

# **STEAM LEARNING ECOLOGIES**

## Participatory Scenario Development template guidance



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## Guidance

Participatory scenario development is a process that allows stakeholders to collectively explore potential future developments based on their joint action and resources invested. The process consists in developing scenarios (storylines), of what the future would look like, if varying inputs are (or could be) available to improve the current situation. The approach encourages stakeholders to come together to concretize their ambitions into such scenarios and commit the resources and support necessary for their achievement.

In the template we provided, you will find three scenarios: (1) A business-as-usual scenario, which describes the current way of doing things as a baseline condition, with a focus on highlighting gaps that can be addressed by stakeholders; (2) a small-effort scenario, where an improvement from the baseline condition is possible with small inputs only; and (3) a best-case scenario, where stakeholders define the ideal efforts to bring about long-term impact. The rows of the template correspond to different aspects of an SLE, which stakeholders can focus on to improve the SLE. These aspects involve: (1) Stakeholder synthesis, which serves to describe which types of stakeholders are involved in and what they can bring to the project; (2) stakeholder interaction, to plan and assess communication and collaboration between stakeholders during the project; (3) availability of resources for learners to structure and complete a learning path and deliver concrete learning artefacts; (4) support to be provided to learners while using resources and constructing learning artefacts. The above items are core components for a successful SLE but they can be enriched or modified based on the objectives of each SLE.

You can find below the template with some guiding questions to help you define your scenarios.

We invite you to dedicate some attention when defining the small-effort scenario, as it allows to define minimal resources needed to start achieving change improvement from the baseline condition. During the pilot implementation, SLEs initiators were able to define several types of small input that proved decisive for improving the SLE.

Leveraging on stakeholder networks already conducting similar activities, or partners from previous collaborations was the easiest way to arrange stakeholder synthesis for SLEs. Focusing on local networks was outlined as more convenient than reaching out for national or international partners.

For stakeholder interaction, some initiators found it easier to align their gatherings with already planned conferences and events. Making use of technology by organizing online meetings also lightened the organizational burden of initiators. Signing a formal agreement may be chosen to ensure a shared commitment for the SLE.

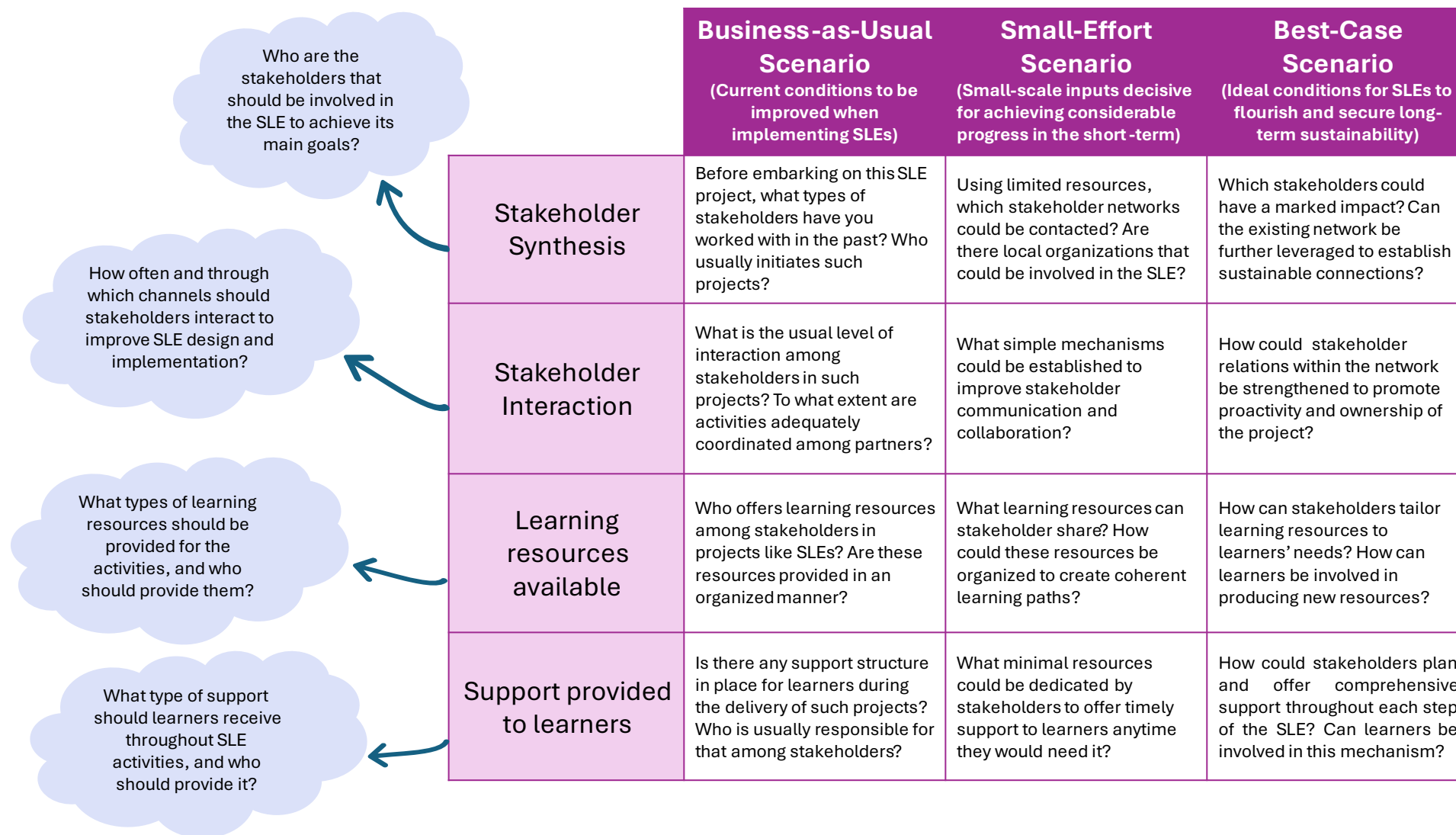
Extending the use of spaces and equipment already available, taking advantage of free spaces such as parks and science fairs, and replicating the same activity over the years for different classrooms, were identified as small-efforts in the provision of learning resources and support. By re-organizing the project, any investment in equipment or resources is expected to result in higher learning returns. Moreover, previous years' students could become supporters in the next editions.

While this document intends to give some guidance on the template, you can find a more detailed explanation of the participatory scenario development process and rationale at [paragraph 4 of this document](#).





## Participatory Scenario Development Template Explained





## Example

	<b>Business as Usual Scenario</b> (Current conditions, that need to be improved implementing SLEs)	<b>Small Effort Scenario</b> (small-scale inputs decisive for achieving considerable progress in the short-term)	<b>Best-Case Scenario</b> (ideal conditions for SLEs to flourish and secure long-term sustainability)
<b>Stakeholder synthesis</b>	A school teacher initiated a project on microplastics in a secondary school in Cyprus which was a member of the South Eastern Mediterranean Sea Project (SEMEP) under the auspices of UNESCO	A Research Excellence Centre joined the SLE and shared with other stakeholders a new research project they are implementing on microplastics with 8 other European partners	The school, supported by the Pedagogical Department of the Research Excellence Centre, applied for joining the Blue Schools network of the EU4Ocean Coalition
<b>Stakeholder interaction</b>	The teacher and students took the initiative to inform about the progress of the project a number of stakeholders in the field of microplastics in their public presentation of the main outcomes of the project	The Research Excellence Centre notified the school anytime new dissemination material was distributed from the project and anytime a new public deliverable was available	Stakeholders in the SLE have the opportunity to interact with numerous other stakeholders all over Europe during the European Maritime Day
<b>Learning resources available</b>	Students worked with samples of sea water taken from coastal areas near Pafos (west-south of Cyprus) and used a methodology based on fluorescent dyes for tracking microplastics.	Students employed the knowledge and expertise developed in the new research project to optimize their methodology and overcome the bias with polystyrene and polyethylene microspheres	Students were able to exchange learning resources with two other secondary schools in Europe who implemented analogous projects on microplastics
<b>Support provided to learners</b>	The teacher has provided support to student groups working in different locations with sampling, analysis and reporting but this added much workload that was not easily manageable at some points in time	The Pedagogical Department of the Research Excellence Centre will support the new launch of the project in the forthcoming school year and help the teacher conduct a curriculum analysis	Additional support is sought by the school and the Research Excellence Centre from EU Young Ocean Advocates of the Youth4Ocean Forum of the EU4Ocean Coalition

