

**Presented in**  
**8th Pan-Commonwealth Forum on Open Learning (PCF8)**  
**27 - 30 November 2016**

**Available at**  
**<http://oasis.col.org>**

## **EXPANSION OF COMPETENCY BASED SKILLS TRAINING FOR THE NEO-LITERATES THROUGH TECHNOLOGY ASSISTED COURSE MATERIALS: PERSPECTIVE BANGLADESH**

### **Country context and rationale**

Bangladesh is predominantly an agriculture-based developing country having a population of approximately 160 million. It is a densely populated country where the proportion of the people aged 15 years and above constitutes more than 68.9 percent. Around two million young people are entering the workforce each year. One of the major development challenges for the country is the creation of employment for new entrants into the labor force, and those who are currently under employed. Labor force Survey, Bangladesh 2013 found about 87.4 per cent of the total employed persons aged 15 and above are in the informal sector , while only 12.6 per cent were in formal employment. The informal economy plays a significant role in the labor market of Bangladesh, contributing a major share to total employment scenario in the country. The labor force here is growing much faster than employment opportunities in the formal sector, and therefore, the problems of unemployment and underemployment remain high. Most of the additional job opportunities in recent years were in the informal sector.

Although access to education has significantly increased in recent years, the vast majority of the working population is without general education or occupational skills. According to the national labor force survey 2010, nearly 40.1percent of the labor force has no education at all. Among them 39.9 percent are male and 40.6 female. There also exists urban-rural variation in the level of education of the labor force. In the urban area, 27.1 percent of the labor force has no education compared to 44.1 percent in the rural area.

In Bangladesh millions of people, who could not complete VIII grade education or dropped out at early stage of primary schooling, cannot attend formal TVET because of entry educational restrictions. People of all ages and locations, especially in the remote and non-accessible areas, are being deprived of their rights to be trained. Most of the poor people, especially women cannot afford to get training from formal skills training institutions due to physical distance of the training institutions from their locality as well as due to social barriers.

Bangladesh national skills development policy 2011 introduced two pre- vocational qualification levels to cater for needs of people who have a general education level below Grade 8. The qualifications are currently being piloted with a number of public and private institutions under the TVET Reform Project. It is universally recognized that to address the needs of the neo-literates, those who have limited reading skills need specially-designed skills training course to overcome their language difficulties.

There is no debate that scope should be widened to make provisions for acquiring vocational skills irrespective to their educational level occurring in formal, non-formal, informal and on-the job-settings. This concern has been reflected in the Bangladesh national skills development policy 2011, which stated that ‘To more effectively manage its human resources and develop an integrated approach to skills development, there is a need to think beyond state controlled TVET systems and emphasize the varied types of formal and non-formal training through which skills are developed’.

Public TVET in Bangladesh is delivered by institutions belonging to 19 different ministries. Each of these segments offers a wide variety of training programs to different target groups using different approaches to delivery and assessment. Many private training organizations and NGOs deliver skills training, both

formal and informal settings. Skills training also occurs on-and-off the job in enterprises, and as pre-departure training for expatriate workers.

Effective skills training largely depend on well-trained cadre of instructors and trainers. The trainers who are responsible for delivering formal and non-formal skills training must possess the necessary up-to-date technical skills to deliver and assess training. In case of private training providing organization, currently there is a lack of skilled trainers and effective course materials to organize local level vocational skills training. Most of the conventional training courses for the neo-literates are dominated by the lecture methods without effective lesson plan and visual training materials. As a result participants cannot achieve expected competencies and do not find training sessions interesting. Due to unavailability of competency - based and effective course materials, the quality of these courses are often much lower than the requirements of the employers, and often fail to offer adequate knowledge and skills to make them entrepreneurs.

### **Capacity building of private training providers an urgent need**

According to Survey of TVET Providers Bangladesh 2013- 2014, private sector participation in TVET had been negligible since 1990. However, by the late 1990s, the private sector had about 40 percent of total capacity TVET provisions, and by 2005 this proportion had gone up to over 60 percent, and by now the proportion of private sector stands around 95 percent of the number of institutions and 86 percent of the total intake of learners. Most of the private training providers lack competency- based training materials and competent trainers to organize local level training courses.

The capacity of TVET system of Bangladesh in terms of resources, expertise and coverage is very limited considering the increasing needs for widening access and impart quality training. Majority of instructional staff of TVET system, especially of private training service providers, are insufficiently competent to impart quality skills training. The principal reason for this incapability is the lack of Trainers Training provision and absence of systematic course materials. The number of technical and vocational training institutions in Bangladesh is around 7000 now. To train the huge number of instructors of these training institutes there are only two public TVET teachers' training institutions in the country, i.e., one Technical Teachers Training College (TTTC) in Dhaka for diploma programme and the Vocational Teachers Training Institute (VTTI) in Bogra for diploma and certificate programmes. It is simply impossible for these two government - run teachers training institutes to train and re-train thousands of Government and non-government instructors of vocational training institutions. As a result, instructors of the vocational training institutions impart skills training without undergoing any trainer's training. While conducting training sessions the instructors largely depending on their individual knowledge and skills instead of following systematic lesson plan and appropriate training materials. There is a widespread dissatisfaction on the part of employers regarding the skills of those graduates of training institutions in relation to job requirements. Therefore, enhancement of quality of training by fulfilling all necessary conditions is of prime importance for the training institutions, especially for those under private sector.

### **Expanding quality training provision- response of Dhaka Ahsania Mission**

Since its establishment in 1958, Dhaka Ahsania Mission (DAM), one of the leading and oldest NGOs in Bangladesh has been giving highest importance to education and skills development for the

underprivileged people of the country. DAM has specialization in developing need- based literacy and skills training materials and field level implementation of literacy and skills training programmes for different clientele groups. Since 1985, DAM has been offering variety of livelihood skills development training courses through vocational training institutes and community based outreach centers in both urban and rural areas of Bangladesh. DAM has developed huge number of need- based training materials for the unreached population who do not have access to formal skills training, especially youths, women and men with limited reading skills. Dhaka Ahsania Mission has long experience of developing digital materials for literacy and skills training. In 2012, with support from Commonwealth of Learning (COL), the Center for International Education and Development (CINED), an institution of DAM, adapted technology based delivery approach of skills training and developed five course materials on five trades for neo-literates.

Through these course materials CINED introduced an innovative technology- based delivery approach in the non-formal skills training. This series materials consists of five Animation videos (each of 15 minutes duration) and five easy to read pictorial Booklets on five livelihood skills i.e. “Vermey compost”, “Nursery”, “Poultry farming”, “Flower cultivation”, and “Batik print”. The uniqueness of the course material is that, the neo-literates through watching videos and reading booklets individually or guided by a local facilitator, gets necessary knowledge and skills about the trades. These five course materials were developed considering the capacity of community level trainers/ resource persons as trainers and ICT enabled Community Learning Centers (CLC) as the delivery platform. These were designed considering the scarcity of skills trainers at the community levels. Literacy competency of the neo-literates was prime concern while developing the course materials. The special characteristics of these course materials were utilization of community level resource persons who have general understanding about the trade as trainers. With support from COL, English versions of the course materials were produced. They were developed under a series “*Let’s work and build our lives*” and disseminated as Open Educational Resource (OER).

Utilizing the experience of developing technology- based skills training materials, CINED in cooperation with Commonwealth of Learning (COL) initiated another intervention in the TVET sector in 2015. This initiative was to demonstrate an effective approach of competency- based skills training for the neo-literates through community level institutional support. Realizing the importance to provide assistance to thousands of private training providers to deliver quality training, CINED developed three “Basic Trade Certificate Course” on three trades. The main aim of developing these course materials was: (a) to assist trainers of NGOs and private training service providers to deliver competency based quality skills training, (b) to develop course curriculum and materials appropriate for the needs and educational levels of the neo literates and (c) to introduce technology based training materials in the training of neo-literates. The course materials were developed under a series titled “*Providing Trainings Building Capacity*”. The names of three trade courses are Beauty Care, Garments Machine Operation and Karchupi (hand embroidery).

### **Course materials - characteristics and significance**

Utilizing the rapidly expanding ICT infrastructure in Bangladesh and evolving need of using ICT in the training sessions, CINED developed three ICT enabled course materials on three trades. The duration of each course is 288 hours. Training providing organizations can organize training sessions 2/4 hours per day depending on the interest and convenience of the trainees. The course materials consist of three Training Manuals for the trainers, three easy to read Handbooks for the trainees and 119 Video Clips for process demonstration of three courses contents. In the training manuals clear instructions have been provided for the trainers which are helpful to deliver every theoretical and practical session systematically using appropriate methodology and time. Clear instructions and techniques of review and evaluation were

given in the training manuals. There are provisions for review at the beginning and evaluation at the end of each session. After conclusion of every chapter, questionnaires are given to evaluate the whole chapter. There is provision for a terminal evaluation after concluding each course.

Considering the fact that most of the trainees would be neo-literate, handbooks of these series were designed taking into account the educational levels of the trainees. Four color handbooks for the trainees have been developed using simple language with easy words, short sentence and real photos. At the end of the course, these handbooks are very useful for the trainees to recapitulate the learning from the course.

A total of 119 video clips have been developed as course materials to show the standard process/techniques of each trade. Out of 199 video clips, 67 were developed to illustrate different techniques of Garments Machine Operation, 37 karchupi trade and 15 to demonstrate Beauty Care techniques. These illustrates know how and technical details of each course contents, and are designed also to help the trainers to know the process of contents of each trade, if is not clear to them. Through watching these video clips the trainers can both update their skills and knowledge before conducting sessions and show the video clips to the trainees before and after theoretical and practical sessions as model demonstration. Course materials are available online as OER to help widen access to private training providers to use and deliver quality skills training.

### **Competency standard**

Course materials are developed keeping consistency with Pre-Vocational Level-2 of the National Technical and Vocational Qualifications Framework (NTVQF). Pre-Vocational Level 1 equips candidates with basic language, literacy and numeracy skills relating to an occupation and on the other hand Pre-Vocational Level 2 adds sector and occupational specific skills to these. While designing the course materials, CINED consider sector specific units, occupation specific units and occupational safety units of the national competency standard of Pre-Vocational Level 2. The most important consideration was to meet the immediate market need of the occupation so that the trainees can be employed and/or be a self-employed easily.

### **Beneficiaries**

According to Labour Force Survey 2013, about 38.7 per cent of the population aged 15 and above are illiterate. In Bangladesh high level of illiteracy exists among potential working population, although country's constitution recognizes basic education as a fundamental right and the universal primary education as a basic state policy. But in reality, a large number of people still remain outside the formal education system. After independence in 1971, Government and non-Government organizations have been implementing programmes to educate millions of children, youth and adults who do not have access to formal schools through alternative learning opportunities offered by non-formal education. During the period 1990 to 2000, target group of NFE programmes were illiterate adult and youths who never had the chance to attend school or dropouts from school. From 2000 onwards, focus was given to retain the literacy skills for those who already completed basic literacy courses through creating provision for continuing education and vocational skills training. In Bangladesh vocational skills training is now considered as integrated part of literacy.

Currently, alongside with Government initiatives, NGOs and private training providers are providing need based short courses to the vast number of literacy graduates/new literates for livelihood development. A survey conducted by the Campaign for Popular Education (CAMPE) in 2009, shows that there are more than 1,300 NGOs, are implementing different kinds of education programmes in Bangladesh. Most of the vocational training courses for the neo-literates are organized as ad-hoc basis and do not follow national

competency standard. Meanwhile, there is a serious lack of teachers training institutes. As a result, trainers of NGOs and private training providers follow orthodox training methods and inappropriate training materials in conducting skills training. It is important to recognize that conventional training methods and materials are not appropriate for the neo-literates who have limited reading skills. Special consideration is required to design skills training for the neo-literates. Visual training materials are found very useful for the neo-literates to grasp the ideas of technical process and feel animated during theoretical sessions.

To minimize the capacity gap of the skills trainers and to address non availability of systematic course materials, CINED's technology based course materials are exemplar. Utilizing these course materials local level trainers can organize systematic training courses for millions of neo-literates who are deprived of being trained.

### **Development process**

While developing the course materials, CINED followed a systematic step-by-step process. A *needs assessment* was carried out to identify three vocational trades suitable for the neo-literates. Prospective beneficiaries, employers and experts of vocational skills training providing agencies were involved in the needs assessment. Through this needs assessment three vocational trades were prioritized. Market demand, pro-female characteristics of the trades, employability and profitability of the trade were examined while selecting three trades. Competency levels of each contents of each trade were identified considering the market demand as well as national competency standard.

After selecting the trades, three course *curriculums* were developed, based on which training course materials were developed. Each course materials contains: (a) Training manual for the trainers, which includes session guides/lesson plan for each session, (b) Handbook/resource book for the trainees on necessary information about the trade and its process. A common matrix was followed while developing the training manuals and handbooks to maintain common characteristics and standard. Following the directions of the course developers, 119 *video clips* were developed to exhibit the real process of each trade. To validate the course materials three *pilot training courses* were organized. Incorporating the feedbacks of piloting, course materials of all three trades were reviewed and finalized. Finally, course materials are *uploaded in the CINED's website* ([www.ahsaniamission.org.bd/cined](http://www.ahsaniamission.org.bd/cined)) for wider access and nationwide utilization.

### **Certification**

NGOs and private training service providers who are implementing skills training using this course materials issue certificates to their participants. Acceptance of the certificate by the employers depends on quality of the trainees which is expected to be of high standard. Since the course curriculum followed the national competency standard, after completion of the course, trainees can appear in the assessment system of "Recognition of Prior Learning" (RPL) to get access to upper level of skills training and formal certification from Bangladesh Technical Education Board (BTEB).

### **Use of course materials**

The course materials are useful and available online for the course organizers who are planning to organize skills training for people with low level of literacy. Skills trainers can easily download all course materials from the website of CINED as per their need and can make necessary copies. The course materials are self explanatory. Following the user's instruction, incorporated in the course materials, instructors/trainers can

easily understand the process of training delivery and process of utilization of the course materials. Trainers are expected to read training manual, handbook and watch video clips to be better equipped before delivering the course. Training providers can obtain DVD of the course materials from CINED. Online availability of the course materials especially handbooks and video clips are helpful to the trainees after the training course. Trainees who have online access can view course materials even from their mobile phone to refresh their knowledge and skills as and when required.

## **Conclusion**

These series of three complete course materials which are specially designed for the neo-literates is first of its kind in Bangladesh. CINED hopes that these series of technology based course materials will be considered as a model of competency based course materials for organizing effective skills training for the neo-literates. It is expected that following the structure of this course materials, other stakeholders would be interested to develop similar training courses on other trades which will help millions of neo-literates in Bangladesh to improve their livelihoods. The course materials are now being utilized by several private training providers, including Dhaka Ahsania Mission. A majority of the youth who completed training using these course materials are now gainfully employed. Some are in the process of establishing their own income generating enterprises i.e. Karchupi production house and beauty parlor. Since the course materials are available online, it is difficult to get proper information regarding the number of user organizations and number of learners who are benefited. To assess the impact of this course materials, CINED will conduct a tracer study in future. Utilizing the scope of online presence of the course materials regular updating of course materials as per demands of the trainers and training implementing organizations will be continued.