

Chapter 1

INTRODUCTION

Vocational and technical education (VTE) plays a vital role in a society's economic growth and social development. The Perkins Act defines vocational and technical education as organized educational programs offering sequences of courses directly related to preparing individuals for paid or unpaid employment in current or emerging occupations requiring other than a baccalaureate or advanced degree. Programs include competency-based applied learning which contributes to an individual's academic knowledge, higher-order reasoning, problem solving skills, and the occupational-specific skills necessary for economic independence as a productive and contributing member of society (McQuay, 2001). The mandate for vocational and technical education is manifold in the following six challenges (Gaskov, 2000). First, the vocational and technical education system should deliver both foundation and specialist skills to individuals, enabling them to find employment or launch their own business and to work productively and adapt to different technologies, tasks and conditions. The ultimate economic objective of education and training is improved personal and social productivity. Second, vocational and technical education is often an instrument for structural change. Large numbers of workers may need to leave jobs that are no longer in demand, move to new jobs that will be created, or learn to perform old jobs in new ways with different technologies. Vocational education and training systems, along with other agencies that provide a safety net and assistance in finding new employment, play an important role in retraining redundant workers and help

reduce the social cost of change. Education and training systems are also increasingly involved in continuing retraining and upgrading programs for employees at all levels (Gaskov, 2000).

Third, education helps people for their lives and for earning a living (Finch & Crunkilton, 1999). There is always a need to equalize opportunities that people have to earn their living with the acquisition of skills. VTE appears to be an important factor in solving earning disparities. One technique for estimating equality of training opportunities is to compare public spending on VTE per individual in various groups, such as rural and urban residents, male and female workers, or younger and older workers (Gaskov, 2000). Fourth, VTE can be viewed as a tool for achieving national economic and social objectives, such as encouraging regional development and supporting priority industrial sectors, expanding exports, attracting foreign investments, and raising wages. This policy aims to change the economic and social situation through training.

Fifth, in addition to the economic benefits, VTE can generate massive social benefits (externalities), such as crime reduction, health improvement and better social cohesion, which accrue to society as a whole rather than to individuals. Although these broad externalities are very difficult to quantify, they are thought to be significant. In this regard, it is becoming increasingly common to see VTE as an important avenue for the socialization of young people.

There is a recognized need for a minimum vocational qualification level for each adult, including early school leavers, to enable them to function adequately in the labor market and in society (Gaskov, 2000). And sixth, VTE can have benefits not directly connected with employment. Vocational skills and knowledge enable people to provide services, such as medical care or car and house maintenance, to their families and neighbors, thus reduce their expenses on such services (Gaskov, 2000).

The implementation of vocational and technical education programs has become one of the most important strategies of educational development in both developed and developing countries. For those countries already possessing VTE programs, a major reason for educational reforms have been to enhance economic and social conditions within those countries.

Communism and Former Communist Countries in Europe and Their Educational Programs

Before 1989, education and training in Central and Eastern Europe were designed to suit the context of centrally planned economies. Under the COMECON (Council for Mutual Economic Assistance, which was formed by most of the Soviet-influenced eastern European countries, Cuba and Mongolia), there was a division of labor whereby one country would provide other countries with supplies of particular commodities. This led to an over-concentration, in particular countries, of some industries and the neglect of others. Furthermore, areas such as crafts, commerce, banking, accountancy, and insurance had remained underdeveloped (ETF Report, 1999). Under the communist system, vocational and technical education was tailored to the needs of large state companies employing large number of personnel, with low levels of innovation and productivity, following a Tayloristic scheme of work organization and offering the most menial jobs. Training was very often directed towards a lifetime job. Craft trades and service professions were seriously neglected. Standards of equipment in vocational education institutions reflected the poor technological standard of industry itself. Ministries of education or sector ministries in charge of vocational education and training were traditionally and strongly involved in defining the scope, content and length of vocational education programs, thus encouraging high rigidity and fragmentation within the system (ETF Report, 1999).

Since 1989, former communist countries underwent fundamental political and economic changes. Those changes have encompassed all aspects of life, from the democratic structure of society, to the privatization of the economy, and to the subjects studied by young people and adults at educational establishments. The economies of these countries have experienced serious adjustment crises. On paper, land reform and privatization have been completed in a number of countries. However, the definitive settlement of property rights, the establishment of functioning land markets, and the restructuring of industries are still an on-going process, which is far from complete (World Bank, 2000).

The large firm sector still contributes a higher than European Union average contribution of employment. Furthermore, there are indications that there may yet be some way to go in the reduction of that sector. Nevertheless, there has been an enormous growth in the micro-sector (under 10 employees) in all the countries concerned and which, in fact, now represent a similar level to that of the European Union as whole. In general, 90% or more of all enterprises are now micro-sized and this sector is still growing (Small Middle Enterprise Report, 2000).

A high proportion of locally owned enterprises are facing serious financial crises. In particular, the absorption of surplus labor from both the farm sector and formerly labor-intensive industrial sectors, such as mining, steel and chemical industries which are now in decline, poses a major challenge for most of these countries. The restructuring or closing of companies inevitably leads to increasing unemployment, a phenomenon largely unknown in former times. The drastic reduction in demand for labor, following the collapse in output, has been reflected both in lower employment and lower real wages. The rate of unemployment is very high throughout the region. Many people who were previously in the labor market are now out of it. This could well be an indicator of even greater social problems. In formerly socialist economies,

women, out-of-school youth, and the elderly were all given jobs, but since the beginning of transition, many such people have left the labor market. This has had a serious effect on household incomes (World Bank, 2000).

The background information described in the last two paragraphs, in combination with the enormous pressure on companies to raise their level of competitiveness, have resulted in an increased demand for training and retraining of the labor force. Short and long-term training programs need to be carried out that allow people to cope with change in demand for skills and to prevent social exclusion.

In comparison with the context in which reforms usually take place, the current vocational education and training reforms in Eastern Europe have two very unusual aspects. First, the breadth, range, and depth of vocational and technical education reform are extraordinarily large. It concerns all levels and sectors of vocational and technical education; legislation, management and administration, financing, vocational education and training institutions, programs, and personnel. They also include the creation of new vocational education and training institutions and the design of completely new types of curricula. And second, the speed of the reform process is also quite exceptional. Conceiving educational reforms in established systems usually takes a relatively long time. In regard to vocational and technical education reform, these countries are trying to design, adopt and launch programs in a matter of months rather than years. The global nature and speed of vocational and technical education reforms have roots in the general climate of rapid and radical change, which those societies are undergoing and which aim at the transition to a market economy and a pluralistic democracy. The past twelve years have shown that the process of modernization can be started quickly. However, deeper, systematic reforms in vocational and technical education will take time. It will

be a matter of a whole generation rather than a couple of years for these reforms to be fully implemented.

Balkan Region, Albania, and Their Educational Programs

The Balkan Peninsula includes Slovenia, Croatia, Yugoslavia, Bosnia and Herzegovina, Albania, Macedonia, Greece, Bulgaria, European Turkey, and Romania. The region as a whole is largely agricultural where fruits, grains, and grazing are important. A variety of mineral deposits are in this region, including iron, coal, manganese, copper, zinc, lead, and oil. The people of the Balkan Peninsula make up several racial groups. However, linguistic and religious differences are more distinct than racial divisions.

The last twelve years has confirmed that the Balkan region contains some of the most ethnically and culturally complex and fragmented areas of Europe. The Balkans also contains some of the poorest countries in Europe, a factor that contributes to the instability of the region. There were wars in the region leaving thousands of dead (Croatia, Bosnia-Herzegovina, Kosovo, and Macedonia) and hundred of thousands of refugees. These are some of the reasons that the Balkan countries (excluding Greece and Turkey) find themselves in a situation of retarded transition. But the Balkan region needs stability. The Balkans is a part of Europe and must be integrated into Europe. This is the reason that a Stability Pact for South East of Europe was launched in June 1999. The Stability Pact is a broad based, cooperative enterprise aimed at strengthening countries in South Eastern Europe in their efforts to foster peace, democracy, respect for human rights, and economic prosperity in order to achieve stability and a better future for the entire region.

The European Training Foundation's (ETF) country review reports have provided labor market information largely as a context for the vocational and technical education and policy

assessment, but the information available does not lend itself to a detailed analysis. Nevertheless, it may be useful to summarize some of the principal characteristics of the region's labor market situation.

- The combined effect of industrial decline, privatization of state enterprises, and economic restructuring has resulted in a dramatic reduction of employment opportunities, blocked access to employment for those who are outside (school leavers and unemployed), and among youth with higher education the unemployment rate is high. Employment creation is largely in the form of micro and small (family) businesses.
- Countries in the region have obviously limited access to capital markets, as investors are reluctant to enter in politically unstable environments.
- The reports note the absence of national development plans and/or mid-term employment strategies in all countries of Western Balkans (Balkan countries excluding Greece and Turkey) (ETF, 1999).

Overall, it can be argued that the picture of the labor markets in those countries resembles what other transition countries have experienced during the early 1990s, though in some respects in more dramatic form. The West Balkan countries appear to differ in the very fact they are latecomers on the stage of transition. They have suffered dramatic physical destruction, faced a multitude of post-war effects such as hosting refugees and displaced persons, experienced hostility between ethnic groups that creates tensions, damaged basic infrastructures, large number of people living below poverty levels, and international investments that are likely to be very selective for some time to come.

Against the background of labor market and employment conditions, the European Foundation's review highlights a series of vocational education and training reform issues.

- Clearly most of the West Balkan countries need heavy investments in educational infrastructure as a result of serious neglect and under-funding. There is also a clear need for modernization of curricula, teacher's training system, adult education, and involvement of social partners.
- The reports argue that the present vocational and technical education system is in many respects not aligned to the new emerging needs of the employment system. Research capacities linking labor market and education are conspicuously absent (ETF, 1999).

Albania started to reform its vocational and technical education system in 1993. While some reforms have been launched, the current vocational and technical education programs have not been brought into line with the needs of the labor market.

Statement of the Problem

The main goal of the Albanian government is to integrate the country as soon as possible into the European Union. The government of Albania remains committed to development of social-economic conditions making use of the country's natural resources and human potential. However, a major problem is that planning for the future development of Albania's human potential has been fragmented. The challenges facing vocational and technical education in Albania, in terms of its potential contribution to the future of social-economic development of the country are:

- there is little vision, encouragement for schools to adopt curricula and activities that address developing needs;
- there is lack of timely and structured information about the labor market;
- there is an absence of a long-term development framework for vocational and technical education and lack of definition of its role in social-economic development;

- there is a lack of coordination between vocational and technical education programs and the labor market; and
- there is a lack of involvement from the social partners and the community in vocational and technical education reform.

Purpose of Study

Education is a powerful force in building the new society in Albania: it can help its citizens meet the challenges of the new, emerging democratic society; develop in its labor force the talents, skills, and dispositions required in the new social and economic setting; and harmonize national aims with regional concerns. Thus, the purpose of this study was to determine the potential contribution of vocational and technical education to the future social-economic development of Albania.

Research Questions

In order to achieve the purpose of this study, the following research questions were asked:

1. To what extent do a group of panelists agree with statements that reflect contributions vocational and technical education programs can make to the future social-economic development in Albania?
2. Which statements reflect contributions that could have the greatest positive impact for the future social-economic development in Albania as seen by the panel of experts?

Significance of the Study

The results generated by this study should provide policy makers in Albania with useful information that can serve as a basis for vocational and technical education reform. This study will also provide an empirically derived listing of future oriented factors that have the potential

to impact positively on the vocational and technical education mission for the 21st century.

Finally the Modified Delphi Technique should serve as a meaningful research methodology that could be used by professionals in Albania. It should be of particular value to those interested in identifying the potential contribution of vocational and technical education to the future social-economic development needs in a particular locality, region, or country.

Limitations of the Study

This study is constrained by the following limitations.

1. Respondents in this study were limited to individuals who were identified by predetermined criteria.
2. The study was limited to investigating what “should” be as perceived by the experts.

Assumptions

For the purpose of this study, the following assumptions were made.

1. For Albania’s vocational and technical education reform to have an impact on social-economic development, the educational system has to take into account the culture, tradition, trends, and conditions in the country and region within the context of what is important.
2. Vocational and technical education students can experience the greatest gain when programs are linked to current and future needs assessment derived from the labor market and quality of life in the country and region.
3. The experts selected to participate in this study can identify the potential contribution vocational and technical education can make to the future social-economic development in Albania.

4. Consensus among the experts indicates areas of emphasis and focus that would be useful to educational planners and policymakers.

Definition of Terms

For purpose of this study, the following key terms have been defined.

1. *Consensus*: A view or stance reached by a group as a whole or by majority will (The American Heritage College Dictionary, 2002, 286)
2. *Delphi Technique*: "A social survey technique which involves polling experts and others for their prediction on important future demographic, political, economic, technological, and social trends" (Wilson, 1991, 1).
3. *Expert*: A person with a high degree of skill in or knowledge of a certain subject. Having or demonstrating great skill, dexterity, or knowledge as the result of experience or training. (The American Heritage College Dictionary, 2002, 482). The operational definition of expert as used by this study is an individual who has been deeply involved in vocational and technical education and the social-economic development of Albania.
4. *Economic development* is a particular system of organization for the production, distribution, and consumption of all the things human beings use to achieve a certain standard of living. Included in this process are (a) increasing the gross national product, total employment, and per capita income; (b) eradicating absolute poverty; and (c) expanding the supply of food, clothing, housing, medical services, education facilities, over the long term (Norton & Alwang, 1993).
5. *Modified Delphi Technique* is a technique for achieving consensus for a pre-prepared instrument that involves soliciting two or more rounds of opinions from a panel of experts. (Custer, Scarcella & Stewart, 1999)

6. *Non-Governmental Organizations (NGO)*: Social institutions operating in Albania and funded by sources other than government.
7. *Social development* is the orderly development of participation, interest and action by a group of people, for the purpose of articulating demands for change or resistance to change in the social order. A social development is therefore, the result of the desire of a group of people to find solutions for their own problems and to direct change according to their perceived needs. Social development articulates a change in the social order, which could include bringing about social, political, economic or cultural change. In many instances, social development confronts traditional institutions and can become a threat to the established order. In order to win adherents to their position, social development must educate people. Hence, an essential function of social development is education to change the hearts and minds of people (McMahon, 1999).
8. *Western Balkans* are Balkan countries excluding Greece and Turkey. (Slovenia, Croatia, Yugoslavia, Bosnia and Herzegovina, Albania, Macedonia, Bulgaria, and Romania).

Summary

Many researchers have recognized the role of vocational and technical education in the social-economic development of a country. Vocational and technical education is always very closely connected with a nation's demographic, cultural, social, economic, and political issues. Furthermore, as political, social, and economic conditions of a country change, vocational and technical education has to be reformed and refocused in new situations. The reform can also be affected by conditions outside national borders that have been characterized by regional development or by the changing patterns of political systems, trade, and competition.

This study sought to identify the potential contribution of vocational and technical education to the future social-economic development of Albania. In this chapter, an overview of the relationship between vocational and technical education and social and economic development has been presented. To further establish a need for this study, issues affecting this relationship in former communist countries were described in general as related to Europe, and in particular, to Albania.

Chapter 2

ALBANIA: AN OVERVIEW

In Chapter One, it was noted that there are clear expectations for the role of vocational and technical education (VTE) in the social-economic development of any country. It was also revealed that overall the system of VTE needs to be revised under the changing political, economic, and social conditions found in Albania as well as in the Balkan region. The descriptive information in this Chapter provides a background relating to the need for this study. Specifically, the country's history and culture, population, infrastructure, employment and unemployment, economic activity, educational system, and social problems as related to the purpose of this study are described.

History and Culture

The Republic of Albania is located on the western part of Balkan Peninsula between 40° and 43° north latitude. Albania's neighbors on the north and east are the former Yugoslavia (Montenegro, Kosovo, and FYROM) and Greece on the south. Italy lies on the west across the Adriatic and Ionian seas. The political borders, established in 1913 by the Great Powers, comprise a total land area of 28,750 square kilometers, about the size of Maryland. About 70% of the country is mountainous with rugged terrain (Zickel, 1994). The average altitude is 708 m, twice that of Europe (Muharremi, 1992).

The rugged topography and a wide range of altitudes make the climate vary substantially from region to region. The western part of the country has a Mediterranean climate, with dry, hot summers, and wet, warm winters. The eastern part is under the influence of continental air masses with cold and snow in the winter, but hot days during the summer. The average annual precipitation is high (about 1500mm) but unevenly distributed throughout the year.

Albania is well endowed with natural resources, including chromium, copper, iron, nickel, and petroleum. Traditionally these resources have been important sources of export earnings. The agricultural sector is relatively large by European standards, and about 60 percent of the population lives in rural areas.

During World War II (1939-45), the country was annexed by Italy (1939) and later occupied by Germany (1943). After November 1944, Albania experienced an uninterrupted period of strong centralist rule under Enver Hoxha, the unchallenged communist leader until his death in 1985. Centralism, in the Albanian context, meant both centralized planning and direction of the economy and central control of the political, social, and cultural life of the country and its people.

Albania's turbulent and long historical experience with repeated foreign invasions had instilled a strong sense of patriotic fervor and nationalism in its people and set the background for the fiercely independent foreign policy of the new government, reflected in dramatic shifts in Albania's foreign alliances. After the World War II, the political position of the Albanian Government was initially influenced by the Yugoslavs (1945-48), followed by the Soviets (1949-61), and the Chinese (1961-78). The break with Yugoslavia in 1948 was an outcome of Albanian's concern that Yugoslavia had plans to incorporate the country as its seventh republic. The alliance with the former Soviet Union was financially rewarding, but Albania was deeply committed to the Stalinist model of heavy industry led development and felt compelled to shun Soviet pressure to develop its raw material base. Following ideological and political tensions, the diplomatic and financial ties with the former Soviet Union were broken in 1961, and China became Albania's closest ally. However, after Mao's death in 1976, the Chinese-Albanian relationship suffered a political setback and by 1978, the break with China was complete.

Albania became totally isolated. In 1976 a new Constitution was adapted, which abolished all remaining private property and banned foreign aid, credit, and investment.

After Hoxha's death in 1985, Albania began to show an interest in emerging from its isolation and in improving the relations with the West. The collapse of the communist regimes in Bulgaria, Czechoslovakia, the former German Democratic Republic, Hungary, Poland, and Romania set the stage for the fall of the last bastion of Stalinist rule in Eastern Europe. However, it was not until the second half of 1990 that a democratization process began in Albania with the formation of opposition parties, and the first pluralistic elections were held in March 1991.

In the first year of transition (1992), the decline in all economic indicators continued, but one year later growth commenced. In early 1997, the state collapsed and political instability ensued. The collapse of massive pyramid financial schemes in 1997, followed by violent social unrest and dramatic political consequences, showed the limited social impact and the non-sustainability of such growth. In the space of a few months, Albania's progress was set back a number of years. In addition to deep internal difficulties, the conflict in Kosovo destabilized the situation in the Balkans and increased political tension inside the country.

Demography

According to official statistics in 2001, the Albanian population was estimated to be 3.35 million inhabitants, of which 51% are females National Institute of Statistics and Informatics, (INSTAT, 2001). The Albanian population is relatively young, with an average age of 28.6 years. The 0-19 year age group comprises 42% of the total population. Estimates compiled by INSTAT show that about 600,000 Albanians, mainly males, have emigrated. Internal population shifts have dramatically changed the urban to rural ratio. The urban population rose from 36% of the total population in 1989 to 43% in 2001(INSTAT, 2001).

The 2001 population census indicated that 93% of the population in Albania is of Albanian nationality, whereas Greeks, Romanian, Montenegrin, Macedonian, and Roma minorities make up the remaining 7%. Most minorities are located primarily in border regions, while the Roma groups are spread throughout the country.

Economic Situation

In order to possess an accurate picture of economic evolution in Albania between 1990 and 2002, it is necessary to understand the unique features of the Albanian economy in the preceding decades. Albania's decades of hermetic isolation relied in part upon placing an unusually high value on volunteerism in collective enterprises. The centrally controlled and planned economy regularly fell prey to dictatorial, impulsive and poorly rationalized decision making processes. Analysis of the period between 1951 and 1990 shows a continuous downward trend. The amount of total economic investment decreased sharply in the late 1970s, after Albania's cessation of economic relations with China, and reached its lowest level from 1986 - 1990. A severe infrastructure crisis during the 1980s brought about food rationing, high inflation, increasing unemployment and near stagnation. Real incomes per capita decreased severely (Ruli, 2001).

After 1990, the lack of political stability contributed to the difficult economic situation and eventually became an impediment to implementation of long-term strategies of economic reform. The government that emerged from the pluralist elections of 1992 introduced broad liberal economic reforms with elements of shock therapy. This policy brought about sharp falls in industrial production and led Albania into a deep depression which continued until 1994.

At the end of 1996, the economic situation in the country dramatically worsened again. This grew more evident in the beginning of 1997, with the financial collapse of a variety of

informal investment and banking schemes – known as “pyramid” schemes – that led the country into a new economic collapse and a period of severe social unrest (See Table 1). In many ways this was the second total economic collapse of the country within a space of a few years. Incredibly, these schemes attracted, within just a few years, the life savings of one third of Albania’s population – about 1.2 billion US dollars (Malaj & Mema, 1998).

Table 1.
Selected Indicators of Albanian Economy (1995-2000)

Year	1995	1996	1997	1998	1999	2000
GDP, million USD	2,422	2,689	2,294	3,058	3,801	3,722
GDP per capita, USD	745.5	819.1	690.2	911.6	1,122.0	1,094.4
Real GDP growth rate, %	13.3	9.1	-7.0	8.0	7.25	7.8
Industrial Production growth rate, %	5.4	15.8	-5.6	NA	NA	5.0
Annual inflation rate, %	6.0	17.4	42.07	8.69	-1.03	4.2
Annual unemployment rate	16.9	12.3	14.9	17.9	18.3	16.8
Average monthly gross salary, USD	69	83	64	76	87.5	104.6
Exports in millions USD	204.8	226.4	147.0	206.6	276.1	261.5
Imports in millions USD	713.7	923.3	632.6	838.9	1,157.0	1,088.7

Source: Bank of Albania, Ministry of Finance, INSTAT, 2001

In March 1999, the Albanian economy suffered a third shock due to the political crisis in neighboring Kosovo. Albanian’s generously came to the aid of 500,000 Kosovar refugees that were forcefully expatriated from their homes. The country’s dilapidated infrastructure was stretched quite thin as a result of this sudden and sizable influx of population. Without any real public means to cope with the situation, personal hospitality provided by individual Albanian’s and their families catered to the refugee’s needs.

Extraversion is another characteristic feature of the economic transition in Albania. This means that domestic consumption is higher than production levels (Malaj & Mema, 1998). The difference is covered by financial remittances from Albanians overseas, plus aid inputs from international donor organizations. Financial transfers from Albanian emigrants total about 400 –

450 million US dollars per year. Compared with other Eastern and Central European countries in economic transition, Albania's level of dependence on remittances is similar to East Germany (Malaj & Mema, 1998).

Instability is also reflected in the disparity of regional economic performance. Seventy percent of foreign investment has been disbursed in the Tirana - Durres axis, and in the western and southern regions of the country. Eighty percent of private and public enterprises are located in Tirana, the capital, or in the coastal and southern zones. Foreign investment and establishment of new domestic enterprises are the main factors that have determined the pace of job creation, income generation and improved standards of living in each district, and these developments have occurred in a highly uneven manner (UNICEF, 2000).

Infrastructure

The development of the economic infrastructure is of an essential importance to support growth and the economic development of the country through trade facilitation, the reduction of the production costs, and the increased level of the economy's competitiveness. The government's objective is gradually to create a network of modern infrastructure (telecommunications, energy, roads, ports, airports) and to set up effective systems for their management and maintenance.

Albania's infrastructure is considered critical due to its current highly depreciated condition in comparison to neighboring countries, and Albania's position in relation to the defining and designing projects for the pan-European transport network. For that reason, the infrastructure development projects in Albania have been considered of high priority in the frame of the Stability Pact.

In November 2001, the Albanian government launched the National Strategy for Socio-Economic Development. Using this document as a source, the objectives for improving the situation in Albania are summarized in the following sections.

Transportation

The strategic objectives of this sector include:

- establishment of a modern infrastructure network for an effective transport system, which will facilitate growth;
- increase efficiency of cost recovery in transport operations by reducing the demand on the state budget;
- adequate regulation of the transport operations with the aim of increasing economic efficiency, road safety, and environment protection; and
- promotion of the cooperation with the private sector and the development in the context of the Stability Pact.

The measures and policies to achieve these strategic objectives include:

- rehabilitation of the existing transport infrastructure and development of the regional transport links;
- commercialization of services and privatization of the public transport operations;
- establishment of an adequate regulatory and institutional framework;
- improvement of the transport information systems; and
- improved planning and management of the sector.

Improvement of the road transport system is a priority. The planned activities include:

- completion of rehabilitation and construction of the East-West and North-South national road corridors and their respective branches; and

- improvement of the urban and rural road infrastructure and road safety system (traffic lighting, road signs/markings, road traffic control).

Improvement of the railway transport system which will aim to finalize the Emergency Rehabilitation Program. This would include completion of the inventory renovation of passenger carriages, rehabilitation of Shkoder-Hani I Hotit railway line, and completions of the feasibility study and the detailed design for the railway link with Macedonia.

Improvement of the civil aviation transport which will focus on the construction of the new passenger terminal in Rinas airport, the implementation of the Air Traffic Control Master Plan, and the construction of a new taxiway and parking area for planes at Rinas airport. Furthermore, preparation of a feasibility study and a Master Plan for the development of the civil aviation transport in Albania and the development of local airports.

Potable Water and Sewage

Even though Albania is rich in water resources, the situation continues to be characterized by lack of access for urban and rural population to potable water and sewage systems and other local services. A slow implementation of policies and reforms in the field of public services with a concentration of the population in the suburban areas a critical overburdening of the infrastructure and the public services exist.

Energy

Albania possesses a large hydro-energy potential. It is estimated that only 35 percent of the resources have been used thus far, without including the country's resources in oil, gas, and coals (Albanian Government Report, 2001). The structural changes in the economy have had important implications for energy consumption. While gas and coal production has fallen perceptibly, the consumption of the population has increased. This has had its impact on energy

use. It is estimated that the household's consumption accounts for 35 percent of the total energy consumption and for about 55 percent of the total demand for electric power (Albanian Government Report, 2001).

The country's needs for energy are covered almost entirely from water resources. This makes Albania highly dependent on weather conditions. Under the current weather conditions, the imports and the domestic production cover only 57 percent of the domestic demand for energy (Albanian Government Report, 2001).

In view of current developments in the electricity sector and the difficult situation of the sector, the government is committed to take the necessary measures to improve the supply of electricity to consumers as soon as possible. The overall sector strategy will aim to ensure an adequate supply of electricity to all consumers through the use of alternative energy resources, a better administration of the energy resources of the country, expansion of the importing capacities, and a better balancing of the system.

Telecommunication

The global information infrastructure, based on new information and telecommunications technologies with the use of optic fibers and satellite communications, creates conditions for the large-scale development of new services in the fields of public administration, trade, banks, financial markets, distance education and health care. The inherited telecommunication services were incapable of coping with these new challenges.

Important developments in telecommunications during this period include the approval of the legislation for the regulation of the telecommunications activity and the partial liberalization of the sector, the introduction and development of Internet, and the stimulated involvement of the private sector in this industry.

As a result of the adopted measures, the level of penetration of the telephone lines during the past decade has increased at a satisfactory rate, from 5 lines per 1,000 inhabitants in the 1992-1993 years to 30.5 lines in 1999 (Albanian Government Report, 2001). The state company Albtelekom provides this service. The Albtelekom network is integrated into the world telecommunication network through transmission facilities with underwater and land optical fiber, such as Trans Balkan Line telecommunication corridor. The objectives for the development of the sector include deepening liberalization of the telecommunications sector, and expansion of services and improvement of quality.

Agriculture

In view of the big challenges confronting rural areas, the implementation of a national coordinated strategy for the agricultural sector is of special importance. The strategic objectives, aimed to be achieved in the future include: maintaining the growth rate of the agricultural and livestock production; increase the processing level of the agricultural, livestock, and fish products; and improvement of the conditions and the level of commercialization of agricultural and livestock products in the domestic and foreign markets.

Agricultural growth is expected to be driven by a more intensive increase of production and productivity of the agricultural and livestock enterprises in the coming years. This will occur through increased productivity, expanding the irrigation and drainage of the agricultural lands, and increased use of inputs and mechanization.

Maintaining the agricultural production growth rate will require revitalization of production in the main sub-sectors of the agricultural industry through sector programs. The aims are to increase access to production inputs and agricultural services, consolidate farms and the diversification of their activities, and improve the infrastructure and agricultural services.

Livestock is one of the main contributors to farm income (65 percent) and its importance is growing steadily (Albanian Government Report, 2001). In view of this rapid development, especially in the last three-four years with an increase productivity per head, priority will be given to: the establishment of a stable system of livestock production by encouraging farmers to establish and/or consolidate larger farms with 10-15 head of cows and 120-200 head of smaller livestock; balancing fodder production with livestock numbers through sustainable use and increased effectiveness of pastures, establishment of breed improvement centers and introduction of new breeds; consolidation of veterinary service and laboratory service; increase artificial cattle insemination at an annual average rate of 5 percent and establishment of breeding centers and application of cross-breeding in cattle and smaller livestock; and harmonization of veterinary legislation and legislation on foodstuff quality and hygiene with the European Union and World Trade Organization standards.

In the crop sector, priority in the coming years will be given to development of fruit growing, vineyards, and cultivation of vegetables in greenhouses and open fields. The areas cultivated with these crops have almost doubled in comparison with the first years of the transition. The cultivation of industrial crops, such as sunflower or other oil crops, will be revitalized. Priority measures for the period are: increase the number of fruit trees (fruits, citrus, olives) and areas with vineyards and glasshouse areas; introduction of new varieties with higher productivity and suitable for the climatic conditions; strengthened crop-sanitary control and enhanced crop protection; and increase support with credit for establishment and maintenance of new qualitative fruit plantations.

In general the use of mechanization, quality seeds, and valuable inputs is very low and this is reflected with low productivity rates. In this context, the main measures to be taken in the

next years will be: introduction of competitive schemes for the application of new technologies in production; restructuring and strengthening the institutions of control and certification of seeds and saplings; and support for the private sector of seed and sapling production.

The scientific research agricultural activity is being presently carried out by a network of 14 agricultural research institutions under the authority of the Ministry of Agriculture and Food, as well as by the country's universities, primarily Tirana Agricultural University. The extension service employs about 300 experts who give technical advice to farmers throughout the country. Many efforts have also been made for the establishment and consolidation of the control inspectorate system and foodstuff control laboratories. The priority actions for the future will be rehabilitation and strengthening of the agricultural research institutions, establishment of a national center of agricultural scientific research and advice, increase the role for applied research in accordance with needs of the farmers and involvement of beneficiaries in identification of research priorities, consolidation of advice service in all districts, the continued work for establishment of a national center of agricultural applied research and advisory research, promotion of "cost-effective" research, supply regional foodstuff control laboratories with the necessary material and laboratory equipment, and encouragement of efforts for partial cost recovery through delivery of paid services to customers.

The number of agencies giving small loans to the agricultural sector and non-farming activities in rural areas is presently very limited. They include rural credit funds and savings-credit funds supported by Rural Finance Fund and the Mountainous Area Financing Fund and some funds supported by the Irish Micro Credit League. Despite the good work by these agencies, they are unable to meet the growing need for rural credit. Measures to be taken in the coming years are the encouragement of banks to make their financial services available in rural

areas, and introduction and development of consolidated financial mediators as part of an extensive financial sector.

Only a small part of the domestic crop and livestock production is being presently processed in Albania. The agricultural industry accounts for no more than 5-8 percent of the GDP and employs about 5 percent of the national workforce. This sector is composed of about 200 small private enterprises. The investments in this industry in 1999 were estimated to be about 2.5 million dollars, or about three times more than in 1998 (Albanian Government Report, 2001). The largest investments have been made in the refreshing drink sector, olive oil, and processing of meat and milk, and these are coming entirely from the private sector. The priority actions of the government in the future are promotion of credit and rural micro credit schemes (savings-credit associations, etc.) and the attraction of foreign investments in this sector, the improved possibility to secure raw materials and enhanced quality of these materials, application of new techniques and technologies in this sector, approval and improvement of legislation on standards, quality, hygiene, and marketing.

The system and structures of marketing represent one of the weakest links in the trade of agricultural foodstuff products in Albania. Lack of information about prices and other elements of domestic and foreign markets, lack of compliance with the standards, inadequate packing and labeling, and the almost undeveloped marketing infrastructure, including procurement centers, cooling facilities, transport, wholesale and retail markets, are the main factors behind low competitiveness of Albanian agricultural products in markets. Therefore, priority actions will be construction and organization of wholesale markets in the districts of Tirana, Vlore, Korce, Lushnje, and Shkoder and the inclusion of beneficiaries in their management and operation, establishment of pilot procurement facilities for agricultural and livestock products and the

expansion of the information system on markets, the improvement and completion of legislation concerning norms of hygiene, labeling and standards, the preparation of projects for technical and financial assistance to export producers and establishment of a stakeholder network for export promotion, increased capacities of the structures of the Ministry of Agriculture and Food and service providers to improve economic and market analyses, to ensure that information is available to farmers and agro-business operators.

Tourism

The country's nature and ecology allow for the possible development of different kinds of tourism, and particularly for the development of medium, high, and elite tourism and facilities. There are two broad areas for tourism development: first, coastal zones, primarily the Adriatic coast starting from Velipoja to Vlora bay and the Ionian coast from Llogara to the Greek border; and second, interior zones, primarily lakes and mountains areas. Certain areas have been designated as Priority Tourism Zones, where all other economic activities are to be subordinated to tourism.

Investment ideas are tourism resorts, hotels, tourist villages and conference facilities; cultural centers for music and folklore festivals; rural tourism sustained by specialist tourism activities based on existing villages, lodges, mountain refuges and camping sites in rural and mountain areas; tours to archaeological sites and scenic areas; cruises and private yachting facilities; hunting and fishing tourism; and tennis centers.

Opportunities for tourism projects include refurbishment of hotels and restaurants currently owned and operated by state and private owners, development of beach resorts, hotels, tourist villages and attractions on the principal coastlines- the Adriatic and the Ionian coasts, and yachting marinas along the coast. The Albanian coast has the potential to be one of the yachting

centers of the Mediterranean, with first class facilities and back-up resources, creation of lake and mountain resorts particularly in the west and south of the country, high quality coach and minibus tours using good quality bed and breakfast accommodations, joint-ventures in ground handling, travel agencies, car rental and travel business as a whole.

Labor Market

Until 1989, the labor force consisted of the entire economically active population. Unemployment was officially an unknown phenomenon, although in reality it stood at 7 percent. Economic restructuring after the 1990s was followed by a decrease in the demand for labor together with the emigration of about one fourth of the working age population, with qualified people comprising a majority of this portion.

Estimates by INSTAT (2001) indicate that in 1999, 82 percent of the labor force, or 1,065,104 employees, held jobs. Nineteen percent worked in the public sector (administration & production), 10 percent in the private non-agricultural sector, and 71 percent in the private agricultural sector. This situation is distinctly different from 1989, when about 1,440,000 people were employed in the state sector, out of which 551,000 worked in agriculture.

In 1992, national unemployment stood at 27 percent. By 1999 this figure had fallen to 18 percent. Unemployment in Albania is usually long-term. In 1993, the long-term unemployment comprised 63 percent of the total unemployment figures, but most officials estimate that it is closer to 80 percent. Women and youth are most affected by unemployment. Twenty-one percent of women capable of working are unemployed and 60 percent of unemployed are under age 34 (UNICEF, 2000).

While unemployment is mainly an urban phenomenon, according to employment office records, underemployment is primarily a rural phenomenon. There are a large number of rural

families with limited access to arable land that are mainly supported by social assistance.

Underemployment is mainly characteristic of mountainous rural areas and is concentrated in northeastern Albania. Underemployment and high unemployment are also characteristics of rural areas that are overpopulated due to internal migration since 1990.

Unemployment is highest among the age group 16 – 34 years. This age group often lacks vocational skills and experience. The 16-34 age group made up 86 percent of the unemployment (UNICEF, 2000).

Education

Public administration of the education system in Albania consists of a number of institutional levels. The Central Level includes the legislative and executive bodies, as well as national institutions; namely, the Ministry of Education and Science and the institutions dependent on it such as The Institute of Pedagogical Studies and the Publishing House for School Textbooks. The Parliament and the Council of Ministers define the state policies and design the legislative initiatives, whereas the Ministry of Education and Science defines criteria for schools that will open, faculty teaching load, number of students per class, qualification criteria for faculty, and criteria students should satisfy to graduate. The local level consists of the District Directorate of Education. District Directorates of Education are dependent on the Ministry of Education and Science, and have the responsibility to assign the school's faculty, see to financial plans, and plan and monitor investments in education. They are responsible for the maintenance and administration of education facilities. The school level consists of the School Directorate, the Pedagogical Faculty, the Parent Councils, and the School Board.

Pre-university education includes the first level, which is the pre-school system of kindergartens. This level is not compulsory. Students are three-six years old and they attend

public or private kindergartens. The second level, or primary school, is compulsory and is organized in two cycles: the first cycle, four year program, the students are six-ten years old, and the second cycle, four year program, the students are 11-14 years old. At the end of the eighth grade the students earn a Leaving Certificate. The third level, or secondary education, consists in two main groups of schools, general education high schools and technical schools. This level is not compulsory. The majority of the students today attend general education high schools and only 15% attend technical schools. General education high school consists of a four-year program. At the end of the fourth year the students receive a Maturity Diploma. The last level is higher education. The higher education in Albania consists of eight universities, one academy, and one institute divided into departments.

Institutionally, vocational and technical education in Albania was started in 1922 (Konini, 2001). American educators founded the first technical school in Tirana. After World War II, technical education was developed under the influence of Russian system. Currently, the vocational education system consists of two parts: the first part is basic theoretical education and is administered by the Ministry of Education and Science. The second part covers vocational training, which is organized in seven centers that are administered by the Ministry of Labor and Social Affairs, along with vocational centers set up by private individuals or different NGOs.

A decrease in the number of vocational schools from 400 in 1990 (75 percent provided agricultural training), to 44 in 1999 has had an impact on the coverage of the service. Vocational education is divided into two streams. Three-year courses that aim to produce qualified workers necessary in the labor market, and five-year courses that prepare qualified technicians. Starting in 1993, Albania is working toward the reformation of vocational and technical education.

The establishment of a training system for adults in these seven established centers aims to better equip the labor force to face the free market with relevant knowledge and skills. These centers are located in Tirana, Durres, Shkoder, Vlore, Korçe, and Elbasan. The two vocational centers in Tirana have been successful in expanding the breadth of courses offered. The variety of courses offered in the other centers is limited. The vocational centers have a capacity to train about 6,000 persons per year. The duration of courses ranges from two - nine months depending on the subject. In spite of these efforts, especially in Tirana where the largest training capacities are concentrated, vocational education leaves much to be desired in terms of the adjustment of course content to labor market requirements. The scope of the courses is still quite narrow, with language and hairdressing courses being most popular - comprising about 70 percent of the total number offered. For the private sector, there are no data available, but it is estimated that the number of persons trained is no more than 15,000. The total number of students that attend vocational school courses is 15,000 and each year there are about 3,000 graduates. There are a total of 15 courses in different specialty areas such as hydraulics, tapestry, finance, electronics, hotels, and agriculture.

Vocational training centers are financially partly independent. They are allowed to charge tariffs for the services they offer and may use 90% of the revenue, of which approximately 50 percent must go toward investment. Qualification of trainees in these centers is done without standardization criteria. Almost all public and private vocational centers suffer from the lack of collaboration with the private sector. Improved coordination could in turn improve vocational school offerings and enrollment, as well as providing increased access to the skilled labor pool.

Social Safety Net

Before 1990, officially there was no unemployment in Albania. Despite the fact that vulnerability did exist, the state was completely unprepared to address it as witnessed by the fact that no programs or instruments were established to provide protection against severe need and social exclusion. Thus, as Albania entered into a difficult economic transition period, it had no capacity to provide even a minimum social safety net.

The social assistance program was created in 1993 in the context of a total legal and institutional vacuum. In that year, there were approximately 150,000 unemployed individuals who could not be provided with unemployment benefits. There were another approximately 150,000 unemployed that received some form of redundancy payment. Social stability was at risk, as within a short span of time, a considerable number of families would potentially find themselves with no living means at all. The amount of social assistance is determined by assessment of the number, age and the working capacity of family members in households that apply for the aid (UNICEF, 2000).

Personnel effectiveness within this sector has been affected by frequent political and bureaucratic changes. Overall, the professional level of this administration has suffered numerous setbacks and this has impeded progress toward the goal of poverty alleviation. At the local level, there is inadequate collaboration between the social assistance and employment offices. Long-term solutions for the reintegration of the poor through employment or vocational training have not yet been addressed.

Social Care

The social care program supports integration of the disabled and protection of orphans and elderly. Integration of the disabled program provides financial allowances for disabled

people and their caretakers, as well as free medical service for rehabilitation centers and special schools for the disabled. Statistics from INSTAT (2001) show that in June 2000 there were 38,460 disabled individuals and 5,400 care providers benefiting from this scheme. The program urges vocational education for disabled individuals through the application of differentiated payments according to disability and nature of skill. Besides this allowance, a small number of handicapped children benefit from a rehabilitation service at residential centers or day care and education service at specialized schools.

Employment Service

The first employment service dates back to 1991 and was further expanded in the years 1993-1995 when the Labor Code was promulgated and the National Employment Service was established. The employment service administers provision of unemployment benefits, job counseling, inter- mediation, and vocational/professional training courses through a network of 43 district offices and employment agencies.

Poverty in Albania

Poverty in Albania is multi-dimensional in character. It is represented not only by the unemployed or by families that live below the poverty line, but also by people that are deprived of the fundamental right of housing, substantial food, heating and clothing in winter, employment and education, a school near their homes and the possibility to attend it, access to health services, protection from robbery and violation, and protection of basic human rights. Though poverty is defined as equality in division of material goods among various population strata, "income" is actually the most significant indicator of inequality and poverty.

Based on that indicator and poverty alleviation policy, 149,000 families live below the official level of poverty (UNICEF, 2000). These families that are presently involved in social

assistance schemes have insufficient income. Twenty-four percent of the total population of Albania is affected by poverty.

All indicators refer to regional dimensions of poverty, that is north/south, village/town, mountainous and coastal zones. The level of economic poverty is higher in the north and northeast of Albania. This is due to limited employment opportunities and low income, mainly from agriculture.

The remote mountainous zones are characterized with a greater level of poverty than the zones nearer to towns; infrastructure and access to markets also affect economic poverty. Economic poverty is a common problem for new urban settlements created due to urban drift. Migration to areas of higher economic potential, especially Tirana and Durres, has brought about the creation of large illegal settlements of families that live in extreme economic and social poverty. The population of Tirana and its environs has been increasing at a very rapid pace. In addition, as these migrant families are not registered in the respective civil status office of their administrative unit, they are isolated and have no access to schools, health clinics, and social services. Unemployed youth with no hope become addicted to drugs, delinquency, and prostitution; poor children dropout of school and go out into the street to beg or look for a job; and violated women, exploited and threatened, yield to abusive situations with less resistance.

The groups at risk and the families in economic poverty are largely flexible in nature and various aspects of their vulnerabilities interact and have impacts upon each other. Women who have become objects of prostitution and trafficking are very often unemployed and live in poor families. At one time, drug abusers may also be victims of abuse and may be mothers of abandoned babies. The children of one-parent families live in economic poverty and are the category predisposed to abandon school or unwilling to work. Unemployed or illiterate youth

face the risk of social exclusion and become involved in criminality and high-risk behavior. Children with limited capability have no access to education, rehabilitation services, whereas youth and adults have no access to vocational education and employment in conformity with the type and level of disability.

Albania is gradually overcoming a critical economic situation, which has had an adverse impact on its social indicators. At the current rate of development and growth, new social problems are emerging. These problems are not linked only with poverty, although poverty is still a crucial factor.

A national map of social exclusion based on integrated indicators has been prepared which shows four distinct divisions. The first group is composed of districts in which the level of social problem is the highest. These are Dibra, Bulqiza, Kukesi, (the north east zone of Albania). This zone shows the highest poverty level and the lowest level of education and health services. The second grouping is composed of 19 districts, and includes Tirana and Shkodra. There are 14 districts in the third and fourth group. These districts consistently received low scores in all the social indicators (UNICEF, 2000). These statistics, aiming to demonstrate an overall picture of socio-economic conditions of Albania at district level, reveal the following:

- 1) social exclusion is a phenomenon, which can and should be assessed through analysis of the interplay between a number of different indicators, which have traditionally been viewed discretely,
- 2) in Albania the phenomenon of social exclusion shows a distinct geographic pattern with highest levels found in the east and north of the country along the borders with Macedonia and Kosovo with bands of progressively better conditions generally found as one moves toward the south and west, and

3) social policy makers should take these factors into consideration when designing strategies to combat poverty, exclusion, discrimination, and inequality.

Summary

The overview of Albania reveals that it is one of the Balkan's countries with a rich history and traditions. Turbulent historical experiences have had a strong influence in Albanian's societies. The population of Albania is reportedly very young, and there are more than a half million Albanians working in neighboring countries.

Albania is in an intense period of political, economic, and social reforms aimed at establishing a new democratic society. Economic sectors with greatest potential for development are tourism, agriculture, transport, construction, manufacturing, and energy. Sustained development however is dependent on the regional and international politic and economic situation. Different social problems exist in Albania, such as poverty and inequality, unemployment, underemployment, social exclusion, and illegal emigration; and Albanian society has a challenge to address these problems.

Education in Albania is in the reformation process. The linkage between economic and social development of the country and education has the potential to make a significant contribution to increasing the wealth and the morality of the nation. In recent years, questions that are related to the positive role that vocational and technical education can have on the country's economic and social development have become increasingly evident in the discussions.

Chapter 3

REVIEW OF RELATED LITERATURE

In this chapter a review of the literature focusing on the relationship of VTE with the social-economic development of a society is presented. The results of the literature review process are categorized into three sections. The first section examines the role of VTE and social-economic development within the context of developed and developing countries. The second section, Manpower and VTE reform, explores ways that VTE can impact the 21st century and the third section presents a review of the literature for the Delphi Technique as a research tool.

VTE and Social-Economic Development

The importance of VTE in the social-economic development of both industrialized and developing countries has been increasingly recognized through the years. Pollard (1988) articulately stated, "Linking education and social-economic development is easy. Unlinking them is hard. They are inseparable" (p.3). Economic development theory draws from a variety of disciplines. These disciplines include such areas as "economics, business administration, regional science, planning, political science, public administration, and psychology, to name a few" (Bingham & Mier, 1993). Social development theory also pulls from a variety of issues. Poverty reduction and inequality; democracy, human rights, and political stability; crime reduction; health and net population growth; and environment are some social issues correlated with education and especially with VTE (McMahon, 1999). All of these areas and others interplay to build an extremely complex association. Factors such as location, labor, training, resources, education, and infrastructure come together when shaping social and economic development plans. Manipulation of one variable in this relationship impacts other variables, in both

anticipated and unforeseen ways. Much has been written about national, regional, and international economies and how to enhance social-economic development. Nelson (1993) discussed two dominant schools of thought on regional development: development from above and development from below. Just as the names imply, development from above begins with worldwide demand that filters down to national and local levels, and development from below begins with local needs while also taking into account worldwide demand. The development from below model is the basis for local economic development. Its “objective is to tailor development patterns to fit regional character” (Nelson, 1993, p. 46). The complexity of social-economic development and the forces that shape it have been described in numerous books. The purpose here is not to completely explain it, but to provide a general understanding in some basic theories related to social-economic development. The process of developing a comprehensive social-economic plan is multifaceted and involves many groups with different areas of expertise. It is the time when theory, policy, and actual components such as employment, economic base, location, and resources come together. The question is how does education fit into this complex process and specifically what is VTE’s role in the development process.

Research shows that there is a strong correlation between economic growth and education. Countries with the highest incomes are also those where workers are most educated. About 98% of the adult population in high-income countries is considered to be educated. By contrast in the least developed countries, secondary education enrollment in 1997 was 19.3% (UNESCO, 2001). Also, the macro growth literature includes studies focusing on whether the level of schooling in a cross-section of countries is related to the countries’ subsequent GDP growth rates (Krueger & Lindahl, 1999). Jacob Mincer (1974) formulated the log-linear earnings-education relationship. He found that each additional year of schooling appears to raise

earnings by about 10% in the United States. The Mincer model implies that change in a country's average level of schooling should be the key determinant of income growth. Since the beginning of the century, economists and sociologists have sought to estimate the economic rewards individuals and society gain from completing higher level of schooling.

The rapid growth of scientific and technological development has made VTE a vitally important instrument in the education process, since VTE can contribute to social, cultural and economic development. VTE allows individuals to develop as full members of society and at the same time provides the basic prerequisite for further education. The main role that VTE plays in economic development is preparing a skilled workforce; and the main role in social development is preparing the future citizens of the society (UNESCO, 1987).

The democratization of VTE is another aspect of its role in social-economic development. Democratization of VTE means providing the largest possible number of people with access to VTE based on their own merits, abilities, and needs. The pressure of economic and social needs raises VTE's status and gives it a decisive role in the overall process of education. The contribution of VTE to democratization of the education system as a whole depends on; (a) its place and status within the education system, (b) the equivalence of VTE and general education, and (c) the social appreciation of VTE and of manual and vocational work as a whole (UNESCO, 1987).

In the Resolution of the General Conference of the International Labor Organization (2000), there were important conclusions concerning education and training and their roles in the social-economic development of societies. Using this resolution as a reference, these are some of the conclusions that support the relationship between VTE and social-economic development.

1. A critical challenge that faces human society at the start of the 21st century is to attain full employment and sustained economic growth in the global economy. Human resources development and education and training contribute significantly to promote the interest of individuals, enterprises, economy, and society. By making individuals employable and informed citizens, human resources development and training promote social inclusion. They also help individuals escape poverty and marginalization. The economy and society at large, like individuals and enterprises, benefit from human resources and training. Human resources development and training also underpin the fundamental values of society- equity, justice, gender equality, non-discrimination, social responsibility and participation.
2. Education and training are components of both the economic and social response to globalization. Education and training are a means to empower people, improve the quality and organization of work, enhance citizens' productivity, raise workers' income, improve enterprise competitiveness, and promote job security and social equity and inclusion.
3. Initial training develops further one's employability by providing general core work skills and the underpinning knowledge and industry-based and professional competencies, which are portable and facilitate the transition into the world of work. Lifelong learning ensures that the individual's skills and competencies are maintained and improved as work, technology, and skills requirements change; ensures the personal and

career development of workers; results in increases in aggregate productivity and income; and improve social equity. National and international strategies must be developed to support both initial and lifelong learning.

4. Education and training of high quality are major instruments to improve overall social and economic conditions and to prevent and combat social exclusion and discrimination. In order to be effective they must cover everyone, including disadvantaged groups. Therefore, they must be carefully targeted at women and persons with special needs, including rural workers, people with disabilities, older workers, the long-term unemployed, low-skilled workers, young people, and workers laid off as a result of economic reform programs. In addressing the needs of these groups, particularly of young people, access to a combination of formal, off-the-job, and workplace learning should be systematically offered and developed as it provides for effective learning outcomes and increases the chance of entering the labor market.
5. Education and training are a right for all. Governments, in cooperation with the social partners, should ensure that this right is universally accessible. It is the responsibility of all persons to make use of the opportunities offered. Education cannot be separated from training. Basic and secondary education is the foundation on which an effective vocational and technical education system should be built. Good-quality basic education and initial training, availability of adult and second-chance

education, qualified teachers, career guidance and job placement services, career counseling, and vocational and labor market information, all have a crucial role to play in human resources development.

6. For many countries in transition, the challenges are much more basic. Societies with massive debt crises will not be able to design, fund, or implement a modern VTE system. Much of the developing world lacks access to the physical infrastructure; electricity, telephones, computers, and Internet access. All of these shortages contribute to deprive citizens benefiting from the information revolution. Greater national and international efforts should be made to set up policies and programs and promote economic and social growth and develop their human talent.
7. The development of a national qualification framework is of interest to enterprises and workers as it facilitates lifelong learning, helps enterprises and employment agencies match skill demand with supply, and guides individuals in their choices of training and career. The framework should consist of the following elements: appropriate, transferable, and professional competency standards established by the social partners that reflect the skills required in the economy and public institutions, and a credible, fair and transparent system of assessment of skills learned and competencies gained, irrespective of how and where they have been learned. Every person should have the opportunity to have his or her experiences and skills gained through work, society, or formal and non-formal training assessed, recognized and certified. The framework should

also include a credible system of certification of skills that are portable and recognized across enterprises, sectors, industries, and educational institutions, whether public or private. The assessment methodology should be fair, linked to standards, and be non-discriminatory.

8. Trade unions and employer associations may also contribute to training by managing their own training institutions and providing education for their members. Also, the social partners should strengthen social dialogue and training, share responsibility in formulating education and training policies, and engage in partnerships with each other or with governments for investing in planning and implementing training. In training, networks of cooperation also include regional and local governments, various ministries, sector and professional bodies, training institutions and providers, and non-governmental organizations. Recent regional economic integration also brings a new dimension to social dialogue on training and the need for capacity building. There is a pressing need to raise this capacity by various means such as technical cooperation, public grants to trade union and employer organizations, and exchanging experience and best practices between countries. Additional efforts should be made for the benefit of developing countries. (p. 101-102).

Economic growth and social development of countries are invariably associated with large and sustained investments in vocational and technical education. Countries where citizens have the highest incomes are also those where workers are most educated. Individuals benefit from education and training, enterprises benefit from education and training, and finally, over and

above any economic considerations, education and training bring benefits to society. Human resource development and training underpin the fundamental values of society – equity, justice, gender equality, non-discrimination, social responsibility and participation of all in economic and social life.

Manpower and Vocational & Technical Education Reform

Structuring the VTE system to respond to economic and social changes is not a recent effort. However, the most recent developments have focused on preparing an educated, skilled, and motivated work force. Economists Murnane and Levy (1996) stated, “during the past 20 years, the skills required to succeed in the economy have changed radically, but the skills taught in most schools have changed very little” (p.3). However, the proliferation of advanced technologies and the phenomenon of globalization have altered the pattern of demand for manpower in both industrialized and developed countries (Kincheloe, 1999; Smith, 1995). Also, Lesler Thurow (1996) stated that the end of Communism, the shift from natural resource-based industries into man-made brainpower industries, the high technology necessary for a global economy, the world’s demography transformation, and the new economic game without a dominant economic power are all factors that will drive the worldwide economy in the coming years. Thus, without the skills to participate in a literate, technological world and the knowledge to transform their environment, people will remain on the margins of society, and society itself will lose their potential contribution for economic development (Haddad, 1999). The paradigm that the ability to innovate and produce ideas is more powerful than the ability to produce products, mine resources, or grow agricultural products, has created an increased interest in the link between education, human resources, and the economy (Blakely, 1997).

Human capital is “an accumulated stock of skills and talents, and it manifests itself in the educated and skilled workforce in a region” (Mathur, 1999, p. 205). Human capital does not represent capital in the traditional way. It is distinguished by its unique connection to man. Most economists today accept human capital theory as a significant contributor to economic growth. Human capital has its skeptics, but its true importance was confirmed when Theodore W. Shultz and Sir W. Arthur Lewis won the Nobel Prize in Economic Science for their research in this area (Alexander & Salmon, 1995). This award highlighted the significant role human capital played in the economy. Once this role was acknowledged, the question then becomes, what impacted human capital and the answer was education. “Education played a critical role in creating human capital, which contributes to production and economic growth just as physical capital, land and labor did” (Judson, 1998, p.337). Judson (1998) highlighted the need for a comprehensive plan and investment strategy involving all levels of education, but she recognized the significant role K-12 education played in laying the foundation for future economic growth. But, what are the skills required to compete in the new century? Murnane and Levy (1996) argued that new kinds of basic skills are required to compete in the global arena. These new skills include both hard and soft skills. Hard skills consisted of “basic mathematics, reading and problem solving activities at levels much higher than many high school graduates now attain” (p. xvii). Soft skills included “the ability to work in groups and to make effective oral presentations” as well as “the ability to use personal computers, and to carry out simple tasks like word processing” (p. xvii). According to Basu (1999), a multi-dimensional approach is necessary for VTE to meet its objectives. He includes: (a) more broad-based and flexible curriculum replacing skill-specific training programs; (b) integration of training and education in cooperation with business, industries, education, and private sectors; (c) life-long and flexible learning that enables professionals to

meet the higher and varied demand of the job; (d) knowledge of new technologies and skills in using them for training and education; (e) development of multilingual and other communication skills; (f) increased emphasis on development of work ethics, teamwork, human values, and other non-technical competencies like leadership, time management, environmental awareness; and (g) development of self-employment and entrepreneurial skills. Kelly (1991) further suggested that configuration's of the VTE country's system should (a) be diverse and mixed, (b) combine both public and private sector elements, and (c) involve cost sharing, on the job and institutional training, apprenticeships, and related components. In the new era, countries in transition are influenced by, rather than influencing output, price, and terms of trade. They do not set trends; they react to them (Kelly, 1991). So, VTE programs for countries in transition need to be flexible and adaptable to rapidly changing external conditions. Rapid change made accurate long-term prediction of skills demands, thereby necessitating a highly mobile and flexible workforce, one more quickly adaptable to new skills (Smith, 1995; Psacharopoulos, 1997).

To ascertain how to make VTE more effective and efficient, Middleton (1991) examined policy strategies designed for just that purpose. Drawing from World Bank studies, he suggested six viable strategies:

The first strategy to improve the effectiveness of vocational education and training should be based on the economic circumstances and level of institutional development of each country. Second, strengthening basic and academic or general secondary education has high priority in building the basic skills needed for productivity and the more advanced conceptual skills needed to make retraining to meet changing occupational requirements effective. Third, training by private employers and in the

proprietary training sector can be encouraged and improved because it reduces the burden on public budgets. Fourth, if the responsiveness of public training to market forces can be improved, it will raise both effectiveness in placing graduates in jobs and efficiency in the use of training resources. Fifth, sources of financing must be diversified to increase the contribution of the principal beneficiaries of training-employers and workers and sixth, improving the impact of training on the income of the poor requires broad strategies in which training plays a complementary role (Middleton, 1991, p. 8).

In most of the former communist countries, VTE programs were school-based programs. During the last 15 years this system became an object of criticism. Several authors (Gray, 1993; Watson, 1994, Gaskov, 2000) questioned the effectiveness and efficiency of the VTE system in these countries. Two main criticisms were leveled against school-based programs: first, VTE graduates could not find jobs in the occupational areas in which they were educated; and second, governments could not afford VTE with the average unit cost nearly twice the cost of general secondary education. Nevertheless, if VTE programs synchronized links with national and region development strategies, VTE could play a significant role in improving the countries respective economic and social problems. Thus the real challenge for a former communist country like Albania is to reform its VTE system and link it with the region's current and future social-economic developmental needs and trends.

A new type of individual - the multi-skilled worker with a broad but profound knowledge of science, the humanities and society, a narrow specialization in one field and the ability to work along with other specialists for a common cause - can be expected to characterize the 21st

century society. This individual would exemplify the type of education and training needed in future for a successful career. Thus, the reform of VTE would be focused on the need to upgrade the educational background of individuals to incorporate the emergence of a new body of knowledge, the growing interdependence of new technologies leading to the need for broad-based cross-disciplinary education and training for all occupations, and a continual upgrading of the responsibilities of lower levels of professional manpower facing a much higher expected levels of competence in the future.

Delphi Technique

Definition and Historical Background

“Delphi operates on the principle that several heads are better than one in making subjective conjectures about the future...and that experts will make conjectures based upon rational judgment rather than merely guessing...”(Weaver, 1971).

The objective of most Delphi applications is the reliable and creative exploration of ideas or the production of suitable information for decision-making. According to Helmer (1963), Delphi represents a useful communication device among a group of experts and thus facilitates the formation of a group judgment. The Delphi Technique has been found a most useful tool in setting priorities, establishing goals, and forecasting the future (Finch & Crunkilton, 1999). Dalkey (1969) states that the Delphi Technique was developed in order to make discussion between experts possible without permitting a certain social interactive behavior as happens during a normal group discussion which can hamper opinion forming. The Delphi method has been widely used to generate forecasts in technology, education, and other fields. Delphi is a group process and its goal is to help a group reach consensus. Rather than gathering people together for oral discussion, individuals provide written responses to questions. This is an

advantage when persons possessing the knowledge and expertise to address the problem are not in close proximity.

The technology forecasting studies, which eventually led to the development of the Delphi method, started in 1944. At that time General Arnold asked Theodor von Karman to prepare a forecast of future technological capabilities that might be of interest to the military. Arnold got the Douglas Aircraft Company to establish in 1946 Project RAND (an acronym for Research and Development) to study the “broad subject of inter-continental warfare other than surface.” In 1959, Helmer and fellow RAND researcher Rescher published a paper on “The Epistemology of the Inexact Sciences” which provides a philosophical base for forecasting (Fowles, 1978). The paper argued that in fields that have not yet developed to the point of having scientific laws, the testimony of experts is permissible. The problem is how to use this testimony and, specifically, how to combine the testimony of a number of experts into a single useful statement. The Delphi method recognizes human judgment as legitimate and useful inputs in generating forecasts. Single experts sometimes suffer biases and group meetings suffer from “follow the leader” tendencies and reluctance to abandon previously stated opinions (Fowles, 1978). In order to overcome the shortcomings, the basic procedure of the Delphi method with theoretical assumptions and methodological procedures were developed in the 1950s and 1960s at the RAND Corporation. Forecasts about various aspects of the future are often derived through the collection of expert judgment. Dalkey and Helmer developed the method for the collection of judgment for such studies.

The RAND team named the process, Delphi, after the site of the Greek oracle “where necromancers foretold the future using hallucinogenic vapors and animal entrails” (Fowles, 1978, p. 18). Legend says that the earth goddess Gaia long ago inhabited this site and was protected by

the Dragon Pythos. Apollo, the son of Zeus and Leto, slew the dragon and made himself master of Delphi. He was famous throughout Greece not only for his beauty, but also for his ability to foresee the future (Linstone, 1978). The RAND Corporation adapted the name Delphi for a procedure to obtain the most reliable consensus of opinion of a group of experts (Dalkey & Helmer, 1963).

The Basics of the Delphi Technique

The Delphi Technique is an in-group communication exercise among a panel of geographically dispersed experts. The technique allows experts to deal systematically with a complex problem or task. The essence of the technique is fairly straightforward. It comprises a series of questionnaires sent either by mail or e-mail to a pre-selected group of experts. These questionnaires are designed to elicit and develop individual responses to the problem posed and to enable the experts to refine their views as the group's work progresses in accordance with the assigned task. According to Fowles (1978), *structuring of information flow*, *feedback to the participant*, and *anonymity* characterize the Delphi Technique. Fowles (1978) describes the following steps for the Delphi Technique:

1. selection of one or more panels to participate in the exercise. Customarily, the panelists are experts in the area to be investigated;
2. development of the first round Delphi questionnaire;
3. transmission of the first questionnaire to the panelists;
4. analysis of the first round responses;
5. preparation of the second round questionnaire;
6. transmission of the second round questionnaire to the panelists;

7. analysis of the second round responses (Steps 5 to 7 are reiterated as long as desired or necessary to achieve stability in the results); and
8. preparation of a report to present the findings and conclusions.

Since the results of a Delphi Technique study depend on the opinions expressed by the Delphi panel, one of the most important steps in this process involves the selection of the panel of experts. Persons are usually considered experts after they have acquired a considerable amount of knowledge and experience in the field of inquiry. They may be identified in a number of ways: literature searches that reveal persons who have published works relevant to the topic of investigation; through institutions, such as universities and government or nongovernmental agencies; through referrals made by members of professional listservs; and by personal referrals from professionals within the field of investigation. Once a list has been formulated, prospective panelists should be personally contacted with a request for their participation in the study. The following written information should be provided to the prospective panelist; purpose of the inquiry, a brief explanation and outline of the Delphi process, expected time commitments of the panelist to complete all phases of the study, assurance of response anonymity, and an offer to make the results of the study available upon its completion. A panel size of 15 - 25 experts is typical for the Delphi process. Dalkey, Rourke, Lewis & Snyder (1972) reported there was a definite and monolithic increase in the reliability of group responses with increasing group size.

After the panel has been selected and confirmation of acceptance to participate has been received, it is time to send the first round of questions to the experts for their consideration. Delphi questions have been described as consisting of three general types, each requiring different kinds of expertise: 1-*forecasts* on the occurrence of future developments based on knowledge of cutting-edge research and technology; 2-*desirability* of some future state base on

moral, political, or social considerations; and 3-*policy* issues concerning the means for achieving or avoiding a future state. Formulation of questions is a critical stage of the Delphi process. According to Turoff (1975), precision and clarity of expression are vital to both the smooth execution of the questioning process as well as interpretation of responses from panel members. The first questionnaire could take several forms, but would most likely be one or two open-ended questions related to a broad problem or issue. The researcher, based on the information collected during the first round, develops the second questionnaire. During the second round, the second questionnaire asks participants to review all items identified by the first round of Delphi. From the original open-ended questions, the researcher develops a series of structured items. Participants rank-order items or use a Likert-type rating scale to establish preliminary priorities among items. Participants are invited to comment on their rationale for the rating and add additional items. During the third, and any additional rounds, the Delphi respondents re-rate each item. To assist in their consideration, participants are provided with statistical feedback related to their own rating on each item, how the group of participants rated the same item, and a summation of comments made by each participant. This feedback process makes the Delphi respondent aware of the range of opinions and the reasons underlying those opinions. Delphi rounds of questionnaires continue until a predetermined level of consensus is reached or no new information is gained (Dalkey, 1969). Uhl (1983) found that in most instances three iterations were enough and not enough new information was gained to warrant the cost of more iterations.

Perhaps the property that most characterizes the Delphi Technique in the minds of most people is the use of anonymity. Typically, in paper and pencil Delphi exercises there is no identification of who contributed specific material or who made a particular evaluative judgment

about it. Turrof & Hiltz (2000) in their article “Computer Based Delphi Processes” state some primary reasons for anonymity:

- individuals should not have to commit themselves to initial expressions of an idea that may not turn out to be suitable;
- if an idea turns out to be unsuitable, no one loses face from having been the individual to introduce it;
- persons of high status are reluctant to produce questionable ideas;
- committing one’s name to a concept makes it harder to reject it or change one’s mind about it;
- votes are more frequently changed when the identity of a given voter is not available to the group;
- the consideration of an idea or concept may be biased by who introduced it;
- when ideas are introduced within a group where severe conflicts exist in “interests” or “values,” the consideration of an idea may be biased by knowing someone with whom the individual agrees or disagrees produces it;
- the high social status of an individual contributor may influence others in the group to accept the given concept or idea; and
- conversely, lower status individuals may not introduce ideas, for fear that the idea will be rejected outright (Turrof & Hiltz, 2000).

In essence, the objective of anonymity is to allow the introduction and evaluation of ideas and concepts by removing some of the common biases normally occurring in the face-to-face group process.

Advantages of the Delphi Technique

In summary, the following statements highlight many of the advantages of using the Delphi Technique as a research tool.

1. It is a rapid and relatively efficient manner in which to acquire expert opinions (Dalkey, 1969).
2. If well designed, the procedure requires less effort of respondents than a conference (Dalkey, 1969).
3. The systematic procedures give the appearance of objectivity to the outcomes (Dalkey, 1969).
4. There is a sense of shared responsibility due to anonymity, which decreases social inhibitions (Dalkey, 1969).
5. Information can be obtained from a large group of experts that are geographically widely dispersed, and who may be of diverse background or live in remote locations (Strauss & Zeigler, 1975).
6. The researcher has an increased ability to focus the group's attention on the topic of interest (Weatherman & Severson, 1974).
7. It increases rational input (Skutsch & Hall, 1973).
8. It is a relatively inexpensive means of gathering group opinion.

Disadvantages of the Delphi Technique

Although many of the advantages of using the Delphi was just described, a researcher must also be aware of its disadvantages which follow.

1. There is evidence for questioning the accuracy of Delphi forecasts and its utility (Weaver, 1971)

2. The inductive analysis of responses to the initial questionnaire may lead to problems in interpretation.
3. The unproveable nature of a Delphi makes its utility subject to the influences of unforeseen events, such as scientific discoveries, politics, and events in nature (Linstone, 1978).
4. Lack of assurance of consensual agreement by panel members.
5. Motivating panel members to participate in the Delphi, and maintaining their interests in each subsequent round of questions.

The Modified Delphi Technique

The modified Delphi Technique is an abbreviated version of the Delphi Technique. It is efficient in both group decision-making situations and in other areas where order of magnitude estimates are required (Helmer, 1983). A Delphi study carried to the extreme degree could be an expensive undertaking in both time and money on the part of the researcher and the respondents. The “True” Delphi Technique involves three or more rounds with a panel of experts. In round one, the respondents are asked to develop the survey items (Linstone, 1978). Each of the following rounds to solicit input from the panel members is time consuming, making it increasingly difficult to keep an acceptable response rate.

The Delphi Technique has often been modified to meet specific needs and to avoid the problem of respondent attrition. It is common to limit the Delphi Technique to two rounds instead of three or more to conserve resources and to encourage continued participation by the respondents. In such cases the researcher prepares the statements for the first round or utilizes an existing instrument, which may eliminate one round of contacting the respondents (Uhl, 1983).

Reeves and Jauch’s (1978) study indicated that the value of more than two rounds in the

Delphi process was questionable since few changes of opinion occur beyond round two. The majority of the convergence is observed between round one and round two with minimum improvement in later rounds (Helmer, 1983).

Selected Studies in Education Utilizing the Delphi Technique

Copeland (1977) conducted a national study using the Delphi Technique to identify teacher competencies for evaluating industrial arts student teachers. The purpose of this study was to identify and gain consensus on triadic listings of teacher competencies for evaluating industrial arts students teachers – based on the converged opinion of three groups of industrial arts education teachers. The results of the study indicated that convergence of opinions occurred for each group of educators during the second and third rounds of the study. The results also indicated a high rate of agreement among the groups on the ranking of teacher competencies and that the rankings were reliable.

Reneau (1994) employed a four-round Delphi Technique to identify the vocational education's potential contribution to the future economic development of Belize. A panel of experts was chosen with four selected from each of four groups: government, non-governmental organizations, manufacturing, and export-oriented production. Each of the experts was asked to identify statements that vocational education should emphasize in the future so that it would contribute to future economic development in Belize. Frequency distributions, means, and variances were calculated for all statements. The criterion to determine whether consensus was achieved was defined as item variance being equal to or less than .75 on a 4-point scale.

Woolwine (1998) employed a three-round Delphi Technique study for her doctoral dissertation "Components of Effective Workplace Mentorship." Twenty-five panelists from seven different fields participated in this study. The first round was an open-ended questionnaire

instrument, and a Likert scale was used in the second and third rounds. Criteria of an effective workplace mentorship were retained in both rounds two and three if 80% of the respondents rated them “important” or “very important.”

Harris (2000) used a modified Delphi Technique in a study to identify the workplace basic skills needed by employees in small businesses. The modification consisted of using the 36 generic workplace skills identified by the SCANS Report to formulate the initial questionnaire. In the first round, panelists rated the importance of each skill needed by an entry-level worker on a Likert type scale ranging from 1-little importance to 10-extreme importance. In this round, panelists were given the opportunity to add skills on the list and rate them. In the second round, panelists were asked to consider the average group rating from the previous round before rating each skill again. A third round of data collection involved phone contacts with various participants to clarify comments and accumulate reasons why individual ratings differ significantly from the group average.

Scott (2002), in a study designed to determine competencies needed by business teachers to work with students with disabilities, utilized a two round modified Delphi Technique. The 16 members of a nominated Delphi panel were business education teachers who worked directly with students with disabilities. The researcher conducted a literature review and reviewed course work to develop the initial instrument in round one. The researcher formed a validation panel to provide information regarding the validity and appropriateness of the competencies. The Delphi panel responded to the competencies using a five point Likert-type scale. The levels of agreement or disagreement for each competency were reported as a mean score and standard deviation. It was determined that only competencies with a mean 3.5 or higher on the 5.0 scales would be reported as competencies the panel members agreed on as being important for teachers.

Summary

The literature cited in this study indicates that there is strong relationship between education and social-economic development. First, there is strong evidence that in this interaction there is a movement from an emphasis on labor, capital, and resources to one that emphasizes worker's knowledge, attitudes, and skills. Thus by compelling a change in social and economic factors, there is a need for reform and a need to change VTE programs.

In the second section of this chapter, the literature focused on how the reform of VTE should be accomplished in different conditions. Current practices and strategies in vocational and technical education were focused on planning, administering, and managing reformed programs. As national governments turned to VTE to stimulate further economic and social development, governments need to improve program quality, link programs to national economic development strategies, and include all stakeholders in the reform.

Social-economic development is clearly related to the educational programs of a country and vocational and technical education's role is crucial in this process. Conceptually, this study is based on the literature cited earlier in this Chapter that a relationship does exist between social-economic development, manpower and human capital investment, and reforms in education and more specifically in vocational and technical education. Furthermore, the research approach for this study is conceptually based on the review of literature where it is permissible in fields where scientific laws or exact science do not exist to use input from experts to generate information for use in future decision making.

With reference to Albania where changes were brought by the collapse of the Communist system and large reforms toward democracy and globalization, the technology push by government and private business to reorganize the system of human capital investment by

improving the way education is organized and delivered has become a high priority. As it was described in previous chapters, outdated and irrelevant curricula and ineffectiveness in adapting educational programs to real world experiences in Albania are causing VTE to not fulfill its potential role in human capital development. However despite these difficulties, government, policymakers, and international representatives support VTE because it possesses the potential to link education with employment, improve productivity, change the mind and the heart of people, and ultimately lead to social-economic development of the country. The potential role of VTE as perceived by leaders in governmental institutions, non-governmental institutions, Albanian personalities in education, and international experts in vocational and technical education provide the essence for this study.

The chapter concluded with an examination on the history and use of Delphi Technique as a research tool. Research cited also supported use of the Modified Delphi Technique to examine topics in education. The literature reported that the range of applications using this methodology is wide, and the results are satisfactory.

Chapter 4

METHODOLOGY

The purpose of this study was to determine the potential contribution of vocational and technical education to the future social-economic development of Albania. This chapter describes the design of the study, expert panel selection, instruments, data collection, and data analysis procedures. The Modified Delphi Technique was used to answer the following research questions:

1. To what extent do a group of panelists agree with statements that reflect contributions vocational and technical education programs can make to the future social-economic development in Albania?
2. Which statements reflect contributions that could have the greatest positive impact for the future social-economic development in Albania?

Identification and Selection of Panel Members

A key step in using the Delphi Technique is the identification and selection of the panel, since it is the panel's opinions and judgments that determine the outcomes of the study. Individuals who are recognized as experts in the area being studied should be selected for panel membership in Delphi research (Helmer, 1983; Dobbins, 1999). Identifying individuals considered experts in the relationship between VTE and social-economic development comprised the first step in the selection process. Helmer (1963) noted that in dealing with experts, there are basically three rules that should be followed: select your experts wisely; create the proper conditions under which they can perform most ably; and if you have several experts on a particular issue available, use considerable caution in deriving from their various opinions a single combined position.

In an effort to increase the validity of this study, groups from a cross-section of the country, including top-level educators and futurists who are involved in defining the needs for social-economic development in Albania, were utilized. A basic criterion for selecting experts was that they should be extremely knowledgeable in the area they represent. Given the current conditions in Albania and the purpose of this study, it was determined that the experts should represent four areas. These areas included; government service, non-governmental organization, Albanian educators, and international educators directly involved in VTE programs in Albania. For each of the four areas, the following specific criteria were used to identify experts for inclusion in this study.

1. Government service - Individuals employed by government who had a minimum of three years experience in a planning capacity within a particular ministry. Ministries involved in this study were: Ministry of Education and Science, Ministry of Labor and Social Affairs, Ministry of Economic Development, and Pedagogical Research Institute.
2. Non-governmental Organizations - Persons who are leaders or managers of non-governmental organizations involved in vocational education and training projects that address social-economic problems for a specific sector or population. Non-governmental organizations involved in this study were: Center for Economic and Social Studies, Small and Middle Enterprise (SME) Development Project, Center for Information Vocational Education and Training (CIVET), and TEMPUS Office Tirana (Trans-European Cooperation Scheme for Higher Education).
3. Albanian Educators – Knowledgeable, professional Albanians who currently have responsibility for educational reform in Albania.

4. International Educators - Non-Albanian professionals involved in different projects for reforming the VTE system in Albania, and/or representatives of different international educational programs in Albania during the last 10 years.

The Delphi Technique does not have a specific criterion for determining panel size (Linstone, 1978), but the size of the panel depends on the specific study. The panel of experts should be large enough to obtain the amount of expertise necessary to conduct the study effectively. The size of the panel should be kept at a minimum to reduce cost or overabundance of data that becomes cumbersome and yields no additional information for the study (Uhl, 1983). In conducting this study, a panel of seventeen experts was utilized. The panel composition grouped by area is presented in Appendix A.

Initial contact was made with each expert by personally delivering or e-mailing information that consisted of a cover letter stating the study's purpose, research questions, summary of the Modified Delphi Technique procedures, and a participation form for them to indicate their agreement to serve on the panel. This was followed with a letter thanking them for their responses.

Instruments

Three instruments were used in this study. The first instrument identified as Delphi Probe was open-ended. The other two instruments were identified as Delphi Round I and Round II.

Delphi Probe

Delphi Probe usually consists of either a prepared list of items to be evaluated or an open-ended questionnaire designed to develop the initial list of items. In this study, the Delphi Probe was developed as an open-ended questionnaire to promote thoughtful and creative responses from the panel. Experts were asked to list three to five statements about their perception of the

potential contribution that vocational and technical education could make to the future social-economic development of Albania. When the Delphi Probe was received from participants, each statement was carefully examined for clarity by the researcher. The statements were also examined for content and if two or more were found to be expressing parallel concepts only one was retained. After this step the researcher added statements from the fields not proposed by the experts. The researcher's statements were generated based on information and reports from European Training Foundation (ETF) and Vocational Education and Training (VET). When the list of statements was completed a review panel composed of two knowledgeable VTE professionals (one holds a doctoral degree in VTE with professional VTE teaching experience at the high school, community college, and university levels, and the second is a PhD candidate in VTE with VTE teaching experience at the secondary and post-secondary educational level) was formed to read statements for grammar, clarity, and accuracy. After this step, appropriate changes were made in the statements based on suggestions of the review panel. This resulted in the initial instrument for Round I of the study. A copy of Delphi Probe instrument is included in Appendix B.

Round I

The seventeen experts who agreed to participate as Delphi panel members were delivered a set of materials that consisted of a cover letter, copy of the initial instrument, and detailed instructions to assist them in making decisions. A nominal scale with verbal explanation, as opposed to a numeric continuum scale, clearly defined the scale for the panelists to use.

Panelists were asked to respond to the importance of each statement using a Likert-type scale. This is the most common scaling method used with the Delphi Technique, particularly on instruments with comprehensive lists which would make simple ranking difficult to accomplish

(Scheibe, Skutch, & Schofer, 1975). The scale was assigned with the most important statement receiving the highest numeric value and the least important statement receiving the lowest numeric value; therefore, there would be a positive correlation between highest numeric value and highest importance. The rating scale was as follows.

1 = Strongly Disagree (SD)

2 = Disagree (D)

3 = Neutral (N)

4 = Agree (A)

5 = Strongly Agree (SA)

Space was also provided for comments and the panel members were asked to return the completed instrument within one week. The complete Round I packet included:

1. Document A - Letter confirming the panel member's participation and outlining the participation timeline;
2. Document B - Participation Agreement; and
3. Document C - Round I Instrument

A copy of Round I instrument is included in Appendix C.

Round II

Panel members' responses to Round I were used to construct the Round II instrument. Means and standard deviations were computed for each statement. To assist in the development of sound conclusions and recommendations for the study, a criterion for consensus was pre-established for the data. All statements that had a mean of 3.5 or higher on the 5.0 scale, and a standard deviation equal to, or less than 1.00, were concluded to have reached a consensus and did not appear in the Round II instrument (Hill & Fowles, 1975; Dobbins, 1999). Panelists'

responses were entered into a database and Excel statistical software was used to determine which of the statements were most important, and whether consensus was reached.

In the second round, the researcher delivered or e-mailed the panel of experts materials that consisted of a cover letter thanking them for their support and continued participation, and the Round II instrument. The Round II instrument consisted of the statements for which there was not consensus among the panel members in Round I. In order that comparisons could be made between the respondents personal ratings and the mean ratings of the panel, the rating scale included the individual's prior ratings. Panel members were asked to reconsider their previous answers and revised them if they desired. Respondents were also asked to state the reasons for any changes in their ratings. Panel members were asked to return the instrument within one week. The researcher made personal or phone contacts with participants to clarify unclear or incomplete comments made on the questionnaires that might prove useful in data analysis.

Results of Round II instrument were used with the results of the Round I instrument to compile and rank by mean and standard deviation the list of statements on which there was consensus among the panel members. The Round II packet included:

1. Document D - Letter thanking panel members for their support and continued participation, explanations for the results from Round I, and general instructions for the Round II Instrument.
2. Document E - Round II Instrument.

Copy of the Round II instrument is included in Appendix D.

Analysis of Data

A standard analysis procedure has not been recommended when using a Modified Delphi Technique. However, most Delphi studies have analyzed data by using a combination of means,

median scores, and standard deviations (Dalkey, 1969; Uhl, 1983). For this study, the mean scores and standard deviations were used to analyze the findings. The levels of agreement or disagreement for each statement were reported as a mean score and standard deviation.

Summary

A description of the research methodology was presented in this chapter. Based on the nature of the research problem, the Modified Delphi Technique was identified as the appropriate technique to seek answers to the research questions.

A critical first step in this study was the design and development of the Delphi Probe. An open-ended questionnaire was completed by the experts, and statements added by the researcher formed the list of statements for the initial instrument. Through two rounds of iterations and information feedback, the panel of experts validated the initial instrument and rated the importance of the statements previously identified. The Delphi panel rated the instrument items on a five-point Likert-type scale, ranging from Strongly Disagree to Strongly Agree. Means and standard deviations were calculated for each statement.

Chapter V

FINDINGS AND ANALYSIS OF DATA

The Modified Delphi Technique was used to collect and analyze a panel of experts' opinions to achieve the purpose and to answer the research questions for this study. A 17 member panel of experts, representing government institutions, non-government organizations, Albanian educators, and international educators, plus the researcher, generated the list of statements. This chapter presents the data collected and reports the findings.

Round I

The round one packet of data collection materials was distributed to the 17 panelists. Participants responded to the list of 71 statements using a five-point Likert-type scale in which 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree with the statement as being a potential contribution to the social-economic development of Albania. The panel members were also given the opportunity to provide comments about each statement. Questionnaires from all 17 experts were returned within one week. The mean and standard deviation were calculated for each statement and Table 2 reports these findings. The statement means ranged from a high of 4.71 (Strongly Agree) to a low of 3.35 (Neutral). In order to meet the criteria previously set to be an important statement, the mean rating of the statement had to be 3.5 or above. Statement 38, with a mean rating of 3.35, was the only statement out of the 71 that did not meet this standard. Statement 38 was that "VTE institutions in Albania should develop regional councils to insure that VTE curricula adapt to regional demands."

For the expert panel to reach consensus on a statement, it was determined in advance that a statement must have a standard deviation equal to or less than 1.00. The standard deviations ranged from 1.05 to .44. Consensus was achieved for 69 of the 71 statements (Table 2).

Table 2

The Potential Contribution of Vocational and Technical Education to the Social – Economic Development in Albania as Viewed by the Expert Panel and Ranked by Mean Importance and Standard Deviation

N=17

Rank	Stat No	Statements	SD	D	N	A	SA	Mean ¹	SD
1	67	VTE should provide Albanians with proper skill sets to secure employment in the job market in Albania, thus making them productive members of Albanian society.	0	0	0	5	12	4.71	0.47
2	25	VTE must be relevant and responsive to Albania's changing needs over time	0	0	1	3	13	4.71	0.59
3	20	VTE should prepare young people to meet the employment needs of the country.	0	0	0	6	11	4.65	0.49
3	31	The VTE curriculum should be responsive to both the short and long term needs of specific industries and new technologies in Albania.	0	0	0	6	11	4.65	0.49
5	6	VTE planners should first consult with business and industry leaders in the private and public sectors so programs can be responsive to their needs.	0	0	0	7	10	4.59	0.51
5	70	VTE should retrain individuals with new skills, giving individuals the flexibility to respond to changes in the labor market.	0	0	0	7	10	4.59	0.51
7	58	VTE programs in Albania should be included as an integral part of the total educational system, not just as a response to problems plaguing the system.	0	0	1	6	10	4.53	0.62
8	11	VTE in Albania needs to upgrade school equipment used in the educational programs	0	0	0	9	8	4.47	0.51

Table 2 (continued)

Rank	Stat No	Statements	SD	D	N	A	SD	Mean ¹	SD
9	32	Closer cooperation should be encouraged between the business sector and educational institutions in establishing an apprentice system.	0	0	1	7	9	4.47	0.62
9	36	VTE programs must be updated often to reflect rapid changes in technology and work place practices.	0	0	1	7	9	4.47	0.62
11	28	Special attention must be given to providing women equal opportunity and access to specialized training.	0	0	2	5	10	4.47	0.72
11	45	VTE teachers should stay abreast of new technologies in the workplace through continual study and periodic on site visits or work assignments in industry.	0	0	2	5	10	4.47	0.72
11	53	VTE programs should hire highly qualified teachers with professional/occupational experience to instruct students in their practical skills.	0	0	2	5	10	4.47	0.72
14	37	A system of accrediting VTE programs should be established to insure that institutions modify their structures and curricula accordingly.	0	0	0	10	7	4.41	0.51
15	7	VTE should assist young people in establishing a healthy work ethic where there is mutual respect toward employers and employees.	0	0	1	8	8	4.41	0.62
16	3	Teamwork and group interaction skills should be a part of workplace skills acquisition for all students.	0	0	2	6	9	4.41	0.71
16	10	VTE in Albania needs staff development on a wider scale, including training for policy makers, educational administrators at all levels, representatives from employers and employees organizations, school managers, curriculum authors and teachers.	0	0	2	6	9	4.41	0.71

Table 2 (continued)

Rank	Stat No	Statements	SD	D	N	A	SA	Mean ¹	SD
16	44	VTE institutions should better manage education resources - plant, machinery, land, and consumables-to ensure meaningful training for students.	0	0	2	6	9	4.41	0.71
16	56	VTE instructors should be retrained in real world problem solving skills and in relevant industry competencies.	0	0	2	6	9	4.41	0.71
20	12	VTE in Albania needs a more flexible funding mechanism to provide greater freedom for decision-making and an opportunity for institutions to be more innovative.	0	0	3	4	10	4.41	0.80
21	1	VTE should prepare more Albanians to be self-sufficient through self-employment and family business.	0	1	1	5	10	4.41	0.87
22	55	VTE should develop a long-range strategic plan for Albania.	0	1	2	3	11	4.41	0.94
23	9	VTE in Albania should develop new curricula with the aim of providing training for a range of broad based occupations, particularly with new sectors of economic activity such as banking, finance, tourism, and food processing.	0	0	1	9	7	4.35	0.61
24	39	VTE should be more widely offered in Albania.	0	0	2	7	8	4.35	0.70

Table 2 (continued)

Rank	Stat No	Statements	SD	D	N	A	SA	Mean ¹	SD
25	17	Graduates of VTE programs should be aware of the following concepts: quality, productivity, efficiency, standards, and value of money as applied to the business sector.	0	0	3	5	9	4.35	0.79
25	71	VTE can play a role in conserving and promoting some of the traditional skills that particularly reflect the unique Albanian culture and traditions.	0	0	3	5	9	4.35	0.79
27	27	VTE program planners should be aware of the government's strategies and priorities for social-economic development so that VTE programs can reflect government policy.	0	1	1	6	9	4.35	0.87
28	29	VTE programs should target adults and early school leavers with "hands on" and home environment learning to reduce the number of unskilled members of the national workforce.	0	0	1	10	6	4.29	0.59
29	43	VTE institutions should work with industry leaders in order to secure work opportunities for trainees/graduates of programs.	0	0	2	8	7	4.29	0.69
29	13	VTE programs in Albania have to integrate functions of "brain and hand" in the workplace by forming multi-task teams of multi-skilled workers responsible for their own work.	0	0	2	8	7	4.29	0.69
31	2	Planning, goal setting, and positive decision-making should be included in the curriculum of all VTE programs.	0	0	3	6	8	4.29	0.77
31	69	VTE should provide skills that can lead to employment, which in turn, sustains a productive society and higher standard of living and quality of life for everyone.	0	0	3	6	8	4.29	0.77

Table 2 (continued)

Rank	Stat No	Statements	SD	D	N	A	SA	Mean ¹	SD
33	21	Local education institutions should create an appropriate environment where young people can fulfill their learning needs and career goals.	0	0	4	4	9	4.29	0.85
33	60	Assure that management training becomes a focal point throughout the VTE program with emphasis on “I hear I forget, I see I remember, I do I understand.”	0	0	4	4	9	4.29	0.85
35	5	VTE institutions should be developed or strengthened to fulfill the needs of predetermined economic regions/zones within the country, and in the country as a whole.	0	1	2	5	9	4.29	0.92
36	65	VTE should provide practical skills to prepare Albanians to enter the market place as technicians, mid-level managers, and entrepreneurs, as well as the capacity/capability to adopt to fast changing circumstances in a technology oriented society.	0	0	0	13	4	4.24	0.44
37	54	VTE in Albania should evaluate all programs for effectiveness and terminate ineffective programs, or provide guidelines for their improvement.	0	0	2	9	6	4.24	0.66
37	66	VTE should provide technical training to help meet Albania’s infrastructure needs in communications, utilities, transportation and construction, which are the building blocks of socio-economic development of Albania.	0	0	2	9	6	4.24	0.66
39	23	Given the vastly growing hi-tech world around us, students now need to be literate and sufficiently broad in their knowledge of information technology and related sciences to meet the growing employment demands.	0	0	3	7	7	4.24	0.75

Table 2 (continued)

Rank	Stat No	Statements	SD	D	N	A	SA	Mean ¹	SD
39	24	VTE should prioritize potential alternatives to serve the needs of Albania in terms of future macro economic plans.	0	0	3	7	7	4.24	0.75
39	33	VTE programs should be multi-purpose in scope so that students become the beneficiary of allied related trade skills, which will enhance their employability.	0	0	3	7	7	4.24	0.75
42	35	VTE should offer experienced employees an opportunity to obtain the certification needed for career advancement.	0	0	2	10	5	4.18	0.64
42	59	VTE should incorporate skill training at a high level, especially in computer literacy and information and communication technologies in order to propel the country forward in its ability to compete globally.	0	0	2	10	5	4.18	0.64
44	61	Include self-esteem and leadership training as an integral part of the VTE program so that the trainees consider themselves professional leader - managers by the time they graduate.	0	0	4	6	7	4.18	0.81
44	47	VTE programs should insure that program quality measures meet international standards.	0	1	1	9	6	4.18	0.81
44	49	VTE should establish guidance and counseling services in order to help students to select and pursue meaningful careers.	0	0	4	6	7	4.18	0.81
44	4	VTE programs in Albania should focus on students developing business management skills to reduce small business failures	0	1	1	9	6	4.18	0.81

Table 2 (continued)

Rank	Stat No	Statements	SD	D	N	A	SA	Mean ¹	SD
48	26	Long term planning should be conducted to forecast accurately labor skill needs of the country.	0	1	2	7	7	4.18	0.88
48	62	Performance based objectives should be used as an integral part of the curriculum, assuring that the training of the students relates directly to their future job opportunities.	0	0	5	4	8	4.18	0.88
50	51	VTE institutions should recognize the benefits of working together, sharing resources and ideas, and establishing mechanisms for solving common problems.	0	1	2	8	6	4.12	0.66
51	15	VTE should encourage the development of effective communication skills.	0	0	3	9	5	4.12	0.70
52	52	VTE programs should provide the flexibility for students to pursue both academic and VTE courses simultaneously without difficulty.	0	2	2	5	8	4.12	1.05 [*]
53	18	VTE can expose young people to the “way things work,” by teachers who through their own actions can instill pride in quality, productivity, and efficiency through good use of their limited time, energy, and resources.	0	0	4	8	5	4.06	0.75
54	16	The development of an attitude of taking pride in and responsibility for one’s own work should be strongly encouraged in the VTE curriculum.	0	1	4	5	7	4.06	0.97
55	34	VTE programs should follow up graduates continuously, once they join the workforce, to ensure that the skills acquired are being utilized.	0	0	4	9	4	4.00	0.71
56	14	VTE should be used as an opportunity to foster and develop critical and creative thinking skills and comprehension skills in students.	0	0	5	7	5	4.00	0.79

Table 2 (continued)

Rank	Stat No	Statements	SD	D	N	A	SA	Mean ¹	SD
56	22	VTE programs should reflect, where possible, the entire spectrum of vocational educational needs within a particular sector, for example tourism - tour guides, tour operators, receptionists.	0	0	5	7	5	4.00	0.79
56	46	VTE administrators should educate students, parents, and communities on the advantages of vocational and technical training.	0	0	5	7	5	4.00	0.79
59	19	VTE programs should focus on developing production line operators so they may have knowledge and appreciation of overall production goals and objectives.	0	1	4	6	6	4.00	0.97
60	42	VTE articulation should provide a smooth transition from technical schools to the university level.	0	1	2	11	3	3.94	0.75
60	48	VTE institutions should require programs to network and/or work closely with organizations to introduce students to the world of work.	0	1	2	11	3	3.94	0.75
62	68	VTE should assist Albanians in setting up their small own businesses, thus enabling them to participate in local, regional, and international markets.	0	1	3	9	4	3.94	0.83
63	57	VTE should include basic life skills (conflict resolution, self-awareness and control, family life and civic education) as an integral part of vocational and technical education.	0	1	5	5	6	3.94	0.97
64	30	VTE should assist in the development of a good work ethic, which includes respect for authority and respect for co-workers.	0	2	3	6	6	3.94	1.03*
65	50	VTE should develop a unified organization to deal with and solve problems related to at-risk youth.	0	1	4	8	4	3.88	0.86
66	40	VTE should develop a national system of articulation with higher-level education within the Albanian educational system (community college level).	0	0	6	8	3	3.82	0.73

Table 2 (continued)

Rank	Stat No	Statement	SD	D	N	A	SA	Mean ¹	SD
67	41	VTE's goal should be to produce graduates who can demonstrate to society that their studies lead to successful careers.	0	0	7	6	4	3.82	0.81
68	8	Albania needs to establish a vocational education and training council to provide policy advice and improve inter-ministerial cooperation.	0	1	5	7	4	3.82	0.88
69	64	The Department of Distance Learning at the University of Tirana should support VTE institutions with teacher training courses.	0	2	3	8	4	3.82	0.95
70	63	VTE institutions should explore with the Department of Distance Learning at the University of Tirana for offering on line different courses and training modules.	0	1	8	6	2	3.53	0.80
71	38	VTE institutions in Albania should develop regional councils to insure that VTE curricula adapt to regional demands.	0	3	8	3	3	3.35**	0.80

¹Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

* Panelists did not reach consensus. Standard deviations were greater than 1.0.

** Panelists did not view this statement as important. Mean was less than 3.5.

The two statements where experts did not reach consensus (Table 2) were number 30 “VTE should assist in the development of a good work ethic, which includes respect for authority and respect for co-workers,” with a standard deviation of 1.03 and number 52 “VTE programs should provide the flexibility for students to pursue both academic and VTE courses simultaneously without difficulty,” with a standard deviation of 1.05.

Round II

Statements 30 and 52 did not meet consensus in Round I and were the only two items that were included in Round II. Materials for Round II were e-mailed to the 17 panel members. The questionnaire used in this round differed from the Round I questionnaire in that it contained the individual’s ratings and the mean ratings of the expert panel from Round I. The panelists were asked to review their previous ratings in view of the group’s responses. Members of the panel whose ratings differed from the group were provided the opportunity to offer comments to justify their ratings. The panelists rated the two statements using the same Likert-type scale used in Round I. All the panel members completed the questionnaire within two weeks. The results of Round II questionnaires are included in Table 3. The means for statements 30 and 52 were 3.94, and 3.88 respectively, which indicated agreement with the statement, but the standard deviations for statements 30 and 52 were 1.09 and 1.05 respectively, still indicating a lack of consensus by the panel. Panelists were given the opportunity to add any comments in Round II as they reevaluated their ratings. For statement 30, “VTE should assist in the development of a good work ethic, which includes respect for authority and respect for co-workers,” two different opinions emerged from the group of experts. The first opinion expressed that it was really important for VTE in Albania to emphasize the development of a good work ethic, especially where respect and cooperation with authorities and co-workers are concerned. These experts

Table 3

Statements Reflecting The Potential Contribution of Vocational and Technical Education to the Social-Economic Development in Albania Where Experts Did Not Reach Consensus
N=17

No	Statements	SD	D	N	A	SD	Mean ¹	Standard Deviation [*]
30	VTE should assist in the development of a good work ethic, which includes respect for authority and respect for co-workers.	0	3	1	7	6	3.94	1.09
52	VTE programs should provide the flexibility for students to pursue both academic and VTE courses simultaneously without difficulty.	0	3	1	8	5	3.88	1.05

¹Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

* Panelists did not reach consensus. Standard deviations were greater than 1.0.

rated this statement as Agree or Strongly Agree. The second opinion emerging was that some experts agreed with the need for good work ethic, but not with the focus of its definition on respect for authority and co-workers. Respect should be towards the rule of law and basic human rights. Thus, these experts rated this statement as Don't Agree. For statement 52, "VTE programs should provide the flexibility for students to pursue both academic and VTE courses simultaneously without difficulty," also resulted in different opinions from the panel. The first opinion was that it is vital that VTE students have a sense of equality, and have opportunities to pursue their future careers and the VTE curriculum should assure them of opportunities in both areas. Experts with this feeling rated this statement as Strongly Agree or Agree. The other opinion was that a student pursuing academic and VTE studies simultaneously would likely give emphasis or divert more attention to academics over VTE. Panelists were of the opinion that the combination of academic and VTE could tend to weaken the effectiveness of VTE programs. These experts rated this statement as Don't Agree.

Research Questions

Question One

To what extent do a group of panelists agree with statements that reflect contributions vocational and technical education programs can make to the future social-economic development in Albania? When the Delphi Probe was completed, 71 statements emerged as having potential contributions to the social-economic development in Albania. After two Delphi Rounds, 68 statements remained. For statement 38, the panel's response indicated consensus but they were "neutral" in its contribution to the social-economic development in Albania, thus that statement "VTE institutions in Albania should develop regional councils to insure that VTE curricula adapt to regional demands," was eliminated from Round II because it was viewed as not

- Linkages 9 statements
- Values and Work Ethics 5 statements
- Communication and Analytical Skills 4 statements

List of statements grouped by themes and ranked by mean importance is summarized in Table 4. Means were calculated for each theme and were ranked and reported in Table 5. VTE's Planning Procedures and Policy had a mean 4.32 and was ranked first, Program and Institutional Development had a mean 4.31 and was ranked second, Values and Work Ethics had a mean 4.28 and was ranked third, Productivity had a mean 4.22 and was ranked fourth, Communication and Analytical Skills had a mean 4.09 and was ranked fifth, and Linkages had a mean 4.04 and was ranked sixth.

Four of the seven highest ranked statements (means over 4.50 Table 2) indicating a strong agreement for which consensus was achieved were related with the theme "VTE's Planning Procedures and Policies." These four statements were number 6 "VTE planners should first consult with business and industry leaders in the private and public sector so programs can be responsive to their needs," number 20 "VTE should prepare young people to meet the employment needs of the country," number 25 "VTE must be relevant and responsive to Albania's changing needs over time," and number 31 "The VTE curriculum should be responsive to both the short and long term needs of specific industries and new technologies in Albania." Two statements, number 58 "VTE programs in Albania should be included as an integral part of the total educational system, not just as a response to problems plaguing the system," and number 70 "VTE should retrain individuals with new skills, giving individuals the flexibility to respond to changes in the labor market" were related to the theme of "Program and Institutional Development," and one statement number 67 "VTE should provide Albanians with proper skill

sets to secure employment in the job market in Albania, thus making them productive members of Albanian society” fell in the theme of “Productivity.” The highest mean rating (4.71) and the lowest standard deviation (.47) of all the 68 statements was statement 67 “VTE should provide Albanians with proper skill sets to secure employment in the job market in Albania, thus making them productive members of Albanian society.” There were 58 statements with the mean over 4.0, indicating a high level of agreement among the panelists for the majority of statements. The five lowest ranked statements for which consensus was achieved, but still indicating an agreement by the panel as important contribution that VTE could make to the social-economic development in Albania were related with the role of the Department of Distance Learning at the University of Tirana in VTE (63, 64), the need to establish an inter-ministerial VTE council (8), and the articulation of VTE with the higher education in Albania (40).

Table 4

List of Statements Grouped by Themes and Ranked by Mean Importance and Standard Deviation

Table 4.a Theme: *VTE's Planning Procedure and Policy*

Stat No	Statements	SD	D	N	A	SA	Mean	SD
25	VTE must be relevant and responsive to Albania's changing needs over time	0	0	1	3	13	4.71	0.59
20	VTE should prepare young people to meet the employment needs of the country.	0	0	0	6	11	4.65	0.49
31	The VTE curriculum should be responsive to both the short and long term needs of specific industries and new technologies in Albania.	0	0	0	6	11	4.65	0.49
6	VTE planners should first consult with business and industry leaders in the private and public sectors so programs can be responsive to their needs.	0	0	0	7	10	4.59	0.51
36	VTE programs must be updated often to reflect rapid changes in technology and work place practices.	0	0	1	7	9	4.47	0.62
37	A system of accrediting VTE programs should be established to insure that institutions modify their structures and curricula accordingly.	0	0	0	10	7	4.41	0.51
12	VTE in Albania needs a more flexible funding mechanism to provide greater freedom for decision-making and an opportunity for institutions to be more innovative.	0	0	3	4	10	4.41	0.80
55	VTE should develop a long-range strategic plan for Albania.	0	1	2	3	11	4.41	0.94

Table 4.a (continued)

Stat No	Statements	SD	D	N	A	SA	Mean	SD
39	VTE should be more widely offered in Albania.	0	0	2	7	8	4.35	0.70
27	VTE program planners should be aware of the government's strategies and priorities for social-economic development so that VTE programs can reflect government policy.	0	1	1	6	9	4.35	0.87
2	Planning, goal setting, and positive decision-making should be included in the curriculum of all VTE programs.	0	0	3	6	8	4.29	0.77
5	VTE institutions should be developed or strengthened to fulfill the needs of predetermined economic regions/zones within the country, and in the country as a whole.	0	1	2	5	9	4.29	0.92
54	VTE in Albania should evaluate all programs for effectiveness and terminate ineffective programs, or provide guidelines for their improvement.	0	0	2	9	6	4.24	0.66
23	Given the vastly growing hi-tech world around us, students now need to be literate and sufficiently broad in their knowledge of information technology and related sciences to meet the growing employment demands.	0	0	3	7	7	4.24	0.75
24	VTE should prioritize potential alternatives to serve the needs of Albania in terms of future macro economic plans.	0	0	3	7	7	4.24	0.75
26	Long term planning should be conducted to forecast accurately labor skill needs of the country.	0	1	2	7	7	4.18	0.88
22	VTE programs should reflect, where possible, the entire spectrum of vocational educational needs within a particular sector, for example tourism - tour guides, tour operators, receptionists.	0	0	5	7	5	4.00	0.79
40	VTE should develop a national system of articulation with higher-level education within the Albanian educational system (community college level).	0	0	6	8	3	3.82	0.73
8	Albania needs to establish a vocational education and training council to provide policy advice and improve inter-ministerial cooperation.	0	1	5	7	4	3.82	0.88

Table 4.b Theme: *Program and Institutional Development*

Stat No	Statements	SD	D	N	A	SA	Mean	SD
70	VTE should retrain individuals with new skills, giving individuals the flexibility to respond to changes in the labor market.	0	0	0	7	10	4.59	0.51
58	VTE programs in Albania should be included as an integral part of the total educational system, not just as a response to problems plaguing the system.	0	0	1	6	10	4.53	0.62
11	VTE in Albania needs to upgrade school equipment used in the educational programs.	0	0	0	9	8	4.47	0.51
28	Special attention must be given to providing women equal opportunity and access to specialized training.	0	0	2	5	10	4.47	0.72
45	VTE teachers should stay abreast of new technologies in the workplace through continual study and periodic on site visits or work assignments in industry.	0	0	2	5	10	4.47	0.72
53	VTE programs should hire highly qualified teachers with professional/occupational experience to instruct students in their practical skills.	0	0	2	5	10	4.47	0.72
10	VTE in Albania needs staff development on a wider scale, including training for policy makers, educational administrators at all levels, representatives from employers and employees organizations, school managers, curriculum authors and teachers.	0	0	2	6	9	4.41	0.71
44	VTE institutions should better manage education resources - plant, machinery, land, and consumables-to ensure meaningful training for students.	0	0	2	6	9	4.41	0.71
56	VTE instructors should be retrained in real world problem solving skills and in relevant industry competencies.	0	0	2	6	9	4.41	0.71

Table 4.b (continued)

Stat No	Statements	SD	D	N	A	SA	Mean	SD
9	VTE in Albania should develop new curricula with the aim of providing training for a range of broad based occupations, particularly with new sectors of economic activity such as banking, finance, tourism, and food processing.	0	0	1	9	7	4.35	0.61
21	Local education institutions should create an appropriate environment where young people can fulfill their learning needs and career goals.	0	0	4	4	9	4.29	0.85
60	Assure that management training becomes a focal point throughout the VTE program with emphasis on “I hear I forget, I see I remember, I do I understand.”	0	0	4	4	9	4.29	0.85
35	VTE should offer experienced employees an opportunity to obtain the certification needed for career advancement.	0	0	2	10	5	4.18	0.64
59	VTE should incorporate skill training at a high level, especially in computer literacy and information and communication technologies in order to propel the country forward in its ability to compete globally.	0	0	2	10	5	4.18	0.64
49	VTE should establish guidance and counseling services in order to help students to select and pursue meaningful careers.	0	0	4	6	7	4.18	0.81
62	Performance based objectives should be used as an integral part of the curriculum, assuring that the training of the students relates directly to their future job opportunities.	0	0	5	4	8	4.18	0.88
50	VTE should develop a unified organization to deal with and solve problems related to at-risk youth.	0	1	4	8	4	3.88	0.86
64	The Department of Distance Learning at the University of Tirana should support VTE institutions with teacher training courses.	0	2	3	8	4	3.82	0.95

Table 4.c Theme: *Productivity*

Stat No	Statements	SD	D	N	A	SA	Mean	SD
67	VTE should provide Albanians with proper skill sets to secure employment in the job market in Albania, thus making them productive members of Albanian society.	0	0	0	5	12	4.71	0.47
1	VTE should prepare more Albanians to be self-sufficient through self-employment and family business.	0	1	1	5	10	4.41	0.87
17	Graduates of VTE programs should be aware of the following concepts: quality, productivity, efficiency, standards, and value of money as applied to the business sector.	0	0	3	5	9	4.35	0.79
29	VTE programs should target adults and early school leavers with “hands on” and home environment learning to reduce the number of unskilled members of the national workforce.	0	0	1	10	6	4.29	0.59
69	VTE should provide skills that can lead to employment, which in turn, sustains a productive society and higher standard of living and quality of life for everyone.	0	0	3	6	8	4.29	0.77
65	VTE should provide practical skills to prepare Albanians to enter the market place as technicians, mid-level managers, and entrepreneurs, as well as the capacity/capability to adopt to fast changing circumstances in a technology oriented society.	0	0	0	13	4	4.24	0.44
66	VTE should provide technical training to help meet Albania’s infrastructure needs in communications, utilities, transportation and construction, which are the building blocks of socio-economic development of Albania.	0	0	2	9	6	4.24	0.66
33	VTE programs should be multi-purpose in scope so that students become the beneficiary of allied related trade skills, which will enhance their employability.	0	0	3	7	7	4.24	0.75

Table 4.c (continued)

Stat No	Statements	SD	D	N	A	SA	Mean	SD
47	VTE programs should insure that program quality measures meet international standards.	0	1	1	9	6	4.18	0.81
4	VTE programs in Albania should focus on students developing business management skills to reduce small business failures	0	1	1	9	6	4.18	0.81
19	VTE programs should focus on developing production line operators so they may have knowledge and appreciation of overall production goals and objectives.	0	1	4	6	6	4.00	0.97
68	VTE should assist Albanians in setting up their small own businesses, thus enabling them to participate in local, regional, and international markets.	0	1	3	9	4	3.94	0.83
41	VTE's goal should be to produce graduates who can demonstrate to society that their studies lead to successful careers.	0	0	7	6	4	3.82	0.81

Table 4.d Theme: *Linkages*

Stat No	Statements	SD	D	N	A	SA	Mean	SD
32	Closer cooperation should be encouraged between the business sector and educational institutions in establishing an apprentice system.	0	0	1	7	9	4.47	0.62
43	VTE institutions should work with industry leaders in order to secure work opportunities for trainees/graduates of programs.	0	0	2	8	7	4.29	0.69
51	VTE institutions should recognize the benefits of working together, sharing resources and ideas, and establishing mechanisms for solving common problems.	0	1	2	8	6	4.12	0.66
18	VTE can expose young people to the “way things work,” by teachers who through their own actions can instill pride in quality, productivity, and efficiency through good use of their limited time, energy, and resources.	0	0	4	8	5	4.06	0.75
34	VTE programs should follow up graduates continuously, once they join the workforce, to ensure that the skills acquired are being utilized.	0	0	4	9	4	4.00	0.71
46	VTE administrators should educate students, parents, and communities on the advantages of vocational and technical training	0	0	5	7	5	4.00	0.79
42	VTE articulation should provide a smooth transition from technical schools to the university level.	0	1	2	11	3	3.94	0.75
48	VTE institutions should require programs to network and/or work closely with organizations to introduce students to the world of work.	0	1	2	11	3	3.94	0.75
63	VTE institutions should explore with the Department of Distance Learning at the University of Tirana for offering on line different courses and training modules.	0	1	8	6	2	3.53	0.80

Table 4. e Theme: *Values and Work Ethic*

Stat No	Statements	SD	D	N	A	SA	Mean	SD
7	VTE should assist young people in establishing a healthy work ethic where there is mutual respect toward employers and employees.	0	0	1	8	8	4.41	0.62
3	Teamwork and group interaction skills should be a part of workplace skills acquisition for all students.	0	0	2	6	9	4.41	0.71
71	VTE can play a role in conserving and promoting some of the traditional skills that particularly reflect the unique Albanian culture and traditions.	0	0	3	5	9	4.35	0.79
61	Include self-esteem and leadership training as an integral part of the VTE program so that the trainees consider themselves professional leader - managers by the time they graduate.	0	0	4	6	7	4.18	0.81
16	The development of an attitude of taking pride in and responsibility for one's own work should be strongly encouraged in the VTE curriculum.	0	1	4	5	7	4.06	0.97

Table 4.f Theme: *Communication and Analytical Skills*

Stat No	Statements	SD	D	N	A	SA	Mean	SD
13	VTE programs in Albania have to integrate functions of “brain and hand” in the workplace by forming multi-task teams of multi-skilled workers responsible for their own work.	0	0	2	8	7	4.29	0.69
15	VTE should encourage the development of effective communication skills.	0	0	3	9	5	4.12	0.70
14	VTE should be used as an opportunity to foster and develop critical and creative thinking skills and comprehension skills in students.	0	0	5	7	5	4.00	0.79
57	VTE should include basic life skills (conflict resolution, self-awareness and control, family life and civic education) as an integral part of vocational and technical education.	0	1	5	5	6	3.94	0.97

Table 5

Themes Ranked by Means

Theme	Number of Statements	Theme's Mean
VTE's Planning Procedures and Policy	19	4.32
Program and Institutional Development	18	4.31
Values and Work Ethics	5	4.28
Productivity	13	4.22
Communication and Analytical Skills	4	4.09
Linkages	9	4.04

Summary

The purpose of this study was to determine the perceptions of an expert panel on the potential contribution of VTE to the future social-economic development in Albania. The research methodology consisted of a two-round Modified Delphi Technique preceded by an initial probe round. The probe was used to develop a list of statements related to vocational and technical education contributions to social-economic development. There were 71 statements identified for inclusion in the Round I questionnaire.

The Round I packet, containing detailed instructions and the 71 statements identified in the probe round, was delivered to panel members with instructions for rating each statement on a five-point scale of importance. Each statement's rating was analyzed to compute the mean and standard deviation. Statements with a mean 3.5 or higher were declared important and statements with a standard deviation 1.00 or less were declared in consensus. There were 69 statements that reached the consensus criteria during the round one with only one (number 38) receiving a neutral rating while all others were rated as important.

The Round II instrument, containing instructions and two statements (numbers 30 and 52), which did not reach consensus in Round I, was delivered to panel members for re-rating across the same five-point scale of importance. The panel of experts still did not reach consensus for these two statements after Round II.

In order to gain a better perspective of the implications that the statements might have on future VTE programs, a content analysis was conducted for the 68 statements and the mean for each theme was calculated. Six thematic areas were identified. The themes with the three highest importance ratings were for the statements centered on Planning and Policy for VTE Programs, Program and Institutional Development, and Values and Work Ethics.

Chapter VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter includes the summary, conclusions, and recommendations of the study. The major sections are an overview of the study, research procedure, summary of findings, conclusions, and recommendations.

Overview of the Study

The Problem

Prior to 1989, VTE in Albania was designed to suit the context of a centrally planned economy. Under the communist system, VTE was tailored to the needs of large state companies that had low levels of innovation and productivity and that employed large number of personnel. Furthermore, areas such as crafts, commerce, banking, accountability, and insurance had remained underdeveloped. Since 1989, political, economic, and social changes have been fundamental. Logic dictates that the educational system in general, and vocational and technical education in particular, should refocus its approach to human resource development in this new environment. In different reports prepared by European Training Foundation, International Labor Organization, and World Bank, there was significant consensus about the major issues facing the VTE sector in Albania. Some of these issues were:

- lack of program relevance or responsiveness given local, regional, and national economic objectives;
- rigidity within VTE's decision-making operating system combined with uncertainty about the number and types of employment and their related skills required by the nation's industrial sectors, both now and into the near future;

- demonstrative low levels of both internal and external efficiency in most VTE institutions, combined with an apparent reluctance to become involved in strategic planning to develop paths to solve these issues;
- lack of a clear political message clarifying VTE as an investment in the country's social-economic future leading to employment/self employment opportunities, poverty alleviation and industrial growth; and
- lack of coordinating mechanism within an effective VTE system to encourage and manage the growth of various forms of training delivery mechanisms (private and public) occurring throughout the country.

The government of Albania remains committed to the development of the social-economic conditions making use of the country's natural resources and human potential. However, a major problem is that planning for future development of Albania's human potential has been fragmented.

The Purpose of the Study and Research Questions

Education is a powerful force in building the new society in Albania: it can help its citizens meet the challenges of the new, emerging democratic society; develop in its labor force the talents, skills, and dispositions required in the new social and economic setting; and harmonize national aims with regional concerns. Thus, the purpose of this study was to determine the potential contribution of vocational and technical education to the future social-economic development of Albania.

In order to achieve the purpose of this study, the following research questions were asked:

1. To what extent do a group of panelists agree with statements that reflect contributions vocational and technical education programs can make to the future social-economic development in Albania?
2. Which statements reflect contributions that could have the greatest positive impact for the future social-economic development in Albania as seen by the panel of experts?

Research Procedure

This study was conducted using a Modified Delphi Technique to identify and prioritize statements related to vocational and technical education potential contributions to the social-economic development of Albania. The study was accomplished through solicitation of responses from a 17 member panel of experts. The panel consisted of individuals representing government service, non-government organizations, Albanian educators, and international educators involved in different educational projects in Albania in the last ten years.

The initial Delphi probe was designed to generate a list of areas in which vocational and technical education might possibly contribute to future social-economic development in Albania. Responses provided by the panel members and the statements added by the researcher were edited and organized into 71 statements.

In Round I, the panelists were asked to rate the 71 statements for importance according to a five-point Likert rating scale. To reach more accurate conclusions and recommendations for the study, the criterion for group consensus was established prior to study. All statements that had a mean importance of 3.5 or higher on the 5.0 scale, and a standard deviation equal to, or less than 1.00, were concluded to have been important and have reached consensus by the panel. These statements would not appear in the Round II instrument. A detailed set of instructions accompanied all questionnaires.

The Round II instrument consisted of two statements for which there were not consensus among the panel members in Round I. In order that comparisons could be made between the respondents' first ratings and the mean ratings of the panel, the instrument included the individuals' prior ratings. Panel members were asked to reconsider their previous answers and revise them if they desired. Respondents were also asked to state the reasons for any changes in their ratings.

The Research Findings

Seventy-one statements relative to vocational and technical education potential contributions to the social-economic development of Albania were identified. Sixty-eight statements met the importance criteria (mean 3.5 or higher) and the consensus criteria (standard deviations 1.00 or less) in Round I. There were two statements in Round I on which the panel did not reach consensus, thus these statements appeared in Round II and the panel of experts still did not reach consensus. These two statements were "VTE should assist in the development of a good work ethic, which includes respect for authority and respect for co-workers" and "VTE programs should provide the flexibility for students to pursue both academic and VTE courses simultaneously without difficulty." The third statement was judged non-important by the panel but consensus was reached for this statement in Round I, and thus it was not included in Round II. The statement was "VTE institutions in Albania should develop regional councils to insure that VTE curricula adapt to regional demands."

The sixty-eight statements on which the panel of experts agreed as important and reached consensus were rank ordered according to their means of importance. A content analysis of the ranked statements revealed that statements clustered around common themes. The three top themes in order of ranked mean importance were VTE's Planning Procedures and Policy,

Program and Institutional Development, and Values and Work Ethics. Statements in each theme were ranked by the mean importance.

For the theme VTE's Planning Procedure and Policy, experts agreed that VTE must be relevant and responsive to Albania's changing needs over time and prepare young people to meet the employment needs of the country, and educational planners must be knowledgeable of governmental strategies for social-economic development so that human resource development programs can reflect government policy. Furthermore, the planning process must be carried out in consultation with both public and private sector involvement. This collaborative planning process will help ensure that vocational and technical education programs are relevant and responsive to Albania's changing needs.

For the theme Program and Institutional Development, experts agreed that VTE in Albania must respond to market demand, and training and retraining individuals with new skills. VTE programs in Albania should be included as an integral part of the total educational system, not just as a response to problems plaguing the system. VTE should be demand-driven and focused on available and projected job demands. VTE institutions in Albania need to upgrade school equipment and create an appropriate environment where students can fulfill their learning needs. Albania needs to develop a system for VTE teacher training as an integrated element of the overall VTE reform.

For the theme Values and Work Ethics, experts agreed that VTE in Albania should assist in the development of workplace skills through teamwork and group interaction. VTE should include self-esteem and leadership training as integral part of the program. The development of an attitude of taking pride in and responsibility for one's own work should be strongly encouraged in the VTE curriculum.

The seven highest ranked statements (means over 4.50), indicating a strong agreement for which consensus was achieved, were statement numbers 67, 25, 20, 31, 6, 70 and 58. Four of these statements were related with the theme “VTE’s Planning Procedures and Policies.” These four statements were number 6 “VTE planners should first consult with business and industry leaders in the private and public sector so programs can be responsive to their needs,” number 20 “VTE should prepare young people to meet the employment needs of the country,” number 25 “VTE must be relevant and responsive to Albania’s changing needs over time,” and number 31 “The VTE curriculum should be responsive to both the short and long term needs of specific industries and new technologies in Albania.” Two statements, number 58 “VTE programs in Albania should be included as an integral part of the total educational system, not just as a response to problems plaguing the system,” and number 70 “VTE should retrain individuals with new skills, giving individuals the flexibility to respond to changes in the labor market” were related to the theme of “Program and Institutional Development.”

The highest mean rating (4.71) with the lowest standard deviation (.47) of all the 68 statements was statement 67 “VTE should provide Albanians with proper skill sets to secure employment in the job market in Albania, thus making them productive members of Albanian society.” This statement reflects the essence of VTE’s role in the social-economic development of Albania.

Although still viewed as important, the five lowest ranked statements for which consensus were achieved were related with the role of distance learning in Albania (63, 64), the need to establish an inter-ministerial VTE council (8), and the articulation of VTE with higher education in Albania (40).

Conclusions

The focus of this study was on what contributions VTE might make to the social-economic development of Albania. As such, the findings of this study focused on changes that should be considered if VTE is to be an effective educational program. Based on the results of this study, several conclusions can be derived.

Any improvements or changes made in the current VTE program in Albania will be a very complex and long process. Since the panel was in agreement with the importance of almost all statements, efforts to change the current situation will involve many people, agencies, and organizations all working together for the development of an effective VTE program that will contribute to the social-economic development of Albania. This process will require clear leadership of the respective ministries, and systematic participation of all stakeholders developing a sense of ownership of and commitment to the reforms among them who must sustain them.

Fundamental changes are needed at the national level in the policies and procedures for offering VTE programs if this educational program is to have a positive impact on social-economic development in Albania. This would involve changes in the philosophy and commitment of government leaders as well as business and industry on VTE's role in the development process. Increased awareness of the importance of VTE for the future social-economic development of Albania will be imperative and the government must not only provide the necessary resources to the sector, but also provide the leadership needed to make a potentially promising framework workable. This conclusion is consistent with earlier findings and policy recommendations for Albania offered by the European Training Foundation, International Labor Organization, and World Bank.

It is important to establish VTE's rightful place in the educational system in Albania. VTE curricula and programs that develop skills in students to address critical labor shortages will be viewed as complementary to the achievement of the academic goals of the educational system. The introduction of a new curriculum philosophy and a new concept of VTE curriculum is a long-term strategy, and can only be implemented gradually. VTE must assist in the development of new workplace skills, teamwork and group interaction abilities, self-esteem, leadership training, and a positive attitude of taking pride in one's own work that is vitally needed in a country which is moving from a dictatorial system to a democracy. While some progress has been made to accomplish these goals, much more needs to be done and with a higher priority.

The Modified Delphi Technique was found to be effective in prioritizing the importance of vocational and technical education contributions to the social-economic development of Albania. It can be concluded that a panel of experts drawn from different institutions and agencies, knowledgeable Albanians, and international people involved in vocational and technical education in Albania can achieve consensus when attempting to set priorities for the future growth of VTE programs.

Since similar problems and situations exist in other Balkan and Eastern European countries, the results of this study may be applicable to countries within this region. Problems as changing the nature of curriculum from being education driven to more demand driven, involving industry representatives in a systematic way, integrating their different reform initiatives into an overall education and training policy framework, and determining the roles and functions assigned to different players in the system are common challenges in all these countries.

Recommendations

Recommendations for Application

The results of this study should be distributed to the Ministry of Education and Science and the Ministry of Labor and Social Affairs, the two key ministries for any changes in the current VTE programs. The Ministry of Education and Science should take the lead in developing, implementing, and supervising the country's strategy and framework for revising VTE to meet the future workforce needs. These policy changes should be developed as a collaborative effort among the other ministries and public and private sector institutions that are responsible for VTE programming.

A national workshop inviting policy makers, legislators, and representatives from Vocational Education and Training, European Training Foundation, International Labor Organization, and other NGOs be held to present and discuss the appropriate legislation and government leadership that is needed for the enhancement of VTE in Albania. Since the findings of this study showed that almost all statements have a potential contribution to the social-economic development in Albania, there is urgent need for all stakeholders to collaborate if real progress is to be made in VTE reform. Top ranking statements in the theme VTE's Planning Procedure and Policy could frame the topics for this workshop.

The Ministry of Education and Science must take the lead in assisting local VTE institutions in Albania in developing institutional frameworks for the involvement of the private sector and other non-governmental organizations in improving learning experiences. Establishing closer communications and better cooperation during the whole process of institutional development would facilitate institutions in implementing more effective educational practices by helping students gain necessary hands-on experience in the work environment and an

appreciation of market place demands. Also, the development of a VTE teacher training system as an integrated element of the overall VTE reform will help stimulate a higher quality of program and institutional development.

International assistance for VTE programs has been provided in Albania for the last 10 years. The funds for these projects have not always been used in the most effective ways. Findings of this study offer ideas to the Ministry of Education and Science and the Ministry of Labor and Social affairs for the preparation of proposals based on research findings that VTE can contribute to the social-economic development in Albania. Submission of these types of proposals would be of interest to international donors that have interests in funding projects aimed at the social-economic development of Albania.

Recommendations for Further Research

This study should be replicated in other East European countries that have similar social-economic conditions as Albania. The European Training Foundation and International Labor Organization reports cited in Chapters I and III noted those former communist states' educational institutions and programs reflect the legacy of previous political system rules with regard to education and training. It is very important for those countries to respond to rapidly changing economic circumstances and to prepare for the future through human resource development with these new conditions. Such studies could provide valuable directions for the development of VTE programs in their countries and verify if the results of this study are generalizable to other countries.

Future research should be conducted that builds on the results of this study to determine the appropriate delivery system for future oriented vocational and technical education in Albania. The investment in vocational and technical education and the returns of that investment should

be of primary importance. Further empirical evidence would guide investment choices as to type of programs, demographic location, level of schools (secondary or community college level), programs jurisdiction, and if VTE should be the responsibility of the Ministry of Education and Science or another ministry.

Finally, the Modified Delphi technique has been found as useful tool in setting priorities and establishing goals for planning VTE programs in Albania. Other East European countries are experiencing similar rapid and radical changes that have never happened before. Modified Delphi as a research technique should be considered as a potential research methodology for other studies in the Balkan region.

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Appendix A
Composition of Delphi Panel

Composition of Delphi Panel

Each member selected to serve on the final panel meets the criteria established in Chapter IV. The experts are drawn from the four sectors outlined below:

Government Service (4 members)

1. Dr. Maksim Konini
Head of the Department of VTE
Ministry of Education and Science
Tirana, Albania

2. Dr. Ahmet Mancellari
Advisor to Deputy Minister
Co-author of the National Strategy for Socio-Economic Development in Albania
Ministry of Economic Development
Tirana, Albania

3. Mr. Luftim Gazheli
Director of National Employment Service
Ministry of Labor and Social Affairs
Tirana, Albania

4. Alqi Mustafaj
Head of VTE Department
Institute of Pedagogical Studies
Tirana, Albania

Non – Governmental Organizations

(4 members)

1. Dr. Ilir Gedeshi
Director
Center for Economic and Social Studies
Tirana, Albania

2. Mr. Aurel Grabocka
Director
Small and Middle Enterprises (SME)
Korca, Albania

3. Dr. Vaso Qano
Director of Trans-European Cooperation Scheme for Higher Education (TEMPUS)
Office
Tirana, Albania
Former Chief of Ministers' of Education Cabinet
Albanian Expert for Education in the Stability Pact

4. Ms. Edlira Muedini
Managing Director
CIVET 2000, Centre for Information Vocational Education and Training
Tirana, Albania

Albanian Educators (4 members)

1. Dr. Ilia Mikerezi
Head of the Department of Distance Learning
University of Tirana, Albania

2. Dr. Ruzhdi Reci
Inspector for VTE
Ministry of Education and Science
Tirana, Albania

3. Prof. Dr. Pajtim Bejtja
Former Head of Department of VTE
Pedagogical Research Institute
Tirana, Albania

4. Mr. Ilia Cili
Director
“Harry T. Fultz” Community College
Tirana, Albania

International Educators (5 members)

1. Dr. Bruce Lansdale
Former President of American Farm School, Greece
Leader in Alliance for Vocational Agricultural Training in the Albanian Region (AVATAR) Program, Program for Reconstruction of Agricultural Education in Albania, 1993-1998

2. Mag. Monika Mott
Bereichsleiterin Bildung · Head of Education
KulturKontakt Austria
1070 Wien/Vienna · Spittelbergg. 3

3. Ms. Deedee Blame
Former USAID director in Albania (1991-1998)
Member of the Board of Trustee of Harry Fultz Technical School

4. Dr. Stavros Androulidhakis
Technological Institute
Thessaloniki, Greece

5. Ms. Randall Warner
Coordinator of AVATAR Project in Albania
Publications Office
American Farm School
P.O. Box 23 Thessaloniki, Greece 551 02

Appendix B

Introductory Letter to Panel Members

Memorandum

Delphi Probe

Statements Identified in the Delphi Probe

Date _____

Dear. _____

I really enjoyed visiting with you recently and learning more about the current programs in Albania. As you recall, I am currently enrolled in a doctoral program at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. As part of my doctoral program, I am required to conduct a research dissertation and the title of my research is "Vocational and Technical Education's Potential Contributions to the Future Social-Economic Development of Albania."

To conduct my research, I must solicit the opinions of an expert panel that is knowledgeable of the vocational and technical education in Albania. You were identified as an individual who has the experience and professional expertise to serve on the expert panel for this research. The Modified Delphi Technique is the research methodology that I will use to conduct this study. This technique will assemble a group of experts in a round table discussion, but without face-to-face meeting. You will have the opportunity to provide input of your own ideas and also view the input of others on the panel.

The research study consists of three stages. Your opinions will be collected in the following way:

1. This is the first packet. Please complete the enclosed instrument (Delphi Probe). When the first instrument (Delphi Probe) is returned by all members of the expert panel, a small review panel will summarize all of the input, eliminate duplications, and prepare a final list of statements for all panel members to review during the round activity. In addition, I will add other statements based on the research conducted in other countries or recommendations in the literature from VTE institutions. The final list of statements will form the Delphi Round I questionnaire that you will review during the second stage.
2. In the second stage you will receive the questionnaire with all statements identified by the expert panel and the researcher. This will be Delphi Round I activity. Using a five-point rating scale constructed for this study, all panel members will have the opportunity to rate each statement in terms of its importance to the future contribution to the social-economic development of Albania. When the questionnaire is returned, I will summarize the ratings of the expert panel. Statements receiving a mean 3.5 and higher and a standard deviation of 1.00 or less will be determined to have reached the consensus, and will not be used in round two.
3. In the third stage you will receive the questionnaire with the statements that didn't reach consensus in the Delphi round one. This will be Delphi Round II. This document will include the mean for each statement based on the expert panel rating and your individual response. You will review the statistical information and if desired comments on each statement. If you choose to revise your response based on this

information, you will mark it in the response column. This information will be summarized and a second statistical procedure will be applied to determine if consensus was reached in these statements.

Your expertise is truly important, and your participation will make a significant contribution to the outcome of the study. Furthermore, once the study is completed, I will be happy to share a copy of the results with you.

Please complete the Delphi Probe, and the attached memo. Kindly return both of them to me by _____.

In anticipation of a positive reply from you, I am looking forward to working with you.

Sincerely,

Pavli K. Mykerezi
Ph.D. Candidate
Virginia Polytechnic Institute and State University

MEMORANDUM

DATE: _____

To: Pavli Mykerezi, Ph.D. Candidate
Virginia Polytechnic Institute and State University

FROM: _____

TOPIC: Response to Invitation to Serve as Member of the Panel of Experts.
_____ I am pleased to serve as a member of your Expert Panel on the Modified Delphi Study titled: “Vocational and Technical Education’s Potential Contributions to the Future Social-Economic Development of Albania,” and look forward to participation in the entire study.
_____ I prefer to return my responses by e-mail.
_____ I prefer to return my responses directly to you.
_____ I regret that I will not be able to serve as a member of your panel.

Comments: _____

Delphi Probe

Introduction:

This study focuses on identifying statements through which Vocational and Technical Education can potentially contribute to the future social-economic development of Albania.

Instruction:

Please list your perception of how vocational and technical education can potentially contribute to the future social-economic development of Albania.
Kindly list up to three and no more than five statements.

Example:

The following statement is an example:

Vocational and technical education should prepare young people to fill jobs available in Albania.

Important:

Please attach the list of the statements and e-mail to pmykerez@vt.edu or to mykerezi@hotmail.com by _____

I will pick up the list of statements in your office on _____

Sincerely,

Pavli Mykerezi
Ph.D. Candidate
Virginia Polytechnic Institute and State University
Blacksburg, Virginia, USA

How can vocational and technical education potentially contribute to the future social-economic development of Albania?

1. _____

2. _____

3. _____

4. _____

5. _____

Statements Identified in the Delphi Probe

Statements

1. VTE should prepare more Albanians to be self-sufficient through self-employment and family businesses.
2. Planning, goal setting, and positive decision-making should be included in the curriculum of all VTE programs.
3. Teamwork and group interaction skills should be a part of workplace skills acquisition for all students.
4. VTE programs in Albania should focus on students developing business management skills to reduce small business failures.
5. VTE institutions should be developed or strengthened to fulfill the needs of predetermined economic regions/zones within the country, and in the country as a whole.
6. VTE planners should first consult with business and industry leaders in the private and public sectors so programs can be responsive to their needs.
7. VTE should assist young people in establishing a healthy work ethic where there is mutual respect toward employers and employees.
8. Albania needs to establish a vocational education and training council to provide policy advice and improve inter-ministerial cooperation.
9. VTE in Albania should develop new curricula with the aim of providing training for a range of broad based occupations, particularly with new sectors of economic activity such as banking, finance, tourism, and food processing.
10. VTE in Albania needs staff development on a wider scale, including training for policy makers, educational administrators at all levels, representatives from employers and employees organizations, school managers, curriculum authors and teachers.
11. VTE in Albania needs to upgrade school equipment used in the educational programs.
12. VTE in Albania needs a more flexible funding mechanism to provide greater freedom for decision-making and an opportunity for institutions to be more innovative.
13. VTE programs in Albania have to integrate functions of “brain and hand” in the workplace by forming multi-task teams of multi-skilled workers responsible for their own work.
14. VTE should be used as an opportunity to foster and develop critical and creative thinking skills and comprehension skills in students.
15. VTE should encourage the development of effective communication skills.
16. The development of an attitude of taking pride in and responsibility for one’s own work should be strongly encouraged in the VTE curriculum.
17. Graduates of VTE programs should be aware of the following concepts; quality, productivity, efficiency, standards, and value of money as applied to the business sector.
18. VTE can expose young people to the “way things work,” by teachers who through their own actions can instill pride in quality, productivity, and efficiency through good

use of their limited time, energy, and resources.

19. VTE programs should focus on developing production line operators so they may have knowledge and appreciation of overall production goals and objectives.
20. VTE should prepare young people to meet the employment needs of the country.
21. Local educational institutions should create an appropriate environment where young people can fulfill their learning needs and career goals.
22. VTE programs should reflect, where possible, the entire spectrum of vocational educational needs within a particular sector, for example tourism - tour guides, tour operators, receptionists.
23. Given the vastly growing hi-tech world around us, students now need to be literate and sufficiently broad in their knowledge of information technology and related sciences to meet the growing employment demands.
24. VTE should prioritize potential alternatives to serve the needs of Albania in terms of future macro economic plans.
25. VTE must be relevant and responsive to Albania's changing needs over time.
26. Long term planning should be conducted to forecast accurately labor and skill needs of the country.
27. VTE program planners should be aware of the government's strategies and priorities for social-economic development so that VTE programs can reflect government policy.
28. Special attention must be given to providing women equal opportunity and access to specialized training.
29. VTE programs should target adults and early school leavers with "hands on" and home environment learning to reduce the number of unskilled members of the national workforce.
30. VTE should assist in the development of a good work ethic, which includes respect for authority and respect for co-workers.
31. The VTE curriculum should be responsive to both the short and long term needs of specific industries and new technologies in Albania.
32. Closer cooperation should be encouraged between the business sector and educational institutions in establishing an apprentice system.
33. VTE programs should be multi-purpose in scope so that students become the beneficiary of allied related trade skills, which will enhance their employability.
34. VTE programs should follow up graduates continuously, once they join the workforce, to ensure that the skills acquired are being utilized.
35. VTE should offer experienced employees an opportunity to obtain the certification needed for career advancement.
36. VTE programs must be updated often to reflect rapid changes in technology and work place practices.
37. A system of accrediting VTE programs should be established to insure that institutions modify their structures and curricula accordingly.
38. VTE institutions in Albania should develop regional councils to insure that VTE curricula adapt to regional demands.
39. VTE should be more widely offered in Albania.
40. VTE should develop a national system of articulation with higher-level education within the Albanian educational system (community college level).

41. VTE's goal should be to produce graduates who can demonstrate to society that their studies lead to successful careers.
42. VTE articulation should provide a smooth transition from technical schools to the university level.
43. VTE institutions should work with industry leaders in order to secure work opportunities for trainees/graduates of programs.
44. VTE institutions should better manage education resources - plant, machinery, land, and consumables - to ensure meaningful training for students.
45. VTE teachers should stay abreast of new technologies in the workplace through continual study and periodic on site visits or work assignments in industry.
46. VTE administrators should educate students, parents, and communities on the advantages of vocational and technical training.
47. VTE programs should insure that program quality measures meet international standards.
48. VTE institutions should require programs to network and/or work closely with organizations to introduce students to the world of work.
49. VTE should establish guidance and counseling services in order to help students to select and pursue meaningful careers.
50. VTE should develop a unified organization to deal with and solve problems related to at-risk youth.
51. VTE institutions should recognize the benefits of working together, sharing resources and ideas, and establishing mechanisms for solving common problems.
52. VTE programs should provide the flexibility for students to pursue both academic and VTE courses simultaneously without difficulty.
53. VTE programs should hire highly qualified teachers with professional/occupational experience to instruct students in their practical skills.
54. VTE in Albania should evaluate all programs for effectiveness and terminate ineffective programs, or provide guidelines for their improvement.
55. VTE should develop a long-range strategic plan for Albania.
56. VTE instructors should be retrained in real world problem solving skills and in relevant industry competencies.
57. VTE should include basic life skills (conflict resolution, self-awareness and control, family life and civic education) as an integral part of vocational and technical education.
58. VTE programs in Albania should be included as an integral part of the total educational system, not just as a response to problems plaguing the system.
59. VTE should incorporate skill training at a high level, especially in computer literacy and information and communication technologies in order to propel the country forward in its ability to compete globally.
60. Assure that management training becomes a focal point throughout the VTE program with emphasis on "I hear I forget, I see I remember, I do I understand."
61. Include self-esteem and leadership training as an integral part of the VTE program so that the trainees consider themselves professional leader - managers by the time they graduate.
62. Performance based objectives should be used as an integral part of the curriculum, assuring that the training of the students relates directly to their future job

opportunities.

63. VTE institutions should explore with the Department of Distance Learning at the University of Tirana for offering on line different courses and training modules.

64. The Department of Distance Learning at the University of Tirana should support VTE institutions with teacher training courses.

65. VTE should provide practical skills to prepare Albanians to enter the market place as technicians, mid-level managers, and entrepreneurs, as well as the capacity/capability to adopt to fast changing circumstances in a technology oriented society.

66. VTE should provide technical training to help meet Albania's infrastructure needs in communications, utilities, transportation and construction, which are the building blocks of socio-economic development of Albania.

67. VTE should provide Albanians with proper skill sets to secure employment in the job market in Albania, thus making them productive members of Albanian society.

68. VTE should assist Albanians in setting up their small own businesses, thus enabling them to participate in local, regional, and international markets.

69. VTE should provide skills that can lead to employment, which in turn, sustains a productive society and higher standard of living and quality of life for everyone.

70. VTE should retrain individuals with new skills, giving individuals the flexibility to respond to changes in the labor market.

71. VTE can play a role in conserving and promoting some of the traditional skills that particularly reflect the unique Albanian culture and traditions.

Appendix C

Delphi Round I Questionnaire Directions

Thank You Letter to Panel Members

Comments on Statements

Delphi Round I Questionnaire Directions

Questions to be answered:

1. To what extent do a group of panelists agree with statements that reflect contributions vocational and technical education programs can make to the future social-economic development in Albania ?

2. Which statements reflect contributions that could have the greatest positive impact for the future social-economic development in Albania as seen by the panel of experts?

Activity:

Rating all statements submitted by all expert panel members and the researcher.

Directions:

1. This is the second phase of the research study. The content of this packet should include a list of all statements submitted by all expert panel members and the researcher during Delphi Probe.
2. It is your task to make a judgment on how important each statement is as it relates to the research questions noted above. The rating scale has five values ranging from: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree
Please, indicate your rating of each statement in the space provided for rating (left of the statements) by circling the appropriate scale number. Please feel free to write any comments in the space provided for comments (right of the statements).
3. After you have rated all the items and are satisfied that your ratings represent your best judgments, kindly e-mail it as an attachment to pmykerez@vt.edu , or mykerezi@hotmail.com or will be picked up by _____

Thank you.

Your willingness to take the time to assist with this study is deeply appreciated.

Statements

1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Circle Response	Statements	Comments
1 2 3 4 5	1. Vocational and technical education should prepare young people to fill jobs available in Albania.	

Pavli Mykerezi
Ph.D. Candidate
Virginia Polytechnic Institute and State University
Blacksburg, USA

Date_____

«Title» «FirstName» «LastName»
«Institution»
«Address»

Dear «Title» «Last Name»:

Thank you for your response to participate in a Modified Delphi study. It is unfortunate that you will not be able to participate in the research. Your expert opinion on the Vocational and Technical Education's Potential Contribution in the Future Social-Economic Development of Albania will be missed.

Again, thank you for responding and best wishes for you.

Sincerely,

Pavli K. Mykerezi
Ph.D. Candidate
Virginia Polytechnic Institute and State University

Pavli Mykerezi
Ph.D. Candidate
Virginia Polytechnic Institute and State University

Date _____

«Title» «First Name» «Last Name»
«Job Title»
«Institution»
«Address»

Dear «Title» «Last Name»:

Thank you for accepting to participate in the three round Modified Delphi study titled: Vocational and Technical Education's Potential Contribution to the Future Social-Economic Development of Albania. Thank you for your response to Delphi Probe. I am thrilled with the response.

I am looking forward to your valuable input as a member of this panel.

If you have any questions please do not hesitate to contact me by email pmykerez@vt.edu or mykerezi@hotmail.com

Sincerely,

Pavli K. Mykerezi
Ph.D. Candidate
Virginia Polytechnic Institute and State University

Panel of Experts Comments About Statements

Nr	Statements	Comments
1	VTE should prepare more Albanians to be self-sufficient through self-employment and family businesses.	Competitiveness within the labor market is probably a more economically valuable goal than family economic self-sufficiency.
2	Planning, goal setting, and positive decision- making should be included in the curriculum of all VTE programs.	Leadership training should be an integral element of curriculum.
3	Teamwork and group interaction skills should be a part of workplace skills acquisition for all students.	There are vital skills that are contrary to Albanian traditions. Question is, "How to promote them?" Fultz school has been successful. Yes! No matter how difficult teamwork may be to teach and to achieve! Too many Albanians are individualistic. OK, for VTE graduates, but how can we promote teamwork abilities for other co-workers?
4	VTE programs in Albania should focus on students developing business management skills to reduce small business failures.	Emphasis should be on "success" rather than "failure."
5	VTE institutions should be developed or strengthened to fulfill the needs of predetermined economic regions/zones within the country, and in the country as a whole.	As well as for regions beyond Albania's borders. Too much top-down planning.
6	VTE planners should first consult with business and industry leaders in the private and public sectors so programs can be responsive to their needs.	Business consultants also. How much of limited VTE resources will the consultation process absorb?
7	VTE should assist young people in establishing a healthy work ethic where there is mutual respect toward employers and employees.	Rather, "among employers and employees."

8	Albania needs to establish a vocational education and training council to provide policy advice and improve inter-ministerial cooperation.	To some extent new curricula already exist, focus should be on implementation. This should be a practical "hand-on" council related to the needs of agriculture and industry, including tourism. Would this merely create additional bureaucracy?
9	VTE in Albania should develop new curricula with the aim of providing training for a range of broad based occupations, particularly with new sectors of economic activity such as banking, finance, tourism, and food processing.	European Union oriented. Add as well as agriculture, at the end of the sentence
10	VTE in Albania needs staff development on a wider scale, including training for policy makers, educational administrators at all levels, representatives from employers and employees organizations, school managers, curriculum authors and teachers.	Within the financial constraints of a limited government or private funding budgets. How would individuals compete or be evaluated for training opportunities?
11	VTE in Albania needs to upgrade school equipment used in the educational programs	Also additional training on the job.
12	VTE in Albania needs a more flexible funding mechanism to provide greater freedom for decision-making and an opportunity for institutions to be more innovative.	Better funding oriented to needs. Not flexible if needs are not pre-assessed. This statement needs more clarification. As long as flexibility is accompanied by accountability.
13	VTE programs in Albania have to integrate functions of "brain and hand" in the workplace by forming multi-task teams of multi-skilled workers responsible for their own work.	
14	VTE should be used as an opportunity to foster and develop critical and creative thinking skills and comprehension skills in students.	Avoid rote learning.
15	VTE should encourage the development of effective communication skills.	Listening as well as speaking. For Albania's condition communication skills in the mother language as

		well as in foreign languages.
16	The development of an attitude of taking pride in and responsibility for one's own work should be strongly encouraged in the VTE curriculum.	Would add the concept of business ethics.
17	Graduates of VTE programs should be aware of the following concepts: quality, productivity, efficiency, standards, and value of money as applied to the business sector.	Not clear on the meaning here. Personal care to do the very best is very important.
18	VTE can expose young people to the "way things work," by teachers who through their own actions can instill pride in quality, productivity, and efficiency through good use of their limited time, energy, and resources.	Teachers and other VTE staff in Albania need to improve their system of teaching.
19	VTE programs should focus on developing production line operators so they may have knowledge and appreciation of overall production goals and objectives.	Does this imply that manufacturing has an important role in the economy of Albania?
20	VTE should prepare young people to meet the employment needs of the country.	Important!
21	Local education institutions should create an appropriate environment where young people can fulfill their learning needs and career goals.	Applies to all sectors of education and is not VET specific. -If we assume #20 exists. Not very specific.
22	VTE programs should reflect, where possible, the entire spectrum of vocational educational needs within a particular sector, for example tourism - tour guides, tour operators, receptionists.	Integrated hands-on skills in each area. This may not be feasible given funding and other constraints.

23	Given the vastly growing hi-tech world around us, students now need to be literate and sufficiently broad in their knowledge of information technology and related sciences to meet the growing employment demands.	Yes! The only constraint is funding.
24	VTE should prioritize potential alternatives to serve the needs of Albania in terms of future macro economic plans.	How do VTE planners interact with and relate to Ministry of Labor and other ministry planners?
25	VTE must be relevant and responsive to Albania's changing needs over time.	VTE should encourage people to create jobs, rather than just fit.
26	Long term planning should be conducted to forecast accurately labor and skill needs of the country.	Long-term accurate forecasts in labor and skills needs are unlikely to be achieved, particularly in the framework of economic transition.
27	VTE program planners should be aware of the government's strategies and priorities for social-economic development so that VTE programs can reflect government policy.	If this exists.
28	Special attention must be given to providing women equal opportunity and access to specialized training.	Impossible at present in Albania. Not only in "women's occupations" but also in broad spectrum of vocational opportunities.
29	VTE programs should target adults and early school leavers with "hands on" and home environment learning to reduce the number of unskilled members of the national workforce.	Emphasis on lifelong learning through short courses. If VTE planning and budgets and can expand to encompass these audiences.

30	VTE should assist in the development of a good work ethic, which includes respect for authority and respect for co-workers.	Do not agree with this definition of "work ethics." As well as respect for lower level employees. I agree with the need for good work ethics, but not with the focus of its definition on respect for authority and co-workers-respect should be towards the rule of law, basic human rights (minorities, gender, etc). I insist in my opinion knowing the circumstances in Albania where there is the tendency of the people to put the minimum effort in their work if they are not able to totally escape from doing it. They also avoid to do their work in cases where somebody else is responsible. They also, in many cases, although they have responsibility to continue something started, after the monitoring system ceases, the work if continues is not with the same quality quality.
31	The VTE curriculum should be responsive to both the short and long term needs of specific industries and new technologies in Albania.	Needs assessment important. Not only Albania but neighboring countries as well.
32	Closer cooperation should be encouraged between the business sector and educational institutions in establishing an apprentice system.	Yes!
33	VTE programs should be multi-purpose in scope so that students become the beneficiary of allied related trade skills, which will enhance their employability.	Trainees will have flexibility and employment choices.
34	VTE programs should follow up graduates continuously, once they join the workforce, to ensure that the skills acquired are being utilized.	This statement is not quite clear. This should also lead to periodic evaluation of curriculum with particular emphasis on performance-based objectives.Desirable but probably not realistic. Is this economically feasible?
35	VTE should offer experienced employees an opportunity to obtain the certification needed for career advancement.	This should include academic equivalency granted through in-service training courses.
36	VTE programs must be updated often to reflect rapid changes in technology and work place practices.	When possible instructors should be employed in industry.

37	A system of accrediting VTE programs should be established to insure that institutions modify their structures and curricula accordingly.	Yes!
38	VTE institutions in Albania should develop regional councils to insure that VTE curricula adapt to regional demands.	Regional profile development by the respective VTE institutions should be an internal process.
39	VTE should be more widely offered in Albania.	Cost effective training. Are there positions? Hands-on training!
40	VTE should develop a national system of articulation with higher-level education within the Albanian educational system (community college level).	More community college training which will also have equivalency to higher level as well as recognition for lower level (high school) graduates
41	VTE's goal should be to produce graduates who can demonstrate to society that their studies lead to successful careers.	Then what? Is there future? Vital to recruitment!
42	VTE articulation should provide a smooth transition from technical schools to the university level.	Yes! With consulting agencies also.
43	VTE institutions should work with industry leaders in order to secure work opportunities for trainees/graduates of programs.	Important! At all levels - also as a continuous process.
44	VTE institutions should better manage education resources - plant, machinery, land, and consumables -to ensure meaningful training for students.	In theory yes, in practice given the current state of Albanian industry rather difficult.... Consideration given to student projects and in-service training.
45	VTE teachers should stay abreast of new technologies in the workplace through continual study and periodic on site visits or work assignments in industry.	Work assignments in industry are particularly important. See tourism schools in Greece and Switzerland. IT development is very important.

46	VTE administrators should educate students, parents, and communities on the advantages of vocational and technical training.	Yes- but needs more specific goals.
47	VTE programs should insure that program quality measures meet international standards.	Assumes extensive exchange programs in Albania as well as abroad.
48	VTE institutions should require programs to network and/or work closely with organizations to introduce students to the world of work.	Infrastructure?
49	VTE should establish guidance and counseling services in order to help students to select and pursue meaningful careers.	Are trained people for it?
50	VTE should develop a unified organization to deal with and solve problems related to at-risk youth.	Needs more clarification
51	VTE institutions should recognize the benefits of working together, sharing resources and ideas, and establishing mechanisms for solving common problems.	OK, but how this system will work?
52	VTE programs should provide the flexibility for students to pursue both academic and VTE courses simultaneously without difficulty.	Pursuing vocational and academic education simultaneously is feasible only for the very rare individual capable of incorporating both in his or her future work or career. Academic education will have to undergo major revision before the two aspects of education will harmonize or cohabit effectively. It is vital that the students have a sense of equivalency in the studies just so long as their VTE does not suffer as the curriculum assures them of adequacy in both areas.
53	VTE programs should hire highly qualified teachers with professional/occupational experience to instruct students in their practical skills.	Difficult to achieve given the shortage in well qualified teachers in the VET field. Who is paying for it? This is the ideal, of course.

54	VTE in Albania should evaluate all programs for effectiveness and terminate ineffective programs, or provide guidelines for their improvement.	Needs periodic evaluation.I assume "all programs" still refers only to VTE programs.
55	VTE should develop a long-range strategic plan for Albania.	This is not easy in Albania's condition.
56	VTE instructors should be retrained in real world problem solving skills and in relevant industry competencies.	This is good, but is Albania's industry ready to help on this?
57	57. VTE should include basic life skills (conflict resolution, self-awareness and control, family life and civic education) as an integral part of vocational and technical education.	Leadership. Are there trained psychologists and sociologists available to provide this element of education?
58	VTE programs in Albania should be included as an integral part of the total educational system, not just as a response to problems plaguing the system.	Assume periodic evaluation and long-term strategy.
59	VTE should incorporate skill training at a high level, especially in computer literacy and information and communication technologies in order to propel the country forward in its ability to compete globally.	Should be applied both to private and public sectors. Realistically, what fraction of the VTE students' audience will be served with computer literacy training, given the costs? Will there be VTE "elite" students who are taught computer literacy, and the larger number students who are not?
60	Assure that management training becomes a focal point throughout the VTE program with emphasis on "I hear I forget, I see I remember, I do I understand."	
61	Include self-esteem and leadership training as an integral part of the VTE program so that the trainees consider themselves professional leader - managers by the time they graduate.	This should have been attained and in the other levels of education.

62	Performance based objectives should be used as an integral part of the curriculum, assuring that the training of the students relates directly to their future job opportunities.	Important!
63	VTE institutions should explore with the Department of Distance Learning at the University of Tirana for offering on line different courses and training modules.	Limited access to Internet by a relatively wide sector of the population. Needs a long way to go. Yes difficult to implement. Requires specially trained staff at various levels
64	The Department of Distance Learning at the University of Tirana should support VTE institutions with teacher training courses.	Limited access to Internet by a relatively wide sector of the population, and risk of a focus on theoretical knowledge rather than skills. Needs adequately trained staff.
65	VTE should provide practical skills to prepare Albanians to enter the market place as technicians, mid-level managers, and entrepreneurs, as well as the capacity/capability to adopt to fast changing circumstances in a technology oriented society.	Very important!
66	VTE should provide technical training to help meet Albania's infrastructure needs in communications, utilities, transportation and construction, which are the building blocks of socio-economic development of Albania.	Prepare Albanians to compete on European-wide level.
67	VTE should provide Albanians with proper skill sets to secure employment in the job market in Albania, thus making them productive members of Albanian society.	Yes!
68	VTE should assist Albanians in setting up their small own businesses, thus enabling them to participate in local, regional, and international markets.	In Albania and abroad.

69	VTE should provide skills that can lead to employment, which in turn, sustains a productive society and higher standard of living and quality of life for everyone.	Experience! Other government bodies are available for this business starts and regulations. Better not to drain limited resources of VTE for this purpose.
70	VTE should retrain individuals with new skills, giving individuals the flexibility to respond to changes in the labor market.	Adult education can do this. Albania needs to improve the system of adult education.
71	VTE can play a role in conserving and promoting some of the traditional skills that particularly reflect the unique Albanian culture and traditions.	Not clear on meaning. VTE should recognize the importance of maintaining unique aspects of Albanian culture and tradition. Particularly exciting through extracurricular programs.

Appendix D

Thank You Letter

Delphi Round II Questionnaire Directions

Date _____

Dear _____

Thank you for your prompt response to Delphi Round I questionnaire. Your continued participation as a member of the expert panel is essential to the outcome of this study.

The enclosed Delphi Round II questionnaires ask you to review the ratings of the statements that did not reach consensus of the expert panel during the Delphi Round I activity. Detailed directions are provided to assist you in this activity. The goal of this phase is to determine the level of consensus that can be reached with these remaining statements. Please review the instructions carefully before you proceed.

Your diligence is highly appreciated. Thank you again for your valuable input.

Sincerely,

Pavli K. Mykerezi
Ph.D. Candidate
Virginia Polytechnic Institute and State University

Delphi Round II Questionnaire Directions

Directions:

Please reconsider and again **rate** the following statements that did not meet expert panel consensus in Round I. If your NEW rating is more than one number higher or lower than the mean rating, provide a brief explanation of the reason(s) you disagree with the other panel members.

Examples:

1. If the mean rating of the group was 3.56 and your new rating is 3 or 4 (within one number from the mean), an explanation is not needed.
2. If the mean rating of the group was 3.56 and your new rating is 1, 2, or 5 (more than one number from the mean), please give a brief explanation of your reasons(s) your rating.

Use the same rating scale as in the Round I.

1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

Statements	Mean Rating by Panel	Your Previous Rating	Your New Rating. <i>Circle Response</i>	Explanation
1. Vocational and technical education should prepare young people to fill jobs available in Albania	3.79	2	1 2 3 4 5	

4. After you have rerated all the items and are satisfied that your reratings represent your best judgments, kindly e-mail it as an attachment to pmykerez@vt.edu , or mykerez@hotmail.com, or I will pick up your questionnaire by _____
Thank you again. Your willingness to take time to assist with this study is appreciated.

Appendix E

Letter to Delphi Panel with the Results of the Study

Publication and Receipt of Results Form

Panel Member Name: _____

- Yes, I agree to have my name and current position published with the results of this study.**

Please provide the information, as you would like it published.

**Name:
Title:
Business:
Other:**

- No, I do not want my name and current position published with the results of this study. I wish to remain anonymous.**

-
- Yes, I would like a copy of the study summary.**

e-mail

Mailing Address: Please provide your full address

- No, I do not want to be sent a copy of the study summary.**

Thank you for your participation throughout the process!

Appendix F

Vita

Pavli K. Mykerezi

Education

Doctor of Philosophy, Career and Technical Education, May 2003

Virginia Polytechnic Institute & State University (Virginia Tech), Blacksburg, VA, USA

Dissertation: “The Potential Contribution of Vocational and Technical Education to the Future Social-Economic Development of Albania”

Co-chairs: John R. Crunkilton and Curtis R. Finch

Master of Science, Vocational and Technical Education, May 2000

Virginia Polytechnic Institute & State University (Virginia Tech), Blacksburg, VA, USA

Master of Science, Teaching Physics, June 1988

University of Tirana, Tirana, Albania

Bachelor of Science in Physics, June 1977

Major: Physics

University of Tirana, Tirana, Albania

Major Fields of Interest

Curriculum development, Teaching methodology, Critical thinking, Human resources, Role of CTE in civic education and democracy, Career development, Guidance and counseling, Research, Educational Policy, and Education issues in Eastern European countries.

Awards/Grants/Affiliations

Graduate Assistantship for Ph.D. studies, Office of Academic Programs, College of Agriculture and Life Sciences, Virginia Tech, 2000-2003

Fulbright Fellowship, Graduate Study at Virginia Tech, 1999-2000

Rufus W. Beamer Professional Development Award, Virginia Tech, 2002

Austrian Government Scholarship, Certificate in Human Rights Protection, June-July 1999

Swiss Government Scholarship, Certificate in International Agriculture Education, August 1998

TEMPUS Individual Mobility, Curriculum Development, Queen’s University of Belfast, 1996

Regional Environmental Center Grant, Representing Albania in Ag. Tour 1995, California

TEMPUS JEP Mobility, Certificate “Training of Trainers”, American Farm School, Thessaloniki, Greece, 1993

TEMPUS JEP Mobility, Certificate “Curriculum Development”, American Farm School, Thessaloniki, Greece, 1994

Member, Global Consortium of Higher Education and Research for Agriculture, 2001-present

Member, Association for International Agricultural and Extension Education, 2000-present

Member, Phi Delta Kappa International, 2001-present

Member, Omicron Tau Theta (OTT), 1999-present
Member, National Teacher's Association of Albania 1981-1998

Work Experience

Graduate Teaching Assistant, (August 2000 – May 2003)

Office of Academic Programs, Virginia Tech, Blacksburg, VA

- Taught “Application of Computers in Agriculture” three semesters

Inspector of Education, (August 1998 – July 1999)

Ministry of Education and Science, Albania

- Coordinated different educational projects in Korca district, Albania
- Supported technical schools in Korca district for more effective and qualitative work

Director General, (August 1988 – August 1998)

Korca Agricultural Polytechnic School, Korca, Albania

- Directed and coordinated educational, administrative, and counseling activities to ensure conformance to state and school board standards
- Developed and coordinated educational programs through meetings with staff, review of teacher activities, and issuance of directives
- Established and maintained strong relationships among teachers, students, parents and community concerning educational, behavioral, and other problems in school
- Evaluated teacher and assigned staff performance
- Directed the national program for restructuring the system of agricultural education in Albania
- Served on special task committees (CCVATA, ACSE)

Principal Middle & High School, (August 1981 – August 1987)

Lozhan Middle & High School, Lozhan, Albania

- Directed educational, administrative, and counseling activities to ensure conformance to state standards
- Established and maintained liaison and cooperation between middle and high school level
- Established a systematic and effective plan for communication between the school and community regarding school program and school related issues

Science Teacher, (August 1977 – August 1981)

Lozhan Middle & High School, Lozhan, Albania

- Taught physics and math in middle and high school level

Regional Project Coordinator, Part-time, (December 1997 – July 1999)

Education for Democratic Citizenship, Council of Europe, KulturKontakt, Austria, AEDP

- Trained school community members in acquiring democratic skills
- Created a co-operative climate in the participating schools
- Enhanced the role of schools as civic and social centers in the local communities and to allow the population to feel ownership for “their” schools
- Trained variety of skills in the process of developing and implementing concrete projects: discussion skills, decision making, critical thinking, conflict management, project planning/management, possibilities for improvements of the school and the community environment

Computer Skills

Excellent in Windows applications, Word processors, Internet applications, Spreadsheets, PowerPoint, Web Page development.

Languages

English, Albanian, Italian, French (learning)

Publications/Working Papers/Presentations

Mykerezhi, P. "Entropy," *Teacher's Magazine*, 1988.

Mykerezhi, P. "General Ideas for the Establishment of a Suitable Agricultural Education System in Albania." *Teacher's Magazine*, 1996.

Mykerezhi, P. "What Can We Improve in Agricultural Education?" *Teacher's Magazine*, 1998

Crunkilton, J., Duncan, D., & Mykerezhi, P. "Preliminary Findings of the Perceptions of Administrators of Technical Agricultural Programs at Land-Grant Institutions Who are Members of the Technical Agricultural Association." Technical Agricultural Association, Arlington, Virginia, 2002.

Mykerezhi, P. "Educational Implications of the Shift from Socialism to Capitalism in Eastern Europe." Virginia Tech, 2001.

Mykerezhi, P. "Program for Training Vocational & Technical Education Teachers in Albania." Virginia Tech, 2001
