

DOCUMENT RESUME

ED 380 571

CE 068 432

AUTHOR Lasonen, Johanna; Frantz, Nevin R., Jr.
TITLE A Comparison of Workforce Preparation Policies in the United States and Finland.
PUB DATE Dec 94
NOTE 22p.; Based on a paper presented at the International Vocational Education and Training Association Conference (Dallas, TX, December 1994).
PUB TYPE Speeches/Conference Papers (150) -- Reports -- Research/Technical (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; Consortia; Educational Legislation; Educational Objectives; *Educational Policy; Educational Practices; *Education Work Relationship; Federal Legislation; Foreign Countries; Government School Relationship; High Schools; *Job Training; Labor Force Development; Postsecondary Education; *Public Policy; Tech Prep; Two Year Colleges; *Vocational Education
IDENTIFIERS *Finland; *United States

ABSTRACT

The national policies on preparing youth for the work force in the United States and Finland were compared through a retrospective review of past policy decisions. Qualitative data were gathered by analyzing key policy documents and by conducting focus group interviews with reform stakeholders within three Finnish experimental school divisions and three tech prep consortia representing rural, urban, and suburban areas of one state in the United States. The focus group interview results were analyzed by comparing the responses of each group within each country and national work force preparation goals as identified during the policy document analysis. The two countries were found to have similar national goals but different contextual environments and implementation strategies. Finland emphasized flexibility in high school course selection with upgrade technical preparation in emerging polytechnic institutions. U.S. policy focused on increased course requirements for graduation from high school and stronger linkages between secondary and postsecondary programs for specialized occupational preparation. Both countries were working to improve work force preparation of youth by emphasizing the role of continuing education and internationalization beyond compulsory school. The main difference between the U.S. and Finnish systems was in the emphasis placed on breadth of studies and specialization. (Contains 19 references.) (MN)

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

Abstract

A COMPARISON OF WORKFORCE PREPARATION POLICIES IN THE UNITED STATES AND FINLAND

by

Johanna Lasonen
Institute for Educational Research
University of Jyväskylä
Jyväskylä, Finland

Nevin R. Frantz, Jr.
Division of Vocational and
Technical Education
Virginia Polytechnic Institute
and State University
Blacksburg, Virginia

The study compared national policies for workforce preparation of youth in the United States and Finland using policy analysis and focus group interviews. Findings of the study indicated similar national goals but different contextual environment and implementation strategies. The Finnish Movement is characterized by flexibility in high school course selection with up-grade technical preparation in emerging polytechnic institutions. In the United States the focus was on increased course requirements for graduation from high school and developing stronger linkages between secondary and post-secondary programs for specialized occupational preparation. Both nations are striving to improve workforce preparation of youth by emphasizing the role of continuing education and internationalization beyond compulsory schooling. The main difference between the American and Finnish systems of education is the emphasis on breadth of studies and specialization.

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 document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

J. Lasonen

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

¹ Based on a paper presented at the International Vocational Education and Training Association Conference, Dallas, TX, December, 1994.

A COMPARISON OF POLICIES WORKFORCE PREPARATION IN THE UNITED STATES AND FINLAND.

Johanna Lasonen
University of Jyväskylä

Nevin R. Frantz, Jr.
Virginia Polytechnic Institute
and State University

The formation of global economic linkages between nations has created changes in the relationships between countries and among the people who reside within their boundaries. In North America, the recent approval of the North American Free Trade Agreement is creating a new geographic marketplace that will rival the emerging European Union of Nations. In the far east, Japan and other Pacific Rim countries are also challenging the economic supremacy of the western industrialized world. As these economic consortiums develop and free trade continues across all nations, there are increasing demands on each nation to remain competitive in the world marketplace and provide a high standard of living for it's citizens (Thurow, 1992).

NATIONAL GOALS AND STRATEGIES

The challenges of remaining competitive in a global marketplace are being addressed by both the private and public sectors within each nation. Business and industrial organizations are addressing the competitive issue by using new technologies to produce goods and services, moving the processing of information and materials to locations of lower costs, finding niche markets, and customizing products to meet consumer needs, and reducing and reorganizing the workforce (Carnivale, 1991).

In the public arena, the most ubiquitous strategy has been the improvement of workforce quality through a reform of the nation's educational system. In the United States, federal and state legislation has been approved to raise standards of

achievement and develop new initiatives for the preparation and continued retraining of the workforce. In Finland, two extensive experimental projects have been launched at the secondary and tertiary education levels. The major concern in both nations is the development of human resources that will enable the countries to remain competitive in Europe and across the global economy.

ORGANIZATION OF EDUCATION

Education in Finland. In Finland a national priority has been made to provide equal educational opportunities to all populations in each region of the country. This goal is accomplished through the comprehensive school which provides a compulsory education for all children ages seven through sixteen. A standardized curriculum is taken by all students for further studies beginning at age sixteen in the upper secondary schools or in the vocational schools. The upper secondary school offers a geographically homogeneous three year program of studies which prepares students to take the matriculation examination which is the general criterion for admission to the university. The academic high school students can choose their major areas of studies in languages, mathematics and natural sciences, humanities, sports and gymnastics, music or dance. Students enrolling in the vocational schools may select from twenty-six (26) basic programs within which a total of over 200 very specialized lines of study. The students entering the vocational schools can obtain a diploma after two or three years depending upon their specialization. Upon graduation they may seek employment or continue toward a higher vocational diploma which provides additional preparation in a two to three year program leading to supervisory and managerial roles in their areas of specialization. Students who complete the upper secondary school who are not admitted or chose not to continue their education at a university may also enroll in the vocational schools after graduation for occupational preparation.

All of the schools are located in a separate physical location and have a mixture of ownership and financial support that includes national/state, municipalities, and private ownership. Ninety-two percent of the upper secondary academic schools are funded by the municipal or local government, six percent are funded by private agencies and two percent get their resources from the state (Tilastokesaus, 1993). The comprehensive vocational schools, which offer courses in the technical specializations, are owned and operated by the state or municipal or the federation of municipals. Within a given municipality or region of the country there are also additional types of vocational schools for commercial subjects, health, social services and design and handicraft that may be owned publicly or privately. In 1992, fifty-five percent of vocational students studied in the municipality, or the federations of municipal owned, thirty-five percent studied in state owned and ten percent studied in private vocational schools (Tilastokesaus, 1993).

The curriculum in the upper secondary academic schools is very oriented toward the matriculation examination which requires four compulsory subjects that include Finnish or Swedish (depending upon the school location), a second official language, another foreign language, and mathematics or social studies. Two additional subjects are optional. Academic high school students' three- or four-year programs include a minimum of 75 study units (study weeks with 38 contact hours) in 14 subjects. The study program consists of core courses (30-50%), advanced optional courses (30-40%), and free optional units (10-30%). In the vocational schools the core curriculum also requires the two official languages, Finnish and Swedish a foreign language, mathematics, physics and chemistry, civics, information technology, physical and health education, and art education. Most of the studies are concentrated in the specific line of specialization.

According to 1991 statistics, fifty percent of the students completing the comprehensive school will immediately continue on to the upper secondary school with the remaining thirty-two percent enrolling in the vocational school, six percent

continuing on to the volunteer tenth grade, and twelve percent going to work and delaying their studies. In Finland many of the students graduating from the upper secondary academic high schools are not able to continue their studies at the university because there are not enough study places available for them. Two thirds of all upper secondary school graduates apply for admission but only one third are admitted. Many of these students will then enroll in the vocational schools and colleges. Some students are waiting for a opportunity to be admitted to the universities. This results in redundant education and prolongs the time required for entry into the workplace or the university as evidenced by the fact that one fourth of the beginning university students are over 25 years of age. The students enrolled in the vocational schools graduate with an intense, high level of knowledge and skill in a very specialized occupational preparation program that prepares them very well for a specific job but causes difficulties when economic conditions are poor or changing workplaces no longer require the specific skill occupational skills.

As a result of these problems and the growing concern about the country's place in the global economy, in particular future linkages with the emerging European Community, policy makers at the national level instituted a plan for the educational system to be developed with "greater clarity and international compatibility. The aim is a simple basic structure with flexibility in individual choice" (Ministry of Education, 1994).

Education in the United States. In the United States public education is a high priority which is organized at the local level under state guidelines with little direct control by the central federal government. Students enter the schools at age five and are required to attend to age sixteen which is the second year of the four year high school. Approximately 90 percent of the students entering high school will complete the four years and obtain a diploma upon graduation. About fifty percent of the high school graduates will continue their education in a four year college or university and about half of these will obtain the first basic degree, the baccalaureate. The

remaining will enter the military, obtain employment, or continue their education at a two year community college located nearby which offers a college transfer program and an occupational preparation program. Others may enroll in a private occupational preparation school or a public technical college depending upon the educational organizational pattern of the state. Most of the academic education and vocational education in the United States is located within one school building although several states have a system of separately located vocational education centers for students to obtain occupational preparation in half day sessions and return to their home high schools for their academic preparation (U. S. Department of Education, 1994, p. 62).

The curriculum provided to students in the high schools will vary from state to state and within local school divisions but generally will require for graduation from high school four courses in English (4 units) three courses in mathematics (3 units), two units in the sciences, a course in U. S. history, American government, geography, physical education, with the remainder in electives chosen by the student. A total of 20 units is generally needed to graduate from high school and the required courses will comprise about 12 to 14 units or courses in a typical student program of studies. Students elect vocational courses and would need to acquire a minimum of three (3 units) courses to complete a concentrated program of vocational education leading to employment upon graduation (U. S. Department of Education, 1993).

THE STUDY

This study was designed to investigate the implications of national policies for workforce preparation of youth in the United States and Finland. The study was conducted by utilizing a traditional evaluation study of policy-oriented research. A retrospective review of past policy decisions were examined by comparing the goals and objectives of the policy before implementation with the performance that actually occurs. Patton and Swicki (1986) called this kind of research design as an ex-post

evaluation model where the analysis of policy implementation focused on specific goals and targets for preestablished criteria for known time periods. The research questions to be addressed were: (1) Did the actual performance meet the goals and target performance? (2) What were the internal and external factors that were enhancing or inhibiting the process of workforce preparation in high schools? The outcomes of the study would enrich the understanding of strategies used by each nation in human resource development and serve to enlighten the future formulation of policy and implementation of practice in both nations.

The qualitative data were collected for the research using policy document analysis and a focus group interviews technique as presented by Morgan (1990) and Majchrzak (1984). An analysis was first made of the current national policy documents for preparing youth in the United states and Finland for entry into the workforce. The results of the analysis was used to develop protocols for the focus group interviews. The interviews were conducted among reform stakeholders within three experimental school divisions in Finland and three technical preparation consortiums in the United States. In Finland, the focus groups were selected from the sixteen townships having experiments and three different municipal systems that were representative geographically. The high school units where visitations were made located in the northwest, eastern, and southern areas of Finland. Focus group interviews were conducted with the representatives of the upper secondary and vocational schools (academic and vocational high schools) who participated in the experiments. Supervisors, principals and vice principals, teachers, counselors, and students in each were interviewed in focus groups. The interviews were conducted in combinations of English and Finnish depending upon the language skills of the participants. There were always two researchers present, both of whom had English speaking proficiency and one with Finnish as her native language. The information collected during the interviews was recorded in writing and a report of the discussion

was compiled by the researchers. The report was then returned to the experiment coordinators and/or supervisors for their review and verification.

In the United States a similar strategy was used in conducting the focus group interviews. The interviews were conducted among selected technical preparation consortiums representing rural, urban, and suburban areas of a single state. The stakeholders interviewed represented community college and high school administrators, teachers, counselors, and students. The interviews were recorded and summaries were prepared and returned to the participants for their verification.

The results of the focus group interviews were analyzed by first comparing the responses of each of the three groups within each country and the national goals of workforce preparation as identified by the policy document analysis process. The major questions was to determine (1) the level of agreement for each group with the prestated policy goals and objectives, and (2) the consistency of agreement across the stakeholders groups. In other words, what was the perception of the participants in the experiments with respect to the need and underlying rationale for the reform in the secondary schools of Finland and the United States? The research was started with diagnosing the level of intra- and inter-group agreement which would be a possible source of underlying factors associated with any differences between policy targets and performance.

CONTEMPORARY APPROACHES TO WORKFORCE PREPARATION

Experiments in Finland. Finland is currently conducting an experiment in secondary education, providing a wider range of opportunities than before for completing a vocational diploma, upper secondary syllabus or a combination of the two through the collaboration of vocational institutions and upper secondary schools. Sixteen localities which comprise one fifth of the age cohort, are taking part. A wide-

ranging experiment in vocational higher education is also in progress, with 22 temporary polytechnics participating. Eighty-four percent of all occupational higher education specializing areas are covered in experiments (Numminen & Piilonen, 1992). The purpose of this experiment is "to raise the standard of higher vocational studies and devise new programs leading to higher vocational diplomas via collaboration between vocational institutions" (Ministry of Education, 1994a, p. 36).

The underlying rationale and reasons for conducting the experiments in secondary and post secondary education according to the Ministry of Education are the following: prolonged study times, increased dropout, overlapping education, a growing gap between general and vocational education, an excessive number of matriculated school leavers compared with educational opportunities, the underrated status of college-level education in international comparisons, and the lack of flexibility of education in responding to changing skill and knowledge requirements. The purpose of the experiments is to study how inter-institutional cooperation can be used to raise the standard of post-compulsory education and to meet the changing demands for knowledge and qualifications. Another objective is to explore possibilities to diversify education and create flexible and individualized programs. One central focus of the experiment is inter-institutional cooperation, with a view to lowering the barriers between different forms of education and offering more options to students (Ministry of Education, 1994b, p. 8).

The Government Development Program (1994) suggested that the education structure will be streamlined and made internationally compatible. The polytechnic program essentially offers opportunities for raising the standard and quality of education. In Finland, higher education will consist of a non-university sector and a university sector. Sixty to sixty-five (60-65) percent of the age group will have access to higher education, one third in the university and two-thirds in the non-university sector (Government Office of Publications, 1991).

Internationalization is the key to a successful policy in Finnish education. The goal is to provide the students of all educational levels with skills needed in global environments. Internationalization of vocational education in Finland focuses on international collaboration and study projects, student and teacher exchange, work practice in another country is included in the study programs, quality of languages study programs, bilateral collaboration with emergent countries, and teaching in many languages (Numminen & Piilonen, 1994). International education has been implemented in diversified ways in Finnish schools. The countries of the European Union are aiming to promote free moving workforce policies in Europe. The European Union countries have started to produce and certify equivalent occupational and professional qualifications in order to enhance workforce mobility and raise standards.

Federal Legislation in the United States. In the United States there is also a growing concern about the level of education need by high school graduates to enter the workforce and have the skills and knowledge required to function in new organizational structures that utilize communication and problem solving skills. The new technologies to produce goods and services will also demand highly trained and skilled workers and there is a concern on the part of policymakers at state and federal levels that American students do not have the knowledge and skills of their international competitor's workforce. This concern was first introduced in a widely distributed and discussed report entitled *A Nation at Risk* (The National Commission on Excellence in Education, 1983) which began a massive reform movement in almost every state in the United States. One of the most widespread aspects of the educational reform movement was the increase in the number of academic courses required for graduation from high school. From 1983 to 1989 most states in the United States increased the number of courses and developed specific course

requirements in academic subjects as a qualification for a high school diploma (Clune, et al., 1989).

In the United States the passage of the Carl D. Perkins Vocational and Applied Technology Act in 1990 stated as its purpose "to make the United States more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population" (Public Law 101-392. 1990).

The basic components of the Act are: (1) the acquirement of basic knowledge and occupational skills through the integration of academic and vocational education and (2) the opportunity to receive additional education by linking secondary and post-secondary technical education curriculums through the concept called "Tech-Prep" Technical-Preparation), and (3) accountability for states and local schools to demonstrate achievement of academic and occupational preparation outcomes.

The Act addresses the challenges of preparing students for employment in a changing workplace by requiring the Federal funds be used for programs that "integrate academic and vocational education ... through coherent sequences of courses so that students achieve both academic and occupational competencies." (P. L. 101-192, 1990) As a result of this provision schools across the United States are now developing various approaches to making connections between the knowledge taught in an academic classroom and the skills learned in the vocational laboratory (Bottoms, 1993; Grubb, et al., 1991).

The Perkins Act provides funding to each state in the United States to deliver Tech-Prep programs where cooperative linkages between secondary and post-secondary educational institutions. These post-secondary linkages may include a two year community college, an apprenticeship program, or a private proprietary school. Most tech-prep programs operate on a two plus two (2+2) concept with two years of a planned series of high school courses that are articulated with a two year community college program leading to an associate of applied science degree (Hull and Parnell, 1991). Across the nation consortiums have been formed with

community colleges and high schools planning and delivering tech programs for students to earn a high school diploma and continue their technical education with an associates of applied science degree.

COMPARISONS OF WORKFORCE PREPARATION

The two countries have embarked on national policies which are intended to keep both nations economically competitive in the global marketplace. In the United States, Congress passed the North American Free Trade Act which established lower tariffs for trade between Mexico, Canada, and the United States. More recently, Finland joined the European Union which will strengthen their economic ties to other member nations in Western Europe. Both nations have a common goal of maintaining strong national economies and are using similar strategies of joining regional geographical economic and political consortiums.

The goal of joining these economic partnerships is to continue providing a high standard of living for the citizens of each nation. In order to accomplish the national goal of economic competitiveness and maintaining a high standard of living for their citizens, both nations have focused their attention on improving the quality of education for preparing young people to enter the workplace. Both nations passed legislation to reform and restructure the educational systems at the secondary and post-secondary levels of education. In the United States the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 was passed with the stated purpose of "making the United States more competitive in the world economy by developing more fully the academic and occupational skills for all segments of the population." (P. L. 101-392, 1990) In Finland, the Finnish parliament adopted legislation to seek alternative solutions to educational development by testing reforms in post-compulsory education. The purpose of the experiments are to study how inter-institutional cooperation will (1) seek greater clarity and international comparability, (2) raise the standard of post-compulsory education to meet the

changing demands for knowledge and qualifications, (3) lower barriers between different forms of education and offer more options to students (Ministry of Education, 1994b).

In comparing the purposes of the federal/state policies for improving workforce preparation one will find similar purposes as well as differences in the intent of the legislation. Both policies are aimed at developing workers for their adapting to the global economy. However, the Finnish goal is to clarify the education received by student so that it will be more compatible with the educational requirements and certification of other nations, particularly those in Western Europe. The purpose of the Perkins Act states very clearly that the intent is to make the United States more competitive or dominant in the world marketplace. This difference in the intent of the purposes may be explained by the geographical proximity of Finland to other European nations and the requirement for common educational standards among the members of the European Union. In the United States, economic and political dominance of the world following World War II to the present has shaped a national concern for continued world leadership among the nations of the world. The relative geographical isolation from most other developed countries does not create the urgent need for the United States to cooperate as is the case in Finland. These factors create a competitive position rather than a collaborative one when defining the major outcomes of workforce preparation reform in the United States.

Both policies emphasize the raising of educational standards with the Finnish strategy for improvement focusing on inter-institutional cooperation while the strategy in the United States is aimed at developing more fully the academic and occupational skills through an integration or interdisciplinary approach. This difference is the result of the need in Finland for expanding the options of secondary students to acquire a broader base of preparation that provides options for workplace preparation as well as continuing their education in the newly formed polytechnics. The aim of this policy is to provide a more practical post-secondary education than

the existing university route which is not readily available to a large number of Finnish students desiring to continue their education after completing their secondary schooling. In the United States much public attention has been directed at the lack of "basic skills" among high school graduates and the Perkins Act translates this concern into a strategy which requires academic and occupational skills for improving workforce preparation.

The removal of barriers between different forms of education is a common goal for both the United States and Finland, but the contexts and strategies for implementation in each nation are quite different. In Finland, the separate physical sites for upper secondary academic and vocational education programs with each school having a prescribed state mandated curriculum is problematic in responding to changing skill and knowledge requirements. A new form of upper secondary education is being introduced in the experimental schools which features a movement toward increasing the number of electives available for students, eliminating year long courses, and giving students the opportunity to choose courses in different upper secondary schools. The goal of the experiment is to provide students with more diversified options for a program of studies. Students in an academic high school can take courses in the vocational schools as well as students in the vocational schools taking academic courses. Some students may also choose a combination of academic and vocational courses that provide them with a vocational certificate as well as the academic diploma. The vocational education system has also introduced the concept of flexibility in the experimental schools by reducing the occupational lines of specialization from 250 to 160 occupational preparation programs. Students in several of the experimental schools are allowed to develop a concentration in a major area of specialization and obtain a minor area in another program or cluster. In this approach students will have the flexibility to prepare themselves for qualification to enter related occupational fields and better

respond to structural changes in the labor market and shorten the time required to be retrained for another occupation.

A third component of the experimental reforms in Finland is the formation of polytechnic institutions of higher education. This is being accomplished in twenty-two locations across Finland by combining the separate higher vocational education schools offering occupational preparation in allied health, agriculture, forestry, business, etc. into a single administrative unit. The aim is to raise the level of qualifications by combining the theoretical with vocational studies and allow students to develop individual relevant study programs among the occupational areas found in the schools comprising the new polytechnics. For example, a student in forestry could choose courses from business to develop their expertise and preparation to enter management in the forest products industry. The newly formed polytechnics will create more opportunities for students to continue their education after graduation from the upper-secondary school, and link their vocational education coursework with advanced practical and theoretical preparation at the polytechnic institutions.

In the United States the educational reform movement has stimulated an effort to improve the quality of education by reducing the options students have had in the past in graduating from high school. Every state in the nation has increased the basic requirements for high school graduation reducing the opportunities for taking electives such as vocational education courses at the same time. Proponents of educational reform are also recommending that the "general" program of studies be eliminated and students be better prepared to enter the workforce and/or continue their education. These reforms became national policy in the Perkins Act with the tech-prep initiative. The major goal of the initiative is to develop a prescribed program of studies which will include higher levels of mathematics, science, and communication skills and link the occupational preparation courses at the high school level with technical preparation programs at the post-secondary level. In this

manner, students in the United States would develop a career path that would better qualify them for entry into the workplace and allow them to continue their depth of specialization through an articulated program of technical studies found in a community college, proprietary school, or apprenticeship program.

COMPARISONS AND CONCLUSIONS

In comparing these policies and practices, it is interesting to observe that both nations are seeking to remove barriers within as well as between the secondary and post-secondary schools and programs. In the United States the integration of vocational and academic education and the tech-prep linkages are the strategies being used to accomplish the goal. In Finland the strategy is to develop flexibility for student options and electives through inter-institutional cooperation and administrative consolidation among separate schools and programs at both the secondary and post-secondary levels. The difference in strategies among the two nations is accounted for by the values of the two cultures. In Finland with a relatively small population of five million located in a moderately sized nation, a strong state or federal control of education emerged with prescribed standards for school administration and curriculum which has been quickly decentralized in recent years. The European tradition for in-depth preparation for work or for entry into higher education facilitated the development of a separate system of secondary schools devoted to either academic or vocational preparation. Changes in the economy of Finland, with a severe recession creating large numbers of unemployed and under employed and the necessity to form collaborative economic and political linkages with other nations particularly Western Europe, created the need for more flexibility in preparing students for a rapidly changing environment.

In the United States the formation of a decentralized system of state governments with divergent entities within states created a more localized governance of public schooling. Most communities across the nation began to

establish high schools during the early part of the century and federal legislation in 1917 promoted the placement of vocational education in the emerging high schools. The American norm became the comprehensive high school containing both college and workforce preparation programs.

The establishment of a widespread network of community colleges and technical institutes in the United States following World War II provided technical preparation in every state of the country. The availability of these existing programs enhanced the development of local articulation agreements between high schools and post-secondary institutions during the past ten years which eventually became public policy with the tech prep initiative in the 1990 Perkins Act. These developments have produced federal leadership in promoting linkages between secondary and post-secondary programs for workforce preparation funding support to encourage the planning and development of tech prep programs across the nation.

The future prosperity of Finland and the United States is a shared concern among the citizens of both nations. These concerns have been translated into common national goals with both countries seeking economic growth in a competitive world marketplace that provides employment opportunities to continue a high standard of living for members of each society. Both countries have placed priority on improving the quality of education and have approved federal legislative policies and initiatives to address specific concerns about improving the quality of workforce preparation for youth and adults. Each nation has also established a tradition of delivering the preparation of youth for employment through a school based approach at the secondary and post-secondary levels.

Although both nations share common goals and have launched efforts to improve the workforce preparation of youth, the social and political contexts of each country have influenced the development of different policies and strategies to address the issue. The Finnish experiments are aimed at raising the standards of vocational education studies and eliminating barriers between different forms of

education that will produce greater flexibility for students and be more compatible with educational systems of the European union nations. The United States has focused on improving the academic as well as the occupational skills of youth belonging to all populations and increasing opportunities for highly specialized technical preparation through linkages with post-secondary institutions and organizations.

The strategies for accomplishing these goals in Finland can be characterized as moving away from state mandates to local control with a loosening of rigid curriculum requirements and allowing students more opportunities to elect courses from both academic and vocational schools. The opportunity to continue in an area of in-depth specialization in a technical area is being changed by upgrading post-secondary higher vocational studies into an emerging national system of four year polytechnic institutions of high education. This initiative will also produce greater compatibility with the credentialing systems and standards being used by other nations belonging to the European Union.

In spite of the prevailing recession, Finland is taking up the challenges of the future. The agreement on the European Economic Area and officially joining the European Union in 1995 will increase international competitiveness of Finland and pave the way for closer cooperation in education and research. Finland has chosen the strategy to invest in education and research even during recession.

In the United States the strategies for improving the workforce preparation of youth is focused on reducing the options and electives of high school students by increasing the academic achievement of students through increased graduation requirements and the integration of academic and vocational education courses. Whereas, Finland is in the process of transforming their post-secondary technical preparation programs into the polytechnics, the United States has well established community college and technical college systems and federal resources are being used to strengthen and raise the level of workforce preparation through the

development of linkages and articulation of secondary and post-secondary programs with the tech prep initiative. The aim of these efforts is to improve the quality of the workforce in order to better compete in the international marketplace rather than collaborate with other nations in forming common markets and educational credentials.

As both nations move forward in reforming and restructuring the workforce preparation programs for their youth, the outcomes will be dependent upon the effect of the initiatives and strategies being used to implement the goals of each nation's policy. The ultimate goal of both initiatives is to raise the level of achievement and provide a well qualified person to enter the workforce and/or continue their career and technical preparation through a four-year polytechnic institution in Finland or a two-year post-secondary community college or apprentice program in the United States. The results of these reforms in workforce preparation will be a contributing factor in the future economic development and progress of each nation.

REFERENCES

- Bottoms, G., & Presson, A. (1993). *Making High Schools Work*. Atlanta, GA: Southern Regional Educational Board.
- Carnegie, A. P. (1991). *America and the New Economy*. San Francisco, CA: Jossey Bass Publishers.
- Clune, W. H., White, P., & Patterson, J. (1989). *The Implementation and Effects of High School Graduation Requirements: First Steps Toward Curricular Reform*. New Brunswick, NJ: Center for Policy Research in Education, Rutgers, The State University of New Jersey.
- Grubb, W. N., et. al. (1991). *The Cunning Hand, the Cultured Mind: Models for Integrating Vocational and Academic Education*. Berkeley, CA: National Center for Research in Vocational Education.
- Hull, D., & Parnell, D. (1991). *Tech Prep/Associate Degree: A Win/Win Experience*. Waco, TX: Center for Occupational Research and Development.
- Government Office of Publications. (1991). *Koulutuksen ja korkeakouluissa harjoitettavan tutkimuksen kehittämisyksikön vuosille (1991-1996)* (The Government Development Program of Education and Research for 1991-1996). Helsinki: Government Office Publications.
- Majchrzak, A. (1984). *Methods for Policy Research. Applied Social Research Methods Series, Volume 3*. Newbury Park, CA: SAGE.
- Ministry of Education. (1994a). *Higher Education Policy in Finland*. Helsinki: Nykypaino Oy.
- Ministry of Education. (1994b). *Developments in Education 1992-1994*. Helsinki: Painatuskeskus.
- Morgan, D. L. (1990). *Focus Groups as Qualitative Research (3rd printing). Qualitative Research Methods Series 16*. Newbury Park, CA: SAGE.
- National Commission on Excellence in Education. (1983). *A Nation at Risk: The Imperative for Educational Reform*. Washington, DC: National Commission on Excellence in Education.
- Numminen, U., & Piilonen, A. R. (1994). *Nuorisoasteen koulutuskokeilut ja ammatikorkeakoulukokeilut. Raportti 2. Lukuvuosi 1992-1993* (Experiments of youth education and polytechnics education. The second report). Study year 1992-93. Helsinki: Ministry of Education.

- Numminen, U., & Piilonen, A. R. (1992). *Nuorisasteen koulutuskokeilut ja ammatikorkeakoulukokeilut, perusraportti* (Experiments of youth education and polytechnics education, the first report). Helsinki: Ministry of Education.
- Patton, C. V., & Swicki, D. S. (1986). *Basic Methods of Policy Analysis and Planning*. Englewood Cliffs, NJ: Prentice-Hall.
- Public Law 101-392. (1990). *The Carl D. Perkins Vocational and Applied Technology Act of 1990*. Washington, DC: U. S. Congress.
- Thurow, L. (1992). *Head to Head: The Coming Economic Battle Among Japan, Europe and America*. New York: William Morrow.
- Tilastokeskus. (1993). *Koulutus* (Educational Statistics). Helsinki: Paino-Centre Oy.
- United States Department of Education, National Center for Educational Statistics. (1993). *The Condition of Education*. Washington, DC: U. S. Government Printing Office.
- United States Department of Education, Office of Educational Research and Improvement. (1994). *Vocational Education in G-7 Countries: Profiles and Data*. Washington, DC: U. S. Government Printing Office.