



## *Framework of the e-Tool*

This document is a report to describe the process to design the e-Tool of the RESPRO project. In this document is described the elements that inspire this project Report.



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## Table of contents

EXECUTIVE SUMMARY .....	5
INTRODUCTION .....	5
<b>About the project .....</b>	<b>5</b>
Mission .....	5
Vision.....	5
Values.....	5
<b>About this document .....</b>	<b>6</b>
FRAMEWORK.....	6
<b>Why and e-Tool/eGame.....</b>	<b>6</b>
Core learning theory underpinning the e-Tool .....	6
The use of serious games and simulations.....	7
Simulation and responsible leadership for well-being.....	7
eGame Design choices .....	8
Integration with RESPRO.....	9
PEDAGOGICAL BACKGROUND.....	9
<b>Pedagogical foundations.....</b>	<b>9</b>
Basics concepts .....	9
Progression logic .....	10
<b>Global outcome levels.....</b>	<b>10</b>
Master rubric .....	10
Stage 1. Responsible Leadership (RL).....	11
Stage 2. Well Being (WB).....	12
Stage 3. Job Crafting (JC).....	13
<b>Scenario-Based Learning &amp; Questioning Strategy.....</b>	<b>14</b>
Facts .....	14
Emotions .....	15
Boundaries .....	16
E-GAME DESIGN .....	16
<b>Overview .....</b>	<b>16</b>
Elements .....	17
Elements of the eGame.....	17
<b>Running elements .....</b>	<b>18</b>
CONCLUSIONS .....	21



REFERENCES ..... 21

APPENDIX A. SCENARIO TEMPLATE ..... 23

**Scenario introduction ..... 23**

**Scenario data ..... 23**

**Room data ..... 23**

    Environment..... 23

    Description ..... 23

**Questions ..... 23**

    Question 1 ..... 23

    Question 2 ..... 24

    Question 3 ..... 24



## Executive summary

The RESPRO project aims to enhance project management education by developing people skills and focusing on responsible leadership and well-being at work. With the rise of international projects and the increasing complexity of team dynamics, the need for project managers to possess strong leadership and interpersonal skills has become more critical. The project addresses these needs by creating innovative learning tools: easy-access short courses and an e-simulation game focusing on responsible leadership components. These tools promote team well-being with proactive leadership, and using job crafting, responding to Europe's growing demand for soft skills in project management education. Led by a consortium of four higher education institutions from Spain, Finland, Latvia, and Austria, RESPRO leverages interdisciplinary expertise to ensure the relevance and sustainability of its outcomes. Through transnational collaboration and integrating innovative pedagogical approaches, RESPRO aims to strengthen project managers' ability to lead effectively in diverse and complex environments, fostering a more resilient and people-focused approach to project management.

## Introduction

### About the project

#### Mission

The mission of the RESPRO project is to reinforce the people skills in project management education across European HEIs by analysing best practices in responsible leadership, integrating these principles into curricula, and delivering Easy-Accessible Short (EAS) courses, an e-simulation game, and a Teacher Guidebook that can help HEIs institutions to create these skills in their students.

#### Vision

The vision that guides the project is create a higher-education ecosystem where responsible leadership and well-being at work are embedded as core competences of every project manager; where educators and students use job crafting as a method to achieve this ecosystem; and where RESPRO's open resources are used as a model of tools to use.

#### Values

The RESPRO project is guided by a series of values that must be followed to ensure a framework of understanding that is both caring and efficient. These values are as follows:

- Responsibility & Ethics. We consider responsibility as the knowledge of the consequences of decisions.
- Well-being & Psychological Safety – We foreground team well-being as a driver of progress.
- Openness – We commit to open access for results and materials, enabling broad adoption and reuse.
- Inclusion & Accessibility – We design for diverse learners and contexts, ensuring activities and outputs are accessible to all.
- Evidence-based Improvement – We ground decisions in research and evidence to refine processes and outputs.
- Co-creation – We build with and for our communities: students, teachers, practitioners, and associated partners.



- Digital Readiness – We deliver practical, user-friendly digital solutions that enhance teaching and learning.
- Impact Orientation – We focus on measurable value for learners, educators, institutions, and the labour market, and on the transferability of results.

## About this document

This deliverable (WP4–R1) defines the plan for the RESPRO e-tool. It indicates the why (learning needs), the what (roles, main use cases, design choices), and how success is assessed (acceptance criteria). It details how development details are transferred to the outcome of Task 2. The primary users are the WP4 team, the WP leads, and the teaching staff. In practice, it functions as a design contract between partners and a feed for WP5 teaching materials.

Located before development and piloting in the Gantt chart, this is a public Erasmus+ outcome. The chapters cover the framework, pedagogy (competences and rubrics), and the essential elements of the e-game. It remains an active reference during WP4 and is updated according to WP1 quality procedures: improvements only, no scope creep.

## Framework

This chapter offers the pedagogical background of the e-Tool to transmit why an e-Tool/eGame. RESPRO focuses on strengthening project-management “people skills” through responsible leadership, well-being at work, and team-level job crafting, delivered via Easy-Accessible Short (EAS) courses and a web-based e-simulation game integrated into HEI curricula. The e-Tool is designed as an open, browser-based serious game with configurable scenarios, randomization, and teacher dashboards to support classroom and distance use explicitly chosen to maximize access and re-use across European HEIs. This digital result sits alongside WP3 EAS courses and the WP5 Guidebook and is aligned with the project’s priorities on innovative learning and digital readiness.

## Why and e-Tool/eGame

Serious-game simulations are a research-backed way to practice the interpersonal, ethical, and well-being-related decisions at the heart of responsible project leadership. By aligning theory (experiential, social, motivational), competence frameworks (IPMA/PMI), and evidence (meta-analyses on games, feedback, leadership training), the RESPRO e-Tool provides a rigorous, scalable, openly accessible means to develop the very “people skills” Europe’s project managers need—exactly as envisaged in RESPRO’s WP3–WP5 plan.

In competence terms, the e-Tool targets the internationally recognized “People” competences in IPMA’s ICB4 (IPMA, 2016), for example, leadership, teamwork, conflict, or self-reflection; and the PMI Talent Triangle’s Power skills (Turner, 2016), giving students a safe space to practice interpersonal decisions that are difficult to teach through lectures alone.

## Core learning theory underpinning the e-Tool

Experiential learning (Kolb, 2014) uses simulations to apply Kolb’s four-stage cycle in practice. Simulations provide a concrete (specific) experience, opportunities for reflective observation, support for abstract conceptualization, and conditions for active experimentation. In this sequence, learners carry out tasks, observe the results, derive general principles, and then test those principles in subsequent tasks.

In the game, each round supplies the experience and experimentation, while structured debriefs guide reflection and conceptualization. This design makes movement through the cycle explicit and repeatable, enabling systematic, iterative learning constructive alignment (Biggs, Tang, & Kennedy, 2022). The e-Tool's scenarios, embedded analytics, and rubrics are aligned with intended learning outcomes (i.e., “creates psychological safety under time pressure”; “enables job crafting in the team”). Assessment and activities are mapped back to these outcomes, ensuring coherence.

Problem based (Barrows, 1986), and scenario based (Smith, Warnes, & Vanhoestenbergh, 2018), learning use authentic problems that are not fully structured. Such problems are important for the development of professional judgment because they require learners to work with uncertainty and incomplete information. The e-Tool offers project episodes with clear time limits that ask learners to set priorities, make sense of evolving situations, and weigh ethical trade-offs. These features reflect core elements of problem-based learning and support the growth of sound professional judgment in realistic conditions.

Social and situated learning explain that leadership and team behaviours develop through interaction with others. Learners build knowledge and skills by engaging with peers, mentors, and tasks in shared contexts. The digital tool supports collaborative play and structures debrief sessions (Sorin, 2013). It mirrors a community of practice in which newcomers begin with peripheral participation and gradually move toward fuller participation as their competence grows.

The design promotes deep engagement by offering autonomy supportive choices, progressive competence gradients, and cues of relatedness. These elements align with Self Determination Theory (Ryan & Deci, 2000), which proposes that autonomy, competence, and relatedness are basic psychological needs that foster intrinsic motivation.

Following the Theory of Gamified Learning (Landers, 2014), the design uses game mechanics to influence learning through motivational and behavioural pathways. By shaping attention, persistence, and strategic effort, these mechanics support deeper processing and more durable learning outcomes.

### The use of serious games and simulations

Over the past two decades, meta-analytic studies indicate that well designed serious games and simulations (Wouters et al., 2013) produce higher learning and better retention than conventional instruction, and they can increase motivation when guidance and debriefing are provided. Research on computer-based simulation games (Sitzmann, 2011) also shows superior outcomes for declarative knowledge, procedural knowledge, and self-efficacy when compared with other methods. Evidence on leadership training shows reliable positive effects, which are stronger when activities are spaced over time, when learners are active, and when feedback is frequent. The digital tool incorporates these design features.

Debriefing and feedback play a central role in these effects. After play debriefs and timely task focused feedback are among the most powerful influences on learning and transfer. For this reason, the digital tool includes structured debriefing and feedback as required steps in classroom use.

### Simulation and responsible leadership for well-being

Responsible leadership is understood as a relational practice that is oriented to stakeholders and guided by ethical reasoning. It is not only a set of skills that operate between a single leader and a

single follower. Instead, it involves attention to the interests, values, and impacts that arise across a network of people and organizations (Lacerenza et al., 2017).

The digital tool places learners in situations that involve multiple stakeholders and competing priorities. For example, learners must balance timely delivery with protection of team health. These scenarios ask learners to analyse consequences for different parties, justify choices using ethical criteria, and reflect on how a leader can act responsibly in complex contexts.

Psychological safety is a shared belief that team members can speak up, ask questions, and report problems without fear of embarrassment or punishment. Teams learn and perform better when this belief is present. The game draws attention to specific micro behaviours that build or damage psychological safety. Examples include how leaders respond to bad news, how they frame conflict, and whether they invite input from quieter members.

During play and debrief, the digital tool shows how these small behaviours create visible effects at the team level. Learners see changes in information sharing, error reporting, and coordination that follow from safety producing actions. In this way, the tool links day to day interaction patterns with measurable outcomes for learning and performance.

The Job Demands and Resources model proposes that wellbeing and performance depend on the balance between what work requires and what it offers. Demands include workload, time pressure, and emotional strain. Resources include autonomy, feedback, social support, and opportunities for growth. When resources are sufficient to meet demands, engagement rises and strain decreases. Job crafting is a proactive process in which workers adjust tasks, relationships, and perceptions to improve this balance.

The digital tool allows players to test leader behaviours that enable job crafting. Learners can experiment with actions that increase resources, such as granting autonomy, improving feedback, and strengthening peer support. They can also try actions that reduce hindrances, such as removing unnecessary steps or clarifying roles. The tool then displays downstream effects on engagement, learning, and output, making the mechanisms of change concrete.

These constructs are central to the focus of the project. Responsible leadership, well-being as psychological safety, and job crafting form the conceptual core of the content (Maak & Pless, 2006). They are framed as intended outcomes of RESPRO project and are operationalized within the learning activities of the digital tool.

### eGame Design choices

Building on the principles described above and as specified in the RESPRO planning, eGame should implement authentic and variable scenarios. These scenarios use randomized parameters and provide multiple plausible options that vary in quality. The aim is to elicit sound judgment under uncertainty while preserving ecological validity.

The design includes dynamics with several game actors such as stakeholders, teammates, and supervisors. This structure aligns with the logic of responsible leadership by requiring learners to consider diverse interests and interdependencies during decision making.

Practice is spaced across short cycles, and the activity is repeatable with progressive scaffolding. This arrangement is consistent with evidence from leadership training and with Kolb's experiential learning cycle, supporting repeated application, reflection, abstraction, and further experimentation.



Each cycle is followed by guided debrief and formative feedback. Learners receive dashboard indicators that are mapped to the intended learning outcomes and to IPMA “People” competences. These structured reviews help consolidate understanding and support transfer to practice.

The environment incorporates motivational features that support autonomy, competence, and relatedness. Clear goals and visible progress cues are provided in accordance with Self Determination Theory and with the theory of gamified learning, which links game elements to motivation and behaviour.

Teacher orchestration and analytics enable educators to select scenarios, monitor observable behaviours, and assess learner growth with rubrics aligned to EAS course outcomes and to the Guidebook. This capability supports consistent evaluation and continuous improvement.

### Integration with RESPRO

The digital tool is not a stand-alone product. It is designed to deepen knowledge from the EAS course through active practice so that learners convert conceptual understanding into usable skills. Implementation follows the partners recommendation sequence: pre brief, play, debrief, and a reflective assignment. Each step prepares learners, engages them in the activity, helps them analyse outcomes, and consolidates learning through reflection. The tool also supports Erasmus Plus priorities for innovative and digitally ready learning. Project results will be prepared and shared in line with guidance for the Project Results Platform.

Based on the research literature, we expect improvements in four areas. First, responsible leadership with higher decision quality when stakeholder interests are in tension. Second, team level behaviours that strengthen psychological safety. Third, the ability to enable job crafting within the team. Fourth, self-efficacy for people leadership. Evidence will be gathered through in game analytics, structured reflective prompts, and performance rubrics that are aligned with the intended outcomes. Practice will be spaced across multiple sessions to support retention and to maximize transfer to new contexts.

## Pedagogical background

### Pedagogical foundations

#### Basics concepts

Based on the previous chapter, the concepts in which the eGame is based (previous chapter resume) are:

- Experiential learning: Learners progress through Kolb’s cycle (concrete experience → reflection → conceptualization → experimentation).
- Constructive alignment: Scenarios, analytics and rubrics are tied to explicit outcomes.
- Problem/scenario-based learning: Ill-structured, authentic incidents cultivate judgment under uncertainty.
- Situated/social learning: Behaviours are learned through interaction; collaborative play + debrief mirrors communities of practice.
- Motivation & engagement: Autonomy, competence and relatedness (Self-Determination Theory) guide design; game mechanics are used as means to learning.
- What works in leadership training: Active, spaced, feedback-rich designs show stronger effects—hence mandatory debriefs, replay and formative feedback in the e-Tool.

## Progression logic

Responsible Leadership sets the leader behaviour and, in consequence, is the core of the project. In practice, this means leaders must have these “behaviour outcomes”:

- keep a clear stakeholder orientation (anticipating needs and negotiating trade-offs)
- act with ethics (fair, transparent, and consistent decisions)
- build psychological safety (people can speak up, ask for help, challenge ideas without fear),
- coach rather than micromanage (regular feedback, growth conversations, and support).

These behaviours don’t sit on the wall as values; they show up in day-to-day routines—how priorities are set, how mistakes are handled, and how work is recognised. When these signals are coherent, the team understands “how we do things here,” and the climate becomes predictably supportive.

A healthy climate is the springboard for Team Well-Being. With clear norms and fair processes, workload becomes sustainable (pace, boundaries, and resource allocation are actively managed), trust strengthens (commitments are kept and information flows), focus improves (noise is reduced, priorities are explicit), and team learning accelerates (retrospectives, peer reviews, and quick experiments are normalised). Well-being here is not a perk; it is an operational condition that protects capacity and quality. When the climate removes unnecessary friction, the team can invest energy where it matters—solving the project, not surviving it.

With safety and resources in place, individuals can Job Craft. People proactively adjust tasks, relationships, and the meaning of their work to balance demands with available resources and to grow. This can look like reshaping task boundaries (streamlining handovers, automating a repetitive step), tuning relationship patterns (seeking a mentor, creating a peer-support loop), or reframing purpose (connecting a deliverable to user impact). Job crafting is not “scope drift”; it is disciplined self-organisation that keeps roles fit-for-purpose as context shifts. The result is higher engagement, better alignment, and incremental capability gains—outcomes that compound over the life of the project.

## Global outcome levels

Starting from this logical progression where the responsible person is employed to create a healthy climate, we will then review the main learning outcomes and present the corresponding rubrics for each of the phases that have been previously determined. The first will talk about co-responsibility, the second about team well-being and the third about Job Craft. For each of these competencies, it will establish some behavioural indicators, some mechanisms that the tool or the Game must have evidence of and for the evaluation and we will link it with the corresponding IPMA Framework as it has been established for the RESPRO project.

## Master rubric

This master rubric provides a common reference to evaluate performance of the eGame. It captures how well learners demonstrate responsible-leadership and people-skills behaviours in action during the eGame. Using one shared rubric enables comparable scoring across scenarios and anchors assessment to the best practises that define RESPRO.

Level	Descriptor
L1 – Awareness	Can define concepts; choices are rule-following; identifies issues only in hindsight.



Level	Descriptor
L2 – Emerging	Spots trade-offs; applies basic RL behaviours; surfaces risks; proposes small adjustments with prompts.
L3 – Competent	Anticipates stakeholder/team reactions; builds safety deliberately; balances demand–resource; supports team-led crafting with measurable gains.
L4 – Advanced	Orchestrates multi-stakeholder value; institutionalizes well-being practices; scales job crafting (norms, peer coaching, continuous improvement).

The rubric is criterion-agnostic and can be applied to any competence. It mirrors recognised competence baselines that emphasise People and Practice dimensions on professional performance.

### Stage 1. Responsible Leadership (RL)

#### Intended learning outcomes

Responsible Leadership (RL) equips learners to act decisively and humanely when it matters most. By the end of this stage, participants can make pressure-tested decisions that protect people and project integrity (RL1), use every day micro-behaviours that lift psychological safety (RL2), and coach in an autonomy-supportive way that grows team capability (RL3).

- RL1: Demonstrate decisions that protect people and project integrity under pressure.
- RL2: Enact micro-behaviours that increase psychological safety.
- RL3: Provide autonomy-supportive coaching that raises team capability.

#### Sub-competencies, indicators, mechanics and evidence

This subsection makes Responsible Leadership (Stage 1) actionable by unpacking it into clear sub-competencies, the observable indicators for each, the learning/assessment mechanics that elicit those behaviours, and the evidence teachers collect. The result is a traceable line from intent to behaviour to artefact, enabling consistent judgement and meaningful feedback

Sub-competency	Behavioural indicators (game & class)	e-Tool mechanics that elicit it	Evidence & assessment	Framework links
Stakeholder orientation & ethics	Maps stakeholders; discloses rationale; weighs long- vs short-term value; resists “quick wins” that harm team	Branching dilemmas with reputational/quality/well-being trade-offs; outcome dashboard with competing metrics	Decision logs; stakeholder satisfaction deltas; integrity flags; short reflective memo	<b>IPMA:</b> P1 Leadership, P3 Integrity <b>PMI:</b> Power skills
Psychological safety micro-behaviours	Responds appreciatively to bad news; invites	Timed incident cards; “speak-up”	Team voice rate; error-reporting	<b>IPMA:</b> P5 Teamwork, P6 Conflict

Sub-competency	Behavioural indicators (game & class)	e-Tool mechanics that elicit it	Evidence & assessment	Framework links
	dissent; frames failures as learning	prompts; hidden info revealed only if PS maintained	frequency; PS rubric (L1–L4)	
Coaching & empowerment	Delegates with clarity; sets autonomy boundaries; gives task/process feedback	Resource tokens for coaching time; autonomy sliders; feedback quality checks	Autonomy index; rework rate; 1-minute feedback audio/text scored against rubric	<b>IPMA:</b> P4 Communication <b>PMI:</b> Power skills
Reflective practice	Extracts principles from outcomes; sets next-round hypotheses	Structured debrief forms; “what will you try differently?” checkpoints	Debrief quality score; hypothesis-result alignment	<b>IPMA:</b> P2 Self-reflection

## Stage 2. Well Being (WB)

### Intended learning outcomes (ILOs)

Stage 2 builds the operating habits that keep performance high without burning people out. Learners practice (WB1) maintaining a sustainable workload while meeting quality by using visible work-in-progress limits, buffers and clear “done” criteria; (WB2) facilitating communication that reduces friction and preserves focus through meeting hygiene, hand-off protocols and short, structured check-ins; and (WB3) institutionalising so improvements become routine rather than ad hoc. Activities blend classroom facilitation with e-simulation scenarios, producing evidence such as team boards, decision logs, and retro outcomes that are scored with the Master rubric for consistent judgement and actionable feedback.

- WB1: Maintain sustainable workload while meeting quality.
- WB2: Facilitate communication that reduces friction and preserves focus.
- WB3: Institutionalize quick learning cycles (retro → experiment → review).

### Sub-competencies, indicators, mechanics and evidence

This table turns Team Well-Being into concrete practice by mapping each learning outcome to specific sub-competencies, observable indicators, learning and assessment mechanics, and the evidence to be collected.

Sub-competency	Behavioural indicators	e-Tool mechanics	Evidence & assessment	Framework links
Workload & pacing	Plans buffers; rebalances load;	Kanban-style board; sprint	WIP compliance; overtime	<b>IPMA:</b> P5 Teamwork

Sub-competency	Behavioural indicators	e-Tool mechanics	Evidence & assessment	Framework links
	prevents over-commitment	capacity caps; urgent/non-urgent shock events	minutes; carry-over work	
Supportive communication	Uses appreciative inquiry; clarifies needs; negotiates boundaries	Dialogue choices with tone analysis; “needs/offer” cards	Tone/clarity score; conflict resolution time	<b>IPMA:</b> P4 Communication
Team learning routines	Runs blameless post-mortems; captures lessons; experiments next sprint	Retrospective mini-games; experiment backlog	Lessons-learned rate; experiment success ratio	<b>IPMA:</b> P7 Resourcefulness
Recovery & sustainability	Schedules breaks; protects focus time; pushes back on harmful demands	Focus blocks vs interruptions; “customer escalation” scenarios	Focus preservation %; stress index trend	<b>PMI:</b> Team care (power skills)

### Stage 3. Job Crafting (JC)

#### Intended learning outcomes (ILOs)

Stage 3 develops learners’ ability to shape work proactively while staying aligned with project and team priorities. Participants practice (JC1) proposing and negotiating “craft moves” that balance team goals with personal growth, (JC2) increasing resources or reducing hindrances without generating hidden workload, and (JC3) building peer feedback loops that keep crafting efforts visible and sustainable over time. Classroom tasks and e-simulation moments to real trade

- JC1: Propose and negotiate craft moves that fit team priorities and personal growth.
- JC2: Increase resources/reduce hindrances without creating hidden workload.
- JC3: Build peer feedback loops that sustain crafting.

#### Sub-competencies (JD-R lens), indicators, mechanics and evidence

This table applies the categories to make Stage 3 actionable, grouping sub-competencies by Resources. For each learning outcome (JC1–JC3) it lists observable indicators, the mechanics that elicit them in the eGame.

JD-R category	Behavioural indicators	e-Tool mechanics	Evidence & assessment	Framework links
Increase structural resources	Redesigns tasks for skill variety/autonomy; clarifies role scope	Task-redesign cards; autonomy sliders per role	Skill-variety index; autonomy gain without quality loss	<b>IPMA:</b> P5 Teamwork, P1 Leadership
Increase social resources	Seeks/gives feedback; builds mentoring ties	Feedback requests: peer-assist tokens; mentoring matches	Feedback network density: mentoring sessions logged	<b>PMI:</b> Power skills
Increase challenging demands	Volunteers stretch tasks aligned to growth; time-boxes risks	Stretch-task pool with risk/learning value	Challenge uptake vs spillover; learning points earned	<b>IPMA:</b> P7 Resourcefulness
Decrease hindering demands	Removes red tape; clarifies priorities; renegotiates scope	“Remove friction” actions; scope-negotiation mini-dialogs	Hindrance minutes removed; priority clarity score	<b>PMI:</b> Ways of Working <b>PMI:</b> Power skills

## Scenario-Based Learning & Questioning Strategy

This section outlines the elements needed to design a scenario for the e-game, where scenario-based learning is assessed through questions. An effective questioning strategy rests on three pillars: facts, emotions, and boundaries. First, facts: every scenario has a past, and understanding prior events defines the essential knowledge the learner needs; for example, a previous conflict between two people that appears in the scenario. Second, emotions: people in the scenario experience feelings that the player must recognize and interpret to judge the most appropriate response. Third, boundaries: organizational constraints that shape what can and cannot be done or said, guiding the player's choices. Making these boundaries explicit ensures that answers are conditioned by context. Together, these three elements define the environment so that questions and answers align with the skills learners are expected to develop and that the e-game will evaluate.

### Facts

In (Dochy, Segers, & Buehl, 1999). show that prior knowledge (“facts”) is a major driver of learning and performance. In scenario design for the e-game, facts are the objective elements a learner must know—or be able to infer—to interpret the situation and answer credibly. They anchor the scenario's plausibility, reduce ambiguity that is not pedagogically useful, and make judgments traceable to shared evidence rather than guesswork. In practice, facts include:

- the context (sector, organization, unit, current priorities).
- actors and roles (who is involved, formal authority, informal influence).
- chronology (key events leading to the present moment).
- available artifacts (policies, emails, KPIs, budget lines, meeting notes).

These items are not “hints” because they are the minimal information a competent professional would reasonably have when entering the situation. To design appropriately the facts, these steps should be followed:

- Define the Minimum Viable Fact Set (MVFS): the smallest, sufficient set of facts to make a well-reasoned choice possible. Remove trivia; add only those facts that change a decision.
- Deliver facts deliberately: some can be pre-briefed (short brief, org chart, one-page KPI snapshot); others can be discoverable in scenario (click to open an email, glance at a dashboard). Label each fact with a tag (e.g., F1: stakeholder map, F2: Q2 service-level dip) and map those tags to the specific questions they support.
- Guard validity: verify each fact for accuracy, recency, and relevance. If a fact is uncertain, present it as such (e.g., “unverified claim from Team A”) so learners practice reasoning under imperfect information—without drifting into needless opacity.
- Disentangle facts from boundaries and emotions: facts state what is; boundaries state what is permitted; emotions indicate how people feel. Keep these streams distinct in the materials, even if they interact during decisions.

## Emotions

In (Immordino-Yang and Damasio, 2007) synthesize evidence that emotions shape attention, memory, and decision-making; in short, we feel, therefore we learn. In scenario design for the e-game, emotions are not decorative—they are information that directs what learners notice, how they interpret events, and which options they judge as viable. Well-designed affective cues make the scenario more authentic, increase engagement, and improve transfer by anchoring decisions to socially meaningful signals rather than abstract rules.

In practice, emotional information should cover the emotional climate (trust, tension, morale) and the actors’ states (defensiveness, frustration, enthusiasm) expressed through observable evidence or providing the information in the question text. This text should cover the next characteristics.

- Make emotions consequential: choices that acknowledge or regulate others’ emotions unlock information, reduce resistance, or improve outcomes; ignoring them carries realistic costs.
- Use observable cues, not mind-reading: quotes, tone, timing, body-language descriptors, and lightweight indicators (e.g., “customer satisfaction dipped after the meeting”) so judgments are evidence-based.
- Vary valence and intensity: include mixed or conflicting emotions across stakeholders to avoid caricature and to train nuance.
- Tag and map cues: label affective cues (e.g., E1: terse reply, E2: long pause in meeting) and link them to specific questions and feedback.
- Support emotion recognition and regulation: optional “peek” hints, brief debriefs, and micro-strategies (e.g., pause-paraphrase-probe) help learners practice noticing and responding without derailing flow.
- Guard ethics and bias: ensure psychological safety, avoid stereotypes, and rotate roles so empathy is practiced across identities and positions.



## Boundaries

In (Christian, Edwards, and Bradley's, 2010) a meta-analysis is done and shows that situational judgment tests (SJTs) scenarios. with constrained options that ask respondents to choose the best action, predict performance well when options are grounded in the rules and constraints of the setting. In scenario design for the e-game, boundaries are those organizational, legal, ethical, temporal, and resource constraints that define what can (and cannot) be done or said. Making them explicit narrows the feasible action set, sharpens scoring, and supports fairness by ensuring all players reason under the same conditions. In practice, boundaries include:

- decision rights and authority (who can approve what).
- policy and compliance (privacy, safety, equity, procurement rules).
- resources and time (budget ceilings, staffing, deadlines).
- risk tolerance and escalation paths.
- communication protocols (what may be shared, with whom, and when).

About the design of the questions/answers it is important to take care about these characteristics.

- State boundaries up front: avoid "gotcha" constraints. Brief them clearly (e.g., "Overtime >5% requires CFO pre-approval; product launch in 48 hours").
- Tie options to constraints: include actions that are feasible-and-effective, feasible-but-inferior, and infeasible (policy violations) so choices reveal judgment under real limits.
- Balance desirability vs. feasibility: top answers satisfy the goal within constraints; tempting but noncompliant actions should carry realistic consequences.
- Calibrate difficulty via tightness/ambiguity: tighter boundaries emphasize compliance; looser ones test prioritization and risk management.
- Tag and map boundary cues (e.g., B1: budget cap, B2: confidentiality clause) to the items and feedback they inform.
- Keep streams distinct: boundaries = what's permitted; facts = what is; emotions = how people feel. Let interactions show up in options, not in muddled briefs.

## e-Game Design

### Overview

The RESPRO e-Game is a browser-based serious simulation. It provides students practice responsible leadership, team well-being and job crafting in realistic project situations. It complements the WP3 EAS courses. The tool is open, configurable and usable in class or online, with teacher dashboards for facilitation the evaluation.

Pedagogically, the e-Game applies experiential learning. Scenarios, analytics and rubrics are mapped to intended learning outcomes ensuring constructive alignment between activities, assessment and project outcomes.

Figure 1 shows the main elements on which the eGame design is based. The starting point is the content of the EAS courses, which provide the knowledge students have learned. This knowledge has been captured in a series of learned skills. The learned skills are used to design the scenarios. A sequence of scenarios depicts a "story" that unfolds in rooms. The rooms are used to support the context. In each room, the scenario will provide a series of questions, with pre-established answers.

The answers are used to confirm and evaluate the competencies associated with the corresponding scenario.

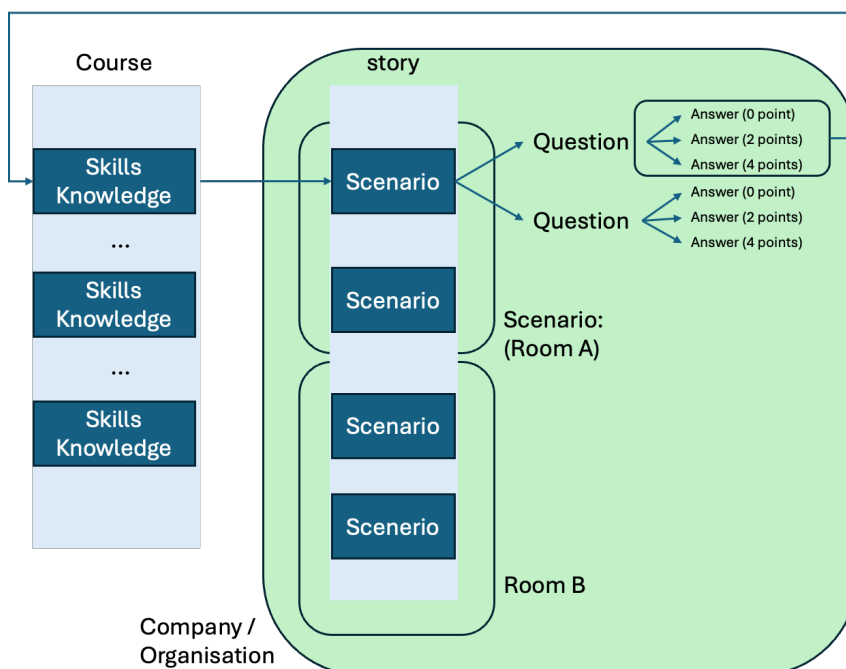


Figure 1. eGame Architecture (elements and relations between them).

Each scenario is mapped to explicit learning outcomes and to the target competence elements. Decision points branch the story based on the student's choices. Each pre-established answer carries a rationale and a consequence that updates the state of the story. This keeps the narrative coherent while making the underlying competence model visible to the learner. Assessment is integrated. Every answer contributes evidence to one or more competencies through rubrics and indicators. Scores accumulate per scenario and across the full sequence, with performance bands. A debrief at the end of the room summarises strengths, gaps and (if possible) suggested next actions. These actions also can be suggested in the next face to face session of the EAS course.

## Elements

Below we review the elements that were initially determined to be required in the eGame.

### Course

The Course is the entry point for play. It mirrors the EAS syllabus and defines the intended learning outcomes, assessment criteria and sequencing rules. Each course bundles a curated set of scenarios, the required skills to be evidenced, and the rubrics used for feedback.

### Skills knowledge

Skills knowledge is the structured inventory of what students have already learned in EAS. Each skill includes a definition, behavioural indicators, common misconceptions and observable evidence. These skills are mapped to competence elements and tagged to scenarios and questions, so that every learner choice can be traced back to the skill it evidences. This layer is the bridge between course theory and in-game assessment, enabling consistent feedback and analytics.

## Elements of the eGame

Elements to teach are the focused teaching targets extracted from the skills set translated to each question and answers of the eGame. They inform the design of decision points and debriefs, ensuring that the game surfaces the intended takeaways in clear, actionable language.

### Company / Organisation

Multiple organisations can be used across courses to increase transferability and reduce memorisation. The Company/Organisation provides the realistic context in which scenarios unfold. It defines sector, size, structure, roles, policies, tools, and constraints (time, budget, compliance). By making boundaries explicit, it anchors ethical and feasible decisions

### Scenario

A Scenario is a short narrative arc built from one or more Rooms and centred on a defined learning outcome. It comprises the initial situation, decision points, and state updates. The Scenario should provide the story from a sequence of Rooms, cantered on a practical dilemma and unfolds through and branching choices with pre-established answers.

### Room

A Room is a self-contained scene within the scenario. It sets time and place, lists who is present, clarifies the immediate objective. They keep the narrative tight while giving teachers clear breakpoints for facilitation. To achieve this, rooms deliver the narrative setup, present artefacts (messages, dashboards, policies) and host the decision sequence

### Question bank

The Question bank is the validated pool of items used inside Rooms. Each item links to one or more competencies. This ensures reliable measurement and consistent student feedback.

## Running elements

This section delineates the core elements of a scenario and their interrelationships. A scenario description should, where appropriate, address three components: information, emotional context, and boundaries. Although none of these elements is strictly mandatory, attending to them is strongly recommended to ensure that learners grasp the full context of events unfolding across the rooms in which the scenario is enacted.

Beyond the learner, scenarios typically include additional roles—most commonly a Project Manager and one or more team members. Within each room, the learner encounters one or more questions accompanied by several plausible response options. These responses may engage with one or more of the project’s three dimensions: Responsible Leadership, Wellbeing, and Job Crafting. While a given response need not address all three dimensions, it is advisable that at least one be represented.

Frequently, there is no single “correct” answer. Instead, options vary in their alignment with the dispositions and behaviours expected of a responsible leader; some may be closer to good practice, whereas others may be less constructive or even deliberately counterproductive to prompt reflection. The sequence of selected responses generates a results panel and a decision history. Additional questions may follow within the same room or in a different room.

The ordered set of rooms traversed across one or more scenarios constitutes a mission: the narrative path the learner follows. This mission provides evidence of the learner’s comprehension and application of the skills required for responsible leadership.

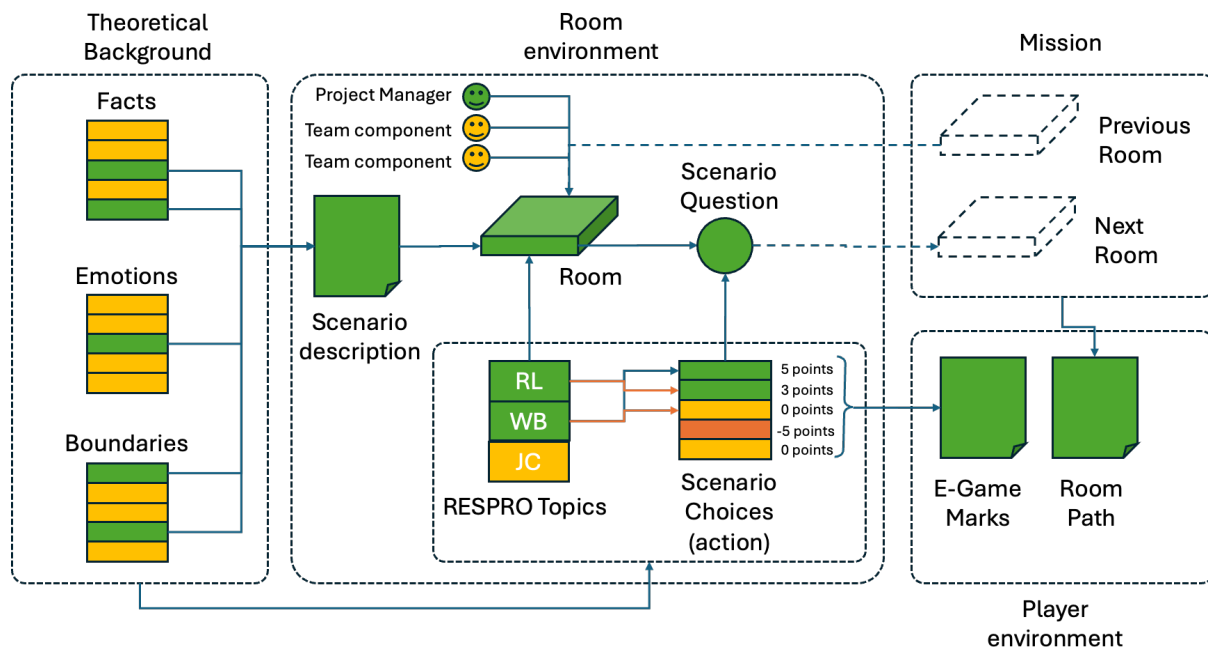


Figure 2. Elements to develop in the eGame

Figure 2 shows the connections between elements of the eGame playing scenarios. Connection is important since they determine how one element relates to another. It is also important to keep in mind that the game itself has a complex version (Figure 3) that can be carried out in which the same question can have answers based on the three RESPRO dimensions (RL, WB, and JC) and at the same time the same answer covers these three parameters. In this case and in the previous case there is a new element which is what we know as consequences.

Consequences are one of the most important points that this project deals with. As the fact that describes whether a leader is responsible or not, leader is responsible when he/she knows the consequences of the decisions done. Due to is difficult, to place the consequences since these depend on the context and even on how the person knows what can happen from a decision. Future projects can deal with this issue in a much more profound way. A good leader is often not the one who is able to predict what will happen but the one who knows the entire context and knows the decision tree and corresponding consequences both in the people and in the project.

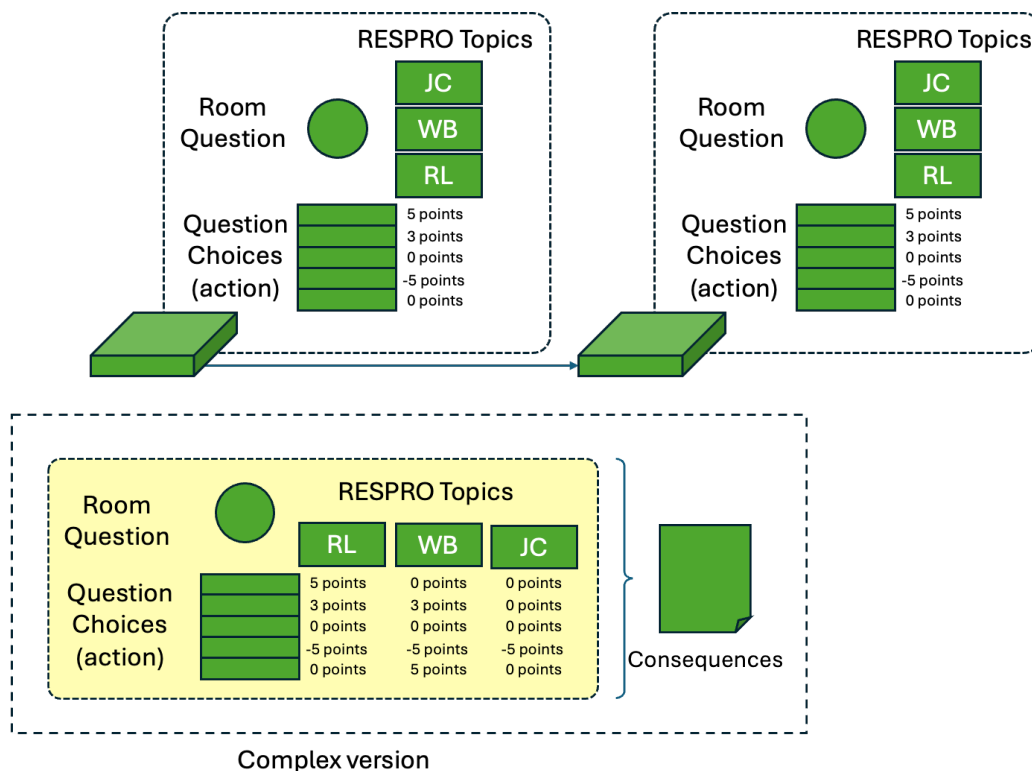


Figure 3. Questions and answers process.

Well-designed scenarios and the accompanying eGame provide an authentic, low-risk environment in which learners can practise decision. By staging choices within “rooms” and structured “missions,” the design mirrors the temporal and contextual pressures of real projects while preserving psychological safety. The branching structure and the presence of role characters foster perspective-taking and personal competences. Because options rarely map onto a single “correct” answer, learners must weigh trade-offs, justify positions, and anticipate consequences aligned with responsible leadership in real environments. The explicit inclusion of emotional context and boundaries further strengthens scenario fidelity by acknowledging that affect and constraints shape workplace behaviour.

From an assessment teachers’ point of view, the eGame results panel and decision history enable rich formative feedback and learning analytics. Educators can trace how and why a student progressed through a mission. At a programme level (from a specific training to Erasmus projects), aggregated traces provide evidence for outcome achievement, support continuous improvement.

Finally, the format is intrinsically motivating. Narrative progression, immediate consequences, and visible impact on the results panel tend to increase engagement and persistence compared with static case studies.

The authenticity that makes scenarios powerful also raises design and maintenance costs. Crafting coherent missions with credible roles, emotionally nuanced contexts, and well-balanced boundaries demands substantial expert time. Assessment validity and reliability can be challenging. If scoring rules behind the results panel are opaque or oversimplified, they may reward test with a misunderstanding.

Scenarios and the eGame format provide a powerful, evidence-rich vehicle for cultivating and assessing responsible leadership competencies, especially when decisions are contextualised by emotions and boundaries and captured via results panels and decision histories. Their effectiveness,

however, depends on rigorous instructional design, transparent assessment logic, purposeful debriefing, and explicit attention to accessibility, cultural validity, and data governance.

## Conclusions

This report has established the pedagogic and functional frame for RESPRO eGame and clarified how it supports the project mission. This chapter connects the EAS courses (WP3) and the Teacher Guidebook (WP5) as a coherent, open, browser-based learning solution. The design choices are intentional to maximise access, re-use and classroom (or online) delivery across contexts.

Pedagogically, the e-Tool operationalises experiential learning with explicit constructive alignment: each scenario supplies specific experience and active experimentation. This closes the loop between activity, evidence and feedback and makes progress measurable for learners and teachers. Scenario-based learning principles and a questioning strategy are embedded to elicit professional judgement under uncertainty while keeping assessment reliable and transparent.

From an implementation perspective, this report delivers the shared blueprint the consortium needs to move consistently into development and piloting. It specifies the story-room-scenario structure, the alignment to EAS course skills, and the assessment flow, providing a common language for students, developers and teachers. This blueprint is the agreed backbone for the next activities of the WP4.

As a resume, the e-Tool frame is fit for purpose: it connects RESPRO's evidence base to a usable digital product and aligns learning activities with assessment. With the scenario template (see Appendix A), partners can now proceed to author content, implement the technical build, and prepare teaching sessions.

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## Appendix A. Scenario template

### Scenario introduction

Overview and general details about the situation.

### Scenario data

Project name (ID)	The specific project related to the scenario, e.g., Responsible leadership
Scenario name (ID)	Identification of the scenario in focus.
Room	Represents the space or environment where the scenario unfolds.

### Room data

Information about the environment, including various factors like the setting and conditions.

### Environment

Description of the setting or external conditions influencing the scenario.

Workers and roles	The individuals involved in the scenario and their assigned roles. For each role: <ul style="list-style-type: none"> <li>Name, role, overview about personality, character, etc.</li> <li>...</li> <li>...</li> </ul>
Facts	Objective details relevant to the scenario, especially the precedents that are relevant for the scenario. <ul style="list-style-type: none"> <li>Every fact should be short and specific.</li> <li>...</li> <li>...</li> </ul>
Emotions	Emotional states or reactions of characters in the scenario. <ul style="list-style-type: none"> <li>Emotions should, mainly, affect to only a worker</li> <li>...</li> </ul>
Boundaries	Limitations or constraints within the scenario. <ul style="list-style-type: none"> <li>Each boundary</li> <li>...</li> </ul>

### Description

Scenario description	A detailed explanation of the scenario
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### Questions

Each question should affect only to one of the three dimensions of the project, following the next code:

- RL: Responsible Leadership
- WB: Well-being
- JC: Job Crafting

### Question 1

Scenario question		
Dimension related (only one: RL, WB, JC)	RL	
Scenario choice		
Choice	Choice description	Points

1	The 0 points choices should be a choice that doesn't solve the scenario, usually "bad" decisions.	0
2	The 2 points choices should be choices more "neutrals" or that delay the decisions.	2
3	The 4 points choices should be choices that contribute with value to the project, and use the dimension related to the question.	4

### Question 2

Scenario question		
Dimension related (only one: RL, WB, JC)		RL
Scenario choice		
Choice	Choice description	Points
1		0
2		2
3		4

### Question 3

Scenario question		
Dimension related (only one: RL, WB, JC)		RL
Scenario choice		
Choice	Choice description	Points
1		0
2		2
3		4