

Cómo crear confianza entre el sector educativo y el sector privado para desarrollar un sistema de formación profesional eficiente entre industria y institutos de formación

Cómo establecer vínculos entre actores del sistema educativo y de empleo

Prof. Dr. Ursula Renold

Chair of Education Systems

ursula.renold@mtec.ethz.ch

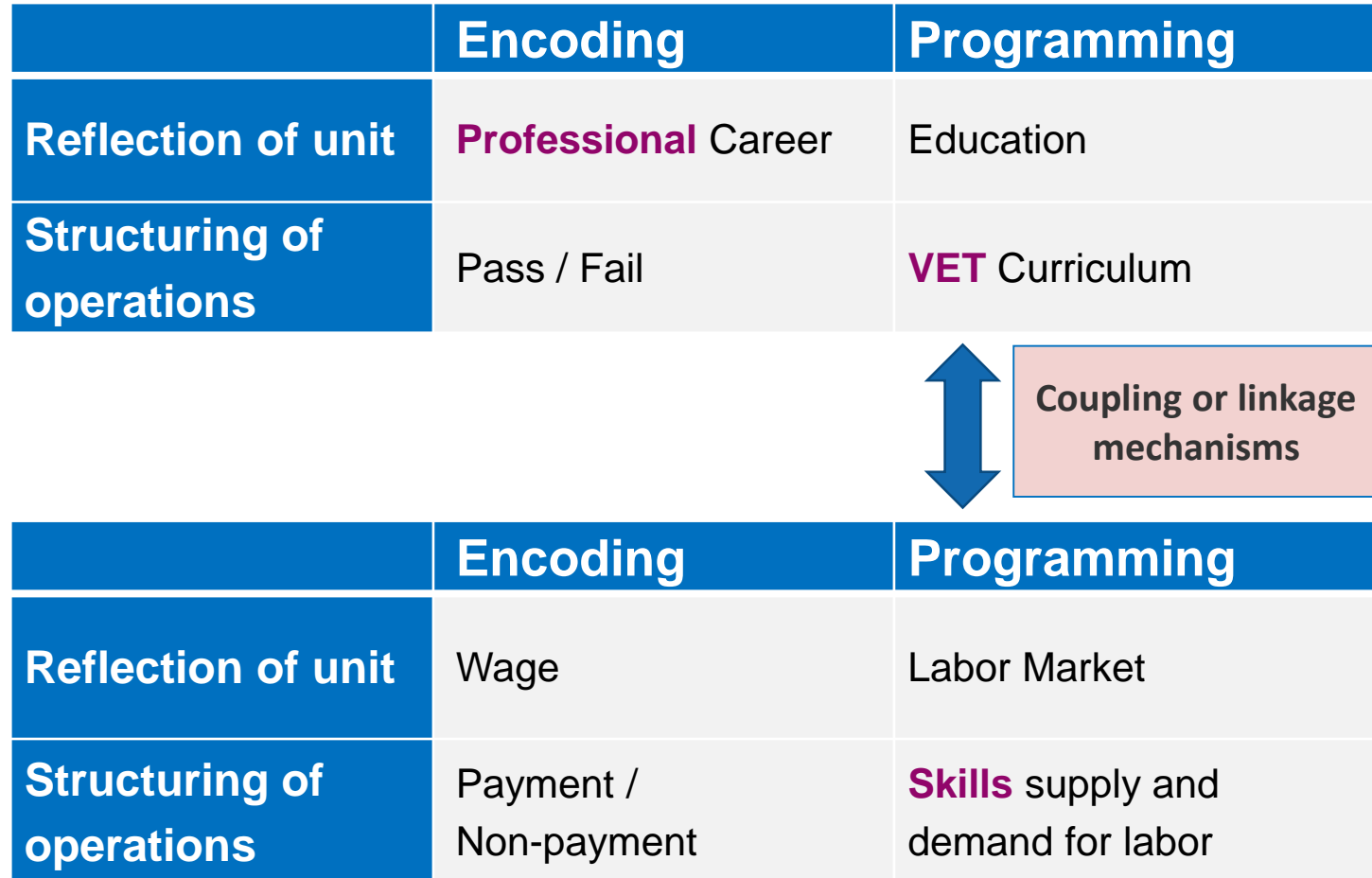
Agenda

1. Why has “dual education” become a major issue worldwide? Digital transformation as driving force
2. Education and Employment Linkage Index (EELI): Tool to measure system actor collaboration
3. What is “dual education”?
4. Advantages of dual education for all and system requirements



Digital transformation changes the qualification requirements on the labor market very fast

Linkage mechanism between education and employment system are required

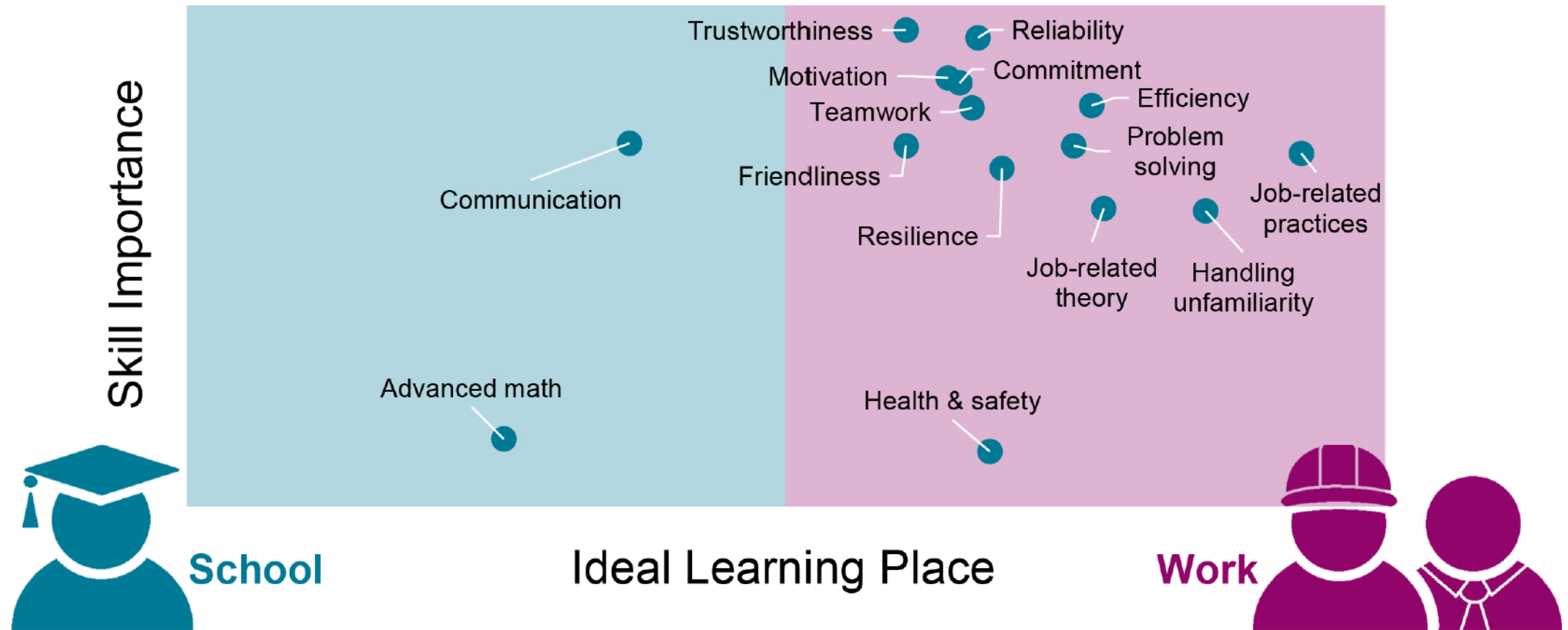


Coupling or linkage mechanisms

What are requirements on the labor market?

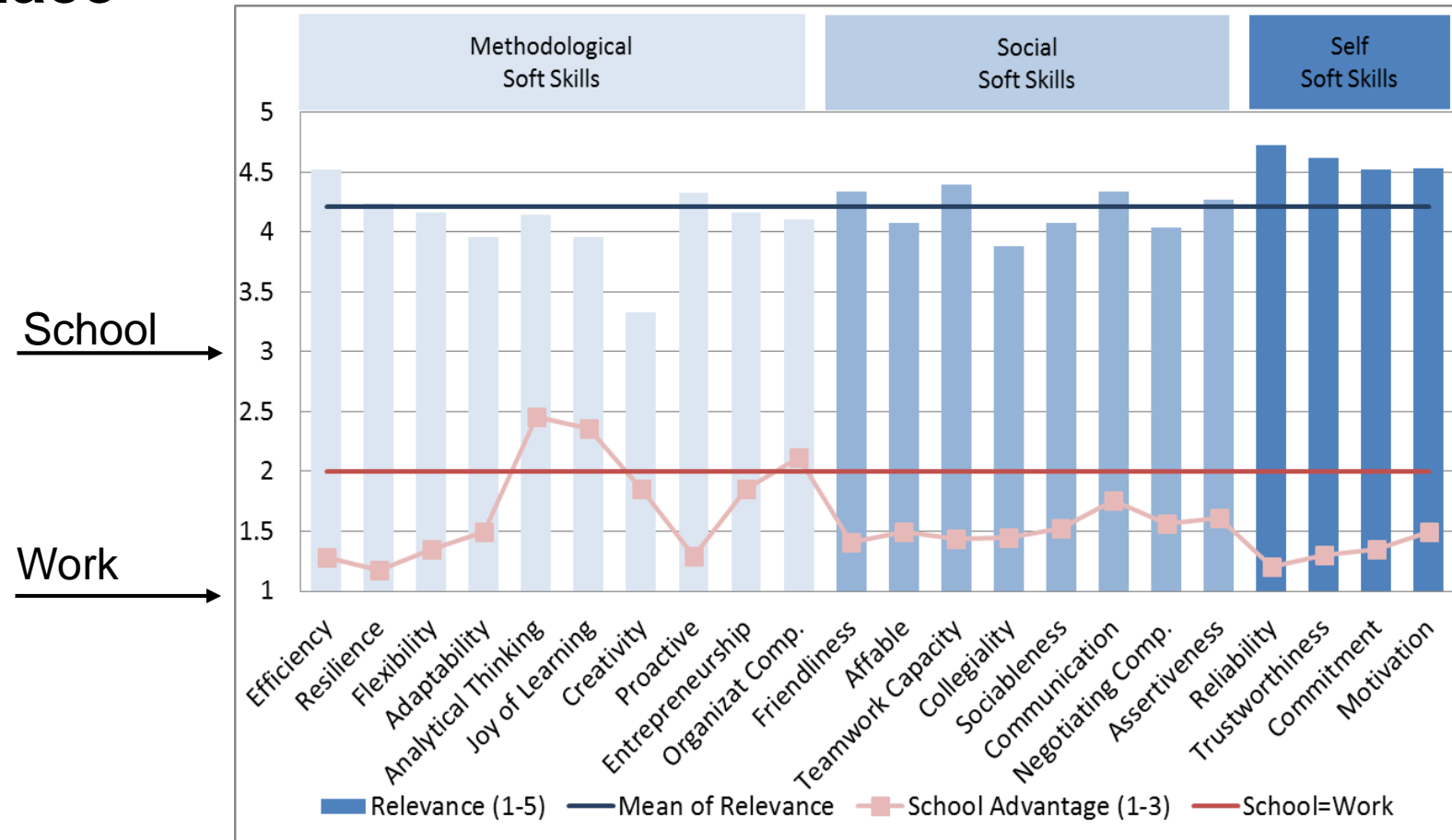
Source: Rageth, Ladina, und Ursula Renold (2019). „The Linkage between the Education and Employment Systems: Ideal Types of Vocational Education and Training Programs“. *Journal of Education Policy*, 27. April 2019, 1–26. <https://doi.org/10.1080/02680939.2019.1605541>.

American companies say key skills best learned at work



Source: Renold, Ursula; Bolli, Thomas; Caves, Katherine; Buergi, Jutta (2017). Training for Growth: Skills shortage and companies' willingness to train in Colorado. An application of the KOF Willingness to Train Survey. KOF Studies, No. 94, June 2017.

Relevance and comparative advantage for teaching soft skills: Swiss employer survey – most skills can best be learned in the workplace



(Source: **Bolli Th. and Renold, U. (2017)**: Comparative Advantages of School and Workplace Environment in Skill Acquisition: Empirical Evidence from a Survey among Professional Tertiary Education and Training Students in Switzerland. In: Evidence-based HRM: A Global Forum for Empirical Scholarship. Vol. 5 Iss, p 1-34.)

Digital Transformation challenges Education Systems worldwide



Learning on the best available technology



Learning work-relevant skills from the beginning



Learning from different role model

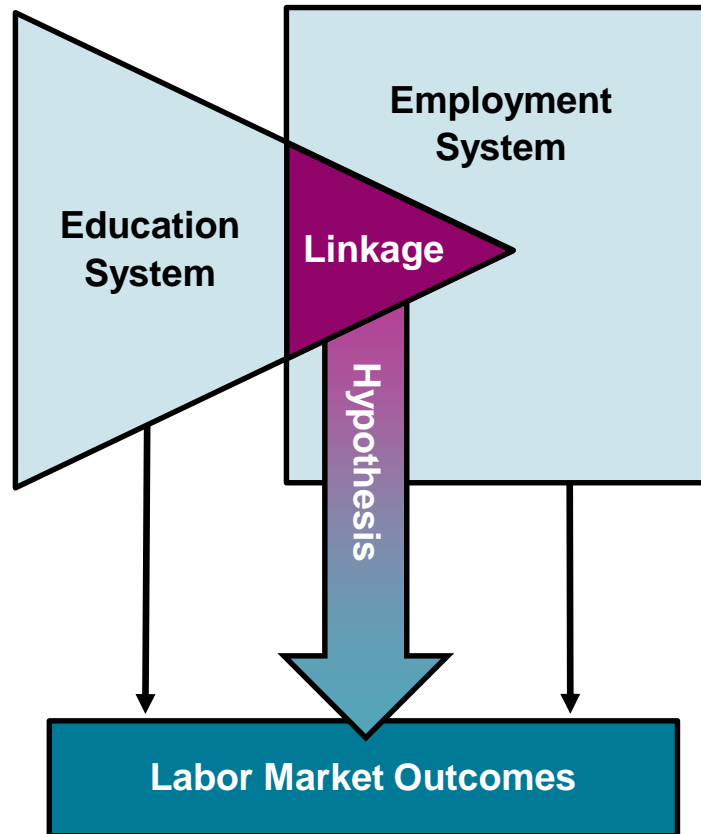


Education systems will have comparative advantage if they include workplace learning!

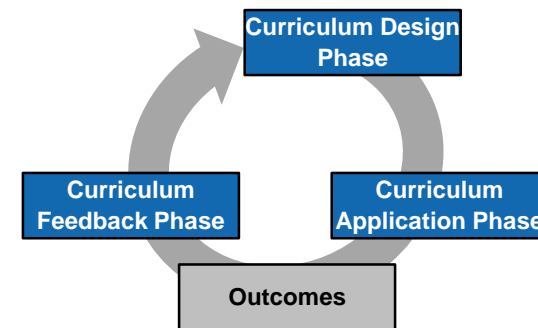
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What is education-employment linkage and why is it relevant?

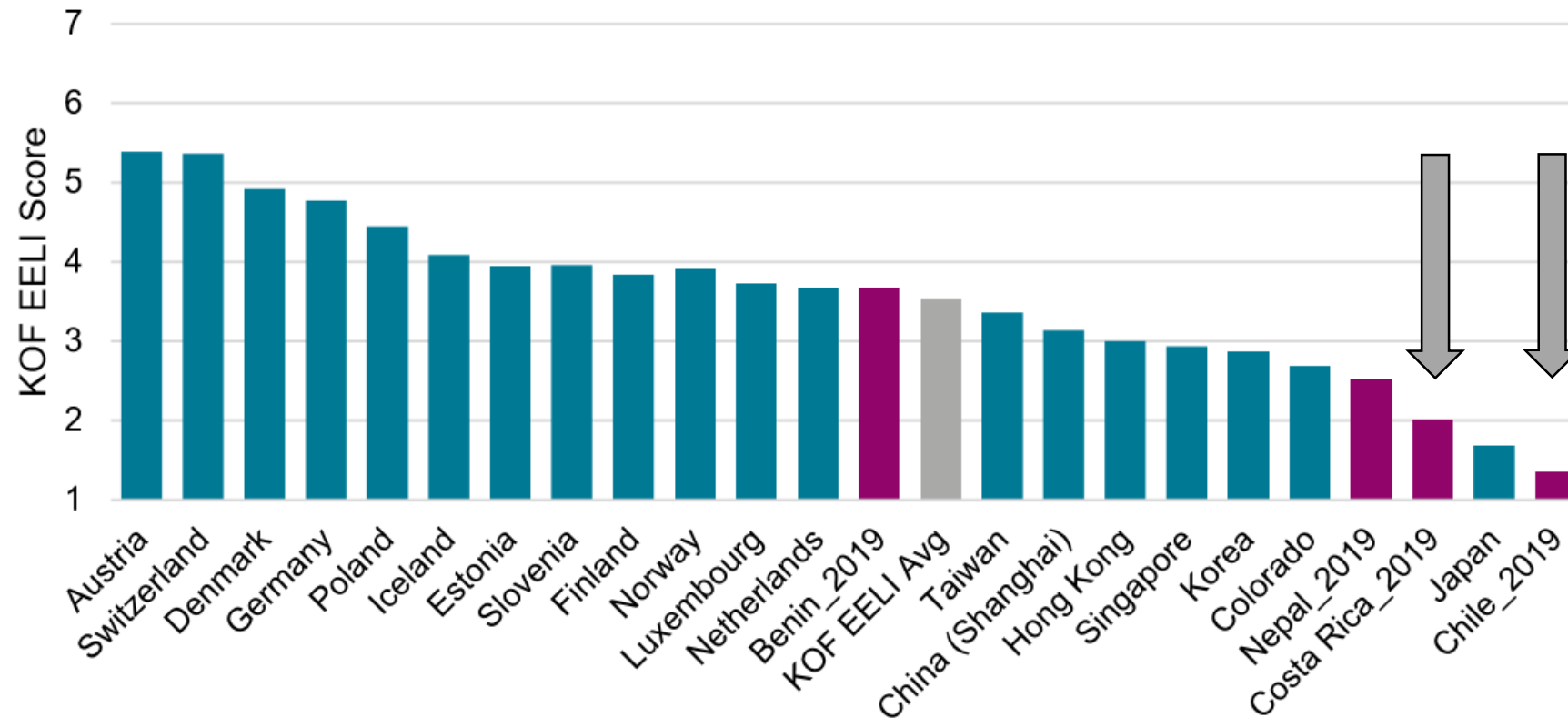


1. Generally, **linkage** is in all the processes where actors from the education and employment systems interact in VET.
2. It should help improve graduates' labor market outcomes.



Source: Renold, Ursula; Bolli, Thomas; Caves, Katherine; Buergi, Jutta; Egg, Maria Esther; Kemper, Johanna; Rageth, Ladina (2017). Comparing International Vocational Education and Training Programs: The Education-Employment Linkage Index. Includes a special sections on applying the KOF EELI to VET policy. KOF Studies, No. 98, September 2017.

CES EELI: Results by country



Source: Own depiction.

Source: Caves, Katherine M., Andrea Ghisletta, Johanna Mirka Kemper, Patrick McDonald, and Ursula Renold (2021). Meeting in the Middle: TVET Programs' Education–Employment Linkage at Different Stages of Development. Social Sciences 10: 220. <https://doi.org/10.3390/socsci10060220>

Education-Employment Linkage in Costa Rica compared to Chile, Nepal, Benin (formal programs)

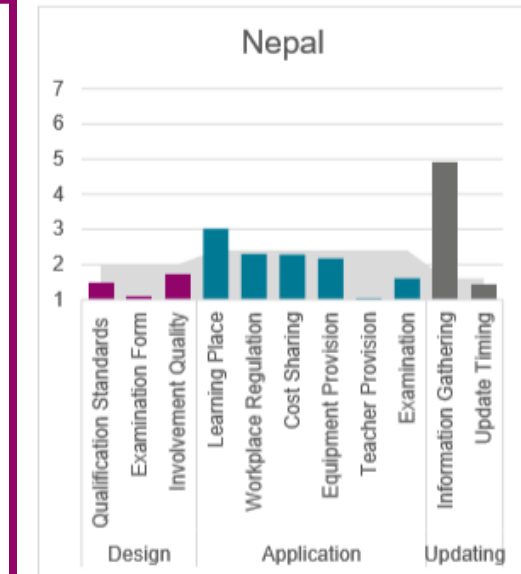
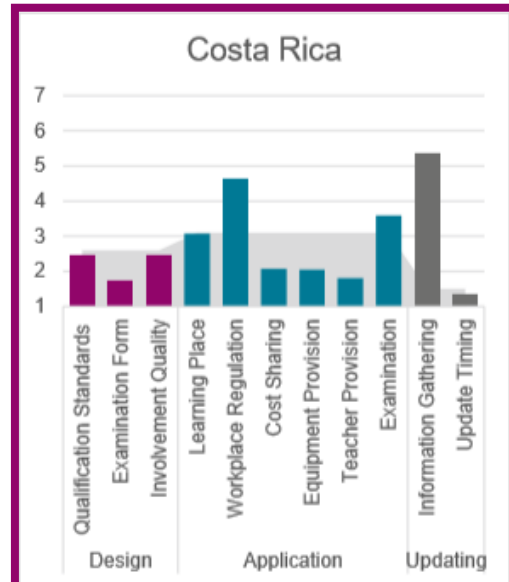
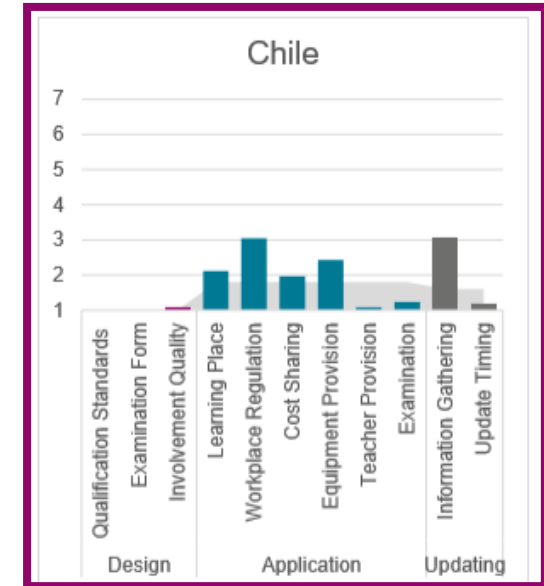
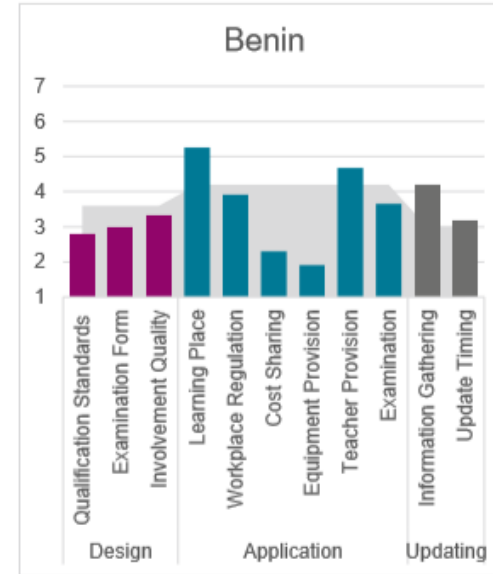


There is room for improvements in the
Inter-institutional framework

Embrace the business sector and
allocate function to this sector!

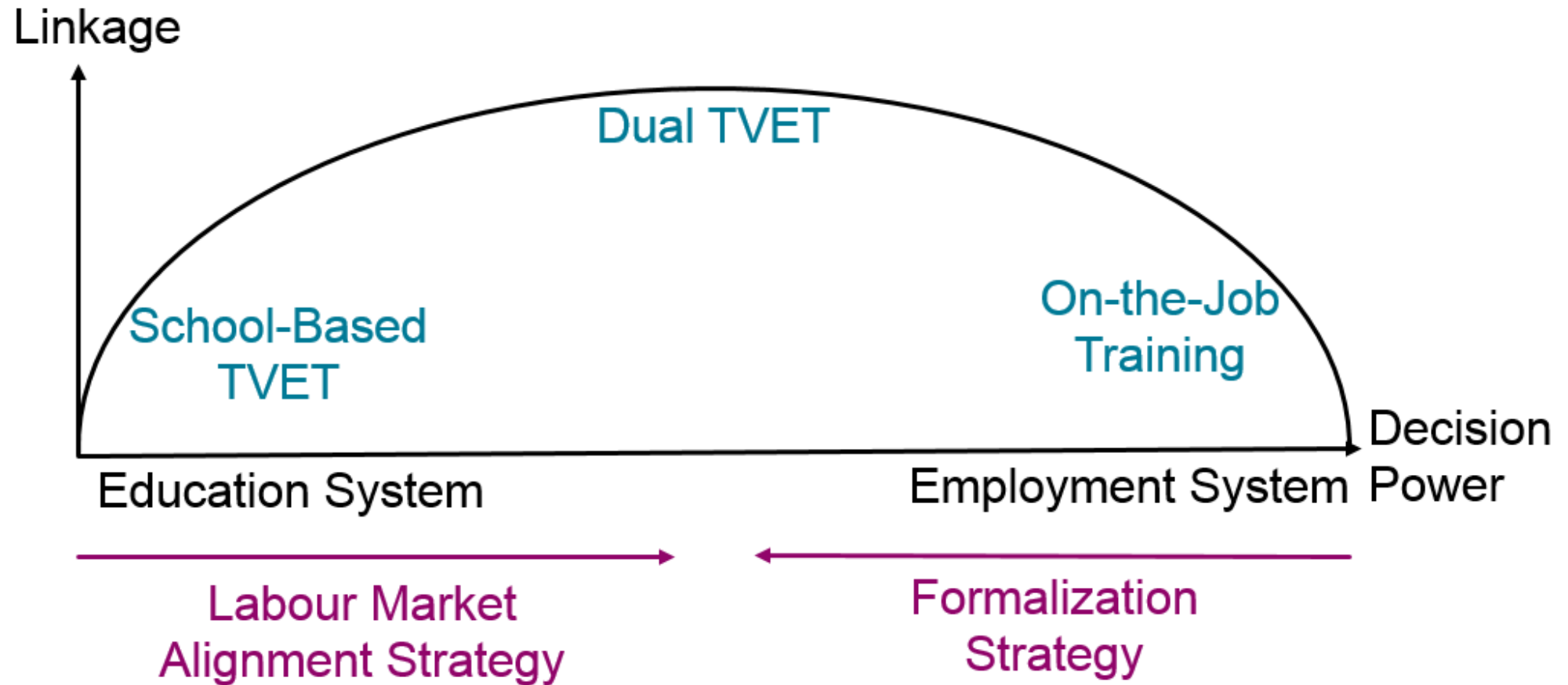
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Figure 3: Process-level results by country



Notes: Higher scores represent more employer power. Shaded grey fields represent phase-level averages. Columns in pink represent design-phase processes, in teal the application phase, and updating in dark grey.

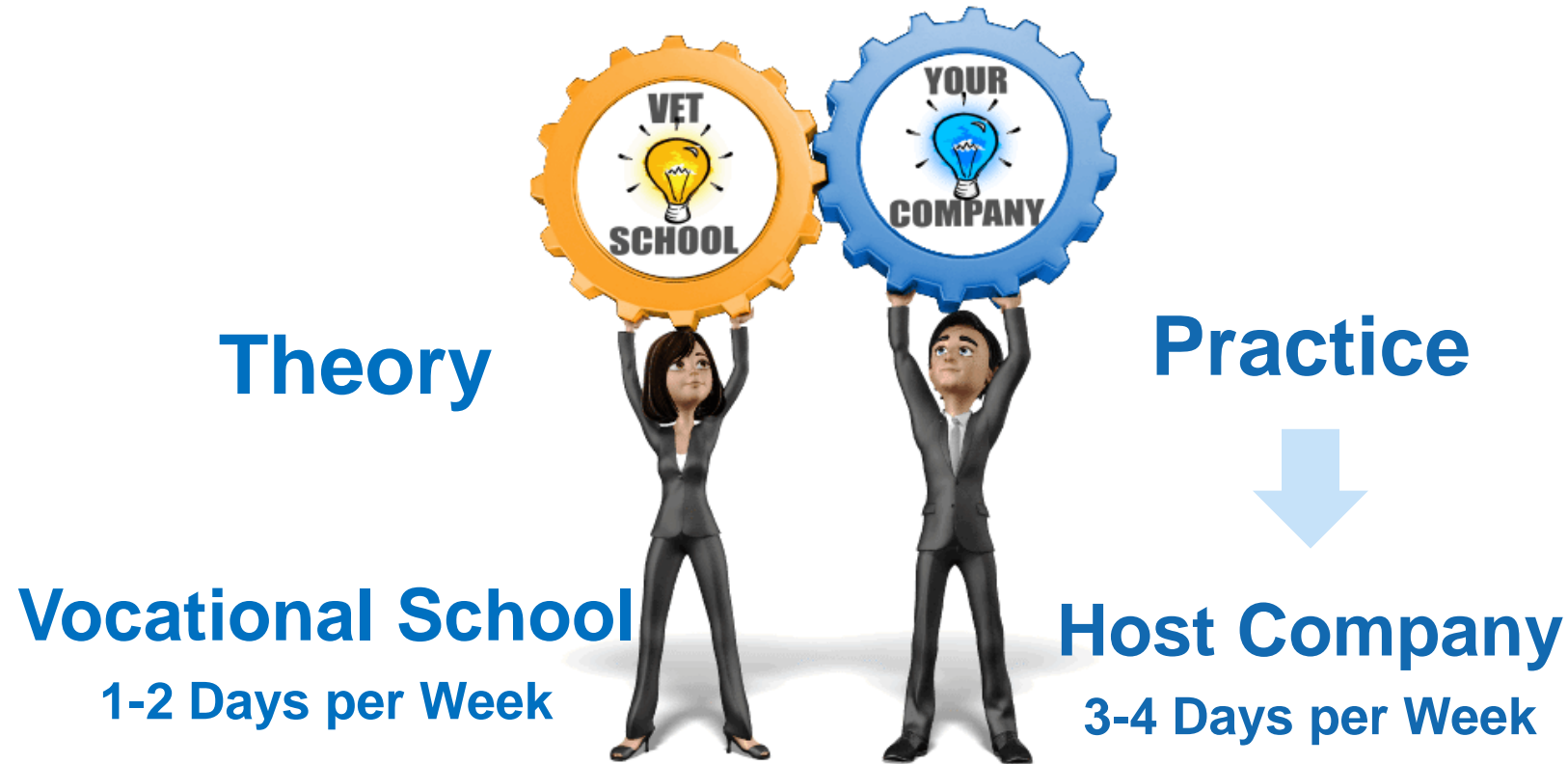
How can we establish strong linkages? It depends...



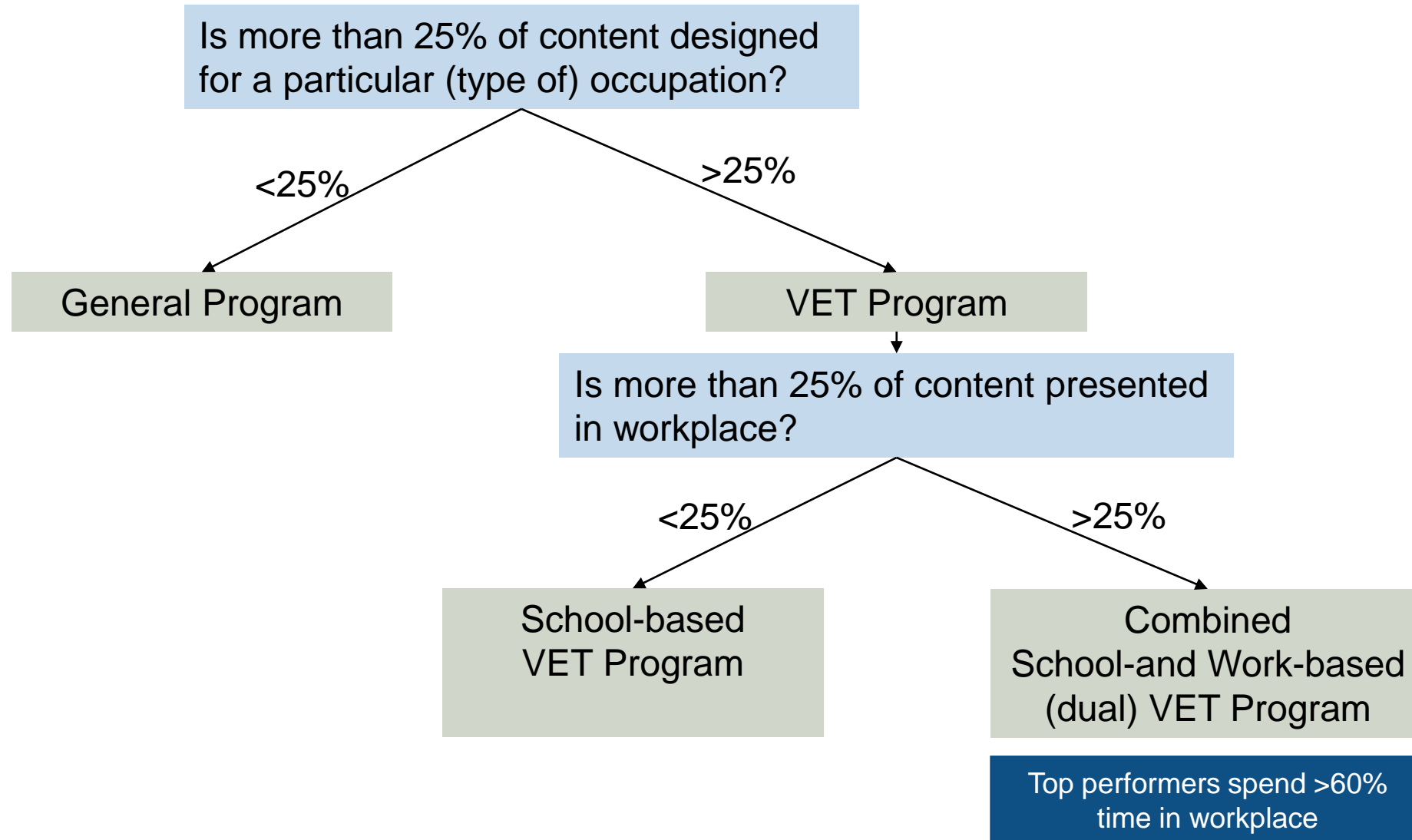
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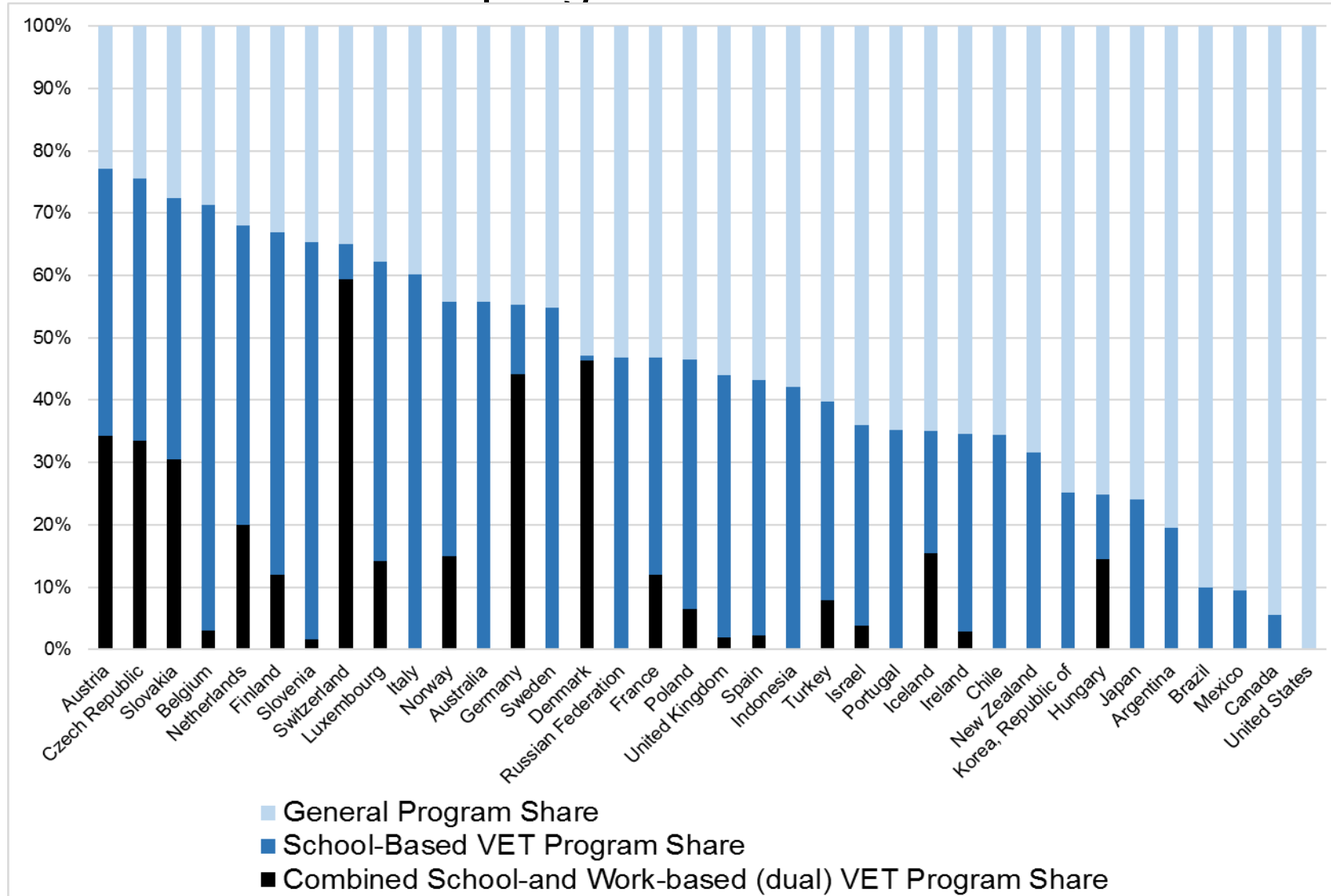
Dual Education (VET): Connecting Theory and Practice



What is VET empirically (OECD standard)?



How common are **dual** VET programs?



Source: Own graph for OECD (2015) data for upper secondary education 2004-2012

What we know from top performers in VET

1. **Employers** are involved in:

1. Setting **qualification standards**,
2. Deciding when an **update** needs to happen, and
3. Setting the **examination form**.

2. **Students spend most of their time in the workplace** instead of the classroom.

Please note.....

... apprentices are not
low paid employees.

They are VET students
who earn a salary on
their journey to a
national VET diploma

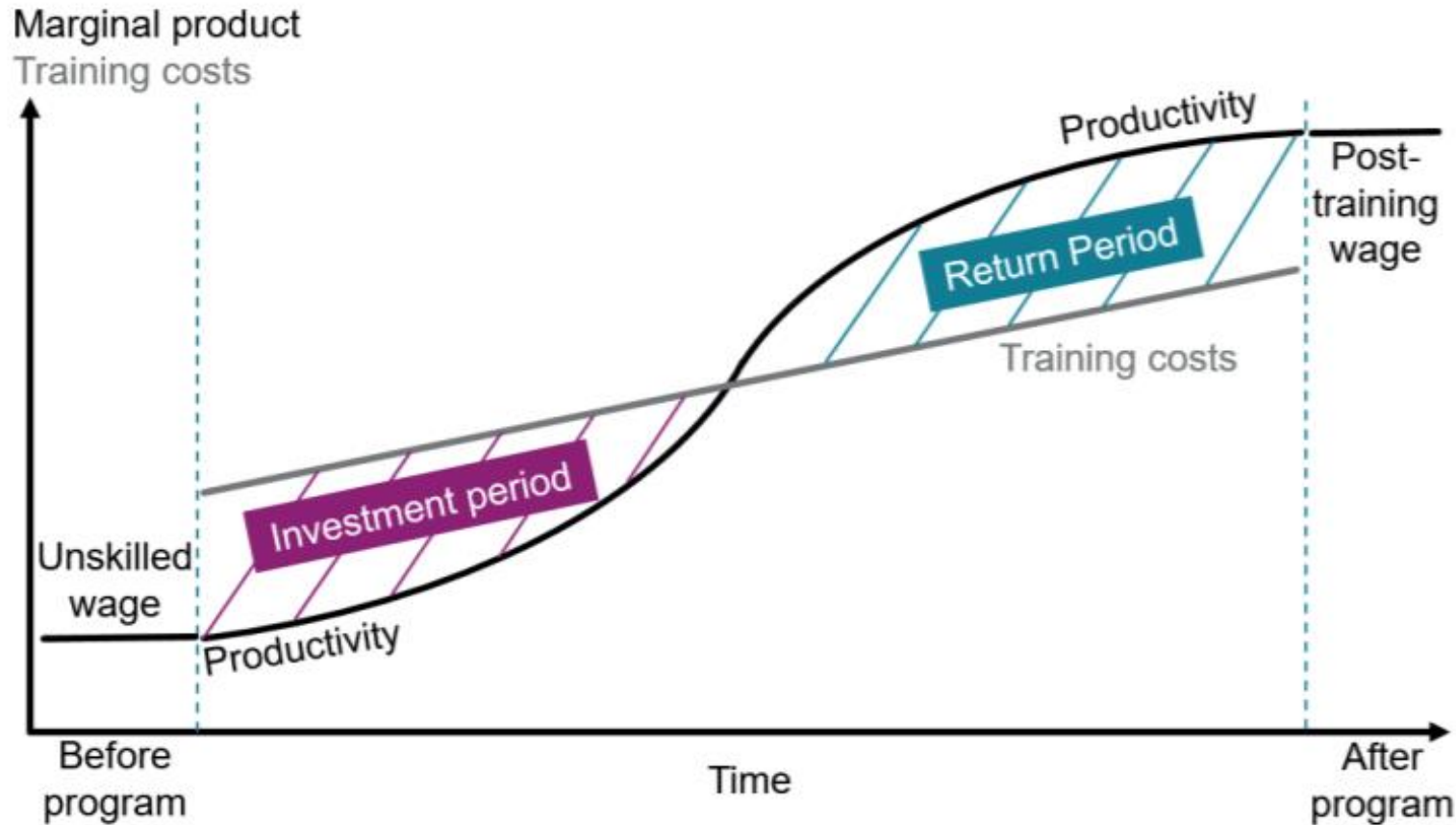


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Companies should be convinced by a balanced ROI

Factors that help companies earn returns on their training investments



Renold, U., Bolli, T., & Wolter, S. (2018). Does it pay for Firms? Costs and benefits of the SkillsFuture Earn and Learn Programme in Singapore. *KOF Studies*, 115.

Average cost and benefit per apprentice for training firms in Switzerland (2009)

	Per apprentice and year (in Euro) 3 y	Per apprentice and year (in Euro) 4 y
Gross costs	72'012.5	96'391.7
Productive contribution	79'273.3	103'380.8
Net benefit	7'260	6'989.2
ROI	10.1%	7.25%

Source: Strupler & Wolter, 2012

Substantial Employer Engagement needs a strong Institutional Framework

The Institutional Framework of a VET System describes...

- The **role of the state** represented by one or more ministries (federal, state, local)
- The **role of the private sector** in the VET System (professional associations, chambers, training companies)
- Other agencies and actors

It is a result of the allocation of the relevant **VET function** to **different political levels**.

Re-Engineering an Education System is a Complex Tasks



CES Education Systems Reform Labs

Each year, 10 countries can participate in our international program (CEMETS). The faculty will explain the scientific basis for education system re-engineering and helping countries initiate and implement their education reforms with translational research.

Thank you very much for your attention!

For more information:
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