



WorldSkills as a catalyst for system-level change

Executive summary on the analysis of the
Impact Statement Development Survey 2021

September 2024



Table of Contents

Overview	3
1. Survey findings	4
1.1 Macro-level: TVET, economies, and beyond.....	5
1.2 Meso-level: education stakeholders, employers, and industry sponsors	6
Education stakeholders	6
Industry employers and sponsors	6
1.3 Micro-level: Competitors and Experts/trainers	8
Competitors	8
Experts, teachers, and trainers.....	8
2. Gaps in understanding WorldSkills impacts	10
3. Insights from two Members	11
4. Summary	12
Acknowledgements	13



Overview

Since its inception in 1950, WorldSkills has been committed to improving and advancing vocational education and training. WorldSkills and its Members collaborate around the central asset of its biennial skills competitions. Together, WorldSkills and its Members work to raise the profile of skills among young people, develop global skills standards, conduct shared research, exchange best practices, and promote the value of skills for economic growth and personal success. WorldSkills has identified three broad strategic goals as part of WorldSkills Vision 2025, specifically to:

1. Raise ambition and opportunity in TVET for young people, employers, and societies;
2. Enhance the quality of TVET provision through stronger connections to labor markets, employers, and economies; and
3. Help build the organizational capability of WorldSkills and the global competitiveness of its Members through skills.

Given the WorldSkills Vision and its strategic goals for 2025, it is vital to understand and identify the potential indicators and gaps in how WorldSkills enables Members to make system-level changes. In 2021, WorldSkills Member countries and regions participated in the *Impact Statement Development Survey 2021*. Fifty Members participated in the survey. The completion rate for questions in the section on WorldSkills impact varied between 58% and 92%, with an average of 78.5%. This summary presents findings from the survey responses on how WorldSkills, as a leading global organization driving skills excellence, utilizes WorldSkills to affect changes at the individual, institutional, and systemic levels.

The analysis of survey responses shows that micro-level changes and impacts have occurred among Member countries and regions, with significant potential to extend these impacts to drive changes at the meso- and macro-levels. Two follow-up interviews helped us to elaborate understanding of the higher-level impacts of WorldSkills, and the potential for WorldSkills to create a skills-led ecosystem to achieve more comprehensive and systemic changes. Direct quotes from Members' responses were edited to highlight key messages and ensure anonymity.

This executive summary consists of four sections: findings from the *Impact Statement Development Survey 2021*, identification of gaps in understanding WorldSkills potential impacts, insights from interviews with two Members, and concluding remarks. More detail is provided in the full report.



1. Survey findings

Using a structured analytical framework, macro-level system changes, meso-level impacts on Technical and Vocational Education and Training (TVET) schools and industry, and micro-level effects on Competitors and Experts, trainers, and teachers participating in WorldSkills were identified (see Figure 1).

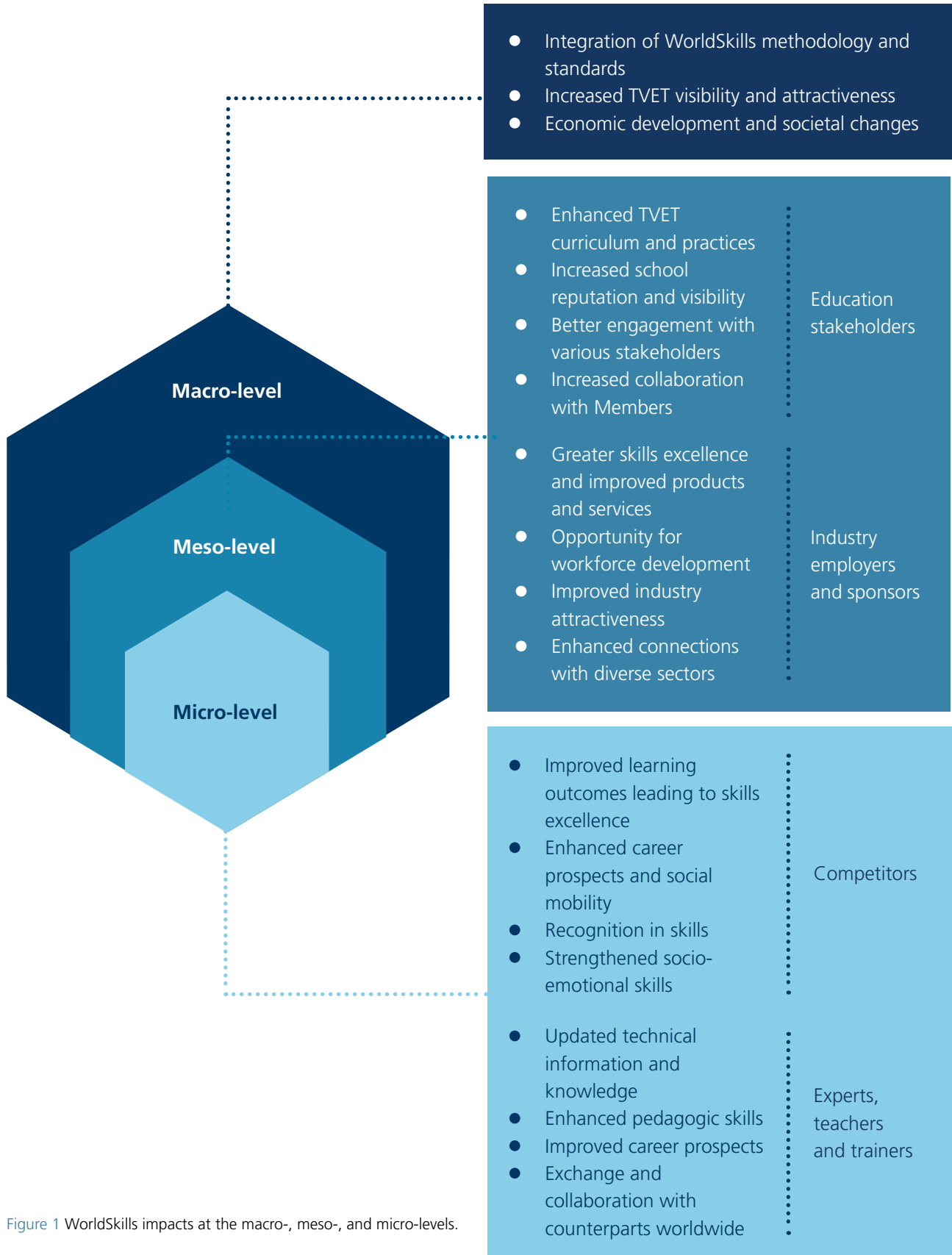


Figure 1 WorldSkills impacts at the macro-, meso-, and micro-levels.

1.1 Macro-level: TVET, economies, and beyond

Potential macro-level impacts include TVET system improvements, the increased attractiveness of TVET, and economic and societal changes within Member countries and regions. Although there were no specific questions on macro-level impacts, responses to other questions suggest these impacts can occur. However, tracking and measuring these impacts remain challenging, obscuring potential positive outcomes.

Integration of WorldSkills methodology and standards into the national system and improved TVET systems. Most Members reported positive impacts on their TVET systems from WorldSkills involvement. Data from a few Members (e.g., Costa Rica and the United Kingdom) suggest an unarticulated concept of “WorldSkills methodologies” used to enhance TVET systems. These methodologies likely include international standards, skills competitions, and best practices integration. While the definition or perception of “WorldSkills methodologies” remains unclear, further research would elucidate Members’ perceptions and applications of these methodologies:

Costa Rica:

[...] WorldSkills enables the appropriation of good practices, the transfer of knowledge, obtaining inputs for the implementation of methodologies, the application of tools for the diagnosis and integral quality control, the continuous improvement of TVET and its development under principles of flexibility, adaptability, and relevance.

UK:

[...] Benchmark education systems and training methodologies to raise standards of education, teaching, and training in the UK.

Increased TVET visibility and attractiveness.

Competitors, Experts, teachers, and trainers highlighted increased pride and recognition in skills. Educational stakeholders and industries reported increased attractiveness and visibility of skills and industries. At least 24 out of 50 Members (48%) have reported positive changes in their society’s perception of TVET, with exposure to WorldSkills inspiring the younger generation to pursue a life trajectory centered around skills:

China:

[...] Improve the social attention of the skilled people, by using the WorldSkills Competition as a platform to increase publicity.

Economic development and societal changes.

WorldSkills Vision 2025 aims to drive economic growth and societal changes. Even so, few Members linked TVET development to this vision as a top benefit of WorldSkills membership. This suggests challenges in linking an organization’s vision to macro-level planning for integrating TVET into a system-wide approach. Some of the identified challenges include limited data, budget constraints, difficulty linking TVET to economic growth, and insufficient expertise for assessments.



1.2 Meso-level: education stakeholders, employers, and industry sponsors

Potential meso-level impacts include benefits for schools, colleges, and industry sponsors involved in skills competitions and WorldSkills. Most respondents (82%, N=41) reported positive outcomes for these stakeholders. It would seem that meso-level impacts may influence changes at macro- and micro-levels, though explicit data is scarce.

Education stakeholders

74%

37 Members reported that WorldSkills involvement has greatly enhanced teaching and learning in schools and colleges, serving as a catalyst for broader TVET improvements and empowering institutions to drive systemic changes.

Enhanced TVET curriculum and practices.

Participation in WorldSkills offers crucial guidance for education stakeholders, including advancements in curriculum, updates in skills training, and enhancements in pedagogical practices, infrastructure, and programme design. These contributions benefit schools and colleges and potentially the broader TVET systems:

Malaysia:

1. Update the curriculum standard according to the international standard that is applied in WorldSkills Competitions. 2. Upgrade the institution with training equipment and materials that comply with international industry standards. [...]

Increased school reputation and visibility.

WorldSkills participation enhanced TVET's attractiveness and visibility, bringing recognition and status to schools. Some Members noted increased visibility and student enrollment as a result:

Spain:

[...] Help them gain prestige, promote their VET studies, and attract more students.

Better engagement with various stakeholders and increased collaboration with Members.

Participation in WorldSkills enhances stakeholder engagement and collaboration among schools, industries, and policymakers, driving systemic TVET changes. Members noted improved international networks and skill advancement:

China:

[...] Leading by the WorldSkills Competitions standards to better promote school-enterprise cooperation and international cooperation through transforming WorldSkills Competitions skills into training contents, developing technical standards for industry enterprises, and promoting international cooperation and training.

From the data it is evident that the impact of these engagements and collaborations are limited, requiring more detailed stories for clarity.

Industry employers and sponsors

72%

36 Members reported that WorldSkills boosted industry skills excellence, workforce development, visibility, and connection with other sectors.

Greater skills excellence and improved products and services. Involvement in skills competitions has created a unique space for low-stakes opportunities to train staff and enhance organizational skills development. Exposure to cutting-edge skills, techniques, tools, and knowledge also enables employers to update their products and services. Members reported that WorldSkills helped advance excellence in skills and standards in the workforce:

Malaysia:

[...] The number of skilled/best-performance workforce increased in the job market. [...] It will benefit the industry by increasing their productivity and quality.

Opportunity for workforce development. Skills competitions offer employers valuable opportunities for marketing, talent recruitment, and workforce development. They enhance branding, attract apprentices, upskill employees, and foster loyalty through national and international competitions. These initiatives boost competitiveness and support long-term growth by keeping the workforce adaptable to industry demands:

Korea:

Benefits for selecting and hiring skilled technicians and improving their performance.

Improved industry attractiveness and connections with diverse sectors. Members reported that skills competitions enhance the attractiveness of skills and industries, improve the image of traditional sectors, and attract young talent. They noted that WorldSkills fosters connections between industries, students, TVET institutions, and policymakers, driving partnerships and collaborations.

Belgium:

Increasing the reputation and strengthening the dynamic image of the institution or company. Highlighting and attracting people to professions that are often in short supply. Inspiring testimonials from young talents, and ambassadors of their profession.

Croatia:

[...] more direct links with VET providers, etc.

More research is required to understand the details of these connections and collaborations, and how they contribute to more profound impacts.



1.3 Micro-level: Competitors, Experts, teachers, and trainers

Micro-level data on Competitors, Experts, teachers, and trainers is the most extensive, with 44 out of 50 respondents (88%) noting positive changes. The wealth of data and stories facilitates easier tracking, measurement, and reporting of these impacts.



Improved learning outcomes leading to skills excellence. The main benefit identified was improved learning outcomes from WorldSkills preparation and participation. Competitors gained deep understanding, ongoing learning, and exceeded international standards, as highlighted in nearly all submitted stories. To illustrate,

Ghana:

- 1. Understanding of how to carry on the skills they competed in.*
- 2. Surprised about the level of competency needed to carry out tasks during competition and wish similar tasks were taught in schools [...]*

Enhanced career prospects and social mobility.

Participation in WorldSkills Competitions notably enhanced Competitors' career prospects, with 32 out of 50 respondents (64%) reporting that their Competitors quickly secured desirable jobs with top employers in their fields. Such career progression boosts social mobility, potentially transforming their life trajectories.

China:

[a gold medalist in car painting] came from a poor family and learned skills [...] He not only changed his family's situation but also became a teacher at [a prestigious technical institute in China], embarking on the career path of training skilled talents.

Skills recognition and strengthened socio-emotional skills.

Competitors thrive on respect and recognition, with the international Competition offering authoritative validation that boosts their professional significance and well-being. They develop confidence, motivation, and socio-emotional skills like resilience and adaptability. Nineteen Members reported significant growth in these areas for their Competitors. For example,

South Tyrol, Italy:

[...] The competition showed [a Competitor] that it is not only skill that matters but also mental strength, endurance, and teamwork – qualities that are indispensable [...]

Korea:

Personal competency improvement, having high self-esteem, and pride in the skills.



Updated technical information and knowledge, and enhanced pedagogic skills.

Members reported that Experts, teachers, and trainers gained valuable knowledge, insights, and skills from WorldSkills, including advanced technologies and methodologies, which help refine local TVET systems. According to 27 respondents (54%), these enhanced skills improve pedagogic and mentoring capabilities, driving advancements in TVET. This could be a key mechanism for positively impacting students, institutions, and systems overall:

Chinese Taipei:

Experts, teachers, and trainers bring home the best practices of WorldSkills Competitions into VET education, bridging the gap of VET at the global level.

United Kingdom:

[...] Teachers and trainers gain enhanced teaching practice and play an influential role in developing young people's skills with exposure to world-class insights, access to techniques in skills development, and new approaches to standard setting and assessment.

Improved career prospects. Experts, teachers, and trainers, like Competitors, have also benefited significantly from WorldSkills, advancing their careers and securing prominent positions within their industries:

Finland:

Many of the Finnish experts have advanced in their careers and/or in their WorldSkills competition career after participating in competitions.

However, further validation is needed to establish the direct correlation between their career progression and WorldSkills participation.

Exchange and collaboration with counterparts worldwide.

Members reported that WorldSkills involvement fostered regional and international collaboration among Experts, teachers and trainers, promoting best practice exchanges. This involvement has the potential to significantly impact TVET at various levels in an educational system:

Spain:

[...] Enhance education internationalization through innovative and practical collaboration with worldwide Experts. Promotes the exchange of good practices and cooperation with other institutions and enterprises.



2. Gaps in understanding WorldSkills impacts

The analysis highlights instances where Member countries and regions have identified potential impacts at various levels. It has also revealed gaps in the survey data that limit a comprehensive understanding of how WorldSkills drives system-level changes. These gaps provide an incentive to conduct further research to fully understand the possibility that WorldSkills holds for mobilizing system-level change.

WorldSkills vision and alignment with system-level impacts. The survey suggests a potential misalignment between WorldSkills vision and its Members' survey responses. WorldSkills vision is to foster a global skills movement. However, the data indicates gaps in systematically evaluating WorldSkills impacts, particularly at the meso- and macro-levels. The limited data provided on higher-level impacts implies that WorldSkills International's ambition for a global skills movement may not be fully embraced by its Members due to limitations in capacity, resources, and differing national priorities. While detailed individual-level data is available, revealing significant impacts on Competitors, Experts, teachers, and trainers, there is less clarity on how these translate into broader systemic changes. There appears a hindrance for many Members to assess the impacts of WorldSkills participation comprehensively. In turn, a hampered understanding of how WorldSkills drives productivity, innovation, economic development, and societal changes is apparent.

Lack of integration and system-level understanding. The survey's design, which separates impacts at different levels, has unintentionally created a disconnect between micro-, meso-, and macro-level data. This isolation obscures the dynamic interactions and systemic impacts of WorldSkills participation. The lack of integration between these levels limits the ability to see how individual, institutional, and systemic impacts mutually enhance each other. There is a need for more contextualized data to connect these diverse responses and provide a holistic view of WorldSkills impact on driving systemic changes.

Variability in progress among Members.

The analysis indicates that Member countries and regions are progressing at different rates in integrating WorldSkills methodologies into their national systems. This variability, influenced by local factors, affects the extent of integration and impact. Understanding the current status of Members and the factors influencing successful integration is crucial for evaluating the overall effectiveness of WorldSkills in driving system-level changes.

Overall, the survey data underscores the need for further exploration into the broader impacts of WorldSkills, improved integration of methodologies across levels, and a deeper understanding of the varying progress among Members.



3. Insights from two WorldSkills Members

Having identified what was missing in the survey data and the key misalignment, the research team conducted follow-up interviews with two Members – Skills Finland and WorldSkills UK. These Members were selected due to the research team’s familiarity with their work within their respective countries and to demonstrate their strategic intent of how Members use membership to contribute to broader impacts. The interviews highlight WorldSkills positive meso- and macro-level impacts, illustrating interconnected benefits across all levels. The interviews also emphasized the need to strengthen Members’ shared vision to drive system-level changes nationally and internationally.

Promising impacts at the meso- and macro-levels. Interviews with WorldSkills UK and Skills Finland reveal how WorldSkills contributes to higher-level impacts in TVET systems. WorldSkills UK’s Centre of Excellence, for example, has provided world-class training, benefitting 2,000 educators and 37,500 learners with a 97% quality rating in the past three years. Their efforts drive productivity, innovation, and economic growth, with a reported ROI of £2.40 to £4.50 per pound invested. This also supports UK’s shift towards a skills-led economy focusing on net-zero, digital skills, and advanced manufacturing. Additionally, WorldSkills UK emphasizes equity and diversity, aiming to engage underrepresented groups in the skills movement. Despite these benefits, tracking macro-level impacts remains challenging due to their indirect and long-term nature.



Interactions across impact levels: creating a dynamic and impacting ecosystem. Participation in WorldSkills enhances workforce skills, empowers individuals, updates curricula, boosts productivity and innovation, and fosters collaboration. These benefits are interconnected, reinforcing each other across micro-, meso-, and macro-levels. WorldSkills UK and Skills Finland exemplify the importance of having a Theory of Change to drive systemic improvements. WorldSkills UK’s approach aligns skills competition objectives with national priorities, such as net-zero, digital skills, and advanced manufacturing, creating a cohesive strategy that meets evolving skill demands. Finland’s Ministry of Education and Culture has set strategic objectives for the development of digitalization, sustainability, and continuous learning. These topics have also been included in the objectives of the competition in Finland, and they are promoted through the competition activities. Their model ensures that skills development is directly relevant to economic and societal needs, fostering a sustainable TVET system. These frameworks are crucial for operationalizing and nurturing comprehensive impacts, highlighting the need for dynamic, collaborative ecosystems.

Strategic planning and ambition to foster endless possibilities and system-level changes. While not all Members are able or choose to fully embrace the WorldSkills mission to drive systemic changes, WorldSkills UK and Skills Finland strive to utilize their involvement with skills excellence as a catalyst to improve their TVET systems and create a future-oriented workforce and economy at the strategic level. They have developed their Theory of Change that aligns TVET development with national priorities and future economies and jobs. These examples underscore the urgency and importance for WorldSkills to strengthen and emphasize the collective ambition shared among its Members to drive system-level changes nationally and internationally.



4. Summary

The *Impact Statement Development Survey 2021* and follow-up interviews reveal positive impacts from participating in WorldSkills, particularly at the micro-level among Member countries and regions. These findings suggest potential for extending these impacts to meso- and macro-levels. However, future research would be required to fully comprehend WorldSkills potential on higher-level impacts.

Follow-up interviews with Skills Finland and WorldSkills UK showcase the potential for creating a skills-led ecosystem for systemic changes. These Members align strategies to develop local TVET systems with WorldSkills methodologies and national priorities, engaging stakeholders cohesively. Their structured approach enables better outcome tracking and strategy adjustments. Based on insights from the survey analysis and interviews with two Members, a few key takeaways can be summarized:

- Engaging various stakeholders at different levels to promote higher-level positive impacts is imperative;
- Enhancing strategic planning and ambition to drive systemic changes is fundamental for change;
- Developing a Theory of Change that addresses local challenges and needs in TVET development, economic growth, and societal transformation is essential; and
- Prioritizing impact research to assess effectiveness and inform decisions is crucial for sustainable TVET development.

In conclusion, this report highlights the potential for systemic changes from WorldSkills membership and involvement. While not without its challenges, the potential for Members to learn from each other to create dynamic, impactful ecosystems that address education, industry, economy, and societal needs offers many opportunities.



End note

It is important to note that WorldSkills and its partners on the WorldSkills Global Research Council acknowledge that [Russia](#) and [Belarus](#) are suspended Members since 2022 due to a clear and significant breach of WorldSkills Code of Ethics and Conduct, following the invasion of Ukraine by Russia. WorldSkills is politically and denominationally neutral. It stands in solidarity with the people of Ukraine. The inclusion in this report of references from WorldSkills Russia and WorldSkills Belarus, and any relevant materials, are based solely on historical data from *the WorldSkills Impact Statement Development Survey* which took place in 2021. The sole purpose of this survey and data was to establish a holistic approach for recognizing the positive progress and potential impact of WorldSkills globally, and this includes the qualitative and quantitative data supplied by WorldSkills Russia and WorldSkills Belarus at the time. To maintain the academic methodological integrity of this research, this data has been included, while being explicit that WorldSkills Russia and WorldSkills Belarus are now suspended Members. For the avoidance of doubt, the inclusion of this data does not in any way or form represent any endorsement of Russia or Belarus today by WorldSkills.

Acknowledgements

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This report is jointly produced in collaboration with members from the WorldSkills Global Research Council and support from WorldSkills International Secretariat, including:

- Neil Bentley-Gockmann – WorldSkills Honorary Member, CEO of Whitehall & Industry Group
- Susan James Relly – Head, School of Education, University of Adelaide
- Thomas Mayr – Managing Director, ibw Austria - Research & Development in VET
- Kenny Muscat – Project Manager, UNESCO-UNEVOC
- Olga Strietska-Illina – Team Lead, Skills for the Future of Work, ILO
- Iván Bornacelly – Policy Analyst, OECD
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