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# Inclusive skill-building: potential impact & approaches

Asian Development Bank Skills Forum

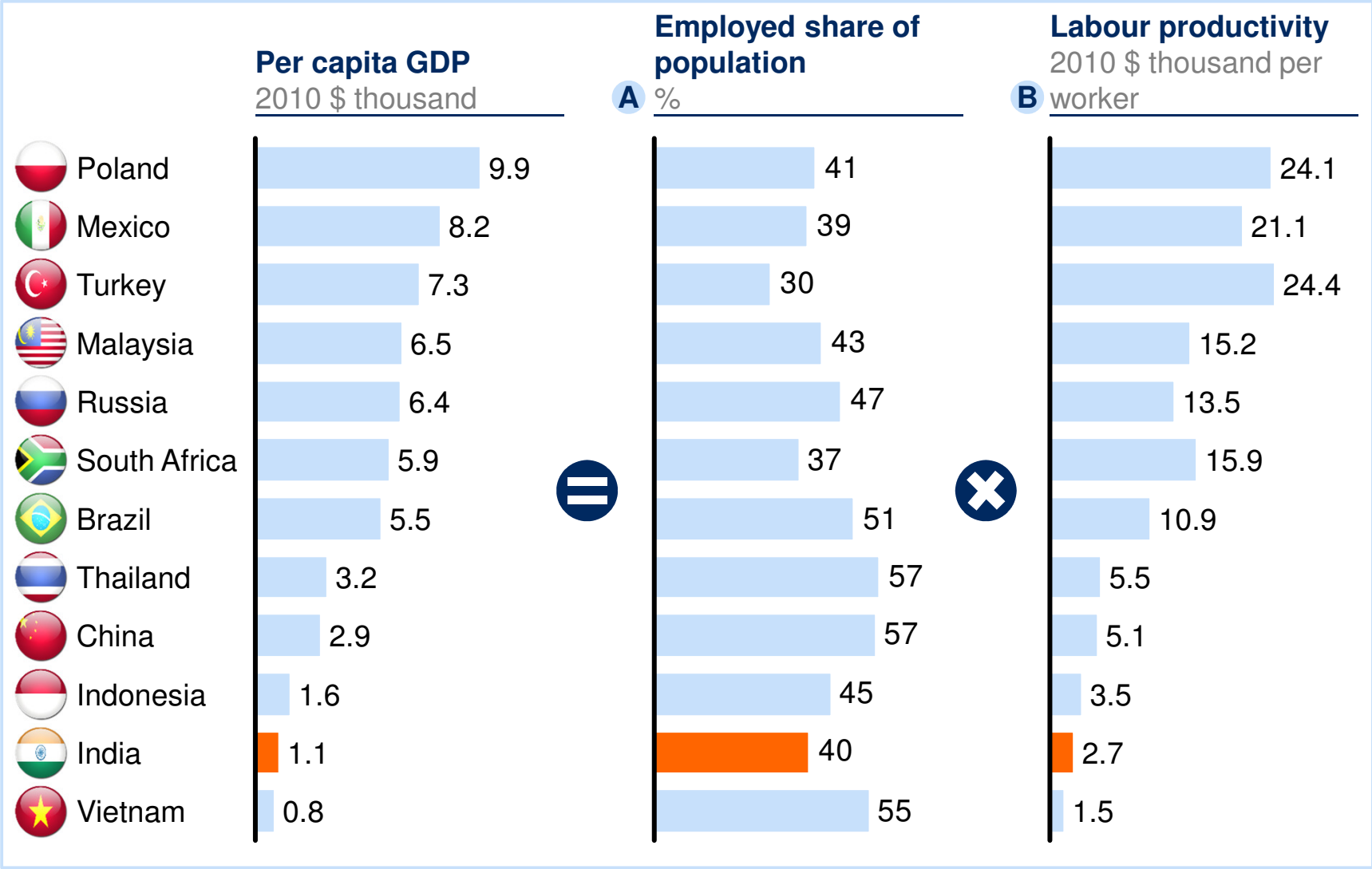
Presentation

11 December 2013

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# For many developing countries, improving labor productivity is critical to raising living standards



SOURCE: Economist Intelligence Unit, Conference Board, McKinsey Global Institute analysis

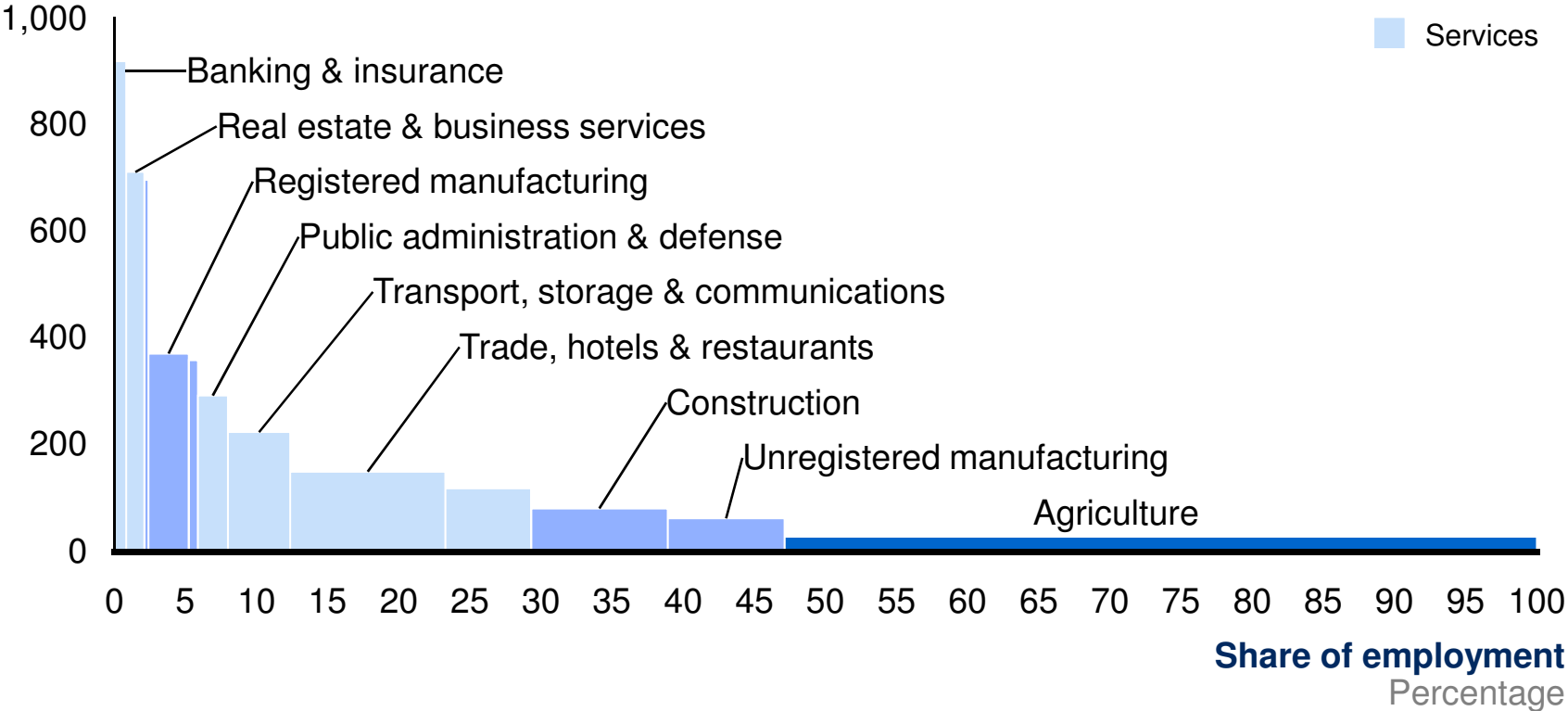
# India's aggregate labor productivity is held back by the high share of workers in low-productivity agriculture

## Productivity & employment by sector

2010

### Productivity per worker

INR '000 per worker

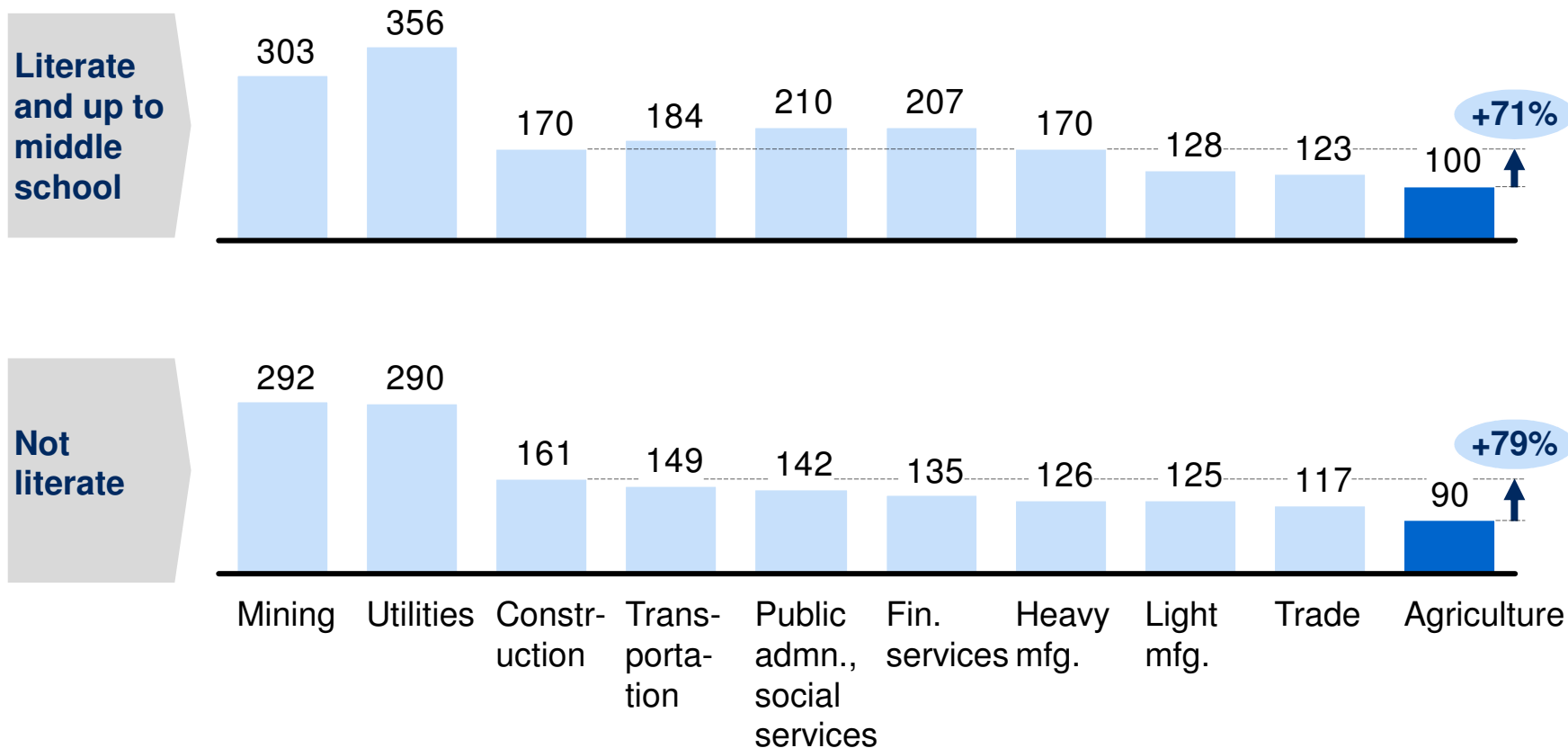


SOURCE: NSSO 66th Round, MOSPI website, McKinsey Global Institute analysis

## Giving workers the skills to move to working in non-farm sectors can result in a significant uplift in incomes

### Wages for salaried workers

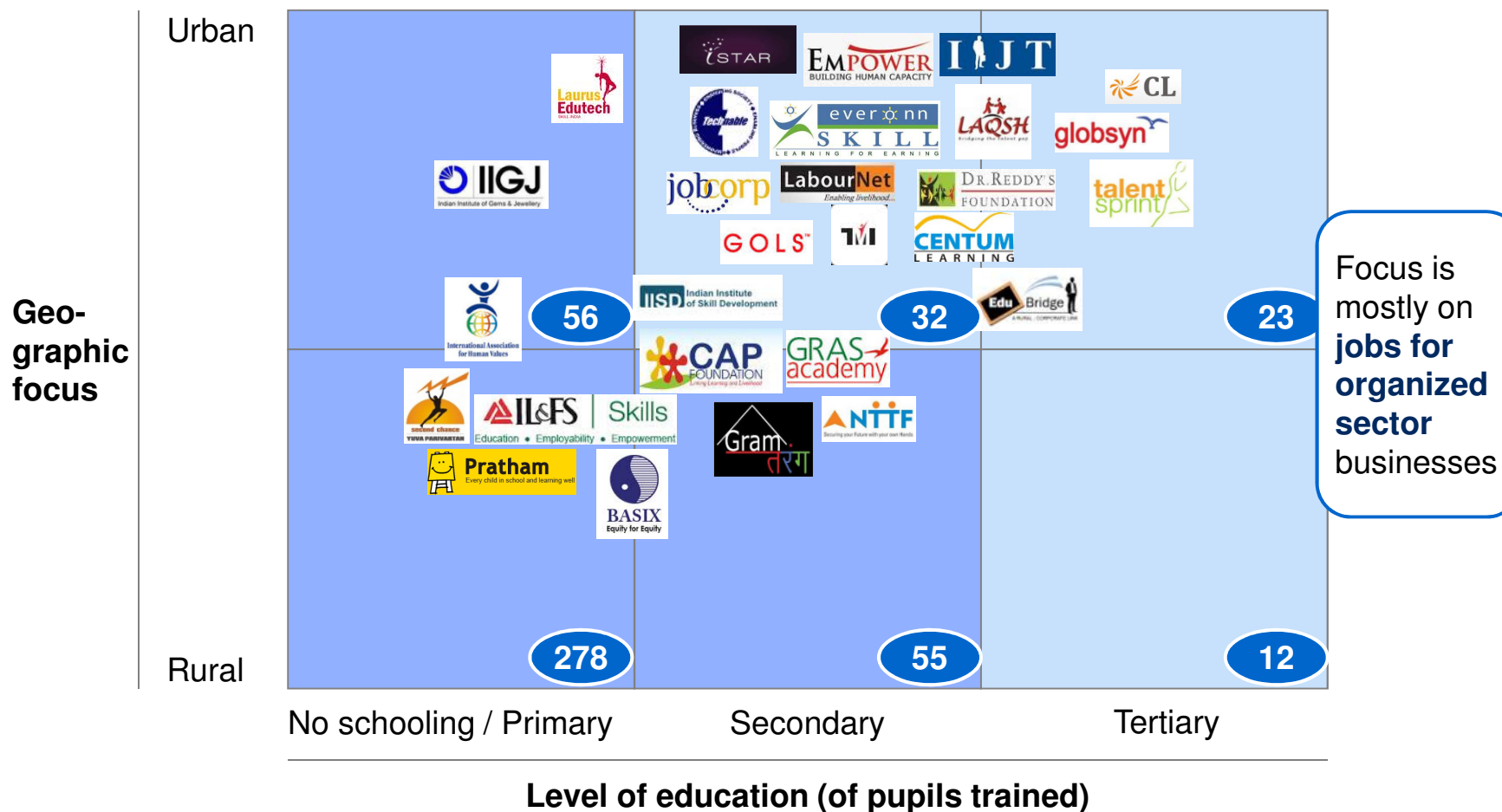
INR per day, 2010



# However, vocational education is not focused on the neediest segment– low-educated rural workers

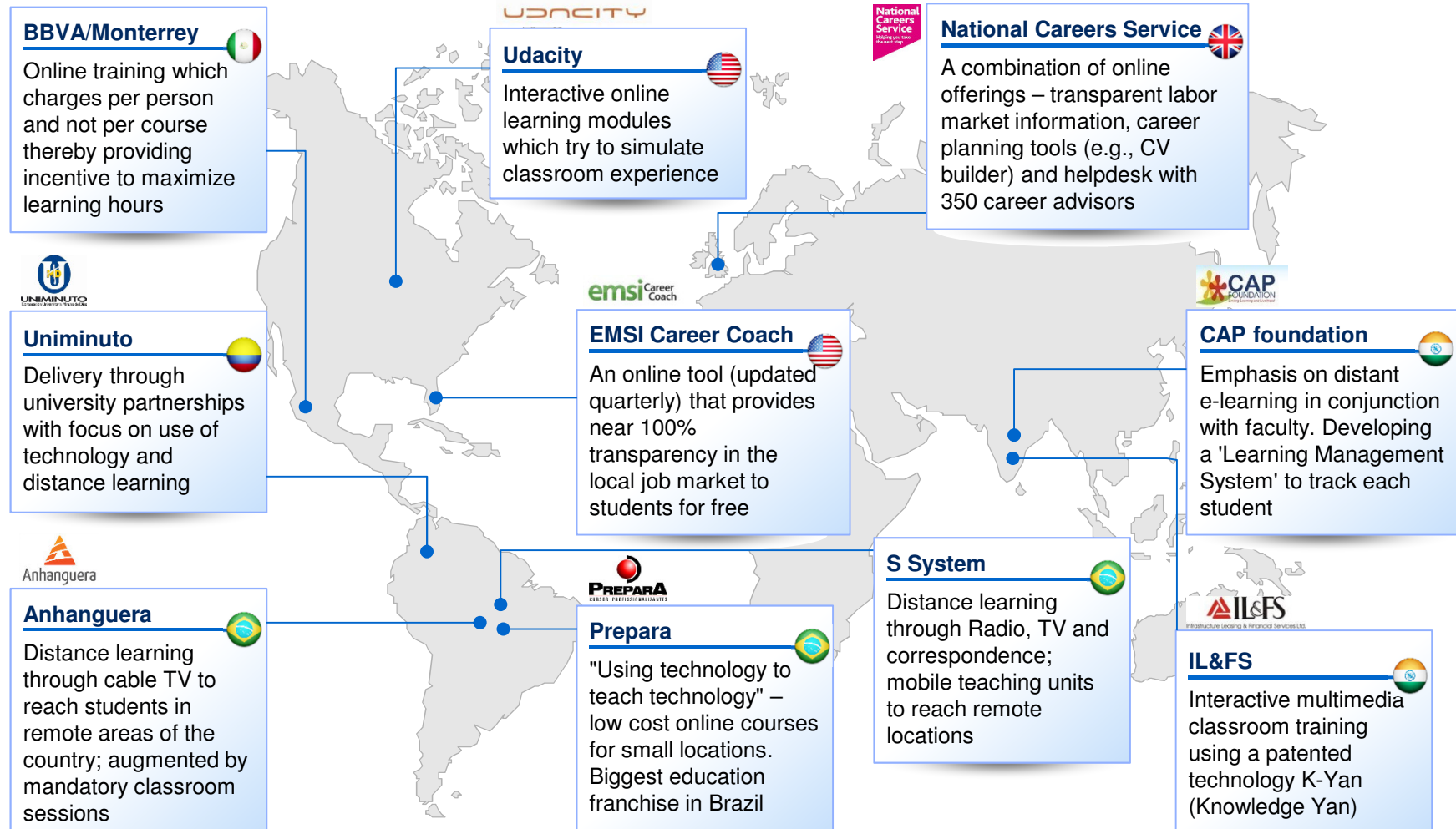
NOT EXHAUSTIVE

- x** Labor force size, 2010 (millions)
- Segments with largest supply gap



# Technology holds the promise to access more pupils at lower cost

- Using technology for **'hybrid' delivery models** – combination of classroom teaching and distance learning (online, TV)
- Leveraging technology to **create transparency about labour markets** and career planning



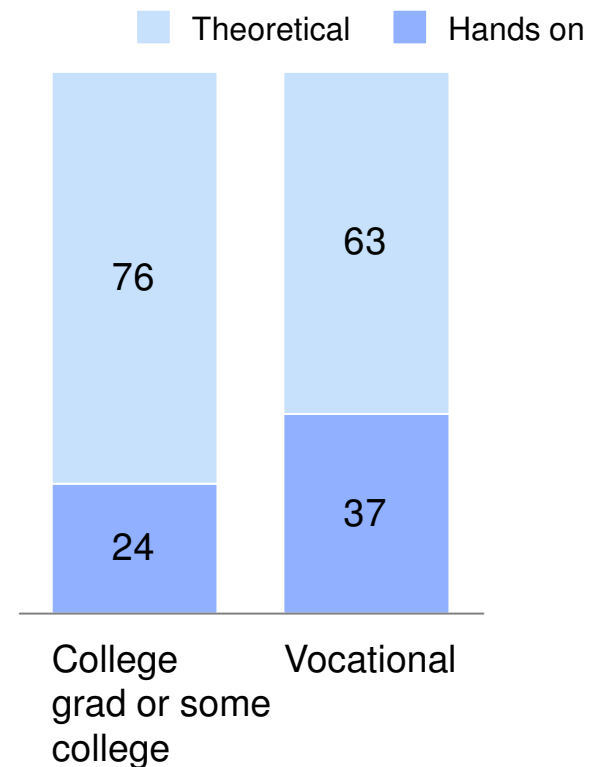
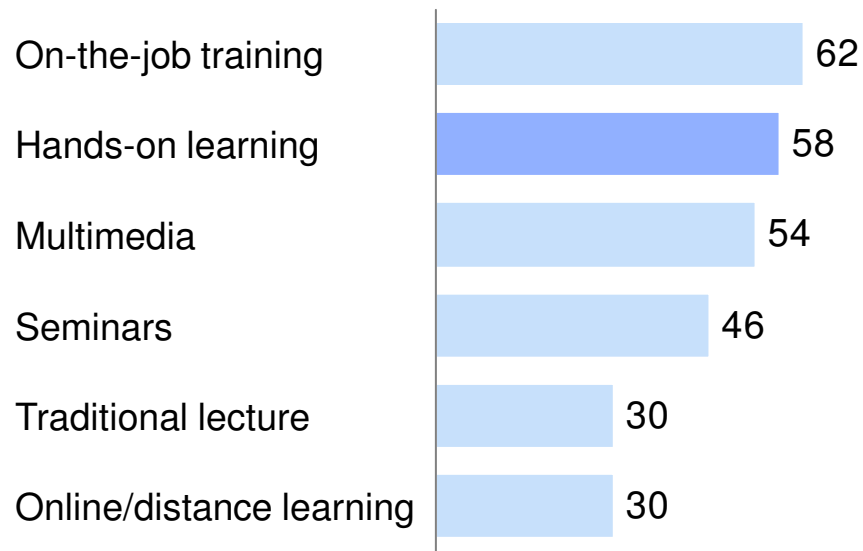
# Young people prefer hands-on learning, but not many providers are geared to deliver this – hybrid models are necessary

## Use of hands-on learning in vocational institutions<sup>2</sup>

% of respondents indicating a majority of hours spent in learning methodology

## Most effective instructional techniques<sup>1</sup>

% of respondents saying technique is effective



1 Now I'm going to read out a number of different instructional techniques. I want you to rate how effective each technique is for your learning, using a 11-point scale, where 0 means the technique is not at all effective and 10 means the technique is very effective. If you have not been exposed to this technique, please respond "no exposure."

2 On average, how much time did you spend in your academic program engaged in practical, hands-on learning versus theoretical learning? Please think about this in the context of every 10 hours you spent learning and indicate how many of those hours were practical (e.g., on-the-job training, simulations, etc.) and how many were theoretical (in the classroom).

## Anhanguera in Brazil has used technology in a hybrid model to increase reach, profitably

### Anhanguera, Brazil: Distance learning at scale

#### Context of vocational training in Brazil

- **Significant shortfall** (60%) in number and quality of teachers
- **Largely fragmented and low-scale private market**
- **Prohibitive cost of delivery** of education to cities below 100,000 students
- **Massive regulatory push** (e.g., explicit targets for net enrolment rate of 33% + in higher education)

#### Approach

- Offers “**hybrid programs**” that reach small cities
  - Students attend a “learning center” 1-2 days each week to watch lectures broadcast from a central location
  - Local professors lead students through exercises and discussion
  - Complete online learning on their own schedule for rest of the week
- Offers a **mix of 4-year, 2-year, and non-degree programs** via this hybrid model at **~60% lower price**





#### Key achievements

- **Increased reach 10x** (from 30 cities to 250+ cities) **by adopting hybrid model** (studio & satellite)
- **Largest** distance learning **program for ‘working adults’ that is profitable**: \$200 Mn revenues; 22% EBITDA
- **>500 units/courses offered** across business
- **High enrolment** to distances learning program: ~150,000 per month; 500 learning centres covering 26 states



# IL&FS Skills’ rural, bottom-of-pyramid skills model is promising – students’ opportunity cost is a potential barrier

Case study of IL&FS Skills

Key success factors	Description	IL&FS Skills approach
Low-cost delivery	<ul style="list-style-type: none"> <li>Low cost base in order to ensure profitability</li> </ul>	<ul style="list-style-type: none"> <li>Standardized curriculum</li> <li>Delivery through multimedia platform (K-Yan)</li> <li>Corporate partners sometimes provide facilities</li> </ul> 
Interactive learning	<ul style="list-style-type: none"> <li>Learning by doing due to the technical &amp; vocational nature of training</li> </ul>	<ul style="list-style-type: none"> <li>Simulated environments, paired with classroom instruction, allow pupils to learn in field-and-forum way</li> </ul> 
Visibility on skills demand	<ul style="list-style-type: none"> <li>Ensuring participants are developing skills that lead to employment</li> </ul>	<ul style="list-style-type: none"> <li>Industry partnerships with 1,000+ employers to ensure relevance of curriculum and secure placements for students</li> </ul> 
Affordability for participants	<ul style="list-style-type: none"> <li>Low tuition / potential compensation to pupils to defray opportunity cost of training over work</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Rural Development pays for training</li> <li>No benefit yet for pupils to defray opportunity cost</li> </ul> 

- In 2012, >9,000 students were trained with an 85% placement rate
- 30 students trained per month per center
- ~350 centers across 24 states
- ~60/40% female-male split

## Alternative sources of financing can be considered - payroll tax example to deploy mobile learning units to remote areas



### Overview

- **Created in 1946** as a professional education institution to educate people to carry out activities in the areas of **commercialization of goods, services and tourism**
- Financed by **businesses from relevant sectors** who **contribute 1% of their payroll**





### Delivery methods

- Network of **506 teaching units** and **74 mobile road and river units** across 3,000 municipalities
- Methods of delivery
  - **On-site**, in person
  - **Distance learning**
    - **TV network** (the Rede Sesc-Senac de Teleconferencia (STV)) transmits material by satellite TV complemented with real-time **interaction via e-mail, fax and telephone**
    - **Radio program** “Sintonia Sesc-Senac”
    - Through **VHS, CDs and DVDs**
  - **Semi-distance learning: first phase of in-person** education followed by a **second phase of distance learning**

### Mobile learning

- SENAC provides **training in rural and isolated communities** using **mobile units (“Senac-Movel”)** that **remain in each municipality from 6 mo to 1 year**
  - **“Sobre Rodas”** (Schools on Wheels): 59 road units that operate on vehicles 14 m long and 4 m high and 2.6 m wide, equipped with A/C, computers, VCR, TV and satellite
    - Provide **professional training in hotel and tourism, IT, management, personal presentation skills and health**
  - **“Senac sobre as águas”** (Senac on Water): floating units on 3-story floors of 180 m<sup>2</sup> that provide services to riverside communities

# A number of stakeholders need to work together to realize the potential of building inclusive skills

Stakeholder	Interventions
<p><b>Government Institutions</b></p> 	<ul style="list-style-type: none"> <li>▪ Apex skills agencies can <b>spearhead the use of technology and distance learning</b> in vocational training               <ul style="list-style-type: none"> <li>– Create centralized repository of online vocational learning content to enable small players</li> <li>– Enable <b>government technical institutes’ IT infrastructure</b> to be used by private players</li> <li>– Develop <b>simulation capability</b> for complex trainings to reduce requirement of physical infrastructure</li> </ul> </li> <li>▪ <b>Ministries (of HRD, Labour, Education)</b> can <b>allocate a share of their education budget</b> for technology enabled vocational training for poor and less accessible communities</li> </ul>
<p><b>Technology companies</b></p> 	<ul style="list-style-type: none"> <li>• Network infrastructure companies can provide <b>connectivity for vocational training schools</b></li> <li>• Cloud services providers can build <b>cloud-based scalable solutions for remote conferencing and collaboration tools</b> in local languages</li> </ul>
<p><b>Educational Institutions</b></p> 	<ul style="list-style-type: none"> <li>• <b>Trainers can digitize content consistent with national vocational qualification &amp; certification standards</b></li> <li>• Trainers can develop “<b>hybrid</b>” <b>models</b> that leverage online content and also provide hands-on learning</li> </ul>
<p><b>Employers</b></p> 	<ul style="list-style-type: none"> <li>• <b>Companies and MSME associations can gear up for an e-environment</b> by collaborating to develop simulations, shaping e-training content</li> <li>• <b>Payroll tax or a share of mandatory CSR fund pools</b> can be used for bottom-of-pyramid skills trainers</li> </ul>





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