

Technical and Vocational Education through Distance Learning in Bangladesh: Social Impacts and Benefits

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ABSTRACT

The globalization of business and industry increases the demand of more highly educated and skilled workers; but traditional academic curriculum systems have not enough scope to develop such skills. To fulfill the demand of skill manpower and to keep them in the streamline, policy-makers and educators must providing multiple pathways through high school and giving more emphasis on vocational education. Many countries have learned a lot by transforming from industrialization to knowledge society. It is well known that knowledge is the powerhouse of countries development. By providing a well-managed structured general education and vocational education for the citizen, they have reached at a higher standard. Bangladesh is not having enough infrastructure facilities to facilitate its people to become a skilled manpower like other nations. The working age population (15-64) is grown up every year. There are about three million Bangladeshi people stayed abroad and every year about 250,000 Bangladeshis goes abroad for living or work. These huge numbers of population and labor force have not been a skilled worker due to lack of training and proper education. BOU provides education for under privilege; drop out learners especially for the female and adults. Now it is offering some programs which have been partially supported to the Governments vocational and technical education policy. BOU has countrywide network by 12 Regional Resources Centers, 80 Coordinating Offices and more than 1260 Study Centers to delivers its educational program at the door-steps of the learners. BOU has a great opportunity to use these countrywide networks to provide vocational training and education in a distance mode especially for the work forces and huge unskilled population. By this, a skilled and trained manpower would be increased whom they would be a potential works forces for the countries development. This paper try to explore the current situation of VET in Bangladesh by emphasizing its effort and attainment as well as the recent changes has been happen in the job market pattern and also provide some suggestion for the policy-makers to introduce effective methods for VET in Bangladesh.

Keywords: Vocational education, social impact, skilled manpower, Job market.

INTRODUCTION

The development of a country is depends on per capita income, gross domestic product, industrialization, educated and skilled manpower and well communication facilities. Most of the developing countries have not achieved a significant level of industrialization relative to their populations and their living standard. There is a robust association between high population growth and low income; economic growth and human development have relationship in both directions.

Vocational education and training (VET) can prepares learners as a skilled manpower and helps them to get a job. Craft vocations are generally created on manual or practical activities; usually it is non-academic and related to a specific trade. It is occasionally denoted to as technical education as the students directly improves skill in a specific area. The VET system is being changed in order to make it more effective, efficient and responsive to the labor market needs instead of knowledge based education. Learning by doing is an effective strategy for re-engaging students especially for the students. Per capita economic growth in many countries has been relatively low because of high population growth and huge unemployment in low-level services as well as less job opportunities in job-market. To overcome the unemployment situation students are continuing their study to get better job and earn more money.

Bangladesh is a densely populated (158.8 million, July 2011) developing country and its adult literacy rate is 58.3% (BBS, 2011). Most of the illiterate people have been engaged in different unskilled jobs and they are not eligible in high demand job market. About 80% of the employed people are engaged in informal sector which contributes the major economical areas of the country. Among the unskilled workers, 76% of them worked in outside like agriculture, forestry and fisheries. In Bangladesh, working age population (15-64 years) has been increasing and it is now more than 46 million. Most of this growth has been come from the increasing trend of women participation (World Bank Report, 2007). The working age population will occupy 72.9% of the total population in 2016. To fulfill the equal balanced of learning activities and skill matching; education may continue throughout a lifelong. It also required to the shift study burden of middle and secondary schools to the fields of higher education and vocational education. This paper try to explore the current situation of VET in Bangladesh by emphasizing its effort and attainment as well as the recent changes has been happen in the job market pattern and also provide some suggestions for the policy-makers to introduce effective methods for VET in Bangladesh.

Bangladesh Open University: A New Dimension of Technical and Vocational Education

Bangladesh Open University (BOU) is the only one distance educational institute in Bangladesh which offer education for under privilege; dropout learners especially for the female and adults. BOU is now offering Junior School Certificate (JSC), Diploma in Youth in Development Work (DYDW), Bachelor in Agricultural Education (BAgEd), Certificate in Livestock and Poultry (CLP), Certificate in Pisciculture and Fish Processing (CPFP), Diploma in Computer Science (DCSA) and Bachelor of Nursing (BSN) programs which have partially exists vocational and technical education.

In place of off campus based teaching methods, BOU uses many types of technology to reach education to the citizen of the country, even in the most remote and rural areas, thereby contributing to poverty alleviation. There are several reasons for offering vocational education through BOU, these are: (a) there are so many evidence of skill mismatch; (b) increase of skilled manpower and send more overseas employment; and (c) there is an top most priority to enhance the levels of on-job training, and a well-designed VET system, which would addressing this shortcoming.

To enhance the skill and professional development, vocational education is the essential component for a developing country. It gives the opportunity to get a job in the job market crisis. It also create a self-employment opportunities. JSC, DYDW, CPFP, CLP, BAgEd, DCSA, BSN programs of BOU partially create a self-employment opportunities and employment at different organization. BOU should collaborate with job related industries to offer VET which should be accredited by BOU.

Benefits from Education

The reputation of education and training in a lifelong learning perception for the knowledge based society. Most of the benefit of higher education increases to individual learners and their families (Cunningham, 2005). Society as a whole also enjoys a financial return on the investment in higher education. Because the individual outcomes affect others, it is not possible to gracefully separate the benefits to persons from those shared by society as a whole. For example, all employees benefit from the better productivity of their associates, and joblessness causes the most damage to those who are jobless, but also results in a loss to the whole economy.

The likelihood of being jobless over the course of a functioning life is also related to education. Jobless youth creates some problems like crime and other antisocial activities that are generally not measured among the costs of not being educated (OECD, 2009). Education does not only increase the chance of being employed; whereas, once in occupation, better-educated persons earn considerably more than their less-educated groups.

Benefits from VET

Vocational education plays a significant role in the foundation of skills. Education in the labour force increases productivity in two ways: a) education enhances skills to labour, increasing the aptitude of labour to produce more production; and b) it raises the worker's capacity to update in ways that increase his or her own productivity as well as others. Participation in the labour market is closely

related to education. The higher an individual's education level, the more likely it is that she/he will participate in the labour market. This effect is especially pronounced for women, whose participation rates are still comparatively low in many countries (Fig. 1).

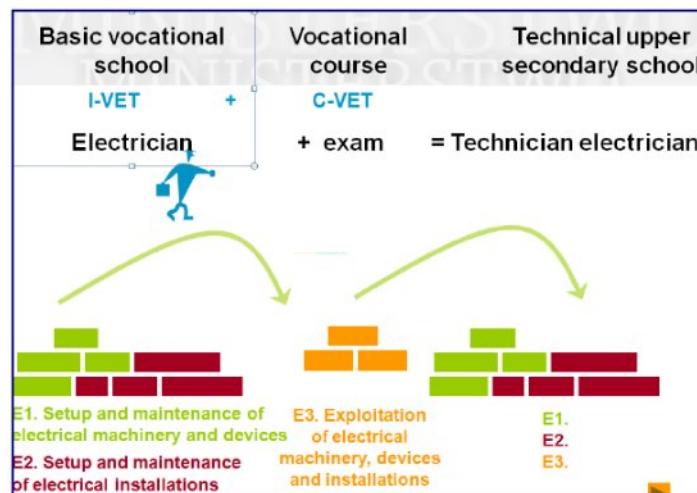


Figure 1. Model of Vocational Educational Benefits.
 Source: New Skills for New Jobs: www.eunec.eu

Existing Technical and Vocational Education Status of Bangladesh

Education system of Bangladesh has been broadly divided into three major phases, this are a) primary education, b) secondary education and c) tertiary education. The secondary education system is further classified into four types: general education, madrasah education, technical-vocational education and professional education (Fig. 2).

THE PRESENT EDUCATIONAL STRUCTURE OF BANGLADESH											
Age	Grade										
26+											
25+	XX			Ph. D (Engr)	Ph.D (Medical)						
24+	XIX		Ph. D	PostMBBS Dipl			Ph. D (Education)				
23+	XVIII		M.Phil	M.Phil (Medical)							
22+	XVII	MA/MSc/MCom/MSS/MBA	LLM	M B B S BDS	MSc (Engr)	MSc (Agr)	MBA	M.Ed & M A (Edn)	MFA	MA (LSc)	
21+	XVI	Bachelor (Hons)	Masters (Prof)	LLB (Hons)	BSc.Eng BSc.Agr BSc.Text BSc.Leath	BSc.Eng	BSc (Tech.Edn)	BBA	B.Ed Dip.Ed & BP ED	Dip. (LSc)	Kamil
20+	XV	Bachelor (Pass)							BFA		
19+	XIV					Diploma (Engineering)				Diploma in Nursing	Fazil
18+	XIII	Secondary									Alim
17+	XII	Examination		HSC				HSC Voc. C in Ag	C in Edu.	Pre-Degree BFA	Diploma in Comm.
16+	XI	HIGHER SECONDARY EDUCATION									
e15+	X	Examination		SSC	TRADE Certificate/ SSC Vocational	ARTISAN COURSE e.g. CERAMICS					Dakhil
14+	IX	SECONDARY EDUCATION									
13+	VIII	JUNIOR SECONDARY EDUCATION									
12+	VII										
11+	VI										
10+	V	PRIMARY EDUCATION									Ebtedayee
9+	IV										
8+	III										
7+	II										
6+	I										
5+		PRE-PRIMARY EDUCATION									
4+											
3+											

Figure 2. Educational Structure of Bangladesh.
 Source: http://www.banbeis.gov.bd/es_bd.htm

To ensure the quality education in VET, thirteen national bodies which co-ordinate TVET in Bangladesh to increase the job-oriented skilled manpower those who are engaged in different sectors, industries and self-employment. Bangladesh have 2848 TVET established where 447927 students

were enrolled in the year of 2010; among the institutions government funded vocational institutes are 251 and non-government are 2597; and the number of student enrollment are 133897 and 314030, respectively (Table 1) (BANBEIS, 2012).

Table 1: Number of Institutions, Teachers and Enrolment by Type, Management & Sex.

Type of Institute	Management	No. of Inst.	Teachers			Students		
			Total	Female	% of Female	Total	Girls	% of Girls
Polytechnic Institute	Public	46	1285	134	10.43	58816	7324	12.45
	Private	125	1592	531	33.35	25124	1645	6.55
Technical School & College	Public	64	1135	121	10.66	35621	4633	13.01
	Private	26	242	72	29.75	2283	668	29.26
Commercial College	Public	16	88	21	23.86	4125	993	24.07
	Private	9	32	7	21.88	702	122	17.38
Glass & Ceramic Institute	Public	1	18	3	16.67	884	63	7.13
	Private	-	-	-	-	-	-	-
Graphic Arts Institute	Public	1	14	4	28.57	550	47	8.55
	Private	-	-	-	-	-	-	-
Survey Institute	Public	2	35	5	14.29	840	33	3.93
	Private	-	-	-	-	-	-	-
Technical Training Centre	Public	37	802	142	17.71	8877	1682	18.95
	Private	6	56	14	25.00	262	78	29.77
Textile Institute	Public	6	158	15	9.49	3462	268	7.74
	Private	23	132	28	21.21	6486	423	6.52
Textile Vocational	Public	40	288	65	22.57	4532	495	10.92
	Private	10	74	13	17.57	1224	231	18.87
Agriculture Training Institute	Public	13	137	25	18.25	9065	2032	22.42
	Private	96	732	148	20.22	15156	2560	16.89
Marine Technology	Public	1	50	4	8.00	666	36	5.41
	Private	-	-	-	-	-	-	-
S.S.C Vocational (Independent)	Public	11	266	36	13.53	2954	495	16.76
	Private	127	1808	392	21.68	19037	5679	29.83
HSC Voc/B. Management (Independent)	Public	10	143	26	18.18	3112	165	5.30
	Private	527	4937	907	18.37	72875	7722	10.60
S.S.C Vocational (Attached)	Public	-	-	-	-	-	-	-
	Private	1080	6109	1431	23.42	101558	37393	36.82
HSC Voc/B. Management (Attached)	Public	3	5	3	60.00	393	393	100
	Private	568	2317	464	20.03	69323	27401	39.53
Total (Technical Education)	Public	251	4424	604	13.65	133897	18659	13.94
	Private	2597	18031	4007	22.22	314030	83922	26.72
	Total	2848	22455	4611	20.53	447927	102581	22.90

To ensure the quality VET system, Bangladesh has set a new format of Technical and Vocational Education and Training policies and strategies. Implementation of the new national TVET policy there have an effective progress was made in the TVET system. There also established a new national qualifications framework for TVET, standard curriculum, quality assurance arrangement for training organizations, enhanced links between industry and TVET and also increasing access of underprivileged groups to TVET (ILO, 2008).

In Bangladesh VET system is comprised of three levels-

Basic Skills Level

Basic skill level is composed of two years course focusing on manual both inside and outside manual skills dependent. Learners who have completed grade VIII are eligible for enrollment.

Certificate Level

Same enrollment criteria as Basic Skill Level but learners can earn a two-year Secondary School Certificate (Voc) and they have also scope to update themselves to enroll in the additional two years HSC (Voc) after completing two years SSC (Voc).

Post-secondary Level

Post-secondary level of vocational education is for four-year diploma-level courses, offered through polytechnic and mono-technic institutions.

- The basic skills and certificate level courses can be classified as vocational education;
- The diploma level courses are equivalent to vocational (post-secondary) training (Aktaruzzaman and Clement 2011).

VET Initiatives in BOU

World economy is changing, along with that demand of vocational skilled manpower is increasing day by day at home and abroad. To minimize the demand of skilled manpower, BOU is now planning to offer some vocational program. The aim and objectives of these programs are as follows; to reduce the unemployment and increased job opportunity; to become a competent with other job market and to enhance the productivity of the country.

BOU is now planning to offer the following trade courses-

- Weaving
- Knitting
- Dying, Printing and Finishing
- Food Processing and Preservation
- General Electronics
- General Mechanics
- Computer & Information Technology
- Fish Culture and Breeding

These courses are covered by the teaching-learning activities through tutorials, contact sessions, self-study, self-practice, role play, brain storming and writing a practical work report. After completion of each year learners must have to attend a six week hands-on training (industrial training) for the respective trade courses. Trained teacher of the respective technical and vocational educational institution would be the key personnel for the teaching-learning activities.

Problem and Issues of VET

Increasing job demand and advance in technology there have still a number of factors including jobless growth, the high quality of school education and there exists a relatively high unemployment rate among youths aged 15 to 29.

Problem and Issues of VET in Bangladesh (Elbushari I E, Aktaruzzaman M. 2012):

- There are lack of linkage between industry and the VET institutions, this is a big issue and the main reason of low employment rate of VET graduates.
- Inadequate coordination and bureaucratic complexities of different ministries and controlling bodies witch affect the proper management.
- The lack of international affiliation of the VET institutions and the learners due to lack of institutions accreditation from internationally recognized accreditation bodies.
- Inadequate rising of fund both from the government and private sector is the key issues in order to maintain justifiable development and development of VET system.
- Low capacity utilization of the existing VET system at different institutes and industries.
- Negligence in encouraging the NGO's to play a major role in VET system.

RECOMMENDATIONS

- Established a well-structured institutional framework for enhancing industry participation in VET. Under the framework, all relevant ministries and industry stakeholders should contribute to development and implementation of VET policy.
- Improve the provision, quality and relevance of initial on-job training by strengthening incentives for partnerships between VET institutions and firms and by developing and implementing quality standards.
- Students who enrolled for the VET, they must get subsidies from the government as well as from the industries as like weaving of their tuition fees and ensuring of getting a job.
- Encourage newly-recruited VET teachers to have relevant prior work experience particularly for high school VET. Require all VET institutions to ensure that VET teachers regularly update their skills in the vocational area, including their knowledge of technologies and working practices.
- VET qualifications are recognized on the labour market and
- This is easy in the countries having a tradition of employers and employees involvement and engagement in the policy design.

CONCLUSIONS

Skills, knowledge and innovation are important driving forces of economic growth. Bangladesh has achieved a robust economic performance in the recent years. There have some drawback to uphold the current situation of skill development and job creation. To overcome this pressure technical and vocational education is the alternative option for the social and personal development. BOU made a tremendous job to offer SSC and HSC program and planning to offer SSC (vocational) program through open and distance mode for the job seekers and jobless youth in the job market by creating a self-employment opportunities for the unskilled people.

BOU have to collaborate with job related industries to offer VE which should be accredited by BOU authority and it also provide certificate according to the level of learners. Continuous evaluation with ranked to the learners, trainees and the providers of VE have to be done. The finished product which made by the learning process or industrial training could be sale with the collaboration of any industry or any sale center. The earning money from the sale center would be distributed as cost-sharing to the learners, trainees and the providers as stipend. Vocational and technical education can enhance the skill development and create a job opportunity. BOU might be a part of this phenomenon and contribute a lot to generate skill manpower as individually, for the family, for the society and for the countries development.

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