications having to do with economic education, economic illiteracy continues to be widespread. A large percentage of small businesses fail because they violate sound economic principles;

individuals and families fail to budget wisely; unprofitable investments are made, and our citizens generally have limited insight into the many economic problems they face daily.

Should the Federal Government decide to support programs of private organizations that carry on economic education, a very practical problem presents itself: How to decide on organizational programs to be subsidized, that would present material and carry on training programs from an objective viewpoint?

A practical solution to this problem would appear to be to place the power to grant subsidies in the hands of a council of a completely nonpolitical nature. This council or board should be composed largely of recognized professional economists from educational institutions. However, the practical and applied viewpoint should also have representation.

Let me summarize what I have said in my testimony. There are obvious needs for the development of programs of economic education for adults. Many agencies are carrying on educational programs and disseminating published materials for adults that relate to economic education. One practical question to this subcommittee however would be: What programs and publications of what private organizations would the Federal Government subsidize? Would freedom of discussion of alternative points of view be preserved? This is a sensitive problem and one which could only be resolved by placing the power to grant subsidies with a nonpolitical council or board.

Thank you very much, Mr. Chairman.

Chairman PATMAN. Thank you.

I am very much impressed with each one of these statements. I am also proud of the fact that we are commencing, finally, the hearing on this important subject.

I believe the Joint Council on Economic Education, Dr. Frankel, is the only one of its kind in the United States. Is that correct?

Dr. FRANKEL. That is correct, sir.

Chairman PATMAN. And you are operating in 31 States?

Dr. FRANKEL. At the present time, yes.

Chairman PATMAN. I was impressed by the testimony of Congressman Wilbur Mills a few days ago. He had a lot to say about your Council.

Dr. Frankel. Thank you.

Chairman PATMAN. We are really proud of the State of Arkansas. It is right next to my district, and I know about Arkansas and the Arkansas people, with their fine Congressmen and Senators. I understand Mr. Mills said they won a number of your awards last year. Out of 52, I think, Arkansas received about 11.

Dr. FRANKEL. That is right.

Chairman PATMAN. I asked him to put the names into the record, and he will do that. (See p.16.) If you want to put more information about your Council in here, it will be all right with us. (See Volume II, part 2).

Dr. FRANKEL. Thank you.

Chairman PATMAN. I am very much interested in credit unions, having been one of the authors of the bill in 1934 to create credit unions. They have certainly done well in this country. Now the State and Federal credit unions aggregate about 22,000, and their resources are very great. It hasn't been many years since all the commercial

banks in the country had no more resources than the credit unions have now. I think they teach thrift to people, and I think they fit into this program very well.

Dr. FRANKEL. I agree with you.

Chairman PATMAN. A lot of high schools have them already. Do you know about that?

Dr. FRANKEL. Yes, sir. As a matter of fact, many of our projects in the schools evolve around the savings programs that are undertaken by the children in the schools.

Chairman PATMAN. Here you have a setup that goes into every nook and corner of our Nation. We have outstanding examples of what they can do and what they have done. I have a feeling even in the lower grades where a child is permitted to put in so much money a week or month, and participate in the organization of the credit union and its management, and maybe borrow a dollar now and then and pay it back, that the savings program of the credit union would fit right in with this work that you are advocating, Doctor. I hope you give consideration to it.

Dr. FRANKEL. We certainly will.

Chairman PATMAN. I have an elementary book—that is the only kind I could sponsor—in simple language that I can understand and other people can understand. I sent for some copies of it. I want you all to look at it. If you think it is all right, we might put excerpts from it into the record. (See vol. II, part 6.) It is about money facts and the creation of money, the manufacture of money. That is what I usually call it. It hasn't been many years when I brought up the question of banks manufacturing money, they all jumped on me with "Oh, no, that is not true at all. That just does not happen."

The banks talked about how they have to get back the money that they loan, because it is their depositors' money—which it is not; or that it belongs to the bank—which it does not. Some people don't seem to realize when a person goes into a bank and borrows \$100, we will say, on a promissory note, that when he leaves that bank with that \$100 credit, and he can take the money with him if he wants to, no depositor has any less. The deposits are exactly as they were before he borrowed that \$100. The bank's assets are the same. So that is just the pure and simple manufacture of money.

I am all in favor of it, as long as it is done for the public interest. That is all right. Of course, the banks happen to be the only ones that can manufacture money and not go to the penitentiary. I am all for the system, as long as they do it in the public interest. But when they begin to do it for other purposes, not connected with the public, I begin to look with great suspicion on it.

Would you like to comment further on your testimony, Dr. Frankel?

Dr. FRANKEL. I would like to read into the record, Mr. Chairman, possible constructive activities of the Federal Government in support of economic education.

(1) These hearings in themselves and the work of the Joint Economic Committee are important contributions to economic understanding.

(2) The present summer institute programs in economics of the U.S. Office of Education and the National Science Foundation should be expanded. These institutes play an important role in the education of teachers.

(3) The two experienced teacher fellowship programs in economic education (authorized by title V, part C, of the Higher Education Act of 1965) should be extended to other colleges and universities. From these advanced degree programs will come the economic education supervisors and coordinators so desperately needed by school systems.

(4) I concur in the recommendation that an ad hoc organization should study the economic knowledge and research produced by the Federal Government and should recommend communication techniques and channels for getting this knowledge into the schools and colleges.

(5) Established centers for economic education should receive priorities for action research grants in economic education. In centers economists and education specialists work directly with school systems in their area. Research conducted by the centers has immediate and ongoing impact on economic education at the "grass-roots" level.

(6) The Joint Council's success in improving economic education in the schools has been dependent on the leadership and financial support of representative civic and economic groups. The council seeks no Government support for program innovation and expansion. However, new programs expose areas of needed research best implemented by a national organization. Governmental grant-giving agencies should have the freedom to support such research when it merits consideration.

(7) From the Joint Council's developmental economic education program will come objective and tested curriculum materials for both students and teachers. The Joint Council encourages private publishers to market these materials. Many items that are invaluable to the furtherance of economic literacy are not profitable commercially. Our budgetary limitations preclude the wide distribution of these materials. We suggest consideration of an open grant to the Joint Council that will permit the placement of a working kit of these materials in school systems throughout the country.

(8) There is a growing interest in economic education among members of the Atlantic Treaty Association, Japan and Latin American nations. Their educational leaders are seeking our materials and services. Our resources are needed for economic education reform in the United States. I suggest that Federal Government agencies might underwrite the export of the Joint Council's experience, techniques, and materials.

Chairman PATMAN. I have just one question on your last statement, about underwriting the export of the Joint Council's experience, techniques, and materials. Does any other country in the world have anything that is similar to the Joint Council in this country?

Dr. FRANKEL. No, sir. But very shortly, I believe by the fall, there will be a council similar to ours in Japan. But other countries are still progressing toward that point.

Chairman PATMAN. We have enough time for a minute or two for each of you to summarize your statements, if you would like to.

Mr. Schur, would you like to summarize?

Mr. SCHUR. I would simply like to emphasize once more the importance of economic education. Your own example of the ignorance that you have found in the past about the banking system still is

valid. I can testify to that. It is a conceptual understanding of economics that we need. The State councils and centers in economic education which are affiliated with the Joint Council are doing a yeoman job at the State level. However, we greatly need additional support, moral support, and financial support from the Congress.

Chairman PATMAN. Thank you.

Mr. Stewart?

Mr. STEWART. I would simply add this note: I hope it may be recognized that much can be done, much must be done, in the primary and intermediate grades. So many people in thinking of economic education consider it only in terms of the secondary program. I believe it is very difficult in a secondary program, unless it is supported by a beginning, to achieve the kind of competence children must finally achieve in order to make good citizens.

Chairman PATMAN. Thank you, sir.

Mrs. Patrick?

Mrs. PATRICK. I would like to say that we feel that our program in elementary and secondary schools has a certain measure of success. In other words, it is becoming successful. The teachers are enthusiastic as they learn more about economic education. We feel that it will grow, the program will grow, and become more efficient as time goes on. But it is something that we must continue working on.

Chairman PATMAN. Thank you.

Mr. Pyle?

Mr. PYLE. Mr. Chairman, I simply want to say that I have tried to show the importance of a greatly expanded program for adults in the field of economic education, and to say something of what is going on at the present time.

In conclusion, I think we owe you and your committee a debt of gratitude for opening up this whole question for us.

Representative PATMAN. Thank you, sir.

We have another first to our credit. Back in 1955 our subcommittee had a hearing on automation. Dr. Vannevar Bush was our first witness. He made the shocking statement that in 1955 the Russians would graduate twice as many engineers as would be graduated in the United States, and the further shocking statement that the Russians that year would graduate 32 times as many technicians as would be graduated in the United States. In other words, we would graduate about 50,000 and they would graduate about 1,600,000.

There were many interesting statements like that which provoked much thought and discussion, and which I believe has had something to do with our people trying to get ahead of the Russians. I believe we have succeeded in doing that.

I have had placed before you a book on money facts. That is just a sample of economic illiteracy that exists in some sections of our country among certain groups. This book was prepared by a subcommittee that I am chairman of in the Banking and Currency Committee. It goes into such subjects as: What is money? How is money created? Why was the Federal Reserve Act passed? Who determines the money supply? Who owns the Federal Reserve banks? Why was the Federal Deposit Insurance Act passed? How does the Federal Reserve provide public funds to the private banks? What is monetary policy? What improvements are needed in the money system?



That book has been very popular. It wasn't printed as a private publication for the reason that we wanted it distributed as widely as possible. So it has been sold by the Government Printing Office. Everyone who writes to me for a copy gets a copy free, because I want to get them out to our people.

Mr. SCHUR. We have been using them in our economic education workshops.

Chairman PATMAN. I am mighty glad to know that.

We have a primer on money, prepared by the same Domestic Finance Subcommittee of the Banking and Currency Committee, which goes into this subject more fully and thoroughly. It is published by the Government Printing Office.

In fact, for practically every book I have sponsored, where I could get it done by the Government Printing Office I have preferred that method of distribution, because the cost is lower and it is easier to get distribution that way.

We are very proud of these books. We do want them distributed. I would like to put parts of the smaller one into the transcript of the hearings as an example of the basic kind of economic education needed in this country. Do you think it would be all right, Doctor?

Dr. FRANKEL. Surely.

(The material referred to by Chairman Patman appears in volume II, part 6.)

Mr. SCHUR. I want to add that so much material that comes from the Joint Economic Committee is being used and is very important in economic education, as well as being of great value to professional economists.

Dr. FRANKEL. Mr. Chairman, I do want to pay my respects to the members of the committee and the staff for the great assistance they have been to the Joint Council in making available these publications for the summer institutes and programs during the school year that are held for teachers. This kind of help is invaluable, and we hope it will be continued.

Chairman PATMAN. We have had a very fine staff since the committee was established.

I was the House author of the full employment bill in 1945. We were all called Communists and everything else because we talked about full employment. But we had hearings in the House and Senate, and we finally got the bill passed. That bill created this Joint Economic Committee. We first called it the Joint Committee on the Economic Report. But in saying that very fast, it was kind of difficult and we changed the name of it to the Joint Economic Committee.

We have had a wonderful staff ever since; a good professional staff. We are very proud of them. We have published so many studies which I think are so helpful. I suggested to our present chairman of the Joint Economic Committee, Senator Proxmire, a few days ago that he consider placing in the Congressional Record all the available publications that have been prepared by our committee. Most of them now are just as current as of the time they were prepared, and some of them, of course, we are bringing up to date. That would let Members of Congress know what is available in that respect. (See Congressional Record, May 4, 1967, pp. 6369-71.)

We have two other witnesses now. We will have a brief recess of 5 minutes in our proceeding, and then we will start with the other two witnesses.

I want to thank each one of you for your statements. You have been wonderful this morning, and we appreciate your appearance very much.

Dr. FRANKEL. Thank you, sir.

Mr. STEWART. Thank you, Mr. Chairman.

Mrs. PATRICK. Thank you, Mr. Chairman.

Mr. SCHUR. Thank you, Mr. Chairman.

Mr. PYLE. Thank you, Mr. Chairman.

Chairman PATMAN. We will now be in recess for 5 minutes.

(Brief recess.)

Chairman PATMAN. The committee will please come to order.

We are pleased to have as our next witness, Dr. John T. Wilson, Deputy Director of the National Science Foundation.

I believe you have a prepared statement, Dr. Wilson. You may proceed in your own way. If you desire to insert additional material, you may do so.

Would you present those accompanying you, for the record, please?

#### STATEMENT OF JOHN T. WILSON, DEPUTY DIRECTOR, NATIONAL SCIENCE FOUNDATION

Dr. WILSON. Thank you, Mr. Chairman.

I am John T. Wilson. To my left is Dr. Keith Kelson, deputy associate director for our education group; to his left is Dr. Edward Todd, deputy associate director for our research group. To my right is Dr. Howard Nicholson, program director for economics. To his right is Mrs. Katherine Arnow, staff associate in our planning group.

Let me first say, Mr. Chairman, that I am not an economist. I was a psychologist, to begin with, and I guess in becoming a science administrator I have been going downhill ever since.

I am appearing before you representing the National Science Foundation. I am very pleased to come up and tell you about the Foundation, particularly about the programs that relate to the field of economics.

#### I

As you know, the National Science Foundation was established by the Congress in 1950 for the purpose of supporting science in the broadest sense. It was, in its time, as bold and farseeing a piece of legislation as the somewhat earlier act which established this Joint Committee in recognition of the importance of the economic aspects of national affairs. With the establishment of NSF the Federal Government of the United States committed itself to the support of fundamental scientific research and to the advancement of education in the sciences.

A major aspect of Foundation activities is the support of basic research, accomplished in large measure by project-type grants to universities, colleges and other nonprofit institutions. In addition to project-type grants, funds are made available by the Foundation to

support: specialized research equipment and facilities; "national research programs" such as the International Geophysical Year, weather modification, the International Indian Ocean Expedition, and the United States-Japan cooperative science program; and four national research centers—three having to do with astronomy, and one with atmospheric sciences. These centers are owned by the Foundation but are operated by university consortia.

Two national research programs—weather modification and the United States-Japan cooperative science program—include projects of economic interest. The Foundation also has a variety of "institutional" programs directed at the development of science activities in universities and colleges, as well as an extensive program in science education which I will later discuss in some detail, particularly as it relates to economics. Other NSF activities include a variety of programs in science information, in international science, and in planning and policy studies.

## II

To come now to the field of economics, the National Science Foundation relates to and uses economics in several contexts: first, it is one of the fields of science which the Foundation supports directly—in basic research, in science education, in international science activities, in the provision of computers and other facility support, and in the general assessment of, particularly, academically oriented scientific activities of the field. The services of economists are utilized to carry out another important function of the NSF: planning and policy studies relating to our statutory responsibilities "to develop and encourage the pursuit of a national policy for the promotion of basic research and education in the sciences" and "to appraise the impact of research upon industrial development and upon the general welfare."

In this latter connection, for example, analytical studies on economics as a discipline and as a profession are carried out as a part of the activities of the national register of scientific and technical personnel. With the partial support of the Foundation, the American Economic Association has published an analysis of the "Structure of Economists' Employment and Salaries, 1964." This report was published as a supplement to the American Economic Review and, if you wish, I will leave a copy with you for the record. Preliminary reports on the most recent (1966) registration of scientists are now available. To give you a basis for comparing economics to other fields covered by the Register, there are some 13,000 registered economists, 66,000 chemists, 20,000 earth scientists, 29,000 physicists and 23,000 mathematicians. Only two "natural sciences"—agricultural sciences and meteorology—have lower registrations, but of the social sciences, economists are second to psychologists (19,000). The median salary for economists is the highest reported for all the sciences. Salary data are a reflection of a combination of several factors including: relative shortage of economists; years of professional experience; locus of employment; and the level of highest academic degree. Further detailed statistics regarding economics manpower are available in a Foundation report which I submit for your information (Reviews of Data on Science Resources, 66-34).

Chairman PATMAN. The items you have just referred to will be included in the record in the appendix which will follow today's testimony.

(See vol. II, part part 7, exhibit I, and exhibit II, for materials referred to.)

## III

Mr. WILSON. Support for economics research was initiated at a relatively early period in the Foundation's history although such support at first was restricted to econometrics. Growth in the rate of research support has been gradual—too gradual to some. From an annual rate level of \$100,000 in fiscal year 1959, it grew by fiscal year 1966 to a level of \$2.3 million and it will be approximately \$3 million in the current fiscal year. These funds are distributed to such major economic research centers as Yale, California, Pennsylvania, Wisconsin, and the Brookings Institution and smaller institutions, including Cornell College, Wesleyan University, Grinnell, Occidental, and Haverford. The Foundation's program is one of the largest sources of support in the country for basic research in economic sciences and constitutes a major stimulus to the production of new knowledge and the development of new analytical methods and quantitative techniques in the discipline. Currently the program is supporting the work of both outstanding economists and promising young members of the profession in most of the active research areas of economics.

Let me mention a few current projects, and to supplement these examples, I will submit as an appendix, a complete list of the research grants in economics for the past 5 years. (See volume II, part 4, exhibit III.)

For many years the Foundation has supported the widely known work of Prof. Wassily W. Leontief of Harvard University on basic research in input-output techniques. Input-output analysis has been used in a large number of foreign countries, particularly for developing nations involved in economic planning and analysis. Currently, input-output analysis is finding increasing favor in the United States where not only in the Government but also in the business community there is a growing awareness of its usefulness.

Since 1961, an interuniversity group—now headed by Profs. Lawrence R. Klein, University of Pennsylvania; Edwin Kuh, MIT, and Dr. Gary Fromm, Brookings Institution, has been supported on the development of an econometric model of the economy which may be used to investigate the dynamic properties of the U.S. economic system. The model which has been developed has over 300 equations and is much larger in scale and has a more detailed sector breakdown than any previous effort in econometric model building.

Examples of other models of the U.S. economy supported by NSF research funds include work by Prof. Daniel B. Suits, University of Michigan, and Prof. Guy H. Orcutt, University of Wisconsin.

Without modern computers the ambitious projects described above would be impractical. But substantial as its contribution to research methodology in economics has been, the computer promises to aid research in many new ways. Currently with the support of the Foundation, Prof. Richard Ruggles of Yale and Edwin Kuh of M.I.T. are cooperating in the development of computer software for use on a shared-time system that will enable econometricians to

estimate, test, and simulate models more effectively than can now be done. In addition the project will attempt to develop a large on-line open-ended library of both data and functions.

The area of consumer behavior has been a meeting ground between psychology and economics, a typical grant in this area being an award to George Katona, of the University of Michigan, to study consumer responses to the income tax cut of 1964. He found, among other things, that the tax cut influenced consumer spending several months before it went into effect. Studies are also underway at the National Bureau of Economic Research, Wayne State University, and the University of Michigan to improve our ability to measure consumer anticipations and to predict consumer behavior.

#### IV

Turning now to education in economics, with which this committee is most immediately concerned, the Foundation, through its Education Division, is improving the quality of education in all the sciences, including economics.

At the graduate level, education and research are intimately connected and, with reference to lower educational levels, one of the goals of our education programs is to introduce as quickly and as effectively as possible into the educational system, advances in knowledge made by researchers. We do this through programs designed to enhance the substantive background of teachers at all levels, to keep them up to date in contemporary methods and research findings; to develop good courses, textbooks, and instructional units; and to afford some especially interested and talented students the opportunity for special studies in depth. As is true for all of the social sciences, the Foundation's education program in economics has been a growing one.

It must be noted, however, that in our experience the academic community's interest in education support programs in economics is not nearly so widespread as might be hoped or even expected. To be sure, some thoroughly competent professional economists, some college and secondary level teachers, and some schools are interested and are doing constructive things. But the momentum in economics education has been slow to develop as compared with, say, mathematics, physics, biology, chemistry, and even other social sciences. I would hope that these hearings serve to focus attention on the problem.

It is possible that the lack of momentum stems from the nature of economics. As treated by secondary and elementary schools, it is frequently an admixture of facts and of value systems. The Foundation is concerned with economics education from the scientific point of view. It feels that it is important that both the prospective economist and the future adult citizen have an understanding of the factors underlying economic systems and trends, and consequently the activities it supports are directed toward this end.

As we have noted, at the elementary level of education to the extent that it appears at all, economics education is blended into a general area known usually as social studies. Unlike mathematics, for example, it is rarely discretely identifiable in elementary instructional programs. At progressively higher levels it becomes increasingly identifiable. Because of this fact, the Foundation's involvement in economics edu-

cation is greater and more specific at successively higher educational levels, culminating in fellowships and research training in economics as such at the graduate and postdoctoral levels. At these points, economists participate fully in the various science education programs. For example, in fiscal year 1966, the proportion of successful economics applicants for fellowships and traineeships (30.5 percent) was higher than that achieved by applicants from any other field except mathematics (34.1 percent). And, I should point out that a significant amount of graduate training is supported by way of the previously discussed basic research grant program of the Foundation. For example, the 51 research grants awarded last fiscal year provided funds for 68 research assistants who are graduate students learning their science through the traditional form of apprenticeship training. In addition, the Division of Social Sciences has a special program for assisting with the expenses of doctoral dissertation research so that the doctoral candidate will not be confined to working on a faculty-determined project, rehashing old data or depending solely on library research for his thesis. Last year the work of 60 social science graduate students was supported by this program.

At the undergraduate level NSF's education activities include several that offer college teachers supplementary training not regularly available in graduate schools. There also are the undergraduate research participation program to encourage able undergraduates to develop into competent and independent scientists; the instructional scientific equipment program of matching grants to assist colleges and universities to obtain up-to-date science teaching equipment; the undergraduate science curriculum improvement program; and a special projects program. In addition, through the American Economics Association, the NSF has made a currently active grant in support of a visiting scientists program. This grant provides for some 30 days of consultant visits to enable well known economists to visit predominantly undergraduate institutions, to give lectures on special topics for the benefit of students and faculty and to consult with faculty and administrators to help them improve course offerings in economics.

To give you some specific examples from programs aimed at the undergraduate level, beginning this June, the University of Pennsylvania will conduct a research participation program for college teachers interested in learning about research in macroeconomics models under Lawrence R. Klein. At about the same time Leonard A. White of the University of Arkansas will begin a summer institute in advanced economic principles for college teachers of economics. In late July, a year-long program of study will begin at Lehigh University, specifically designed to upgrade teachers in junior and 4-year colleges. This program is under the direction of Warren A. Pillsbury of the Lehigh Department of Economics.

We are also supporting eight institutions this year in their efforts to provide opportunities for bright college juniors and seniors to gain experience in economic research under the guidance of an experienced mentor. This is something that most college students do not have an opportunity to do until they get well into graduate school. Through the Foundation's undergraduate research participation program institutions are being encouraged to provide this type of experience for

carefully selected undergraduate students. We look forward to increased activity of this kind.

For the reasons I have stated above, Foundation involvement with precollege programs is relatively slight. Last year grants were made to support institutes on 11 different campuses offering advanced training opportunities for some 350 elementary and high school teachers. Among these grants are three in which a total of 80 teachers study part time in evening or Saturday morning classes to improve their understanding of economic principles and their ability to make these principles relevant to the children in their classrooms. More concentrated opportunities are provided by summer institutes and by one program at the University of Washington where 14 secondary school teachers are studying for a full year. An interesting project that is just starting involves a cooperative arrangement between the San Diego County Board of Education and San Diego State College. Dr. Joseph O. McClintic of the Department of Economics at San Diego State will be working this summer with a group of specially selected secondary school teachers in developing a new course to be used in the secondary schools of the area.

I have appended tables to this statement that present fiscal year 1966 Foundation experience in support of economics education. From a total of 83 proposals, 43 grants (exclusive of fellowships and traineeships) were made for all economics education programs. In general, the thrust was primarily in the direction of improving the quality of instruction, particularly at the undergraduate level. At best the programs are a beginning and there is obvious room for improvement in our efforts. (See volume II, part 4, exhibit IV.)

## v

In addition to its support of basic research and science education projects carried on for the most part at colleges and universities, the Foundation maintains a program of surveys and studies of science and technology. These surveys and studies focus on research and development expenditures, scientific and technical manpower, and the activities of organizations in the public and private sectors, with special attention to colleges and universities. They are either directly economic in nature, or they provide information for use by economists. The recent volume by Richard R. Nelson, Merton J. Peck, and Edward D. Kalachek, "Technology, Economic Growth and Public Policy," contains examples of economic analyses drawing on NSF data.

In response to the continuing increase in the volume of research throughout the university community on the economic and social implications of science and technology, the NSF some years ago began to compile and publish an annual inventory, "Current Projects on the Economic and Social Implications of Science and Technology," which is widely used as a source book by teachers, graduate students, librarians, and others.

Stimulated, in part, by the results of NSF surveys and analyses, other countries—Canada, France, the United Kingdom, among them—and the Organization for Economic Cooperation and Development (OECD) have established continuing surveys and special studies of research and development. The OECD declared 1964 the International Statistical Year for Research and Development and has

obtained the participation of 16 nations in statistical surveys of research and development expenditures and employment.

The Foundation's planning group has also supported exploratory studies, at the National Planning Association and at the George Washington University, of technology transfer and industrial innovation, of methods of Government-business cooperation in the field of oceanics and of regional patterns of research and development and science-based technology.

Two areas of economic analysis which have been broadened by the NSF statistical program have been scientific and technical manpower and the economic aspects of institutions of higher education. NSF is the focal Federal agency in stimulating and carrying on studies of the development and deployment of scientific manpower. By clarifying the manner in which manpower as a resource enters into scientific activities, these studies contribute to the larger economic analysis of the Nation's manpower force and the impact of scientific and technical programs on manpower.

The NSF's special interest in the progress of research and education at institutions of higher education has led the planning group to support studies aimed at casting light on the economics of this nonprofit sector. The feasibility of the systems approach to analyzing the interaction of economic and educational factors as a means of estimating future requirements for funds, facilities, and staff in institutions of higher education is now under study at Michigan State University. Companion projects at Tulane University and Rensselaer Polytechnic institute respectively are being supported to develop a university cost system model and a model for planning the optimum enlargement and use of capital facilities, including laboratories.

## VI

In this brief review I have tried to illustrate the Foundation's role in the support of research and science education in economics as well as to describe its other activities relating to the field. To a considerable extent, it plays a unique role. Most Government support of economics is directed toward furthering agency missions—agriculture, commerce, defense, and so on. The Foundation's support of uncommitted research in economics is of growing importance, particularly in view of the slackening of support by the Ford Foundation and the Office of Naval Research which, within its Mathematical Sciences Division, has in the past supported economic research and training. The support of applied economics—in areas such as housing and urban development, and transportation will grow. The Foundation's basic research support represents a critical input to extending the base of economic knowledge and for refining the tools and techniques of economic analysis. The field of economics does not normally involve substantial and expensive laboratories, facilities, and equipment; the bulk of Foundation funds for the support of economics research goes for the direct support of principal investigators and their assistants. The \$2.3 million NSF obligated last year, while a small absolute amount in relation to total estimated Federal obligations for basic research in all the sciences (1.9 billion), represents an important source for the healthy growth of the discipline. We expect this source to grow, and we anticipate concomitant growth in our programs directed toward



economics education. One factor which undoubtedly will accelerate the rate of expenditures in both research and education is the increasingly heavy utilization of computers by economists and the need not only for machine time but for associated software.

The current status and future prospects for the behavioral and social sciences, including economics, are now being studied by the Behavioral and Social Science Survey Committee under the auspices of the National Research Council and the Social Sciences Research Council, acting for the Committee on Science and Public Policy of the National Academy of Sciences. This study, which is financed in part by NSF, will explore comprehensively the content of economics as well as other behavioral and social sciences, and the role and activities of the Government, the universities, and other private sectors in research, education, and action programs in these fields.<sup>1</sup>

A few weeks ago President Johnson transmitted to the Congress the 16th Annual Report of the National Science Foundation. His message included the statement:

Many of the most pressing problems of our times depend for their solution on a better understanding of man and his interaction with the highly technological society in which he lives. For this reason, the Foundation has more than doubled the funds for basic research in the social sciences over the past five years.

While working on the problems of the present, we can be quite certain that the future will bring new and different problems. We plan to support research in the social sciences more vigorously than ever to prepare for these challenges.

I would like to submit the various tables I have referred to as appendixes to my testimony for the record. I or other members of the Foundation staff who are here with me will be glad to try to answer any questions the members of the committee may have or to add further details of any program in which you may be interested. (See volume II, part 7, exhibit I.)

Thank you very much.

Chairman PATMAN. Thank you, Dr. Wilson. It was nice of you to arrange your schedule so that you could be here this morning. We could not have a hearing this afternoon.

Your testimony is very fine, interesting, and will certainly receive consideration of the committee.

There were other meetings which made it impossible for the other members to be with us this morning.

The Joint Council on Economic Education—are you acquainted with their work?

Mr. WILSON. I am acquainted indirectly. I think probably Dr. Nicholson is more acquainted with it, and Dr. Kelson.

Chairman PATMAN. Dr. Frankel was here this morning. I hope you noticed his testimony, which was very interesting. We were impressed with the testimony of the other witnesses who testified this morning.

We cannot continue very long, but I do want to ask you about credit unions. They seem to fit in with this type of work of economic education. A lot of high schools have credit unions and even in the elementary grades, I understand, where children are taught thrift by putting in their small savings each week or each month, and they

<sup>1</sup> The panel for economics is headed by Carl Kaysen, director of the Institute for Advanced Study at Princeton University and Robert M. Solow, professor of economics at the Massachusetts Institute of Technology.

participate in the decisions that are made, the management of the credit union, and actually go to the point of borrowing money now and then and paying it back, entering into real financial dealings. Do you think this would be a good program for schools and colleges in economic education as well?

Mr. WILSON. My judgment would be that certainly at the elementary level this might be a very good way to introduce youngsters to money, its value, and all of the things that go into a savings system, certainly; and investment, yes.

Chairman PATMAN. It is possible we will ask you to come back to give the other members an opportunity to interrogate you at some time that will be mutually satisfactory, Dr. Wilson.

At this time, we will let you go, and your staff, with the thanks of the committee for your appearance.

You may insert into the record any material you desire to insert along the lines we are studying, economic education.

We appreciate your testimony, sir, and appreciate the members of your staff coming with you.

Mr. WILSON. Thank you. We are very pleased to be here.

Chairman PATMAN. Our next witness will be Mr. Harold Howe II, U.S. Commissioner of Education.

We appreciate the fact that you were willing to rearrange your schedule, Mr. Howe, and permit us to have your testimony this morning. It is a great accommodation to the committee. Unfortunately, most of our members had to go on other assignments this morning and could not be here.

I look forward to your testimony. When it is printed we will have a meeting of the full subcommittee, at which time we will want to interrogate Dr. Wilson and you, at a time that is mutually satisfactory, sir. I hope that can be arranged.

We are glad to have you. You may proceed as you desire, sir.

#### **STATEMENT OF HAROLD HOWE II, U.S. COMMISSIONER OF EDUCATION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE.**

Mr. HOWE. Mr. Chairman and members of the Subcommittee on Economic Progress: I welcome the opportunity to appear before you this afternoon. In my prepared testimony I shall review the economic education programs supported by the U.S. Office of Education. I assume that your questions will bring out matters of interpretation and judgment to which the committee may be interested. My opinions on the necessity of supporting general education in economics for all citizens have developed over a good many years as a teacher, school administrator, and public official. They are succinctly stated in Senate Resolution 316, which was introduced in the Senate last October, and is the mandate for these hearings:

. . . a widespread understanding of the operations and problems of the American economic system is essential if our people are to meet their responsibilities as citizens, voters, and participants in a basically private enterprise economy. . .

I am confident that testimony before this subcommittee by persons representing various interests in economic education will be very helpful in pointing up the effectiveness of current economic education programs and in identifying weaknesses and needs that remain in this area.

The front page headlines of the New York Times of last Saturday illustrate the "economic" aspects of our lives which daily surround us: "Tax Credit Voted on College Costs"; "Columbia to Get Aid for Stability"; "U.S. Refuses Soviet Permission to Buy 2-Man Submarine." Of course, not every person in the United States reads the Times as the source of information, but most persons are continually bombarded by various types of mass media which announce the latest tax proposals, employment-unemployment statistics, the going price for beef—or milk—the best "deal" on a used car, or the status of the gold reserve. We make choices daily, as private individuals and as public citizens, on how best to allocate limited resources to meet limitless desires, and needs. Wise choices are, to a large extent, dependent upon a good understanding of the economic issues involved in our decisions. The problem of choices has become of pressing concern to me since assuming my present position; what seemingly unlimited education "wants" or "needs" should have priority in allocating limited Federal resources.

Our capability to make wise choices on economic issues has increasingly become a national concern to public and private agencies, organizations, and institutions. Indeed, in the early 1960's, concern for the status of economic education generated many nationwide studies and research projects which enlisted the cooperative support of disparate interest groups, public and private: the Joint Council on Economic Education, the Committee for Economic Development, the U.S. Chamber of Commerce, the American Economic Association, educators at all levels of education, various government agencies, and Members of Congress.

Some statistics of interest to those of us interested and involved in allocating our education resources have emerged from studies conducted in 1960-61 by the National Task Force on Economic Education, jointly sponsored by the American Economic Association and the Committee for Economic Development and surveys made by the National Association of Secondary School Principals in 1964-65, as well as continuing research in the 1960's by the Joint Council on Economic Education. Only approximately 25 percent of our high schools offered economics as a separate course. Economics was, of course, a part of the course content of other required social studies subjects such as history and civics. This, however, is not very encouraging since in 1963 only 22 States required at least one college economics course for accreditation as a social studies teacher. The long-range implications of these statistics are pointed up by another statistic: less than 50 percent of our high school students go on to colleges or universities, and of those who do, less than 40 percent take at least one economics course. These figures indicate that a major responsibility for offering to our citizens the chance to develop the ability to reason clearly and objectively about economic issues rests with our elementary and secondary schools.

The Congress has certainly recognized its responsibility of our schools and has authorized the Office of Education, by various pieces of legislation, to support economic education programs of various types and at all levels in our educational system.

When economics was added in 1965 to the list of subjects eligible for support under title III—"Instructional Assistance"—and title XI—Institutes for Advanced Study—of the National Defense Education

Act, as amended, the Senate committee reported that its addition was "in line with the goal of providing financial assistance for all those subjects which are in need of support in the development of our society's resources."

The Office of Education shares this sentiment for including economics as a subject of specific support, and the Office supports a variety of programs designed to improve economic education in our elementary and secondary schools and institutions of higher education. It is hoped that these programs will help both students, in order that they may become well-informed citizens, and teachers, so that they may be effective in their up-to-date presentations and translations of economics into classroom experiences. I would like to discuss the various programs pertaining to the disciplines of economics which the Office is authorized to support.

Federal funds under title III of the NDEA, as amended by section 467 of the Higher Education Act of 1965, may be used to acquire teaching materials and equipment (e.g., library and audiovisual equipment) and to provide for supervisory and related services at the State level. As intended by the 1965 amendment, economic instruction in the schools has been strengthened by providing matching funds to local school districts to be used for these purposes. The funds are not especially earmarked for economic education, but this subject is sharing title III allocations with the other subject areas. I submit for the record, a title III, NDEA breakdown. The act requires that the States must voluntarily amend their State plans to include economics and all the States have amended their title III plans to provide for this inclusion. (See vol. II, pt. 8, exhibit I.)

Since economics only became eligible for title III assistance in fiscal year 1966, its share of the materials and equipment funds falls far short of the other social sciences. For this reason also, economics "shares" the specialists under the supervisory personnel portion of the title. Economics also shares with the other social sciences the position of being in the beginning stages of instructional improvement which has resulted from the increasing availability of materials, equipment and consultant services. The dissemination of improved economics curriculum materials and techniques, and the ability of teachers correctly to use improved devices remains a weak aspect of economic education programs.

Also, as authorized by section 467 of the Higher Education Act of 1965, economics is included as an area of institute eligibility under title XI of the NDEA. This institute program is designed to help teachers, supervisors and trainers of teachers increase their understanding of the discipline of economics and improve their teaching techniques in this subject. The economics institutes offer a variety of programs ranging from studies in economic concepts for elementary school teachers to those designed for college faculty members who train teachers. Those eligible to attend include teachers and supervisors in the field of economics and other social sciences or business education who deal with economics in their classwork.

Last summer 175 educators participated in five pilot projects, funded at \$270,000 and held at Rutgers University, Carnegie Institute of Technology, Kansas State University, the University of Michigan, and the State University of Iowa.

This summer 22 institutes are planned for over 760 participants and are funded at \$1,100,000. Three of the institutes will be concerned with economics instruction at the elementary school level, three will be concerned with both the elementary and secondary levels, and 14 will concentrate solely on the secondary level.

The NDEA summer institute program promises to have a great impact on the teaching of economics in our schools. The role of the office, besides that of funding the institutes is to cooperate closely with the universities involved to guarantee the fullest success of the programs.

Since most of the almost 200 million inhabitants of the Nation are either actual or potential consumers—housewives, businessmen, students, public officials—some degree of “consumer intelligence” is necessary to attain their best interest. How to get the most, and the best, for one’s dollar has been of such increasing concern that Office of Education supported consumer education programs have been established all over the country.

The Bureau of Adult and Vocational Education administers programs directly relating to economic education under authority of the Vocational Education Act of 1963, which amends two previous acts, and the Manpower Development and Training Act of 1962, as amended. Vocational and consumer education programs are eligible for Federal assistance under these Acts. Since economic decision-making is involved in each of the distributive competencies—marketing, merchandising, and management—some aspect of economic education is included in every area of the distributive education curriculum.

Programs of consumer education are being carried out as part of the home economics curriculum in over 24,000 high schools throughout the United States. In addition, adult courses in consumer education are offered in two-thirds of the Nation’s communities. Adult consumers interested in enrolling in courses on consumer education or home economics should contact either local school system officials or the State director of vocational or adult education. High school students, of course, may enroll wherever such course offerings are available. The role of the Office of Education in these consumer education programs has been to provide the consultative services of specialists in the Home Economics Education Unit to the various State boards for vocational education.

In addition, consumer education programs are being funded under title I of the Higher Education Act of 1965—community service and continuing education programs. Last year, for example, eight projects in consumer education totaling \$150,000 were approved. An important aspect of the projects supported under title I is the involvement of community resources beyond those of strictly educational institutions.

One of the projects, sponsored by the University of South Florida at Tampa, had as its purpose the attempt to inform consumers in the Tampa Bay area on topics such as fair profits and women in business and industry. Television programs were produced and taped by the university’s business administration staff and scheduled to be shown through educational television facilities.

Another title I project involved studies to determine the characteristic problems and specific needs of families faced with the problems of low income. It is being sponsored by the University of Dayton which hopes to develop consumer education teaching materials spe-

cifically designed for the economically disadvantaged. The planning of this project involves a communitywide effort of welfare agencies, volunteer agencies, the Council of Consumer Information and university personnel.

I would like to mention one more project, sponsored by Iowa State University, which would establish a center for consumer education. The function of the director of the center would be to organize a clearinghouse for collecting, evaluating, and disseminating consumer information; to advise and consult groups and urban community leaders on meeting local consumer needs; and to plan and conduct State consumer workshops. All of these federally supported efforts to develop programs and services for consumers indicate the responsibility assumed by the Office of Education to an educated citizenry of consumers attempting to attain adequate information concerning their economic interests. These efforts provide, however, only minimum opportunities on which to expand governmental and non-governmental cooperative endeavors in consumer education programs.

Under title IV of the National Defense Education Act the Office of Education administers a graduate fellowship program for persons interested in, or preparing for, an academic career of teaching at an institution of higher education. Fellowships in economics for the 1966-67 academic year have been granted by 33 institutions of higher education; three institutions have granted fellowships in economic and business administration; and one institution has granted fellowships in marketing and transportation administration.

The following chart shows the number and funding of graduate fellowships awarded in the discipline of economics:

*NDEA title IV support in the discipline of economics*

	Number of fellowships	Cost
1959-60.....	46	\$717, 600
1960-61.....	92	1, 435, 200
1961-62.....	80	1, 248, 000
1962-63.....	77	1, 201, 200
1963-64.....	69	1, 078, 400
1964-65.....	71	1, 107, 600
1965-66.....	146	2, 507, 550
1966-67.....	111	1, 906, 425
1967-68.....	180	1, 3, 091, 500
Total.....	872	14, 291, 475

<sup>1</sup> Estimated.

For fiscal years 1959-64, the average total cost per 3-year fellowship, including cost of education allowance, stipend, and average dependency costs, is estimated at \$15,600. For fiscal years 1965-67, average total cost is estimated at \$17,175 because of the addition of summer school.

The Office of Education supports another teacher fellowship program under title V-C of the Higher Education Act of 1965. Under the experienced teacher fellowship program the Office authorizes programs designed to strengthen and improve elementary and secondary education by upgrading the qualifications of teachers and other personnel. In academic year 1966-67, 25 experienced teacher fellows participated in an economic education program, grades K-12, at Purdue University in Indiana. This program is being continued in

academic year 1967-68, in addition to a similar fellowship program for 25 teachers at Ohio University in Athens, Ohio.

In addition to the various teacher training and curriculums improvement programs supported by the Office of Education, various research projects in economic instruction have been funded. Under the Cooperative Research Act, as amended by title IV of the Elementary and Secondary Education Act of 1965, the Commissioner of Education is authorized to make grants to universities and colleges and other public and private agencies, institutions or individuals for research, surveys and demonstrations in the field of economic education research and dissemination. Due to limited research funds the Office has not been able to fund all of the good economics research proposals submitted.

I would like to describe two research projects funded by the Office. San Jose State College contracted for a project entitled "Development and Evaluation of a 12th Grade Course in the Principles of Economics" and work on the project began in July 1964. The purpose of the project was to develop and evaluate a one-semester course in economics for the 12th grade. The materials developed include: a rather short text written to arouse an interest in economics and to present course content in a concise, well-organized manner; a teacher's manual, including an annotated bibliography; programed booklets covering specific topics; an economics factbook of historical data with factual descriptions of the evolution and present characteristics of economic institutions; transparencies for overhead projectors, charts and slides; and an investigation of teaching materials which go beyond the objectives of the text and source book.

Another project, entitled "Development of Economic Curricular Materials for Secondary Schools" has recently been completed at Ohio State University. Personnel involved in this project included professors from the fields of education, economics, and psychology, and from the Bureau of Educational Research and Service of the Ohio State University. The objective of the center at Ohio State was the improvement of economics instruction at the ninth grade level within a sequential context of social studies structured disciplines. The researchers first formulated the student behavior expected through economics taught at the ninth grade level and then prepared curriculum materials which were modified to embody the structuring of economics as a discipline at this level. The curriculum materials have been prepared and tested in field centers and what remains is to disseminate the modified curriculum materials to interested teachers and schools.

These two research projects point up three major problems involved in improving economic education in our schools. First of all, curriculum materials—involving all types of techniques and media—suited to specific grade levels must be developed; second, such materials and information about techniques must be disseminated to the schools throughout the country which decided to make the effort, or to emphasize existing efforts, to improve their economics education programs; and, third, there must be teachers, trained both in subject matter and in instructional techniques to utilize new materials, available and interested in teaching economics courses.

The support which the Office of Education gives to the discipline of economics is increasing in amount. The research, teacher institute, consumer education, equipment and instructional materials, and

teacher fellowship programs point to the fact that the Office does recognize the need for improving economic education in the elementary and secondary schools and institutions of higher education. The programs I have described are helping to foster an appreciation for the need to improve economics education in our schools and to provide some means of meeting this need.

In the last analysis, our schools must be convinced of the necessity to provide or to improve their economics course offerings. They must be willing to demand basic economic understanding competencies in their social studies teachers and they must be willing to compete for the services of economics teachers with research organizations, private business and government at all levels. And teachers must be convinced of the importance of economic education—to allocate classroom time to developing student understanding of economics, to improve their own knowledge and skills and to learn to utilize effectively various curriculum materials.

Improvement in economics understanding will raise the chance for rational discussion and decision on the myriad economic issues which surround all of us daily.

One of these issues was certainly brought close to me recently when I compiled my income tax for 1966. I was reminded of a passage from "David Copperfield," read many years ago:

Annual income twenty pounds, annual expenditure nineteen nineteen six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery.

Certainly no one can promise that an understanding of economic issues, fostered in our schools, will result in happiness, but some of the anxieties presented by our economic decisionmaking may be relieved by a better understanding of the economic issues underlying our decisions. Our citizens need to understand economics both for conduct of their own personal affairs and for participation in the processes of citizenship under a representative form of government. This committee is to be congratulated on its interest in these important matters. I will be happy to answer any questions you may have.

Mr. Chairman, in summarizing my formal statement I would simply call to your attention that we have a very broad interest in the area of economics in the U.S. Office of Education, in that we have a number of programs which have impact on the area of economics and on the public understanding of economics. And some of these programs are quite new and have not realized as yet their full potential.

To mention them briefly, under the National Defense Education Act, title III, we now may make use of those funds for providing materials to school systems under State plans for education in economics in the elementary or secondary grades. The authorization to include economics as one of the subjects for which title III provides materials is very recent, so that program is just in the process of being launched.

We have the beginning of that program and we will enter for the record a statement about the actual start that has been made, and where school systems are using the funds involved for the purpose of improving education in economics. (volume II, part 8, exhibit I.)

Under our teacher training institute program, also in connection with the National Defense Education Act, we have similarly, just within the last year, received authority to include teacher training



institutes in economics. In the first year we had a small number of these. We will have a considerably enlarged effort to train elementary and secondary school teachers in economics during the coming year.

The fact is that there are relatively few schools in the United States which offer discrete courses in economics as such. However, that is not a complete measure of the efforts the schools make, because a good many schools build into their social studies, history, or geography programs some emphasis on economic studies of a variety of kinds. But it is clear that social studies teachers working in the schools need upgrading of their understanding of economics.

It is also clear that the requirements for certification of teachers for the social studies in general are such that there are relatively minor requirements for the study of economics on the part of the people who are preparing to go into the teaching profession. That is, of course, a State matter rather than a Federal matter—the requirement for certification.

We support in the Office of Education also a very large graduate fellowship program. You will find in my testimony a table which indicates the number of fellowships we have awarded since the year 1959 to make it possible for people to pursue the Ph. D. degree in the study of economics. The number of fellowships has grown from 46 in the year 1959 to 180 during the current year.

There has been a slow but steady growth over that period of time, and I assume that the growth will continue.

I think the area where we may be doing the most to improve the economic competence of citizens is in the area of vocational education, and particularly in those aspects of it which have to do with consumer education.

A great many high schools, probably over 20,000 in the United States, offer courses of one kind or another related to consumer education, helping people to understand the market with which they deal, the pressures that there are on consumers, and the opportunities and problems of the consumer. We find that high schools are having a continued interest in improving those programs. We are using our programs to help them do that.

We are engaged also in research grants for developing curriculum materials for schools so that they may have a choice of materials available in the area of economics. When I say we are engaged in this, we do not develop materials ourselves, but we make grants usually to persons at colleges or universities for the development of curricular materials for use in the schools.

I have brought for the use of the committee a sample of some of the curricular materials developed by these research grants for use in the 12th grade. I will leave them here with you. I don't necessarily suggest that these be entered into the record. I will leave that up to you. (See volume II, part 3, exhibit VII.)

Chairman PATMAN. We will furnish each of the members with a copy.

Mr. HOWE. I thought you might like to have an actual example.

Chairman PATMAN. If there is any part you would like to put into the record, we will leave it to your discretion.

Mr. HOWE. I might ask my staff to review this material and to pick out some representative sections which would be of interest in the record, but I think it would be an overloading of the printing process.

Chairman PATMAN. We will leave that to you, sir.

Mr. HOWE. I think these are the main activities that we are pursuing: Our interest in consumer education, our interest in graduate fellowships, our interest in the training of teachers, and our interest in providing materials and equipment for more effective teaching of economics in the schools.

When you summarize the whole thing, I have to say, by way of judgment, I don't think we have solved the problem. I think it is going to be a long time before we do solve the broad problem of having each citizen of this country have enough broad knowledge of economics to do two things: one, to handle his own personal affairs on a rational and sensible basis with regard to the choices he has to make and, secondly, to have a broad enough knowledge of economics so that in the area of public policy he may make intelligent decisions about the choices he faces as a citizen of the country.

Increasingly, it seems to me, the obligations of the citizen in examining the policies of his local, State, and Federal Government demand some sophistication in the realm of economics. I believe that the programs that we already have mounted across the country need to be increased and improved.

Chairman PATMAN. I wonder on this consumer problem if there isn't a place for consumer education on wise expenditures, to encourage people not go into debt unnecessarily, and, further, to warn them against the excessive cost of installment buying in a lot of cases. Also to let them know that they can really save a lot of money by being able to accumulate something to make larger payments on their purchases.

In other words, some sort of education about installment buying. So often that gets out of hand and people just don't think about what they are doing. The first thing you know they are over their heads in debt. They either have to go into bankruptcy or make their creditors charge it off.

What do you think about that?

Mr. HOWE. Yes; I think there is a need for some emphasis of that kind. I don't believe it ought to be totally in the direction of criticism of the use of credit.

Chairman PATMAN. No; I am strong for credit, as long as you need something, to work with, especially, or in the home. It is all right to go into debt for it. But I think they should be warned that oftentimes that almost leads to disaster to the families.

Mr. HOWE. It seems to me that what we require is the kind of education, the kind of consumer education which will address itself to the intelligent use of credit and to a real understanding of the nature of interest rates. There is a particular need for an understanding of the very high interest rates which are frequently charged for short-term installment credit so that the consumer doesn't always find himself believing the claims that are made in regard to the level of these interest rates.

Chairman PATMAN. I assume we have in circulation in all, in the pockets and tills of the people, in complete circulation, less than \$40 billion. Wouldn't you say that is about right, in actual money?

Mr. HOWE. I would accept your judgment of this, sir.

Chairman PATMAN. I would think it would be about \$40 billion. Yet we pay in interest rates about 2½ times that every year. Imagine a situation like that. Of course, the answer is very logical and reason-

able in that we use bank credit, in other words pencil marks, machine marks, things like that, to make up for it.

We don't actually use money, or about 5 percent would be about all that we actually use money for in transactions in the course of a year. That is rather interesting. Of course, that goes to pinpoint the importance of an understanding of credit and interest rates. Interest rates can eat up these peoples' incomes before they know it.

Mr. HOWE. Yes. And I think there is a need for understanding of other features of the economic system. For example, I think there are a great many people who don't have much knowledge of what capital is, how it works, of what the function is that the stock market performs. I can recall that I was principal of a high school at one time and we introduced a program in which the students in the eighth grade chipped in funds and bought some shares of stock. They watched this through the year. One of the difficulties that emerged was that they made a profit. Then it was a question of whether the school, the school board, or the students themselves should make this gain.

But that kind of direct experience—participating in an important element of the economic system probably taught those youngsters more about how things work than would any amount of reading about it.

Chairman PATMAN. Were you present when I interrogated Dr. Wilson about the credit unions and how they would fit into this program?

Mr. HOWE. I didn't hear all of the conversation.

Chairman PATMAN. It was suggested here by witnesses this morning that credit unions would be helpful in these schools, even in the lower grades. A credit union, of course, is recognized now in every nook and corner in America. We have 22,000 of them. They are doing well. You never hear of one going bankrupt. They are administered by people who are clerks, stenographers, charwomen, truckdrivers, and anybody else. They really run a good financial institution, in a sound way.

It was mentioned that if the children of a school—and I think the stock exchange example you gave would be a good implementation of this credit union business, because it would enlarge their knowledge in different things that are essential in life—put in a small amount each week or each month, have charge or at least have participation in management, have discretion in decisions, and things like that, thrift would be encouraged.

Don't you think such a program would implement economic education greatly, even in the lowest grades of school and even in college?

Mr. HOWE. Yes; I think it would. There are, of course, within the public schools, a number of programs, sometimes through a credit union type of arrangement, though I think more frequently through a savings bank-related program, to encourage thrift.

To my knowledge, which certainly isn't complete, I think the most extensive use of credit unions now in the schools is by the teachers. They are very common among teachers and teacher organizations.

Chairman PATMAN. Yes, and they have served a mighty good purpose. One of the largest teacher credit unions is in Dallas, Tex. They finance all of their automobiles, furniture, and everything that they want to buy through the credit union, at a very low rate of interest. It saves them a lot of money.

Mr. HOWE. We have one in the Department of Health, Education, and Welfare.

Chairman PATMAN. Fine.

I assume you have been interested in this hearing about interest rates and truth in lending. Didn't you testify on that?

Mr. HOWE. I haven't complete knowledge of the issues or of the suggested legislation, but from what I know about it I would support that legislation. It would seem to me to be a useful kind of legislation to promote, because I can cite a good many direct examples of persons who certainly have been taken advantage of by the way interest rates are put before them, and the misunderstandings, to describe it in the least dramatic term, that there are about interest rates.

Chairman PATMAN. Couldn't you cite that as an example of, in the direction of, economic education?

Mr. HOWE. Certainly.

Chairman PATMAN. Our committee in the House, the Banking and Currency Subcommittee on Domestic Finance, went into the abuses of finance companies toward the servicemen. We discovered some very shocking examples of where they were being charged 50 and 100 percent interest a year when they bought automobiles and had extortionate charges added to them; they were charged for insurance that they never did receive.

We made such a startling exposé that the company that was guilty the most, all over the world, actually folded up. It just went out of business, because they couldn't continue with that kind of a record.

I suspect there are other things going on in this country that should have careful watching, the same as that type of short-term lending.

Mr. HOWE. I would expect that you could draw a direct correlation between the amount of education, the extent of education, that people have and the extent to which such inordinate interest rates really prey on these people. In general, people who have more extensive opportunities in education are the people who are more likely to go to the bank and to the credit unions, to the agencies which are not attempting to shuffle the interest rates through improper advertising.

For the people who have less education, they fall prey to those other activities.

Chairman PATMAN. It certainly eats up the family budget to pay these extortionate interest rates that some of them have to pay.

Mr. Howe, we appreciate very much your coming this morning. This testimony, of course, will be available to every member of the Joint Economic Committee and will be studied by their staffs and by them. It is possible some time in the future we will want you to return to give the other members the opportunity to interrogate you. You will be consulted about it in the future for a time that will be mutually satisfactory.

Mr. HOWE. Thank you very much, Mr. Chairman.

Chairman PATMAN. Thank you very much for your testimony.

The committee will stand in recess subject to the call of the Chair.

(Whereupon, at 12:15 p.m., the committee recessed, subject to the call of the Chair.)

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(Additional materials, related to these hearings, will be found in Volume II.)