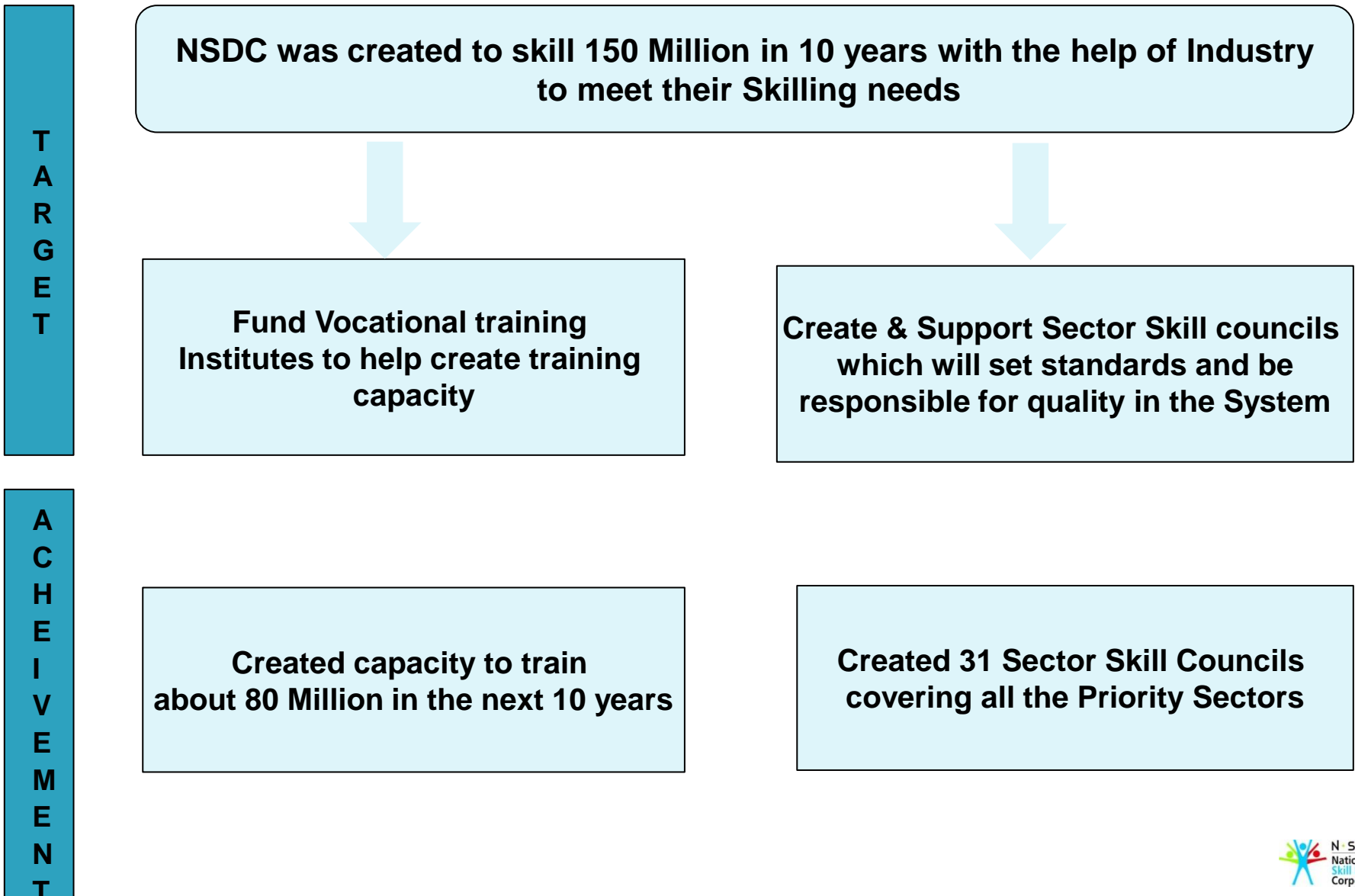


Presentation on the Outlook for Skill Building

G M Mohan Reddy
National Skill Development Corporation, India
31st October, 2014



National Skill Development Corporation – It's Objectives

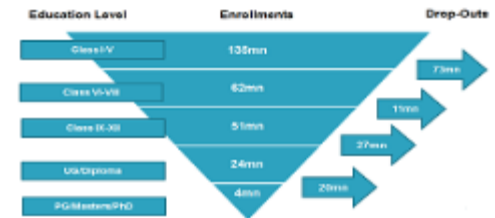


Why NSDC was created : Indian Scenario

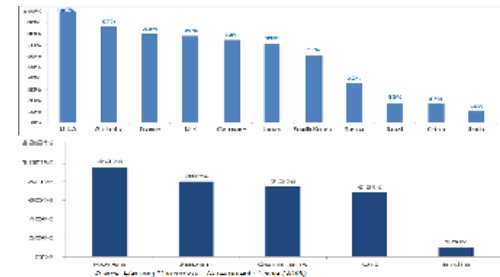
Young Country: 50% of its population will be below 29 years by 2021



High Drop out rates 135 million enroll in the schooling system but only 24 million clear the Under graduate level



Low Productivity rates due to very low skilling levels, only 10% of the workers receive skill training



Huge Requirement of Skilled Work force to meet the demand of 350 million by 2022



India requires nearly 350 Million skilled manpower between 2008 & 2022 to sustain Industry Growth in 20 Key Sectors

Manufacturing Sector needs nearly 90 Million in 9 Sub-Sectors

Industry	Incremental requirement (in million)	Industry	Incremental requirement (in million)
Building and Construction Industry	33.0	Tourism and Hospitality services	3.6
Infrastructure Sector	103.02	Construction Material and Building Hardware	1.4
Real Estate Services	14.0	Chemicals and Pharmaceuticals	1.9
Gems and Jewellery	4.6	Food Processing	9.3
Leather and Leather Goods	4.6	Healthcare	12.7
Organised Retail	17.3	Transportation and Logistics	17.7
Textiles and Clothing	26.2	Media and Entertainment	3.0
Electronics and IT Hardware	3.3	Education and Skill Development	5.8
Auto and Auto Components	35.0	Services	
IT and ITES	5.3	Select informal employment sectors (domestic help, beauticians, security guards etc)	37.6
BFSI	4.2	Total Incremental	347
Furniture and Furnishings	3.4		

Source: IMaCS analysis

Proprietary and confidential. This information does not represent and should not be construed as, legal or professional advice. © 2014 NSDC. All Rights Reserved.

Key learning's for the Success of Skilling System/ Vocational Training

1

Involvement of the Industry in the Skilling System

- **Creation of Occupational standards:** In India, it is Mandatory to get approval from at least 30 Companies ranging from Large, Medium & Small
- **Mandating % of Skill Workforce:** Industry voluntarily mandating certain percentage of skilled/ certified workforce in the companies over the years
- **Strong Leadership:** An Industry luminary has to be the head of Sector Skill Councils to provide the required impetus and focus for Skilling in their respective Sectors

2

Creating newer avenues of funding into the Skilling System

- **Contribution to Skilling Activities is counted under CSR:** Any activity which would result in Employment in Vocational Skills

3

Working towards Transnational Standards

- To create global opportunities to the local workforce and facilitate seamless movement across borders. Sector Skill Councils in India are doing a pilot with Australian Counterparts in sectors like Mining, Healthcare, Telecom & IT Sectors

Creation of Occupational Standards in India

A Job Role (Qualification Pack) contains all the Tasks (Occupational Standards) a person should perform in his role and are fitted in the common format specified for all Sector Skill Councils

Typical constituents of Occupational Standard

1. Task Description including the Scope of Work
2. Performance Criteria
3. Basic Knowledge & Understanding: Both Organizational & Technical/
Domain
4. Skills: Both Core Skills & Professional Skills
5. Assessment criteria: Weightage of marks for various tasks performed

Products created by Sector Skill Councils - Example of Competency

CNC Operator – Turning

Job Details

Job Details	Qualifications Pack Code	CSC/ Q 0112		
	Job Role	CNC Operator - Turning		
	Credits NSQF [OPTIONAL]		Version number	1.0
	Sector	CAPITAL GOODS	Drafted on	14/04/14
	Sub-sector	<ol style="list-style-type: none"> 1. Machine Tools 2. Dies, Moulds And Press Tools 3. Plastics Manufacturing Machinery 4. Textile Manufacturing Machinery 5. Process Plant Machinery 6. Electrical and Power Machinery 7. Light Engineering Goods 	Last reviewed on	
	Occupation	Machining	Next review date	30/08/15

Products created by Sector Skill Councils - Example of Competency

CNC Operator – Turning

Minimum Qualification & Applicable Occupational Standards

Job Role	CNC Operator - Turning
Role Description	Operation of Computer Numerically Controlled (CNC) machines, such as CNC lathe machine, in order to perform turning operations on metal components, as per specifications provided.
NSQF level	L3
Minimum Educational Qualifications*	10 th Standard
Maximum Educational Qualifications*	
Training (Suggested but not mandatory)	No Previous Training Required
Experience	No Previous Experience Required
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <p>CSC/ N 0112 Perform turning operations on metal components using Computer Numerically Controlled (CNC) machines</p> <p>CSC/ N 0135 Use basic health and safety practices at the workplace</p> <p>CSC/ N 0136 Work effectively with others</p> <p>Optional:</p> <p>1. Nil</p>
Performance Criteria	As described in the relevant OS units

Products created by Sector Skill Councils - Example of Competency

CNC Operator – Turning

Task Description & Performance Criteria

CSC/ N 0135: Use basic health and safety practices at the workplace

National Occupational Standard	Unit Code	CSC / N 0135
	Unit Title (Task)	Use basic health and safety practices at the workplace
	Description	<p>This OS unit is about knowledge and practices relating to health, safety and security that candidates need to use in the workplace. It covers responsibilities towards self, others, assets and the environment.</p> <p>It includes understanding of risks and hazards in the workplace, along with common techniques to minimize risk, deal with accidents, emergencies, etc.</p> <p>It covers knowledge of fire safety, common first aid applications, safe practices and emergency procedures.</p>
	Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Health and safety • Fire safety • Emergencies, rescue and first-aid procedures
Performance Criteria(PC) w.r.t. the Scope		
Element	Performance Criteria	
Health and safety	<p>The user/individual on the job should be able to:</p> <p>PC1. use protective clothing/equipment for specific tasks and work conditions Protective clothing: leather or asbestos gloves, flame proof aprons, flame proof overalls buttoned to neck, cuffless (without folds), trousers, reinforced footwear, helmets/hard hats, cap and shoulder covers, ear defenders/plugs, safety boots, knee pads, particle masks, glasses/goggles/visors Equipment: hand shields, machine guards, residual current devices, shields, dust sheets, respirator</p> <p>PC2. state the name and location of people responsible for health and safety in the workplace</p> <p>PC3. state the names and location of documents that refer to health and safety in the workplace</p>	

Products created by Sector Skill Councils - Example of Competency

CNC Operator – Turning

Knowledge and Understanding

Knowledge and Understanding (K)

<p>A. Organizational Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KA1. names (and job titles if applicable), and where to find, all the people responsible for health and safety in a workplace. KA2. names and location of documents that refer to health and safety in the workplace.
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. meaning of “hazards” and “risks” KB2. health and safety hazards commonly present in the work environment and related precautions KB3. possible causes of risk, hazard or accident in the workplace and why risk and/or accidents are possible KB4. possible causes of risk and accident Possible causes of risk and accident: physical actions; reading; listening to and giving instructions; inattention; sickness and incapacity (such as drunkenness); health hazards (such as untreated injuries and contagious illness) KB5. methods of accident prevention Methods of accident prevention: training in health and safety procedures; using health and safety procedures; use of equipment and working practices (such as safe carrying procedures); safety notices, advice; instruction from colleagues and supervisors

Products created by Sector Skill Councils - Example of Competency

CNC Operator – Turning

Skills Needed

Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Reading and Writing Skills
	The user/individual on the job needs to know and understand how to: SA1. read and comprehend basic content to read labels, charts, signages SA2. read and comprehend basic English to read manuals of operations SA3. read and write an accident/incident report in local language or English
	Oral Communication (Listening and Speaking skills)
	The user/individual on the job needs to know and understand how to: SA4. question coworkers appropriately in order to clarify instructions and other issues SA5. give clear instructions to coworkers, subordinates others
	Decision Making
	The user/individual on the job needs to know and understand how to: SA6. make appropriate decisions pertaining to the concerned area of work with respect to intended work objective, span of authority, responsibility, laid down procedure and guidelines
B. Professional Skills	Plan and Organize
	The user/individual on the job needs to know and understand: SB1. plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity
	Working with others
	The user/individual on the job needs to know and understand how to: SB2. remain congenial while discussing and debating issues with co-workers SB3. follow appropriate protocols for communication based on situation, hierarchy, organizational culture and practice SB4. ask for, provide and receive required assistance where possible to ensure achievement of work related objectives SB5. thank coworkers for any assistance received SB6. offer appropriate respect based on mutuality and respect for fellow workmanship and authority

Products created by Sector Skill Councils - Example of Competency

CNC Operator – Turning

Assessment Criteria

ASSESSMENT CRITERIA

CSC/ Q 0112	CNC- Turning Operator	
		Weightage
CSC/ N 0112	Perform turning operations on metal components using Computer Numerically Controlled (CNC) machines	70
CSC/ N 0135	Use basic health and safety practices at the workplace	20
CSC/ N 0136	Work effectively with others	10

		Marks Allocated	
		Theory	Practical
Work safely	PC1. comply with health and safety, environmental and other relevant regulations and guidelines at work	1	1
	PC2. adhere to procedures and guidelines for personal protective equipment (PPE) and other relevant safety regulations while performing CNC turning operations	1	1
	PC3. read and understand safety instructions, warning signs on the machine	1	1
	PC4. work following laid down procedures and instructions	0	1
	PC5. ensure work area is clean and safe from hazards	1	2
	PC6. ensure that all tools and equipment are in a safe and usable condition	0	1
		4	7



N · S · D · C
National
Skill Development
Corporation

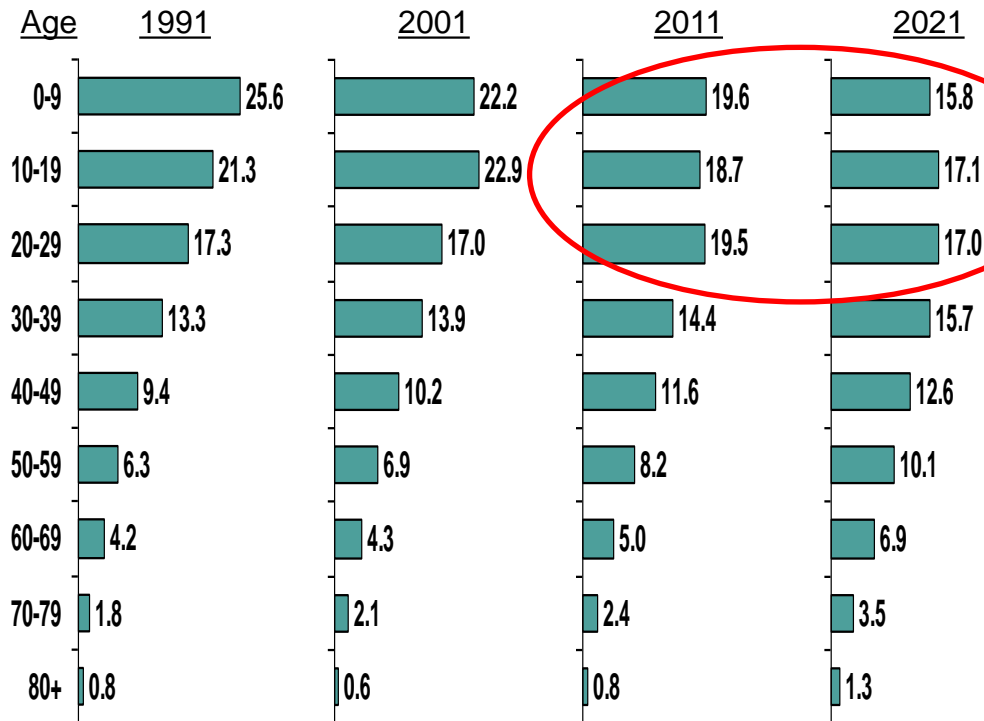
Thank you

Contact Information:

Mohan.Reddy@nsdcindia.org

India's Demographic Advantage

47.8% of India's population is below 29 years increasing to 49.9% in 2021

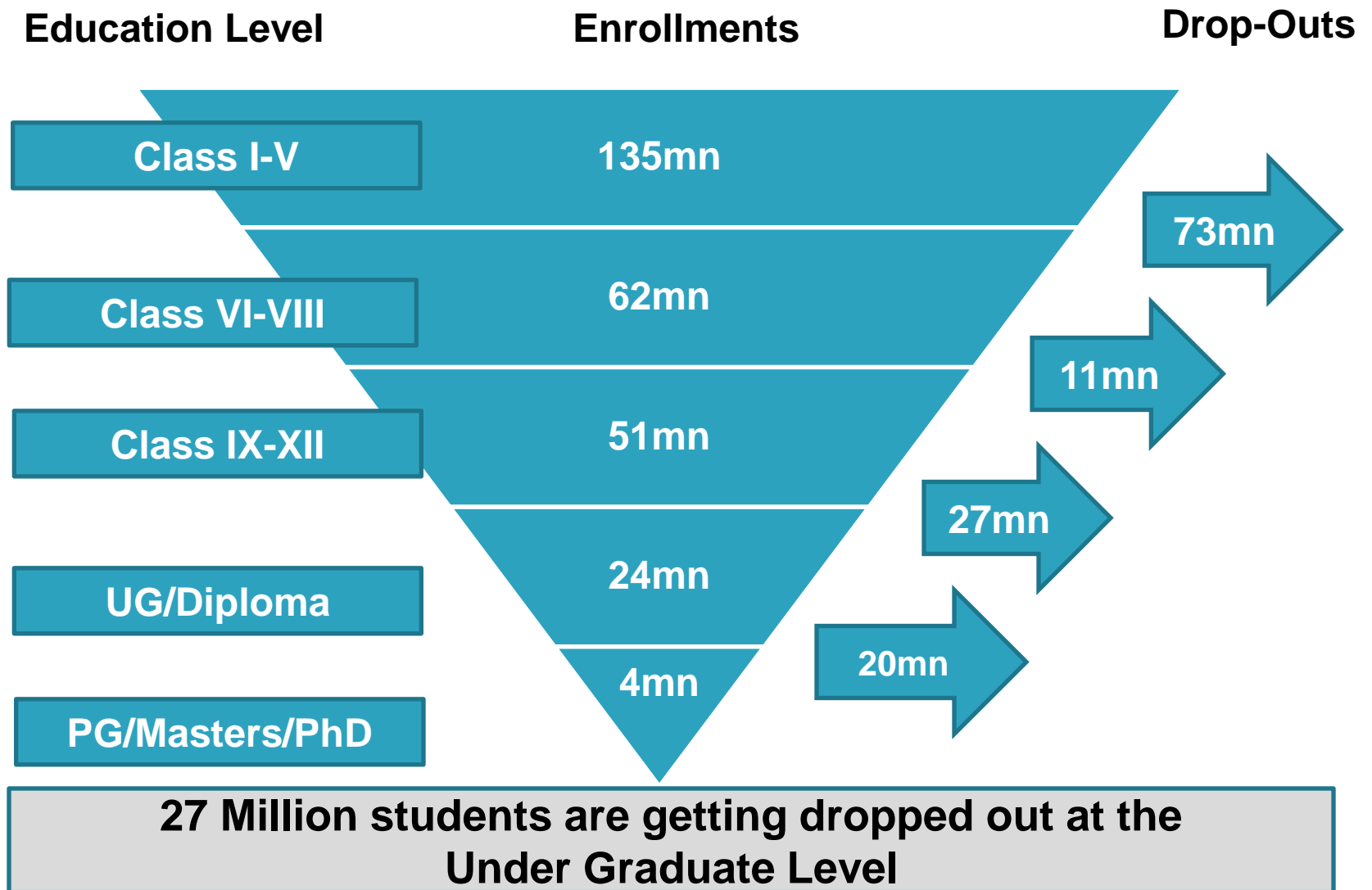


Demographic Dividend is an opportunistic competitive advantage that a population possesses as a result of a rising share of working age people which can lead to a rise in economic growth rate.

Demographic Advantage - India will be expanding its most productive cohorts (population between 15-60 years) as most developed countries and some developing ones will start contracting theirs.

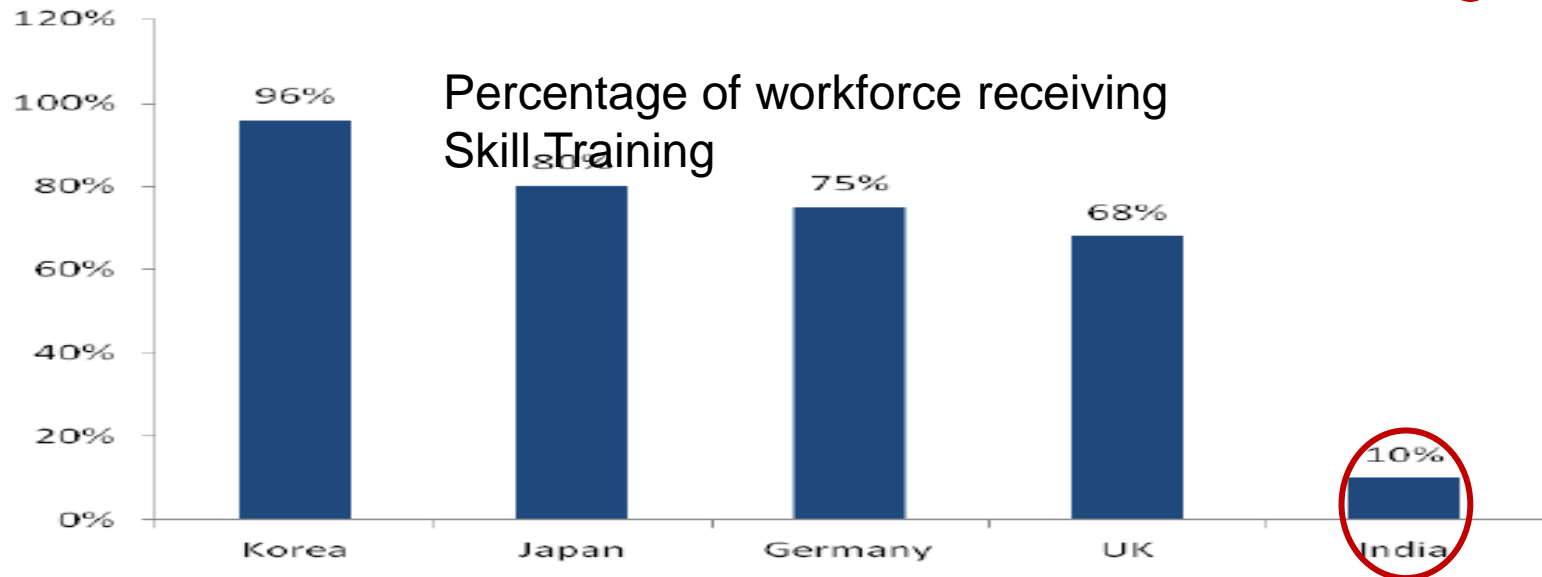
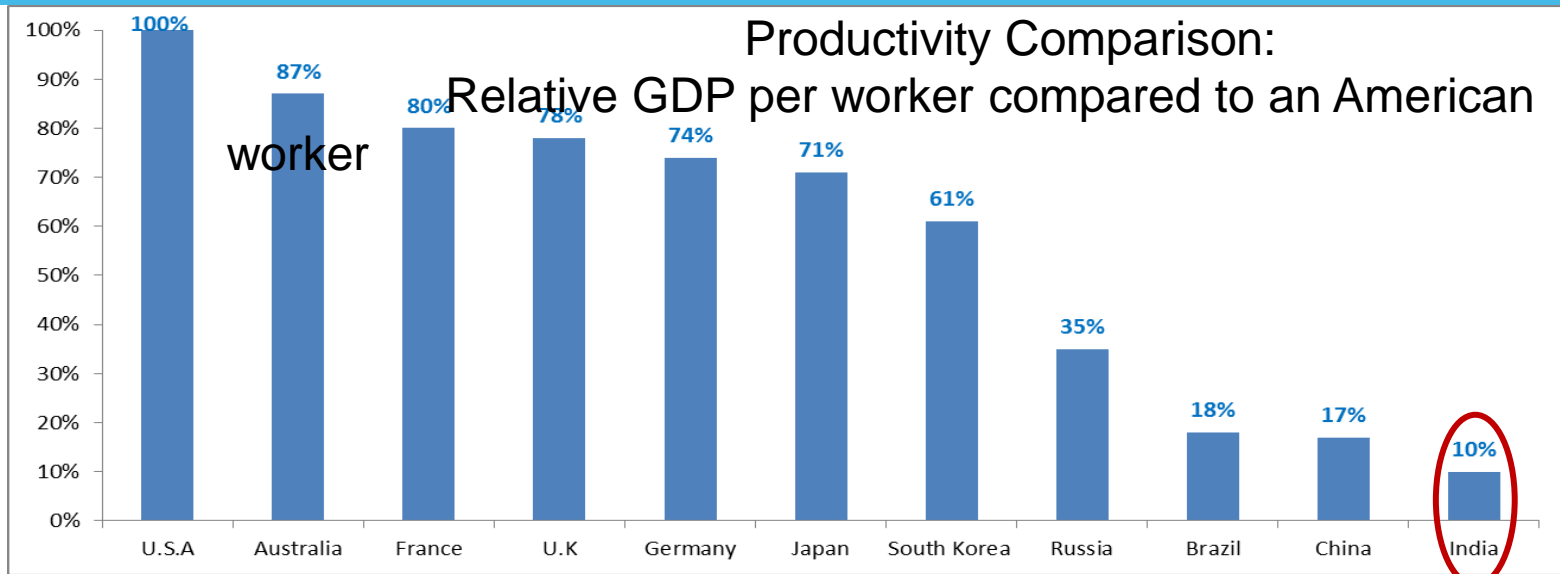
An ageing world needs workers; A young country has workers

Education Scenario of India in year 2010-11



Source: Statistics of School Education 2010-11 & Statistics of Higher and Technical Education 2010-11 - MHRD

Existing Scenario: Low Productivity due to Low Skill training



Source: Planning Commission, Government of India (2008)

Emigration for Employment During Last 5 years

Year	No. of Workers
2008	8,47,994
2009	6,10,270
2010	6,41,355
2011	6,26,565
2012	7,47,041

- ❑ Average 7,00,000 Indians emigrate for employment every year- a number equivalent to the population of Noida
- ❑ India has an estimated overseas community of 25 million

Source: Emigration Services Division,
MOIA