

Micro-Credentials: Future of Modern Skilling

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Dr. Neena Pahuja

Executive Member, National Council for Vocational Education and Training
Ministry of Skill Development and Entrepreneurship,
Government of India, New Delhi

Need of Upskilling and Reskilling

PRIORITIZING UPSKILLING & RESKILLING

CHALLENGES

Upskilling reduces turnover as generation X and millennial employees are more likely to leave due to lack of career progress.

60%

of employees believe their current skill set would be outdated in the next 3-5 years

In the next few years

54%

of employees will require upskilling to meet the changing demands of their jobs



46%

of those in mentoring programs said their mentoring experience positively influenced their desire to stay at their company.

94%

of employees would stay longer if their company invested more in learning



MENTORING SOLUTIONS

Leverage the knowledge and experience of your teams with skills-based mentoring programs in areas such as Sales, Technology, IT, and Executive/Leadership.

Micro-Credentials India Scenario



India: A Micro-Credential certifies achievement of a coherent set of skills and knowledge; and is specified by a statement of purpose, learning outcomes, and **strong evidence of need by industry**, employers, Government or the community. They are smaller than a National Occupational Standard (NOS) or qualification and focus on skill development opportunities.

Why Micro-Credentials(MCs)

Lifelong Learning, Recognition of Prior Learning and Cost-Effective Education:

- MCs provide Accessibility and Flexibility in learning by Online and Digitally delivered learning capsules
- MCs help in creating Customized Learning Paths
- MCs as Bridge courses complement & recognize skills and knowledge individuals acquired through work experience, self-study, informal learning.
- MCs can be more cost-effective than traditional degree programs, with “**Learning-on-Demand**”

Skill Enhancement and Employability:

- **Quickly acquire specific skills** for greater employability, like communication, digital, cognitive, design thinking skills
- Skills acquired through MCs become increasingly valuable **with economic diversification and evolving industry**

Industry-Responsive and Entrepreneurship & Innovation:

- Ensuring alignment with current job market needs and industry-specific requirements.
- India has a growing entrepreneurial ecosystem. Enable entrepreneurs and innovators acquire the necessary skills to start and grow their businesses.

Addressing Skill Gaps and Workforce Development :

- Tailored to address specific skill gaps in industries: Updated Products/ Tools
- Can bridge the divide between what is taught in traditional education and what is needed in the workplace.



India Vocational Education Training and Skilling System

- **National Occupation Standards (NOSs)**- A NOS defines one or more key function with measurable performance outcomes what an individual performing that task should know.
- **Micro-credentials (MCs)**- The smaller units, namely Micro-Credentials may be developed within a sector or across sectors primarily focusing on upskilling.
- **Skill Qualifications/ Course**- A Qualification comprises of a number of smaller units of learning with independent learning outcomes called National Occupational Standards (NOSs). Just as each job role may require the performance of a number of tasks, the combination of all these NOSs form the Qualification for that job role.
- ~~**Apprenticeship embedded Skill Qualifications/ Course** - NSQF aligned and approved courses wherein learners are engaged in both theory and industry-based learning, under the provisions of Apprenticeship ACT.~~
- ~~**MNC/ OEM/ Industry specific course:** These are qualifications developed to encourage the MNCs participation including Original Equipment Manufacturers (OEMs), Original Design Manufacturers (ODMs), Value Added Resellers (VARs), and other industry bodies in filling the demand supply gap.~~
- ~~**Employability Skills/Life Skills/Soft Skills** - Specific modules like employability skills are integrated in the skill-based course to enhance the overall employability of the learner undertaking the skill training.~~

National Skills Qualifications Framework (NSQF)

- The NSQF has been notified by NCVET as a competency-based framework for vocational education and training/Skilling for development, classification, and recognition of qualifications from Level 1 to Level 8
- Each NSQF level is determined by a Level Descriptor which prescribes the Learning Outcomes at a particular Level.
- **All skilling components are defined at these levels.**

Components of programs of study:

Skill based Theory

Practical Laboratory/ Hands-on/ studio/ workshop

Field – based learning/ projects, Internship & Apprenticeship

On the Job Training

NSQF Levels

Level 8 – Doctoral Degree

Level 7 – Master's Degree (2 years after a 4-year Bachelor's degree)

Level 6.5 – Master's Degree (2 years after a 3-year Bachelor's degree or 1 year after a 4-year Bachelor's degree)

Level 6 – PG Diploma; First year of a 2-year master's programme

Level 6 – Bachelor's Degree, 4th year

Level 5.5 – Bachelor's Degree; 3rd Year

Level 5 – UG Diploma; First two years

Level 4.5 – UG Certificate; First year, 3 year diploma after 10th

Level 4- Class 12, 2 year ITI after 10th

Level 3.5- Class 11. 1 year ITI after 10th

Level 3- Class 10/ 2 year ITI after 8th

Level 2.5- Class 9, 1 year ITI after 8th

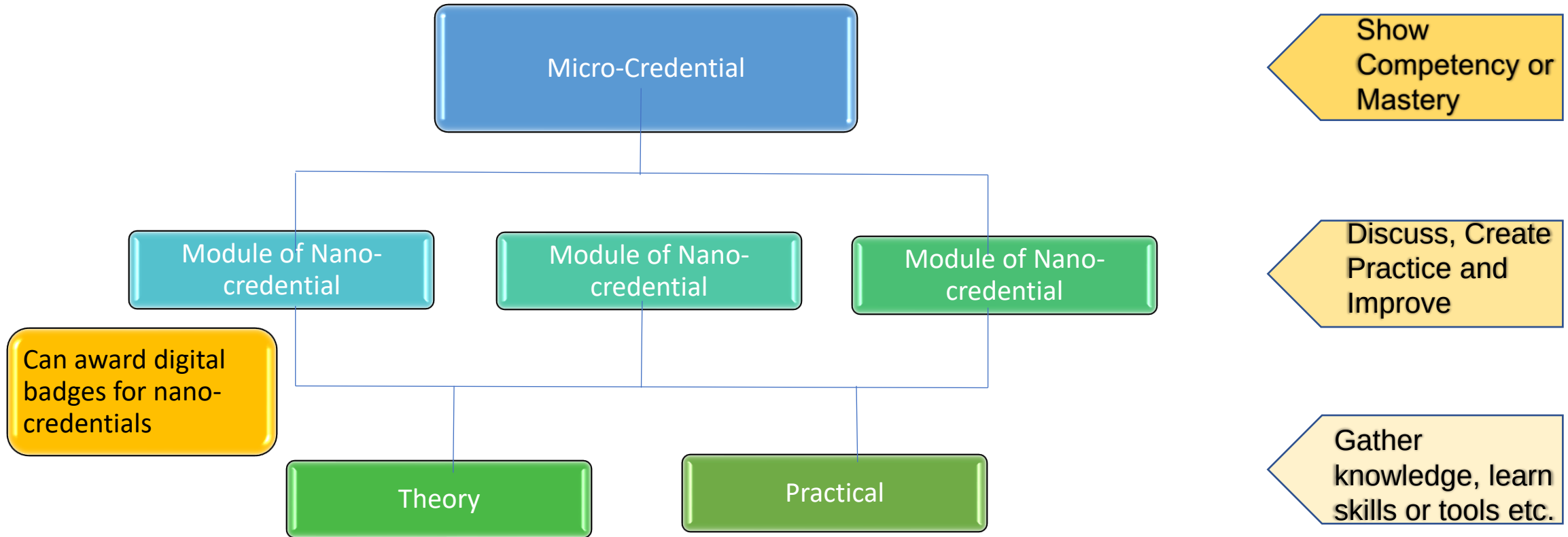
Level 2- Class 8

Level 1- Class 5

Micro-Credentials vs NOSs vs Qualification

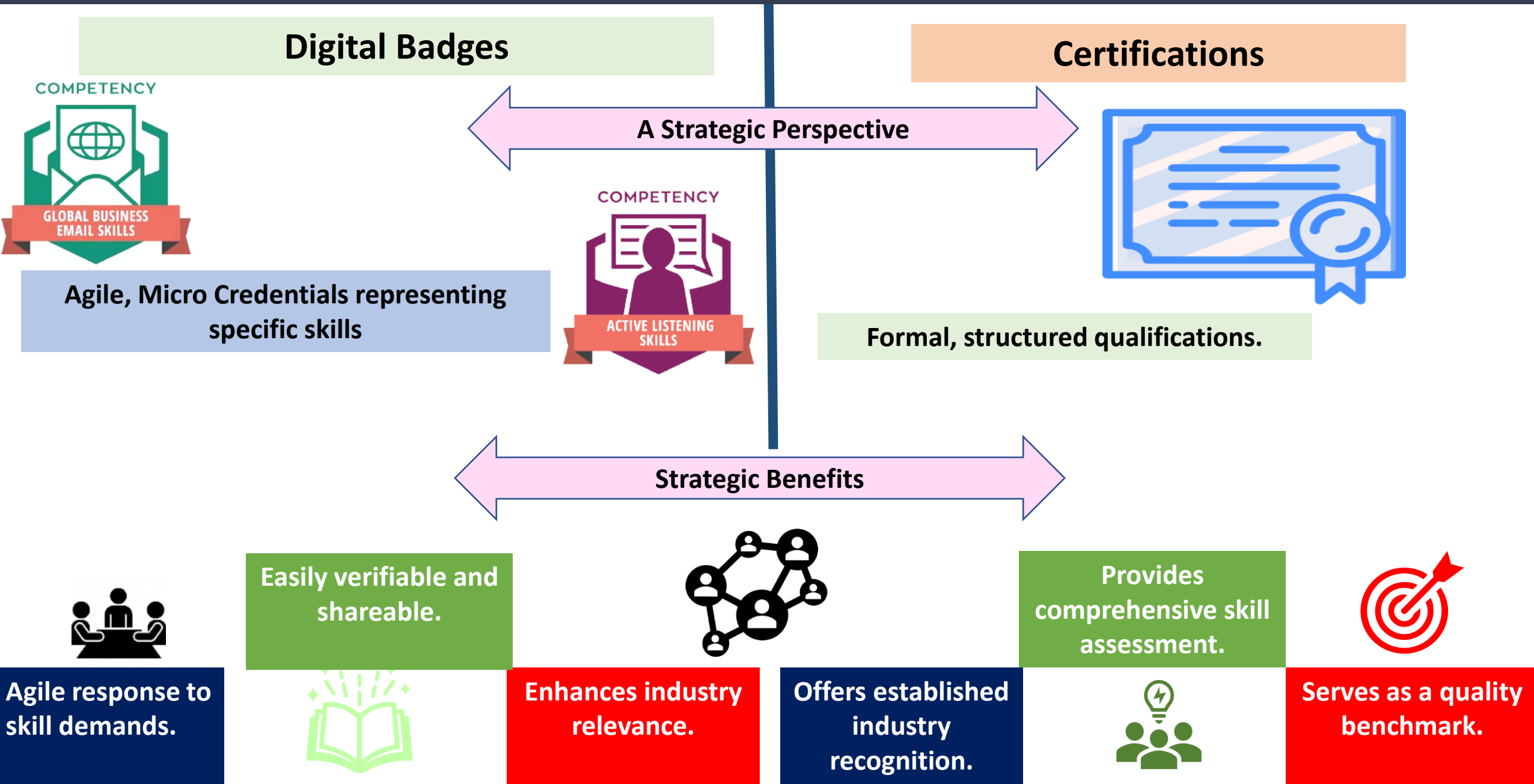
Headers\Type	Micro-Credentials	National Occupation Standards (NOSs)	Qualifications
Utilization	Upskilling	Upskilling, Bridge courses, Skilling	Upskilling, Reskilling, Skilling
No of Hours	Ideally in Multiple of 7.5 Can be of 15, 22.5 or up to 30 hours	- Standard – In multiple of 30 hours - Special Requirement – In multiple of 15 hours	Multiple of 30 From 150 to 1200 hours
Types	<u>Public</u>: Available for adoption by anyone <u>Private</u>: Open Curriculum/Content IPR with Awarding Body(AB)/Industry Body	1. Applicability wise: Generic/ Domain 2. Structure wise: Mandatory/ Optional 3. Approval wise: Standalone /As Part of qualification	
Industry Validations	5 for Public Micro-Credentials 1 for Private 2 for Future Skills qualifications	As required for standard qualification approval	30 for New Qualification 21 for Revised with Changes. 5 for Revised without Changes 5 for future Skills Qualifications
Levels	Can come at all levels Will be same as the entry level. However, it is suggested to create less than 15 hours courses only for level 6 and above	Possible at all levels	Possible at all levels (1-8)
Suggested Delivery Mechanism	Preferably on-line	As per Blended guidelines	As per Blended guidelines
Suggested Assessment Methodology	Preferably on-line	As per Blended guidelines	As per Blended guidelines

Stacking of Multiple Nano-Credentials to create Micro-credential



Digital Badging: The badging is like a certificate, but unlike a certificate that merely says the title of the course completed, the digital credential lists the skills earned and the criteria to earn the badge.

Micro-Credentials Enhancing Skill Recognition(1/2)



Enhancing Skill Recognition (2/2)

Digital Badges

Certifications

Alignment with Skill Development Goals:

Adapt to the
evolving needs of
the workforce

Uphold industry
standards and
regulatory
requirements.

Recognition and Industry Partnerships

Support the
rapid
development of
in-demand skills.



Instil confidence
in skill
development
programs.

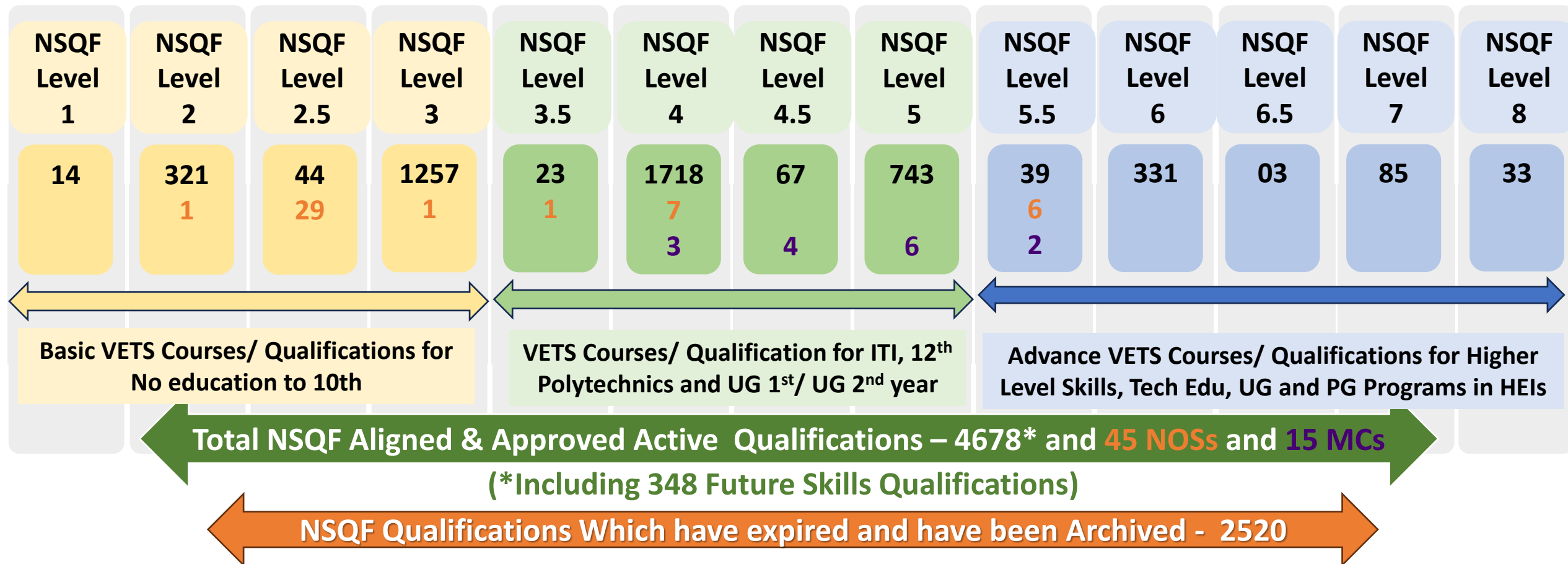
Collaboration with
industry leaders for skill
validation.



Formal accreditation and
recognition from government
and industry bodies.

NSQF Level wise NSQF Aligned and Approved Qualifications/ Courses

(As of October 2023)



Qualifications Developed by of Central/ State Govt. Bodies and Institutions	Qualifications Developed by SSCs and other Awarding Bodies in collaboration with Industry	Total Active Qualifications
1991 (Including 271 qualifications from Indian Defence Forces)	2687	4678

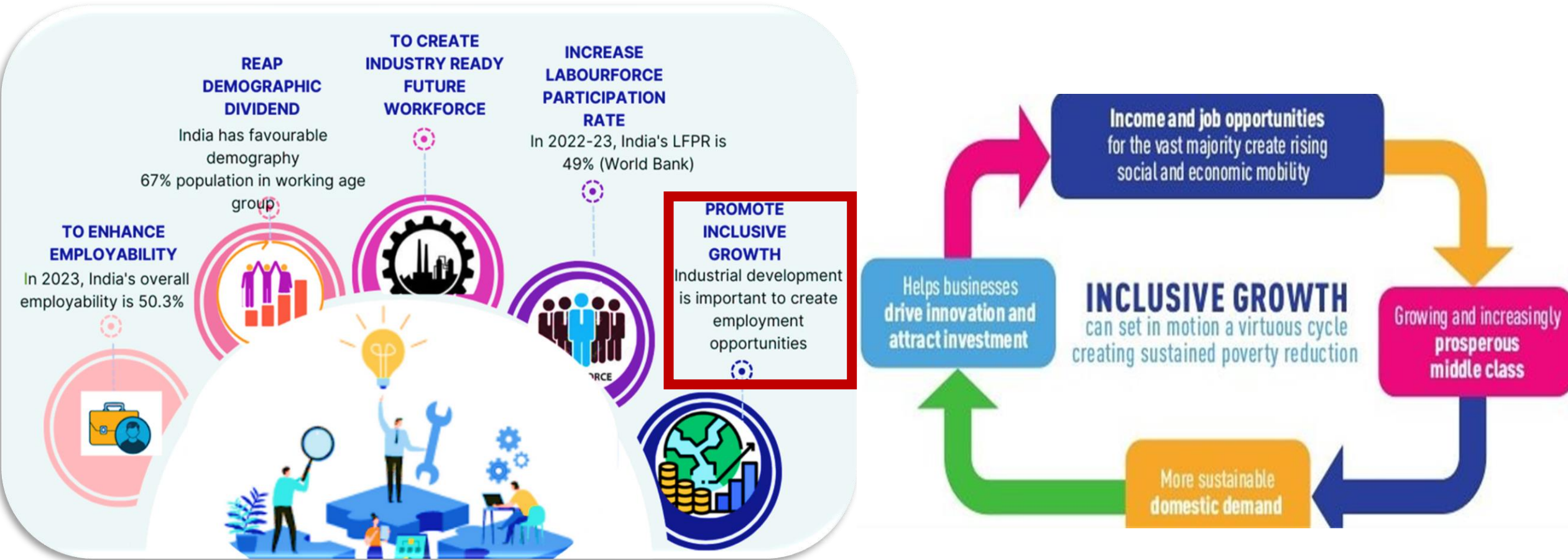
Thanks

Comments & Suggestions may be sent to

neena.pahuja@gov.in

Or help@ncvet.gov.in

Role of Skilling in fostering Inclusive Growth



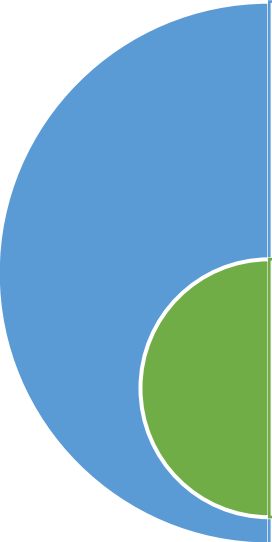
- The focus shifted towards enhancing employability and productivity of workforce.
- National Education Policy (NEP) 2020: Education has been made more multidisciplinary and holistic by integration of general (academic) and vocational education.

Future Steps: Nano-Credentials to be introduced

Nano-credentials seek to fill the gap in the current practice of awarding credentials beyond the award of certification of qualification.

Need: Learning has accelerated the drive for nano-credentials, micro-credentials. In a changing workforce seeking to stay relevant in Industry 4.0 and 5.0, continued upskilling and reskilling is pivotal but in chunks of time that are seen to be more manageable.

A nano-credential is smaller than a micro-credential with the ability to 'stack' into micro-credentials. If a micro-credential is 5-30 hours of learning, then a nano-credential should be 1-4 hours. A nano-credential should be more focused on particular skill sets.



The benefit for nano-credentials is that they will be a lot quicker to take. For example, if there is a new technology tool update requirement or need, a nano-credential could teach just the skills for that element in a short period to focus on specific and necessary learning outcomes.

Nano credentials, which could be even more specific and focused than traditional Micro-credentials, are certainly an area of potential evolution in the realm of education and professional development. These ultra-specialized credentials are designed to provide learners with precise skills or knowledge in a particular area.

MC alignment with qualification system in India

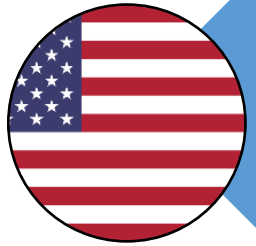
Main elements of NSQF Alignment

- **Well defined PCs** will specify the standard of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding
- The **training pedagogy** needs to be established in terms of Theory, Practical and OJT which the candidate shall undertake for his/her learning.
- Offered as complete theory-based courses or complete practical courses as the requirement may be from the Industry.
- Clearly defined **assessment strategy, assessment criteria** against PCs & **assessment tools**
- The **validity** of the Micro- credential shall be same as that of the NSQF aligned qualifications i.e. **03 years**.
- The entry requirements, levels and commensurate notional hours shall be as per the **standardisation framework of NSQF qualifications** established by NCVET.
- Once approved the Micro-credentials shall be **uploaded on the National Qualifications Register (NQR)** website.

Type	No. of days	No. of Learning hours	No. of NOSs
Micro Credential 1	01	7.5 (+0.5-hour assessment)	0.25
Micro Credential 2	02	15 (+1-hour assessment)	0.5
Micro Credential 3	03	22.5 (+1.5-hour assessment)	0.75
Micro Credential 4	04	30 (+2-hour assessment)	1.00

*The above are for reference, there can be some variations on above numbers based on the Industry requirements.

Micro-credentials International Scenario



US: At the most basic level, micro-credentials are credentials that verify, validate, and attest that specific skills and/or competencies which have been achieved. They differ from traditional degrees and certificates in that they are generally offered in shorter or more flexible timespans and tend to be more narrowly focused. They are generally developed by bundling courses from existing degree programs, certificates or minors.

Source: McGreal, R., & Olcott Jr, D. (2021). Micro-Credentials Landscape Report: Transforming workforce futures: Strategic perspectives and practices for university micro-credentials.



European Union: A Micro-Credential is a recognised proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against transparent standards.

This proof is contained in a certified document that lists the name of the holder, the achieved learning outcomes, the assessment method, the awarding body, level & credits applicable

Source: McGreal, R., & Olcott Jr, D. (2021). Micro-Credentials Landscape Report: Transforming workforce futures: Strategic perspectives and practices for university micro-credentials.



Australia: A Micro-Credential is a certification of assessed learning or competency, with a minimum volume of learning of one hour and less than an Australia Qualification Framework (AQF) award qualification, that is additional, alternate, complementary to or a component part of an AQF award qualification.

Source: Australia. Department of Education, Skills and Employment. (2021). National Microcredentials Framework.

Challenges and Solutions in implementation of Micro-Credentials

MAIN BARRIERS

During Implementation

Lack of awareness

Capacity issues with respect to development of MCs

Establishing need for development of relevant and appropriate MC

During Development

Capacity issues with respect to development of MCs

Trainer and assessors with specialized skills

ENABLERS

Creditization of learning as per NCrf

Suitable frameworks in form of guidelines developed and implemented by NCVET

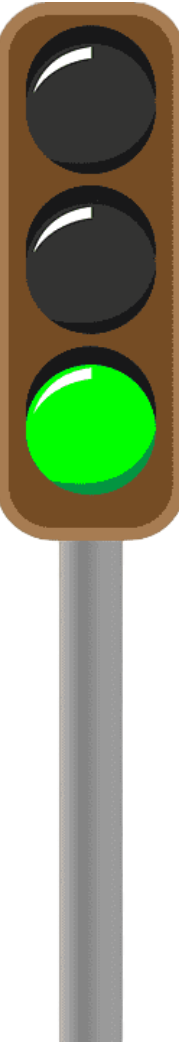
Options of stackability

Use of already trained trainers and assessors

Effective Use of technology

Ease of process, less documentation

Single regulator and standardization of processes



Best Practices and Lessons Learned

