

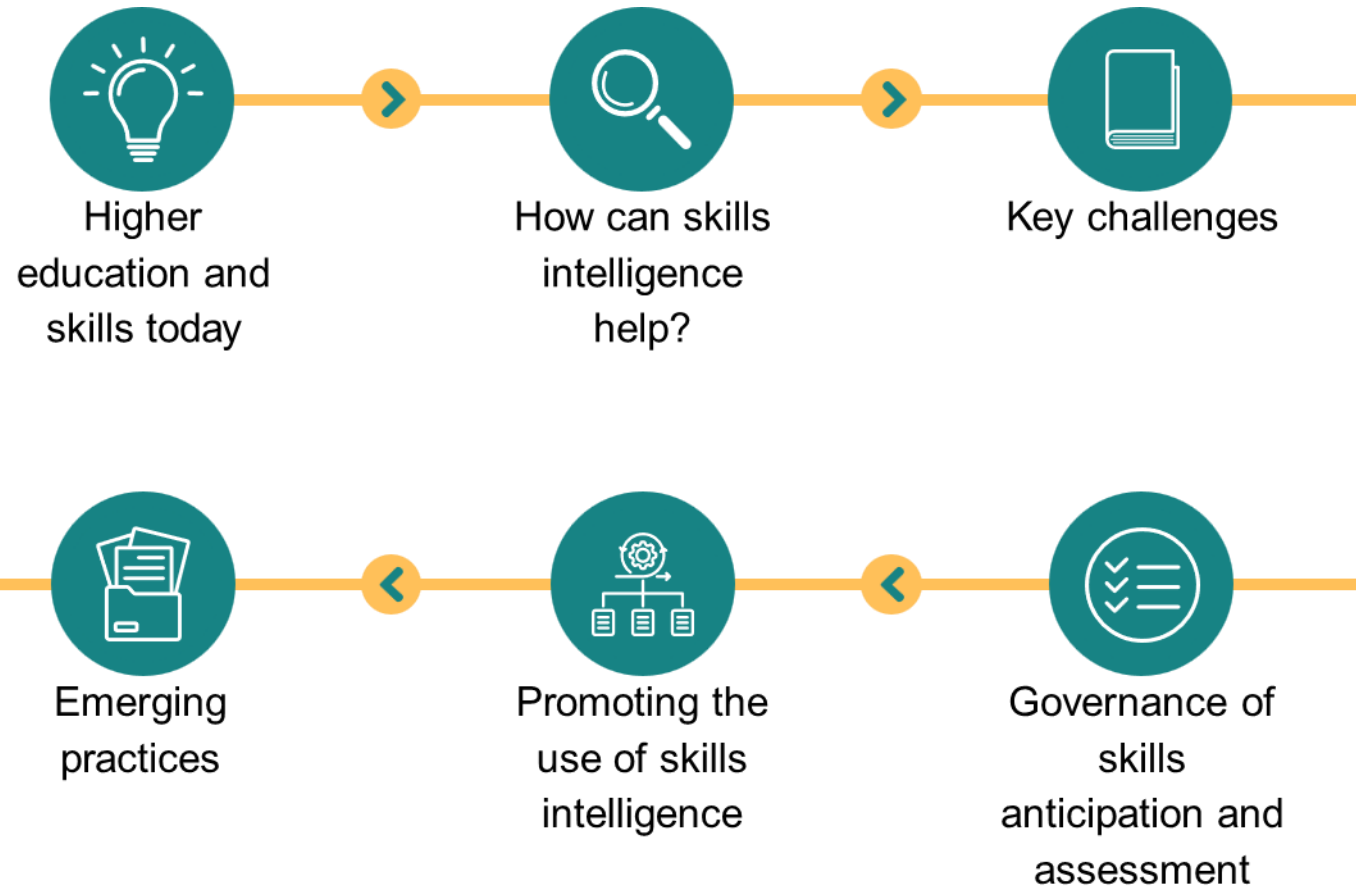
Skills intelligence for higher education systems – reflections on policy and practice

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Overview

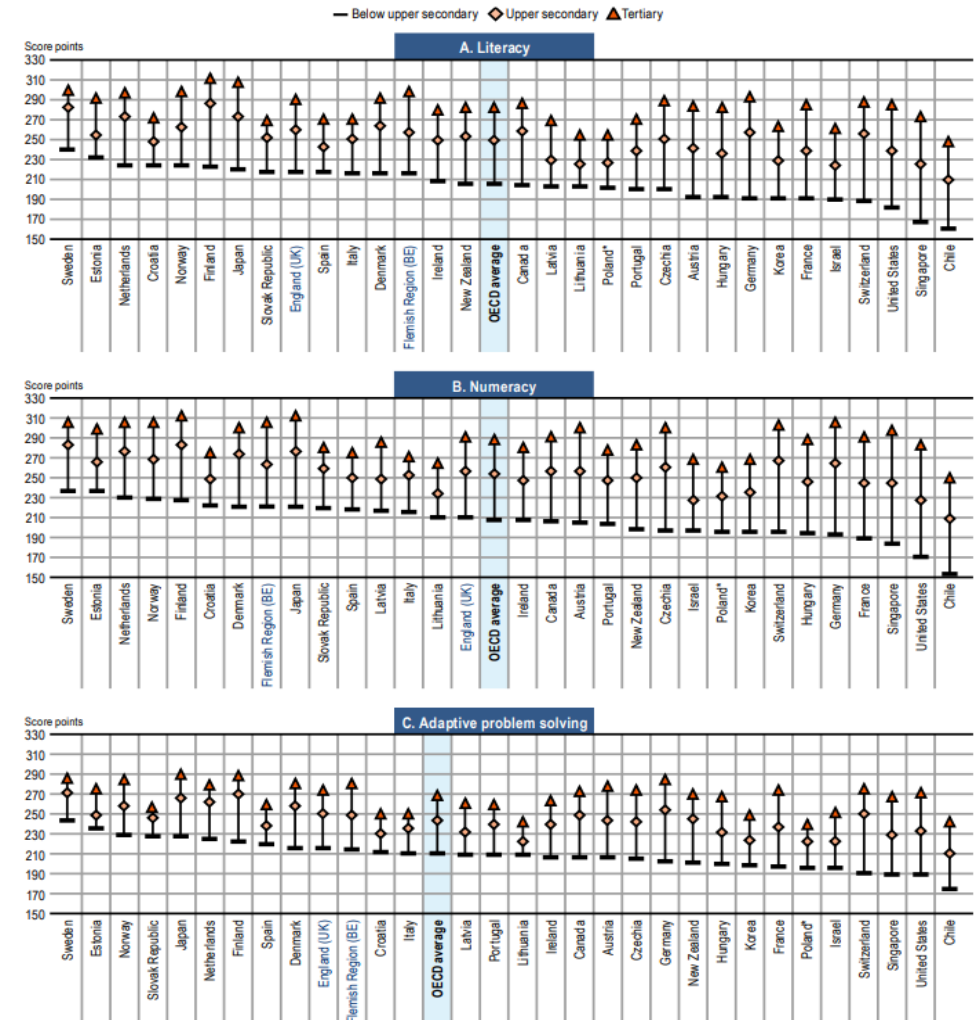




Higher education and skills today

- PIAAC data indicates a **complex relationship**
- Employers still mainly rely on qualifications as a signal of skills, especially at early career stages
 - ❖ BurningGlass Institute/Harvard study (2024) found **1 in 700 hires in 2023 were made based on skills alone**
- Many employers report **difficulties finding graduates with the right mix of skills**
- In surveys, a large share of **graduates report feeling unprepared** for the labour market

Figure 2.8. Average proficiency in key information-processing skills, by educational attainment
Literacy, numeracy and adaptive problem solving





How could skills intelligence help?

Several
potential
benefits



Improve articulation with the labour market

Address skills mismatch

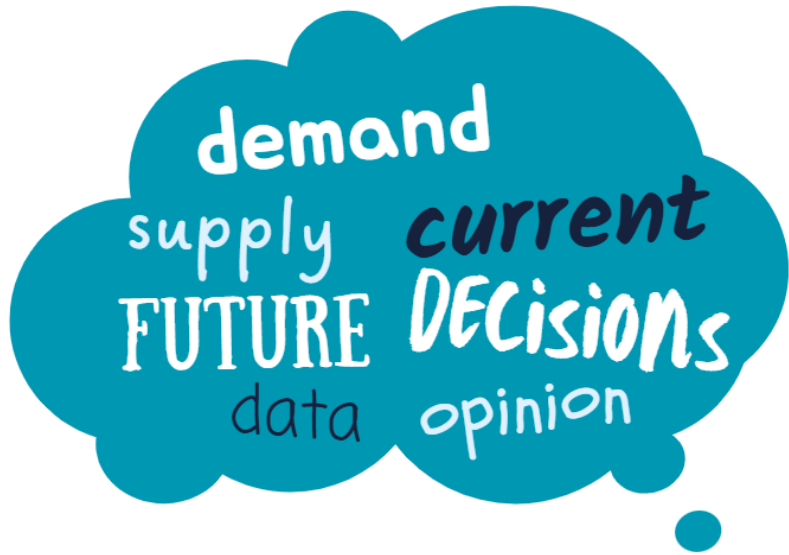
Inform policy

Influence curriculum development and
teaching methods

Support learners to make beneficial career
and education choices

Yet, the adoption of skills intelligence approaches in higher education systems has been slow, fragmented and often contested.

Fundamental challenge – speaking the same language



- ❖ Are we all talking about the same thing when we discuss skills intelligence?
- ❖ How does, and should, collective and organisation-level skills intelligence interact?
- ❖ Does it matter?

IFSI: the ability to analyse, anticipate, and align the competencies required in a changing labour market and society.

CEDEFOP: ...the result of skills assessment and anticipation: activities aimed at evaluating current and future skill needs in the labour market in a strategic way by using consistent and systematic methods

ILO: ...reliable information on the skills in demand and supply at domestic and regional levels,

OECD: ...aggregated data and information on skills and the labour market

World Economic Forum:using artificial intelligence (AI) and machine learning to collect, analyse and translate workforce data into actionable insights.

Specific policy challenges in the context of higher education





Effective skills intelligence at national level starts with governance

Countries are developing distinctive approaches....



Connection between SAA exercise developers and users

- “Integrated model” - SAA exercises are directly developed and led by the end users of the information
- “Independent model” - SAA exercises are developed and led by organisations/teams that are independent of the end users of the exercise
- Hybrid model may combine elements of the integrated and independent models

Formal mechanisms for stakeholder involvement

- High-level political support can contribute to effective stakeholder dialogue
- Stakeholder involvement should be supported by formal legal or regulatory frameworks for consultations and discussions on skills needs
- Stakeholder deliberations may be most successful when centred around a national skills strategy, presenting a shared vision and goals for the skills system



Mechanisms for achieving consensus about skills needs

- Independent third-party coordinators can help manage SAA discussions effectively
- Organising stakeholder discussion into work groups or round tables can facilitate consensus-building
- Providing clear objectives and timelines for discussions can help with conflict resolution

SAA governing body	Ministry of Education	Ministry of Labour/ Employment	Other Ministry/ public agencies	Regional bodies	Professional or sectoral bodies	Employee representatives	Employer representatives
Jobs and Skills Australia Ministerial Advisory Board (Australia)				Yes	Yes	Yes	Yes
OSKA Coordination Council (Estonia)	Yes		Yes		Yes	Yes	Yes
Skills Anticipation Forum Steering Group (Finland)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occupations 2030 Steering Committee (France)	Yes	Yes (through its statistical unit - DARES)	Yes (France Stratégie)	Yes	Yes	Yes (through the Réseau Emplois Compétences)	Yes, social partners
Expert Group on Future Skills Needs (Ireland)	Yes	Yes	Yes			Yes	

Source: OECD (forthcoming)

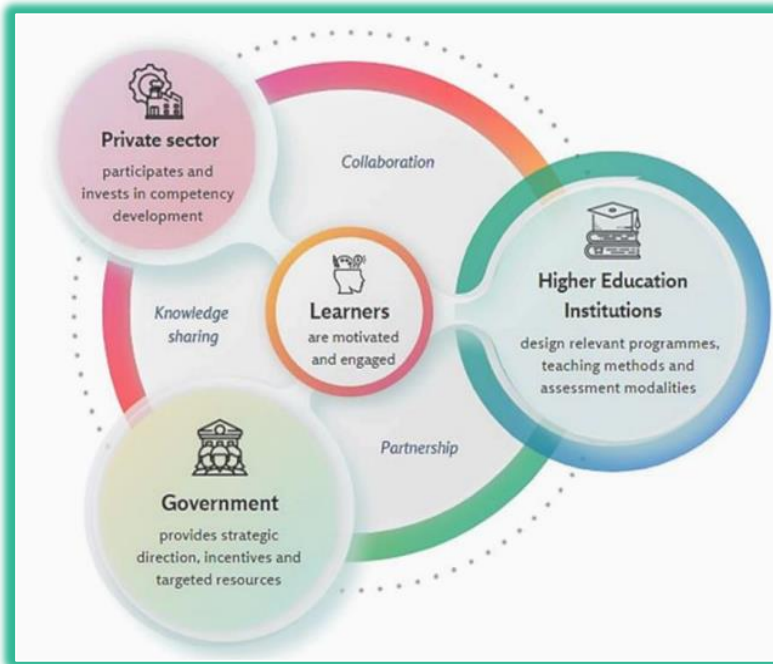
...in some cases with an explicit role for higher education



The **Swedish** government assigns **collective responsibility** for skills governance to several public bodies. Within this approach, **the Swedish Council for Higher Education is mandated to contribute to specific elements of skills governance**, including developing a coherent data infrastructure on skills supply and cooperating with other public bodies.

Source: Author's elaboration based on OECD (2016), Getting Skills Right, Assessing and Anticipating Changing Skills Needs, <https://doi.org/10.1787/9789264252073-en>

How to move from skills intelligence to skills development



Supply side: Many ways for higher education systems to respond to skills intelligence

- New degree programmes.
- Updating curricula,
- Adding capacity to existing programmes
- Better articulation of skills gained in higher education
- Upskilling, reskilling and lifelong learning policies

Demand side: supporting a shift to “skills focus” in career guidance

- Improving match of students and programmes
- Improving communication between employers, education providers and learners on skills needed for different occupations
- Building motivation to take up programmes in areas of skill need

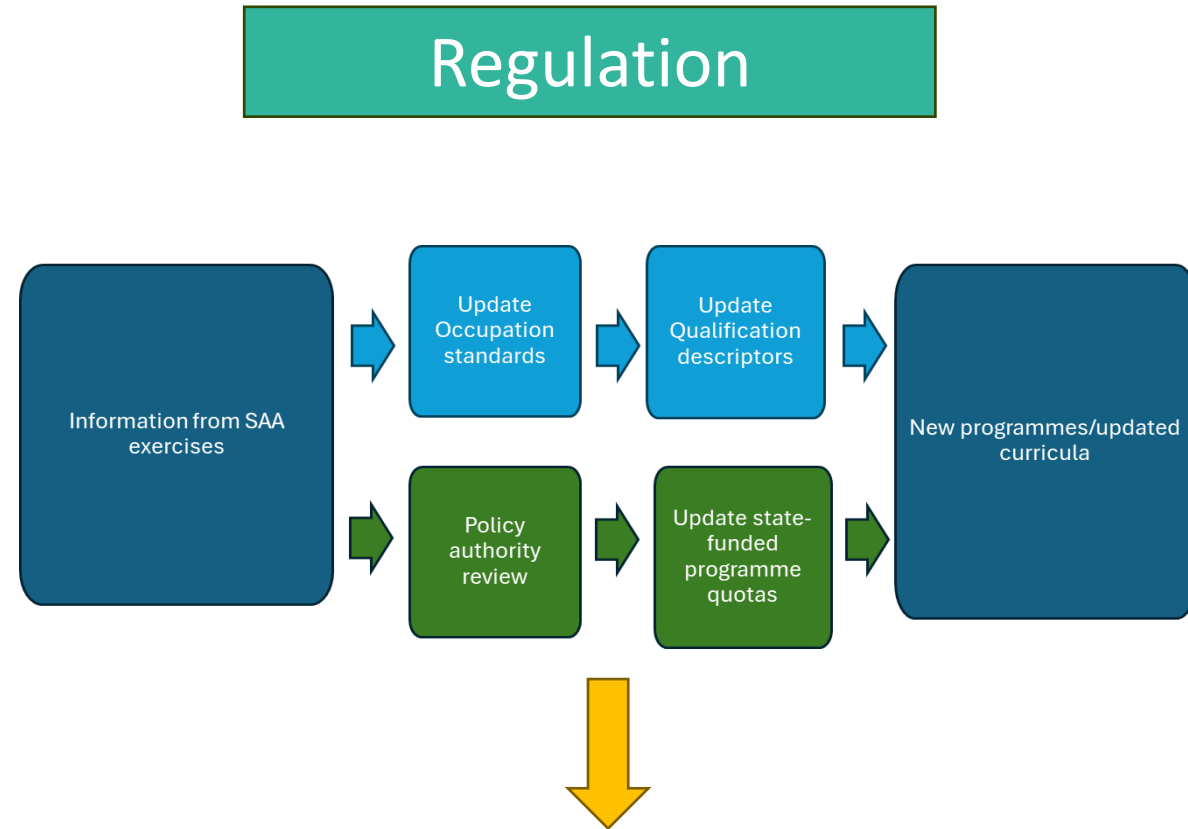
Need to assess uncertainty and take it seriously

- Long-term forecasting models are complex and less effective at predicting significant structural changes to labour markets. Predictions can be very sensitive to parameter changes.
- Those governing and using skills intelligence should understand the sensitivity and uncertainty of outputs. Cross-validation of results is vital.



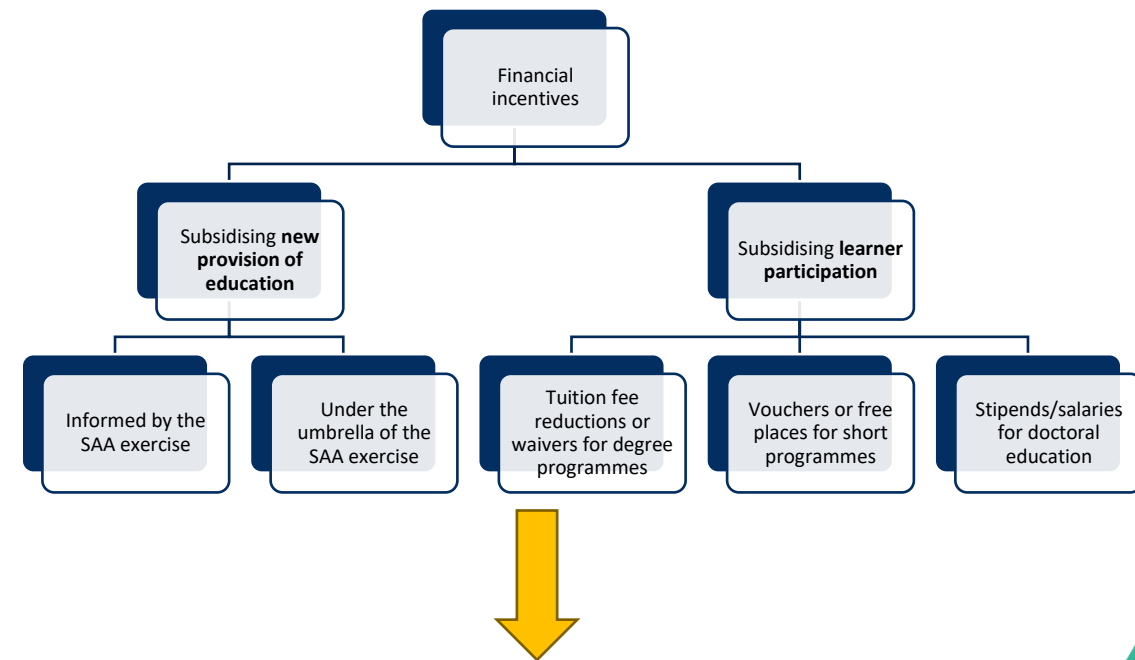
Regulatory and financial policy levers to support use of skills intelligence

Regulation



In **Estonia**, a single body (Kutsekoda) is responsible for developing occupational standards, qualifications and assessments of occupational competence, for all levels of publicly funded education and training.

Funding



The Human Capital Initiative in **Ireland** takes a three-pillar approach to addressing skills needs and future proofing graduates, with each pillar focusing on a different aspect of skills demand



What does the future look like?

- AI- powered and AI-assisted skills intelligence approaches
 - Balancing efficiency and granularity with transparency and interpretability
- More emphasis on skills from higher education policymakers, institutions and employers
 - How effective will the “skills-first” approach be in addressing mismatch?
- Curriculum crowding and constrained resources
 - How to prioritise among competing demands for skills cultivation?
- Will higher education institutions lose ground to other providers?

Thank you!
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