### Missing Middle of Educated Unemployable: A Critical Perspective on Secondary Education in India

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### Outline

- Objectives
- Motivation
- Contributions to Literature and Policy
- Revisiting Educational Inequality: 2007-08 and 2014
- Quality of Secondary Education: An Outcomes Approach
- Policy Discussions
- Conclusions

### **Objectives**

• Extent of inequality in secondary education is assessed as per latest available data in 2014 and change since 2007, if any.

• Whether the secondary education is adequately preparing the youth with appropriate skills which would enable them to acquire further skills via higher education or work.

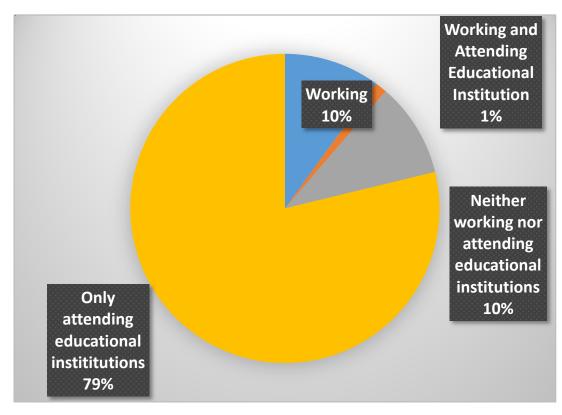
• Policy implication of this analysis on the universalisation debate on secondary education.

### Motivation

Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skilloriented instruction using more specialized teachers (World Development Indicators)

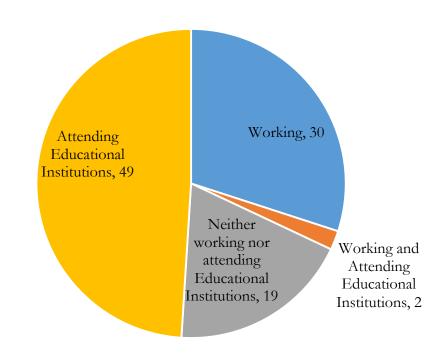
#### Motivation contd.

Percentage Distribution of Youth Aged 14-16 by their Education Attendance/Work Status (2011-12)



Source: NSSO

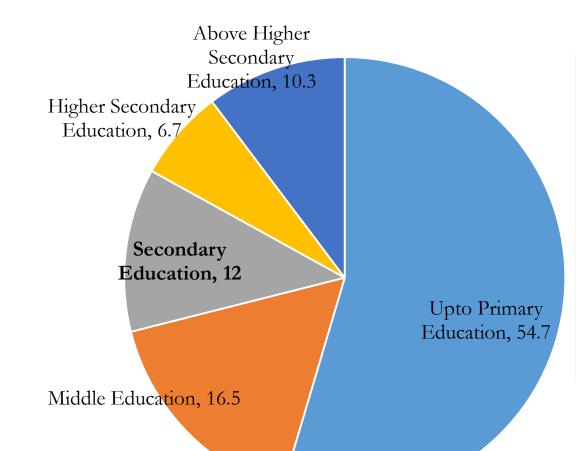
Percentage Distribution of Youth Aged 14-29 with Secondary Education across Work and Education Attendance Status, 2011-12



### Motivation contd.

#### Percentage Distribution of Workers Across Educational Attainment (2011-12)

And close to 20 per cent of the workforce had secondary education in high employment generating sectors like transport and wholesale & retail trade; repair of motor vehicles & motorcycles



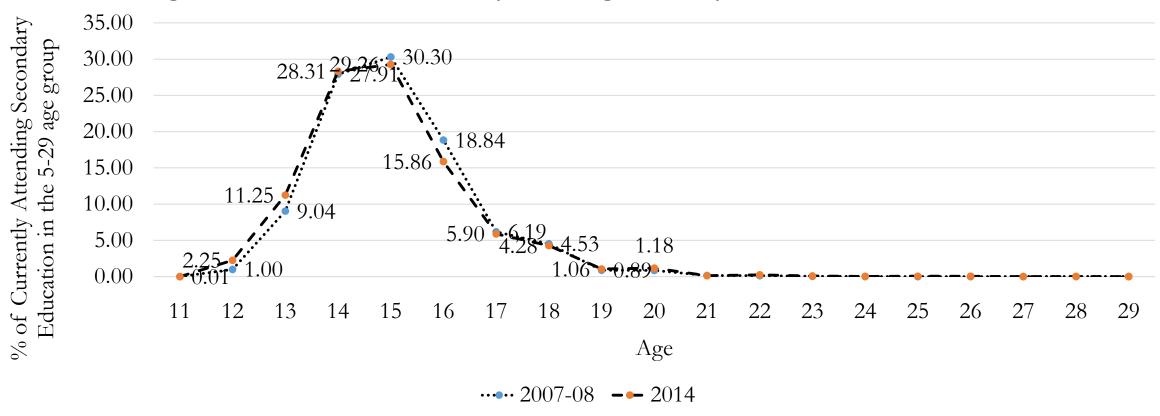
Plus, the average wage rate of secondary education in 2011-12 was Rs 247 and higher secondary education was Rs 317. However, if the secondary education is combined with received or receiving vocational education, the average wage rate was Rs 553. This gap is consistent across the age profiles from 15 and above.

### Motivation contd.

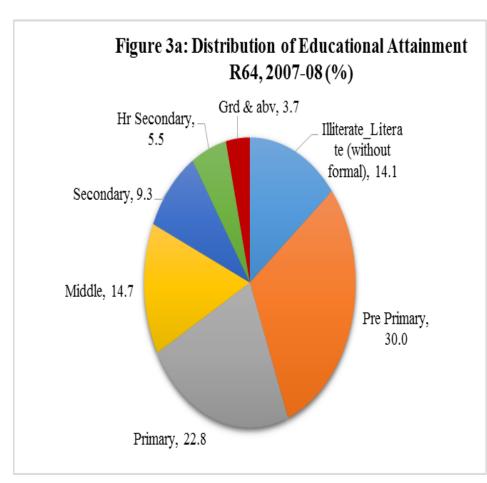
- World Bank (2009); Singhari and Madeshwaran, 2016; Rani, 2014; Duraisamy, 2002; Blaug, 1972; and Tilak, 1987
- RMSA –Revised Target of GER of 75 per cent by 2017
- Under-achieved its target (MHRD, 2016)
- Gross Enrolment Ratio (GER) in secondary education was 80.01, with 79.16 for boys and 80.67 for girls in 2015-16
- NER at 51.26 for the corresponding year. The corresponding number for 2012-13 was 41.9. The relatively lower NER confirms that many students in secondary school are overage.
- Average annual drop-out rate was 17.06 in 2014-15.
- Transition rate from secondary to higher secondary education in 2015-16 was 69.04; annual average repetition rate was 3.03 in 2014-15 in secondary education;
- GER in higher secondary education was 56.16 and; NER was 32.3 in 2015-16.

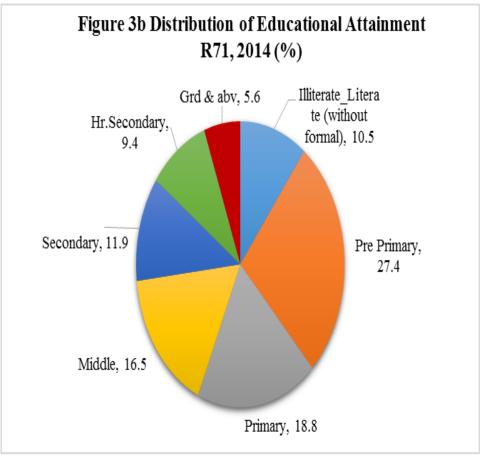
# How to define youth? Students as young as 11 are attending secondary education?

Age-wise Distribution of Currently Attending Secondary Education, 2007-08 and 2014

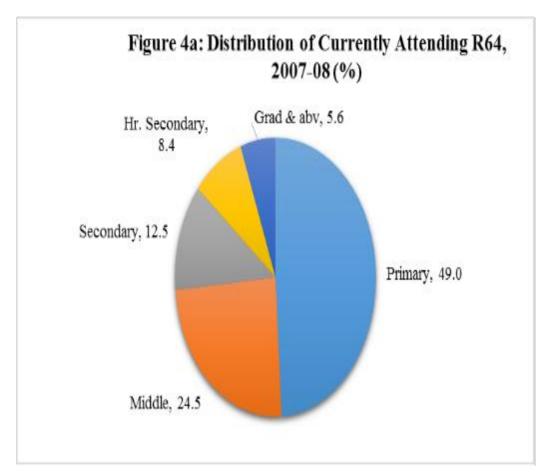


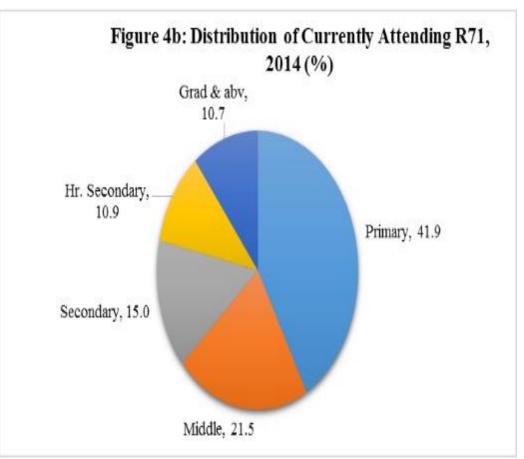
## Educational attainment- not changed much over the seven years!





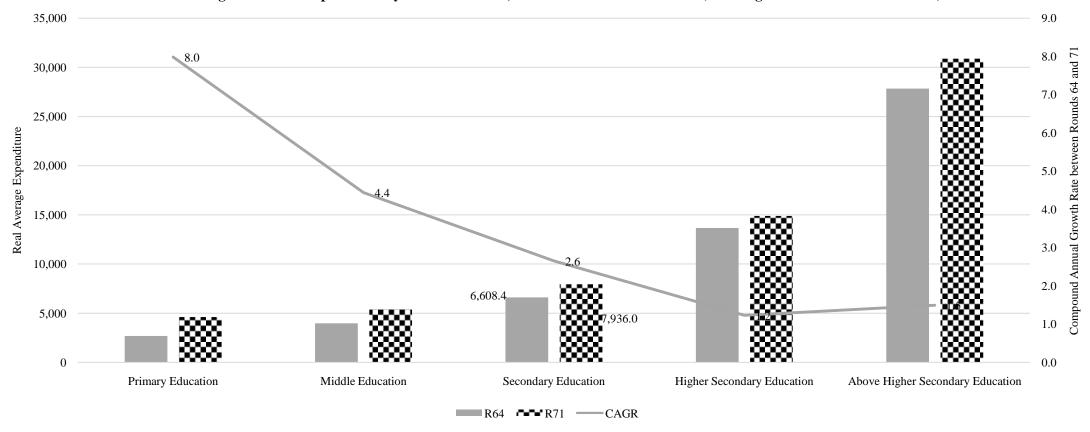
## Attendance has shown moderate improvement over the seven years





### Average Secondary Education Expenditure has shown moderate increase ....

Real Average Education Expenditure by Education Level, 2007-08 and 2014 and CAGR (% change between 2007-08 and 2014)



### Revisiting Educational Inequality

Secondary Educational Attainment in 5-29 years population MPCE –wise and percentage change, 2007-08 and 2014

MPCE Class	2007-08	2014	Percentage Point Change
1	4.8	7.6	2.8
2	7.4	9.8	2.5
3	9.2	12.7	3.5
4	11.6	14.4	2.9
5	14.3	15.7	1.4
All India	9.3	11.9	2.6

### Revisiting Educational Inequality

Current Attendance Secondary Education in 5-29 years population MPCE –wise and percentage change, 2007-08 and 2014

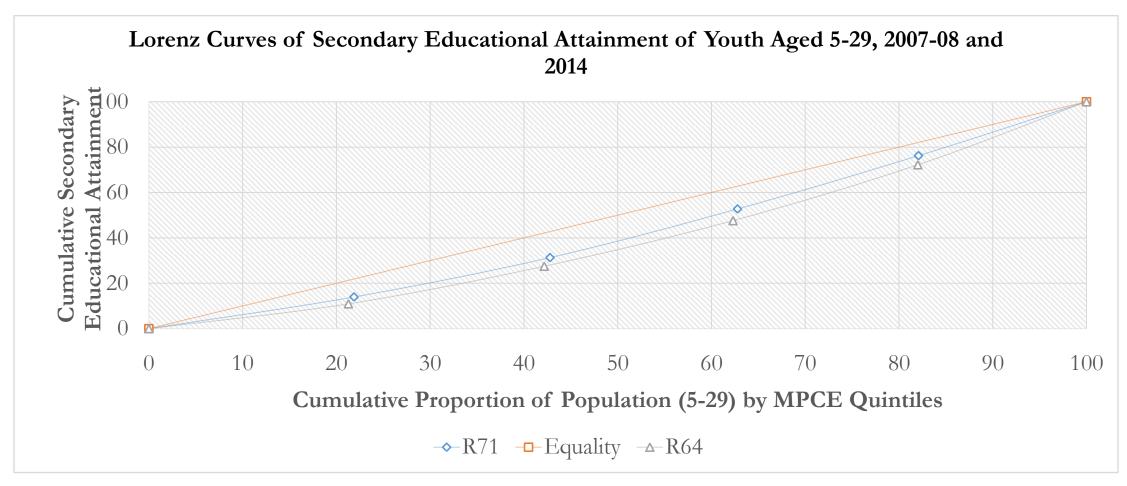
MPCE Class	2007-08	2014	Percentage Point Change
1	4.0	6.3	2.3
2	5.3	8.1	2.8
3	6.2	8.3	2.1
4	7.6	8.9	1.4
5	9.1	9.3	0.3
All India	6.3	8.1	1.8

### Revisiting Educational Inequality

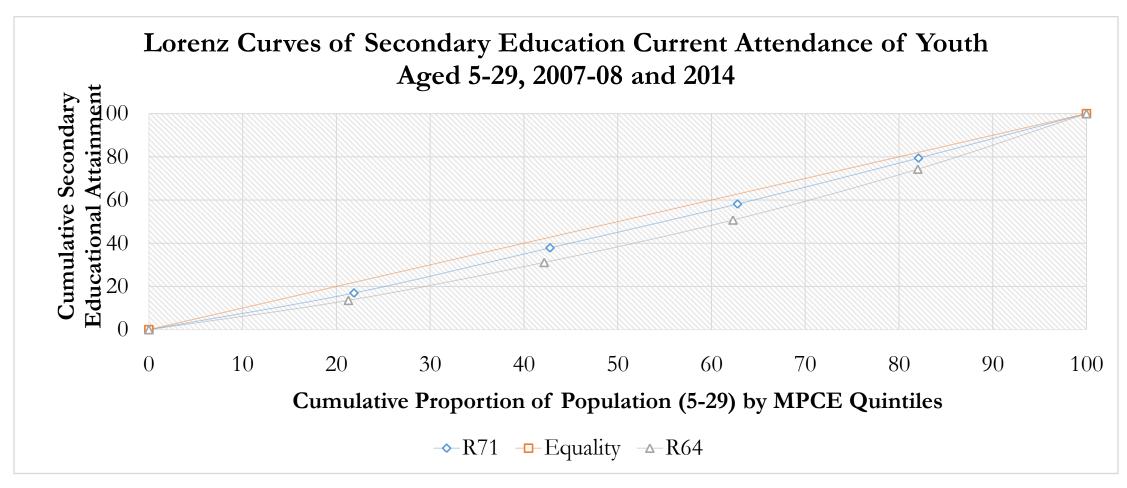
Real Average Expenditure in Secondary Education in 5-29 years population MPCE –wise and percentage change, 2007-08 and 2014

MPCE Class	2007-08	2014	Percentage Change
1	3,309	3,734	1.7
2	4,094	5,172	3.4
3	5,023	6,243	3.2
4	6,685	8,090	2.8
5	11,210	15,717	4.9
All India	6,608	7,936	2.6

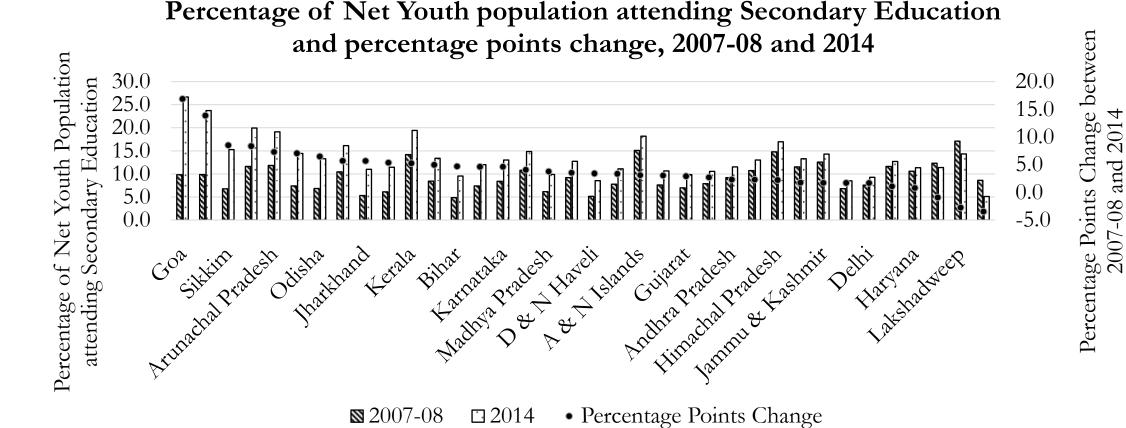
## Inequality of Educational attainment has decreased, albeit marginally



## Inequality of Current Attendance of Secondary Education has also gone down



### Spatial variations



## Educational Quality: An Outcomes Approach

Digital Skills (NSSO, 71st

Pilz et al. (2016) state of vocational education in schools

Percentage of those attained secondary			Percentage of those att		
Able to operate a computer	Able to use computer for word processing/t yping	internet for searching for	Able to use internet for sending e-mails	Able to operate a computer	Able to compute for word processing yping
33.6	30.1	28.0	24.3	27.7	24.2

ASER (2018) showed functional skills varied a lot in the rural youth aged 14-18 in 2017: 76.6 per cent could read standard two tte level text, 43.1 per cent could divide, 58.2 per cent could read a sentence in English, 75.7 per cent could count money, 55.7 per cent could add weights, 82.7 per cent could tell time (hour), 59.3 per cent could tell (hour and minutes), 50.2% could apply unitary method, 38.6 per cent could calculate time, 53.5 per cent could read at least three out of four instructions, 63.8 per cent could manage a budget, 64.1 per cent could take a purchase decision

## Policy Discussion: What outcomes do we want out of Secondary Education?

- Becker (1962): General Skills, which prepare them for both work and secondary higher education
- Foundational Skills including cognitive, non-cognitive, technical and vocational and psychomotor/physical skills
- Take-out TVET from secondary level and focus on pre-vocational education, teaching about attitudes to not work

# Policy Discussion contd. (P21 framework and Scott 2015)

s.	No.	Type of Skills	Skill
1.		Knowledge	English, reading or language arts, World languages, Modern Indian languages (other than the mother tongue), Arts, Mathematics, Economics, Science, Geography, History and Government and Civics

# Policy Discussion contd. (P21 framework and Scott 2015)

S.No.	Type of Skills	Skill
2.		Reading
3.		Writing
4.		Mathematics
5.		Communication
6.		ICT Literacy
7.		Global Awareness
8.		Financial, Economic, Business and Entrepreneurial Literacy
9.		Health Literacy
10.	Foundational cognitive skills	Environment Literacy
11.		Active Learning
12.		Active Listening
13.		Critical thinking and problem solving
14.		Creativity and Innovation
15.		Communication and Collaboration

# Policy Discussion contd. (P21 framework and Scott 2015)

S.No.	Type of Skills	Skill
16.	Foundational non-cognitive skills	Civic and Digital Citizenship
17.		Seek and Value Diversity
18.	Physical/Psychomotor Skills	
19.	Technical and vocational Skills	Pre-vocational curricula

### Conclusions

- Educational inequality has decreased
- Quality is abysmal
- Change needed in outcomes of secondary education

### Thank you!