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Istituto Regionale
Programmazione
Economica
della Toscana

Bridging Skills and Jobs: How ITS Academies Align Tertiary Education with Local Labour Demand

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Fourth International Conference of Scuola Democratica

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What are ITS Academies?

ITS Academies are the Italian non-university tertiary vocational education pathway.

They were introduced in 2010 and strengthened by the 2022 reform

There are 10 ITS in Tuscany

- They provide **higher technical education** for upper-secondary school graduates, through **two-year** programmes.
- They are organised as **foundations** bringing together schools, firms, universities, training institutions and local actors.
- Programmes are designed around the **skills needs** of specific technological sectors.
- Their **educational model** combines classroom teaching, laboratories, industry professionals and extensive work-based learning.

Overview of the research

Objective of the study: to analyse the relationship between ITS Academy and the productive system, focusing on the role played by firms in governance, curriculum design, teaching activities and work-based learning.

Methodology:

- **Quantitative analysis**, based on *INDIRE* data on firms' participation in ITS governance structures, teaching activities delivered by professionals and company representatives, extra-classroom activities (internships, laboratories, company visits)
- **Qualitative analysis**, based on *10 focus groups* involving stakeholders from different ITS: schools, universities, firms, business associations, top management and staff of the Foundations.

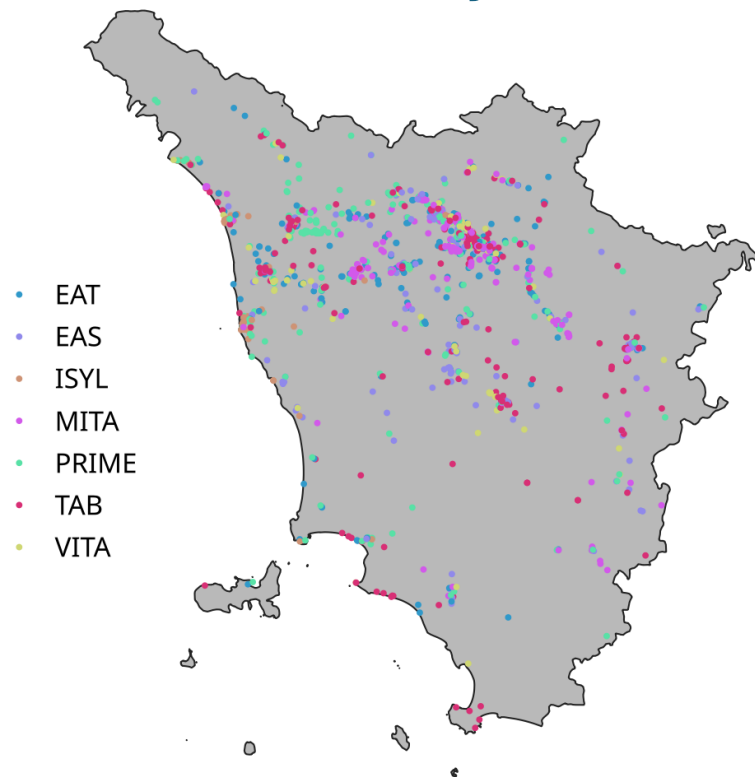
Quantitative analysis



A broad and solid network of firms (1)

- Around **200 firms** are **members** of ITS Foundations and play a key role in the governance of most Tuscan ITS.
- About **1,000 host firms** were involved in internships over the period 2021–2023, representing the main regional production chains and widely distributed across the territory.
- Firms also played a **decisive role in the creation** of more than half of Tuscan ITS Foundations through bottom-up initiatives.

Host firms, by ITS



*Note: data refer only to ITS courses completed by 2023
Source: INDIRE data*

A broad and solid network of firms (2)

	Partner firms	Host firms	Total Tuscan firms
Firms in corporate groups	72%	52%	9%
Export-oriented firms	46%	42%	5%
Average number of employees	295	97	3.4

The firms gravitating around ITS represent the **most structured and dynamic segment of the regional economy**: medium and large companies, often part of corporate groups and strongly export-oriented.

Note: data refer only to ITS courses completed by 2023 and to firms operating in Tuscany
Source: INDIRE data

Qualitative analysis



Strengths: a joint curriculum design

- **Structured surveys.** Skills needs are identified through formal tools (firm surveys, technical committees, sectoral analyses). Courses are designed to address recurrent and cross-cutting needs of each sector.
- **Ongoing informal dialogue with firms.** Curriculum design also relies on continuous interaction with companies, which signal emerging needs and contribute to constant updating of contents.
- **Courses designed on demand.** Some programmes are developed in response to specific requests from a single firm or a network of firms, which define required skills and modules and often contribute directly through teaching staff and laboratories.

Strengths : teaching by labour market professionals

- Teaching activities delivered by industry professionals are **crucial** to the success of ITS programmes.
- National regulation raised the minimum share of external teachers from 50% to 60% in 2022 but all Tuscan ITS largely exceed this threshold, with a regional average of **78%**.
- Industry professionals play a **triple role**: they transmit not only technical and practical skills, but also the soft skills required for entering the workplace, they contribute to real-time curriculum updating and they often pre-select future interns, acting as a bridge between training and employment.

Strengths : well-targeted internships

- Internships are the core of practical training and are organized in a **highly tailored way**, aiming at the best possible match between student and firm.
- **From the students' perspective:** 84% undertake a single internship experience and 16% follow a mix of internship experiences (mainly in ITS with networks dominated by SMEs).
- **From the firms' perspective**, three main models emerge: high-intensity and continuous involvement, medium-intensity and continuous involvement, lower-intensity and more discontinuous involvement. Firm involvement is strongly correlated with company size and, partly, with their role as ITS partners.

A successful model under structural constraints

- ITS Academies are still **poorly known among students, families and upper-secondary teachers**.
- ITS Academies still occupy a relatively **uncertain position within the Italian education system**, with weak connections to schools, universities and other education pathways.
- **Short-term funding** cycles and complex administrative procedures limit medium-term planning and organisational consolidation.
- The model requires **a high level of organisational effort**, relying on continuous coordination, individual tutoring, close relationships with companies and tailored student–company matching. These activities are difficult to extend to a much larger number of courses.

Conclusions (1)

- **ITS Academy system works:** according to INDIRE monitoring, 84% of ITS graduates in Tuscany are employed 12 months after graduation; for 89% of them, the job is coherent with their field of study.
- Its success is grounded on **four key elements**:
 1. the participation of a broad and solid network of firms
 2. joint curriculum design between ITS and companies
 3. a high share of teaching delivered by labour market professionals
 4. well-targeted curricular internships

Conclusions (2)

- **The quantitative gap:** while ITS effectively reduce the qualitative mismatch between labour demand and supply, a quantitative gap remains: demand for technicians largely exceeds the number of ITS graduates, according to both quantitative evidence and stakeholder perceptions.
- **Scaling up the model:** bridging this gap requires stable funding, stronger integration within the tertiary education system, and broader cultural recognition of ITS Academies as a high-quality alternative to university.



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