

SKILLMAN FLORENCE DECLARATION

TVET FOR GREEN, SUSTAINABLE AND INCLUSIVE DEVELOPMENT IN RESPONSE TO THE FOURTH INDUSTRIAL REVOLUTION, THE EMERGING NEEDS OF INDUSTRY 4.0 AND ETHICAL CONSIDERATIONS

ARISING OUT OF, AND ENDORSED BY, PARTICIPANTS AT THE SIF 2019 SKILLMAN INTERNATIONAL FORUM, 10 AND 11 OCTOBER 2019 IN FLORENCE, ITALY

PREAMBLE

We, the participants gathered in Florence, Italy, on the occasion of the SIF 2019 Skillman International Forum, express our gratitude to, and acknowledge the intellectual leadership of the Secretariat of the worldwide Skillman Network, for convening this Meeting, in partnership with several organisations*, and with co-funding from the Erasmus+ Programme of the European Union.

In advancing the contribution of TVET and applied learning to green, sustainable and inclusive development, in response to the Fourth Industrial Revolution, the emerging needs of Industry 4.0 and the increasing importance of ethical issues, both at the national and at international levels, we especially recognize the necessity of developing and implementing sustainable partnerships between all levels of government, members of civil society, and policy makers, researchers, and practitioners in the area of skills development for employability. We hereby propose this ‘Skillman Florence Declaration on Sustainable and Inclusive Development in Response to the Fourth Industrial Revolution, the Emerging Needs of Industry 4.0 and Ethical Considerations’.

The ideas presented in this Skillman Florence Declaration are the consensus views of those participating in the SIF 2019 Skillman International Forum and not necessarily those of the host organisation and its partners nor of the organisations represented by the participants.

We recognize the important advances that have been made in skills development for employability (TVET), particularly over the past decade, by the national and international community, at all levels, in working toward internationally agreed development goals.

We are inspired by the wide national and international commitment that exists in broad support of the Sustainable Development Goals (SDGs), which are catalysing partnerships worldwide to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

We acknowledge that there are major changes – megatrends – affecting global and national economies and societies that have profound implications for the world of work and TVET; and that green skills and transferable skills are the foundation of human capital.

We believe there is a great need to rethink in fundamental ways what is required of TVET to meet workforce and wider societal concerns, to such an extent that there is a need to seriously consider ‘re-engineering TVET for change’, and for a ‘holistic approach to TVET’ to be adopted, which includes an ethical dimension.

We are firmly convinced that education is the key to sustainable and inclusive human progress, and to a world characterized by harmony among peoples, and respect for the natural resources of Earth, upon which social and economic development depends.

We value SDG4 on Education which seeks to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. We also note the significant role of education in the strategies for meeting the targets in all the other SDGs.

We are committed to the Education 2030 Framework for Action, which provides guidance on achieving all the targets in SDG Goal 4. Target 4.4 which requires that TVET address economic, social and environmental well-being by:

- Developing the skills youth and adults need for employment, decent work and entrepreneurship;
- Promoting equitable, inclusive and sustainable economic progress; and
- Supporting transitions to green economics and environmental sustainability.

We celebrate the successes and impacts of the United Nations Decade of Education for Sustainable Development. These achievements illustrate the power and potential of education to empower learners at all levels and in all forms of education, including TVET in both formal and informal sectors, by “developing knowledge, skills, attitudes, competencies and values required for addressing global citizenship and local contextual challenges of the present and the future” (Aichi-Nagoya Declaration on Education for Sustainable Development 2014)

We strongly endorse the 2015 UNESCO Recommendations on TVET, which are based upon a vision of TVET as contributing to

“sustainable development by empowering individuals, organizations, enterprises and communities, and by fostering employment, decent work and lifelong learning, so as to promote inclusive and sustainable economic growth and competitiveness, social equity and environmental sustainability”.

We strongly believe that to be most effective, policy making and practice need to pay particular attention to exploring:

- **CoVEs** – how to best think about, analyse and support the development of this new forefront model as a possible solution for achieving most effective collaboration amongst **TVET** providers, policy makers, companies, researchers and relevant others.
- **Curricula development** – how curriculum development processes can be strengthened and upgraded to be most effective, and in line with, meeting the changing skills needs of the 4th industrial revolution.
- **4.0 learning environments** – how to best understand and support the transformation of working environments to efficient and supportive learning environments to develop learning ecosystems which are addressed to continued lifelong learning, innovation and skills improvement.
- **Mobility for learning** – to effectively explore what are the key factors of the mobility for learning experience that can be studied, improved and finally elevated to the level of ‘methodological standards’ necessary to ensure a universal across-country approach to ethics in TVET.

We also strongly believe that if skills development for employability is to be able to meet its full potential, to assist countries reach their economic and social development goals, then it is essential that policy making and practice be *research based*. If this is to be achieved then all partners need to work together to ensure that the quality and relevance of TVET research be enhanced through a seamless relationship occurring between practitioners, researchers and policy makers, by proffering a research agenda grounded in a collaborative approach to policy, research and practice with each informing and reinforcing the others.

TOWARDS AN EVIDENCE BASED AGENDA FOR TVET

Educational research is central to developing evidence-based policy- and decision-making. It is especially important if the aim of policy-makers is improving and strengthening educational practice and learning outcomes. This is just true for TVET, as it is for all other areas of education.

Research on TVET is an internationally established and widely recognised focus of educational research. A new international research agenda for TVET, however, is required in order to support the transformation of skills development to meet the focus and targets of SDG4.

We recognize that one size does not fit all and that different countries and regions will derive different priorities from this research agenda. We endorse this approach and welcome differentiated responses to this research agenda.

Thus, we endorse and recommend a **Research Agenda on TVET for Green, Sustainable and Inclusive Development in Response to the Fourth Industrial Revolution, the Emerging Needs of Industry 4.0 and Ethical Considerations** that seeks understandings and applications of questions such as:

- In the new global contest, what are the skills and capabilities required to thrive in the 21st Century and promote green, sustainable and inclusive development? Have these skills and capabilities found their way yet into teaching and learning in TVET? How can we make sure that TVET programs and providers are able to teach and transmit them?
- What are the drivers of change in favour of green, sustainable and inclusive development? What are the drivers of change towards the Fourth Industrial Revolution including matters such as the impact of technology and big data for good? What are the perspectives and voices of industry, youth, women, marginalized groups, people with disability and civil society on how TVET should respond to these changing global contexts, and to the needs of Industry 4.0?
- How might the philosophies and aims of TVET evolve in response to demands for green, sustainable and inclusive development?
- What TVET system reforms are needed to support program development and other changes to better position TVET as an enabler of green, sustainable and inclusive development? And how might the processes of curriculum reform keep up with the rate of change in the workplace today?

- How might we revise TVET programs and up-skill staff to support employability in a world seeking sustainable and inclusive development?
- How may pedagogy and assessment be reformed to support the development of skills for employability in a world of green, sustainable and inclusive development?
- How might the pre- and in-service education of TVET staff be reoriented to better support them as teachers, curriculum developers and researchers in such reforms? And how might the research capacity of TVET staff, institutions and systems be enhanced?
- How can such reforms within TVET be monitored, the processes influencing patterns and rates of progress be explained, and the impacts of the reorientation of TVET be evaluated?

We commit ourselves to this agenda and its goal of reorienting TVET for green, sustainable and inclusive development **in response to the Fourth Industrial Revolution, the emerging needs of Industry 4.0 and ethical considerations.**

We call upon our research, practitioner and policy colleagues to consider this Skillman Florence Declaration and commit themselves to action through:

- Contextualizing and modifying the TVET agenda to suit local contexts;
- Setting specific goals;
- Forming appropriate structures, enabling mechanisms and networks to develop, support and undertake priority evidence based research activities;
- Creating platforms for sharing experience; and
- Strengthening professional learning processes for ensuring the adoption of relevant and appropriate findings and policies.

We invite all supporters of TVET for green, sustainable and inclusive development to: a) widely disseminate and publicize this Declaration; b) advocate for its adaptation and adoption by governments and relevant international agencies; and c) to reconvene a further Skillman International Forum at an appropriate future date to review progress on the reorientation of TVET for green, sustainable and inclusive development.

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