

DOCUMENT RESUME

ED 341 807

CE 060 286

AUTHOR Hoerner, James L.
 TITLE Tech Prep and Educational Reform. Reprint Series.
 INSTITUTION National Center for Research in Vocational Education,
 Berkeley, CA.
 SPONS AGENCY Office of Vocational and Adult Education (ED),
 Washington, DC.
 PUB DATE 91
 CONTRACT V051A80004-90A
 NOTE 8p.
 AVAILABLE FROM National Center for Research in Vocational Education
 Materials Distribution Service, Horrabin Hall 46,
 Western Illinois University, Macomb, IL 61455 (order
 no. MDS-396: \$2.00).
 PUB TYPE Information Analyses (070) -- Journal Articles (080)
 JOURNAL CIT Occupational Education Forum; v20 n1 p1-5 Fall
 1991
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Articulation (Education); Associate Degrees;
 *Educational Improvement; *Educational Needs;
 *Educational Philosophy; Educational Practices;
 Noncollege Bound Students; Occupational Aspiration;
 Postsecondary Education; Quality of Working Life;
 Secondary Education; *Technical Education;
 *Vocational Education
 IDENTIFIERS *Tech Prep

ABSTRACT

Tech prep is a new initiative that shows great promise for educational reform. However, "tech prep" is not the new name for vocational education. Tech prep is a new program of articulated education involving 2 years of high school and 2 years of postsecondary preparation that includes a common core of mathematics, science, communications, and technologies designed to lead to an associate degree or certificate in a specific career field. For tech prep to be successful, a philosophical mind-set change must take place among educators, along with the adoption of a new mission for education. Tech prep must not become just another "dumping ground" for students who are not academically inclined. Educators must rethink the educational system and the underlying philosophy for tech prep as part of the educational reform. Education must stand for "world life" rather than for "work life." All students must be prepared to contribute meaningfully to the economy and to their own fulfillment. The major method to accomplish such change will be professional development of educators. (13 references) (KC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED341807



National Center for Research in
Vocational Education

University of California, Berkeley

Reprint Series

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

(*) Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
DERI position or policy.

Tech Prep and Educational Reform:

James L. Hoerner

Virginia Polytechnic Institute and State University

National Center for Research in Vocational Education
University of California at Berkeley
1995 University Avenue, Suite 375
Berkeley, CA 94704

NCRVE is supported by the Office of Vocational and Adult Education, U.S. Department of Education.

This article first appeared in the Fall 1991 issue of *Occupational Education Forum*, Vol. 20, No. 1, pp. 1-5.
Reprinted with permission of the editors.

This document is one in a continuing series of reprints. It has not been reviewed by NCRVE; therefore, this article
represents the views of the authors. NCRVE makes these reprints available upon request for informational purposes.

CC060286

FUNDING INFORMATION

Project Title: National Center for Research in Vocational Education

Grant Number: V051A80004-91A

Act under which Funds Administered: Carl D. Perkins Vocational Education Act
P. L. 98-524

Source of Grant: Office of Vocational and Adult Education
U.S. Department of Education
Washington, DC 20202

Grantee: The Regents of the University of California
National Center for Research in Vocational Education
1995 University Avenue, Suite 375
Berkeley, CA 94704

Director: Charles S. Benson

Percent of Total Grant Financed by Federal Money: 100%

Dollar Amount of Federal Funds for Grant: \$5,918,000

Disclaimer: This publication was prepared pursuant to a grant with the Office of Vocational and Adult Education, U.S. Department of Education. Grantees undertaking such projects under government sponsorship are encouraged to express freely their judgement in professional and technical matters. Points of view of opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.

Discrimination: Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance." Therefore, the National Center for Research in Vocational Education project, like every program or activity receiving financial assistance from the U.S. Department of Education, must be operated in compliance with these laws.

TECH PREP AND EDUCATIONAL REFORM

JAMES L. HOERNER

ABSTRACT

Tech Prep is a new initiative that shows great promise for educational reform. However, just using tech prep as the new name for vocational education will not be acceptable. For tech prep to be successful, a philosophical mind-set change must take place among all educators along with the adoption of a new mission for education. "The days of the status quo are over." We must rethink our educational system and the underlying philosophy for Tech Prep as part of the educational reform.

Tech Prep has been referred to as one of the most exciting initiatives in education in decades (Hull & Parnell, 1991). The opportunity as well as the challenge is for Tech Prep to be a major part of the educational reform taking place.

As President Bush said, "the days of the status quo are over." (Alexander 1991, p. 2). If we listen to President Bush, America 2000 by U. S. Secretary of Education Alexander (1991), the SCANS Report by U. S. Secretary of Labor Martin (1991) and other recent documents about education we begin to realize as Alexander (1991) has said, "we are talking about a revolution in education."

Tech Prep, if perceived correctly by all educators can be the major instrument, perhaps the model, or key to much of the crucially needed reform and revolution. This, however, can only happen if the necessary changes are made within the minds of all educators.

I have a major concern that we are rushing forth throughout the nation, launching Tech Prep programs in every state in response to the Perkins Vocational and Applied Technology Act (Congressional Record, 101st Congress 2nd Session, September 25, 1990) without having identified the

basic constructs or the underlying philosophy upon which the concept of Tech Prep should be built. Based on recent research (Hoerner, Clowes and Impara 1991) prior to July 1, 1991 there were approximately 380 Tech Prep programs in the nation. Eleven states identified in the research did not have any Tech Prep programs. The passage of the Tech Prep Act with the 63.4 million dollar allocation being divided among all the states, has caused every state to rush forth initiating a number of Tech Prep projects. Florida has funded 10 Tech Prep projects and Virginia has funded 36 projects as an example. If each state funded an average of 10 projects there could easily be 800 to 1000 Tech Prep programs by July 1992. If the appropriation for next year moves to the full authorization of 125 million dollars, as some have projected, there well could be 1500 to 2000 Tech Prep programs in the nation by December 1992.

This rapid growth is not detrimental if a sound philosophy and mission is developed for these Tech Prep programs.

What is Tech Prep?

Perhaps, we need to establish a definition of Tech Prep before going much further. While the

new act prescriptively defines Tech Prep, there are many misconceptions. It is not the new name for vocational education as many seem to think. It is not a 4-year program that must lead to an associate degree as again seems to be the perception. In fact, Tech Prep does not have to involve a community college. The law says 2 years of postsecondary education--it could be apprenticeship or a university that offers a 2-year postsecondary certificate. Tech Prep also is not exclusively only for "high-tech technologies" as some would lead you to believe. The act says in sec. 347(3), "the term, tech-prep education program means a combined secondary/postsecondary program...carried out under an articulation agreement...consist(s) of 2 years of secondary...and 2 years of higher education, or an apprenticeship program of at least 2 years following secondary instruction with a common core of required proficiency in mathematics, science, communications, and technologies designed to lead to an associate degree or certificate in a specific career field..." and leads to "...effective employment placement or transfer of students to 4-year baccalaureate degree programs..." (Congressional Record, 101st Congress, 2nd Session, September 25, 1990, p. 790-791).

In the most simplistic terms, Tech Prep is an articulated educational program of 2 years high school and 2 years postsecondary preparation which includes a common core of math, science, communications and technologies designed to lead to an associate degree or certificate in a specific career field. It may include many other things. It can be a 2+2, a 4+2 or a 2+2+2, etc.

What is more important than the definition, is

OEF, (20)1, Fall, 1991

how Tech Prep is viewed. If Tech Prep is viewed as just another vocational program which becomes a dumping ground for students who cannot make it in the college-bound tract, then Tech Prep will just be another vocational education initiative that has failed.

A Philosophical Mind-Set Change

The success of Tech Prep, if not the success of our future educational system, depends totally on all educators rethinking the purpose and mission of the educational system. The needed educational reform that must take place starts with a basic philosophical mind-set change within all educators. We must stop practicing and conducting education as if there are two worlds. Willard Wirtz, former U.S. Secretary of Labor summed it up when he said, "there aren't two worlds -- education and work, there is one world--life. Learning by hands-on participation...should be at the heart of our educational perspective" (W.T. Grant Foundation Commission on Work, Family and Citizenship, 1988, p. 3). Educators have kept alive the myth, first there is education, then later on, out there someplace is the world of work. After all, our present educational system is founded on the British model that is an elitist system in which education is generally not to be relevant or practical. Educators in America have not felt the need to facilitate learning through an applied mode.

Betsy Brand, U. S. Assistant Secretary for Vocational Education stated that, "we need a mind-set change among educators at all levels regarding their role in human resource development" (Brand, 1990). Human Resource Development (HRD) has tended to be viewed as a corporate term.

Educators do not seem to view themselves as human resource developers, yet, if we are not in the business of human resource development then what is our business. Most educators seem to see themselves as math teachers, history teachers, electronics teachers, home economics teachers, etc. just as I did in 1963 when I taught H.S. algebra. That is what I did, I taught algebra--I didn't teach kids. Can you imagine the difference it would make in the school environment if the principal and all teachers said the theme of their school was Human Resource Development for every student.

Many have discussed the role of education in HRD. Johnston and Packer (1987) in Workforce 2000 set the stage in their statement that education and training are the primary systems by which the human capital of a nation is preserved and increased. The document Building a Quality Workforce furthered the responsibilities of education in preparing the workforce in the statement, "Education has the primary responsibility for initially preparing the entry level workforce." (McLaughlin, Bennett, and Verity 1988, p 2). They did not say preparing only the top 20-30 percent of the workforce.

The Forgotten Half also strongly supports education's HRD role in the statement, "Education and training remain the forgotten half's most fundamental and reliable pathway to success." (W.T. Grant Foundation Commission on Work, 1988, p.127). A fourth study, America's Choice: high skills or low wages further emphasizes the relationship of education and work in the statement: "Guaranteeing the right to a good education to every young American and providing positive links

between educational achievement and jobs are essential to the creation of an educated nation." (Commission on Skills of the American Workforce, 1990, p.72). Through these documents and many others it is unquestionably clear that we must rethink the schooling process in this country. Fiske (1991) in Smart Schools, Smart Kids comments at length about the needed educational reform and the new role for educators. He stated this role quite well. "The consequences of becoming a learning society are enormous, for it means that for the first time schools have been given the job of producing the *capitol* on which the country depends." (p. 23).

The necessary reform truly requires a philosophical mind-set change in the minds of all educators--teachers, counselors and administrators. Business as usual will no longer do. We can not continue to conduct education with the theme of, "sort out the best and forget the rest", as we have and as Hart (1989) discussed in his article, The Horse is Dead.

The New Mission

Tinkering with the educational system here and there is just not working. This philosophical mind-set change is about adopting a new mission for education. We can no longer practice the elitist, sorting process as we have for the past 100 years using the "nineteenth century factory model school" (Fiske 1991). The new mission for education is about "success schools" (Hart 1989 p. 239) for all and "learning-oriented, not teacher-oriented" (Fiske 1991, p. 66) schools. This new mission is found in the six National Goals for Education that President Bush unveiled January 1990 (U.S. Department of Education, July 1990). Goal 3 states: "By the year

2000...every school in America will ensure that all students...be prepared for responsible citizenship, further learning, and productive employment..." (p.5). Some say goal 3 is about academic achievement which is the first part of the goal, and represents only the educational process. When we analyze the second half of the goal, the purpose or outcome is about being prepared for further learning and productive employment. Being academically prepared and not being employable does not do the individual or the nation any good.

The new mission for education, then, is to develop an educational system that has its major thrust: to prepare all students for further learning and productive employment. We, of course, have a system that has been doing this for the 20-30 percent called the college-bound. After all that's what higher education provides--further learning and ultimate preparation for productive employment. Now we must provide the same opportunities for the other 60-70 percent of our youth. This can only happen if all educators are willing to make the mind-set change necessary and accept the new mission for education at all levels.

I believe Tech Prep is the opportunity to be the structure or pathway through which this new mission can be accomplished. Imagine having an educational system in which all educators were dedicated to developing all students to their fullest potential for further learning and productive employment.

Relevant Learning for All

At the risk of using a worn out term, I do believe the new mission is about relevant education for all. The Forgotten Half states, "Learning takes

OEF, (20)1, Fall, 1991

place when learners regard what one needs to know as relevant to their lives." (W.T. Grant Foundation Commission on Work, 1988, p. 128). America's Choice also supports the importance of relevancy with their statement, "the lack of any clear direct connection between education and employment opportunities for most young people is one of the most devastating aspects of the existing system." (Commission on Skills of the American Workforce, 1990, p. 72). A third document, What Work Requires of Schools: A SCANS Report for America 2000, a report that all educators need to consider, states how, "all young Americans should leave school with the know-how they need to make their way in the world." (p. vi). As U.S. Secretary of Labor Martin states, schools must teach with work in mind--"contextual learning" as it is called (Secretary's Commission on Achieving Necessary Skills, June, 1991). It's increasingly obvious that educators must recognize the need to learn how to teach through an applied mode and not always in the abstract. Again, Tech Prep with its emphasis on applied learning can become the framework or structure for a more relevant approach for a greater number of our youth.

Necessary Professional Development

The key to the concepts and reforms thus far discussed rests almost exclusively with all educators making the necessary mind-set changes as earlier presented. Since approximately 75% of the educators today will still be in education by the year 2000, the major method to change will primarily be through professional development.

The acceptance of this new mission for education, will require the "movers and shakers" and

decision makers in our educational system at all levels to begin conducting forums and professional development activities for all vocational and non-vocational faculties, counselors and administrators to re-think the educational system America needs today and in the future.

As indicated, "business as usual" will no longer suffice. The first place to start as Fiske (1991, p. 249) indicated is with a new "vision" -- a sense on the part of the American public, business/industry and parents of what education now needs to be. I am in agreement with President Bush and Secretary Alexander, "we are talking about a revolution." Tech Prep if conceptualized correctly, can be a major part of this revolution.

References

- Alexander, L. (1991). America 2000: An Educational Strategy Sourcebook. Washington, DC: U.S. Department of Education.
- Brand, B. (1990, January). A discussion with a committee of technical educators in her office. Washington, DC.
- Commission on the Skills of the American Workforce. (1990). America's Choice high schools or low wages. Rochester, NY: National Center on Education and the Economy.
- Congressional Record, 101st Congress 2d Session (1980, September 25). The Carl D. Perkins Vocational and Applied Technology Act Amendments of 1980.
- Fiske, E. B. (1991). Smart Schools, Smart Kids. New York, NY: Simon & Schuster.
- Hart, L.A. (1989, November). The Horse is Dead. Phi Delta Kappan, 71, 237-242.
- Hoerner, J.L., Clowes, D.A. & Impara, J. (1991). Identification and Dissemination of Articulated Tech Prep Practices for At-Risk Students. A research project funded by the National Center for Research in Vocational Education. University of California, Berkeley, CA.
- Hull, D., and Parnell, D. (1991). Tech-Prep Associate Degree. Waco, TX: Center for Occupational Research and Development.
- Johnston, W.B. and Packer, A.H. (1987). Workforce 2000. Indianapolis: Hudson Institute.
- McLaughlin, A. Bennett, W. B. & Verity, C. W. (1988, July). Building a quality workforce. Washington, DC: U.S. Department of Labor.
- Secretary's Commission on Achieving Necessary Skills. (1991, June) What Work Requires of Schools: A SCANS Report for America 2000. Washington, DC: U.S. Department of Labor.
- William T. Grant Foundation Commission on Work, Family and Citizenship (1988). The forgotten half: Pathways to success for America's youth and young families. Washington, DC: The William T. Grant Commission on Work Family and Citizenship.
- U. S. Department of Education (1990, July) National Goals for Education. Washington, DC.
- Dr. James L. Hoerner
Associate Professor of Vocational Education
at Virginia Polytechnic Institute and State University and Director for the project Identification and Dissemination of Articulated Tech Prep Practices for At-Risk Students for the National Center for Research in Vocational Education, University California-Berkeley.
(703) 231-8199