



ARTICLE

Young People Speculating with and About Hope Through a Life-Friendly Cli-Fi Roleplaying Game: Disrupting Environmental and Sustainability Education/Research

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Abstract

The signals and consequences of, and currently overall eco-socio-cultural inadequate responses to, the pressing climate and biodiversity crises of the Anthropocene foster a landscape of repression, hopelessness and anxiety among many, not least young people. As young people today seem to primarily encounter dystopian future narratives, this article tells a story about how playing an open-ended, solarpunk, character-driven cli-fi tabletop roleplaying game together with young people might nurture non-dystopic engagements. Designed as both a research and educational playspace, the game invites participants to become co-researchers and co-narrators engaged in imagining life-friendly futures, attempting to push the boundaries of environmental and sustainability education research. In conversation with the theoretical inspirations of the game — post-Anthropocene pedagogy, climate literacy research and SF multispecies storytelling — the article discusses insights from the first prototype playtests. When the game flows, it produces engagements with speculative futures and understandings of hope's relational and complex character. When it halts, it reveals challenges around participation, social context and setting, pointing to directions for further research and game alterations.

Keywords: active hope; Cli-Fi; environmental and sustainability education; roleplaying; speculative futures; young people

Introduction: playing with disasters and hopes

The signals and consequences of — and currently overall eco-socio-cultural inadequate responses to — the pressing climate and biodiversity crises of the Anthropocene¹ foster a mixed landscape of repression, hopelessness and anxiety among many, not least young people (Fettes & Blenkinsop, 2023; Hull, 2019; Jukes et al., 2024; Lehtonen et al., 2019; Paulsen, Jagodzinski, & Hawke, 2022; Verlie, 2021; Brückner, 2025). Such an emotional landscape risks turning many toward passivity, discouragement and despair. This is particularly the case if one grows up with mainly dystopian narratives of the future in mass media such as news, films and videogames (Baden, 2019; Oziewicz, 2022).

To elaborate on how to counter this and transform important affects into creative and active forces educationally, this article speculates whether a solarpunk, character-driven, climate fiction

¹The Anthropocene is a suggested title for our current epoch, where (some) humans/man (anthropos) have become a geological force impacting all life on the planet. See Paulsen et al. (2022) for a critical discussion.

(cli-fi) tabletop roleplaying game (TRPG) can nurture life-friendly, future-oriented climate and eco-engagements (Iversen & Paulsen, 2024).

We describe the game as solarpunk, and more specifically hopepunk — subgenres of speculative fiction — because 1) solarpunk envisions ecologically and socially just futures beyond current socioecological crises, often combining renewable technologies, community resilience and sustainable living, and 2) hopepunk, a closely related subgenre, emphasises emotional strength, solidarity, and small-scale resistance as forms of radical hope (Kelsey, 2020; Hull, 2019). Because solarpunk and hopepunk do not always engage climate change directly, we also use the term cli-fi (climate fiction) to clarify the thematic focus. Cli-fi refers to speculative narratives that explore how humans and more-than-human communities might respond to climate change and environmental challenges, imagining alternative futures.

Our speculations are based on a research project, situated in Denmark, which we began in 2022. Our aim is to create an open-ended, non-dystopian playful framework that is simultaneously an Environmental and Sustainability Education (ESE) research playspace (Rousell & Cutter-Mackenzie-Knowles, 2022) as well as a novel educational format. Here one can play with and speculate about how perceptions of the future might impact how we in the present relate to the climate and environmental crises. We play with hope and hopelessness, reflecting together with the participants on whether and how hope matters, and how such shared experiences may change our understanding of how to live and die together with others as well as possible (Haraway, 2016; de La Bellacasa, 2017).

This brings us to the core research question guiding this article: How might an open-ended, solarpunk, cli-fi TRPG support non-dystopian engagements with climate futures and enable new forms of ESE?

A solarpunk cli-fi tabletop roleplaying game

TRPGs are one of more roleplaying game (RPG) formats, originating in the mid 1970s with inspiration from sport simulation games, early text adventures, tabletop wargames, and Tolkien's writings (Barton & Stacks, 2019, 21). *Dungeons and dragons: Rules for fantastic Medieval wargames campaigns playable with paper and pencils, and miniature figures* (Gygax & Arneson, 1974) was the first published TRPG. As the name indicates, the activity is carried out at a table with pencils, papers (and special dice). TRPGs are co-created fictional stories guided by game mechanics in which a group of players enact characters. Mostly, a gamemaster (GM) leads the game, improvising a story with the group, based on a prewritten, yet open-ended scenario and playing non-player characters. While the early TRPGs were combat-focused and set in fantasy worlds, a wide variety of RPGs have emerged since then (Zagal & Deterding, 2018, 47).

The variation we discuss in this article is a cli-fi TRPG, belonging to the solarpunk genre, thus a game that invents scenarios of habitable futures beyond current socioecological disasters (Skiveren, 2024, 490).

This is based on the premise that how we imagine and see the future matters in the present. Every step we take, every action we attempt is shaped by imagined, anticipated, and expected futures that we cannot know whether will come true (Luhmann, 1990). Thus, it matters how we in the present *project* future horizons, and it's therefore an important aspect to play with, and disrupt, within ESE (Rousell & Cutter-Mackenzie-Knowles, 2022; Rousell & Peñaloza-Caicedo, 2022) (Figure 1).

Our cli-fi TRPG is designed as both 1) a research playspace (Rousell & Cutter-Mackenzie-Knowles, 2022) and 2) an alternative educational practice (Iversen & Paulsen, 2024). The intention is to invite participants to become co-narrators, co-researchers and co-learners (Rousell & Cutter-Mackenzie-Knowles, 2017, 2022). This also resonates with approaches that see ludic play itself as a method of inquiry and transformation, as proposed by de Koven and Gramazio (2021),



Figure 1. Image from playtest # 2.

where the act of playful exploration can generate knowledge and unsettle habitual ways of thinking. Thus, push the boundaries of ESE research by engaging with young people in collaboratively imagining and debating perhaps life-friendly futures (Rousell & Peñaloza-Caicedo, 2022; Brückner & Paulsen, 2025).

While our project is situated in Denmark, it is shaped by and contributes to an international conversation within ESE — one to which Australian scholars have offered substantial theoretical and methodological insight. Concepts such as research playspaces (Rousell & Cutter-Mackenzie-Knowles, 2022) have been particularly generative for our approach. As such, we hope this work will resonate with AJEE's broader readership and contribute to shared inquiries into transformative, hopeful educational practices across diverse contexts.

In the following we (1) outline the background of the game, (2) describe the story of the game (3) clarify its theoretical inspirations, (4) present the first prototype playtests and (5) consider challenges identified during the playtests, which call for further research and adjustments.

Bringing cli-fi roleplaying into environmental and sustainability research

Since the mid 1970s, various types of RPGs have been used for educational and therapeutical purposes (Kilmer et al., 2023; Zagal & Deterding, 2018, 9–10). During the same period, research into the use of RPGs in educational and therapeutical settings has documented many benefits (Daniau, 2016). The use of RPGs may increase students' engagement (Broadwell & Broadwell, 1996). Playing the role as someone else might train perspective shifting, nurture complex and detailed understanding of situations and people (Asal, 2005; de los Angeles, 2016), and foster empathy (Bagès et al., 2021). Recall and rendition appear to increase (Krain & Shadle, 2006). Other studies report a strengthening of the ability to think ethically and critically (Gordon & Thomas, 2018; Simkins & Steinkuehler, 2008). In the context of therapy, the research is in its infancy (Henrich & Worthington, 2023) but similar benefits have been described across different diagnostic groups such as autism, ADHD, conduct disorder, anxiety disorder and clients with traumatic experiences (Arenas et al., 2022). A motivation for applying RPG in therapy is the argued transformative potential of clients experiencing different scenarios such as experimenting



Figure 2. The main characters of the game in Berlin-part, drawn by Sigrid Skov Asmussen.

with alternative identities in a safe environment (Rosselet *et al.*, 2013), trying out alternative ways of interacting with peers (players and characters), regulating emotions, coping and problem-solving. In the therapeutic setting attention can be given to debriefing (Daniau, 2016), helping the client to link experiences from the RPG setting to real-life experiences and, when relevant, encourage and support the transference of new skills and insights to the lived life (Slaughter & Orth, 2023).

We point to three reasons for experimenting with a cli-fi TRPG in ESE:

Firstly, roleplaying as an open-ended and collaborative format that includes participants as actors and co-narrators hold a potential for a different engagement than fixed formats, such as literature, films and theatre. While reading or watching allows for interpretive activity, play and games also allow for configurative activity (Moulthorp,). That is, participation, where players have agency and can influence what happens. We have pointed to how the format might support shift of perspective, development of empathy, and complex understanding of existential and environmental issues. All this we find relevant to explore and experiment with, to contribute with new insights on how to nurture agency in ESE (Evans, 2015).

Secondly, we want to invest ourselves, not just study published fictions or the impact of teaching about cli-fi literature. We want to commit ourselves 'to do something', exploring and co-creating future stories together with young people to partake in active, environmental commitments. This to seek transformation (Varpanen *et al.*, 2024) by becoming storytellers together with the players of the game. Thus, instigating a playful, collective research space that crosses boundaries between research and education, inspired by posthuman onto-axio-epistemologies (Malone, 2017; Rousell and Cutter-Mackenzie-Knowles (2022).

Thirdly, we see an unfulfilled potential in RPGs for creating life-friendly stories (Nørreklit & Paulsen, 2023). Looking into dominating tropes within RPGs, one finds a multitude of stories featuring heroes who defeat evil violently. Suggesting aggression as the main solution, such narratives are unhelpful, if not on the wrong trajectory, when it comes to devising possible responses to the climate and biodiversity crisis. Instead, we find it worthwhile to frame stories otherwise, inspired by ecofeminisms (Lykke, 2025) and *The Carrier Bag Theory of Fiction*, proposed by Ursula Le Guin (1996), and her distinction between *life stories* and *killer stories*.

On-doing dystopian narratives

To offer a basis for connections with the players' own lives we work with character-driven stories, offering players the narrative freedom to form their characters and the collective narrative within a predefine, but flexible, frame. This frame, the overall story, aims to push the story in life-friendly directions or at least not down solely dystopian nor action-laden paths with classical heroes as protagonists (cf. Haraway, 2016) (Figure 2).



Figure 3. Front page of our game, drawn by Sigrid Skov Asmussen.

Our TRPG is divided into four seasons: summer, fall, winter and spring. Each season takes around 4–6 h to play and explore life-dilemmas, hope and the power of imagination. The story, which the players may transmute in unpredictable ways, is this: seven young people meet every week in a garden community in Berlin, to talk, hang out and cultivate a garden together. This happens in 2025. One of the group, Gaia, has a dying grandfather who voices strange visions of a future on the other side of a global catastrophe. When Gaia tells her friends about her grandfather's visions, the game shifts to the future around 2050 around the polluted Aral Lake in nuclear infected Kazakhstan (Malone, 2017). Upon the shift, the participants play seven characters in this future. As the two stories (present 2025/26 + the future of 2050/51) unfold, threads emerge between the two, and the characters in the present may begin considering whether there is some truth in the visions of the future, and whether they're related to their own lives (Figure 3).

The 2050-future scenario starts where the film *Snowpiercer*² ends: Inside a train with a sustainable but class-divided society and ecology. The passengers are told that no human life exist or can exist outside of the train. This because the earth due to a failed attempt to respond to global

²The film *Snowpiercer* from 2013 directed by Bong Joon Ho, is inspired by *Le Transperceneige* (1982–2015), a post-apocalyptic cl-fi graphic novel written by Jacques Lob and illustrated by Jean-Marc Rochette. Based on the film and the novel, a television series came out from 2020–2024. The RPG we have created is not based on the series, but on the novel and the film, but starts when the film ends, and tries to play with disrupting the dystopian elements in favour of speculating forth new life and narratives as a difficult dismantling of the dystopic outlook.

warming has cooled down, resulting in a near-global ice-age. Yet a group of young people have come to doubt this dystopian ideology and jump off the train. The future scenario begins here, and it turns out that there *is* life outside the train. Including human life and emerging societies with new relations to the more-than-human. Thus, the narrative invites storytelling and beliefs *beyond* dystopian outlooks (the latter represented by the train, its closure, and ideology).

The future narrative has been created with inspiration from existing life-friendly stories from authors such as Ursula Le Guin, Hayao Miyazaki, and Tove Jansson. Each season is divided into episodes. After every episode the players give interpretations of how their character's hope is affected. None of the episodes are straight forward but confront difficulties as well as loveable aspects of life. Gradually, the players take over the story, and it is up to the players to tell and feel how life is lived and give it shape.

Life-affirmative research, education and storytelling

The theoretical inspirations for the game compress three threads:

(1) *Post-anthropocene pedagogy* launches criticism against ESE that responds to the crisis of the Anthropocene by trying "to solve environmental problems with the same institutions, logics and world understanding that cause the problems" (Nørreklit & Paulsen, 2022, 220). Post-Anthropocene pedagogy suggests that ESE should not only focus on optimising resource usage for some dominating humans, but care for multispecies flourishing by nurturing life-friendly co-existence (Brückner & Paulsen, 2025). Life-friendly means loving and caring about and for life in its multiplicity, i.e., 1) life as the living world, 2) life as each singular living being, 3) life as a process and event and 4) matter as the mother of life (Brückner & Paulsen, 2025). This focus on life-friendly co-existence, perhaps yet to come, has inspired us to create a disruptive research and educational practice that A) examines what can be learned from playing characters who in the present struggle with becoming life-friendly, B) while debating future narratives where new entanglements between humans and other living beings, develop, change and transmute (also played by the participants).

(2) *Climate literacy research* (Oziewicz, 2022) holds that contemporary youth predominantly encounter dystopic narratives regarding the future. If we only see the future through dystopian lenses, it risks leaning us into passivity, anxiety and hopelessness (Bernstein et. al., 2022), especially if it seems impossible to dismantle eco-destructive capitalism and societal structures disempowering life (Rolnik, 2017). According to Oziewicz, young people today grow up primarily with dystopic narratives, meaning that they believe the world as we know today will collapse, if not mitigated by technological fixes. In both cases such views lean towards that we as ordinary people cannot do much to change the course. Oziewicz (2022) as Haraway (2016) calls out for a third option: stories of futures that are neither purely dystopian nor technotopian, but biotopian (or Gaia stories with Tønder (2025)). Thus, we can distinguish between at least three available narratives:

1. *Dystopian*: due to human folly everything will collapse in near future and cannot be prevented.
2. *Technotopian*: technical solutions will be developed to solve or at least mitigate the worst problems related to climate and ecological crisis and thus save us.
3. *Biotopian*: if we dare, we might become capable to co-create new ways of living, more life-friendly, in partnership with the living world.

Oziewicz suggests educators search for biotopian narratives and promote these in ESE to nurture climate literate people who can envision and believe in futures where humans may learn to live more life-friendly. We want to create such stories together with participants via roleplaying,

as research (c.f. earlier in the article) indicates this format can create opportunities for becoming collective agents. In accordance with Le Guin's notion of life stories (1996), our game is populated by everyday people who struggle to make sense of their lives, while also experiencing opportunities for personal transformation (Varpanen et. al., 2024). In accord with climate and ecoliteracy research (Evans, 2017; Iversen & Paulsen, 2024; Orr, 1992) we intend to cultivate the capacity to envision thick life-friendly futures via participation in our cli-fi TRPG. This includes how understandings, norms, imaginations and skills are embedded as core structures of our lives (Cutter-Mackenzie & Smith, 2003).

(3) *SF multispecies storytelling* (Haraway, 2016) comprises connected strings that ask: *what if* we could live otherwise more attuned to and in collaboration with other species, to learn with and from? *Then* what might the world come to look like? (Le Guin, 2017, xviii):

SF is a sign for science fiction, speculative feminism, science fantasy, speculative fabulation, science fact, and also, string figures. Playing games of string figures is about giving and receiving patterns, dropping threads and failing but sometimes finding something that works, something consequential and maybe even beautiful, that wasn't there before, of relaying connections that matter, of telling stories in hand upon hand, digit upon digit, attachment site upon attachment site, to craft conditions for finite flourishing on terra, on earth.

(Haraway, 2016, 10).

We see our game as an open string figure, we hand to the players to play with, which can be passed on to new participants, in ever new variations. The game is inspired by "The Camille Stories", told in chapter 8 of *Staying with the Trouble* (Haraway, 2016). Here Haraway tells about a writing workshop where she is asked to fabulate a baby through five generations "to imagine flourishing with and for a renewed multispecies world" (Haraway, 2016, 134). Inspired by this, we've created a RPG where a group of seven fictive young people, situated in present time Berlin, are retelling and listening to visions of a future anno 2050. In the future narrative we are not following only one child, but a group of children, a polar bear and some adults, who encounter new multispecies societies evolving. One of these experiments with mixing and relating butterflies and human beings, inspired by the Camille stories. In the game, we play with what it may mean to become a butterfly-human and live in such a society. We play one future story, but with inbuilt generational relationships and movements towards future transformation. Besides that, many ideas from Haraway are taken up. For instance, that we try to avoid future imaginations which start from scratch, to not confirm "settler colonialism" (Haraway, 2016, 138). Instead, we set off in a ruined world, on a damaged planet (Tsing, 2015). Here the characters encounter cave paintings from a prehistoric past, a ruined gas city (from present time), the environmentally devastated Aral Sea, and an ecology affected by nuclear pollution. Yet, becomings in new ways, perhaps enabling capacities for resurgence and multispecies flourishing (Haraway, 2016, 145).

Haraway (2016) recounts how Anna Tsing turned her attention to Hayao Miyazaki's manga (published 1983–1994) and anime movie (1984) *Nausicaä of the Valley of the Wind*, becoming the favourite story of Camille. The *manga* Miyazaki authored, however, is far more complex, longer and different from the anime movie. The manga, for instance, ends differently. This Haraway seems unaware of, only taking account of the film. In the RPG we have integrated aspects of the manga: in the last season, the future characters arrive at a secret garden. Here they meet an old guardian. She tells them that the people outside of the garden is meant to clean the world after the great climate catastrophe. Perfect human embryos are kept frozen in a crypt under the secret garden and will be awakened to life when the world has been cleaned, to take over the world again and, this time around, make it perfect. The guardian then offers the characters a choice: They can choose to stay in the garden, or if they prefer, leave. In the manga, Nausicaä is confronted by a

similar choice and chooses to leave. She wants to dedicate herself to what lives, instead of to the perfect. In the RPG we play with this. In most of the playtests some characters stay while others want to leave for multiple reasons. We think that the roleplaying genre here come to its greatest potential: because of its open-ended character, we can play with examining the complexities of life.

Together, these theoretical threads have shaped both the structure and narrative possibilities of our TRPG. Post-Anthropocene pedagogy encourages us to design educational prompts that disrupt dominant human-centred logics and foster speculative engagements with multispecies futures. Climate literacy research has led us to deliberately avoid framing the future solely in dystopian or technotopian terms. Instead, we invite participants to a biotopian narrative space where they can actively explore complex, life-affirming possibilities in response to the ecological crises. SF multispecies storytelling, in turn, informs the game's world-building, character development, and narrative arcs — inviting players to navigate entangled relationships between humans and more-than-human beings. Rather than teaching about these theories abstractly, we embed them within the game's mechanics and story world. This is to enable participants to explore them playfully and affectively: through roleplay, decision-making, and collaborative storytelling, they are invited to co-create narrative experiments in what life-friendly futures might feel like, look like and require.

Prototype playtesting

The aim of this article is not to analyse the rich empirical material (images, videos, sound recordings, interviews, drawings, and diverse contributions to the game) we have created with participants — that will be the focus of future publications — but rather to present and discuss key conversations that the first four playtests have fostered in our research group. This is in line with the research design, which follows a practice-based, iterative methodology rooted in post-qualitative and arts-based traditions (Rousell & Cutter-Mackenzie-Knowles, 2022), where each playtest operates both as an educational experiment and as a site of collaborative knowledge production. This approach enables us to explore how speculative, participatory storytelling can cultivate life-affirmative thinking and hope-oriented imaginaries among diverse participants. Rather than seeking generalisable outcomes, we treat the playtests as research playspaces where emergent, affective, and relational dynamics are key to understanding how participants engage with complex ideas like hope, co-existence, and future imaginaries. The empirical material generated — such as participant reflections, conversations, images, creative contributions and our own fieldnotes — is not analysed through rigid coding schemes but instead through a diffractive and dialogic process within our research group. After each playtest, we engage in collaborative reflection sessions to trace how each experience fosters or limits engagement with its educational and theoretical aims. These reflections guide adjustments, such as script modifications, facilitation techniques and structural tweaks, which are then tested in subsequent playtests. In this way, the research and design processes are entangled, and the game evolves responsively across contexts and groups.

In what follows, we describe the first four playtests conducted between 2022 and 2025. These playtests illustrate how the TRPG works (or does not work) across diverse settings and participant groups and how, through each iteration, insights emerged that informed ongoing development. While we do not offer a full empirical analysis here, we reflect on key conversations and relational moments that arose.

Playtest #1: playing with adults in a botanical garden

The first playtest ran from August 2022 to late spring 2023 in a botanical garden in Aarhus, Denmark, with four seasonal sessions: two indoors in a public greenhouse café and two outdoors on a patio. Each session lasted around five hours and involved about seven players. Michael

Paulsen acted as gamemaster (GM) and researcher, writing the script between sessions; Sara Mosberg Iversen participated both as a player and researcher. The eleven volunteer participants, aged 20–60, varied in gender, background, and experience with TRPGs and climate issues. Some were teachers; some were new to roleplaying. All expressed enthusiasm about the game, especially those unfamiliar with the format. Each session ended with a reflective conversation.

A central theme was hope, which players explored through their characters. One player described being “pulled in and out of realities” and appreciated the “forced reflection” on their character’s shifting relationship to hope (Iversen & Paulsen, 2024). Others valued the open-ended structure, which invited deep thought about choice, values and consequences. Rather than offering simplistic optimism, the game prompted nuanced reflections on hope’s complexity. As one noted, the same narrative events led some characters to grow more hopeful, while others became less so (Iversen & Paulsen, 2024). One player said the game inspired her to seek out a community garden in her real life (Iversen & Paulsen, 2024). Players also recognised the game’s educational potential. One noted that it engages imagination without overwhelming fear, allowing space to explore both existential concerns and possible futures (Iversen & Paulsen, 2024). Others highlighted how the game’s dual-timeline structure helped them reimagine what might change over 25 years. All in all, the first playtest suggested that the game can spark thoughtful, emotionally engaged discussions about ecological futures, imagination and the role of hope — valuable capacities for both personal reflection and education.

Playtest #2: playing with young experienced roleplaying players

Encouraged by the successful first playtest, we moved on to playing with 12 young people who were experienced roleplayers volunteering to participate. This playtest took place at Østerskov, a national secondary boarding school (8th, 9th, and 10th grade), where most of the teaching takes the form of roleplaying. The school was created based on an understanding of games as potential catalysts for social interaction and training grounds for complex skills. It opened in 2006 and was partly run by passionate roleplayers, many of whom did not have extensive experience with teaching.

We divided the students into two groups with Michael Paulsen and Sara Mosberg Iversen as GMs. The groups were diverse in gender, diagnoses and experiences of schooling before coming to Østerskov. We were struck by how careful these young people were with one another, helping, supporting and giving each other space to be. The students were able to elaborate on the game at an advanced level, suggesting adjustments and additions.

The script of the TRPG was only adjusted slightly from the first playtest. We played together over four days in a row, from Monday to Thursday in January 2024. Each day began with a briefing and ended with debriefing and conversation. During some briefings, we asked participants to do exercises, such as exploring what it might feel like to be a polar bear. The game fostered enjoyable hours and fabulous conversations about the game, hope and life — conversations that were thoughtful, philosophical and inventive.

Among other things, we learned that hope is complex and relational; the same event can provoke loss of hope for some while inspiring hope in others. Hope and life are not linear: one can lose hope but still find life worthwhile, or the opposite. Moreover, hope is influenced by backgrounds and experiences. We talked about how it matters that we relate in conversation to how hope can go up and down, while also recognising that hope is not everything but part of a wider relational alchemy of affects (Bennett, 2020).

Playtest # 3: playing with school children 11–14 during a theme week

During December 2024, Amanda Glob Nielsen (now a Ph.D -student in the project), Michael Paulsen, and Sara Mosberg Iversen went to a small nation Island to play with a diverse group of



Figure 4. From the third playtest.

children at a small, private school with focus on the children's autonomy and freedom of expression. We met 20 children/young people, aged 11–14, grouped together for a theme week. This setting differed from the previous. Firstly, the participants had not volunteered to play as the activity was framed by the school as obligatory. Secondly, none of the students had previous experience with TRPGs. Thirdly, they were younger, down to eleven years old. Fourthly, we decided that this time some of the students should be GMs to examine if this would work.

We decided together with a teacher, who was present, to have three roleplaying groups. Amanda and Sara, on the first day introduced the game to the players, while Michael prepared six students, preselected by the teacher, to be GMs. Later the first day, we began playing. Yet, the setup didn't work, as too many did not engage in the game or disrupted the game by throwing paper balls, talked about other things, bothered others, including those who wanted to play, left the game now and then, while others lost courage, did not speak or did not understand what to do. The next day we decided to form one group of those who voluntarily wanted to continue, while we together with the teacher invented alternative, non-roleplaying activities for the rest. In a nice room in another section of the school, Amanda and Michael together with six students around 11–12 years old, and two GMs, around 14 years old, continued with the game. Simultaneously, Sara and the teacher made creative and science activities with the other students, producing artefacts and knowledge related to the game story. Compared to the chaos the day before, this worked relatively well, engaging many, though not all. Halfway through the second day, some students came back to the roleplaying group, asking to join. Amanda and Michael hesitated. Michael had noticed that these students seemed to be interested in music and asked if they wanted to produce original music for the RPG. With enthusiasm they agreed and went to the school's music room. Continuously they went back and forth between the roleplaying room and the music room to hear how the story unfolded so they could incorporate it into the song they worked on. The final day, they played their song for all of us. A central motive in the song was Igor, a pet squirrel (attached to a main character) who died in the game. The roleplaying group disintegrated the last two days. The last day, there were only two players left and no GMs. In total, the game perhaps failed, yet with glowing and intensified moments here and there. As a research practice, it worked well as we learned about how relational dynamics matters (Figure 4).

Table 1. Comparative overview of key features and emerging patterns across the four playtest settings

Playtest	Participants	Setting	Engagement	Imaginative/ reflective themes	Relational Dynamics	Educational insights
#1: Adults in a Botanical Garden	11 adults, mixed backgrounds	Semi-public space, seasonal sessions	High engagement across sessions	Hope as complex and evolving; personal connection to futures	Strong, with shared reflective conversations	High; prompted real-life actions and deep thought
#2: Young Experienced Roleplayers	12 teenagers, roleplay-trained	Secondary boarding school	Very high, co-creative and inventive	Hope as relational and non-linear; philosophical depth	Exceptionally supportive peer dynamics	Very high; participants contributed to game development
#3: Schoolchildren 11–14	~ 20 children, diverse experiences	Small island school, theme week	Initially low, more mixed after restructuring	Music, pets, and grief; scattered narrative engagement	Fragile, but improved with self-selected grouping	Moderate; success in informal creativity and collaboration
#4: Tenth-Grade Students	14 students, elective class	Conventional school setting	Low overall; sporadic engagement	Some imaginative uptake, but hard to sustain	Weak; limited familiarity among students	Limited; showed difficulty of disrupting school norms

Playtest # 4: playing with young people in a tenth grade

We decided to test the game in one more setting before adjusting. During January and February 2025, we spend five Thursdays playing with a group of students attending a tenth-grade centre. While these were of similar age, they came from different classes to attend an elective course focused on board games. They participated because it was part of the class requirement and didn't know each other well. Since it was a small class (14 students) and because the teacher expected many wouldn't show up every time, we formed only one group, with Sara and Michael as alternating GMs. The first of the five days Amanda and Sara prepared the students for the game. The next week we began playing. At the fourth day Mette Elmoose Andersen, the psychology researcher of our research team, attended in the research playspace. In overall, we didn't succeed in creating a relational atmosphere that made it possible to get the young people to interact, making it nearly impossible to roleplay. The participants most of the time didn't want to say much except short sentences when we encouraged them to do so. Yet, some of the students in some parts of the game participated in thoughtful and attentive ways. Moreover, even though the roleplaying were slow-going, requiring much prompting, some participants still expressed that they'd been gripped by the story and had formed interesting pictures in their mind. The teacher also remarked that the students clearly "felt" the TRPG and took part in the activity in a more constructive way than during normal lessons. Yet, some expressed that they could not relate to the story. As a research practice we learned how much relations and the school context affect attempts to encourage new practices, being difficult to disrupt; and how challenging it can be to create a space together to foster life-friendly future narratives.

While the playtest descriptions remain narrative and contextual, Table 1 below offers a comparative overview of key features and patterns that emerged across the four settings.

Discussions of future cli-fi TRPG to disrupt ESE

While it's tempting to think that introducing something new and interesting, such as a cli-fi TRPG, into ESE will automatically create engagement and interest, we can attest that this isn't the

case. Here we'll focus on three initial conversations that the four playtests have kindled in our research group regarding the preconditions for using a cli-fi TRPG as an engaging and constructively disruptive ESE.

Motivation

Participants' motivation affects the collective capability to co-create imaginations. Highly motivated participants are more ready to cope with learning how to play, despite lack of prior roleplaying experience (Boysen *et al.*, 2023), even when players are strangers to each other. The more intrinsically motivated participants are or become, the more they're willing to dedicate themselves to playing, resulting in a more imaginative, moving, and communal session. As noted above, some positive learning still takes place during less optimal sessions, although probably to a lesser degree than where motivation is higher. These observations reactivate the question of whether education is at all constructive if not based on volition.

Relational dynamics

Relational dynamics — both prior to and emerging in the game sessions — highly affect how play can unfold. This is because roleplaying is entirely relational. Playing our cli-fi TRPG is in many cases a new experience for the participants, either because they haven't tried TRPGs before, or due to the way we twist the format towards life-friendly, speculative co-fabulation. Moreover, participating actively and freely requires confidence to speak up, take chances, and imagine together with others. In schools, the interplay between students, teachers, surroundings, and institutional context doesn't necessarily provide sufficient safety. In our research group this has led to conversations about how much a four-day-long, speculative TRPG can do to disrupt, if what is needed are more fundamental changes of the school system with regards to fostering safe and life-friendly learning environments for people to grow up in (Blenkinsop & Kuchta, 2024). Further, in Daniaus (2016) work on transformative TRPG it is suggested that player engagement, quality of interactions and group imagination may be more readily achieved in small groups of three to six persons and may be challenged by disturbances and changes. This leads us to the third variable.

Spacetime mattering

It matters where we play, when, how long time and with what artefacts and bodies for the entanglements that evolve (c.f. Kuby & Taylor, 2021). *The first playtest* took place in a botanical garden where vegetative life morphed into and co-created imaginations. It was a public place, where other visitors were present. We played during weekends, which contributed to a relaxed atmosphere. Moreover, we played each time during a season that mirrored the season in the game. Different from this, *the second playtest* was situated in two rooms next to each other at the boarding school. This setting wasn't as inspiring, but it was a cosy and undisturbed space, where we played four days in a row, in wintertime, draining perhaps most energy we had. *The third playtest* started in rooms that were messy and noisy. Partly because the space was a thoroughfare to other rooms, and probably also due to local norms and relational dynamics. From the second day onward, roleplaying took place in a room with a much softer and relaxed atmosphere. Observing how the players enjoyed this space, Amanda and Michael, the two researchers present, felt that it contributed to the roleplaying sessions. Again, we played four days in a row, but now the last week before Christmas, so many were longing for Christmas holidays. *The fourth playtest* took place at a school in an anonymous, standard classroom. We moved the furniture to create a large, shared table, and, likewise, brought pens and paper for doodling. Here we played one time at a week, which perhaps made memory and catch up on the story more difficult. All these differences show how much the situatedness of playing matters. It confirms also that focusing on the playing

atmosphere from choice of room and use of props and music can be a relevant parameter to use actively to increase player and group imagination and immersion (Daniau, 2016). We're also considering how we can transform the TRPG to be more locally place-based, while including more bodily movement, and also outdoor play.

Conclusion

We've presented our work with creating a disruptive ESE research playspace, that is also a new educational format, involving an open-ended, solarpunk, character-driven, cli-fi TRPG. This to cultivate non-dystopic engagements with the future and conversations about hope in difficult times. The first playtests reveal that when the game flows, it produces engagements with speculative futures and knowledge about hope's relational and complex import within life. However, when the playing-together is stifled, challenges are revealed, calling for further research and game alterations. We have pointed to three such challenges: (1) If we want the new practice to work in diverse contexts, we need to change the storytelling practice to offer a variety of entrances for participation. (2) The social milieu in a specific context can hinder the collective, playful, cli-fi research and educational practice to unfold. Arriving at activities and processes that can encourage safety is a key inquiry for further research about such creative practices. (3) If we want to strive for the full educational potential of the 'ESE cli-fi practice' we have so far created, it needs to be moved out of the modern, mainstream, bureaucratic, school architecture (Roy, 2003). The activities must become more place-based and involve more bodily movement and vibrant surroundings to imagine life-friendly futures with.

As we see it, these findings contribute to environmental education research by demonstrating how imaginative formats like cli-fi TRPGs can support nuanced engagement with possible futures and foster emotional and philosophical reflection on hope, interdependence and long-term transformation. At the same time, our findings highlight a crucial limitation: the roleplaying practice does not function equally well across all contexts. Without the capacity to co-create a conducive social atmosphere, sustain sufficient motivation, or establish a supportive learning environment, the game's potential to take hold — to invite participation, immersion and shared exploration — was significantly diminished. This underscores that speculative educational practices are highly dependent on relational, institutional and material conditions.

Based on this, we suggest that educators and researchers wishing to experiment with similar formats attend closely to factors such as group size, relational safety, physical setting, and temporal pacing. Future research should explore how TRPGs and other speculative formats can be designed with openness, flexibility, and responsiveness in mind — recognising that such practices are always shaped by the uncertainties and particularities of their educational contexts. Rather than seeking universal models, the task may lie in cultivating practices that are attuned to plurality, emergent meaning-making and the situated dynamics of each setting. It is also vital to investigate how such practices might challenge dominant educational norms and cultivate life-affirming, collective engagements with the future

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