

Effective Employment: A Basic Objective for Curriculum Design in Higher Education

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Abstract

Education is the most fundamental factor in social and economic development, and economic growth is a major objective for all countries. Education leads to change individuals' values and perceptions and this alone directly affects economic condition. In this review paper, it is aimed at investigating the extent to which students and pupils are prepared and trained for gaining skills and motivation needed in today's job market. It should be the most basic and essential concern of the curriculum planners of Iran's education system. The most important question mainly addressed in this study is as follows:

What features should education system and curriculum have to help students develop and improve economic growth of labor market? In analyzing the studies and researches carried out in this regard, the following results were obtained:

Attracting graduates from universities and centers of higher education in the labor market depends on their abilities and characteristics some of which should be provided for them while studying. It seems that lack of congruence between processes and educational materials at universities and required skills and abilities for labor market is the most important factor for graduates in failing to find jobs and be employed. Business process implies the application of machines instead of manual tasks. Thus, it seems that curriculum designers should reduce the amount of handwork skills and instead they should add mental skills training. To this end, priority funding should be allocated to public education.

Keywords: Employment, Higher Education, Curriculum.

Introduction

Education is a fundamental factor in social and economic development, and economic and social development, in turn, provides the possibility of further education. Economic development is a major objective for all countries. This development is defined differently in developed and developing countries. In developed countries with advanced industry, this means reducing unemployment and increasing real welfare of the people. In developing countries, on one hand, it means the reduction or elimination of poverty and deprivation and on the other hand it means attempting to raise the level of GDP (Gross Domestic Product) and improving living standards of people to the extent to which developed countries are enjoying it. The role of education as a tool for economic growth and development is quite different

over time. Simply put, the expansion of formal education classified at various levels and categories may be the most essential issue in some stage of the development process, while in other stages it may consider to be less important due to other priorities.

One important effect of education is the development of liberal, political, and social inclinations. Another important effect is that education development can reduce population growth rate; this way an important problem of developing countries is reduced. Well-educated people generally marry later and they know better how to control their children and also they act better towards having a healthier society. In addition to this, higher level of public education increases life expectancy and promotes longevity. This action gives further rise to improve the economic and social life.

Education changes people's values and attitudes; this has a direct impact on the economic situation. Most research suggests that economic growth is associated with improved public education and public literacy; job training together with in-service instructions are also effective in job efficiency and economic development. Thus, it can be said that the type of educational system and its aims, plans, and facilities are quite effective in economic growth rate. For instance, if the curriculum of high school is generally aimed at vocational training and just a small part of it is dedicated to the theoretical instruction and university preparation of young talents, it will result in economic growth; whenever education has got a decentralized or semi-centralized aspect, this will lead to the sense of responsibility and attention from markets and local and national forces and it will increase education development which will consequently bring about better economic results. In order to achieve the economic and social development in developing countries public education for all people, especially for rural and disadvantaged groups living in populated areas, should be primarily addressed. It can be said that if this general education is practiced and transferred by competent teachers, or additional training related to the work and lives of these people is taught to them, it will have effective results in improving social and economic lives of them. It should be noted that if economic growth is realized, it will be easy to achieve many other goals.

Among other issues related to education and its associated plans about that are the issues of value transfer, adaptation and development, and knowledge, technology, and behavioral, economic, social, political and cultural norms, and learning in new education (Cheng, 2002). Regarding the globalization of education, due to the fact that competition between countries has increased and market objectives have affected education more than the other aspects of life, technical and vocational training as should be emphasized as leading objective of education programs (Varta, 2002).

Globalization has both positive and negative consequences. The following table summarizes what Cheng (2002) stated about the positive and negative aspects of globalization.

Table (1)

Positive And Negative Aspects of Globalization

Positive effects of globalization (opportunity)	Negative effects of globalization (threats)
1. global classification of knowledge, skills and attributes necessary for development in different areas	1. increasing the technological gap between developed and less developed countries.
2. mutual complementary support for production create synergies to advance	2. creating more legitimate opportunities for a few advanced countries and political and economic imperialism of other countries
3. value creation and increase efficiency through global sharing	3. exploiting local resources and damaging indigenous cultures of less developed countries.
4. promotion of international understanding, sharing harmony and acceptance for cultural diversity between countries	4. increasing inequalities and conflicts between areas and cultures
5. Facilitation of using multiple ways of multi-cultural communication, interaction and cooperation	5. promoting the culture and values of most of advanced areas

Perhaps the most important effect of globalizing the process of educational principles and planning is removing the barriers of economic, political and cultural development. In contrast, the most negative consequences of this process is the instability and gradual destruction of the pure cultural heritage of communities which is transferred through curriculum and instruction.

Proponents of globalization believe in order to improve employment and business success in the global labor market, people should have different skills. The following table shows the most important skills for employment stated by Robinson which was cited in (Karami and Momeni, 2011).

Table (2),
Employment Skills In Globalization Age

Reading	learning	responsibility	Accuracy and efficiency
Writing	Reasoning	Self-confidence	Self-directedness
Science	Creative thinking	Self-control	Proper working attitude
Mathematics	Making decisions	Social skills	Ability to participate
Oral communication	Problem-solving	Kindness	Motivation
Listening		Honesty	Self-management
		Flexibility	Spirit of teamwork

Obtaining the above skills by individuals to address the employment in labor market and succeed all draws upon a documented and appropriate curriculum designed to achieve the desired goals. It can be said in other words that a curriculum which is based on efficiency and competency can provide stakeholders with necessary qualifications to gain successful employment in the global arena.

The importance and necessity of the above issue has been emphasized by Zulingen (1997) in the following table:

Table (3),
Dimensions of The Key Competencies Required In The Job Market

The major aspects of key competencies	Description of key competencies
General and instrumental dimensions	Knowledge and job skills that are essential, they can be used in many situations. This dimension includes basic skills such as proficiency in mathematics, language and reading, the ability to use information, planning to work, quality awareness and business insight
Cognitive aspect	That includes thinking and acting i.e. identifying and solving problems, thinking abstractly, command thinking, flexibility, learning how to learn and tactical skills
Personal aspect	It includes demonstrating positive personal behaviors such as self-reliance, punctuality, responsibility, assertiveness, coping with stressful situations, creativity, perseverance and pursuit.
Social-communicative aspect	It includes the ability to communicate, i.e. showing self-esteem through writing, verbally or the ability to work collectively with others
Social- normative aspect	It includes the ability to adapt their corporate culture (loyalty, recognition, commitment, and constant organizational knowledge)
Strategic aspect	It includes liberating behavior, showing a critical attitude about work and personal interests, such as active participation in decision-making

In this table, the connection between education and the working world has been emphasized i.e. emphasizing basic skills, competency, and curriculum based on activities and trainings. Given the importance of preparing young people for labor market, we need an education system that associates with the consolidation of the market, and emphasizes key competencies required for the market (Azizi, 1998).

Thus, the mission of a society's educational system is providing growth conditions and developing individuals' capabilities in various aspects; this can be studies from different views.

Methodology

According to the author of this narrative review, preparing and training students with skills and motivation needed in today's job market must be the most basic and most essential concerns of the educational curriculum planners.

The most important question which is based on the main objective of this research is that:

What features should education system and curriculum have to help students move towards development and create partnership for improving economic growth of labor market?

Findings

a) The relationship between educational system and labor market

In the past, it was very easy for high school graduates to enter job market; they entered labor market with having the least possible skills. But now students are faced with a situation that not only should they address technical and vocational trainings, but they are also expected to have a higher level of skill and knowledge. Therefore, schools should help students to understand how the lessons learned must be associated with their future career opportunities.

In this regard, Azizi (2004) in his article entitled "Education and Labor Market" cited the work done by UK National Training Task Force, US Commission on Workforce Quality and Efficiency of the Market and Commission of the European Communities. They, in their project, concluded that although recent decades have witnessed the reformation of the educational system of different countries for many times, by a short look at the status and performance of graduates in the labor market and the assessment of clients' satisfaction in different sectors, it can be seen that the output of educational system performed in most of these countries lacked required abilities and potentialities of the labor market. However, high rate of unemployment among graduates represents undesirable level of external efficacy and failure of the educational system in these countries to gain an acceptable efficiency rate. It should be mentioned here that the main purpose of the changes and reformations pointed above was in order to strengthen the link between education and labor market needs in terms training proper manpower and vocational qualifications.

Perhaps the poor education system in some countries, regarding the lack of adequate relationship between education and the objectives and needs of the labor market, is an example of the analysis of one of the former World Bank Chiefs as said:

Due to significant growth in educational systems in third world countries during the last twenty years, development has not been properly directed. What is the consequent is the most unpleasant dilemmas of our time; while millions of graduates are unemployed, millions of job opportunities have been spared due to insufficient number of educated, trained and skillful manpower (Fresh, 1979).

In another article entitled "Employment and Higher Education", Azizi (2004) investigated the strategies for linking higher education with labor market needs and stated that numerous economic and social changes that occur in societies due to the rapid changes in technology and science, makes it necessary to review and revise higher education objectives, curriculum content and teaching methods.

He continued that the brief review of educational reform in most countries enlightens the point that one important aspect of these reforms is the effort to establish a link between educational system and economic system of communities.

According to Woodhall (1992), cited in Azizi (2003), higher education affects economic systems of countries. He believes higher education represents an important form of investment in human resources and by providing and promoting knowledge, attitudes and basic skills required for personnel in various fields we can help economic development.

Therefore, re-engineering seems really essential in the relationship between higher education system and new conditions and undeniable realities of labor market conditions so that more and more opportunities are prepared for college graduates in employment market.

Quoting from Brown and Lawder (1992), Azizi studied and compared economic conditions and workforce of knowledge-based societies in two stages of hardware structure (Fordism period) and software movement (Post-Fordism period); the results are presented in the following table.

Fordism	Post-Fordism
Economic competitiveness and production process	
Protected national markets	Global competition
Emphasis on mass production of standardized products	Flexible manufacturing system / mini markets
Authority and bureaucratic organization	Flexible organizational structures
Competing through the use of maximum capacity and reducing costs	Competing through innovation, diversification and subcontract
Work force	
Standardized and divided occupational tasks	Flexible specialization / multi-skilled workforce
Low confidence / low accuracy in performing tasks	High reliability / high accuracy in doing tasks
Employing a majority of workers in the industrial and labor sector	Employing the majority of workers in service sector and higher jobs
Workplace training is normally performed	Workplace training is limited
There is little formal education for most required jobs	There is greater demand for well-educated and skillful workforce
A small professional and management group governs the affairs	Professional and managerial class and also service class are expanding
The needs of the labor market can be easily anticipated	Due to the uncertain economic conditions, technology changes and the needs of the labor market cannot be predicted

According to the studies conducted by Organization for Economic Co-operation and Development (OECD), educational systems seek to emphasize the skills and competencies for the future labor market. Based on these studies, the world of future work is growing in service sector and superior technology of work processes (OECD, 1994).

Curriculum design is an important factor in improving the quality of higher education and keeping a balance between attitudes, knowledge and skills through the latest scientific achievements of graduates and labor market needs (Ne'mati et al., 2004).

Regarding this, reviewing and updating curricula is considered the most important tasks of higher education.

Confirming this view, Lawten (1983) believes curriculum should be designed based on the culture of each country. He also states that in the actions which must to be taken for reviewing the academic curriculum, it is essential to consider social, economic, communication, technology, ethical and aesthetic systems. In the level of academic system and in the practical scope, some view such as Lawten is taken into account.

In South Africa, for instance, in the context of curriculum restructuring for higher education the following issues are taken into account: characteristics of combining theory and practice, meeting political and economic development, creating national and international commitment, consider different ways of learning, involving all educational standards, creating the groundwork for progress, paying attention to learning in the students' background and providing guidance for students as the criteria for the framework of higher education curriculum (Logrenburg, 2000).

In this regard, Negara (1995) stated that curriculum should enable students to be able to make reliable content and analytical skills. Curriculum should help students develop economic thinking, investigating and practical and logical ability. Curriculum should include some skills such as management, communication, problem solving and logical action to enable individuals to perform their roles in community level.

What is clear is that in recent decades, criticisms of formal education system performance have increased with the increase in unemployment rate of graduates of schools and universities. To address these deficiencies, some experts have tried to connect curriculum with demands of society and the world of work; by doing this, they hoped to prevent unemployment among graduates and address the demands of different parts of the country's economy.

Regarding the above discussion, the majority of scholars and experts agree on two areas: Firstly, the unemployment of graduates does not mean that there are no jobs, but it means graduates are not able to be employed.

And secondly, job opportunities and employment are prepared in many areas, but instead of creating a job, the graduates prefer to wait for somewhere to hire them.

With a little reflection on these questions it can be found that the main flaw is the lack of skills among graduates of formal educational system; to overcome this deficiency, presenting a suitable pattern for curricula and revising the existing curricula seems necessary.

b) Appropriate curricula model for employment

Binaghi and Saeedi (2003) believe in the literature on educational programs and curriculum, different patterns and perspectives are mentioned to link education and the labor market.

The overall opinions of experts can be classified into three approaches:

1. Vocational learning approach
2. Integration of theoretical and practical training approach
3. The approach of developing basic competencies and skills

Vocational Training Approach

This approach believes in presenting pure professional courses in specific and independent institutions (which are referred to as vocational and technical schools). In this approach, the schools' main duty is to prepare young people for jobs and this objective is attained by diversifying technical and professional fields of study at schools. In this approach, professional education expanded greatly in the 1970s and it was proposed at all below educational courses (Luz, 1999):

Primary school: professional preparation

High school: strengthening professional skills

Higher education: specialized skills

Vocational training approach was used by governments through several different ways (Nafisi, 2011; Khalaghi, 1999; Aziz, 1998). Three basic models of them are briefly presented here.

a) School-based model

In this model, professional training takes place in the school environment (some countries such as Sweden, England and US). Although the school is responsible for preparing young people for the world of work in school-based model, it gets helps from industry for enriching skill training.

b) Work-based model

The model highlights the importance of real workplace in training effective occupational competencies. In some countries, the role of industrial enterprises is very prominent in skills training and in some other countries, getting to know the real workplace is done through apprenticeship. By this, students enter the world of industry and also a closer connection is made between school authorities and industrialists.

Due to the benefits of work-based model, paying attention to the importance of workplace learning has also been practiced in higher education in recent decades and many contact centers to industry has been activated in many universities. For example, Wiskension Madison University has assigned certain schools to work on projects. The strategies taken to move towards university's goals include:

1. Embedding learning in real world situations
2. Creating training that will bring the outside world into the classroom.
3. Creating learning opportunities beyond the traditional school books
4. Reaching scientific dominance under the similar conditions of professional world

c) School/Work- based model

In this model, some parts of the process of education and job skills is performed by school and some other parts are fulfilled by employers and industrialists. The most notable example of this model is Germany. In this country, industrial establishments along with some of the schools train occupational competencies and sometimes the role of industrial establishments is more important than schools. The common point to all models of professional training is the curriculum being affected by available jobs in the society. Planning system in these models is skill-based system; based on this system, the main duties of a job is analyzed first and then knowledge and skills needed to perform these job duties are specified (Binaghi & Saeedi, 2001).

High school students' and higher education graduates' inefficiency who studied at technical and professional centers has been emphasized in many studies. The Institute for Educational Planning investigated the employment status of graduates of technical and professional schools. According to this study:

- Managers and manufacturers believe that the quality of education in vocational schools is not so that graduates can find employment in these centers.
- According to employers, there is no difference between graduates of technical high schools and usual high schools and even they believe non- vocational school graduates have better conditions than the technical ones.

Another reason for the failure of vocational training system is the failure to gain social status in this system. Currently, it is generally the case that those who cannot be accepted in theoretical courses will enter vocational schools and colleges (Nafisi, 2000).

The majority of this group enter vocational schools with the hope of entering universities when graduated and even if they can continue their studies after graduation, they compete the graduates of theoretical courses for gaining non-professional jobs.

Sakhara Pules (1990) stated that there is a huge difference between objectively observed registration and the actual demand for professional training. The students of vocational

schools who are rejected to enter theoretical schools, are forced to choose vocational schools. In such a situation which is a common success in developing countries, vocational schools will fail due to an inherent contradiction between what students prefer and what they choose to study.

Integration of Theoretical and Practical Training Approach

Regarding the criticism of the approach of training for employment in a particular system of vocational training, some scholars came to believe that the emergence of complex skills in the scope of vocations, and rapid and broad changes in science and technology require a revision of the traditional approach to vocational education. The basic idea proposed in the new approach is that the borders between vocational and academic education should not be sharp. Advocates of the integration of vocational and theoretical training proposed reorganization of theoretical and vocational courses so that the courses get connected to each other. This way the students are also able to understand all aspects of the desired profession (knowledge and skills dimensions) to understand.

The development of scientific-applied training stems from this approach. In addition to vocational skill training as the main axis in this approach, teaching scientific bases is also paid enough attention to.

In the recent recommendations issued by UNESCO, it has been strengthened that to adapt to the changing demands of the labor market, public knowledge and training should be enhanced to complete their technical knowledge and training for jobs should be multidisciplinary and interdisciplinary. For instance, it is said that vocational training programs cannot be designed in a way to carefully meet the needs of a specific job or a set of tasks to be responsive after employment. Dynamic and rapid changing of the demands of the world of work makes individuals replace their handwork skills to mental skills (Shariatzade, 2001).

In this educational system manpower is trained in a way that he achieves several occupational skills. It means that in addition to executive skills, the trained person also learns the knowledge, and skills related to problem solving and the ability to get a job. This pattern has had satisfying results in some developing countries such as New Zealand, Korea and the Philippines.

The Approach of Developing basic Competencies and Skills

The approach just described, mainly considers desired training in the form of normal curricula used in schools and universities; it works, thus, in the scope of high school and higher education. Besides accepting the idea that vocational training is essential, some experts, however, proposed that vocational success requires theoretical and practical skills as well as a series of individual skills which is beyond a specific job, such as business valuation, accountability, risk taking, flexibility and so on. Therefore, some experts contribute individuals' failure to their inability to cope with workplace rather than not knowing functional skills. So nowadays the motivating aspects of jobs and individuals' mutual relations in working life is considered even more important than gaining competency in functional skills (Lous, 1999).

Training vocational capabilities which is sometimes located among non-asserted or ultimate goals of the educational system, should be started from childhood and must be deepen in later educations. Numerous competency training methods are suggested within the framework curriculum design for creating basic and general skills required for employment.

For example, Eisner in his article entitled "training in accordance with job conditions and individuals' skills" stated that training art principles can prepare students for work and life, and career. He considered having some competencies such as understanding the relationships, the delicacy and the ability of making decisions in the absence of predefined rules as necessary for job preparation: (Mehrmohammadi, 2002).

Luis (1996), an expert in vocational training, believes that technical and vocational education should be practiced in areas such as the development of attitudes and personal skills, communication skills, computer skills and employment expertise. These competencies are also determined and confirmed in national studies.

Share'pour (2001) examined the relationship between academic trainings and community needs. This research focused on identifying current capabilities and core competencies of higher education graduates, and then introduced the following as effective factors in the employment of graduates:

1. Ability to collect, organize and analyze information
2. Ability to use foreign languages
3. Familiarity with the instruments of producing and distributing knowledge
4. Ability to use technology
5. Ability to communicate and exchange information
6. Ability to review and accept of opposing views
7. Cultural understanding
8. Problem-solving ability
9. Ability to think locally
10. Understanding and practicing organizational behavior
11. Understanding and orienting positively towards school discipline
12. Having reasonable job expectations
13. Commitment, work ethic and ability to think critically
14. Ability to work in a team

Global and current employment trends confirm the approach of training basic and essential skills; employment decline in the public sector and large private enterprises, employment increase in non-economic sectors, acceleration of new jobs creation, job security decrease and non-stability, the growing need for computer skills, information and communications elegant and decrease in handwork jobs all show that "theoretical knowledge" or "practical knowledge" strategies alone were incapable of preparing a person for dealing with career changes and new strategies are needed to be adopted for career training.

Another factor which invigorates the need for public education and basic skills required in employment in today's world is paying attention to the role of the entrepreneurs in economic development of the country. In general entrepreneurship, as a changing factor, refers to the creation of new business by an individual or small group. Studies related to the development of large companies and organizations have determined that the most important factor in ensuring their survival is innovation, invention and creation of products, and also changing them to new processes and methods. All of these owe to managers and employees who were entrepreneurs. In studies that conducted about the characteristics of entrepreneurs, several characteristics were determined that showed growing them requires the existence of a curriculum from the early years of childhood.

Researchers who have studied in the field of entrepreneurship education argue that schools should promote entrepreneurship. They criticize the situation in which teachers do not have the entrepreneurial spirit and this is usually because they are working at a highly organized

system. The result is that the students tend to see themselves as potential employees and not as entrepreneurs (Ahmadpour, 2001).

Conclusion and outlining guidelines for a curriculum which aims at employment

Attracting the graduates of universities and centers of higher education in the labor market depends on having some abilities and characteristics part of which must be created during the course of study at university. It seems that the irrelevance of processes, disciplines and educational materials taught at universities with the skills and abilities required by the job market is the most important factor in graduates' failure in job placement and employment. In addition to this, some external factors that are outside the scope and control of higher education have a significant influence on the employment of graduates. In this review paper, challenges and opportunities in the higher education system in meeting requirements of manpower skills which needed by the labor market was discussed from two aspects of internal and external factors. Internal factors are processes and strategies that are used in higher education system and are directly or indirectly connected with employment and employability of graduates. The most important factors include: lack of congruence between current capacity of university admissions and future needs of the labor market, mismatch between the educational content and occupational skills, lack of success in creating and sustaining motivation for students to serve the community, lack of appropriate context for training scientific and applied research and scientific and not considering scientific research as a priority at universities. External factors include all factors that directly or indirectly affect the employment of graduates and prevent their absorption in the labor market. These factors are as follows: lack of job seeking culture, lack of development of private enterprises for job seeking, underdevelopment of the Association of Graduates and their inefficiency in job placement and career guidance, large number of applicants and high competition for available jobs, lack of promoting a culture of entrepreneurship and small number of entrepreneurs, practical difficulties in implementing employment policies and strategic plans. The following results can also be discussed in employment curriculum:

1. Economic and job market perspectives on the world reflect the fact that the era of planning efficiency based on manpower demand is over. In this situation the best approach for all kinds of training and at all levels of education is promoting education quality and training proper characteristics for the labor market such as flexibility, critical thinking, socialization, rating the business, hard work, entrepreneurship, and creativity as main direction for all programs and administrative procedures.
2. The current boundaries that say technical education should be practiced at the secondary level and scientific-applied education at higher education is a totally rejected. It is necessary to reorganize the curricula for all courses to have an employment approach.
3. The job procedure implies a succession of machines instead of handwork. It seems, thus, that the curriculum should reduce the concentration on handwork skills and focus on mental skills. So, the investment priority should be given to public education.
4. With an emphasis on the need to link school and college with labor market, it seems that lack of diversification in technical, professional, scientific and applied disciplines and a more general classification of professions, and relying on common professional and basic skills, i.e. the skills that enables individuals to take a newer job is a better method for creating multiple fields. Obviously, the degree of specialization will be increased in higher education.

5. As experts have noted, for outlining a suitable employment training model, drawing attention to specific cultural, social, political and economic aspects of each country in both individual and organizational aspects come first. For example, if the pattern of practice in schools in Sweden is effective does not necessarily mean that it would also be effective in other countries. Therefore, to achieve good model of vocational training systems, it is essential to study the disciplines of other countries and localizing them according to the local conditions.
6. One of the infrastructures of developing employment training is decentralization of the education system. This is emphasized even in countries with less ethnic diversity than Iran (Vaziri, 2013).

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