SHUTTLE
Sharing future learning enviroments

SHUTTLE Guidelines for Trainers

Transnational Report:
Part Four

1 Introduction

The SHUTTLE framework offers Higher Education (HE) educators a valuable tool for planning future learning scenarios and advancing digital and collaborative pedagogies (with a particular emphasis on generative AI).

It supports HE educators in designing pedagogical tasks and courses on transformational leadership, combining the dimensions of self-leadership, collaborative leadership, business leadership, intercultural leadership and digital leadership. Within these dimensions, SHUTTLE helps course designers, educators and students focus on key concepts that inform future learning environments, educational activities, learning scenarios, and tasks.

Educational activities following the SHUTTLE dimensions and concepts help create a collaborative learning environment where HE educators, students, and industry partners can work in teams to enhance their co-learning. By leveraging generative AI assisted digital technologies responsibly, creatively, and ethically, we can address human and social challenges in education and lifelong learning.
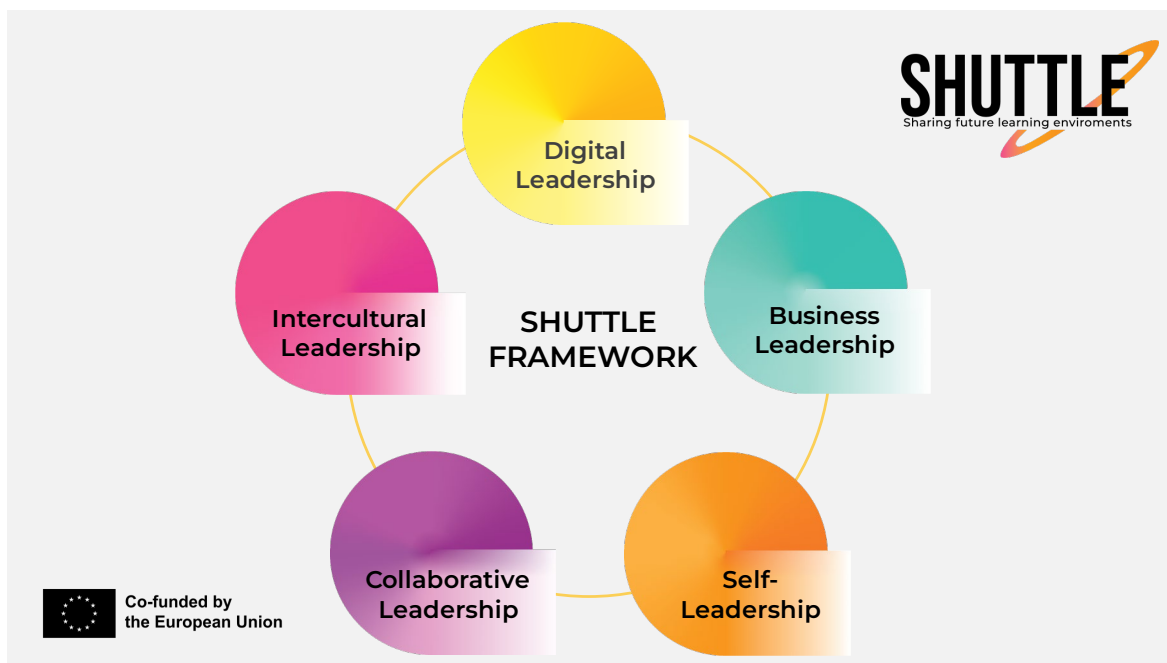

Fig. 1. The SHUTTLE Framework

2 Guidelines

Digital Leadership

- Familiarize yourself with AI-driven key digital tools, applications and platforms, content creation software and best pedagogical practices through hands-on professional training.
- Check the SHUTTLE Curated Open Educational Resources as an entry point into your personal journey of discovery.
- Regularly explore emerging trends in AI, digital transformation, and education technology.
- Create your own pool of tested resources and share them with other educators and trainers.
- Join a special group of interest or a community of learning to keep yourself updated.
- Experiment with AI-assisted lesson planning, explore how AI can help reduce your workload, and gain practical experience with AI tools and platforms.
- Critically evaluate and adapt content when you use generative AI to create engaging materials and to detect biases, hallucinations and inaccuracies.
- Design pedagogical scenarios that promote deep learning and higher-level cognition, social interaction, international collaboration and problem-solving.
- Stay informed about digital ethics, data privacy, and responsible AI use to ensure ethical integration of AI in teaching.
- Discuss with learners about digital ethics, AI limitations, responsible AI use, plagiarism detection, and ethical AI engagement.
- Encourage learners to shun unethical behaviour such as plagiarism and cheating by guiding them to acknowledge their use of AI for learning and be critical in their decisions and prompts.
- Align your pedagogical innovations with Education 5.0 principles, integrating technology with human-centered approaches, local knowledge, community needs, and the personal needs of learners.
- Incorporate online discussions, multimedia content, and AI-driven tools to enhance learning experiences.
- Encourage interdisciplinary approaches and collaboration with HE students, HE teachers and external stakeholders by incorporating AI applications across several subject areas relevant for local and global sustainable societies.
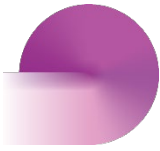
Collaborative Leadership

- Encourage the development of innovative ideas by collaborating across disciplines to co-create solutions for complex challenges.
- Integrate diverse perspectives and involve both academia and external stakeholders.
- Use real-world scenarios as the basis for problem solving.
- Structure collaboration through task-based activities and interdisciplinary projects that require interdependence.
- Organise students into teams where each has a clear role and each team needs another team to complete the task.
- Use close mentoring and reflection so that students are involved in deep learning.
- When organising students in teams encourage shared leadership; mutual trust, peer support based on diverse skills, accountability for task completion; and both individual and collective ownership of teamwork and tasks.
- Invite teams of students to communicate ideas clearly and effectively; listen attentively and actively to one another; give constructive feedback to peers and other teams; and adapt to diverse viewpoints.
- Create time for learners to analyse reflectively their own and others' behaviours and to find novel solutions for effective teamwork and/or aspects of it (such as time management, turn taking, responsibility sharing, leading the team, etc.).

Business Leadership

- To develop sustainable business leadership, discuss and share personal values, principles, and goals among all stakeholders.
- Support value alignment and shared visions and goals between all stakeholders to build commitment to sustainable development.
- Promote the co-creation of business models that aim to balance the needs related to people, profit, and the planet and are in line with the UN SDGs.
- Train learners to experiment with emerging digital tools and platforms to co-create new forms of connectivity, community building, customer journeys, and consumer paths.
- Build learning scenarios and inclusive learning spaces where learners engage in meaningful dialogue with stakeholders with an aim to create shared value.
- Train learners to avoid intrusive and overwhelming outbound communication made possible with digital channels and AI-generated digital content. Instead, develop skills for transparent and authentic stakeholder interaction that invites dialogue, critical

negotiation, and value co-creation.

- Train learners to measure business results in terms of stakeholder trust, experience, expectations, and engagement and in line with the triple bottom line (TBL) approach, monitoring wider impacts on economy, society, and the environment.
- Promote skills that foster learners critical thinking; reflective learning; self-awareness; learning goal orientation; self-care; and stress management.
- Train learners to monitor cultural changes and empathize with the diverse viewpoints of their stakeholders on an emotional level.
- Train learners to engage in human-centered and service-oriented interaction, dialogue, and value co-creation with stakeholders in all possible brand touchpoints, taking into account the diverse socio-cultural contexts and needs of stakeholders.
- Help build psychologically safe learning environments through collaborative learning methods and tasks that build motivation and mutual trust among learners and stakeholders.
- Train learners to build digital connectivity and continuous community engagement between stakeholders.
- Encourage iterative processes of agile experimentation and co-innovation.
- Encourage ethical reasoning, accountability, and shared leadership in business decision-making.
- Design transdisciplinary projects with cross-sector problems, challenges, and learning scenarios, so that learners can address real stakeholder needs and seek shared solutions to common human problems.
- Develop transdisciplinary leadership skills that support learners in knowledge-sharing, conflict resolution, metacognitive analysis, and cross-sectoral collaboration.

Intercultural Leadership

- Promote a culture of critical engagement with AI-generated content to help students recognise biases, stereotypes and essentialised representations.
- Prepare learners to become responsible digital leaders who can critically engage with technology in diverse cultural settings.
- Guide learners in reflecting on how AI can shape and mediate cultural understanding.
- Guide learners in questioning their assumptions and biases when interacting with AI-generated content.
- Use interdisciplinary case studies and scenarios to explore the interplay between AI, cultural identity, and leadership.
- Promote awareness of the complex relationship between humans and technology, avoiding overly simplistic, human-centric views of AI.
- Encourage collaboration across disciplines to develop well-rounded intercultural competencies.

- Train students to navigate the evolving landscape of AI and digitalization with cultural sensitivity and ethical responsibility.
- Balance AI-assisted learning with opportunities for independent thinking, creativity, and human-to-human interaction.
- Train students to assess the reliability and fairness of AI-powered translation and communication tools in intercultural contexts.
- Encourage responsible and transparent use of AI tools, ensuring fairness and accountability in decision-making.
- Discuss the implications of AI surveillance, privacy concerns, and data security in intercultural leadership settings.
- Emphasize the role of educators and professionals in curating AI-generated materials to prevent misrepresentation of cultures.
- Encourage leadership strategies that integrate both human and AI capabilities while maintaining fairness and inclusivity.

Self-leadership

- Provide strategies, tools and techniques for stress management, decision-making under uncertainty, and self- leadership.
- Help learners assess their leadership strengths, reframe negative thoughts, and develop a growth-oriented mindset.
- Use real-world scenarios, case studies, and hands-on exercises to reinforce self-leadership skills in daily life.
- Incorporate self-reflection exercises in learning tasks.
- Align self-leadership practices with professional development.
- Use GenAI to enhance learning, provide personalized feedback, and support critical thinking, without replacing human instruction.
- Encourage discussions, collaboration, and knowledge-sharing among learners to strengthen their self-leadership skills.
- Provide strategies for managing stress and coping with setbacks to maintain well-being.
- Encourage lifelong learning and self-improvement strategies with the help of AI tools.