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Commonwealth Educational Media Centre for Asia

## KEYNOTE ADDRESS

By

B. Shadrach, Director, COL-CEMCA  
bshadrach@col.org

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## CAPACITY BUILDING TRAINING PROGRAMME ON DEVELOPING FUTURE-READY VOCATIONAL EDUCATORS

Organised by

Commonwealth Educational Media Centre for Asia (COL-CEMCA), New Delhi  
and  
National Institute of Open Schooling (NIOS), Uttar Pradesh

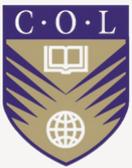
Inaugural Session

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Commonwealth Educational Media Centre for Asia (CEMCA)

7/8 Sarva Priya Vihar,  
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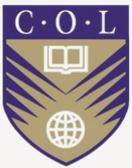
Dear Professor Nirmaljeet Singh Kalsi, Professor Pankaj Arora, and esteemed guests!

I extend my gratitude to Professor Arora for his collaboration with COL-CEMCA in this crucial endeavour of empowering vocational educators at the National Institute of Open Schooling (NIOS)'s Accredited Vocational Institutes (AVIs) with blended learning, technology-enabled learning, and skill pedagogy. This marks a significant stride towards elevating vocational education through NIOS to a new echelon brimming with opportunities.

Globally, numerous nations have long recognised the pivotal role of robust vocational education systems within secondary education. The German "dual system," renowned worldwide, effectively merges practical on-the-job training (apprenticeships) with theoretical instruction in vocational schools. Similarly, Switzerland boasts a strong apprenticeship-based system characterised by close collaboration between educational institutions and businesses. South Korea has made substantial investments in vocational education to fuel its economic progress, featuring specialised vocational high schools and initiatives to enhance the prestige and quality of vocational pathways, aligning training with high-demand sectors like technology and manufacturing. Finland's esteemed education system seamlessly integrates vocational studies with general education at the upper secondary level, offering pathways to both further vocational training and higher education, with a strong emphasis on work-based learning and equitable access. The Netherlands possesses a well-structured vocational education system deeply connected to the labour market, providing diverse levels of vocational training, some integrated into secondary education, with a strong focus on practical skills and industry collaboration.

Within the Commonwealth, we observe similar impactful models:

**Australia:** The VET in Schools (VETiS) programme allows secondary students to pursue nationally recognised vocational qualifications concurrently with their secondary education. Apprenticeships and traineeships offer opportunities to combine paid work with structured training towards recognised qualifications while still in school. The Australian Qualifications Framework (AQF) provides clear progression routes between school-based VET, further training, and higher education. A strong emphasis on industry input ensures the relevance of training to the labour market.



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**Canada:** While education is provincially governed, many provinces have robust career and technical education pathways within high schools. Co-operative Education (Co-op) programmes, particularly strong in Ontario, integrate classroom learning with paid work experience in related fields, often earning secondary school credits in areas like business, technology, healthcare, and skilled trades. Many high schools offer specialised programmes in these and other vocational areas.

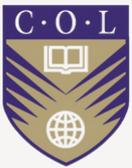
**Singapore:** The Institute of Technical Education (ITE), while primarily post-secondary, maintains close ties with secondary schools, offering early exposure to technical skills and pathways for further vocational training. The Applied Learning Programme (ALP), a Ministry of Education initiative in secondary schools, provides authentic learning experiences with a vocational focus.

**United Kingdom:** A range of technical awards and qualifications are available at the secondary level, emphasising practical skills for specific industries, including BTECs and other technical certificates and diplomas. While traditionally post-school, there are increasing efforts to offer apprenticeships and pre-apprenticeship programmes during the final years of secondary education. Career Colleges, a more recent initiative, focus on specific sectors like digital technologies, health, and engineering, blending academic and vocational education with strong employer links.

**Caribbean Nations:** The Caribbean Vocational Qualification (CVQ), inspired by the Swiss system, is increasingly integrated into secondary education, emphasising competency-based training and assessment with significant industry involvement. Many Caribbean nations are expanding Technical and Vocational Education and Training (TVET) offerings in secondary schools to address skills shortages and youth unemployment in areas like agriculture, construction, tourism, and business studies.

The success of these vocational education systems at the school level hinges on several key characteristics:

- **Strong Industry Involvement:** Close partnerships with employers in curriculum development, training delivery, and work placements (apprenticeships, internships).



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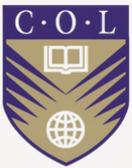
- **Emphasis on Practical Skills:** A significant focus on hands-on training and real-world application of knowledge.
- **Clear Pathways and Qualifications:** Well-defined qualification frameworks recognised by employers, potentially offering pathways to further education.
- **Quality Assurance Mechanisms:** Systems ensuring the quality and relevance of vocational training programmes.
- **Positive Social Perception:** Vocational education valued as a viable and respected career pathway.
- **Adaptability:** The system's responsiveness to the changing needs of the labour market and technological advancements.
- **Integration with General Education:** Opportunities for students to combine vocational studies with academic subjects and potentially pursue higher education.
- **Government Support and Investment:** Adequate funding and policy support for vocational education.

Key features often found in these successful models include: Integration with Academic Studies, Work-Based Learning, Industry Partnerships, Nationally Recognised Qualifications and Career Guidance and Counseling.

It is important to acknowledge that the quality and specific focus of vocational education at the school level can vary significantly within and across these countries. However, these examples underscore the efforts made by nations within the Commonwealth to integrate practical skills development into their secondary education systems.

### **How does India fare in this context?**

The landscape of vocational education at the school level in India is evolving, with increasing emphasis and integration efforts, yet it encounters significant challenges. The National Education Policy (NEP) 2020 places considerable emphasis on integrating vocational education into the mainstream education system from middle school (Grade 6) to higher education, aiming to expose at least 50 percent of learners to vocational education by 2025. The Central Board of Secondary Education (CBSE) offers a range of vocational subjects at the senior secondary level (Grades 11 and 12) across diverse sectors. The Centrally Sponsored Scheme for Vocationalisation of Secondary and Higher Secondary Education (CSS for VHSE) seeks to provide skills relevant to the modern workplace nationwide. The National Skills Qualifications Framework (NSQF) is a



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competency-based framework aligning qualifications with industry needs and providing progression pathways. Industrial Training Institutes (ITIs), while primarily post-secondary, are crucial for the vocational training ecosystem and sometimes have links with secondary schools. Some schools, particularly in urban areas, are introducing Applied Learning Programmes (ALP) to expose students to practical skills. The NIOS also offers a significant number of vocational courses. The Samagra Shiksha Scheme includes vocational education from Class 9 onwards.

The key objectives of vocational education in schools in India include enhancing employability, preparing students for the world of work, reducing dropout rates, bridging the gap between industry needs and workforce skills, promoting entrepreneurship, and changing the perception of vocational education as inferior to academic education.

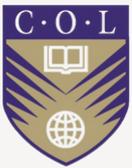
However, several challenges persist, such as: Social Perception, Infrastructure and Resources, Quality of Training, Industry Linkage, Curriculum Issues, Teacher Training, Career Progression, Funding, Accessibility, and Demand-Supply Mismatch.

Recent developments and the future outlook offer some optimism. The strong emphasis in NEP 2020 on integrating and enhancing the quality of vocational education is a significant step. The establishment of the National Committee for the Integration of Vocational Education (NCIVE) aims to oversee this integration and ensure industry relevance. Initiatives under the Skill India Mission, such as PMKVY and NSDC, are working to improve the overall skilling ecosystem. There is an increasing focus on incorporating training in emerging technologies and 21st-century skills, as well as promoting online and open vocational education.

### **What role can NIOS play in this evolving landscape?**

The National Institute of Open Schooling (NIOS) holds a pivotal position in vocational education in India due to several key functions and advantages:

- **Expanding Access and Inclusivity:** NIOS reaches diverse learners, including those in remote areas, school dropouts, individuals with disabilities, and those with work commitments, thereby broadening the reach of vocational



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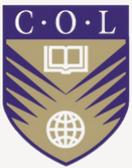
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- education. Its flexible learning system allows students to learn at their own pace and choose subjects of interest. With no upper age limit, NIOS promotes lifelong learning and skill development.
- **Providing Diverse and Relevant Vocational Courses:** NIOS offers a wide array of vocational courses across various sectors, designed to equip learners with practical, job-oriented skills. These courses are aligned with the National Skills Qualifications Framework (NSQF), ensuring national recognition.
- **Integrating Vocational with Academic Education:** NIOS uniquely allows learners to combine vocational subjects with academic courses at the secondary and senior secondary levels, bridging the gap between different educational streams and providing a holistic learning experience. NIOS certificates are recognised for both employment and further education.
- **Leveraging Open and Distance Learning (ODL) Advantages:** NIOS provides self-learning materials in various formats and conducts Personal Contact Programmes (PCPs) for practical training. It is increasingly utilising online platforms and e-learning resources to enhance programme delivery and reach.
- **Collaboration and Partnerships:** NIOS collaborates with various organisations and state open schools to expand the reach and quality of vocational education. It is recognised as an awarding body for assessment and certification by the National Council for Vocational Education and Training (NCVET).

In essence, NIOS acts as a significant enabler in democratising vocational education in India by offering flexible, accessible, and relevant skill-based training, empowering individuals from diverse backgrounds to enhance their livelihoods and contribute to the economy. Its increasing focus on quality, industry alignment, and integration with mainstream education positions NIOS as a crucial player in achieving national skill development and employability goals.

Current trends and developments include increased national emphasis on vocational education in line with NEP 2020, growing focus on new-age skills, digital integration in learning, and efforts to strengthen industry linkages.

NIOS faces challenges similar to the broader vocational education landscape, including social perception, quality assurance across its AVI network, infrastructure and resources at AVIs, and the need to increase awareness and



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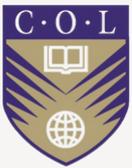
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recognition of NIOS vocational qualifications among employers. However, NIOS has significant opportunities to leverage its ODL expertise, reach underserved populations, align with national policies, and adapt its flexible structure to meet changing skill demands.

### What are the formidable strategies NIOS could employ?

To further scale up its vocational education offerings at the school level, NIOS can employ several strategies, and to name a few:

- **Leveraging Technology and Digital Platforms:** Enhance online learning platforms with multimedia content, virtual labs, and online assessments. Optimise content for mobile learning. Create a digital repository of learning resources. Conduct online teacher training and support. Explore VR and AR for immersive training and implement AI-powered learning support.
- **Expanding and Strengthening the Network of AVIs:** Strategically expand in underserved areas. Enhance the quality of existing AVIs. Foster public-private partnerships. Establish cluster-based approaches for specialised training and resource sharing.
- **Enhancing Curriculum Relevance and Industry Linkages:** Develop demand-driven curricula with industry input. Formalise industry partnerships for internships and joint certifications. Work closely with Sector Skill Councils (SSCs) to align with National Occupational Standards (NOS). Integrate entrepreneurship modules and provide incubation support.
- **Strengthening Assessment and Certification Mechanisms:** Implement online and blended assessment methods. Expand Recognition of Prior Learning (RPL) mechanisms. Issue digital certificates and transcripts.
- **Targeted Outreach and Awareness Campaigns:** Conduct national awareness campaigns to promote vocational education. Provide comprehensive career counseling. Engage with local communities. Utilise digital marketing strategies.
- **Capacity Building of Human Resources:** Develop comprehensive teacher training programmes with industry immersion opportunities. Develop a cadre of master trainers.
- **Financial Sustainability and Resource Mobilisation:** Diversify funding sources through CSR initiatives and industry contributions. Optimise cost-effective delivery models.



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- **Resurrect the National Virtual Open School:** COL-CEMCA assisted NIOS to come up with a blueprint for the National Virtual Open School some 13 years ago. To date, the blueprint hasn't been realised while the technological options have improved. It is best to resurrect the plan and align to the current context for its implementation.
- **Business Planning for scaling-up vocational education:** COL-CEMCA can assist NIOS in developing a business plan, aligned with certain strategic objectives to scale-up the current offering of vocational studies to a meagre 40,000 learners to at least 4 million learners by 2030. This would require a dedicated team at NIOS, together with their regional centres and the AVIs to come together and plan for the scale-up.

With these few thoughts, I would like to thank everyone for the attention paid to the thoughts shared on this platform. I wish Dr Giri and his colleagues all the best with the training programme to building capacity among the vocational educators of India.