Education and Training

Background, Tools and What Next

Alexandria Valerio
avalério@worldbank.org
November 2019
4 Topics

1. Workforce
2. Workplace
3. Solutions
4. What's next?
School Enrollment Increased Globally


Educational Attainment Followed, in all Regions

Highest Educational Attainment, Population 25 Years and Older

Source: Barro and Lee (2010)
Still, many young people exit school early...

Globally, only 35% of primary entrants complete upper secondary education; In SSA, less than 25%
...young people exit without foundational literacy skills

PISA 2015: Distribution of 15-year-old students scoring below Level 2 in literacy

Source: OECD PISA 2015.
... and, literacy skills gaps are long-lasting

**PIAAC/STEP 2011-2014:** Distribution of working-age adults 15–65 scoring below Level 2 in literacy

Source: OECD PIAAC 2011-13; World Bank STEP Surveys 2011-2014 (Armenia, Bolivia, Colombia, Ghana, Kenya, Georgia, Serbia, Ukraine, Vietnam). STEP Surveys are for urban areas only.
Schools are not delivering learning for all

Literacy
A critical ingredient to develop numeracy, socio-emotional, and higher order skills for work and life

# Schooling Years required to reach Level 2 of literacy in PIAAC/STEP

- **9**: Armenia, Finland, Serbia, Vietnam
- **12**: Chile, Colombia, Turkey
- **16**: Bolivia, Ghana, Kenya
Skills are developed over the lifetime ... in school, at work, and in daily life

### Cognitive Skills

| Specific high-level knowledge, such as that in     | Sources of Development |
| STEM fields                                      | Tertiary               |
| Medical fields                                   |                          |
| Other managerial and professional fields          | Secondary, TVET, apprenticeships, OJT |
| Specific mid-level knowledge/skills, such as that in | Employers, TVET, schools |
| Technical occupations                            | Primary, secondary, tertiary, and others |
| Craft and repair occupations                     | Schools, work, and life experience |
| Other mid-skill fields (e.g., clerical occupations) |                          |
| Narrow job skills (business procedures, information technology, use of specific tools/equipment, e.g., forklift) |                          |
| General academic skills—including foundation skills such as |                          |
| Reading, writing, basic math                      |                          |
| Organizational skills                             |                          |
| General cognitive skills—including foundation skills such as |                          |
| General knowledge                                |                          |
| General reasoning, analytical skills              |                          |
| Problem solving                                  |                          |
| Trainability, learning how to learn               |                          |

*Note: STEM = science, technology, engineering, math; TVET = technical and vocational education and training; OJT = on-the-job training; primary, secondary, and tertiary refer to levels of formal education.*
1. Workforce

Literacy makes for “learning-ready” workers

Problem Solving and Learning “Skills Use at Work”, by Educational Attainment and Literacy Proficiency Level

1. Workforce

Literacy is associated with higher skills use at work and productivity

Workers with higher literacy proficiency are more likely to use their skills at work and have higher output.

Source: OECD PIAAC 2011-13; World Bank STEP Surveys 2011-2014 (Armenia, Bolivia, Colombia, Ghana, Kenya, Georgia, Serbia, Ukraine, Vietnam). STEP Surveys are for urban areas only.
Literacy facilitates access to better labor market opportunities

1. Workforce

Type of occupation by Literacy Level and Age Cohort

<table>
<thead>
<tr>
<th>Country</th>
<th>15-24</th>
<th>25-44</th>
<th>45+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

More literacy, less drop-out

% Adults 25 and older reporting dropping-out from education or training by literacy proficiency, 2011-15

Literacy gaps are a roadblock to workplace training opportunities

Young workers with literacy gaps and low education attainment have fewer training opportunities

% Young workers (15-24) participating in training by education attainment

% Young workers (15-24) participating in training by literacy skills

Young people with low literacy become inactive and disenfranchised

1. Workforce

Share of NEETs in the Age Group 15–24, by Region, (circa 2010)

- Rural
- Young women
- Engage in risky behaviors
- Educational attainment

Source: "de Hoyos, Rafael; Rogers, Halsey; Székely, Miguel. 2016. Out of School and Out of Work: Risk and Opportunities for Latin America’s Ninis. World Bank, Washington, DC. © World Bank."
And miss out from realizing the economic benefits of education

Returns are highest in low income countries and higher for tertiary education graduates

“...Increases in the returns to upper secondary schooling are associated with lower shares of NEETs.”
This is important because the literacy (university) “skills premium” is rising.

In OECD countries, the average skill premium of individuals with a university degree (relative to secondary education) is around 1.5.

Source: Max Roser and Mohamed Nagdy
And labor markets are becoming more skills-biased

**United States:** Cumulative change in real weekly earnings of working age adults 18-64, 1963-2017

Employers looking for workers with analytical skills

United States employment, by type of work (1983-2016)

Task intensity* by skill level of employment in the euro area (2016)

Index (average task intensity = 0)

Sources: US Population Survey, Federal Reserve Bank of St. Louis
Economist.com

Note: * Task intensity is a standardised variable for the workforce as a whole, with mean 0 and standard deviation 1. Values above (below) zero indicate more (less) intensity than the average. The occupations included according to the ISCO-88 classification are: high-skilled (categories 1, 2 and 3), middle-skilled (categories 4, 7 and 8) and low-skilled (categories 5 and 9). Source: CaixaBank Research, based on data from the EU-LFS and Acsenoglu and Autor (2011).
Workplace
Important to Unpack “Mismatch” in the Labor Market

2. Workplace

**Workforce Gaps**
- Insufficient **Quantity** of general education
- Poor **quality** of general education
- Insufficient supply of **relevant** field of study

**Job Shortages**
- Low level economic activity
- Insufficient demand for supply of skills available

**Information asymmetries**
- Socio-cultural biases

**Information barriers** prevent job matches
- Biases in hiring and promotion practices

**ECOSYSTEM**
- Fiscal, Societal, Cultural, Location, Entrepreneurship and investment Climate
An issue of quantity, quality, or relevance?

**Workforce Gaps**

- **Insufficient Quantity**
  of general education

- **Poor Quality**
  of general education

- **Insufficient supply of Relevant**
  field of study

**Under-education**

Insufficient supply of workers with high enough levels of general education (secondary and tertiary). Employers stop looking and discontinue making products that require such type of workers.

**Under-skilled**

Insufficient supply of workers meeting standards of general secondary and tertiary education.

**Wrong distribution of skills**

Employers are looking to hire, but there is an insufficient supply of workers with mid-level skills (crafts, non-tertiary) and/or tertiary education in specific fields of study or majors.
...“workforce gaps” are often used to describe many things

Need to classify skills shortages to identify solutions (example):

**Level 1 shortage**
Few people with essential technical skills who are not already using them and there is a long training time needed to develop the skills.

**Level 2 shortage**
Few people who have the essential technical skills who are not already using them but there is a short training time required to develop the skills.

**Skills mismatch**
Sufficient people with essential technical skills who are not already using them, but they are not willing to apply for the vacancies under current conditions (e.g., locality, terms of contract).

**Quality gap**
Sufficient people with essential technical skills who are not already using them and who are willing to apply for the vacancies, but they lack some qualities that employers consider are important (e.g., soft skills).
An issue of economic activity or availability of quality jobs?

2. Workplace

Job Shortages

- **Low level economic activity**
  - Low level of economic activity and demand for formal employment workers of any type.
  - Few jobs available, especially in contexts of conflict, or in failing states.

- **Insufficient demand for supply of skills available**
  - Normal economic activity, but not enough demand for the supply of skills available—e.g., too many tertiary education graduates relative to blue collar workers in demand.

Weak aggregate demand

Under-employment
Indicators showing labor shortages in the labor market

- Rising wages
- Low unemployment
- Persistent vacancies
- Increasing use of overtime (paid or unpaid)
- Increasing use of temporary workers
- Improving terms of employment
- Low rate of redundancy/dismissal of workers and high rates of quits
- Employment of people with lower-than-average levels of formal qualifications and/or experience
- Increasing employment of 'non-traditional' types of workers, such as women/men (depending on the job), older workers and recent migrants
- Substitution of more abundant skills in the technology of work
- Substitution of capital and new technology to economize on the short skills
An issue of information asymmetries and biases?

Information asymmetries Socio-cultural biases

- Information barriers prevent job matches
  Employers want to hire and qualified people are looking for jobs, but they can’t find each other. → Information mismatch

- Biases in hiring and promotion practices
  Employers do not hire people because of social and other types of biases, regardless of their education and skills (e.g., gender, religion, race, ethnicity, and geographical region).
  Individuals are not allocated optimally. → Preferences & discrimination
Cross-classification of workers (current stock) by personal and job-required education, a matrix

Job-required education

Personal education

- Low
- Medium
- High

- Low
- Medium
- High

Well-matched

Under educated

Over educated

Well-matched

Individual (Actual) Match Rates between Worker and Job-Required Education

2. Workplace


Employers have difficulties finding skilled workers

% of firms identifying an inadequately educated workforce as a major constraint

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income: OECD</td>
<td>22%</td>
</tr>
<tr>
<td>High income: nonOECD</td>
<td>25%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>30%</td>
</tr>
<tr>
<td>South Asia</td>
<td>28%</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>24%</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>32%</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>26%</td>
</tr>
<tr>
<td>East Asia &amp; Pacific</td>
<td>29%</td>
</tr>
</tbody>
</table>

% of firms offering formal training

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income: OECD</td>
<td>35%</td>
</tr>
<tr>
<td>High income: nonOECD</td>
<td>37%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>31%</td>
</tr>
<tr>
<td>South Asia</td>
<td>29%</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>22%</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>36%</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>32%</td>
</tr>
<tr>
<td>East Asia &amp; Pacific</td>
<td>38%</td>
</tr>
</tbody>
</table>

Source: Enterprise Surveys www.enterprisesurveys.org
Paradoxically, top 10 most in-demand skills have not changed

Top 5 skills demanded have not changed over a decade

<table>
<thead>
<tr>
<th>Rank</th>
<th>Skill Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Skilled trades</td>
<td>electricians, welders, mechanics</td>
</tr>
<tr>
<td>3.</td>
<td>Engineers</td>
<td>chemical, electrical, civil, mechanical</td>
</tr>
<tr>
<td>4.</td>
<td>Drivers</td>
<td>truck, delivery, construction, mass transit</td>
</tr>
<tr>
<td>5.</td>
<td>Technicians</td>
<td>quality controllers, technical staff</td>
</tr>
<tr>
<td>6.</td>
<td>IT</td>
<td>cybersecurity experts, network administrators, technical support</td>
</tr>
<tr>
<td>7.</td>
<td>Accounting &amp; Finance</td>
<td>certified accountants, auditors, financial analysts</td>
</tr>
<tr>
<td>8.</td>
<td>Profesionals</td>
<td>project managers, lawyers, researchers</td>
</tr>
<tr>
<td>9.</td>
<td>Office support</td>
<td>administrative assistants, PAs, receptionists</td>
</tr>
<tr>
<td>10.</td>
<td>Manufacturing</td>
<td>production and machine operators</td>
</tr>
</tbody>
</table>

Source: Manpower Talent Shortage 2018.
What has changed are the content of “Job tasks” ... employers have difficulties finding workers sufficiently skilled to tackle new job tasks

Lack of Applicants, Experience and Skills are Top Drivers of Talent Shortages

27% of employers say applicants lack either the hard skills or human strengths they needed to fulfill their roles.

- Lack of applicants
- Lack of experience
- Applicants lack required hard skills
- Applicants expect higher pay than offered
- Applicants lack required human strengths
- An issue specific to my organisation
- Applicants expect better benefits than offered
- Other / Don’t know

Source: Skills Revolution 2.0: Robots Need Not Apply, Manpower Group, 2018
Note: Survey last conducted in 2016.
Large & technology-driven companies are vocal about challenges

Bigger companies, Bigger challenges

Large firms have twice as much difficulty filling roles: 67% report hiring challenges and nearly a quarter say they’re having more difficulty now than a year ago. Thirty-five percent say a lack of applicants is their biggest challenge and that job-seekers expect higher pay than what they are willing to offer (14%) compared with micro-employers (9%).

**Difficulty Filling Roles by Company Size**

In Serbia, lack of white collar skilled workers affect recruitment more in larger companies

Source: Manpower Talent Shortage 2018.

And, we are reminded that more changes are expected...

Automation will have a far-reaching impact on the global workforce

- **Technical automation potential**: ~50% of current work activities are technically automatable by adapting currently demonstrated technologies.
- **6 of 10 current occupations have more than 30% of activities that are technically automatable**.

<table>
<thead>
<tr>
<th>Impact of adoption by 2030</th>
<th>Slowest</th>
<th>Midpoint</th>
<th>Fastest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work potentially displaced by adoption of automation, by adoption scenario, % of workers (FTES)</td>
<td>0% (10 million)</td>
<td>15% (400 million)</td>
<td>30% (800 million)</td>
</tr>
<tr>
<td>Workforce that could need to change occupational category, by adoption scenario, % of workers (FTES)</td>
<td>0% (&lt;10 million)</td>
<td>3% (75 million)</td>
<td>14% (375 million)</td>
</tr>
</tbody>
</table>

In addition, of the 2030 workforce of 2.66 billion, 8–9% will be in new occupations. 

Source: McKinsey Global Institute analysis
But, it is important to untangle facts from hype

World Development Report 2019

Fears that robots will take away jobs from people have dominated the discussion over the future of work, but the WDR 2019 finds that on balance this appears to be unfounded. Instead, technology is bringing opportunity, paving the way to create new jobs, increase productivity, and improve public service delivery...

World Development Report 2018

...Schooling is not the same as learning. Schooling without learning is not just a wasted opportunity, but a great injustice. There is nothing inevitable about low learning in low- and middle-income countries ...

Bottom line

Foundational skills literacy, numeracy, problem solving, socio-emotional, digital competency are becoming even more important for success in work and life
Large employers can join forces

Training facilities for young workers

“The biggest hurdle in hiring is the difference in **basic skills**”

“Diagnostic equipment does not tell you what’s wrong, it is just a tool, a good technician needs to **interpret** the messages.”
What we see

Outputs and outcomes

What we don’t see

Policy interactions
Practices to improve training provision
Analyzing Workforce Development: Three Tools

1. SABER Workforce Development: Policy Intent
2. SABER Workforce Development: Training Assessment Provision
3. Interventions addressing systems or providers

System Alignment
Workforce Development Policies and Institutions

Training Landscape
Assessment of Training Provision Effectiveness

Programs
Characteristics, Duration, Delivery
3. Solutions (System Alignment)

SABER WfD Framework: Policies and institutions

SKILLS

Strategic Framework

Dimension 1

1. Strategic Direction
   - Setting strategic priorities

2. Demand-led
   - Assessing skills demand

Dimension 2

3. Coordination
   - Organizing for policy implementation

4. System Oversight
   - Setting relevant and reliable standards

Dimension 3

5. Pathways
   - Creating open pathways for skills acquisition

6. Funding
   - Ensuring efficiency and equity in funding

7. Standards
   - Setting relevant and reliable standards

8. Diversity and Excellence
   - Supporting diversity and quality of training

9. Relevance
   - Promoting market-relevant public training

10. Accountability
    - Using data to monitor and improve results

Aligning workforce development to overall economic goals

3. Solutions (System Alignment)

G1 Setting a STRATEGIC DIRECTION
- Sustained advocacy from government and non-government leaders
- Processes to collaborate on well integrated interventions to advance policy agenda
- Institutionalized processes to routinely monitor and review the implementation of interventions

G2 Fostering a DEMAND-LED Approach
- Assessment of the country’s economic prospects and measures to address critical skills constraints
- Employers viewed as strategic partners, with defined roles for policy dialogue
- Support for employers to upgrade the skills of their workforce

G3 Strengthening CRITICAL COORDINATION
- Legally defined roles and responsibilities for government agencies without overlap in mandates
- Defined roles and responsibilities for non-government stakeholders
- Institutionalized mechanisms for coordination between all stakeholders

3. Solutions

(System Alignment)

Results and promising practices...

1. Latent
   - TAJIKISTAN
   - YEMEN
   - IRAQ

2. Emerging
   - LAO PDR
   - EGYPT
   - TIMOR-LESTE
   - ARMENIA
   - WEST BANK AND GAZA
   - JORDAN
   - GEORGIA
   - TUNISIA
   - MOLDOVA
   - MACEDONIA
   - SOLOMON ISLANDS
   - ST. LUCIA

3. Established
   - MOROCCO
   - SRI LANKA
   - GRENADA
   - BULGARIA
   - TURKEY
   - MALAYSIA

4. Advanced
   - SINGAPORE
     - National priority since the 1960s
     - Regular economic forecasting accompanied by manpower planning practices
     - Tripartite Alliance (union, employers and government) and statutory boards fostering a demand-led approach and coordination
   - IRELAND
     - Semi-autonomous tripartite agencies
     - Expert group on future skills needs established
     - Routine evaluation of programs available

3. **Solutions**

**System Alignment**

**Governing to achieve desired goals**

**Ensuring Efficiency and Equity in FUNDING**
- Routine and formal processes to allocate government funding for technical education
- Funding decisions based on comprehensive criteria (e.g. timely annual reporting, evidence of program effectiveness) that is routinely reviewed and adjusted
- Reviews of the impact of funding on different training-related indicators and labor market outcomes

**Assuring Relevant and Reliable STANDARDS**
- Competency standards cover most occupations and are used by training providers
- Competency-based skills testing follows standard procedures
- Certificates valued by employers (i.e. improve employment and earnings)
- Clear, public and routinely enforced accreditation standards

**Diversifying PATHWAYS for Skills Acquisition**
- TVET students able to progress to academic or technical programs (including at the university level)
- Diverse actions to improve perception of technical education (e.g. pathways, quality, relevance)
- Sustained attention to the recognition of prior learning and adult learning
- Comprehensive menu of services for occupational and career development

Results and promising practices...

3. Solutions
(System Alignment)

1. Latent
- MOLDOVA
- SOLOMON ISLANDS
- LAO PDR
- YEMEN
- IRAQ

2. Emerging
- BULGARIA
- SRI LANKA
- JORDAN
- TAIKI
- KISTAN
- TIMOR-LESTE
- MOROCCO
- TUNISIA
- ST. LUCIA
- TURKEY
- UKRAINE

3. Established
- KOREA
- Efforts to improve perception of technical education, including:
  - Opening pathways to higher education for vocational education graduates
  - Improving balance of academic and vocational curriculum in vocational schools
  - Meister High Schools

4. Advanced
- MALAYSIA
- SINGAPORE

OTHER EXAMPLES:
- GERMANY: Quality assurance protocols for apprenticeships
- AUSTRALIA: NQF with wide coverage and active employers engagement

3. Solutions

Managing for tangible results on the ground

G7 Enabling DIVERSITY AND EXCELLENCE in Training
- Training provided by a diversity of state and non-state institutions
- Registered and licensed non-state training providers. Systematic quality assurance measures and routine review of policies toward non-state provision
- State providers with significant autonomy and accountability

G8 Fostering RELEVANCE in Public Training Programs
- Formal links between training institutions, industry and research institutions
- Staff and instructors recruited on the basis of minimum academic and professional standards
- Regular professional development opportunities for management staff and instructors

G9 Enhancing Evidence-based ACCOUNTABILITY for Results
- Administrative and other data (e.g., job placement statistics, earnings of graduates) collected, reported by all training providers and consolidated centrally in a system-wide, up to date database
- Analysis and use of data for improvement of system performance
- Publically available data on training provider performance, including graduate labor market outcomes for most training programs.

3. Solutions  
(System Alignment)

Results and promising practices...

1. Latent
- IRAQ
- TIMOR-LESTE
- ST. LUCIA
- WEST BANK AND GAZA
- YEMEN

2. Emerging
- TURKEY
- GEORGIA
- ARMENIA
- BULGARIA
- SRI LANKA
- JORDAN
- LAO PDR
- GRENADA
- TUNISIA
- MOROCCO
- MACEDONIA
- TAJIKISTAN
- EGYPT

3. Established
- MALAYSIA
- KOREA
- SINGAPORE
- IRELAND

4. Advanced
- KRIVET: Research for strategy and accountability

Other examples:
- Germany: i) Provider-employer partnership in dual system; ii) autonomy of providers; iii) extensive data collection and publication

Readily available graduate employment and income data in Chile (Mi Futuro) and Colombia (Observatorio Laboral para la Educación)
However...

... all these different policies, institutions and practices are interrelated and will only work if the pieces are aligned.

... even if policies, institutions and practices are aligned, economic conditions (informality, job creation, growth) and social conditions can limit the potential of technical education.
SABER WfD Framework: Training Assessment Provision (TAP)

3. Solutions (Training Landscape)

1. Characteristics of Training Landscape
   How many training institutions are operating?

2. Effectiveness of Training Provision landscape
   Are providers delivering effective outcomes?

3. Good practices
   How well are providers performing, compared to global good-practice and peers?
How many training institutions are operating?

1. Characteristics of Training Landscape

TAP identifies all operating training providers and gather basic identifiers and other data points:

- Name
- Location
- Contact point
- Legal status (public, private)
- Education level/type
- Enrollment figures
- Average age of students
- Number and duration of programs

* Specific data points are agreed upon with WB task teams and their counterparts.
Are providers delivering effective outcomes?

How?
Applying 3 types of survey instruments

2. Effectiveness of Training Provision landscape

3. Solutions (Training Landscape)

Training Institutions
Survey

Students and graduates
Focus Groups

Employers
Focus Groups
How well do they perform, compared to good-practice and peers?

### 3. Analysis and Scoring

<table>
<thead>
<tr>
<th>Institutional Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>IG-1 To set a strategic direction</td>
</tr>
<tr>
<td>IG-2 To develop a demand-driven approach to training</td>
</tr>
<tr>
<td>IG-3 To establish a sustained relationship with authorities</td>
</tr>
<tr>
<td>IG-4 To ensure institutional financial viability and efficiency</td>
</tr>
<tr>
<td>IG-5 To fulfill national quality standards</td>
</tr>
<tr>
<td>IG-6 To enable students to pursue education and training opportunities</td>
</tr>
<tr>
<td>IG-7 To create an teaching/studying experience conducive to learning</td>
</tr>
<tr>
<td>IG-8 To prepare students for the world of work</td>
</tr>
<tr>
<td>IG-9 To gather and publicize data for informed decision-making</td>
</tr>
</tbody>
</table>
How well do they perform, compared to good-practice and peers?
How well do they perform, compared to good-practice and peers?
Young People Follow Different Pathways

3. Solutions

Look/find employment

Enroll in basic or post-basic equivalent job training

Pursue tertiary education

Become inactive (not in school, not working)
3. Solutions

Skills Accumulate Life cycle

What Skills?
- Cognitive skills
- Socio-emotional skills
- Professional skills

Target group?
- Before school
- Formal education
- Further education and training

Level?
- ECD: Public and Private
- Formal Education: Public and Private
- Training Landscape: Public and Private

Pre-employment
- Vocational
- Technical

Activation programs
- Unemployed
- Inactive

On the job
- Enterprise based

Out of school youth
- CCT recipients

Secondary
- Degree

Tertiary
- Non-degree

ISCED Levels: 3 (25&35), 4 and 5 (45&55)
Programs are heterogeneous, identifying impacts is a complex exercise.
Common threads: Successful Training Program Features

1. **Establishing Partnerships**

   Sector/industry programs use intermediary institutions—usually network aggregators or nonprofits with industry-specific expertise—to work with employers in a given industry to anticipate job openings, design program content, and maximize potential placement.

2. **Combining Classroom and Workplace Learning**

   Apprenticeships are a common way to combine classroom and workplace learning, and may last from one to three years and take place at the secondary or post-secondary level or as an alternative to upper secondary education—giving students the opportunity to engage in industry-supervised workplace practices.

3. **Identifying Capable Teachers and Trainers**

   Successful training programs require teachers with industry expertise to ensure content is aligned with job requirements and provide recognized career development tracks for technical trainers and instructors.

4. **Making Information Available for Decision-making**

   Career information interventions are usually grouped into career education programs, which might include providing direction on coursework selection, and career planning, which is usually provided on an individual basis.
Proven Models to support young people to succeed in training programs

3. Solutions (Programs)

**Dropout Prevention Model**
- Summer Bridge Program
- Dual Enrollment
- Early Assessment

**Readiness Acceleration Model**
- Modularized Courses
- Fast-Track Courses
- Main-streaming

**Contextualized Learning Model**
- Learning Communities
- Contextualized TVET

**Student Support Model**
- Intensive Tutoring
- Enhanced Advising
- Student Success Course

**Untested, but promising innovations**
- New Curricula and Practice
- Technology Aided Instruction
- Improving Secondary-to-College Alignment
What’s next?
4. What's next?

Changes ● need for quicker re-skilling cycles

Past

Job
Transition
Re-skilling
Transition
Re-skilling
Transition
Re-skilling
Transition
Re-skilling

Future

Job
Transition
Re-skilling
Transition
Re-skilling
Transition
Re-skilling
Transition
Re-skilling

Labor market trajectory
4. What’s next?

Global Learning Platforms Important Role....

To Allow for Training when, where, and how individuals need it

4. What’s next?

https://capacitateparaeempleo.org/
4. What’s next?

Skills Platform Aggregators • eSkillindia

https://eskillindia.org/
4. What’s next?

More Public Private Partnerships

DATA MINING

STUDENT WELL-BEING

- $100M cumulative earnings
- 80% employed within 90 days after program completion
- 66% still employed one year after placement, and
- 9% have moved onto better opportunities

EMPLOYER IMPACT

- SATISFACTION 83%
- PERFORMANCE 84%

Find your dream job
Over 900,000 jobs in 14,000 companies

www.monsterindia.com
Investing in Human Capital
a Policy Imperative

4. What’s next?

Make learning for all a driving and measurable objective of all schools and educational systems.

Ensure public investments are smart and systemic. In education, tackling the determinants of learning—students, teachers, inputs, management—and are informed by evidence.

Address foundational skills gaps early on to ensure young people can achieve their full potential in work and in life.
4. What’s next?

Investing in Human Capital
a Policy Imperative

Consider **new forms of skills development arrangements** that can better support workers through quicker skills depreciation cycles and for different segments of the age profile, and more readily prepare them for re-skilling throughout their lives (e.g., Precision Training to incentivize frontier ready workers).

**Improve career pathways planning** by aligning secondary schools with post-secondary education and training opportunities to make sure students learn about career options and means to take advantage of opportunities.

Make **measuring progress towards better service delivery and system performance** a regular function of the education and training system and ensure policy makers and stakeholders are able and willing to act on information to improve performance.
Thank you

Alexandria Valerio
avalerio@worldbank.org
November 2019