
Improvement Continued: Elements of improvisational theater as method-specific teaching interventions in innovation management

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Abstract: This paper builds on an earlier conference paper by the author on the use of improvisational theater in innovation management education and presents several examples of operationalized teaching interventions for various innovation methods. The focus is on repeatable teaching interventions (“teaching patterns”) that systematically link improvisational principles with innovation methods. For TRIZ, Business Model Innovation, scenario and futuring methods, SWOT/TOWS, and service design, exemplary teaching patterns are described using settings, roles, procedures, and artifacts. The scenarios are designed so that they can be used in both traditional lectures (even with large groups) and in project-oriented formats. This paper demonstrates how improvisation functions not as a warm-up add-on, but as a didactic catalyst for methodological competence, an innovation mindset, and social agency.

Keywords: Innovation management; improvisational theater; innovation methods; experiential learning; competency-based teaching

1 Introduction

Innovation management is characterized by uncertainty, ambiguity, and social negotiation. Students should therefore not only “know” models and methods but also develop the ability to remain capable of acting despite incomplete information, to shift perspectives, to take risks, and to construct meaning collaboratively. In traditional lecture formats, however, innovation methods are often presented as sequential steps, whereas their actual effectiveness in practice depends heavily on interaction, situational perception, and a culture of experimentation.

The author’s previous conference paper discussed improvisational theater as a pedagogically appropriate complement to the teaching of innovation management and derived a set of rules and principles from the literature and initial teaching experiments (including acceptance and structure, status and role work, productive irritation, tolerance for mistakes, and humor). At the same time, it was emphasized that university teaching contexts differ from workshops in structure and objectives, and therefore a targeted adaptation is necessary (cf. Thurnes, 2024).

Improvisation can be understood as the ability to spontaneously generate coherent actions using the body, space, imagination, objects, and social cues without relying on pre-written scripts (cf. Frost & Yarrow 2014). In innovation work, this ability is not an end in itself but rather functional: it supports co-creation, idea development, dealing with unmet expectations, and learning through experimentation (see e.g., Johnstone 2014/2018/2023; Konrad 2022; Gray et al. 2024).

2 Improvisation Mechanisms and Learning Requirements in Innovation Management

For university teaching, it is crucial to view improvisation as a set of specific mechanisms. Drawing on improvisation literature and the pedagogical analysis of the previous article, six families of mechanisms can be identified that are regularly called for in innovation methods (based on Hoppe et al. 2017, Schwenke et al. 2024, Gerber 2007):

- Acceptance and adaptability (“Yes, and”),
- Role and status competence,
- Proposal logic and intentions,
- Presence and active listening,
- Breaking patterns, risk, and tolerance for mistakes, as well as
- Humor as a way to ease the pressure of evaluation.

Innovation methods become more effective for learning when their cognitive steps are translated into performative micro- or macro-situations that generate realistic pressure to coordinate and deal with uncertainty, and are subsequently transformed back into formal artifacts (canvas, matrix, roadmap) through structured reflection. Improvisation acts as a catalyst here because it makes the “invisible” social and emotional aspects of methodological work visible and discussable—these are the same characteristics that make improvisation interesting in fields such as social and health work as well as foreign language instruction (see e.g., Blankenburg 2017; Needer 2017; Schuppe 2023).

This paper takes a conceptual-exploratory approach. Tailored improvisational interventions were designed for a selection of innovation methods; these can be repeatedly applied, varied, and scaled in teaching. Each intervention is described as a “teaching pattern” and includes learning objectives, setting, roles, procedure, artifacts, and debriefing questions. This bridges the gap between methodological expertise, performative experience, and reflective formalization.

The following scenarios are deliberately formulated so that they can be implemented without specialized training in theater pedagogy, address a clear methodological core, and result in artifacts that can be reused in exam and project contexts.

3 Exemplary Improvement Teaching Patterns for Teaching Innovation Methods

The following collection represents only a small selection of the Impro Teaching Patterns designed and implemented to date, intended to give an impression of their diverse applications. A comprehensive list is currently in the works.

The first three teaching patterns involve methods from TRIZ (Theory of Inventive Problem Solving). TRIZ is particularly well-suited for performative teaching because the methodology consistently aims to resolve contradictions and think beyond obvious compromises (cf. Thurnes et al. 2019). Impro formats help make contradictions physically tangible, discover resources, and immediately test solution ideas before they are formalized.

Business models can be understood as systems of interdependent components (Osterwalder & Pigneur 2010). Improvisational formats are well-suited to bringing these interdependencies to life: when one component changes, others must adapt in real time. This creates precisely the kind of pressure under which business models are adjusted in practice.

In educational contexts, future-oriented methods often suffer from remaining too abstract. Improvisational formats help participants experience futures as concrete spheres of action: actors react, side effects occur, and assumptions become testable. The “Future Newsroom” teaching pattern corresponds to the game format of a news broadcast (see Bicheno & Thurnes 2015) and can be helpful in this regard.

In academic settings, the SWOT/TWOS analysis (cf. Kotler & Armstrong 2009) is often misunderstood as a mere list-making exercise. Improvisational formats generate friction and conflicting perspectives, which are typical of genuine strategic work. This makes it clear that SWOT involves not only gathering information, but also prioritizing, substantiating, and translating it into strategies.

The Service Blueprint tool focuses in particular on the interaction between the front end and back end of service processes (cf. Fließ & Kleinaltenkamp 2004).

3.1 Improvement Teaching Pattern “Contradiction Duell” (TRIZ – contradiction resolution)

Learning objective: Formulate contradictions with precision (improvement vs. deterioration) and resolve them, rather than developing compromises.

Impro format: Status game with side coaching (facilitator calls out status changes and principle prompts).

Setting: Any number of students; at least 2 players (“Requirement A”/“Requirement B”), 1 coach, the rest as observers/analysts; 15–25 minutes; open space.

Procedure:

1. The professor first introduces the context and formulates a concrete, practical goal conflict (e.g., “The product should be lighter, but must not lose stability” or “The service should be faster without sacrificing personal quality”). The goal is to make the underlying contradiction understandable and tangible for everyone.

2. The two participants each take on one of the conflicting requirements and embody it as a role. In a short improvisational scene (approx. 2 minutes), they negotiate the situation, making their respective logic, interests, and priorities clear and attempting to assert them (this may lead to a heated debate).
3. During the scene, the coach actively intervenes by deliberately initiating status changes (high/low) or calling a “freeze” in deadlocked situations. This makes blockages visible and stimulates new dynamics. It is also conceivable that the coach sends new students into the roles during the freeze to continue.
4. The observers then analyze the scene and formulate the underlying contradiction in a precise, TRIZ-compliant manner (a change leads to the improvement of one parameter and the deterioration of another). If multiple contradictions have become apparent, they are all documented.
5. Building on this, the coach selects two to three TRIZ principles (e.g., segmentation, dynamization, or pre-action). The principles are selected either arbitrarily or, for example, by drawing cards from a corresponding deck of the 40 inventive principles (see Opexinno 2019). For each principle, the scene is reenacted (each time for approx. 60–90 seconds), with the principle serving as a new “rule of the game” and requiring active translation into action.
6. Finally, the solution approaches generated in the variants are reflected upon collectively and transformed into concrete, transferable ideas.

Artifact: Formulation of a contradiction (at least one contradiction, formulated as a technical or physical contradiction) and 3 solution approaches, each with an assigned TRIZ principle.

Debrief/Transfer: Which intervention (i.e., which inventive principle) produced a genuine resolution? Where did it remain a compromise? Which inventive principles fit surprisingly well/poorly and why?

3.2 Improvement Pattern “9-Windows as a Stage Grid” (TRIZ - System Operator)

Learning objective: Strengthen systemic thinking along the subsystem-system-supersystem and past-present-future axes.

Impro format: Room layout as a 3x3 grid; short, serial mini-scenes.

Setting: 9–18 minutes; floor markings or tape; 1–2 players per cell, the rest as observers; optional: template for 9-Windows notes.

Procedure:

1. At the start, the room is visibly divided into a 3×3 grid that reflects the logic of the “9 Windows” (subsystem – system – supersystem as well as past – present – future). The structure is briefly explained so that all participants understand which perspective each field represents.
2. Teams or individual participants then take turns occupying selected fields of the grid. In short, focused mini-scenes (approx. 30–60 seconds), they depict how the system under consideration manifests itself in the respective combination of

level and time. The focus is less on elaboration and more on quickly visualizing central characteristics, dynamics, or problems.

3. During or after the scenes, the instructor asks targeted transfer and guiding questions to establish connections between the fields (e.g., “What change in the future supersystem could solve the problem in the current system?”). This encourages thinking beyond individual perspectives.
4. In parallel with each acted-out sequence, the observers document one key insight or hypothesis per field. This gradually results in a 9-Windows grid filled with content.
5. In the next step, the teams specifically select two or more fields between which they wish to establish a meaningful connection (e.g., a cause-and-effect relationship or a line of development). On this basis, they develop an initial solution approach or an intervention that integrates these perspectives and provides ideas for the future system.
6. Finally, the results are brought together and discussed in a plenary session, with a particular focus on which shifts in perspective have led to new insights and in which areas certain aspects may have been initially overlooked.

Artifact: Completed 9-Windows template and a derived solution approach.

Debrief/Transfer: Where did the greatest shift in perspective occur: time or system level? Which aspects were intuitively neglected?

3.3 *Improvement Pattern “Resource Scan” (TRIZ – Resource Orientation)*

Learning objective: Identify resources within the system and environment to expand solution spaces.

Improv format: Object and gesture transformation with a constraint (“use only what is available”).

Setting: 10–40 students; 8–12 minutes (micro-intervention) or 20 minutes (with evaluation).

Procedure:

1. At the beginning, a specific problem statement or system of interest is introduced, which serves as the starting point for the resource analysis. This should be formulated as clearly as possible, while still leaving enough room for different solution approaches.
2. The teams then collect, in a fast “rapid-fire” mode, various types of resources that might be relevant to the problem. They deliberately think broadly (e.g., materials, energy, information, timeframes, space, functional resources) to include less obvious potentials.
3. Each resource mentioned must be immediately translated into a brief physical representation—such as a gesture, movement, or the use of a symbolic object. Through this embodiment, the resource is not only cognitively named but also made perceptible through the senses, which often leads to new associations.

4. The collection continues until a spectrum of resources as diverse as possible has become visible. In doing so, even unusual or initially unrealistic-seeming contributions can be deliberately allowed in order to expand the boundaries of thinking.
5. In the next step, the teams specifically select two to three identified resources and combine them into an initial solution concept. The combination is again made as concrete and vivid as possible, resulting in a comprehensible approach.
6. Finally, the developed concepts are briefly presented and reflected upon together, particularly with regard to which resources were surprising and which only became visible or were reimaged through physical representation.

Artifact: Resource list (clustered) and concept sketch.

Debrief/Transfer: Which resource was surprising? Which one only became visible through representation (not through thinking)?

3.4 Improviation Pattern “Canvas Ensemble” (Business Model Innovation – 9 building blocks as roles)

Learning objective: Understand the logic and interdependencies of the Business Model Canvas according to Osterwalder and Pigneur (cf. Osterwalder & Pigneur 2010); practice making coherent adjustments.

Impro format: Ensemble improv with Freeze & Justify (when the action stops, a character explains their actions).

Setting: 9 roles (or 9 small groups); 45–70 minutes; large room; canvas poster or digital template.

Procedure:

1. At the start, the nine building blocks of the Business Model Canvas are assigned to individual roles or small groups. Each role consistently represents the logic of “their” building block (e.g., customer segments, value propositions, channels, etc.) and briefly prepares to argue from this perspective.
2. Next, a shared opening scenario is introduced, typically framed by the key question “Launch tomorrow—what’s on the agenda?” The roles interact with one another and clarify how their respective building block contributes to the overall model and what requirements or expectations are associated with it.
3. As the exercise progresses, the instructor introduces targeted external stimuli or “shocks” (e.g., new regulations, a competitor entering the market, a supply bottleneck, or a sudden change in demand). These events force the roles to adjust their positions and make the effects on the overall model visible.
4. If inconsistencies or tensions arise between the building blocks, the scene is paused (“Freeze & Justify”). Individual roles must then briefly explain why they are calling for certain adjustments and what consequences this has for other building blocks. This makes interdependencies explicit.

5. This cycle of game situations, external stimuli, and brief reflection breaks is repeated several times, allowing the business model to evolve step by step and various variants to be played through.
6. Finally, the insights gained are transferred into a consistent canvas. In particular, the resulting cascade effects between the building blocks are documented, and key adjustment logics are recorded.

Artifact: Canvas in multiple versions and notes on the identified domino effects.

Debrief/Transfer: Which building blocks were drivers? Where did conflicting goals arise (cost vs. value, scaling vs. quality)?

3.5 Improvement Pattern “Value Proposition Hot Seat” (Jobs, Pains, Gains Under Pressure)

Learning objective: Jobs-To-Be-Done-oriented questioning, deep user perspective, and clear distinction between observation and interpretation.

Impro format: Hot Seat (user persona is interviewed, remains in character) and status or role changes among the interviewers.

Setting: 15–35 minutes; 1 user, 2 interviewers, 1 observer team for Jobs/Pains/Gains.

Procedure:

1. At the beginning, the person in the user role receives a brief background description (e.g., context, goals, usage situation, and constraints), which they consistently embody throughout the exercise. The interviewers prepare to ask open-ended and exploratory questions without jumping to solutions too quickly.
2. The interview is conducted as an improvised conversation (approx. 8–10 minutes). The interviewers ask only open-ended questions and try to delve as deeply as possible into the user character’s perspective, experiences, and needs. Suggestive questions or implicit solutions should be deliberately avoided. To make the situation more diverse and facilitate shifts in perspective, the coach can vary the interviewers’ status or role, e.g., children, subjects of the “King User,” French people, Martians, etc.
3. At the same time, the remaining participants or a dedicated observation team observe the conversation and organize the information gathered into the categories of Jobs, Pains, and Gains. Care is taken to distinguish observations from interpretations.
4. Optional: The interview phase is followed by a brief playback session: Key statements or situations from the conversation are reenacted by observers or participants. This makes particularly relevant or emotional aspects more clearly visible.
5. Based on the insights gathered, the team formulates one or two concise value propositions. These are specifically linked to appropriate pain relievers and gain creators, creating a consistent picture of the value proposition.

6. Finally, the results are briefly presented and reflected upon, particularly with regard to which questions were especially insightful and where the interview may have been unconsciously steered or interpreted.

Artifact: Value Proposition Canvas according to Osterwalder/Pigneur (cf. Osterwalder et al. 2014) and Top-3 Insights.

Debrief/Transfer: Which question opened up new insights? Where was the conversation unconsciously steered or manipulated?

3.6 Improvement Pattern “Future Newsroom (Live News from 2035/2040)”

Learning objective: Translate drivers/uncertainties into consistent futures; discuss plausibility and implications. Development of future scenarios discovered using forecasting or futuring methods (scenarios, long-cycle waves, trends in the evolution of engineering systems, ...).

Impro format: News broadcast featuring an interview, stock market report, and citizen’s voice.

Setting: 45–70 minutes; groups of 5–7; input cards (drivers/uncertainties) and roles (moderator, expert, affected party, opponent).

Procedure:

1. At the start, each group receives a set of key drivers and uncertainties (e.g., technological developments, regulatory frameworks, or societal trends that may result from the application of forecasting or futuring methods), from which a consistent future scenario is to be derived. The group first agrees on a plausible combination of these factors as the basis for their story.
2. The group then develops a concept for a short news broadcast from the future (e.g., the year 2035 or 2040). This typically includes several elements such as a lead story, a brief interview with an expert, an assessment from the perspective of those affected, and, optionally, an economic or business-related analysis (e.g., a stock market report or commercial).
3. The group conducts the live broadcast (approx. 3–4 minutes), presenting their scenario as concretely and coherently as possible. The goal is not merely to describe the future, but to make it tangible as a lived reality in which actors act and react to one another.
4. Following this, the other groups ask targeted critical questions. These focus in particular on the internal logic of the scenario, potential side effects, and previously unconsidered influencing factors or blind spots.
5. Building on this discussion, the group revises its scenario and translates it into a structured format: key assumptions, underlying drivers, relevant uncertainties, and the resulting opportunities and risks are explicitly identified.
6. Finally, the results are reflected upon in a plenary session, particularly with regard to which elements were actually thought through causally and which

remained more narrative in nature, as well as what implications can be derived for strategic decisions or areas of innovation.

Artifact: Scenario profile (title, logic, drivers, uncertainties, implications) and “no-regret moves.”

Debrief/Transfer: Which parts were merely narrated, and which were causally played out? Where did second-order effects become apparent?

3.7 Improvement Pattern “Bias-Check Intervention” (SWOT as a bias-prone artifact)

Learning objective: Recognize cognitive biases (e.g., confirmation bias, availability bias, sunk cost bias) in analysis processes.

Impro format: Short interludes (“bias cards”) during the SWOT exercise.

Setting: 10–15-minute add-on; bias cards; suitable for large lectures.

Procedure:

1. The exercise is integrated as a supplementary intervention into an ongoing SWOT analysis. As the teams begin collecting and organizing their points, the instructor announces that specific disruptions in the form of typical cognitive biases will be introduced throughout the process.
2. At regular intervals, the instructor draws a bias card and introduces it as a brief intervention (e.g., “You’re just looking for confirmation of your assumptions” or “You’re giving disproportionate weight to readily available information”). These prompts deliberately interrupt the workflow.
3. In response to each prompt, the teams are asked to actively counteract it for a short period (approx. 60 seconds). This takes the form of a mini-improv debate in which they specifically develop counterarguments, alternative perspectives, or contradictory evidence regarding their previous points.
4. The newly developed counterarguments are not discarded but systematically recorded and assigned to the respective SWOT categories. This creates a deliberate contrast between the initial assessment and critical reflection.
5. This process is repeated with several bias interventions so that different types of bias are addressed and the analysis gradually gains depth.
6. Finally, the teams consolidate their SWOT matrix by annotating key points with corresponding bias notes or uncertainties. In a joint reflection, they discuss which biases were particularly influential and which strategies can help systematically reduce them in real-world analysis processes.

Artifact: SWOT with bias notes and counterarguments.

Debrief/Transfer: Which bias occurred most frequently? Which countermeasures are feasible in real-world innovation projects?

3.8 Improvement Pattern “Service Blueprint Split-Stage” (Frontstage/Backstage Simultaneously)

Learning objective: Recognize backstage processes as levers for innovation; understand dependencies and handoffs.

Impro format: Split stage: one half frontstage, one half backstage.

Setting: 30–50 minutes; room division; roles: Customer, Frontline, IT, Logistics, Policy/Compliance.

Procedure:

1. At the start, the room is clearly divided into two areas: Frontstage (visible interaction with the customer) and Backstage (internal processes, systems, and rules). Roles are assigned accordingly (e.g., Customer, Frontline, IT, Logistics, Compliance) so that both levels can be acted out in parallel.
2. In an initial run-through phase, the service situation is presented simultaneously: While the customer experience is visible on the front stage, the backstage roles simultaneously act out the internal processes, decisions, and dependencies. The goal is to create an integrated picture of visible performance and invisible process logic.
3. The instructor intentionally pauses at critical points (“Freeze”), particularly where delays, breaks, or inconsistencies occur. At these moments, the group analyzes together which information, rules, or resources are missing or insufficiently coordinated backstage.
4. Based on this analysis, the teams identify specific bottlenecks or problem areas and consider targeted adjustments—particularly at the backstage level (e.g., process changes, information flows, responsibilities, or system adjustments).
5. The scene is then re-enacted, with exactly one change implemented in the backstage each time. This reveals the impact of this adjustment on the frontstage experience.
6. Finally, the insights gained are translated into a structured service blueprint. In the joint reflection, the discussion focuses in particular on where the key levers for improvement lie and which interactions between frontstage and backstage are particularly critical.

Artifacts: Service blueprint, bottleneck list, and innovation ideas.

Debrief/Transfer: Where was the real bottleneck: people, process, system, or rule? Which change is most effective and why?

4 Implementation hints

It is important to remember that the learners are not improvisational theater actors! One should not expect “shows” with high entertainment value, as are common in entertainment events. The sessions are often rather unspectacular and are not highlighted

to students as a “special” form of intervention. For improvisational interventions to be effective and fair in academic contexts, they require clear guidelines. Three aspects have proven to be particularly critical: psychological safety, role diversity, and structured reflection.

Not all students feel comfortable on a “stage.” This is not a shortcoming, but rather a pedagogical design challenge. The following are recommended:

- voluntary participation, especially for high-visibility roles,
- alternative roles (observer, note-taker, coach),
- clear rules (“mistakes are material,” “no embarrassment”), and
- short, frequent formats that create routine.

Improvisation should never end up being an end in itself. Every intervention should result in a verifiable artifact: canvas versions, matrices, lists of hypotheses, evidence plans, or roadmaps. This allows performance to be evaluated based on methodological quality and reflection, not on acting talent.

Reflection combines performative experience with methodological formalization. Short, recurring debriefing questions have proven effective.

- What just happened (without interpretation)?
- Which assumption became apparent (and was previously implicit)?
- Which methodological elements did we use—and which did we skip?
- What alternative could we have tried?
- How do we proceed from here?

In large groups, a “fishbowl” approach is recommended: a few participate, many observe with clear observation tasks (e.g., “Pay attention to status signals” or “Note contradictions and resources”).

Online, many patterns can theoretically be carried out in breakout rooms if roles are clearly assigned, time boxes are strictly adhered to, and shared artifacts are consolidated on a collaborative whiteboard. However, the author has had rather negative experiences with online sessions with his students and therefore largely avoids them.

5 Summary

The scenarios demonstrate that improvisational theater is not merely a warm-up or a “motivational” exercise, but a precise didactic mechanism: it fosters connectivity, makes interdependencies visible, simulates uncertainty, and compels negotiation. In doing so, improv addresses a central need in innovation education: the integration of methodological knowledge with practical competence.

At the same time, there are limitations. Improvisation can be overwhelming if used without a secure framework or if it lacks a connection to methodological tools. Furthermore, performative elements must not be evaluated unfairly. Finally, effectiveness depends on the fit between the method, the learning objective, the group, and the context: not every exercise is suitable for every group.

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