

International Conference
on
Vocational Education and Training
through Open Schooling

Organised by

National Institute of Open Schooling, India
and
Commonwealth of Learning, Canada
8-10 February, 2006, Kovalam, Kerala, India

OUTCOMES
AND
RECOMMENDATIONS

(DRAFT)



National Institute of Open Schooling
India

and



Commonwealth of Learning
Canada

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International Conference Vocational Education and Training through Open Schooling

Introduction

Realising that there are immense opportunities for human resource development in the field of agriculture, manufacturing and social services sectors for developing countries like India, a properly planned and effectively implemented Vocational Education and Training (VET) system through open and distance learning (ODL) will (i) equip the learners having varying learning abilities with particular emphasis on marginalized groups with appropriate skills for sustainable livelihood, (ii) facilitate creation of a pool of technologically qualified human resource, and (iii) make the youth entrepreneurs. However, in many countries, particularly in developing countries, the VET programme under the formal education system faces certain limitations with regard to expansion, access, equity and cost effectiveness. Consequently a large number of individuals who would like to acquire competencies and skills are excluded from the benefits of VET.

There is a need (i) to sensitise the society about the importance of VET in the context of reduction of un-employment and poverty, (ii) to bring about attitudinal changes in the society to ensure dignity of labour thereby diverting more people to join skill based programmes for earning livelihood, and (iii) to provide equitable access to Vocational Education and Training (VET) programme. Certain other challenges that need to be addressed are:

- Need to meet the constantly changing requirements of technology/industry with inbuilt flexibility to switch over courses with changes in demand pattern.
- Quality improvement by involving industries in designing the courses, development of curriculum and learning material, training of faculty, practical training of students and evaluation and certification.
- Recognition of the Vocational Education and Training through ODL system from the national agencies for accreditation/recognition.
- Use of Information and Communication Technology (ICT) for development of instructional material, programme delivery and support systems.

These challenges need to be addressed by developing strategies and plans of action for implementation of viable and effective VET Programme through ODL system. Among other things, it requires exchange of ideas and experiences among representatives of trade and industry, VET practitioners, academicians, educational planners and administrators. Keeping this view, the National Institute of Open Schooling (NIOS) India, in collaboration with the Commonwealth of Learning (COL), Canada organised an *International Conference on Vocational Education and Training through Open Schooling: Challenges and Future Strategies from 8 to 10 February 2006 at Kovalam, Kerala, (India)* to deliberate on the impending challenges and issues and suggest appropriate responses to these challenges.

The National Institute of Open Schooling (NIOS) India with International recognition and presence provides access to sustainable and learning centric quality school education, skill upgradation and training through Open and Distance Learning (ODL) and ensures convergence of Open Schooling organisations, resulting in an inclusive learning society, human resource development, national integration and global understanding,.

The Commonwealth of Learning (COL) is the world's only inter governmental organisation dedicated solely to Open and Distance Learning (ODL) and use of ICT for its advancement. It was formed by the Commonwealth – a voluntary association of the countries committed to international consultation, cooperation and development – to help its members achieve their educational goals.

The conference was attended by delegates from the Commonwealth of Learning, Canada, SriLanka, Nigeria, Bangladesh, New Zealand , Pakistan, and India.

Objectives of the Conference :

- To discuss strategies for development of marginalized groups through VET.
- To examine issues that contribute to quality VET through Open Schooling with focus on course development, course delivery, evaluation, staff development and training, and collaborative arrangements.
- To explore the use ICT for VET through Open Schooling.
- To outline a road map for development and expansion of the Vocational Education and Training Programme through Open Schooling.
- To examine possibilities of international cooperation and networking which may be mutually beneficial, and to learn from experiences of practitioners in the field.

Major Themes of the Conference

Theme I : Vocational Education and Training for Marginalized Groups

Theme II : Quality Issues in the Provision of Vocational Education and Training

Theme III : Acknowledgement/Recognition of the Importance of Vocational Education and Training

Theme IV : Vocational Education and Training through Open and Distance Learning (ODL) and the use of ICT

Participants of the Conference

- International Experts including representatives from the Commonwealth of Learning(COL)
- Educational Planners and Administrators
- Representatives from the Trade and Industry Associations/Federations like ASSOCHAM, C&T Microsoft etc.
- Representatives from Vocational Education Agencies/Institutes
- Reputed Educationists and Experts in Open Learning

The Conference was a mix of presentations in Plenary Sessions, Panel and Open House Discussions and Group Sessions. The recommendations of the conference on each theme were presented and discussed at the end of each session. The recommendations of the Conference were presented in the penultimate session on 10 February 2006.

Methodology of the Conference

Each theme was introduced in the plenary session presided over by an eminent educationist from among the participants. Thereafter, identified speakers made their presentations. It was followed by interventions, observations, suggestions and queries. Based on the inputs and issues raised in the plenary session, each theme was discussed in groups in parallel sessions. The participants again met in plenary session in which the Reports of the groups were presented and deliberated upon.

Based on the deliberations in various sessions, the recommendations of the conference were drafted and presented at the valedictory session on 10 February, 2006. The chief guest at the valedictory session Hon'ble Education Minister Govt. of Kerala Sh. Bashir Ahmed delivered the Valedictory Address – after the summery presentation of the report and comments by the participants.

A copy of the programme schedule is at Annexure-I. The list of participants is at Annexure-II

A precise account about the issues discussed and observations and suggestions given in various sessions of the conference is given in the following pages.

Inaugural Session

The conference was initiated by lighting the lamp by Shri MAA Fatmi, Hon'ble Minister of State, Government of India, Ministry of Human Resource Development, Sir John Daniel, President and CEO, COL, Prof. Ashoka Chandra, former special Secretary, Government of India, Ministry of Human Resource Development, Shri M.C. Pant, Chairman, National Institute of Open Schooling (NIOS) New Delhi, and Shri D.S. Bist, Secretary, NIOS.

While welcoming the Hon'ble Guests and the delegates, Shri M.C. Pant, Chairman, NIOS (India) informed that NIOS had organized several International Conference on

Promotion of Open Schooling. However, the present conference is the first International Conference for deliberation on strategies for up scaling of Vocational Education and Training through Open Schooling. Highlights of the address of the Chairman, NIOS (India) are as follow.

- THE OPEN AND DISTANCE EDUCATION IS A NEW PARADIGM WITH SOME ELEMENTS OF SHIFT SUCH AS:
 FROM CLASSROOM TO ANYWHERE
 FROM TEACHER CENTRIC TO LEARNER CENTRIC
 FROM TEACHER AS AN INSTRUCTOR TO TEACHER AS A FACILITATOR
 FROM MAINLY ORAL INSTRUCTIONS TO TECHNOLOGY AIDED INSTRUCTION
 FROM FIXED TIME TO ANYTIME LEARNING INSTRUCTION
 FROM “YOU LEARN WHAT WE OFFER” TO “WE OFFER WHAT YOU WANT TO LEARN”.
 From education as one time activity to education as life long activity.
- NIOS offers about 70 Vocational Education Courses in various areas such as Agriculture, Business and Commerce, Technology, Health and Paramedical, Home Science and Teacher Training. Some life enrichment courses are also offered. Knowledge, skills and qualities of entrepreneurship have been made essential components in curricula for Vocational Education Courses with emphasis on practical and on the job training in related industrial units.
- The Open Schooling system which is at a take-off stage in developing countries has to have a great leap forward to meet the challenge of making the nations learning societies in a reasonable period of time. The open schooling system with inbuilt flexibilities is going to be a major programme delivery mode of study up to pre-degree level.
- *The Vocational Education programmes of NIOS envisage holistic development of learner using Head, Hand and Heart in unison. Use of Head refers to capability of self learning. Use of Hand refers to skill development and use of ICT wherever needed. Use of Heart refers to life enrichment through appropriate values and virtues. Guidance and Counseling is being made an integral part of the Vocational Education programmes of NIOS.*
- *The NIOS, in collaboration with international organizations like COL and UNESCO, as well as at bilateral level, will strive for promotion of open schooling in the developing countries through various modes such as advocacy, consultancy, training of functionaries, dissemination of information, workshops, conferences etc.*
- The Open Vocational Education Programme can not be operationalised in a watertight compartment. It is obvious that cooperation and collaboration with sectors other than Education is a MUST. Strategies and to be evolved in respect of certain issues such as:
 - Ü inter-sectoral cooperation in operationalisation of Open Vocational Education Programme,
 - Ü identification of education needs of diversified client groups for offering need based vocational education programmes,

- Ü operationalisation of vocational education programmes for differently abled persons and other disadvantaged persons,
- Ü setting up of Rural Community Workshops as training-cum-production-cum-service centres for providing educational opportunities to rural youth,
- Ü qualitative improvement and quantitative expansion of Open Vocational Educational Programme,
- Ü making the learners entrepreneurs and not simply job seekers,
- Ü developing a viable and effective Framework for Examinations in Vocational Education subjects,
- Ü monitoring of implementation of Open Vocational Education Programmes,
- Ü training of functionaries,
- Ü inter-country cooperation through international organization like COL, UNESCO, UNECEF, World Bank, and
- Ü wide publicity of Vocation Education Programme.

Sir John Daniel, President and CEO, COL, in his address focused on “Open Schooling for better Learning”. Among other things, he gave reference of the following.

- The UN Millennium Development Goal “Ensure that all boys and girls complete a full course of primary schooling”.
- Dakar “Education for All” Goal 3 “Ensuring that the learning needs of all young people are met through equitable access to appropriate learning and life skills programmes”.

While giving a precise account of evolution of “Open Schooling”, Sir John mentioned its characteristics. Highlight of his address are as follows.

- “It is at work that our roles as competent human beings and responsible citizens come together most intensely”
- Education and Training implies:
 - intellectual, technical, social skills for work
 - functional literacy
 - lifelong learning
- The challenge of Vocational Education and Training are:
 - To be local
 - To engage the private sector
 - To be up to date
 - To be open to the world
- The National Institute of Open Schooling (NIOS) should exploit its openness. Among other programmes and activities, NIOS could work with self employed and to strive to providing skills for employability.

- Over a period of about one and a half decades, NIOS has made its presence felt in International arena by organizing several advocacy and consultancy programmes for Asian and African Countries in collaboration with COL.
- The VET programmes should endeavor to link training with human resource development. This area needs to be given priority.

The keynote address of Prof. Ashoka Chandra, formerly Educational Advisor, Ministry of Human Resource Development, Government of India, was on the theme "Vocational Training for Informal Economy : A Strategic Intervention for Productive Employment." Highlights of the address of Prof. Chandra are as follows.

- TVET system in India still too small by International Comparison. Almost all of what is available is focused on the Formal/Organised Sector of the Economy. Virtually nothing is available for the large Informal Economy.
- Employment is important dimension of Human Development; No Government and no society can afford to be unconcerned about it. VET is considered important in view of its role in preparing persons for world-of-work.
- Japan's thrust on training is worth examination. They spend \$3 on training for each dollar on technology. Japan's reputation for quality has been built around this emphasis. Many South East Asian economies such as South Korea, Malaysia, and Singapore lay particular emphasis on training. Training even in our organized sector has received little support and the focus on informal sector training by comparison is miniscule.

Prof. Ashoka Chandra explained in detail about (i) the range of economic units in the informal sector (ii) training in formal and informal sector and their significant differences, (iii) characteristics of the workers in the informal sector, and (iv) the problems and issues in skill development and training for the unorganized sector. There after he suggested strategies to strengthen training of the functionaries working in the unorganized sector.

The suggested Training Approaches were as follows:

THE EXTENSION MODEL – making services available. As in agriculture make technical assistance available directly to employing establishment.

- n **A mobile workshop** used as an instruction centre. - Regular visits, team includes mechanics who can solve difficult repair problems, instruction focused on problem at hand.
- n **A service centre operating from a fixed location** providing a full range of services: credit, market and distribution, information on technology: and supplying or locating training

A SERVICE CENTRE CONCEPT EXCLUSIVELY TO TRAINING

- ASSESSES TRAINING NEEDS, DEVELOPS PLANS FOR TRAINING, MAINTAINS TRAINING MATERIALS, MAINTAINS INFORMATION ON INDIVIDUALS, FIRMS AND AGENCIES PREPARED TO CONDUCT TRAINING, ARRANGES LOW-INTEREST LOAN FUND FOR TRAINING.
- DAY RELEASE – COMBINING ON-THE-JOB APPRENTICESHIP WITH CLASSROOM INSTRUCTION; THE WEEK DIVIDED BETWEEN WORK ON THE JOB AND INSTRUCTION AT A VOCATIONAL CENTRE.
Need good links with vocational training centers which design curriculum and its division into instruction and practice. Most time on practical training usually in sample enterprises in formal/informal sector. Modular-preparation for a trade examination. The instructor from VTC regularly visits place of apprenticeship training and supervises.
- PRODUCTION ACTIVITIES – INSTRUCTION FULLY INTEGRATED WITH PRODUCTION OF GOODS FOR SALE. TRAINEES INVOLVED IN ALL STAGES, INCLUDING DESIGN AND DEVELOPMENT, PRODUCTION, MARKETING, SALES AND ACCOUNTING.
ADVANTAGE: GAIN RELEVANT EXPERIENCE TO SET UP OWN ENTERPRISE, AFFORDABLE SINCE THEY ‘EARN – WHILE THEY LEARN’, ACTUAL TECHNOLOGY AND DESIGN WHICH IS COMPETITIVE IN LOCAL MARKET LEARNT. NEED WIDE RANGING INFRASTRUCTURE AND TRAINER SKILLS.

The following were the suggested macro level steps for more effective training.

- ✓ Increasing Govt. allocation for education and training
- ✓ Reviewing priorities with in E & T budgets and reallocate
- ✓ Better use of existing training facilities and personnel
- ✓ Removing Access constrains (difficult training requirements)
- ✓ Special programmes for disadvantaged groups (e.g. women)
- ✓ Increasing the number and quality of trainers
- ✓ Encouraging enterprises, NGOs and others to engage in training
- ✓ Reducing costs per trainee, e.g. by increasing trainee/trainer ratios or by shortening duration of training courses
- ✓ Shifting to low cost training modes such as distance learning.
- ✓ Recovering training costs from those who can afford to pay.
- 2 Reorientation of existing systems usually complicated, time consuming, vested interests resent undoing of established structures and procedures. Not possible without major effort aims at changing attitudes among policy makers, practitioners and clients.
 - 1 Consider Alternatives e.g., apprenticeship, NGO programmes, self-help efforts.

Governments’ role: indirect, creating “enabling environment” quality control, material support

The inaugural address was delivered by Shri M.A.A. Fatmi, Minister of State, Government of India, Ministry of Human Resource Development. Highlights of the address of the Hon’ble Minister are as follows:

- The developing countries all over the world are making efforts for resource development i.e., human beings into productive individuals and useful members of society. These countries, including India, have been endeavouring for quite some time to universalize Elementary Education. As a result of substantial success of Education for All (EFA), and to meet the resulting increased demand for secondary

education, many developing countries are now making plans and programmes to universalize secondary education.

- School Education is the foundation of total education system. With required changes in modern times, school education system in developing countries is required to provide appropriate response to the challenges of education such as:
 - i. the challenge of numbers,
 - ii. the challenge of quality of education,
 - iii. the challenges of credibility of the education system,
- Implementation of Open Schooling programme by the National Institute of Open Schooling (NIOS) and State Open Schools (SOSs) in India for more than a decade has proved its worth. The open schooling programme is cost effective as it uses the infrastructure facilities of the formal education system. It is a learner friendly system due to inherent flexibilities pertaining to place and pace of learning, choice of subjects, and credit accumulation. As a matter of fact there are many students who after completing education up to class VIII intend to continue their education but are unable to go to formal schools due to socio-economic and cultural reasons. Some youngsters are engaged in such jobs that the timings of formal schools and its rigidities do not suit them. We have to make suitable alternative arrangements for education of such students. We can bank upon the open schooling system for meeting the educational needs of such children and youth who could not continue their formal schooling due to variety of reasons.
- Besides these, the developing countries are facing challenges of development of skills that are commensurate to the technological changes, modernization and globalization.
- The Open Schooling System should collaborate with industries, particularly for identification and implementation of need based vocational educational programmes. Knowledge, skills and elements of entrepreneurship should be the integral part of the Vocational Education curricula and emphasis needs to be given on practical and hands on training in vocations related industrial units. It is good that NIOS has visualized an intervention for vocational education in rural areas through Rural Community Workshops as prototype infrastructure of training-cum-production-cum-service centres. Good models of collaboration among institutions and industries in vocational education may be evolved with viable networking at national, regional, state, district and institutional level. ICT may be used increasingly for programme delivery and monitoring of implementation of the open learning programme.
- The curriculum of formal and alternative schooling organizations include educational information related to various sectors such as agriculture, rural development, social welfare, banking, industries and health. The Education Sector should strive for inter-sectoral cooperation in educational endeavours at all stages right from preparation of curriculum, books to evolving teaching-learning strategies and organisation of training of personnel.
- The operation of the Vocational Education programme follows a collaborative model of implementation and requires proper co-ordination and collaboration among institutions and industry. Appropriate networking at National, Regional, State, District and Institutional level will be developed.
- It is encouraging to note that NIOS India in collaboration with the Commonwealth of Learning (COL) and UNESCO has been organizing advocacy and consultancy

programmes for promotion of open schooling in developing countries of Asia and Africa. Sustained efforts need to be made to strengthen international cooperation in the area. India has been sharing its experiences in the area of open schooling with several developing countries.

- It gives me great pleasure to inaugurate the International Conference on Vocational Education and Training through Open Schooling. I am sure that this august gathering of educationists would deliberate on various issues related to promotions of Open Vocational Programme and would come out with concrete suggestions for qualitative improvement and expansion of the programme in developing Countries.
- It is encouraging that Sir John Daniel, President and CEO, Commonwealth of Learning (COL) could find time to share his ideas and experience with the delegates. The Commonwealth of Learning has been encouraging development and sharing of Open Learning resources and technologies at global level. We are thankful to the faculty of COL for their valuable contribution to put the Open and Distance Learning (ODL) system on sound pedestal in several Commonwealth countries. I also congratulate Prof. Ashoka Chandra for his keynote address.
- I welcome the delegates from the India and other countries who have made it convenient to take part in the deliberations of this conference. I am sure that the top level educational planners and administrators from different Countries will be benefited from the presentation in the Conference and exchange of ideas and experiences for formulating and implementing Vocational Education Programmes.

Shri D.S. Bist, Secretary, NIOS (India) proposed a vote of thanks. He felt that keeping in view the thought provoking addresses in the inaugural session, the outcomes of the conference would be very significant. The issues raised and suggestions made in the inaugural session would be thoroughly deliberated. The deliberations would ultimately lead to finalization of the recommendations of the conference and action points. It is imperative at this juncture to take care of the training needs of the workers in unorganized sector of the economy, which would lead to substantial increase in their productivity further leading to higher incomes output and growth of the Indian economy.

Shri D.S. Bist profusely thanked the delegates from various countries, officers of COL, educational planners and administrators from India and the representatives from Indian Industries and Trade. He appreciated the work done by the officers and staff of NIOS for looking after the academic, professional and organizational aspects of the conference.

Session I : Interactive Session with Sir John Daniel and Prof. Ashoka Chandra

Based on the issues that emerged in the Inaugural session, some queries were made. The response was given by Sir John Daniel and Prof. Ashoka Chandra.

An overview of the interactive session is as follows:

- The formal system of school education, due to its structure and certain rigidities, may not be in a position to meet the Vocational Education and Training requirements of the vast informal economy sector. The Open and Distance Learning (ODL) system, with inbuilt flexibilities, has potential to meet this challenge provided steps are taken to strengthen it appropriately.
- The ODL system should strive to prepare need based local specific modular courses with suitable provision of providing hands on training to learners. Efforts may be made to make effective the tradition system of learning skills in family and/or under the guidance of artisans etc. The traditional ways of doing things may be made more effective with the help of technical, scientific and technological advancement in modern times.
- Three key concept of the open and distance learning (ODL) mode of education, viz., access, flexibility and cost effectiveness, are conducive to sustain the

interest of the learner. These characteristics facilitate completion of the courses of study by dispelling the fear of 'fail'. The pleasure of accomplishment motivates the learner for further study and his vertical mobility in occupation. Provision may be made for bridge courses also as per need. It has been observed that mere Graduation does not ensure employability or entrepreneurship skills. Employability per se does not create employment. It is created by economic activities.

- Need based vocational education courses with provision of internship or 'hands on' experience are more effective.
- The ODL system of education is conducive to 'earn while you learn'. The vocational education inputs may be provided in the courses of general education. This needs to be planned and operationalised meticulously.
- In collaboration with the Employment Exchanges in the country, the educational needs of various registrants may be studied and suitable courses may be offered to them by Open Schooling organizations.
- The formal schooling system and the open schooling systems should work in unison. They should not continue working in watertight compartments.

Technical Session I

Date : 8th February, 2006
Theme

Vocational Education and Training to
Marginalized Groups

- Chairperson* : Prof. M.B. Menon, Education Specialist, COL
- Keynote Speaker* : Mrs. Uma Tuli, Managing Secretary, Amar Joyti, New Delhi
- Other Speakers* :
- ✚ Mr. Kamraj, Vidhyal NGO
 - ✚ Dr. Jayanti Naryanan, Director, NIMH, Hyderabad
 - ✚ Mr. Md. Mohsin, Bangladesh

Mrs. Uma Tuli in her keynote address highlighted the various challenges which are coming in the process of imparting vocational education and training to the differently abled persons, which included:

- ✓ Prevailing Social attitude towards disabilities
- ✓ Lack of interface among Government Departments working for differently abled persons
- ✓ Shortage of trained teachers

- ✓ Absence of barrier-free environment
- ✓ Availability of proper learning materials
- ✓ Lack of awareness
- ✓ Socio, cultural, economic regional, religious, linguistic variations preventing programme development and outreach
- ✓ Lack of transport and enabling environment
- ✓ Resistance of parents
- ✓ Poor linkage between pre-school and primary education

Ms. Uma Tuli suggested various measures such as :

- Inclusive education to provide equitable opportunities
- Effective education services
- Age-appropriate classes
- Appropriate support services
- Neighborhood schools and parent's involvements for the marginalized groups.
- Mainstreaming differently abled individuals.

Suggestions

To promote vocational education at school level in collaboration with District and State authorities and NGOs.

To seek appropriate accreditation for vocational courses from recognized agencies.

To popularize vocational training programmes for disadvantaged groups and persons with disabilities through media and other channels.

To ensure availability of resource rooms in all schools equipped with teaching learning material.

To develop Teacher's Guides and Training Manuals for non-formal vocational courses.

To establish linkages between NGOs and Private and Corporate sectors for implementation of need-based vocational training programmes.

Encourage corporate sector and institutions through incentives to invest in training including the programmes for the disabled.

To give equal importance to degrees in vocational education.

To organize loan facilities for self-employment.

To constitute committee of experts to look into the aspects of modernising and equipping vocational training institution for assessment and appropriate job allocations.

To organize skill competitions, like the Abilympics, jointly by the Education Department and State Industrial Development Corporation to foster greater employment opportunities, to help discover and nurture skills of the disabled.

To facilitate the National level institutions for developing vocational courses as per marketability of the products.

To mainstream the marginalized groups through inclusion in all vocational education and training programmes.

Mr. Kamraj from Vidhyal NGO, one of the sub-theme speakers, made a presentation about importance of self help group and its role in providing livelihood to the marginalized sections. Focusing on the challenges of mobilizing human capital, he was looking forward to get assistance and cooperation from leading organizations in this regard. He stated that his organisation was able to mobilize resources which enhanced their social and financial status, but failed to assist in their skill upgradation. Highlighting the use of multiple strategies to earn livelihood by the marginalized groups in the country, he was of the view that VET can play a major role in empowering this group.

Dr. Jaynathi Narayan, Dy. Director, National Institute of Mentally Handicapped, speaking on the sub-theme "special skill development needs of differently abled persons" highlighted the following

- ✓ The Acts and policies for vocational education and training for persons with disabilities, including the provision contained in Article 41 of the Constitution of India, the National Policy on Education 1986 and the Programme of Action 1982; Persons With Disabilities Act 1995 and the National Curriculum Framework 2005.
- ✓ A list of the jobs, which have been listed by the Government of India for various Group A, B, C and D posts for persons with disabilities including visual impairment, hearing impairment and locomotor disabilities, was provided.
- ✓ It was suggested that the curriculum for training in such identified jobs can be incorporated right from secondary school education including open schooling.
- ✓ For those with mental retardation, skill training may start early, as their academic achievement will be limited. Systematic job analysis and training is essential.
- ✓ Ecology based assessment and selection of job tasks will prepare the students for the jobs in demand.
- ✓ Assessment Tools for assessing vocational potential of persons with mental retardation.
- ✓ Establishment of work stations and prototype models of adapted equipments.
- ✓ Skill training manuals for professionals dealing with the persons with Mental Retardation.

Mr. Md. Mohsin from Dhaka Ahsania Mission presented the aims, objectives and the people served by DAM Bangladesh. DAM offered training to the various group by its specialized institutes. The courses offers by these institutes are for the duration of five days to three months. With the help of wide range of print material and ICTH, they reach to their clientele group.

These presentations were followed by the presentations of facilitators of the networking sessions.

Network Session

Group 1 : Sub-theme -- Providing greater opportunities for skill learning to different marginalized groups including unorganized sector

- ✓ Adoption of professional approach to Vocational Education and Training for marginalized groups.
- ✓ Development and maintaining a data base to provide information about marginalized groups.
- ✓ Consultation/partnership with all the stake holders and wide dissemination of information about the programmes, and ways of taking advantage through the use of mass media.
- ✓ Advocacy of job opportunities and salaries available may be made known to the marginalized groups in a sustained way, specifically to the target groups and region-wise in devising Vocational Education Programmes, breaking the social, cultural, political handicaps and barriers.
- ✓ Competencies and benchmarks to be defined and modular curriculum to be developed.
- ✓ Identifying the latest needs in the industries and opportunities.
- ✓ Cultural propositions to be used to empower the marginalised addressing to the needs of specific groups (6th standard being used as a standard to organize groups by the Agricultural University, Coimbatore)
- ✓ Life-coping skills, livelihood skills and life long learning abilities need to be developed.
- ✓ Flexibility at the level of the job seeker on job, as well as off the job, be provided.
- ✓ Courses should be interdisciplinary in character and multi skilled, to support changes from one career activity to another.
- ✓ The marginalized groups may be involved in decision making processes.
- ✓ Language skills and communication skills may form a part of the vocational education and training.
- ✓ Counselling and guidance should be provided to different sections of the society about the need of vocational education and training for the purpose of removal of un-employment and poverty.

Group 2 : Sub-theme -- Training of Girls/Women in non-traditional areas

- ✓ Integrated media campaign covering Electronic and Print etc., for popularization of non-traditional courses.
- ✓ Introduction of need based courses having employment opportunities in emerging disciplines and organisation of special campaigns to encourage women and girls to opt for such disciplines in Vocational Education and Training.
- ✓ Introduction of Vocational Courses with multi skills, life skills and soft skills.

- ✓ Ensuring safety and Security provisions for women in all institutions, promoting women friendly infrastructure at the place of work as well as at the place of learning.
- ✓ Encouraging through incentives/ financial assistance to the women dominated NGOs to set up Vocational Institutions for girls (the aim should be to provide facilities in every district.)
- ✓ Girls/Women should be provided with guidance
 - to become aware of their interests, abilities and special talents.
 - to pursue courses designed to realize their potential
 - to ensure that those who are engaged in work would have access to information concerning availability of learning opportunities as well as work opportunities.
- ✓ Guidance should be gender inclusive and should cover whole range of skill development and career opportunities. Girls and women should be motivated to take advantage of opportunities.
- ✓ Preferential treatment to girls in order to enhance their intake in the vocational institution.

Group 3 : Sub-theme -- Special skill development needs of differently abled persons.

- ✓ Abilities of persons with disabilities to be highlighted and be made known to public through all forms of media so as to create awareness and positive attitude towards the persons with disabilities.
- ✓ Stories of successfully employed Persons with Disabilities (PWDs) to be popularized so as to create role models. Self advocacy by PWDs will speak of their capabilities.
- ✓ Institutions conducting Vocational courses for PWDs and employers in public private sector to be recognized through incentives and social recognition.
- ✓ Goodwill of socially interactive groups such as women empowerment groups, spiritual groups, science organizations PTA etc., can be made a platform for creation of awareness about abilities of pupils.
- ✓ Phasing out of the training/training process to allow the PWDs to learn at their own pace, which should be the main focus.
- ✓ Training in vocational skills should be need based and ecology based for which parents and family members can be the partners in identifying and shortlisting the vocational areas. This will help the trainers in matching the ability of the PWDs of the skill required and plan the training.
- ✓ Flexibility in the work schedule and environment to prevent fatigue in PWDs.
- ✓ Support in terms of aids and appliances to compensate for the disability; Braille communication aids to be suitably made available.
- ✓ Creation of work stations and adaptation of the job tasks/equipment so that the product developed by PWDs is of acceptable standard and quality.
- ✓ Interface between employer and employee through a vocational facilitator, if felt necessary.
- ✓ Contents to be developed in collaboration with multinational agencies such as corporate sector, agro based, and other indigenous trades and educational institutions of higher learning statutory authorities such as IITs, Rehabilitation Council of India (RCI) and Regional Institutes of Education etc.
- ✓ To ensure quality, recognition, accreditation, tie up with statutory bodies such as RCI is essential.

- ✓ On line learning to be made available for severely disabled persons, and should be case - specific.
- ✓ The instructional material should be of two types, one may be simple and brief for creating awareness and should be distributed to all; the other may cover specific skills, which may facilitate self learning .
- ✓ Optimum use of EDUSAT, Gyandarshan and ICT should be made available for supplementing the teaching learning process. (Encouraging inclusive education.)
- ✓ Regular schools to have vocational centres for PWDs as well as for non-disabled persons by which the gap can be bridged.
- ✓ Based on the ability level of PWDs, decision on suitability for (a) open employment for mild disabilities (b) sheltered employment for moderately disabled and (c) supported self employment for severely disabled to be made and training efforts initiated. This will give the PWDs the status of being more productive in inclusive society.
- ✓ Financial support through agencies such as NHFDC may be explored in helping PWDs with subsidized loans. The procedure for getting the support should be simplified.

Group 4 : Sub-theme -- Integration of Basic Education and Skill learning for neo-literates

- ✓ There is a need to devise strategies for achieving the following :
 - Making community aware through advocacy programmes.
 - Initiation of dialogue with community and industry.
 - Assessment of market potential and needs at periodic intervals.
- ✓ Involvement of community, local experts, field functionaries for programme implementation.
- ✓ All Vocational Education and Training programmes should have a component of entrepreneurial skills.
- ✓ The curriculum should be practical based
- ✓ The teaching/learning package should broadly include all aspects of training-pedagogy, skills, motivation capsules, confidence building, study hours.
- ✓ The use of print, electronic and local media with interpersonal component should be promoted for course transaction.
- ✓ Already available infrastructure in the formal system ie. of Primary Schools or of formal vocational training providers or with the institutions imparting technical education, should be optimally utilized.
- ✓ The quality assessment and assurance should be ensured through research studies and through continuous monitoring.
- ✓ There should be continuous revision and updation of the type and level of skills imparted.

Technical Session II

9 February 2006

Quality Issues in the provision of Vocational Education and Training

- Chairperson* : Prof. Ram Takwale, Former Vice Chancellor , IGNOU
Keynote Speaker : Dr. S.D. Awale, Director, NITIE, Mumbai
Other speakers : Prof. M.B. Menon, Ms. Susan Phillips, COL
Ms. Sally Rawnsley, The Open Polytechnic of New Zealand

Prof. Ram Takwale initiated the session by highlighting how quality is becoming an important and integral factor in education, production and services. Globalization is making demands for quality that has to be assured in all fields.

Shri S.D. Awale in his keynote address stated that some type of Vocational Training was the requirement of every person, whatever position he/she holds. Unfortunately in India, the Vocational Education and Training programme is handled and managed by several Government departments or agencies, and there is lack of coordinated efforts to meet the challenges posed. The Government's role is mainly confined to funding, auditing and occasional reviewing. Promotion of skill development is though much talked about, but most of the time students completing Vocational Education courses take admission in General Education courses at higher education level.

One of the solutions suggested by Dr. Awale related to creating of mass awareness and this should start from the top. VET should not be confined only to a few people but should be open to all in any delivery mode;- face-to-face or Open and Distance Learning mode. Secondly some classic models available locally should be adopted. If structural changes are to be implemented, VET should become a national movement and mission. VET should adopt a modular course delivery approach with credits transfer facilities of multipoint entry and exit. There should be a National Testing System and a National Qualification Framework. The VET should become mandatory, there should be meaningful participation of Industry and women and girls should be given special attention.

Prof. Mohan Menon and Ms. Susan Phillips from Commonwealth of Learning made a joint presentation. Prof. Menon mentioned that COL tries to intervene at policy making level and at grassroots level and interacts with NGOs prior to shaping of any policy decision. Prof. Menon said that models should not remain as innovations but should be adopted and adapted. Quality involved setting and following high standards, is consistent, demonstrates fitness of purpose and transforms participants. He defined

quality assurance and highlighted the components of total quality management as quality assurance and quality control, assessment of quality systems. The sum total of all these three results in total quality management - both internal and external. He stressed the need for quality assurance for reasons of accountability, competition, costs and credibility and listed the emerging vocational training systems. The culture of quality requires good leadership which allows decentralization, participatory decision making, leading to ownership, managing change and transparency in all activities. He proposed a curricular structure whereby competencies can be achieved by undergoing training and not just by reading. A trainee should go through several experiences – be it face to face or the open and distance learning mode which will result not just in rote learning but on vocation based competencies. This model would be a constructivist model of learning.

He highlighted different indicators of quality in learning materials, reliable training systems, learner support and administration and management. He remarked that if we want to know whether we have achieved high quality, than we have to go back to the learners and employers and pose a few crucial questions to them about relevance and acceptance of the courses and the way they were delivered.

There is a need to identify quality criteria and indicators for vocational training, documenting cases and best practices, facilitating consortia and networking, developing framework for assessment of prior learning and experiences and orientation and training in quality assurance.

Ms. Sally Rawnsley, from The Open Polytechnic of New-Zealand, began her presentation by identifying the target group for whom the vocational training is meant for and focused on the current environment in VET. There is an increasing demand for open and distance learning in response to the need for workers to keep them up-to-date within a rapidly changing workplace and that learners and employers are demanding greater choice and flexibility in learning options. She identified the needs of the VET educationists i.e, knowledge which has to be subject specific, skill like time management, communication or computing and attitudes such as patience and enthusiasm. She built up her case for a learner – centered individualized training programme through an example for the hospitality department within a large distance education institution. She presented a profile of the Dean and several of the learners and raised several questions that the Dean needed to answer to train her learners. She summed up her presentation by emphasizing a few essential factors. These include commitment from the top, a philosophy to underpin the commitment, shared understanding of objectives of professional development and a model which integrates professional development with all activities in VET open and distance learning.

Prof. Ram Takwale summed up the presentations by emphasizing that VET has to be learner centered. Skills and competencies and capability development have to be individualized. We should explore interaction with industry much more and mentioned some core values that each and every college and university needs to subscribe to. Among them are the linkages with national values, connection with global needs, inculcating Indian value system and promotion of use of Information Technology. He emphasized that quality assurance mechanism must be a dynamic mechanism and the quality of products and services needs to be decided upon. There has to be updation of knowledge, technology upgradation for raising and maintaining quality.

The questions raised after the presentations revolved around developing a model of working and learning simultaneously and on changing the mindset of the people. There was also a suggestion to use the present available infrastructure and strengthen it instead of creating new ones. Developing the National Vocational Framework should be a time bound programme. It was also suggested that the gap in the difference in productivity between the formal and informal sector should be taken up as an indicator of quality. It was suggested that different VET agencies be brought under one umbrella and that rural indigenous models for community supported VET programmes should be explored.

These presentations were followed by the presentations of facilitators of the networking sessions.

Technical Session II : Network Session

Group 1 : Sub theme -- Strategies for quality improvement of instructional and evaluation processes.

The outcome of the group discussions are as follows;

- Through cooperation of community the competencies required for a particular demand in the market may be developed.
- Core competencies as well as basic competencies may be listed.
- Competency based approach to be taken for curriculum development
- Instructional material may be developed in local language which should be understood by the learner.
- The instructional material may be field tested and validated in a classroom situation
- Need to develop local resource group to take interest in the transaction of practical training .There is also a need to motivate the enterprise to be a training provider to the learner.
- Decentralisation and local empowerment for capacity building ,taking the help of print and electronic media.
- Identification of those who have the desired skills and train them to become effective trainers so that they are able to give practical training to learners. This will lead to effective transaction of curriculum and develop desired competencies in the students.
- The competency based curriculum may be developed in modular format. A provision of modules of different levels will provide vertical mobility in a particular vocational area.
- Need to built into the system the revision of curriculum periodically (2/3 years) to consider the technological changes/feedback received from the field.
- The whole world is following the competency standards approach. To help the standardization and to facilitate quality improvement at different tiers, National Qualification Framework should be brought out.

Group 2 : Sub theme -- Student Support Services

- Technology mediators like CD/Audio Cassettes. Simulators etc. should be incorporated, use of EDUSAT, mission 2007 – Kiosks as Knowledge Centres.
- Flexibility, feasibility and appropriate locally adoptable technology to be increased.
- The expertise of Master Craftsman to be comprehensively used for designing the programmes and presented through professionals.
- Various facilities available with organizations like Universities/Polytechnics / ITIs/Colleges, Industrial service units to be mobilized to create consortium of AVIs.
- Credit points may be awarded to students and other actors for partnering with learners.
- The concept of lab to land be suitably adapted to bring talent and resources from various fields to VET.
- The spare capacity of the National assets available to be made use of to develop the capacity building of VET through revenue sharing.
- This should be transparent and mutually beneficial with accountability and responsibility.
- There should be strong linkage with Panchayati Raj Institution to ensure a sense of ownership.

Group 3 : Sub-theme -- Professional development needs of VET trainers and curriculum and Instructional Materials Developers

- According to the domain knowledge of trainers, location, skill need of a company/service sector, the requisite skills must be imparted to trainers.
- The objective of such training to Trainers is Transformation. Transformative value of each skill in a trainer is assessed by Developmental factors such as learning ability of the Trainer during Training, progress made by Trainer during the training in terms of precision, duration taken for acquisition, and the number of skills acquired.
 - § Disabled and special children/learners need must be taken into account while training the trainers.
 - § Gender sensitivity must become a component of the training.
- Interaction with different experts, local people and professionals is a must for a trainer. The acquaintance of trainers with these people and the culture and background of trainers will facilitate the trainers to design and re-design the syllabi according to specific needs of learners.
- Encourage learners to take risk to become innovators. Networking with different trainers, centres and specific markets.
- Content up-gradation can be done through print media; through electronic media. Updating must be done at regular intervals.
- The elements in the professional preparation of VET Trainers are:
 - Print media
 - Internship
 - Mandatory rules for upgradation once in 3 or 5 years
 - Repository of programmes through Digitalization and ICT
- Strategies for the development of Part Time VET Trainers :
 - Identification of Trainers whose interests are helpful to trainers.
 - Provide social recognition
 - Hurricane Approach in training trainers.
- Strategies to orient the experts and key trainers :
 - Involving them if they are directly and fully involved in training the trainers.

- Considering the role of people who are practicing it with VET training.
- Signing Memorandum of Understanding with small and large industry – stake holders.
- Mutual training exchange between NIOS trainers and industrial trainers.

Group 4 : Sub theme -- Identification of strategies for self employment and Entrepreneurship

The group analysed the gaps in the present scenario for self employment and Entrepreneurship development and offered the following suggestions:

- All the details of Entrepreneurship Development Programme (EDP) institutions should be codified into a directory and made available to the needy.
- Evaluate the quality and the quantity of the EDP institution of all kinds.
- Prepare a master plan for the EDP duly integrating the available schemes, opportunities, facilities from the available/on going programmes.
- Expand the present level of vocational education training centres to have a wide spread/presence specially in the rural areas.
- Promote investment in the field of backward and forward linkages to nurture Entrepreneur development.
- Promote public - private partnership to raise capital for investment in the training institutions.
- Explore the possibilities of converting the existing CEC (Continuing Education Centre) into the Vocational Education Centres.
- Similar Government/NGO Organisation in the field of skill development and training should be indentified and developed into VET.
- Launch information, campaign on the opportunities and challenges in the enterprise development.
- Demonstrate the success stories of the enterprises.
- Investment in the projects to include skill up-gradation and entrepreneurial qualities among the rural and backward areas.
- First generation entrepreneurs need hand holding by the financial institutions and training institutions.
- All Financial Institutions should be mandated to have EDP wing of adequate capabilities.
- Massive training institutions to be created in view of the large number of self help groups of women evolving into micro enterprises.

In his concluding remarks, Prof. Ram Takwale questioned if NIOS would put in place a mechanism for the informal sectors to enter VET and have facilities for open distance learning. He stated that the numbers are high, the infrastructure, perhaps, is not inadequate but the people seem reluctant to enter the system. The rate at which Information Technology is sweeping India is remarkable. He stressed that all technologies should be exploited for the education of people. We have to think of mega-systems but we can not overlook the need for individualization. Even in the rural tribal areas, people respond energetically to IT driven systems. According to him, Information Technology has some important process like Virtualization. Several centres can be connected together to make it one campus. People can work together in completely different ways to overcome digital divide. The internet has changed many concepts and

Keynote Speaker : Mr. A.R. Thakur, Vice Chancellor,
West Bengal University

Other Speakers :
 Mr. S. Natrajan, L&T
 Fr. T.V. Kunankal

This session began with the Chairperson inviting the keynote speaker Prof. AR Thakur to initiate discussion.

Prof. AR Thakur, Vice Chancellor, West Bengal University of Technology stressed upon the need for radical reforms in the Vocational Education system. There is a need to change the mindset so that open learning could expand and be more effective. He cited his own experience of working in a traditional university, which, though considered prestigious, was in reality functioning within a rigid framework and was un-willing to make any change in its working style or its academic programmes. It was perceived that opening the doors to open learning would dilute the quality of education. As a result the university was unable to provide any sort of linkages for its students with the industry or to find employment opportunities for them. Prof. Thakur brought to the forefront the role played by the Jadavpur University, which was more open to change and diversified its programmes in addition to those related to higher education. The programmes conducted by the University Department of Adult and Continuing Education was an example of how the university could contribute to Vocational Education. The task before the developing countries with regard to Vocational Education and Training is so huge that all universities, institutes, agencies as well as industry need to contribute in their venture. The Open Schooling organizations can play a catalyst role, and push the organisations towards performing a more pro-active role in open and distance learning. There is a need to create a new understanding and get rid of mental blocks. Existing opportunities need to be grabbed so that this mammoth problem may be addressed effectively.

The WBUT initiated many courses in technology successfully. It is important that the people who initiated the courses must have a conviction of running them. So that opportunity may be converted into action. Prof Thakur called for a reorganisation of the present vocational education curriculum. The skill sets should be brought in such a fashion that a learner may be able to get a livelihood, which is related to a job. Education should lead to employment. The present curriculum, in many cases, is not commensurate to needs of industries.

Prof. Ashok Thakur stressed the importance of teacher training and called for providing minimum skills to trainers who would be master trainers. He dwelt upon the role being played by AICTE and emphasised the need for such institutions to change their functioning. There is a need for AICTE to develop effective policies on VET and to move away from being a controlling authority. Websites need to be updated so that there is greater transparency. The importance of quality education was reiterated.

The ODL institutions are required to work in collaboration with different institutions and motivate others having a traditional mindset. Only when VET programmes reach the grassroot level, the challenge of providing skills can be made successfully.

The presentation on 'Strategies for developing public private partnerships to support VE & Training was made by Sh. S. Natarajan from the ECC Division of Larson and Toubro. He placed his presentation in the context of the leaders who had dared to dream, engineers who translated these dreams into engineering marvels and stressed upon the need for skilled, focussed and productive construction work force. He provided a model of the construction skills training being conducted by L&T for its workers, an outlined the objectives of the programme and the process through which this training was being carried out. The skill standards have been set and there is a stratification of skills so as to create different levels of competencies. There is an emphasis on practicals with 80% of the classes devoted to them and only 20% to theory. Sh. Natrajan outlined the trade/test and certification. There is a need to tie up with the Departments of Employment and Training and evolving a national policy on vocational training in consultation with govt. bodies, industry players, NGOs and others. He called for setting up of a Task Force related to each trade as well as a monitoring body.

Fr. TV Kunnankal, spoke about the importance of the Advocacy for attitudinal changes in the context of importance of vocational education and training. There are many blocks such as those of caste and class. Certain trades had come to be associated with certain castes. There is a need to overcome these blocks and ensure that socially attributed attributes are got over with. The goal is macro one. There is a need to have an inclusive society. At present many children coming out of school came out incompetent. There is a need to re-work the education process so that the product is competent and effective. The country cannot be modernised unless competence is recognised as a non-negotiable requisite for every one. There is a need to do serious model building at micro level. It may be ensured that marketing and entrepreneurial skills are taught. He called for having multiple links with private and public sectors. It is competence that is driving the world. There is a need to increase the competence level appreciably.

During discussion that followed, participants underlined the need for vocational course planners to understand the market needs. All policies related to Vocational Education should have provision for persons with special needs. Any action plan made by NIOS, or any other open schooling institution, should include an action plan for persons with disabilities.

These presentations were followed by presentations of the Facilitators of the networking sessions.

Technical Session III : Acknowledge/Recognition of the Importance of VET.

Group I : Sub theme -- Advocacy for attitudinal changes in the context of importance of skill development/vocational education and training.

- The government needs to be sensitized to the cause of VET.
- There is an urgent need to sensitize people on the concept of certification and upward mobility.
- There is a need to convince parents to send their children for VET in order to make them employable rather than remaining merely a degree holder and unemployed.
- There is felt need of de-linking of employment and qualification/degrees.

- Factory employers ought to be encouraged to send their workers for re-training in ODL institutions to make them be more efficient and productive.
- Professionalizing work will be a means to change attitude towards work. The so called " manual" work concept will disappear gradually.
- There is a need to change the quality of training pattern to suit the needs of a globalized market requirement.
- ODL Institutions should collect and publish success stories of their pass-out and prepare materials for the media.
- Local governments should be requested to telecast ODL activities of the study centres.

Group II : Sub theme -- Strategies for developing public/private partnerships to support vocational education and training

- Ensure sustainable partnership under a win-win situation.
- Open Schooling should be tuned to needs of industry
- Shift in perception of industries regarding certification from Govt. agencies.
- MOUs to be entered into with clear roles and duties.
- Use of facilities in the Industry wherever possible, along with those in Universities/Colleges/ITIs/Polytechnics/Community Resource Centres
- Cost of training should be attractive to Industry over its own training programme.
- More opportunity in the new and emerging industries
- Utilize the services of extension outfits of large industrial houses
- Involve industry in formulation of theoretical and practical course content with compulsory hands on training.
- CII and FICCI may be involved in listing out priorities areas.
- Training in vocational areas should be supported by banks.

Group III : Sub-theme -- National Accreditations Framework for Vocational Education and Training

1. Establish a New Board in the model of the MBA/NAAC.
2. Set-up a sector-wise skill based Task Force with membership drawn from the industry, Institutions, NGOs and Govt Bodies. The Task Force should be vested with the responsibility to implement the skills standards.
3. To ensure adequate representation of the diverse needs of students, local level committees should be constituted to initiate policies and programmes. These should be passed on the National Task Force for examination, approval and implementation.

Group IV : Sub-theme -- Significance of Vocational Guidance and Career Counselling

- An Instructor's Module containing information about the course motivational aspect, the base to identify the potential of the learners, passing on information both academic and occupational, maintaining data base, providing counseling for guidance.

- Target groups
 - Parents
 - Instructors/teachers
 - Students
 - Neo-literates
 - Dropouts
 - Unemployed youth
 - Special groups
 - Students out of UEE/USE
- Pre-admission time
 - About the course
 - Future prospects
 - Theory/practical weightage
 - Internship / apprenticeship
 - Scholarship/stipend
 - Evaluation of the course
- During the course
 - Dealing with personal problems
 - Adjustment to the course and institution
 - Study skills
- Post course
 - Follow up
 - Career guidance and placement
 - Linkages with potential employers and bankers
 - Follow up activity for feedback
- Develop the system having networking and concurrent monitoring system
- Develop a system of orientation/training of instructors/tutors in providing guidance services.
- Provide opportunities for upgradation of skills and for additional learning leading to horizontal and vertical mobility.
- ICT may be used:
 - (a) for networking with guidance workers (instructors) for sharing occupational and educational information/exchange of views with respect to problems and issues.
 - (b) for providing training and retraining to instructors on career guidance and counselling.

During the wrap up session, the chairperson Dr. Nafisatu D Muhammad said that vocational education must have a rightful place of importance in open schooling. She cited examples of the work done by the Nigerian Commission for Nomadic People which developed policies for providing skill training to nomadic people. A well planned multi- faceted approach is required to be taken so that problems may be solved. The Teachers need to be trained and re-trained so that they may be made more sensitive to the needs of marginalised groups. The use of Radio and ICT in Nigeria for advocacy and awareness generation is being made.

Technical Session – IV

10 February 2006 Vocational Education and Training through Open and Distance learning and the use of ICT

Chairperson : Prof. R.H. Dave, Former Director UNESCO
Institute of Education

Keynote Speaker : Prof. M.M. Pant, Former Pro-Vice Chancellor, IGNOU

Other Speakers :

-  Mr. Chander Sundram, Microsoft Corporation (India) Pvt. Ltd.
-  Dr. K. Alluri/Dr. K. Balasubramaniam, COL
-  Prof. K. Sudha Rao, Vice Chancellor, Karnataka Open University

In our endeavour to provide the outcomes and Recommendations of the Conference, a Draft of the Proceedings of the conference was prepared before the conclusion of the Technical Session IV. The outcomes and suggestions of this session will

be taken into account while finalising the Final Report of the Conference including the Recommendations of the Conference.

RECOMMENDATIONS

1. Vocational Education and Training (VET) should be organized on national, state or local basis, to respond positively to cover various socio-economic educational requirements of the corresponding labour market.
2. Realizing the need to provide ample opportunities to enhance skills of marginalized groups of people, including those in informal sectors, the Open and Distance Learning (ODL) mode of education is required to provide easy access to relevant and need based vocational education programmes at various levels.
3. To facilitate access to VET programmes to the huge number of workforce in the informal sector, there is a need to capture the potential of private initiative in providing training to the vast masses. In this endeavour role of the Government should be more strategic than comprehensive.
4. The government may come forward to help in establishing a Skill Development fund emulating the example of Korea and European countries. This fund may be utilized by employers for training their employees in newer skills, by making specific proposals to the Funding Authority.
5. In collaboration with the Employment Exchanges in the country, the educational needs of various registrants may be studied and suitable courses may be offered to them by the Open Schooling Organizations.
6. Realizing that Open Vocational Education programme has potential to meet the educational and development needs of the differently abled persons, a flexible educational approach for appropriate VET courses need to be adopted to provide appropriate responses to meet the challenges for their skill upgradation.

7. The formal system of school education, due to its structure and certain rigidities, may not be a position to meet the vocational education and training requirements of the vast unorganized sector of the economy. The open and distance learning system with inbuilt flexibilities has potential to meet this challenge. Steps need be taken to strengthen it appropriately.
8. The ODL system should strive to prepare need based local specific modular courses with suitable provision of providing hands on training to the learners. Efforts may be made to make effective use of the traditional system of learning skills in family and/or under the guidance of artisans and their . The traditional ways of doing things may be made more effective by integrating technical, scientific and technological advancement in modern times.
9. Need based courses in emerging disciplines may be introduced for girls and women and special campaigns may be organized to enhance them to opt for such courses in vocational education and training.
10. Marginalized groups including girls/women and differently abled persons may be provided with guidance and counseling :
 - a. to become aware of their interest, potential abilities and special talents
 - b. to persue courses designed to realise their potential
 - c. to ensure that those who are engaged in work would have access to information concerning availability of learning opportunities as well as work opportunities.
11. Vocational Education Training (VET) has to be learner centred. Skills and competencies and capability development need be individualized. Quality assurance mechanism must be a dynamic mechanism and the quality of products

and services needs to be decided upon. There has to be updation of knowledge and technology, for raising and maintaining quality.

12. The educational institutions in formal education sector should take responsibility for Vocational Education and Training (VET) through ODL mode not only in direct training delivery but also in building competency standards, testing competencies and certification etc. for the purpose of optimum use of infrastructure and faculty.
13. A competency based training system may be developed. Identification of competencies must be done by analyzing the job functions, feed back from employers and learners looking into their personal growth needs and assessing the future requirements of the occupation.
14. There is a need to identify criteria and indicators of quality in respect of vocational training, documenting cases and best practices facilitating consortia and networking framework for assessment of prior learning and experiences and orientation and training in quality assurance.
15. Realizing that a rigid examination system is detrimental to the cause of the Open Vocational Education Programmes, the Open Vocational Education Organizations should envisage and design a flexible competency based examination system and evaluation strategies to suit the courses of study.
16. The professional development of trainees may include the pre service – training and or in service training depending upon the needs of individuals and may include elements such as education theory in general and particularly as it applies to VET and ODL system, methods of evaluating/assessing the learners, work, choice and use of contemporary multi media techniques particularly ICT, creating

and producing appropriate learning materials including modular and computer aided instructional materials and an introduction to occupational guidance and counselling methods.

17. The Government should develop and prescribe National Competencies Standards to be attained by the institutions in their training programmes and also develop suitable arrangements for testing and certification of competencies. An autonomous and Independent Accreditation Authority may be constituted for this purpose.
18. The developing countries in Asia and Africa are grappling with the challenge of Human Resource Development. There is a need to set up or upgrade the open schooling system in these countries. The International agencies like the Commonwealth of Learning (COL), UNESCO, UNICEF, World Bank, to assist the developing countries in these endeavours. The National Institute of Open Schooling (NIOS) India, in its capacity, as the Secretariat of the Open Schooling Association of Commonwealth should take appropriate steps for promotion of Open Schooling in the developing countries.
19. International cooperation, through the exchange of good practices and methods, should be utilized to apply internationally recommended norms and standards relating particular to a system of assessment and evaluation, of scientific and technical symbols, occupational qualifications and certification, equipment and Technical standards, information processing, equivalencies of qualifications implying standardization of curricula and testing, occupation safety and Security, environmental protection and conservation.

20. International cooperation should be utilized for capacity building in developing countries specially in the area of acquisition, adaptation and application of technology through fellowship and exchange programmes for Teachers/trainers, students and administrators/managers. provision of work experience abroad sustained cooperation between similar institutions in different countries.

These recommendations submitted were adopted by the Conference which also authorized Chairman, NIOS to modify, edit in view of the need for implementing these recommendations.

International Conference
on
Vocational Education and Training Through
Open Schooling: Challenges and Future Strategies

Organized by



National Institute of Open Schooling
New Delhi, India



Commonwealth of Learning
Canada

Venue: Kovalam – Kerala, India

Date: 8-10 February 2006

Programme Schedule

8 February 2006

9.15 hrs – 11.00 hrs

Inaugural Session

- | | | |
|---------------|---|---|
| 09:15 – 09:22 | : | • Welcome by presentation of bouquets |
| 09:22 – 09:25 | : | • Lighting of Lamps by dignitaries |
| 09:25 – 09:35 | : | • Welcome Address by Mr. M.C. Pant, Chairman, NIOS |
| 09:35 – 10:05 | : | • Opening Address by Sir John Daniel, President & CEO, COL |
| 10:05 – 10:30 | : | • Keynote Address by Prof. Ashok Chandra, former Special Secretary-Ministry of HRD, Govt. of India |
| 10:30 – 10:40 | : | • Inaugural Address by Shri. M.A.A. Fatmi, Hon'ble Minister of State for Human Resource Development, Govt. of India |
| 10:40 – 10:45 | : | • Vote of Thanks by Mr. D.S. Bist, Secretary, NIOS |

Tea Break 10.45-11.15 hrs

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|---------------|---|--|
| 11:15 – 11:30 | : | • Interactive Session with Sir John Daniel & Prof. Ashok Chandra Presided over by Mr. M.C. Pant, Chairman, NIOS |
|---------------|---|--|

Rapporteur: Dr. J. D. Sharma, Dr. Mamta Srivastava

Compre: Ms. Anita Priyadarshini

Technical Session I

8th February, 2006
Wednesday

Vocational Education and Training to Marginalized
Groups

- Time : 11.30 hrs – 12.45 hrs HOD to be present: Director (SSS)
- Chairperson* : Prof. M.B. Menon, COL
- Key note Speaker* : Mrs. Uma Tuli, Managing Secretary, Amar Joyti, New Delhi
- Other Speakers* :
- § Mr. Kamraj, Vidhyal NGO
 - § Dr. Jayanthi Naryanan ,Dy. Director, NIMH, Hyderabad
 - § Mr. Md. Mohsin, DAM Bangladesh
- Discussion : 15-20 minutes
- Time: 12.45 hrs - 13.45 hrs : Networking session
- Group 1 : Providing greater opportunities for skill learning to different marginalised groups including unorganized sectors
Facilitator: Dr. Xavier Alphanso
- Group 2 : Training of Girls / Women in non-traditional areas
Facilitator: Dr. Amrapali Merchant
- Group 3 : Special skill development needs of differently abled persons.
Facilitator: Shri. U.K. Samal
- Group 4 : Integration of Basic Education and Skill learning for neo-literates
Facilitator: Dr. V. Mohan Kumar
- 13.45 hrs – 14.45 hrs LUNCH
- 14.45 hrs – 15.30 hrs Presentation of the Group – Group Facilitators
- 15.30 hrs – 15.45 hrs TEA
- 15.45 hrs – 16.00 hrs Open House Discussion
- 16.00 hrs – 16.15 hrs Wrap up by Chairperson
- Rapporteur: Mr. Aditi Ranjan Rout & Dr. R.S.P. Singh
- Compere: Ms. Gopa Biswas

Technical Session II

9th February, 2006
Thursday

Quality Issues in the provision of Vocational
Education and Training

Time : 9.00 hrs – 10.15 hrs

HOD to be present: Director (Evaluation)

Chairperson : Prof. Ram Takwale, Former VC, IGNOU

Key note Speaker : Dr. S.D. Awale, Director, NITIE, Mumbai

Other Speakers :
▪ Prof. M.B. Menon / Ms. Susan Philips, COL
§ Ms. Sally Rawnsley, The Open Polytechnic of New Zealand

Discussion : 15-20 minutes

Time: 10.15 hrs –11.15 hrs

Networking Session

Group 1 : Strategies for quality improvement of Instructional and Evaluation Processes.

Facilitator: Prof. B.P. Khandelwal

Group 2

NIOS Personnel: Director (Eval.) & Ms. Anita Priyadarshini
Student Support Services.

Facilitator: L.Nagraj Murthy

NIOS Personnel: Director (SSS) & Dr. R.S.P.Singh

Group 3

Professional development needs of VET trainers and Curriculum and Instructional Material Developers.

Facilitator: Fr. Dr. Pushparaj

NIOS Personnel: Director (Vocational) & Mr. S.K. Prasad

Group 4

Identification of strategies for self-employment and Entrepreneurship.

Facilitator: P.Krishnaiah

NIOS Personnel: Chairman, NIOS & Mr. Aditi Ranjan
TEA

11.15 hrs —11.45 hrs

11.45 hrs – 12.30 hrs

Presentation of the Group – Group Facilitators

12.30 hrs – 12.45 hrs

Open House Discussion

12.45 hrs – 13.00 hrs

Wrap up by Chairperson

13.00 hrs—14.00 hrs

LUNCH

Rapporteur: Ms. Gopa Biswas & Aditi Ranjan Rout

Compere: Dr. R.S.P. Singh

Technical Session III

9th February, 2006 Acknowledgement / Recognition of the Importance
Thursday of Vocational Education and Training

Time : 14.00 hrs –15.15hrs HOD to be present: Director (Vocational)

Chairperson : Prof. Nafisatu D. Muhammad, NIGERIA

Key note Speaker : Mr. A.R. Thakur, VC-WBU of Technology

Other Speakers : ■ Mr. S. Natrajan, L&T
 § Fr. T.V. Kunnankal

Discussion : 15-20 minutes

Time: 15.15 hrs – 16.15 hrs : Networking Session

Group 1 : Advocacy for attitudinal changes in the context of importance
 of skill development / vocational education and training.
Facilitator: Br. T.V. Mathews
NIOS Personnel: Director (SSS) & Mr. Aditi Ranjan

Group 2 : Strategies for developing public/private partnerships to
 support vocational education and training.
Facilitator: Ms. Lida Jacob
NIOS Personnel: Director (Evaluation) & Dr. Mamta

Group 3 : National Accreditation Framework for Vocational Education
 and Training.
Facilitator: Prof. Charles Onocha,
NIOS Personnel: Director (Vocational), Mr. S.K Prasad

Group 4 : Significance of Vocational Guidance and Career Counseling.
Facilitator: Dr. B Phalanchandra
NIOS Personnel: Director (Academic) & Ms. Gopa Biswas

16.15 hrs —16.45 hrs TEA

16.45 hrs – 17.30 hrs Presentation of the Group – Group Facilitators

17.30 hrs – 17.45 hrs Open House Discussion

17.45 hrs – 18.00 hrs Wrap up by Chairperson

Rapporteur: Ms. Anita Priyadarshini, Dr. R.S.P. Singh

Compere: Dr. Mamta Srivastava

Technical Session IV

10th February, 2006
Friday

Vocational Education and Training through Open
and Distance learning and the use of ICT

Time : 9.00 hrs – 10.15 hrs

HOD to be present: Director (Acad)

Chairperson : Prof. R. H. Dave, former Director UNESCO Institute of
Education

Key note Speaker : Prof. M.M. Pant, Former Pro-VC, IGNOU

Other Speakers :

§ Mr. Chander Sundram, Microsoft

§ Dr. K. Alluri / Dr. K. Balasubramaniam, COL

§ Prof. K. Sudha Rao

Discussion : 15-20 minutes

Time: 10.15 hrs –11.00 hrs

: Networking Session

Group 1 : VET through ODL approach: Overcoming the Barriers.
Facilitator: Fr. Kunnankal

Group 2 : Use of ICT to deliver and support skill learning.
Facilitator: Prof. Ram Takwale

Group 3 : Management, Accreditation and Monitoring systems.
Facilitator: Mr. Tapan Kumar Das/Dr. Matubber

Group 4 : National/International Linkages/Networking.
Facilitator: Ms. Sally Rawnsley

11.00 hrs —11.20 hrs

TEA

11.20 hrs – 12.00 hrs

Presentation of the Group – Group Facilitators

12.00hrs - 12.15hrs

Wrap up by Chairperson

12.30 hrs—14.00 hrs

LUNCH

Rapporteur: Mr. S.K. Prasad & Ms. Anita Priyadarshini

Compere: Ms. Gopa Biswas

10th February, 2006

Friday

- | | | |
|-------------------|---|--|
| 14.00 hrs – 15.30 | - | Valedictory Session |
| 14.00 – 14.10 | - | Chairman's Welcome Address |
| 14.10 – 14.20 | | Summary Report Presentation by Director (VE) |
| 14.20 – 14.30 | - | Participants Comments |
| | - | COL Comments by Ms. Susan Phillips |
| | - | International participants comments |
| 14.30 – 14.50 | - | Valedictory Address by Hon'ble Minister for Education, Govt. of Kerala, Mr. _____ |
| 14.50 – 14.55 | - | Vote of Thanks by Director (Eval.) |

Rapporteur: Mr. J.D. Sharma Compere: Ms. Anita Priyadarshini

International Conference
on
Vocational Education and Training
through Open Schooling

Organised by

National Institute of Open Schooling, India
and
Commonwealth of Learning, Canada
8-10 February, 2006, Kovalam, Kerala, India

OUTCOMES
AND
RECOMMENDATIONS

(DRAFT)



National Institute of Open Schooling
India

and



Commonwealth of Learning
Canada

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International Conference Vocational Education and Training through Open Schooling

Introduction

Realising that there are immense opportunities for human resource development in the field of agriculture, manufacturing and social services sectors for developing countries like India, a properly planned and effectively implemented Vocational Education and Training (VET) system through open and distance learning (ODL) will (i) equip the learners having varying learning abilities with particular emphasis on marginalized groups with appropriate skills for sustainable livelihood, (ii) facilitate creation of a pool of technologically qualified human resource, and (iii) make the youth entrepreneurs. However, in many countries, particularly in developing countries, the VET programme under the formal education system faces certain limitations with regard to expansion, access, equity and cost effectiveness. Consequently a large number of individuals who would like to acquire competencies and skills are excluded from the benefits of VET.

There is a need (i) to sensitise the society about the importance of VET in the context of reduction of un-employment and poverty, (ii) to bring about attitudinal changes in the society to ensure dignity of labour thereby diverting more people to join skill based programmes for earning livelihood, and (iii) to provide equitable access to Vocational Education and Training (VET) programme. Certain other challenges that need to be addressed are:

- Need to meet the constantly changing requirements of technology/industry with inbuilt flexibility to switch over courses with changes in demand pattern.
- Quality improvement by involving industries in designing the courses, development of curriculum and learning material, training of faculty, practical training of students and evaluation and certification.
- Recognition of the Vocational Education and Training through ODL system from the national agencies for accreditation/recognition.
- Use of Information and Communication Technology (ICT) for development of instructional material, programme delivery and support systems.

These challenges need to be addressed by developing strategies and plans of action for implementation of viable and effective VET Programme through ODL system. Among other things, it requires exchange of ideas and experiences among representatives of trade and industry, VET practitioners, academicians, educational planners and administrators. Keeping this view, the National Institute of Open Schooling (NIOS) India, in collaboration with the Commonwealth of Learning (COL), Canada organised an *International Conference on Vocational Education and Training through Open Schooling: Challenges and Future Strategies from 8 to 10 February 2006 at Kovalam, Kerala, (India)* to deliberate on the impending challenges and issues and suggest appropriate responses to these challenges.

The National Institute of Open Schooling (NIOS) India with International recognition and presence provides access to sustainable and learning centric quality school education, skill upgradation and training through Open and Distance Learning (ODL) and ensures convergence of Open Schooling organisations, resulting in an inclusive learning society, human resource development, national integration and global understanding,.

The Commonwealth of Learning (COL) is the world's only inter governmental organisation dedicated solely to Open and Distance Learning (ODL) and use of ICT for its advancement. It was formed by the Commonwealth – a voluntary association of the countries committed to international consultation, cooperation and development – to help its members achieve their educational goals.

The conference was attended by delegates from the Commonwealth of Learning, Canada, SriLanka, Nigeria, Bangladesh, New Zealand , Pakistan, and India.

Objectives of the Conference :

- To discuss strategies for development of marginalized groups through VET.
- To examine issues that contribute to quality VET through Open Schooling with focus on course development, course delivery, evaluation, staff development and training, and collaborative arrangements.
- To explore the use ICT for VET through Open Schooling.
- To outline a road map for development and expansion of the Vocational Education and Training Programme through Open Schooling.
- To examine possibilities of international cooperation and networking which may be mutually beneficial, and to learn from experiences of practitioners in the field.

Major Themes of the Conference

Theme I : Vocational Education and Training for Marginalized Groups

Theme II : Quality Issues in the Provision of Vocational Education and Training

Theme III : Acknowledgement/Recognition of the Importance of Vocational Education and Training

Theme IV : Vocational Education and Training through Open and Distance Learning (ODL) and the use of ICT

Participants of the Conference

- International Experts including representatives from the Commonwealth of Learning(COL)
- Educational Planners and Administrators
- Representatives from the Trade and Industry Associations/Federations like ASSOCHAM, C&T Microsoft etc.
- Representatives from Vocational Education Agencies/Institutes
- Reputed Educationists and Experts in Open Learning

The Conference was a mix of presentations in Plenary Sessions, Panel and Open House Discussions and Group Sessions. The recommendations of the conference on each theme were presented and discussed at the end of each session. The recommendations of the Conference were presented in the penultimate session on 10 February 2006.

Methodology of the Conference

Each theme was introduced in the plenary session presided over by an eminent educationist from among the participants. Thereafter, identified speakers made their presentations. It was followed by interventions, observations, suggestions and queries. Based on the inputs and issues raised in the plenary session, each theme was discussed in groups in parallel sessions. The participants again met in plenary session in which the Reports of the groups were presented and deliberated upon.

Based on the deliberations in various sessions, the recommendations of the conference were drafted and presented at the valedictory session on 10 February, 2006. The chief guest at the valedictory session Hon'ble Education Minister Govt. of Kerala Sh. Bashir Ahmed delivered the Valedictory Address – after the summery presentation of the report and comments by the participants.

A copy of the programme schedule is at Annexure-I. The list of participants is at Annexure-II

A precise account about the issues discussed and observations and suggestions given in various sessions of the conference is given in the following pages.

Inaugural Session

The conference was initiated by lighting the lamp by Shri MAA Fatmi, Hon'ble Minister of State, Government of India, Ministry of Human Resource Development, Sir John Daniel, President and CEO, COL, Prof. Ashoka Chandra, former special Secretary, Government of India, Ministry of Human Resource Development, Shri M.C. Pant, Chairman, National Institute of Open Schooling (NIOS) New Delhi, and Shri D.S. Bist, Secretary, NIOS.

While welcoming the Hon'ble Guests and the delegates, Shri M.C. Pant, Chairman, NIOS (India) informed that NIOS had organized several International Conference on

Promotion of Open Schooling. However, the present conference is the first International Conference for deliberation on strategies for up scaling of Vocational Education and Training through Open Schooling. Highlights of the address of the Chairman, NIOS (India) are as follow.

- THE OPEN AND DISTANCE EDUCATION IS A NEW PARADIGM WITH SOME ELEMENTS OF SHIFT SUCH AS:
 FROM CLASSROOM TO ANYWHERE
 FROM TEACHER CENTRIC TO LEARNER CENTRIC
 FROM TEACHER AS AN INSTRUCTOR TO TEACHER AS A FACILITATOR
 FROM MAINLY ORAL INSTRUCTIONS TO TECHNOLOGY AIDED INSTRUCTION
 FROM FIXED TIME TO ANYTIME LEARNING INSTRUCTION
 FROM “YOU LEARN WHAT WE OFFER” TO “WE OFFER WHAT YOU WANT TO LEARN”.
 From education as one time activity to education as life long activity.
- NIOS offers about 70 Vocational Education Courses in various areas such as Agriculture, Business and Commerce, Technology, Health and Paramedical, Home Science and Teacher Training. Some life enrichment courses are also offered. Knowledge, skills and qualities of entrepreneurship have been made essential components in curricula for Vocational Education Courses with emphasis on practical and on the job training in related industrial units.
- The Open Schooling system which is at a take-off stage in developing countries has to have a great leap forward to meet the challenge of making the nations learning societies in a reasonable period of time. The open schooling system with inbuilt flexibilities is going to be a major programme delivery mode of study up to pre-degree level.
- *The Vocational Education programmes of NIOS envisage holistic development of learner using Head, Hand and Heart in unison. Use of Head refers to capability of self learning. Use of Hand refers to skill development and use of ICT wherever needed. Use of Heart refers to life enrichment through appropriate values and virtues. Guidance and Counseling is being made an integral part of the Vocational Education programmes of NIOS.*
- *The NIOS, in collaboration with international organizations like COL and UNESCO, as well as at bilateral level, will strive for promotion of open schooling in the developing countries through various modes such as advocacy, consultancy, training of functionaries, dissemination of information, workshops, conferences etc.*
- The Open Vocational Education Programme can not be operationalised in a watertight compartment. It is obvious that cooperation and collaboration with sectors other than Education is a MUST. Strategies and to be evolved in respect of certain issues such as:
 - Ü inter-sectoral cooperation in operationalisation of Open Vocational Education Programme,
 - Ü identification of education needs of diversified client groups for offering need based vocational education programmes,

- Ü operationalisation of vocational education programmes for differently abled persons and other disadvantaged persons,
- Ü setting up of Rural Community Workshops as training-cum-production-cum-service centres for providing educational opportunities to rural youth,
- Ü qualitative improvement and quantitative expansion of Open Vocational Educational Programme,
- Ü making the learners entrepreneurs and not simply job seekers,
- Ü developing a viable and effective Framework for Examinations in Vocational Education subjects,
- Ü monitoring of implementation of Open Vocational Education Programmes,
- Ü training of functionaries,
- Ü inter-country cooperation through international organization like COL, UNESCO, UNECEF, World Bank, and
- Ü wide publicity of Vocation Education Programme.

Sir John Daniel, President and CEO, COL, in his address focused on “Open Schooling for better Learning”. Among other things, he gave reference of the following.

- The UN Millennium Development Goal “Ensure that all boys and girls complete a full course of primary schooling”.
- Dakar “Education for All” Goal 3 “Ensuring that the learning needs of all young people are met through equitable access to appropriate learning and life skills programmes”.

While giving a precise account of evolution of “Open Schooling”, Sir John mentioned its characteristics. Highlight of his address are as follows.

- “It is at work that our roles as competent human beings and responsible citizens come together most intensely”
- Education and Training implies:
 - intellectual, technical, social skills for work
 - functional literacy
 - lifelong learning
- The challenge of Vocational Education and Training are:
 - To be local
 - To engage the private sector
 - To be up to date
 - To be open to the world
- The National Institute of Open Schooling (NIOS) should exploit its openness. Among other programmes and activities, NIOS could work with self employed and to strive to providing skills for employability.

- Over a period of about one and a half decades, NIOS has made its presence felt in International arena by organizing several advocacy and consultancy programmes for Asian and African Countries in collaboration with COL.
- The VET programmes should endeavor to link training with human resource development. This area needs to be given priority.

The keynote address of Prof. Ashoka Chandra, formerly Educational Advisor, Ministry of Human Resource Development, Government of India, was on the theme "Vocational Training for Informal Economy : A Strategic Intervention for Productive Employment." Highlights of the address of Prof. Chandra are as follows.

- TVET system in India still too small by International Comparison. Almost all of what is available is focused on the Formal/Organised Sector of the Economy. Virtually nothing is available for the large Informal Economy.
- Employment is important dimension of Human Development; No Government and no society can afford to be unconcerned about it. VET is considered important in view of its role in preparing persons for world-of-work.
- Japan's thrust on training is worth examination. They spend \$3 on training for each dollar on technology. Japan's reputation for quality has been built around this emphasis. Many South East Asian economies such as South Korea, Malaysia, and Singapore lay particular emphasis on training. Training even in our organized sector has received little support and the focus on informal sector training by comparison is miniscule.

Prof. Ashoka Chandra explained in detail about (i) the range of economic units in the informal sector (ii) training in formal and informal sector and their significant differences, (iii) characteristics of the workers in the informal sector, and (iv) the problems and issues in skill development and training for the unorganized sector. There after he suggested strategies to strengthen training of the functionaries working in the unorganized sector.

The suggested Training Approaches were as follows:

THE EXTENSION MODEL – making services available. As in agriculture make technical assistance available directly to employing establishment.

- n **A mobile workshop** used as an instruction centre. - Regular visits, team includes mechanics who can solve difficult repair problems, instruction focused on problem at hand.
- n **A service centre operating from a fixed location** providing a full range of services: credit, market and distribution, information on technology: and supplying or locating training

A SERVICE CENTRE CONCEPT EXCLUSIVELY TO TRAINING

- ASSESSES TRAINING NEEDS, DEVELOPS PLANS FOR TRAINING, MAINTAINS TRAINING MATERIALS, MAINTAINS INFORMATION ON INDIVIDUALS, FIRMS AND AGENCIES PREPARED TO CONDUCT TRAINING, ARRANGES LOW-INTEREST LOAN FUND FOR TRAINING.
- DAY RELEASE – COMBINING ON-THE-JOB APPRENTICESHIP WITH CLASSROOM INSTRUCTION; THE WEEK DIVIDED BETWEEN WORK ON THE JOB AND INSTRUCTION AT A VOCATIONAL CENTRE.
Need good links with vocational training centers which design curriculum and its division into instruction and practice. Most time on practical training usually in sample enterprises in formal/informal sector. Modular-preparation for a trade examination. The instructor from VTC regularly visits place of apprenticeship training and supervises.
- PRODUCTION ACTIVITIES – INSTRUCTION FULLY INTEGRATED WITH PRODUCTION OF GOODS FOR SALE. TRAINEES INVOLVED IN ALL STAGES, INCLUDING DESIGN AND DEVELOPMENT, PRODUCTION, MARKETING, SALES AND ACCOUNTING.
ADVANTAGE: GAIN RELEVANT EXPERIENCE TO SET UP OWN ENTERPRISE, AFFORDABLE SINCE THEY ‘EARN – WHILE THEY LEARN’, ACTUAL TECHNOLOGY AND DESIGN WHICH IS COMPETITIVE IN LOCAL MARKET LEARNT. NEED WIDE RANGING INFRASTRUCTURE AND TRAINER SKILLS.

The following were the suggested macro level steps for more effective training.

- ✓ Increasing Govt. allocation for education and training
- ✓ Reviewing priorities within E & T budgets and reallocate
- ✓ Better use of existing training facilities and personnel
- ✓ Removing Access constraints (difficult training requirements)
- ✓ Special programmes for disadvantaged groups (e.g. women)
- ✓ Increasing the number and quality of trainers
- ✓ Encouraging enterprises, NGOs and others to engage in training
- ✓ Reducing costs per trainee, e.g. by increasing trainee/trainer ratios or by shortening duration of training courses
- ✓ Shifting to low cost training modes such as distance learning.
- ✓ Recovering training costs from those who can afford to pay.
- 2 Reorientation of existing systems usually complicated, time consuming, vested interests resent undoing of established structures and procedures. Not possible without major effort aims at changing attitudes among policy makers, practitioners and clients.
 - 1 Consider Alternatives e.g., apprenticeship, NGO programmes, self-help efforts.

Governments’ role: indirect, creating “enabling environment” quality control, material support

The inaugural address was delivered by Shri M.A.A. Fatmi, Minister of State, Government of India, Ministry of Human Resource Development. Highlights of the address of the Hon’ble Minister are as follows:

- The developing countries all over the world are making efforts for resource development i.e., human beings into productive individuals and useful members of society. These countries, including India, have been endeavouring for quite some time to universalize Elementary Education. As a result of substantial success of Education for All (EFA), and to meet the resulting increased demand for secondary

education, many developing countries are now making plans and programmes to universalize secondary education.

- School Education is the foundation of total education system. With required changes in modern times, school education system in developing countries is required to provide appropriate response to the challenges of education such as:
 - i. the challenge of numbers,
 - ii. the challenge of quality of education,
 - iii. the challenges of credibility of the education system,
- Implementation of Open Schooling programme by the National Institute of Open Schooling (NIOS) and State Open Schools (SOSs) in India for more than a decade has proved its worth. The open schooling programme is cost effective as it uses the infrastructure facilities of the formal education system. It is a learner friendly system due to inherent flexibilities pertaining to place and pace of learning, choice of subjects, and credit accumulation. As a matter of fact there are many students who after completing education up to class VIII intend to continue their education but are unable to go to formal schools due to socio-economic and cultural reasons. Some youngsters are engaged in such jobs that the timings of formal schools and its rigidities do not suit them. We have to make suitable alternative arrangements for education of such students. We can bank upon the open schooling system for meeting the educational needs of such children and youth who could not continue their formal schooling due to variety of reasons.
- Besides these, the developing countries are facing challenges of development of skills that are commensurate to the technological changes, modernization and globalization.
- The Open Schooling System should collaborate with industries, particularly for identification and implementation of need based vocational educational programmes. Knowledge, skills and elements of entrepreneurship should be the integral part of the Vocational Education curricula and emphasis needs to be given on practical and hands on training in vocations related industrial units. It is good that NIOS has visualized an intervention for vocational education in rural areas through Rural Community Workshops as prototype infrastructure of training-cum-production-cum-service centres. Good models of collaboration among institutions and industries in vocational education may be evolved with viable networking at national, regional, state, district and institutional level. ICT may be used increasingly for programme delivery and monitoring of implementation of the open learning programme.
- The curriculum of formal and alternative schooling organizations include educational information related to various sectors such as agriculture, rural development, social welfare, banking, industries and health. The Education Sector should strive for inter-sectoral cooperation in educational endeavours at all stages right from preparation of curriculum, books to evolving teaching-learning strategies and organisation of training of personnel.
- The operation of the Vocational Education programme follows a collaborative model of implementation and requires proper co-ordination and collaboration among institutions and industry. Appropriate networking at National, Regional, State, District and Institutional level will be developed.
- It is encouraging to note that NIOS India in collaboration with the Commonwealth of Learning (COL) and UNESCO has been organizing advocacy and consultancy

programmes for promotion of open schooling in developing countries of Asia and Africa. Sustained efforts need to be made to strengthen international cooperation in the area. India has been sharing its experiences in the area of open schooling with several developing countries.

- It gives me great pleasure to inaugurate the International Conference on Vocational Education and Training through Open Schooling. I am sure that this august gathering of educationists would deliberate on various issues related to promotions of Open Vocational Programme and would come out with concrete suggestions for qualitative improvement and expansion of the programme in developing Countries.
- It is encouraging that Sir John Daniel, President and CEO, Commonwealth of Learning (COL) could find time to share his ideas and experience with the delegates. The Commonwealth of Learning has been encouraging development and sharing of Open Learning resources and technologies at global level. We are thankful to the faculty of COL for their valuable contribution to put the Open and Distance Learning (ODL) system on sound pedestal in several Commonwealth countries. I also congratulate Prof. Ashoka Chandra for his keynote address.
- I welcome the delegates from the India and other countries who have made it convenient to take part in the deliberations of this conference. I am sure that the top level educational planners and administrators from different Countries will be benefited from the presentation in the Conference and exchange of ideas and experiences for formulating and implementing Vocational Education Programmes.

Shri D.S. Bist, Secretary, NIOS (India) proposed a vote of thanks. He felt that keeping in view the thought provoking addresses in the inaugural session, the outcomes of the conference would be very significant. The issues raised and suggestions made in the inaugural session would be thoroughly deliberated. The deliberations would ultimately lead to finalization of the recommendations of the conference and action points. It is imperative at this juncture to take care of the training needs of the workers in unorganized sector of the economy, which would lead to substantial increase in their productivity further leading to higher incomes output and growth of the Indian economy.

Shri D.S. Bist profusely thanked the delegates from various countries, officers of COL, educational planners and administrators from India and the representatives from Indian Industries and Trade. He appreciated the work done by the officers and staff of NIOS for looking after the academic, professional and organizational aspects of the conference.

Session I : Interactive Session with Sir John Daniel and Prof. Ashoka Chandra

Based on the issues that emerged in the Inaugural session, some queries were made. The response was given by Sir John Daniel and Prof. Ashoka Chandra.

An overview of the interactive session is as follows:

- The formal system of school education, due to its structure and certain rigidities, may not be in a position to meet the Vocational Education and Training requirements of the vast informal economy sector. The Open and Distance Learning (ODL) system, with inbuilt flexibilities, has potential to meet this challenge provided steps are taken to strengthen it appropriately.
- The ODL system should strive to prepare need based local specific modular courses with suitable provision of providing hands on training to learners. Efforts may be made to make effective the tradition system of learning skills in family and/or under the guidance of artisans etc. The traditional ways of doing things may be made more effective with the help of technical, scientific and technological advancement in modern times.
- Three key concept of the open and distance learning (ODL) mode of education, viz., access, flexibility and cost effectiveness, are conducive to sustain the

interest of the learner. These characteristics facilitate completion of the courses of study by dispelling the fear of 'fail'. The pleasure of accomplishment motivates the learner for further study and his vertical mobility in occupation. Provision may be made for bridge courses also as per need. It has been observed that mere Graduation does not ensure employability or entrepreneurship skills. Employability per se does not create employment. It is created by economic activities.

- Need based vocational education courses with provision of internship or 'hands on' experience are more effective.
- The ODL system of education is conducive to 'earn while you learn'. The vocational education inputs may be provided in the courses of general education. This needs to be planned and operationalised meticulously.
- In collaboration with the Employment Exchanges in the country, the educational needs of various registrants may be studied and suitable courses may be offered to them by Open Schooling organizations.
- The formal schooling system and the open schooling systems should work in unison. They should not continue working in watertight compartments.

Technical Session I

Date : 8th February, 2006
Theme

Vocational Education and Training to
Marginalized Groups

- Chairperson* : Prof. M.B. Menon, Education Specialist, COL
- Keynote Speaker* : Mrs. Uma Tuli, Managing Secretary, Amar Joyti, New Delhi
- Other Speakers* :
- ✚ Mr. Kamraj, Vidhyal NGO
 - ✚ Dr. Jayanti Naryanan, Director, NIMH, Hyderabad
 - ✚ Mr. Md. Mohsin, Bangladesh

Mrs. Uma Tuli in her keynote address highlighted the various challenges which are coming in the process of imparting vocational education and training to the differently abled persons, which included:

- ✓ Prevailing Social attitude towards disabilities
- ✓ Lack of interface among Government Departments working for differently abled persons
- ✓ Shortage of trained teachers

- ✓ Absence of barrier-free environment
- ✓ Availability of proper learning materials
- ✓ Lack of awareness
- ✓ Socio, cultural, economic regional, religious, linguistic variations preventing programme development and outreach
- ✓ Lack of transport and enabling environment
- ✓ Resistance of parents
- ✓ Poor linkage between pre-school and primary education

Ms. Uma Tuli suggested various measures such as :

- Inclusive education to provide equitable opportunities
- Effective education services
- Age-appropriate classes
- Appropriate support services
- Neighborhood schools and parent's involvements for the marginalized groups.
- Mainstreaming differently abled individuals.

Suggestions

To promote vocational education at school level in collaboration with District and State authorities and NGOs.

To seek appropriate accreditation for vocational courses from recognized agencies.

To popularize vocational training programmes for disadvantaged groups and persons with disabilities through media and other channels.

To ensure availability of resource rooms in all schools equipped with teaching learning material.

To develop Teacher's Guides and Training Manuals for non-formal vocational courses.

To establish linkages between NGOs and Private and Corporate sectors for implementation of need-based vocational training programmes.

Encourage corporate sector and institutions through incentives to invest in training including the programmes for the disabled.

To give equal importance to degrees in vocational education.

To organize loan facilities for self-employment.

To constitute committee of experts to look into the aspects of modernising and equipping vocational training institution for assessment and appropriate job allocations.

To organize skill competitions, like the Abilympics, jointly by the Education Department and State Industrial Development Corporation to foster greater employment opportunities, to help discover and nurture skills of the disabled.

To facilitate the National level institutions for developing vocational courses as per marketability of the products.

To mainstream the marginalized groups through inclusion in all vocational education and training programmes.

Mr. Kamraj from Vidhyal NGO, one of the sub-theme speakers, made a presentation about importance of self help group and its role in providing livelihood to the marginalized sections. Focusing on the challenges of mobilizing human capital, he was looking forward to get assistance and cooperation from leading organizations in this regard. He stated that his organisation was able to mobilize resources which enhanced their social and financial status, but failed to assist in their skill upgradation. Highlighting the use of multiple strategies to earn livelihood by the marginalized groups in the country, he was of the view that VET can play a major role in empowering this group.

Dr. Jaynathi Narayan, Dy. Director, National Institute of Mentally Handicapped, speaking on the sub-theme "special skill development needs of differently abled persons" highlighted the following

- ✓ The Acts and policies for vocational education and training for persons with disabilities, including the provision contained in Article 41 of the Constitution of India, the National Policy on Education 1986 and the Programme of Action 1982; Persons With Disabilities Act 1995 and the National Curriculum Framework 2005.
- ✓ A list of the jobs, which have been listed by the Government of India for various Group A, B, C and D posts for persons with disabilities including visual impairment, hearing impairment and locomotor disabilities, was provided.
- ✓ It was suggested that the curriculum for training in such identified jobs can be incorporated right from secondary school education including open schooling.
- ✓ For those with mental retardation, skill training may start early, as their academic achievement will be limited. Systematic job analysis and training is essential.
- ✓ Ecology based assessment and selection of job tasks will prepare the students for the jobs in demand.
- ✓ Assessment Tools for assessing vocational potential of persons with mental retardation.
- ✓ Establishment of work stations and prototype models of adapted equipments.
- ✓ Skill training manuals for professionals dealing with the persons with Mental Retardation.

Mr. Md. Mohsin from Dhaka Ahsania Mission presented the aims, objectives and the people served by DAM Bangladesh. DAM offered training to the various group by its specialized institutes. The courses offers by these institutes are for the duration of five days to three months. With the help of wide range of print material and ICTH, they reach to their clientele group.

These presentations were followed by the presentations of facilitators of the networking sessions.

Network Session

Group 1 : Sub-theme -- Providing greater opportunities for skill learning to different marginalized groups including unorganized sector

- ✓ Adoption of professional approach to Vocational Education and Training for marginalized groups.
- ✓ Development and maintaining a data base to provide information about marginalized groups.
- ✓ Consultation/partnership with all the stake holders and wide dissemination of information about the programmes, and ways of taking advantage through the use of mass media.
- ✓ Advocacy of job opportunities and salaries available may be made known to the marginalized groups in a sustained way, specifically to the target groups and region-wise in devising Vocational Education Programmes, breaking the social, cultural, political handicaps and barriers.
- ✓ Competencies and benchmarks to be defined and modular curriculum to be developed.
- ✓ Identifying the latest needs in the industries and opportunities.
- ✓ Cultural propositions to be used to empower the marginalised addressing to the needs of specific groups (6th standard being used as a standard to organize groups by the Agricultural University, Coimbatore)
- ✓ Life-coping skills, livelihood skills and life long learning abilities need to be developed.
- ✓ Flexibility at the level of the job seeker on job, as well as off the job, be provided.
- ✓ Courses should be interdisciplinary in character and multi skilled, to support changes from one career activity to another.
- ✓ The marginalized groups may be involved in decision making processes.
- ✓ Language skills and communication skills may form a part of the vocational education and training.
- ✓ Counselling and guidance should be provided to different sections of the society about the need of vocational education and training for the purpose of removal of un-employment and poverty.

Group 2 : Sub-theme -- Training of Girls/Women in non-traditional areas

- ✓ Integrated media campaign covering Electronic and Print etc., for popularization of non-traditional courses.
- ✓ Introduction of need based courses having employment opportunities in emerging disciplines and organisation of special campaigns to encourage women and girls to opt for such disciplines in Vocational Education and Training.
- ✓ Introduction of Vocational Courses with multi skills, life skills and soft skills.

- ✓ Ensuring safety and Security provisions for women in all institutions, promoting women friendly infrastructure at the place of work as well as at the place of learning.
- ✓ Encouraging through incentives/ financial assistance to the women dominated NGOs to set up Vocational Institutions for girls (the aim should be to provide facilities in every district.)
- ✓ Girls/Women should be provided with guidance
 - to become aware of their interests, abilities and special talents.
 - to pursue courses designed to realize their potential
 - to ensure that those who are engaged in work would have access to information concerning availability of learning opportunities as well as work opportunities.
- ✓ Guidance should be gender inclusive and should cover whole range of skill development and career opportunities. Girls and women should be motivated to take advantage of opportunities.
- ✓ Preferential treatment to girls in order to enhance their intake in the vocational institution.

Group 3 : Sub-theme -- Special skill development needs of differently abled persons.

- ✓ Abilities of persons with disabilities to be highlighted and be made known to public through all forms of media so as to create awareness and positive attitude towards the persons with disabilities.
- ✓ Stories of successfully employed Persons with Disabilities (PWDs) to be popularized so as to create role models. Self advocacy by PWDs will speak of their capabilities.
- ✓ Institutions conducting Vocational courses for PWDs and employers in public private sector to be recognized through incentives and social recognition.
- ✓ Goodwill of socially interactive groups such as women empowerment groups, spiritual groups, science organizations PTA etc., can be made a platform for creation of awareness about abilities of pupils.
- ✓ Phasing out of the training/training process to allow the PWDs to learn at their own pace, which should be the main focus.
- ✓ Training in vocational skills should be need based and ecology based for which parents and family members can be the partners in identifying and shortlisting the vocational areas. This will help the trainers in matching the ability of the PWDs of the skill required and plan the training.
- ✓ Flexibility in the work schedule and environment to prevent fatigue in PWDs.
- ✓ Support in terms of aids and appliances to compensate for the disability; Braille communication aids to be suitably made available.
- ✓ Creation of work stations and adaptation of the job tasks/equipment so that the product developed by PWDs is of acceptable standard and quality.
- ✓ Interface between employer and employee through a vocational facilitator, if felt necessary.
- ✓ Contents to be developed in collaboration with multinational agencies such as corporate sector, agro based, and other indigenous trades and educational institutions of higher learning statutory authorities such as IITs, Rehabilitation Council of India (RCI) and Regional Institutes of Education etc.
- ✓ To ensure quality, recognition, accreditation, tie up with statutory bodies such as RCI is essential.

- ✓ On line learning to be made available for severely disabled persons, and should be case - specific.
- ✓ The instructional material should be of two types, one may be simple and brief for creating awareness and should be distributed to all; the other may cover specific skills, which may facilitate self learning .
- ✓ Optimum use of EDUSAT, Gyandarshan and ICT should be made available for supplementing the teaching learning process. (Encouraging inclusive education.)
- ✓ Regular schools to have vocational centres for PWDs as well as for non-disabled persons by which the gap can be bridged.
- ✓ Based on the ability level of PWDs, decision on suitability for (a) open employment for mild disabilities (b) sheltered employment for moderately disabled and (c) supported self employment for severely disabled to be made and training efforts initiated. This will give the PWDs the status of being more productive in inclusive society.
- ✓ Financial support through agencies such as NHFDC may be explored in helping PWDs with subsidized loans. The procedure for getting the support should be simplified.

Group 4 : Sub-theme -- Integration of Basic Education and Skill learning for neo-literates

- ✓ There is a need to devise strategies for achieving the following :
 - Making community aware through advocacy programmes.
 - Initiation of dialogue with community and industry.
 - Assessment of market potential and needs at periodic intervals.
- ✓ Involvement of community, local experts, field functionaries for programme implementation.
- ✓ All Vocational Education and Training programmes should have a component of entrepreneurial skills.
- ✓ The curriculum should be practical based
- ✓ The teaching/learning package should broadly include all aspects of training-pedagogy, skills, motivation capsules, confidence building, study hours.
- ✓ The use of print, electronic and local media with interpersonal component should be promoted for course transaction.
- ✓ Already available infrastructure in the formal system ie. of Primary Schools or of formal vocational training providers or with the institutions imparting technical education, should be optimally utilized.
- ✓ The quality assessment and assurance should be ensured through research studies and through continuous monitoring.
- ✓ There should be continuous revision and updation of the type and level of skills imparted.

Technical Session II

9 February 2006

Quality Issues in the provision of Vocational Education and Training

- Chairperson* : Prof. Ram Takwale, Former Vice Chancellor , IGNOU
Keynote Speaker : Dr. S.D. Awale, Director, NITIE, Mumbai
Other speakers : Prof. M.B. Menon, Ms. Susan Phillips, COL
Ms. Sally Rawnsley, The Open Polytechnic of NewZealand

Prof. Ram Takwale initiated the session by highlighting how quality is becoming an important and integral factor in education, production and services. Globalization is making demands for quality that has to be assured in all fields.

Shri S.D. Awale in his keynote address stated that some type of Vocational Training was the requirement of every person, whatever position he/she holds. Unfortunately in India, the Vocational Education and Training programme is handled and managed by several Government departments or agencies, and there is lack of coordinated efforts to meet the challenges posed. The Government's role is mainly confined to funding, auditing and occasional reviewing. Promotion of skill development is though much talked about, but most of the time students completing Vocational Education courses take admission in General Education courses at higher education level.

One of the solutions suggested by Dr. Awale related to creating of mass awareness and this should start from the top. VET should not be confined only to a few people but should be open to all in any delivery mode;- face-to-face or Open and Distance Learning mode. Secondly some classic models available locally should be adopted. If structural changes are to be implemented, VET should become a national movement and mission. VET should adopt a modular course delivery approach with credits transfer facilities of multipoint entry and exit. There should be a National Testing System and a National Qualification Framework. The VET should become mandatory, there should be meaningful participation of Industry and women and girls should be given special attention.

Prof. Mohan Menon and Ms. Susan Phillips from Commonwealth of Learning made a joint presentation. Prof. Menon mentioned that COL tries to intervene at policy making level and at grassroots level and interacts with NGOs prior to shaping of any policy decision. Prof. Menon said that models should not remain as innovations but should be adopted and adapted. Quality involved setting and following high standards, is consistent, demonstrates fitness of purpose and transforms participants. He defined

quality assurance and highlighted the components of total quality management as quality assurance and quality control, assessment of quality systems. The sum total of all these three results in total quality management - both internal and external. He stressed the need for quality assurance for reasons of accountability, competition, costs and credibility and listed the emerging vocational training systems. The culture of quality requires good leadership which allows decentralization, participatory decision making, leading to ownership, managing change and transparency in all activities. He proposed a curricular structure whereby competencies can be achieved by undergoing training and not just by reading. A trainee should go through several experiences – be it face to face or the open and distance learning mode which will result not just in rote learning but on vocation based competencies. This model would be a constructivist model of learning.

He highlighted different indicators of quality in learning materials, reliable training systems, learner support and administration and management. He remarked that if we want to know whether we have achieved high quality, than we have to go back to the learners and employers and pose a few crucial questions to them about relevance and acceptance of the courses and the way they were delivered.

There is a need to identify quality criteria and indicators for vocational training, documenting cases and best practices, facilitating consortia and networking, developing framework for assessment of prior learning and experiences and orientation and training in quality assurance.

Ms. Sally Rawnsley, from The Open Polytechnic of New-Zealand, began her presentation by identifying the target group for whom the vocational training is meant for and focused on the current environment in VET. There is an increasing demand for open and distance learning in response to the need for workers to keep them up-to-date within a rapidly changing workplace and that learners and employers are demanding greater choice and flexibility in learning options. She identified the needs of the VET educationists i.e, knowledge which has to be subject specific, skill like time management, communication or computing and attitudes such as patience and enthusiasm. She built up her case for a learner – centered individualized training programme through an example for the hospitality department within a large distance education institution. She presented a profile of the Dean and several of the learners and raised several questions that the Dean needed to answer to train her learners. She summed up her presentation by emphasizing a few essential factors. These include commitment from the top, a philosophy to underpin the commitment, shared understanding of objectives of professional development and a model which integrates professional development with all activities in VET open and distance learning.

Prof. Ram Takwale summed up the presentations by emphasizing that VET has to be learner centered. Skills and competencies and capability development have to be individualized. We should explore interaction with industry much more and mentioned some core values that each and every college and university needs to subscribe to. Among them are the linkages with national values, connection with global needs, inculcating Indian value system and promotion of use of Information Technology. He emphasized that quality assurance mechanism must be a dynamic mechanism and the quality of products and services needs to be decided upon. There has to be updation of knowledge, technology upgradation for raising and maintaining quality.

The questions raised after the presentations revolved around developing a model of working and learning simultaneously and on changing the mindset of the people. There was also a suggestion to use the present available infrastructure and strengthen it instead of creating new ones. Developing the National Vocational Framework should be a time bound programme. It was also suggested that the gap in the difference in productivity between the formal and informal sector should be taken up as an indicator of quality. It was suggested that different VET agencies be brought under one umbrella and that rural indigenous models for community supported VET programmes should be explored.

These presentations were followed by the presentations of facilitators of the networking sessions.

Technical Session II : Network Session

Group 1 : Sub theme -- Strategies for quality improvement of instructional and evaluation processes.

The outcome of the group discussions are as follows;

- Through cooperation of community the competencies required for a particular demand in the market may be developed.
- Core competencies as well as basic competencies may be listed.
- Competency based approach to be taken for curriculum development
- Instructional material may be developed in local language which should be understood by the learner.
- The instructional material may be field tested and validated in a classroom situation
- Need to develop local resource group to take interest in the transaction of practical training .There is also a need to motivate the enterprise to be a training provider to the learner.
- Decentralisation and local empowerment for capacity building ,taking the help of print and electronic media.
- Identification of those who have the desired skills and train them to become effective trainers so that they are able to give practical training to learners. This will lead to effective transaction of curriculum and develop desired competencies in the students.
- The competency based curriculum may be developed in modular format. A provision of modules of different levels will provide vertical mobility in a particular vocational area.
- Need to built into the system the revision of curriculum periodically (2/3 years) to consider the technological changes/feedback received from the field.
- The whole world is following the competency standards approach. To help the standardization and to facilitate quality improvement at different tiers, National Qualification Framework should be brought out.

Group 2 : Sub theme -- Student Support Services

- Technology mediators like CD/Audio Cassettes. Simulators etc. should be incorporated, use of EDUSAT, mission 2007 – Kiosks as Knowledge Centres.
- Flexibility, feasibility and appropriate locally adoptable technology to be increased.
- The expertise of Master Craftsman to be comprehensively used for designing the programmes and presented through professionals.
- Various facilities available with organizations like Universities/Polytechnics / ITIs/Colleges, Industrial service units to be mobilized to create consortium of AVIs.
- Credit points may be awarded to students and other actors for partnering with learners.
- The concept of lab to land be suitably adapted to bring talent and resources from various fields to VET.
- The spare capacity of the National assets available to be made use of to develop the capacity building of VET through revenue sharing.
- This should be transparent and mutually beneficial with accountability and responsibility.
- There should be strong linkage with Panchayati Raj Institution to ensure a sense of ownership.

Group 3 : Sub-theme -- Professional development needs of VET trainers and curriculum and Instructional Materials Developers

- According to the domain knowledge of trainers, location, skill need of a company/service sector, the requisite skills must be imparted to trainers.
- The objective of such training to Trainers is Transformation. Transformative value of each skill in a trainer is assessed by Developmental factors such as learning ability of the Trainer during Training, progress made by Trainer during the training in terms of precision, duration taken for acquisition, and the number of skills acquired.
 - § Disabled and special children/learners need must be taken into account while training the trainers.
 - § Gender sensitivity must become a component of the training.
- Interaction with different experts, local people and professionals is a must for a trainer. The acquaintance of trainers with these people and the culture and background of trainers will facilitate the trainers to design and re-design the syllabi according to specific needs of learners.
- Encourage learners to take risk to become innovators. Networking with different trainers, centres and specific markets.
- Content up-gradation can be done through print media; through electronic media. Updating must be done at regular intervals.
- The elements in the professional preparation of VET Trainers are:
 - Print media
 - Internship
 - Mandatory rules for upgradation once in 3 or 5 years
 - Repository of programmes through Digitalization and ICT
- Strategies for the development of Part Time VET Trainers :
 - Identification of Trainers whose interests are helpful to trainers.
 - Provide social recognition
 - Hurricane Approach in training trainers.
- Strategies to orient the experts and key trainers :
 - Involving them if they are directly and fully involved in training the trainers.

- Considering the role of people who are practicing it with VET training.
- Signing Memorandum of Understanding with small and large industry – stake holders.
- Mutual training exchange between NIOS trainers and industrial trainers.

Group 4 : Sub theme -- Identification of strategies for self employment and Entrepreneurship

The group analysed the gaps in the present scenario for self employment and Entrepreneurship development and offered the following suggestions:

- All the details of Entrepreneurship Development Programme (EDP) institutions should be codified into a directory and made available to the needy.
- Evaluate the quality and the quantity of the EDP institution of all kinds.
- Prepare a master plan for the EDP duly integrating the available schemes, opportunities, facilities from the available/on going programmes.
- Expand the present level of vocational education training centres to have a wide spread/presence specially in the rural areas.
- Promote investment in the field of backward and forward linkages to nurture Entrepreneur development.
- Promote public - private partnership to raise capital for investment in the training institutions.
- Explore the possibilities of converting the existing CEC (Continuing Education Centre) into the Vocational Education Centres.
- Similar Government/NGO Organisation in the field of skill development and training should be indentified and developed into VET.
- Launch information, campaign on the opportunities and challenges in the enterprise development.
- Demonstrate the success stories of the enterprises.
- Investment in the projects to include skill up-gradation and entrepreneurial qualities among the rural and backward areas.
- First generation entrepreneurs need hand holding by the financial institutions and training institutions.
- All Financial Institutions should be mandated to have EDP wing of adequate capabilities.
- Massive training institutions to be created in view of the large number of self help groups of women evolving into micro enterprises.

In his concluding remarks, Prof. Ram Takwale questioned if NIOS would put in place a mechanism for the informal sectors to enter VET and have facilities for open distance learning. He stated that the numbers are high, the infrastructure, perhaps, is not inadequate but the people seem reluctant to enter the system. The rate at which Information Technology is sweeping India is remarkable. He stressed that all technologies should be exploited for the education of people. We have to think of mega-systems but we can not overlook the need for individualization. Even in the rural tribal areas, people respond energetically to IT driven systems. According to him, Information Technology has some important process like Virtualization. Several centres can be connected together to make it one campus. People can work together in completely different ways to overcome digital divide. The internet has changed many concepts and

one such concept is that of mass-personalisation. There is a lot of equalization of knowledge and training and the donor-trainee model is fast disappearing. Capacity building training programmes are important for their transformative values but many studies have revealed that capacity building training programmes have not transformed the abilities of primary teachers.

He emphasized the need to customized training programmes to local needs and how the local trainer or tutor should transform the available knowledge to suit local requirements creatively. He pointed out the limitations of the print medium and stressed the need to switch over to electronic mediums. The changing role of tutor as facilitator was also highlighted and he called for local solutions which should be linked to world class scenario. He stated that only by adopting technology one realized its power.

There was also a proposal to have a small group to apply Information Technology to open and distance learning in a considered and systematic manner.

Technical Session – III

9 February 2006 Acknowledge/Recognition of the
Importance of VE & T

Chairperson : Prof. Nafisatu D. Muhammed

Keynote Speaker : Mr. A.R. Thakur, Vice Chancellor,
West Bengal University

Other Speakers :
 Mr. S. Natrajan, L&T
 Fr. T.V. Kunankal

This session began with the Chairperson inviting the keynote speaker Prof. AR Thakur to initiate discussion.

Prof. AR Thakur, Vice Chancellor, West Bengal University of Technology stressed upon the need for radical reforms in the Vocational Education system. There is a need to change the mindset so that open learning could expand and be more effective. He cited his own experience of working in a traditional university, which, though considered prestigious, was in reality functioning within a rigid framework and was un-willing to make any change in its working style or its academic programmes. It was perceived that opening the doors to open learning would dilute the quality of education. As a result the university was unable to provide any sort of linkages for its students with the industry or to find employment opportunities for them. Prof. Thakur brought to the forefront the role played by the Jadavpur University, which was more open to change and diversified its programmes in addition to those related to higher education. The programmes conducted by the University Department of Adult and Continuing Education was an example of how the university could contribute to Vocational Education. The task before the developing countries with regard to Vocational Education and Training is so huge that all universities, institutes, agencies as well as industry need to contribute in their venture. The Open Schooling organizations can play a catalyst role, and push the organisations towards performing a more pro-active role in open and distance learning. There is a need to create a new understanding and get rid of mental blocks. Existing opportunities need to be grabbed so that this mammoth problem may be addressed effectively.

The WBUT initiated many courses in technology successfully. It is important that the people who initiated the courses must have a conviction of running them. So that opportunity may be converted into action. Prof Thakur called for a reorganisation of the present vocational education curriculum. The skill sets should be brought in such a fashion that a learner may be able to get a livelihood, which is related to a job. Education should lead to employment. The present curriculum, in many cases, is not commensurate to needs of industries.

Prof. Ashok Thakur stressed the importance of teacher training and called for providing minimum skills to trainers who would be master trainers. He dwelt upon the role being played by AICTE and emphasised the need for such institutions to change their functioning. There is a need for AICTE to develop effective policies on VET and to move away from being a controlling authority. Websites need to be updated so that there is greater transparency. The importance of quality education was reiterated.

The ODL institutions are required to work in collaboration with different institutions and motivate others having a traditional mindset. Only when VET programmes reach the grassroot level, the challenge of providing skills can be made successfully.

The presentation on 'Strategies for developing public private partnerships to support VE & Training' was made by Sh. S. Natarajan from the ECC Division of Larson and Toubro. He placed his presentation in the context of the leaders who had dared to dream, engineers who translated these dreams into engineering marvels and stressed upon the need for skilled, focussed and productive construction work force. He provided a model of the construction skills training being conducted by L&T for its workers, outlined the objectives of the programme and the process through which this training was being carried out. The skill standards have been set and there is a stratification of skills so as to create different levels of competencies. There is an emphasis on practicals with 80% of the classes devoted to them and only 20% to theory. Sh. Natarajan outlined the trade/test and certification. There is a need to tie up with the Departments of Employment and Training and evolving a national policy on vocational training in consultation with govt. bodies, industry players, NGOs and others. He called for setting up of a Task Force related to each trade as well as a monitoring body.

Fr. TV Kunnankal, spoke about the importance of the Advocacy for attitudinal changes in the context of importance of vocational education and training. There are many blocks such as those of caste and class. Certain trades had come to be associated with certain castes. There is a need to overcome these blocks and ensure that socially attributed attributes are got over with. The goal is macro one. There is a need to have an inclusive society. At present many children coming out of school came out incompetent. There is a need to re-work the education process so that the product is competent and effective. The country cannot be modernised unless competence is recognised as a non-negotiable requisite for every one. There is a need to do serious model building at micro level. It may be ensured that marketing and entrepreneurial skills are taught. He called for having multiple links with private and public sectors. It is competence that is driving the world. There is a need to increase the competence level appreciably.

During discussion that followed, participants underlined the need for vocational course planners to understand the market needs. All policies related to Vocational Education should have provision for persons with special needs. Any action plan made by NIOS, or any other open schooling institution, should include an action plan for persons with disabilities.

These presentations were followed by presentations of the Facilitators of the networking sessions.

Technical Session III : Acknowledge/Recognition of the Importance of VET.

Group I : Sub theme -- Advocacy for attitudinal changes in the context of importance of skill development/vocational education and training.

- The government needs to be sensitized to the cause of VET.
- There is an urgent need to sensitize people on the concept of certification and upward mobility.
- There is a need to convince parents to send their children for VET in order to make them employable rather than remaining merely a degree holder and unemployed.
- There is felt need of de-linking of employment and qualification/degrees.

- Factory employers ought to be encouraged to send their workers for re-training in ODL institutions to make them be more efficient and productive.
- Professionalizing work will be a means to change attitude towards work. The so called " manual" work concept will disappear gradually.
- There is a need to change the quality of training pattern to suit the needs of a globalized market requirement.
- ODL Institutions should collect and publish success stories of their pass-out and prepare materials for the media.
- Local governments should be requested to telecast ODL activities of the study centres.

Group II : Sub theme -- Strategies for developing public/private partnerships to support vocational education and training

- Ensure sustainable partnership under a win-win situation.
- Open Schooling should be tuned to needs of industry
- Shift in perception of industries regarding certification from Govt. agencies.
- MOUs to be entered into with clear roles and duties.
- Use of facilities in the Industry wherever possible, along with those in Universities/Colleges/ITIs/Polytechnics/Community Resource Centres
- Cost of training should be attractive to Industry over its own training programme.
- More opportunity in the new and emerging industries
- Utilize the services of extension outfits of large industrial houses
- Involve industry in formulation of theoretical and practical course content with compulsory hands on training.
- CII and FICCI may be involved in listing out priorities areas.
- Training in vocational areas should be supported by banks.

Group III : Sub-theme -- National Accreditations Framework for Vocational Education and Training

1. Establish a New Board in the model of the MBA/NAAC.
2. Set-up a sector-wise skill based Task Force with membership drawn from the industry, Institutions, NGOs and Govt Bodies. The Task Force should be vested with the responsibility to implement the skills standards.
3. To ensure adequate representation of the diverse needs of students, local level committees should be constituted to initiate policies and programmes. These should be passed on the National Task Force for examination, approval and implementation.

Group IV : Sub-theme -- Significance of Vocational Guidance and Career Counselling

- An Instructor's Module containing information about the course motivational aspect, the base to identify the potential of the learners, passing on information both academic and occupational, maintaining data base, providing counseling for guidance.

- Target groups
 - Parents
 - Instructors/teachers
 - Students
 - Neo-literates
 - Dropouts
 - Unemployed youth
 - Special groups
 - Students out of UEE/USE
- Pre-admission time
 - About the course
 - Future prospects
 - Theory/practical weightage
 - Internship / apprenticeship
 - Scholarship/stipend
 - Evaluation of the course
- During the course
 - Dealing with personal problems
 - Adjustment to the course and institution
 - Study skills
- Post course
 - Follow up
 - Career guidance and placement
 - Linkages with potential employers and bankers
 - Follow up activity for feedback
- Develop the system having networking and concurrent monitoring system
- Develop a system of orientation/training of instructors/tutors in providing guidance services.
- Provide opportunities for upgradation of skills and for additional learning leading to horizontal and vertical mobility.
- ICT may be used:
 - (a) for networking with guidance workers (instructors) for sharing occupational and educational information/exchange of views with respect to problems and issues.
 - (b) for providing training and retraining to instructors on career guidance and counselling.

During the wrap up session, the chairperson Dr. Nafisatu D Muhammad said that vocational education must have a rightful place of importance in open schooling. She cited examples of the work done by the Nigerian Commission for Nomadic People which developed policies for providing skill training to nomadic people. A well planned multi- faceted approach is required to be taken so that problems may be solved. The Teachers need to be trained and re-trained so that they may be made more sensitive to the needs of marginalised groups. The use of Radio and ICT in Nigeria for advocacy and awareness generation is being made.

Technical Session – IV

10 February 2006 Vocational Education and Training through Open and Distance learning and the use of ICT

Chairperson : Prof. R.H. Dave, Former Director UNESCO
Institute of Education

Keynote Speaker : Prof. M.M. Pant, Former Pro-Vice Chancellor, IGNOU

Other Speakers :

-  Mr. Chander Sundram, Microsoft Corporation (India) Pvt. Ltd.
-  Dr. K. Alluri/Dr. K. Balasubramaniam, COL
-  Prof. K. Sudha Rao, Vice Chancellor, Karnataka Open University

In our endeavour to provide the outcomes and Recommendations of the Conference, a Draft of the Proceedings of the conference was prepared before the conclusion of the Technical Session IV. The outcomes and suggestions of this session will

be taken into account while finalising the Final Report of the Conference including the Recommendations of the Conference.

RECOMMENDATIONS

1. Vocational Education and Training (VET) should be organized on national, state or local basis, to respond positively to cover various socio-economic educational requirements of the corresponding labour market.
2. Realizing the need to provide ample opportunities to enhance skills of marginalized groups of people, including those in informal sectors, the Open and Distance Learning (ODL) mode of education is required to provide easy access to relevant and need based vocational education programmes at various levels.
3. To facilitate access to VET programmes to the huge number of workforce in the informal sector, there is a need to capture the potential of private initiative in providing training to the vast masses. In this endeavour role of the Government should be more strategic than comprehensive.
4. The government may come forward to help in establishing a Skill Development fund emulating the example of Korea and European countries. This fund may be utilized by employers for training their employees in newer skills, by making specific proposals to the Funding Authority.
5. In collaboration with the Employment Exchanges in the country, the educational needs of various registrants may be studied and suitable courses may be offered to them by the Open Schooling Organizations.
6. Realizing that Open Vocational Education programme has potential to meet the educational and development needs of the differently abled persons, a flexible educational approach for appropriate VET courses need to be adopted to provide appropriate responses to meet the challenges for their skill upgradation.

7. The formal system of school education, due to its structure and certain rigidities, may not be a position to meet the vocational education and training requirements of the vast unorganized sector of the economy. The open and distance learning system with inbuilt flexibilities has potential to meet this challenge. Steps need be taken to strengthen it appropriately.
8. The ODL system should strive to prepare need based local specific modular courses with suitable provision of providing hands on training to the learners. Efforts may be made to make effective use of the traditional system of learning skills in family and/or under the guidance of artisans and their . The traditional ways of doing things may be made more effective by integrating technical, scientific and technological advancement in modern times.
9. Need based courses in emerging disciplines may be introduced for girls and women and special campaigns may be organized to enhance them to opt for such courses in vocational education and training.
10. Marginalized groups including girls/women and differently abled persons may be provided with guidance and counseling :
 - a. to become aware of their interest, potential abilities and special talents
 - b. to persue courses designed to realise their potential
 - c. to ensure that those who are engaged in work would have access to information concerning availability of learning opportunities as well as work opportunities.
11. Vocational Education Training (VET) has to be learner centred. Skills and competencies and capability development need be individualized. Quality assurance mechanism must be a dynamic mechanism and the quality of products

and services needs to be decided upon. There has to be updation of knowledge and technology, for raising and maintaining quality.

12. The educational institutions in formal education sector should take responsibility for Vocational Education and Training (VET) through ODL mode not only in direct training delivery but also in building competency standards, testing competencies and certification etc. for the purpose of optimum use of infrastructure and faculty.
13. A competency based training system may be developed. Identification of competencies must be done by analyzing the job functions, feed back from employers and learners looking into their personal growth needs and assessing the future requirements of the occupation.
14. There is a need to identify criteria and indicators of quality in respect of vocational training, documenting cases and best practices facilitating consortia and networking framework for assessment of prior learning and experiences and orientation and training in quality assurance.
15. Realizing that a rigid examination system is detrimental to the cause of the Open Vocational Education Programmes, the Open Vocational Education Organizations should envisage and design a flexible competency based examination system and evaluation strategies to suit the courses of study.
16. The professional development of trainees may include the pre service – training and or in service training depending upon the needs of individuals and may include elements such as education theory in general and particularly as it applies to VET and ODL system, methods of evaluating/assessing the learners, work, choice and use of contemporary multi media techniques particularly ICT, creating

and producing appropriate learning materials including modular and computer aided instructional materials and an introduction to occupational guidance and counselling methods.

17. The Government should develop and prescribe National Competencies Standards to be attained by the institutions in their training programmes and also develop suitable arrangements for testing and certification of competencies. An autonomous and Independent Accreditation Authority may be constituted for this purpose.
18. The developing countries in Asia and Africa are grappling with the challenge of Human Resource Development. There is a need to set up or upgrade the open schooling system in these countries. The International agencies like the Commonwealth of Learning (COL), UNESCO, UNICEF, World Bank, to assist the developing countries in these endeavours. The National Institute of Open Schooling (NIOS) India, in its capacity, as the Secretariat of the Open Schooling Association of Commonwealth should take appropriate steps for promotion of Open Schooling in the developing countries.
19. International cooperation, through the exchange of good practices and methods, should be utilized to apply internationally recommended norms and standards relating particular to a system of assessment and evaluation, of scientific and technical symbols, occupational qualifications and certification, equipment and Technical standards, information processing, equivalencies of qualifications implying standardization of curricula and testing, occupation safety and Security, environmental protection and conservation.

20. International cooperation should be utilized for capacity building in developing countries specially in the area of acquisition, adaptation and application of technology through fellowship and exchange programmes for Teachers/trainers, students and administrators/managers. provision of work experience abroad sustained cooperation between similar institutions in different countries.

These recommendations submitted were adopted by the Conference which also authorized Chairman, NIOS to modify, edit in view of the need for implementing these recommendations.

International Conference
on
Vocational Education and Training Through
Open Schooling: Challenges and Future Strategies

Organized by



National Institute of Open Schooling
New Delhi, India



Commonwealth of Learning
Canada

Venue: Kovalam – Kerala, India

Date: 8-10 February 2006

Programme Schedule

8 February 2006

9.15 hrs – 11.00 hrs

Inaugural Session

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| 09:15 – 09:22 | : | • Welcome by presentation of bouquets |
| 09:22 – 09:25 | : | • Lighting of Lamps by dignitaries |
| 09:25 – 09:35 | : | • Welcome Address by Mr. M.C. Pant, Chairman, NIOS |
| 09:35 – 10:05 | : | • Opening Address by Sir John Daniel, President & CEO, COL |
| 10:05 – 10:30 | : | • Keynote Address by Prof. Ashok Chandra, former Special Secretary-Ministry of HRD, Govt. of India |
| 10:30 – 10:40 | : | • Inaugural Address by Shri. M.A.A. Fatmi, Hon'ble Minister of State for Human Resource Development, Govt. of India |
| 10:40 – 10:45 | : | • Vote of Thanks by Mr. D.S. Bist, Secretary, NIOS |

Tea Break 10.45-11.15 hrs

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| 11:15 – 11:30 | : | • Interactive Session with Sir John Daniel & Prof. Ashok Chandra Presided over by Mr. M.C. Pant, Chairman, NIOS |
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Rapporteur: Dr. J. D. Sharma, Dr. Mamta Srivastava

Comperer: Ms. Anita Priyadarshini

Technical Session I

8th February, 2006
Wednesday

Vocational Education and Training to Marginalized
Groups

- Time : 11.30 hrs – 12.45 hrs HOD to be present: Director (SSS)
- Chairperson* : Prof. M.B. Menon, COL
- Key note Speaker* : Mrs. Uma Tuli, Managing Secretary, Amar Joyti, New Delhi
- Other Speakers* :
- § Mr. Kamraj, Vidhyal NGO
 - § Dr. Jayanthi Naryanan ,Dy. Director, NIMH, Hyderabad
 - § Mr. Md. Mohsin, DAM Bangladesh
- Discussion : 15-20 minutes
- Time: 12.45 hrs - 13.45 hrs : Networking session
- Group 1 : Providing greater opportunities for skill learning to different marginalised groups including unorganized sectors
Facilitator: Dr. Xavier Alphanso
- Group 2 : Training of Girls / Women in non-traditional areas
Facilitator: Dr. Amrapali Merchant
- Group 3 : Special skill development needs of differently abled persons.
Facilitator: Shri. U.K. Samal
- Group 4 : Integration of Basic Education and Skill learning for neo-literates
Facilitator: Dr. V. Mohan Kumar
- 13.45 hrs – 14.45 hrs LUNCH
- 14.45 hrs – 15.30 hrs Presentation of the Group – Group Facilitators
- 15.30 hrs – 15.45 hrs TEA
- 15.45 hrs – 16.00 hrs Open House Discussion
- 16.00 hrs – 16.15 hrs Wrap up by Chairperson
- Rapporteur: Mr. Aditi Ranjan Rout & Dr. R.S.P. Singh
- Compere: Ms. Gopa Biswas

Technical Session II

9th February, 2006
Thursday

Quality Issues in the provision of Vocational
Education and Training

- Time : 9.00 hrs – 10.15 hrs HOD to be present: Director (Evaluation)
- Chairperson* : Prof. Ram Takwale, Former VC, IGNOU
Key note Speaker : Dr. S.D. Awale, Director, NITIE, Mumbai
Other Speakers : ■ Prof. M.B. Menon / Ms. Susan Philips, COL
 § Ms. Sally Rawnsley, The Open Polytechnic of New Zealand
- Discussion : 15-20 minutes
- Time: 10.15 hrs –11.15 hrs : Networking Session
- Group 1 : Strategies for quality improvement of Instructional and Evaluation Processes.
Facilitator: Prof. B.P. Khandelwal
- Group 2 : NIOS Personnel: Director (Eval.) & Ms. Anita Priyadarshini
Student Support Services.
Facilitator: L.Nagraj Murthy
NIOS Personnel: Director (SSS) & Dr. R.S.P.Singh
- Group 3 : Professional development needs of VET trainers and Curriculum and Instructional Material Developers.
Facilitator: Fr. Dr. Pushparaj
NIOS Personnel: Director (Vocational) & Mr. S.K. Prasad
- Group 4 : Identification of strategies for self-employment and Entrepreneurship.
Facilitator: P.Krishnaiah
NIOS Personnel: Chairman, NIOS & Mr. Aditi Ranjan
- 11.15 hrs —11.45 hrs TEA
- 11.45 hrs – 12.30 hrs Presentation of the Group – Group Facilitators
- 12.30 hrs – 12.45 hrs Open House Discussion
- 12.45 hrs – 13.00 hrs Wrap up by Chairperson
- 13.00 hrs—14.00 hrs LUNCH
- Rapporteur: Ms. Gopa Biswas & Aditi Ranjan Rout
Compere: Dr. R.S.P. Singh

Technical Session III

9th February, 2006 Acknowledgement / Recognition of the Importance
Thursday of Vocational Education and Training

Time : 14.00 hrs –15.15hrs HOD to be present: Director (Vocational)

Chairperson : Prof. Nafisatu D. Muhammad, NIGERIA

Key note Speaker : Mr. A.R. Thakur, VC-WBU of Technology

Other Speakers : ■ Mr. S. Natrajan, L&T

§ Fr. T.V. Kunnankal

Discussion : 15-20 minutes

Time: 15.15 hrs – 16.15 hrs : Networking Session

Group 1 : Advocacy for attitudinal changes in the context of importance
of skill development / vocational education and training.

Facilitator: Br. T.V. Mathews

NIOS Personnel: Director (SSS) & Mr. Aditi Ranjan

Group 2 : Strategies for developing public/private partnerships to
support vocational education and training.

Facilitator: Ms. Lida Jacob

NIOS Personnel: Director (Evaluation) & Dr. Mamta

Group 3 : National Accreditation Framework for Vocational Education
and Training.

Facilitator: Prof. Charles Onocha,

NIOS Personnel: Director (Vocational), Mr. S.K Prasad

Group 4 : Significance of Vocational Guidance and Career Counseling.

Facilitator: Dr. B Phalanchandra

NIOS Personnel: Director (Academic) & Ms. Gopa Biswas

16.15 hrs —16.45 hrs TEA

16.45 hrs – 17.30 hrs Presentation of the Group – Group Facilitators

17.30 hrs – 17.45 hrs Open House Discussion

17.45 hrs – 18.00 hrs Wrap up by Chairperson

Rapporteur: Ms. Anita Priyadarshini, Dr. R.S.P. Singh

Compere: Dr. Mamta Srivastava

Technical Session IV

10th February, 2006
Friday

Vocational Education and Training through Open
and Distance learning and the use of ICT

Time : 9.00 hrs – 10.15 hrs

HOD to be present: Director (Acad)

Chairperson : Prof. R. H. Dave, former Director UNESCO Institute of
Education

Key note Speaker : Prof. M.M. Pant, Former Pro-VC, IGNOU

Other Speakers :

§ Mr. Chander Sundram, Microsoft

§ Dr. K. Alluri / Dr. K. Balasubramaniam, COL

§ Prof. K. Sudha Rao

Discussion : 15-20 minutes

Time: 10.15 hrs –11.00 hrs

: Networking Session

Group 1 : VET through ODL approach: Overcoming the Barriers.
Facilitator: Fr. Kunnankal

Group 2 : Use of ICT to deliver and support skill learning.
Facilitator: Prof. Ram Takwale

Group 3 : Management, Accreditation and Monitoring systems.
Facilitator: Mr. Tapan Kumar Das/Dr. Matubber

Group 4 : National/International Linkages/Networking.
Facilitator: Ms. Sally Rawnsley

11.00 hrs —11.20 hrs

TEA

11.20 hrs – 12.00 hrs

Presentation of the Group – Group Facilitators

12.00hrs - 12.15hrs

Wrap up by Chairperson

12.30 hrs—14.00 hrs

LUNCH

Rapporteur: Mr. S.K. Prasad & Ms. Anita Priyadarshini

Compere: Ms. Gopa Biswas

10th February, 2006

Friday

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| 14.00 hrs – 15.30 | - | Valedictory Session |
| 14.00 – 14.10 | - | Chairman’s Welcome Address |
| 14.10 – 14.20 | | Summary Report Presentation by Director (VE) |
| 14.20 – 14.30 | - | Participants Comments |
| | - | COL Comments by Ms. Susan Phillips |
| | - | International participants comments |
| 14.30 – 14.50 | - | Valedictory Address by Hon’ble Minister for Education, Govt. of Kerala, Mr. _____ |
| 14.50 – 14.55 | - | Vote of Thanks by Director (Eval.) |

Rapporteur: Mr. J.D. Sharma Compere: Ms. Anita Priyadarshini

