

Reforming Secondary Vocational Education through International Best Practices: Lessons from Six Countries

Research Overview

This comparative study examines effective Vocational Education and Training (VET) practices in South Korea, China, Japan, Brazil, France, and Russia. It identifies key mechanisms in applicant attraction, instructional design, extracurricular engagement, and competency assessment to develop a strategic framework for countries modernizing their VET systems.

Purpose of Study

The purpose of this study is to describe international experience and identify those elements that can be adapted within VET systems seeking modernization—originally with Moscow's VET system as the concrete pilot context. Understanding global trends and successful cases makes it possible to formulate flexible, forward-looking strategies for VET development that respond to contemporary global challenges.

The study concentrates on four activity areas: (1) attraction of applicants, (2) instructional activities, (3) extracurricular activities, and (4) assessment practices. The urgency of transformation in these areas is emphasized by recent international evidence. OECD finds that 24% of young VET graduates work in green-driven jobs, while those in high-emission sectors risk displacement without reskilling (Kuczera, 2025). The OECD Skills Outlook report emphasizes the importance of broadening learning access and matching skills to jobs through agile governance and portable credentials (OECD, 2025). In the Russian context, HSE University shows that only 57% of Russian qualified worker graduates work in their field, and under 5% of instructors have recent industry experience (Shugal et al., 2022). These indicators point to persistent misalignment between VET training and labour-market demands.

This study offers a resource for education policymakers, leaders, business representatives, and experts interested in building sustainable systems for preparing skilled workers for the future.

Research Methods

The study employs a comparative case-study design, drawing on document analysis of national qualification frameworks, legislation, institutional reports, and policy documents from the six selected countries. These countries were selected for two reasons: (1) representation of different nations and continents, (2) continuous improving performance in the WorldSkills student competitions. A structured analytical matrix guides the comparison across the four activity pillars (attraction of applicants, instructional activities, extracurricular activities, and assessment practices), examining the roles of employers, state agencies, and digital technologies.

Results and Discussion

High-performing VET systems share common principles: deep labour-market integration, national competency standards, a pronounced practice orientation, high employer

involvement, rigorous quality control, digital transformation, and flexible learning pathways. Yet each country contributes distinctive solutions across the four examined areas.

For attracting applicants, Korea's Meister High Schools and China's order-based classes demonstrate how guaranteed employment make vocational tracks aspirational. Japan's career passport underscores the value of sustained career education from early schooling. Russia uses interactive career tests, employer-led 'Days of Profession,' and school-college-enterprise partnerships. These experiences point toward creating elite branded institutions, and embedding immersive career programs throughout education.

In instructional activities, Brazil's WorldSkills-aligned project-based learning, France's differentiated final-year tracks, and China's AI-powered smart campuses combine real production tasks with modular, digitally enhanced curricula. Russia's colleges employ individual and group projects, and micro-modules. Shanghai's industry–education consortia offer a replicable model for pooling resources among colleges, universities, and enterprises.

Extracurricular activities serve developmental purposes: Korean school clubs and mentorship cultivate soft skills and cohesion, while Brazilian extension projects and Chinese student technoparks turn extracurricular time into innovation hubs. Russia engages students through professional championships, and employer-led case competitions.

Assessment is shifting toward independent, employer-led evaluation. Korea's industry-linked qualifications, France's profession-wide competitions with joint educator-professional juries, Japan's multi-tiered credentialing, and China's corporate certification models all move from diplomas to verified skills. Brazil's Re-Saber program certifying non-formally acquired competences pioneers social inclusion. Russia conducts demonstration exams with practical sessions and employer-involved commissions.

The evidence across all six countries demonstrates that adoption of isolated practices to modernize VET systems might not be sufficient. Instead, sustainable reform requires an integrated alignment of admissions, curriculum, student life, and assessment with labour-market signals. Based on the lessons drawn from these diverse national contexts, the study suggests 5 strategies for VET modernization:

1. Ideological rebranding of VET,
2. Financial incentives for industry partners,
3. Establishment of business and industry offices within colleges,
4. Digital infrastructure for learning and career tracking,
5. Systematic industry placements.

Keywords

VET, vocational education reform, comparative VET, evidence-based VET practices

References

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