

ACES Malaysia

Practical Recommendations

Introduction

This is a practical guide designed to provide a shared pathway and support to communities and institutions that are planning for a sustainable, resilient, and climate-change future. The practical recommendations are divided into two sections: one for the communities and another for educational institutions like schools and universities. The guide focuses mainly on sustainable practices that can be seen in three areas: environmental protection, social inclusion, and economic growth. The effects of these are intended to enlighten citizens about enhancing resilience, enhancing adaptation to environmental change, and risk mitigation.

The ACES practical guide explores lifelong learning from the perspective of primary school students, continuing through all educational levels into adulthood, encompassing both formal and informal learning. This could inspire schools and universities to give people a voice in sustainable decision-making.

UN Sustainable Development Goal linkages

The ACES model is most closely linked to the training and skills of teachers and educators, and youths supporting SDG 4.4 (skills for work). The STEMBucket programme supports the development of activities for youths and adults (teachers) who take part in our learning programme targeting SDG 4.7 (Education for Sustainable Development) and 12.8 (information for sustainable development and lifestyles in harmony with nature).

All the co-created resources and toolkits provide information on the key components of literacy that play a role in advancing SDG 4 and sustainable development. Specifically, it aims to ensure that by 2030, a substantial portion of both men and women, including all youth, will achieve literacy for resilience. Additionally, it meets SDG 10 for universal access to lifelong learning, which supports and promotes universal social, economic, and political inclusion.

General practical recommendation

- Action 1: Learning and educational opportunities.
- Action 2: Cultural participation and social inclusion.
- Action 3: External partnerships and collaborations.
- Action 4: Support research.

Practical and Policy Recommendations for Educational Institutions

1. Promoting the playful and frugal pedagogies as national educational policies coherent and comprehensible for teacher training (Action 1, 3).
 - a. Realigning and retraining transversal skills (HOTS, high demand 21st skills) through play and frugal, STEM+ educations (Action 1, 2).

2. Promoting activating methodologies that improve the quality of teachers' and students' training through playful and co-creation of programs and diversification of their motivation, according to students' expectations and current niche demands (Action 1).
 - a. Implement programs to ensure continuity in training programs (Action 3).
 - b. In agreement to gear up educational institutions to focus on transversal skills in resource efficiency that will emerge in the future (e.g. green economy) (Action 1, 3, 4).
3. Supporting teachers' lifelong development and transferable skills through platform-based training, mentoring, attachments, and internships in:
 - a. Methodologies that are playful, frugal and co-creation for inclusive learning in and outside classrooms (Action 1, 2).
 - b. Safe spaces for play can establish an encouraging and inclusive experiential learning environment that fosters social resilience and empathetic values by providing adequate resources and facilities for play-based learning (Action 1, 2).
 - c. Work collaboratively for future research projects and partnerships with industries and stakeholders, and universities (Action 2, 3).
 - d. Professional development training platform through Gamification Centre that serves as the hub for gamification and gamified learning activities and collaboration, spaces and co-creation of new educational resources and methodologies (Action 1, 3, 4).
4. Fostering educational research to address the development of IR5.0 skills to enable the creation of innovative solutions in response to the challenges and opportunities given in the future (Action 1, 3, 4).

Practical and Policy Recommendations for University Partnership

1. Collaborating in R&D with various universities (Action 1, 3, 4).
 - a. to build methodologies and contents using playful and co-creation methods.
 - b. to address the knowledge gaps and develop innovative solutions / learning pedagogies for creative teaching and learning.
 - c. to promote and better organise multiple training routes and continuous training for future academics.
2. Gearing up educational institutions to achieve institutional integration and policy coordination for an agreement among institutions to put more emphasis on transversal skills in resource efficiency than on the skills needed for particular jobs (Action 1, 4).
3. Fostering partnerships and collaboration with universities to promote community placements for students and graduates through co-participation, thereby enhancing their motivations and value diversification (Action 3, 4).
4. Developing partnerships with labs and research centres in communities to deliver HOT skills curricula using a playful and co-creation approach (Action 2, 3).