ABSTRACT

The present level of federal spending for secondary vocational students is roughly $100 million. However, in order to achieve vocational education's goals requiring a doubling of enrollment in the early 1970's, another $100 million is needed in federal funds. This is only $25 per student, compared to $1,500 spent for each retrained dropout. These additional funds would be used most efficiently if research funds were appropriated rather than being put in as a line item. The risks involved in research are preferable to the certain waste of misguided planning. (AH)
Mr. Chairman and Members of the Committee, the American Vocational Education Research Association is again grateful for this opportunity to give you our views on appropriations for vocational education. In testifying before this Committee last year I was very much concerned about the level of appropriations for vocational education required to implement the legislation passed in 1968, and particularly the research funds needed to carry out the purposes of that legislation. Those are the problems about which I am still concerned, but the experiences of the past year bring them into even sharper focus.

I think it is obvious to everyone here that within the past decade there has been an increasing demand for educational programs to prepare students for the world of work and, due in large part to the Vocational Education Act of 1963 and the Amendments of 1968, many programs designed to meet the needs of work oriented youth have come into existence. That these programs have not yet reached perfection is not to be denied; and that many difficulties in the initiation, formulation, and conduct of these programs do exist is an inescapable fact. As Lawrence D. Haskew at the University of Texas has so cogently stated:

The imperative of education for work is inescapable, but fraught with grave perplexities for educational planners. The existence of unprecedented need for
I am proposing that for 1971 Congress appropriate the same amount of money for Basic Grants to the States for vocational education and vocational research as was in the bill for this year before it was vetoed, and that these be treated as a single item in the bill.

The actual amount would be $392,936,000. ($357,836,000 plus $34 million plus $1.1 million).

If you adopt the Administration's recommendations for the other items under vocational education, including adult basic which is being included this year, the total appropriation should be $543,716,000.

I have noted in my testimony that the Administration's Budget Justification for 1971 contains this statement:

"The goal for vocational education in the early 70's is to at least double the secondary enrollments in occupational programs and to offer some occupational information and work experience to all secondary students, even those enrolled in college preparatory programs."

I believe this is a reasonable goal and might be accomplished in the next two years with the Appropriation I am suggesting -- although that depends on the ability of the States and school districts to add three times as much from their own resources.

We will spend about $100 million of the Federal Appropriation this year for four million students in secondary vocational programs.

It costs on an average $100 more per student in high school vocational programs than in college preparatory programs, so that would be roughly $400 million to double the enrollment.

At the present Federal level of support this would mean an additional $100 million in Federal funds, and that is almost what we would have in the appropriation I am suggesting.

I have pointed out that this represents only $25 in Federal funds per student in vocational education to give employable skills to four million additional youth.
If they leave school without occupational training and join the ranks of the unemployed, it costs the Federal Government $1500 each to train them in the Manpower Program. This has been pointed out so many times that educators must be pardoned for wondering what kind of economy it is by which the government seeks to save money through cutting expenditures for vocational education.

My principle purpose in being here today is to urge the Committee and Congress to follow the provisions of the Act of 1968 in appropriating funds for vocational research rather than putting them in as a line item.

The experience we have had with the vocational research provision in the 1970 Appropriation emphasizes, I think, the need to handle it this way.

We have lost almost an entire year in the research effort for vocational education.

Some activities by the U.S. Office have been carried out at a minimum level under continuing authority, but there was no continuing authority for vocational research at the state level.

There has been a growing paralysis in research for vocational education at the National, State, and local levels during most of the past year, and this followed two previous years of drastic cuts in vocational research funds from the amounts needed and intended in the original legislation.

In my testimony I have taken fourteen excerpts from the Rules and Regulations for Administering State Vocational Education Programs in the Federal Register which I don't think can be properly followed without research.

They deal with allocation of funds, State plans, evaluation, and Federal reporting.

When Federal research funds are withheld or curtailed, the States will try to comply with the letter of these regulations, but cannot actually do what is required.

Finally, in my testimony I have attempted to show that vocational research is probably more service-oriented than in some other fields, and I have described briefly some of the services that are provided for State Departments and vocational educators.

I submit that there is risk in research, but it is a question of risk versus almost certain waste in trying to redirect vocational education in the schools and bring about some basic changes in American education without it.
My specific recommendations to the Committee in writing the vocational education section of the 1971 Appropriations Bill are these:

1. Change the amount to be appropriated for vocational and adult basic education programs in fiscal year 1971 to $543,716,000.

2. Change the amount included for basic grants to the states for vocational education to $392,936,000.

3. Change the wording in the appropriation of $25,000,000 proposed for "innovation, curriculum development, and research," to "innovation and curriculum development."
occupational competence in ever-changing variety in the seventy's is extremely well-documented by the predicted shape of the approaching society. That this need will be subject to concrete, powerful, vocalized and strongly promoted demands for workerserving education is also certain. It is also doubtful that any state can respond to these demands in the same manner as in the past, and equally questionable that it should do so if it could. The weight of the forthcoming demand will, it appears, support the proposition that the regular establishment for education should be geared up to make worker education a prime commitment and engagement.

How much money does it take to do this? More particularly, how much will the Federal Government have to provide? And of immediate concern to this Committee, how much should be provided for fiscal 1971? It would be easy to say that we need the full amount authorized to be spent under the Vocational Education Amendments of 1968, and if that were available there is no question that the States and local school districts would soon be offering a different kind of education in this country -- an education equally suited for the eighty percent of our students who do not graduate from college as for the twenty percent who do.

Under the circumstances which prevail at this time, that may be impossible. However, I am encouraged to observe in the Administration's Budget Justifications for 1971 that it is the desire at least of the Government to move steadily in that direction. Here is a statement which appears on page 139 of the Budget Justifications:

"The goal for vocational education in the early 70's is to at least double the secondary enrollments in occupational programs and to offer some occupational information and work experience to all secondary students, even those enrolled in college preparatory programs."
With this goal in mind, I should like to suggest what I think is a realistic level of appropriations for vocational education in 1971. I would particularly like to urge this Committee and Congress to do two things in writing the vocational education section of the Appropriations Bill:

1. Use the same total figure that was passed by Congress for fiscal 1970, and then was vetoed by the President because the year was more than half gone. It was urgently needed this year; it is critically needed for 1971.

2. Omit any reference at all in any part of the bill to funds for vocational research. This will result in ten percent of the basic grants to the States being used for vocational research as provided in the Amendments of 1968, which is also what Congress intended in the 1970 Appropriations Bill before it was vetoed. By making it a line item instead of an automatic provision, this part of the appropriations for the current year may have been lost altogether.

I will come back to the matter of research in a moment, but first there are some observations in support of a total appropriation of $543,716,000 for vocational and adult basic education which should be made. This figure includes $55,000,000 for adult basic education which the Administration has combined with vocational education in its 1971 budget. Of the total amount for vocational education in the first 1970 Appropriations Bill as passed by the House and Senate, $357,836,000 was for basic grants to the States, $34 million for research, and another $1.1 million for research planning in the States. If the research funds had been included
with the basic grants, this would have been $392,936,000. And this is
the minimum amount I hope you will write into the bill for basic grants
in 1971.

It is also the minimum amount needed to achieve the goal for vocational
education in the Administration's Budget Justifications to which I referred
a moment ago. I believe this is a reasonable goal and can be achieved, but
not with the amount of money recommended by the Administration. Let me
explain.

The appropriation which was approved for 1970 contains $300 million
for basic grants. About $100 million of this will be used to support
secondary enrollments in occupational programs. It will take at least
another $100 million to double those enrollments, in spite of the fact
that with larger classes the proportionate cost per student may go down.
Even allowing for other efficiencies which may be achieved, expansion in
vocational education requires substantial investments either in additional
equipment or, in the case of cooperative work experience programs, in
equally heavy outlays for faculty coordinators and other expenses. The
best figures available on the difference in costs between vocational
education and academic programs in high school indicate a differential of
$50 to $400 per student depending on the program, with a median differential
of $100.¹ We are talking about doubling an enrollment which at the present
time is about four million, so the Administration's goal will cost the
school districts some $400 million. I think $100 million dollars/to double

¹These figures are from a study by Dr. Chester Swanson published in
March, 1969 by the School of Education, University of California, Berkeley.
the enrollment in high school vocational education is almost too conser-

vative, since it depends on the ability of the states and school districts
to add three times as much from their own resources.

If it were to be accomplished at the present level of Federal funding
for vocational education, however, it would be giving occupational training
to four million additional youth at a cost to the Federal Government of only
$25 per student. If they leave school without occupational training and
join the ranks of the unemployed, it costs the Federal Government $1500
each to train them in the Manpower Program. This has been pointed out so
many times that educators must be pardoned for wondering what kind of economy
it is by which the government seeks to save money through cutting expendi-
tures for vocational education.

It is even more difficult to understand how money can be saved in a
$300 million or $400 million program by cutting out research. If we were
satisfied with the way this program is functioning, with its purposes and
its results, conceivably research might be dispensed with -- although I
doubt it. But for a program in which Congress has called for a complete
overhaul -- where change is mandated -- to dispense with research is to
compound the cost of mistakes, wasted effort and inefficiency.

Research does not guarantee that money will not be wasted; even the
funds used for research may in fact be misused, and we have too many
examples where this has happened especially in Federal research programs.
Nevertheless, it is a question of risk versus deliberate waste. Proper
administration and accountability can reduce the risk in research; nothing
can prevent the loss of time and effort as well as funds when blind groping
is substituted for research.
My principle purpose here today is to urge the Committee to provide vocational research funds in fiscal 1971 in the only way Congress can be sure those funds will be available for research: by relying on the provisions of the law rather than specifying any certain amount for this item. I do so with a particular sense of urgency. There is such a critical need for vocational research as a result of the neglect of the past two or three years that further progress in achieving the goals of the Vocational Education Act of 1963 and the Amendments of 1968 is being seriously jeopardized.

I hope the Administration can be prevailed upon to release the funds voted by Congress for 1970. Whether or not this is done, we have already lost an entire year in our research effort for vocational education, both in the State and in the U.S. Office. Some activities were carried on by the U.S. Office under the continuing authority for spending at the 1969 level. But even this was denied to the States. There was no continuing authority for vocational research at the State level, and programs in at least forty-seven states needing more than $15 million have been drastically curtailed. The only way any of them could be kept alive was for States to find resources of their own, which was always difficult and often impossible.

The national network of research information -- through which the results of Federal and State funds already used are delivered to educators in the schools, and which was developed through the Division of Comprehensive and Vocational Research at the U.S. Office, the national Centers at Ohio State University and North Carolina State University, the State Research Coordinating Units, and the ERIC System in the U.S. Office -- is functioning at a greatly reduced level of efficiency and effectiveness. The result has
been a growing paralysis in research for vocational education at the national, state, and local levels during most of the past year; and this followed two previous years of drastic cuts in vocational funds from the amounts needed and intended in the original legislation.

Last year I appeared before this Committee and reported research projects and activities for which an actual need had been identified and which the U.S. Office and the states were prepared to carry out in fiscal 1970 totalling $36,064,320. What we did not get done this year is needed more than ever next year, and problems for which research alone can provide reliable answers are continuing to pile up. Let me call your attention to some of the provisions in the Amendments of 1968 which I suggest cannot be carried out without research funds -- and which I believe are not being carried out in any of the states where they are dependent on Federal funds for their research. These are provisions taken from the Rules and Regulations for State Vocational Education Programs in Volume 35, Number 4, Part II of the Federal Register.

1. "In determining which individuals shall have access to programs of vocational instruction offered within the State, consideration will be given to all individuals residing in the State."

There are provisions included for students in areas and communities in the state where it is not economically or administratively feasible to provide each type of program.

2. "The content of vocational instruction shall be developed and conducted in accordance with the following standards to assure soundness and quality in such instruction:
"(1) The program of instruction shall be based on a consideration of the skills, attitudes, and knowledge required to achieve the occupational or other objective of such instruction, and includes a planned sequence of those essentials of education or experience (or both) deemed necessary for the individual to achieve such objectives.

"(3) The program of instruction shall include the most up-to-date knowledge, attitudes, and skills necessary for competencies required to meet the occupational or other objective of such instruction.

"(5) The program of instruction shall combine and coordinate classroom instruction with field, shop, laboratory, cooperative work, apprenticeship, or other occupational experience . . . ."

The experience must be appropriate to the occupational objectives, of sufficient duration, and supervised by qualified personnel under the State plan.

3. "Classrooms, libraries, shops, laboratories, and other facilities (including instructional equipment, supplies, teaching aids, and other materials) shall be adequate in supply and quality to complete the occupational or other objectives of the vocational instruction effort."

4. "The program of instruction shall provide for vocational guidance and counseling and personnel and services sufficient to enable such a program to achieve and continue to meet its objectives and the standards and requirements this section."

5. "Evaluation of the results of the program of instruction will be made periodically on the State level by the State board and the State Advisory Council and continuously on the local level with the results being used for necessary change or improvement in the program through experimentation, curriculum development, training of vocational education personnel, or other means."

6. "Any State desiring to receive funds for any fiscal year under the Act shall submit to the Commissioner, . . . a State plan which meets the requirements of the Act and
the regulations in this part. Such a plan shall be
detailed description of the State's programs, ser-
vices, and activities under the Act, and shall include
the policies and operating procedures which the State
board will implement in order to maintain, extend, and
improve existing programs and develop new programs in
furtherance of the purposes of the Act."

7. "The State plan shall . . . set forth a program of
vocational education objectives which affords satisfac-
tory assurance of substantial progress toward meeting
the vocational education needs of the potential students
in the state."

8. "The State plan shall provide that, in planning,
developing, and carrying out programs, services, and
activities under any part of the Act, effective use
will be made of the results and experience of other
programs and projects assisted under other parts of
the Act, . . . ."

9. "In allocating funds among local educational agencies,
the State board shall give due consideration to informa-
tion regarding current and project manpower needs and job
opportunities, particularly new and emerging manpower
needs and opportunities on the local, state, and national
levels."

10. "In allocating funds among local education agencies,
the State board shall give due consideration to the rela-
tive vocational education needs of all the population
groups . . . (a) in all geographic areas and communities
in the State, particularly disadvantaged persons, handi-
capped persons, and unemployed youth. (b) in weighing
the relative vocational education needs of the State's
various population groups, the State board shall give
particular consideration to additional financial burdens
. . . which may be placed upon certain local education
agencies by the necessity of providing vocational edu-
cation students, particularly disadvantaged or handicapped
students, with special education programs and services
such as compensatory or bilingual education, which are
not needed in areas of communities served by other local
education agencies in the State."

11. "In allocating funds among local education agencies,
supported in whole or part with local tax revenues, the
State board shall give due consideration to their rela-
tive ability to provide the resources necessary to meet
the vocational education needs in the areas or communities
served by such agencies."
12. "In allocating funds among local education agencies, the State board shall give due consideration to the cost of the programs, services, and activities these local education agencies provide which is in excess of the cost which may be normally attributed to the cost of education in such local educational agencies."

13. "The State plan shall also provide that no payments of Federal funds under the Act will be made in any fiscal year to any local education agency unless the State board finds that the combined fiscal effort of that agency and the State with respect to the provision of vocational education by that agency for the preceding fiscal year was not less than such combined fiscal effort for that purpose for the second preceding fiscal year."

14. "The State board shall submit on or before October 1 of each year in accordance with procedures established by the Commissioner an annual report concerning the conduct of activities described in the annual plan . . . . This report shall consist of three parts: Fiscal, statistical, and descriptive.

(a) the fiscal report shall show the expenditures of each of the several allotments made to the state under the act, that the Federal funds expended from each of the allotments in the States have been matched by the non-Federal share, if any, required for such allotment, that the maintenance-of-effort requirement . . . has been met, and that all other conditions and requirements of the Act of a fiscal nature have been satisfied . . . .

(b) the statistical report shall include reporting data with respect to programs, services, and activities under the State plan for which expenditures of funds are reported in the fiscal report. Such data shall be compiled and submitted to the Commissioner on forms furnished to the State board by the Commissioner.

(c) the descriptive report shall be a narrative account of the programs, services, and activities under the State plan for which expenditures of funds are reported in the fiscal report. Such information shall be compiled and submitted to the Commissioner in accordance with such forms and instructions as may be furnished to the State board by the Commissioner."
This is technical language, and there are many ways of complying with the letter of the regulations without actually doing the job that is called for. In the past, federal reports for vocational education -- as is true in many other areas -- have too often been compiled for the effect they are intended to have rather than accurately reflecting the activities being reported and results achieved. Forms become standardized and procedures for gathering the data are all too often conveniently informal.

But now we have a new program to administer, new forms to be designed, and new procedures for collecting the data. We are in a position to do this with a high degree of accuracy, and federal reporting of vocational education can be developed along lines of complete honesty and candor. But this is only possible through the methodology and under the rigid standards of scientific research. I submit that reliable reporting to the federal government in any program, certainly including vocational education, is impossible without using research personnel, methods, and equipment. This is not only true today more than ever before, but it is also easier through the use of electronic data processing. It is inconceivable to me that any State can submit reliable data and data analyses to the U.S. Office without using computer equipment, yet Arizona was the only State from which the U.S. Office last year accepted a computer printout of enrollment and follow-up data in vocational education.

Research in vocational education is probably more service-oriented than in some other fields, and I think this is due to the establishment of the National Centers for Vocational Research and the Research Coordinating Units which are essentially service organizations. They have made it pos-
rible for the States actually to do what Congress has said they must do under the Vocational Education Amendments of 1968. To deprive them of the funds called for under the Act not only forces vocational educators and State Departments of Vocational Education to grope blindly as they seek to change their programs, but it also deprives them of the essential data they must have for evaluation, planning, and program management.

I am not suggesting that all vocational research funds go into data development and problem solving. A close scrutiny of the regulations I have quoted from the Federal Register will show that basic research in methodology and curriculum, experimental research, occupational analyses and many other kinds of research projects at the local, state, and national levels must be designed and carried out continuously. To slow down or stop this kind of research means to deprive vocational educators and State Departments of the only reliable information they can get on what works and what doesn't, what has been tried and what hasn't, what is most effective, most efficient, and most beneficial to the students. This is the case for vocational research which the American Vocational Education Research Association seeks earnestly to bring to your attention and to the attention of other members of Congress as we request funds adequate to do this job.

In summary, I earnestly hope the Committee will make these changes in the budget as proposed by the Department of HEW:

(1) Change the amount to be appropriated for vocational and adult basic education programs in fiscal year 1971 to $543,716,000.

(2) Change the amount included for basic grants to the states for vocational education to $392,936,000.
(3) Change the wording in the appropriation of $25,000,000 proposed for "innovation, curriculum development, and research," to "innovation and curriculum development."

Thank you very much. I will be glad to answer any questions you have to the best of my ability.