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# Skills mismatch in LAC. Some Insights

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# The community of VET in LAC





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# 1. Change, everything change....

“The problem is not in the new ideas, but in how to escape of the old ones”

J.M. Keynes



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# Y a muy rápida velocidad....



1927



1954



1970



1980



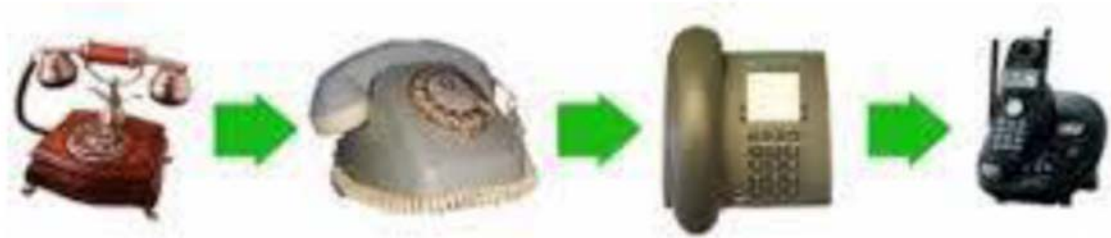
1990



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# Especialmente en las comunicaciones y manejo de datos.....

VOZ



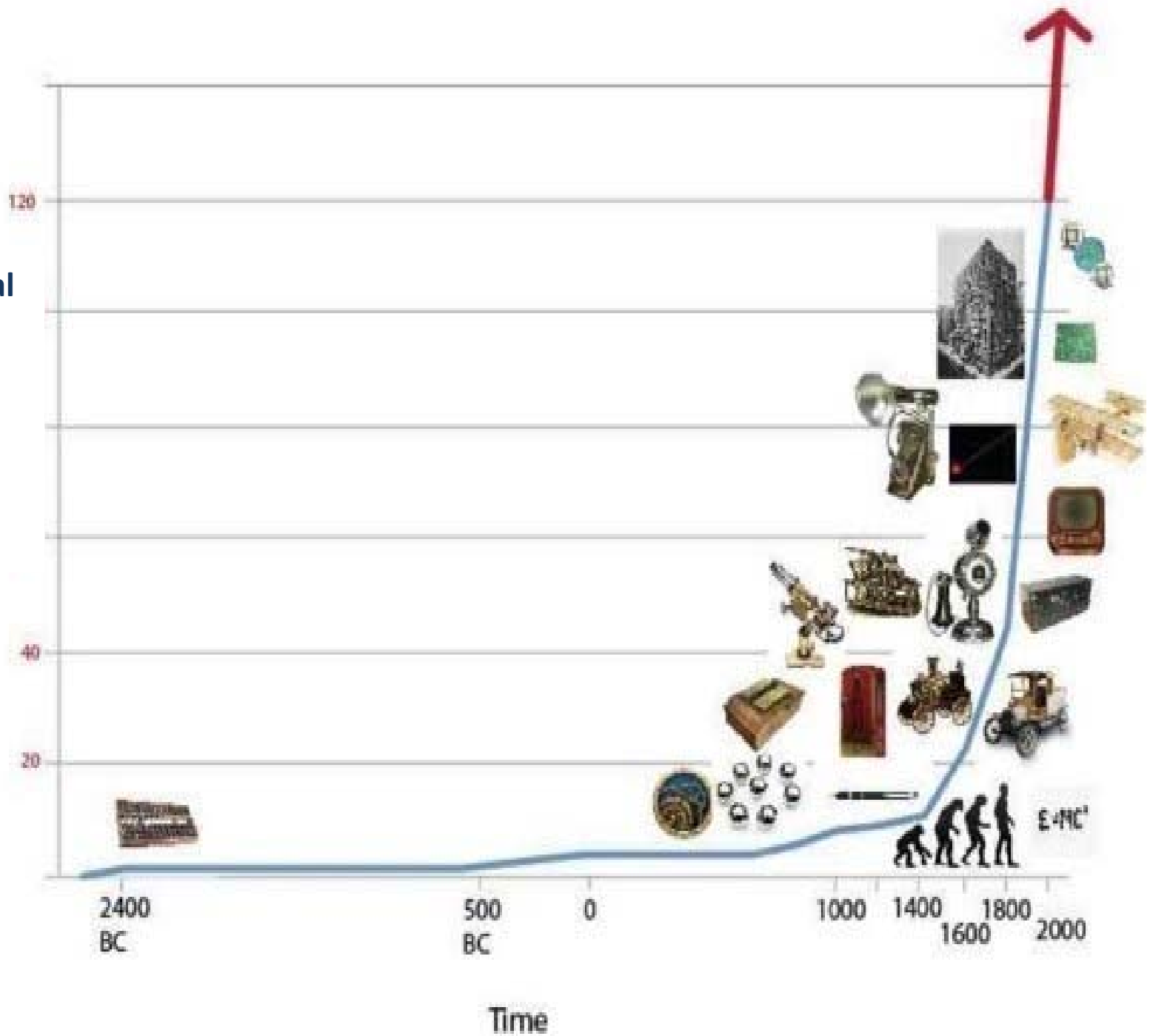
VOZ  
RF



VOZ, RF,  
Bytes

Technological  
advance.

Cumulative  
number of  
significant  
inventions





# 2017 *This Is What Happens In An Internet Minute*





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# Technological revolution and labour competencies



**New  
production  
paradigm  
called  
Industry 4.0**



**Demand for  
new,  
advanced  
skills**



**Dynamic  
process of  
job creation  
and  
destruction**



**Increasing  
risk of  
greater  
inequality**



**Human development agenda**





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# OIT: Iniciativa relativa al futuro del trabajo





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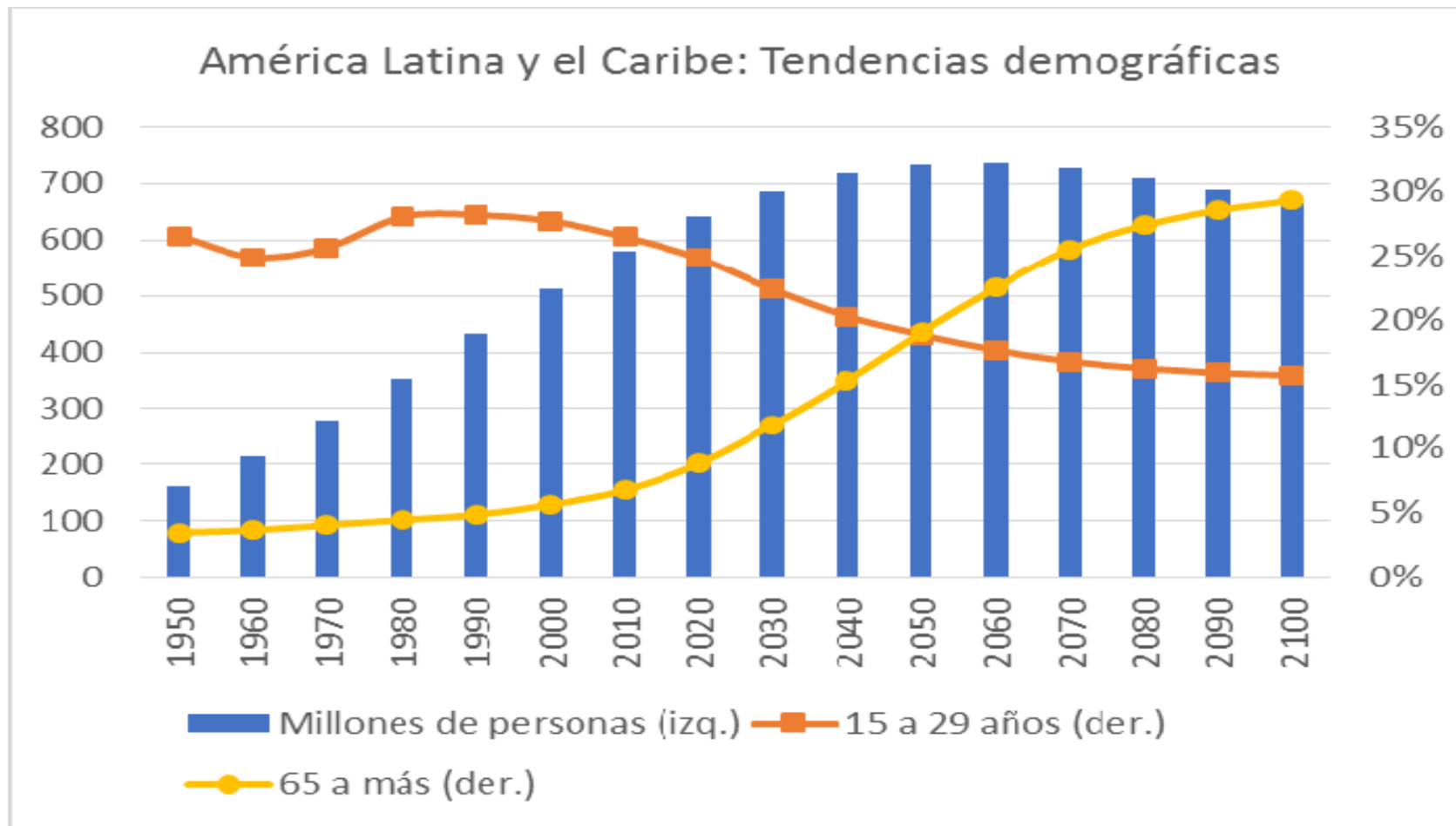
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2. What talent do we have for  
the future....



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## Share of the young population and the elderly in the total population 1950 a 2100



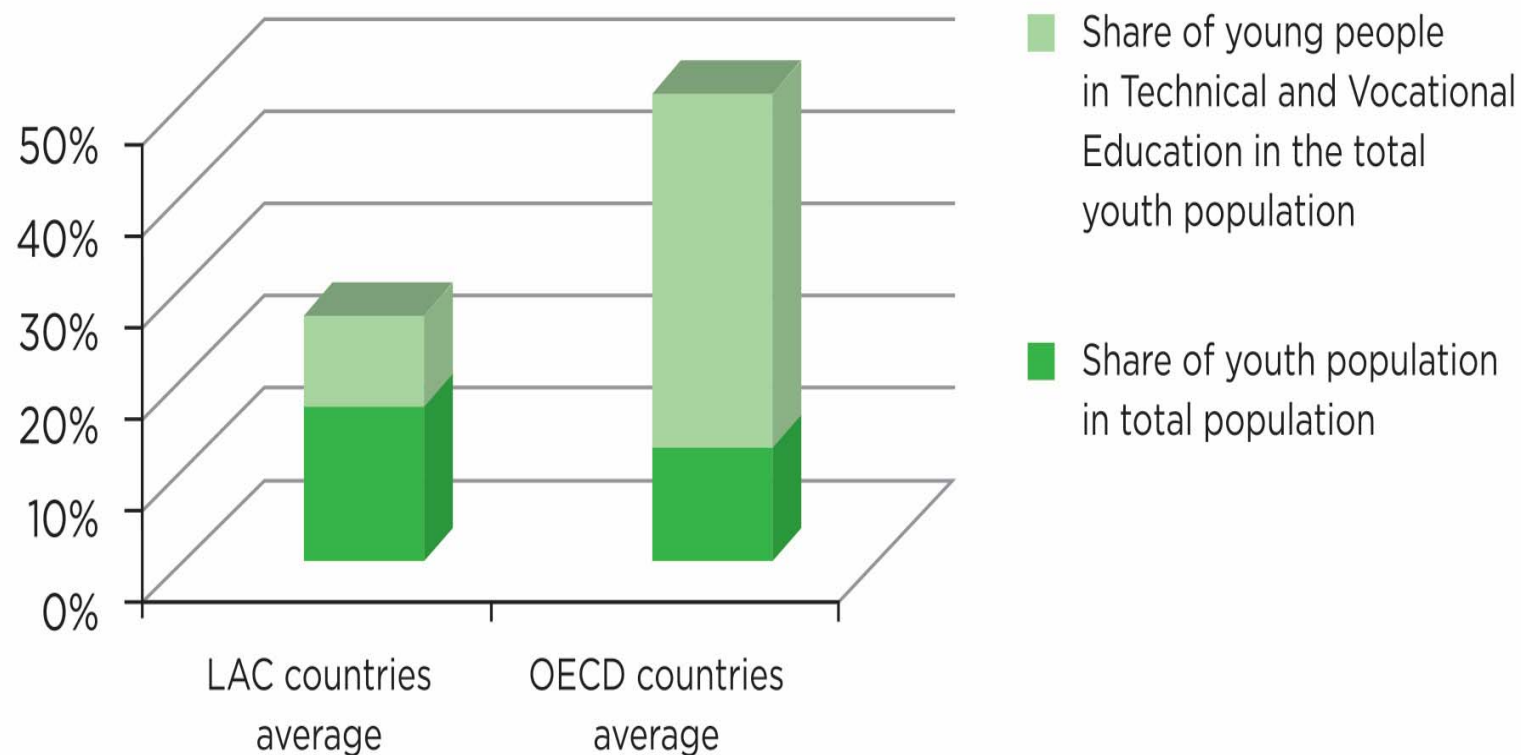
Source: Latin America and the Caribbean Labour Overview. ILO. 2016.



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## Improve the attractiveness of VT

**FIGURE 2:**  
Young people in TVE in LAC and OECD countries





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## Continuing to improve the quality and relevance of education.

- **LAC has improved educational achievement indicators in the past two decades.**
- **1990->2010:**
  - **Avg. Years of educ. 8.2 -> 10.2**
  - **Primary 95%**
  - **Secondary 73%**
- **However, the increase in coverage has not brought good news in terms of quality.**

**TABLE 2:**  
Percentage of students who do not reach the baseline level of proficiency (2) in PISA

Skill areas	LAC	OECD
Mathematics	63%	23%
Reading	45%	18%
Science	50%	23%

TERCE Test 2013	Level I and II
Mathematics	83%
Reading	61%
Science	79%





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# Continuing to improve vocational training systems

**TABLE 4:**  
A single gap through different perspectives

Study	Tipo Type of gap		Measurement %
IDB <sup>50</sup>	Socioemotional Skills		22.9
	Knowledge		8.7
	Specific		4.4
World Bank	Inadequate training 2010		35.8
CAF 2016	Enterprises that see education as an obstacle:	LAC	34.0
		OECD	17.0
		All countries	22.0
Manpower Survey	Difficulty filling vacancies:	2013	39.0
		2014	48.0
		2015	42.0

Source: Prepared by the authors on the basis of the sources mentioned.



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3. ¿And... what challenges do companies pose?



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## The expectations of the new workers are different ....

- They do not look for life long employment ...they need to be attracted
- They perceived more value from work environment than from wages.
- They required flexibility: when, where and how they work.
- All of this change the structure of organizations and its culture of change.



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# And... ¿How the organizations of the future looks like?



Big teams and buildings.

Teams working in “silos”

Slow adaptation

Departmentalized innovation

Closed ecosystem

Hierarchic

Corporate learning

Life long employment

Profits



Small global teams

Interconnected teams

Fast adaptation

Innovation “anywhere”  
“anytime”

Open ecosystem

Flat

Open learning

Project based work

Prosperity





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4. Then.... ¿How to teach and  
how to learn?

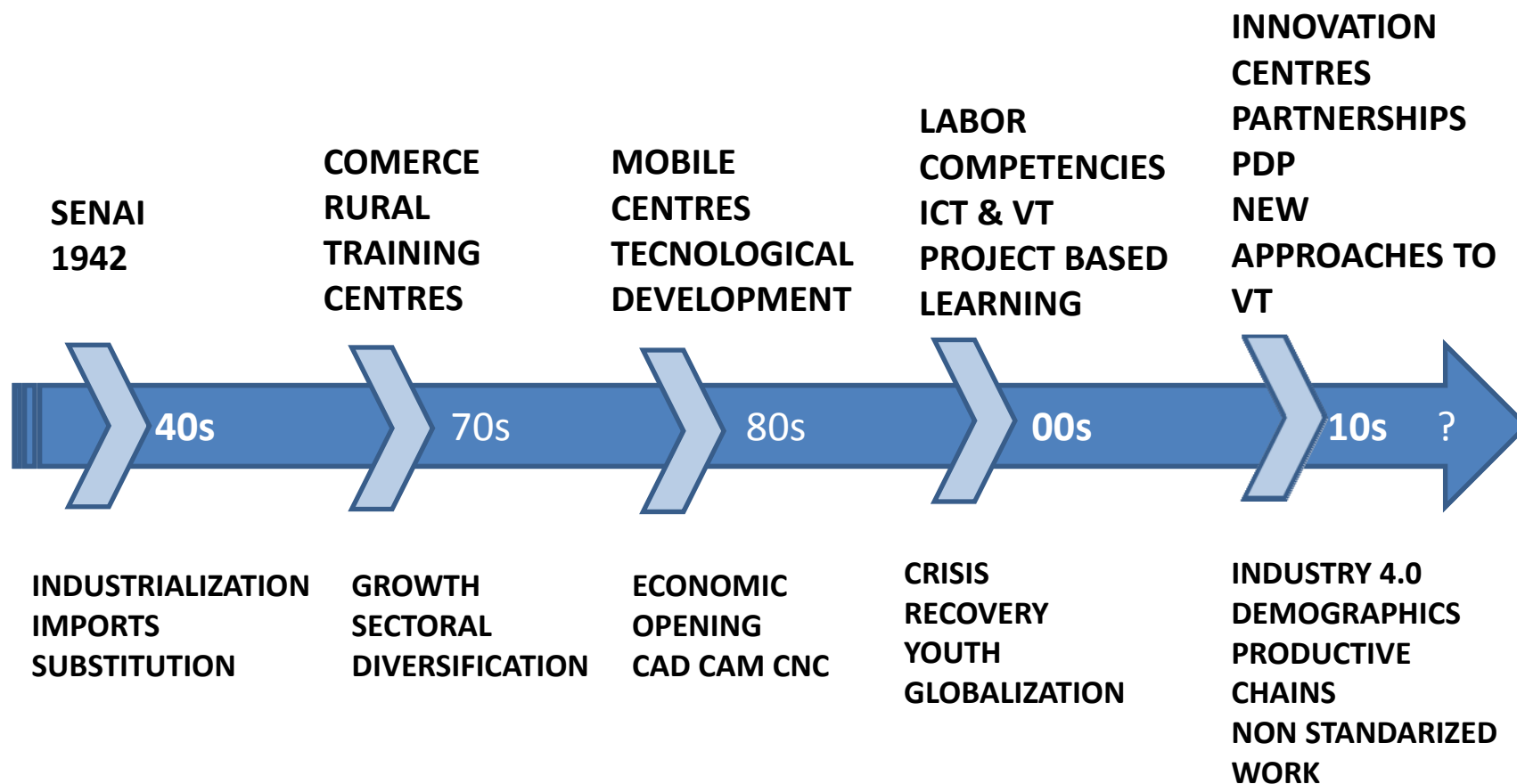




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# Vocational Training: it's time for reinvention





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# Lack of systems to improve the quality and relevance of VT



Disarticulated stages



A “jungle” of qualifications



Heterogeneous quality



Asymmetries and information failures



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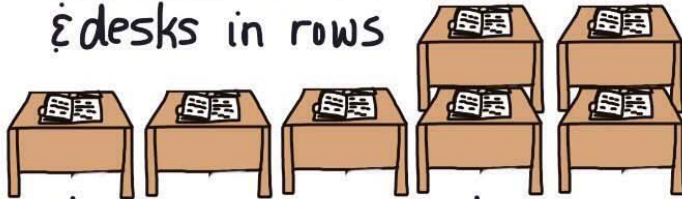
## Socio-emotional skills

ATC21s	F. Ayrton Senna	OCDE	U.E.
<p><b>Ways of thinking:</b> Creativity Innovation Critical thinking Problem solving Learn how to learn Decisions taking</p> <p><b>Ways to work:</b> Communication Collaboration Team work</p> <p><b>Tools:</b> ITC literacy</p> <p><b>Living at world:</b> Local and global citizenship Life and career Social and individual responsibility</p>	<p><b>Set up and achieve goals</b> Ability to pursue a goal, to plan, to be responsible, disciplined.</p> <p><b>Cooperation</b> Act with altruism, tolerance, empathy, solidarity and team work.</p> <p><b>Opening to the new</b> New experiences Taking risks Originality, Creativeness.</p> <p><b>Emotional stability</b> Self control, anxiety, stress, self steam.</p>	<p>Creativity Innovation Critical thinking Solving problems Taking decisions Communication Collaboration Literacy ICT Research Digital citizenship Flexibility and adaptation Initiative and autonomy Leadership and responsibility</p>	<p>Communication in different languages Mathematics Science and technology Social skills Digital Skills Learn how to learn Initiative Entrepreneurship Cultural awareness</p>

# How to teach and how to learn in the 21th Century?

## THEN

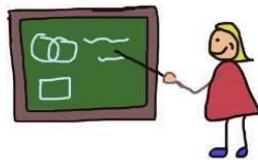
Students sat in chairs  
& desks in rows



the room was quiet

Shhhhhh...

Students learned from the  
teacher



everyone completed the  
same assignment



@ValentinaESL

Educational

MIND

Shift



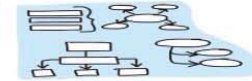
seating is flexible



the room is buzzing with  
student talk



students learn from one  
another



assignments are differentiated  
to meet each students' needs

## NOW





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# How to teach and how to learn in the 21th Century?

VT can become more attractive, oriented to the project based learning and increasing flexibility ...



Fuente: SENA.





A new learning concept..

# FABLAB SENA





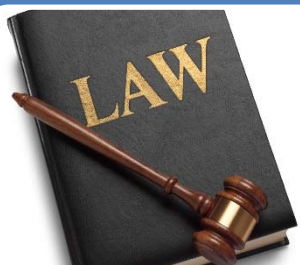
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# The role of enterprises as learning places



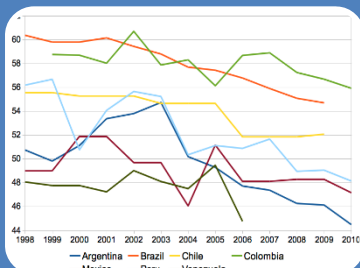
## Learning at the workplace

- Human talent is a pillar of the sustainability of enterprises
- Enterprises are the best places to develop labor competencies



## Regulations, operation and coverage of apprenticeship programmes in LAC are very heterogeneous

- Apprenticeship laws or standards in at least 17 countries
- Resurgence of Company-VTIs partnerships for Quality Apprenticeship



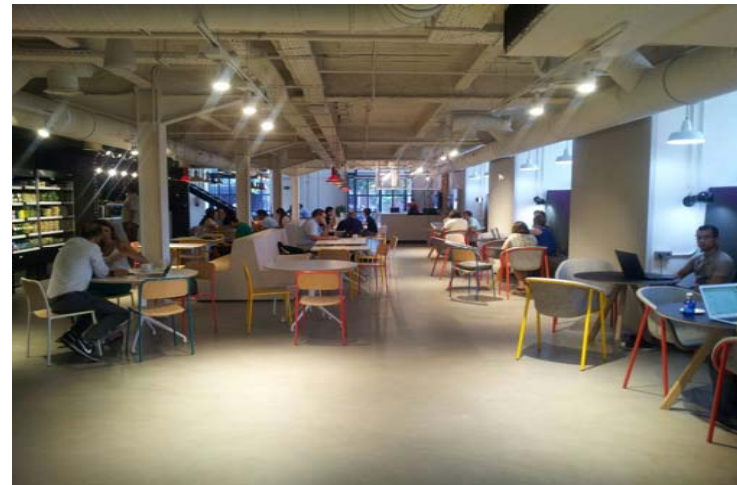
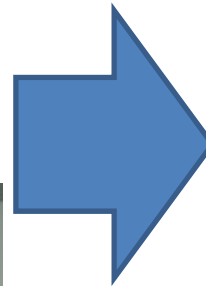
## The proportion of participants in apprenticeship programmes in the region is significantly low

- New arrangements and incentives are needed
- New partnerships between enterprises and training institutions



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Learning environment is going to look like the work environment...





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**END**