

Playing with Misinformation: A Game-based Approach to Children's Critical Digital Literacy

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Abstract: In an increasingly complex digital information environment, children encounter both reliable and misleading content on social media at an early age. While recent research has explored game-based interventions addressing misinformation, most existing approaches target adolescents or adults. Younger schoolchildren remain an underexplored audience in this field. This paper presents the design rationale and early development of a role-based classroom game developed as part of the interdisciplinary SafeChilDe project (Safeguarding Children's Democratic Agency). The game targets children aged 10–12 and simulates key dynamics of social media through four complementary roles: journalists, influencers, misinformation creators ("fake makers"), and fact-checkers ("detectives"). By assigning players different roles in producing and analysing social media content, each guided by distinct underlying motives, the design enables children to explore how textual, paratextual, and contextual cues shape credibility assessments in digital content. The learning design is grounded in critical digital literacy and experiential learning. Rather than focusing solely on inoculation against misinformation, the game aims to balance critical alertness with constructive trust in reliable information. The role-based structure allows players to experience how different actors in digital information environments operate with different goals, strategies, and communicative practices. The paper documents the design and development process of the game, from early concept exploration and prototyping to the development of a digital prototype. The design process follows an iterative approach, combining concept development, low- and mid-fidelity prototyping, and early testing. Children are involved in the development process, both in iterative playtesting and in selected production elements, such as contributing voice recordings used in the game. These activities provide insights that inform the refinement of gameplay mechanics, role dynamics, and usability in classroom settings. By documenting this process, the paper contributes design insights into how role-based classroom games can support children's critical engagement with digital information and how game mechanics can be structured to make complex media literacy concepts accessible for younger learners.

Keywords: Game-based learning, Critical digital literacy, Misinformation, Critical thinking, Role-based learning, Participatory design with children

1. Introduction

Worldwide, misinformation is increasingly recognised as a major challenge to society and democratic stability, accelerated by AI-generated and algorithmically amplified content (Elsner et al. 2025). Children are increasingly part of this environment through social media platforms such as YouTube, TikTok, Instagram, and Snapchat (DR 2024; Ofcom 2024). Recent findings from the SafeChilDe project show that children frequently encounter misleading content and often lack strategies to verify or contextualise it. Nine out of ten Danish children aged 5–12 report having come across content they perceive as false or misleading, with the highest exposure occurring on YouTube; yet only a minority feel confident in their ability to check sources or evaluate credibility (Berg et al. 2025). These findings highlight the need for learning interventions that engage children in concrete practices of evaluating digital information. Game-based approaches have shown promise in addressing misinformation, particularly through designs inspired by inoculation theory (Kiili et al. 2024; Literat et al. 2020). However, many of these interventions target adolescents or adults, limiting their applicability in classroom contexts and their suitability for younger learners.

This paper addresses this gap by presenting the design and early prototyping of a role-based classroom game developed within the SafeChilDe project (University of Southern Denmark 2023). The game is designed specifically for children aged 10–12 and simulates familiar social media dynamics through four complementary roles: journalists, influencers, misinformation creators ("fake makers"), and fact-checkers ("detectives"). Through these roles, the design operationalises key dimensions of critical digital literacy by making the production and evaluation of information explicit. The game draws on principles of critical digital literacy, foregrounding how textual, paratextual, and contextual cues shape children's evaluation of online information.

The contribution of this paper is twofold: first, it introduces a multi-role game design that translates children's real-world experiences with misinformation into a structured classroom activity; second, it reports insights from early prototype testing with children, illustrating how the role-based structure supports different dimensions of critical digital literacy.

2. Background and Design Rationale

Children increasingly encounter misinformation in digital environments but often lack strategies to evaluate it, relying instead on intuitive judgments (Berg et al. 2025; Literat et al. 2020). This highlights a gap in competencies associated with critical digital literacy, including the ability to assess textual, paratextual, and contextual cues (Kiili et al. 2024). Game-based learning has been proposed as a potential response, particularly through approaches inspired by inoculation theory. While such interventions have shown promising results, they are typically short experiences targeting adolescents or adults, limiting their applicability in classroom contexts and for younger learners (Kiili et al. 2024).

Role-based and simulation-oriented learning environments offer an alternative by supporting perspective-taking and engagement with complex systems (Carlomagno et al. 2014; Krämer et al. 2025). However, classroom-ready designs for younger learners that integrate empirical insights into children's media practices with frameworks for critical digital literacy remain limited. The SafeChilDe game is developed in response to this gap. Building on empirical findings that children engage with digital content through viewing, sharing, and interpreting information—often guided by engagement and intuition rather than systematic evaluation (Adler Berg et al. 2025)—the design adopts a multi-role structure. Learners engage with different intentions—informing, persuading, misleading, and evaluating credibility—supporting perspective-taking across roles. To reflect children's everyday media environments, the game incorporates simplified platform-like mechanics such as posts, feeds, and sharing within a structured classroom setting. Some scenarios are adapted from empirical examples, while others are designed to reflect common patterns in children's everyday media environments.

As mentioned, the design operationalises critical digital literacy through four roles: journalists, fake makers, influencers, and detectives. This role structure is informed by the critical media literacy model (Blom & Hansen, 2020), which distinguishes between textual, paratextual, and contextual indicators of (mis)information and serves as a conceptual basis for the operationalisation of critical digital literacy in the game. Within this framework, journalists engage with textual and paratextual cues, such as language, genre, headlines, images, and quotes, when constructing posts. In contrast, fake makers manipulate these cues to produce misleading content, foregrounding common rhetorical strategies such as exaggeration and sensationalism. Influencers emphasise contextual indicators by selecting and sharing content based on engagement potential, reflecting platform dynamics and peer influence. Detectives synthesise all three dimensions through critical examination, enabling learners to identify, articulate, and categorise signals of credibility and manipulation.

This mapping makes the literacy framework actionable in gameplay. Figure 1 illustrates how the different roles foreground specific literacy dimensions and associated actions

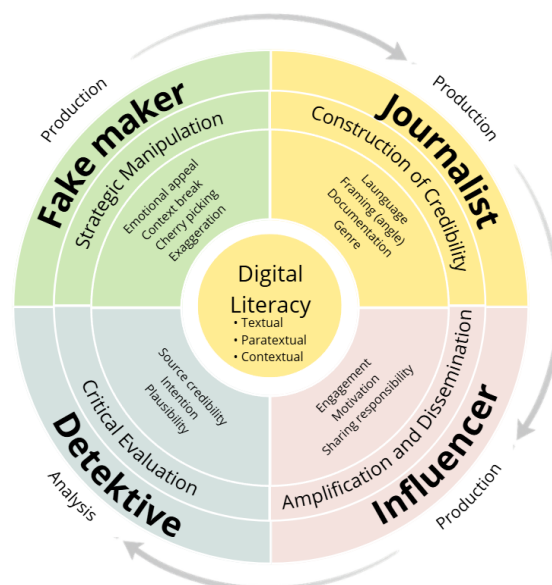


Figure 1: Overview of the SafeChilDe game design, illustrating how player roles (journalist, fake maker, influencer, and detective) structure children's engagement with digital information

The learning design is grounded in experiential learning (Kolb 1984) and informed by constructivist and constructionist perspectives (Piaget 1952; Papert 1980), emphasizing learning through participation and making. Elements of situated learning (Lave & Wenger 1991) are also reflected, as literacy practices are embedded in a simulated environment resembling real-world digital contexts.

3. Methodology – Iterative Prototype Development and User Feedback

The study employed an iterative, user-centred design approach in which prototypes were developed, tested, and refined across several stages. This process aligns with principles of iterative game design (Salen & Zimmerman, 2001).

Children were involved throughout the process through testing sessions, where their interactions, responses, and feedback informed subsequent design decisions. These contributions played a central role in shaping gameplay elements such as role clarity, pacing, feedback, and overall usability. The game design was anchored in the critical media literacy model (Blom & Hansen 2020), which informed the design of gameplay tasks and overall structure.

3.1 Participants

Testing primarily involved children aged 10–12, corresponding to the intended target group for the game (see Figure 2). Some testing contexts, particularly public events, included a broader age range, but observations and design decisions were primarily informed by interactions with children within the target group.

3.2 Iterative Prototyping and Testing

The development process unfolds across four iterations. Each stage contributed distinct insights into the functionality, usability, and potential learning impact of the game.

Overview of design iterations				
Iteration	Focus	Prototype format	Testing context	Key outcomes
1. Early concept and role structure	Establish game flow, roles, and core mechanics	Canva + PowerPoint (interactive mock-up)	Internal testing (development team)	Shift from free text to predefined elements (headline–image–quote); expansion from 3 to 4 roles
2. Exploring content creation	Develop post construction as core gameplay	Paper prototype (card-based)	Public testing at <i>Forskningens Døgn</i> (N≈50, ages ~6–17)	Validation of the headline–image–quote structure and high engagement
3. First digital prototype	Implement digital gameplay and role mechanics	Unity prototype (journalist & fake maker)	Exploratory testing (N=7, primarily 9–12)	Implementation of digital gameplay and motive-based role mechanics
4. Second digital prototype	Refine gameplay, feedback, and variation; implement detective role	Unity prototype (expanded roles + mini-games)	Internal testing + Public testing at <i>Forskningens Døgn</i> (N>150, primarily 9–13)	Refinement of gameplay and feedback; introduction of mini-games and implementation of the detective role

Figure 2: An overview of the four iterations

3.3 Data collection and Analysis

Data collection across the four iterations was qualitative and closely integrated with the iterative design process. Observations, field notes, and informal conversations with participants were used to capture how children interacted with the prototypes, including their choices, reactions, and engagement during gameplay.

In the early iterations, data focused on the clarity of the game structure and role understanding. Later iterations increasingly focused on usability, pacing, feedback, and how players engaged with different roles and game elements. The qualitative material was reviewed to identify recurring patterns related to role understanding, engagement, usability, pacing, and feedback. These patterns were subsequently discussed within the development team and used to inform design decisions and refinements across iterations.

4. Design and Prototype Development

This section presents the development of the game across four design iterations. The process is described chronologically to illustrate how the design evolved, with a focus on key challenges, observations from testing, and the design decisions that followed.

4.1 Early Concept and Role Structure (Iteration 1)

The first iteration focused on translating the initial concept into a playable structure by defining the game flow, player roles, and core mechanics. Three roles were initially defined: influencers, fake makers, and detectives.

To explore this concept, an early interactive prototype was developed using Canva and PowerPoint, see figure 3. User interface layouts and gameplay flows were first sketched in Canva and then imported into PowerPoint, where slide linking was used to simulate navigation between game screens.



Figure 3: Early interactive prototype developed in Canva and PowerPoint, used to explore the game flow and role-based interactions prior to digital implementation

4.1.1 Testing

The first iteration was explored through internal testing and design discussions within the development group. These sessions focused on role clarity and gameplay flow.

4.1.2 Insights and implications

The internal testing quickly highlighted challenges related to free text production. Allowing players to write their own posts risked creating barriers for students with weaker writing skills and slowed down gameplay. Constructing posts through a combination of headline, image, and quote emerged as a core gameplay mechanic that guides attention to cues associated with misinformation. The initial three-role structure was reconsidered, as it did not sufficiently capture how information is produced and circulated in social media environments. To address this, a journalist role was introduced to represent the production of credible content, while the influencer role was redefined to focus on selection and amplification rather than original content.

4.2 Exploring Content Creation Mechanics (Iteration 2)

This iteration focused on post construction as a core gameplay mechanic. A low-fidelity paper prototype was developed, see figure 4 below. The activity was designed as a competitive task played in pairs, where one player took the role of a fake maker and the other a journalist. The goal was to produce posts and achieve the highest score within a limited time.

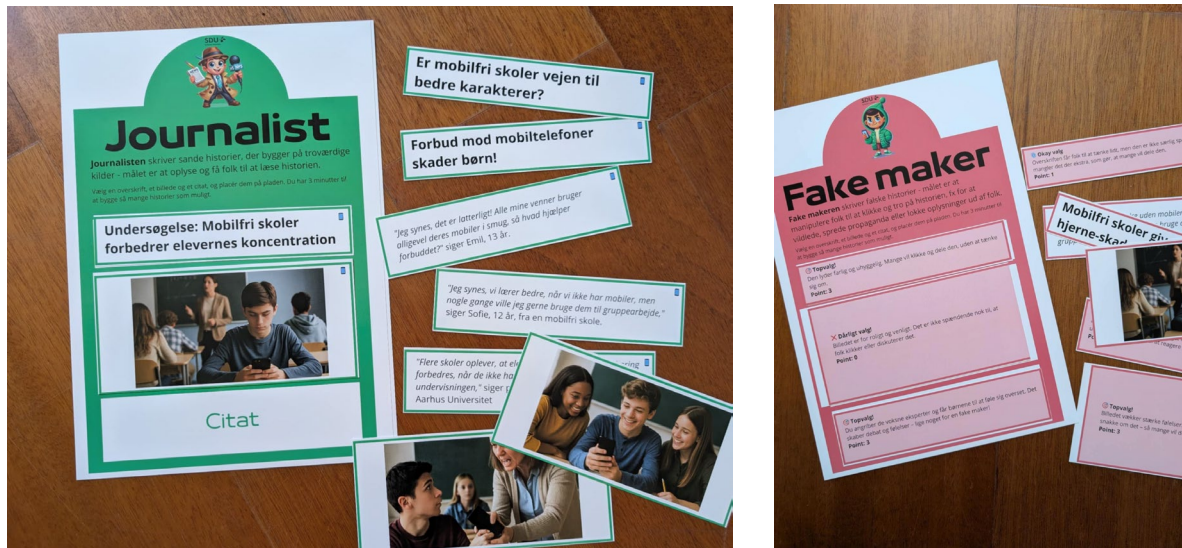


Figure 4: Paper prototype showing the headline, image, and quote cards used in Iteration 2

Each post consisted of three elements: a headline, an image, and a short quote. For each story, children were given a set of cards (three headlines, three images, and three quotes) and constructed posts by placing their selected elements on a board. Once completed, the cards were turned over to reveal points and feedback. The scoring reflected how well the selections matched the intended role, while the feedback explained the outcome.

4.2.1 Testing

The prototype was tested at a public science event ($N \approx 50$, ages $\sim 6-17$). Data was collected through field notes, observations, and short informal conversations about participants' choices during gameplay.

4.2.2 Insights and implementations

The testing showed that children were generally able to recognise exaggerated language as a sign of misleading content, suggesting that some cues were intuitively understood. However, many found it difficult to articulate why a post appeared misleading, even when they identified it correctly. In particular, the fake maker role was often perceived as the most enjoyable, and many children chose this role when given the option. Most players engaged with feedback after incorrect choices. At the same time, the competitive format encouraged quick decision-making, sometimes at the expense of reflection. The headline–image–quote format with three options for each element was kept as a core mechanic, as it balanced variation and simplicity.

4.3 First Digital Prototype (Iteration 3)

The third iteration focused on developing a functional digital prototype and refining the mechanics of the journalist and fake maker roles. The prototype was implemented in Unity3D (Unity n.d.) and primarily focused on the journalist and fake maker roles, while the influencer role was only partially developed. Post creation was structured around a set of motives. At the beginning of each task, players selected a motive that guided the type of post they were about to create, see figure 5. For the fake maker, the motives were deceive, lie, and harm, while the journalist worked with inform, help, and investigate, reflecting different forms of journalism.

Each role was introduced by a mentor character framing the task as training. Short voice narrations were added to support comprehension. For most roles, these were generated using the AI voice tool ElevenLabs (n.d.), while the fake maker used a recorded human voice modified with a distortion filter to resemble anonymised speech, similar to anonymised television interviews.

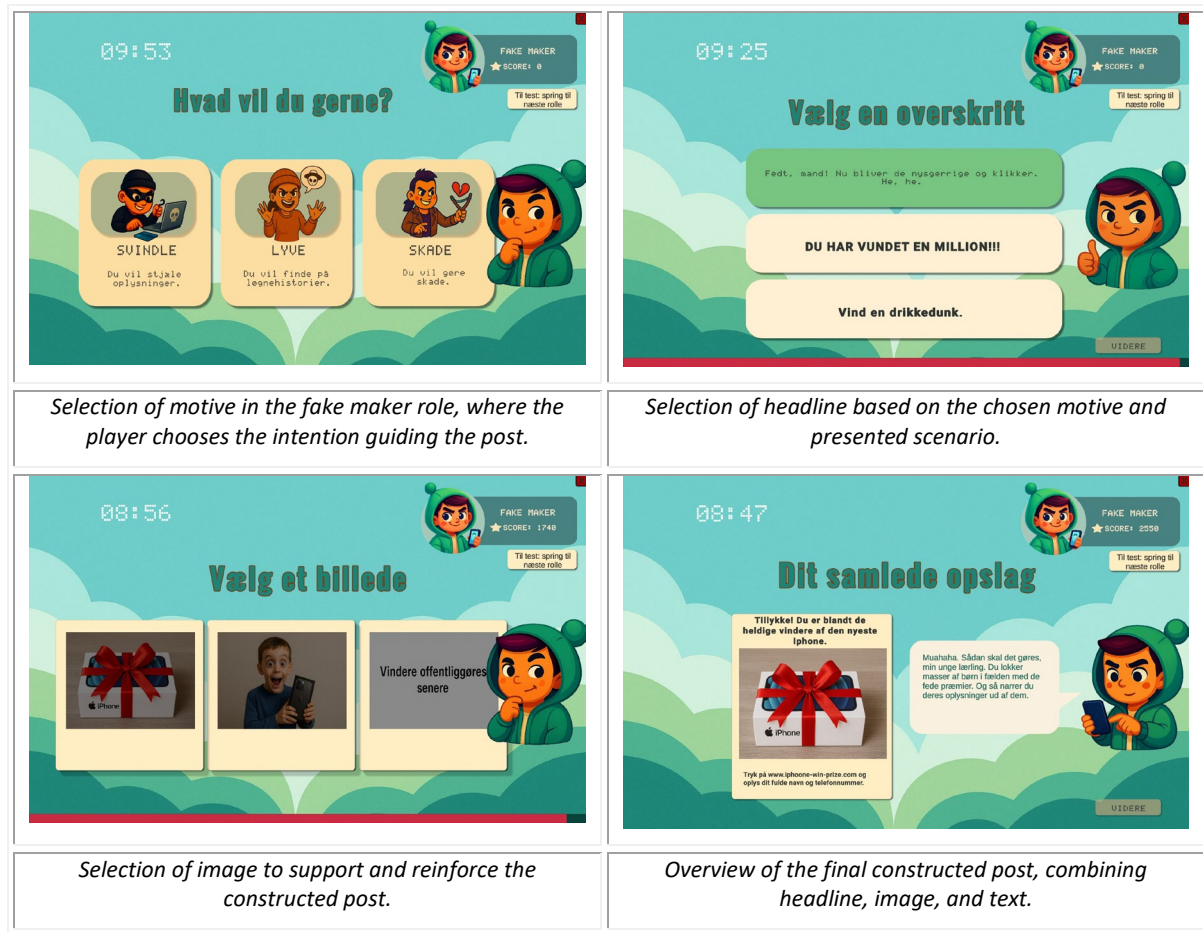


Figure 5: Excerpt from the fake maker gameplay flow, illustrating how players construct a post through sequential choices of motive, headline, image, and text, resulting in a complete assembled post

A scoring system was implemented in which players earned points based on the correctness of their choices, the number of attempts, and the time taken. A visual timer was displayed at the bottom of the screen, and a score counter was shown in the top corner, with a summary presented between roles.

4.3.1 Testing

The prototype was tested in small exploratory sessions with the researchers' own children and their friends (N=7, aged 9–16, primarily 9–12).

4.3.2 Insights and implications

Structuring tasks around motives and scenarios made the intentions behind different types of content more explicit and provided a clear gameplay framework. At the same time, the development process revealed the scale of content required for unique stories. To reduce production demands, the design shifted to having all players work with the same set of stories, and planned video elements were postponed to maintain a manageable scope.

The mentor characters supported players' understanding of their roles and created a clear framing of the tasks as a form of apprenticeship. However, the testing also revealed issues related to representation and character design. One participant pointed out that three of the characters were male and only one was female, and another commented that the distorted voice of the fake maker sounded older than the character appeared.

The time constraint supported engagement but meant that players rarely completed all available stories. A more critical issue concerned how players engaged with explanations and feedback. Despite the inclusion of voice narration, children often skipped introductions and feedback in order to progress quickly and maximize their score. This suggested that progression was prioritized over reflection, even though these elements contained important contextual information intended to support learning. To ensure that players engaged

with explanations and feedback, progression was restricted so that navigation buttons were temporarily locked while the mentor character delivered the narration.

In addition, the journalist character was changed to a female character to create a more balanced gender representation. An outro sequence was also introduced for the fake maker role, in which an animation shows the police knocking on the character's door. As this happens, the voice distortion is removed, revealing the character's normal voice and framing the distortion as an attempt to hide behind online anonymity. This both addressed the mismatch between voice and character and reinforced the message that producing and spreading misinformation can have consequences.

4.4 Second Digital Prototype

This iteration focused on refining the digital prototype and expanding the gameplay with more variation and clearer feedback. Audio narration was extended to the journalist role using recorded voice, and visual elements and content were further adjusted. The detective role was also implemented. Here, players worked with three guiding questions—how, who, and what—to assess the credibility of posts. Two of these paths culminated in mini-games. One focused on recognising trustworthy sources. The other focused on AI-generated images, where players identified visual errors and received short explanations. Furthermore, a mid-game status screen was added, showing accumulated points and awarding badges linked to skills in each role.

4.4.1 Testing

The prototype was tested internally within the development group and externally at Forsknings Døgn, where more than 150 participants tried the game. Most participants were aged 9–13.

4.4.2 Insights and implications

The testing highlighted several issues related to clarity and pacing. Some players did not fully understand the overall goal of the game or that points accumulated across roles. This pointed to a need for a clearer introduction. The locked narration ensured that players were exposed to explanations, but some found it slowed down the gameplay. This illustrates a tension between supporting learning and maintaining flow.

The source recognition game was often perceived as too fast. In the AI image game, instructions were sometimes overlooked, and feedback elements could cover too much of the image. In the content creation roles, the development team noted that some answer options followed recognizable patterns and raised the question of whether students would quickly detect these. At the same time, this may indicate that key cues had been understood. These findings informed further adjustments to clarity, pacing, and progression.

5. Discussion and Future Work

This paper set out to explore how a role-based game design can support children's critical engagement with digital information. Based on the iterative design process and early prototype testing, the discussion highlights three key aspects: (1) the role-based structure as a way of operationalising literacy concepts, (2) the importance of production-oriented gameplay, and (3) the pedagogical and ethical tensions involved in allowing children to "play" with misinformation.

5.1 Using Role-based Game Design to Teach Critical Literacy

The contribution of this study lies in demonstrating how abstract concepts from critical digital literacy can be translated into concrete, playable mechanics for younger learners. The SafeChilDe game does not treat misinformation as an isolated phenomenon to be recognised, but situates learners within a simplified representation of a digital information ecosystem.

By assigning players distinct roles—journalists, fake makers, influencers, and detectives—the design makes it visible how different actors contribute to the production, framing, circulation, and evaluation of information. This enables learners to engage with the intentions and strategies shaping how information spreads online. In this way, the design operationalises key elements of the critical media literacy model (Blom & Hansen 2020), as textual, paratextual, and contextual cues are embedded directly in gameplay mechanics rather than presented as abstract analytical categories. This approach differs from many existing misinformation interventions, which are typically short experiences and primarily target adolescents or adults (Kiili et al. 2024). In contrast, the design adapts these concepts into a classroom-based format for younger learners. The role-based structure thus bridges empirical insights into children's media practices with pedagogically grounded game design.

The visual design further supports this operationalisation by foregrounding images as paratextual cues. The prototype deliberately combines authentic photographs with AI-generated and manipulated visuals. In the journalist role, posts rely on real images and attribution markers, reflecting conventions of credible news production. In contrast, the fake maker role incorporates synthetic images and exaggerated visual elements, mirroring how visual manipulation operates in real-world misinformation. This makes the role of imagery in credibility assessment explicit.

5.2 Learning Through Producing, not Only Detecting

The design suggests a broader understanding of critical digital literacy, not only as an evaluative skill but as a practice-based competence developed through participation. The game does not position learners solely as critical readers, but as active participants in the information environment, engaging in the construction, dissemination, and assessment of content.

In the production-oriented roles, players experiment with how credibility can be constructed or manipulated through the selection of headlines, images, and quotes. These activities make rhetorical strategies such as exaggeration, emotional appeal, and selective sourcing tangible. In particular, the fake maker role provides insight into how misleading content can be designed to attract attention and shape perception, while the journalist role foregrounds conventions associated with credibility, such as attribution and balance.

The influencer role highlights platform dynamics such as engagement and amplification, while the detective role focuses on analysing signals of credibility across textual, paratextual, and contextual dimensions. The alternation between these roles appears to function as a key learning mechanism. By moving between insider and outsider perspectives, learners first experience how attention and trust can be constructed and are then required to recognise these same mechanisms from a critical standpoint. This aligns with experiential learning (Kolb 1984).

This design also responds to empirical findings showing that children often rely on intuitive judgments and lack explicit strategies for evaluating digital information (Berg et al. 2025). The design provides scaffolding that makes these practices visible and actionable. This suggests a shift from detection-based approaches toward participatory models of critical digital literacy.

5.3 Pedagogical and Ethical Tensions in Letting Children “Play” With Misinformation

While the role-based structure offers clear pedagogical affordances, it also raises important tensions, particularly in relation to the inclusion of the fake maker role. Allowing children to construct misleading content may appear problematic, as it risks normalising or trivialising such practices. However, from an experiential learning perspective, engaging learners in the production of misinformation can support a deeper understanding of how manipulation operates in practice. Rather than legitimising misleading behaviour, the intention is to demystify it by exposing the strategies and mechanisms involved. This approach resonates with research suggesting that active experimentation and exposure to weakened forms of misinformation can strengthen critical awareness when combined with reflection (Roozenbeek & van der Linden 2019; Kiili et al. 2024).

The design attempts to mitigate potential risks in several ways. First, misinformation production is framed within a clearly fictional and educational context. Second, the role structure ensures that players do not remain in a manipulative position but instead rotate between roles, including those focused on evaluation and verification. Third, the game integrates feedback mechanisms that highlight the consequences and implications of different actions.

Nevertheless, the findings also point to a tension between engagement and reflection. The competitive and time-based elements of the game can encourage rapid decision-making and prioritisation of progression over deeper consideration of feedback and explanations. This suggests that gameplay alone is not sufficient to ensure learning outcomes. Instead, the educational value of the game depends on how it is embedded within a broader instructional context. In this regard, teacher facilitation and structured debriefing emerge as critical components. Without opportunities to reflect on gameplay and connect in-game actions to real-world information practices, there is a risk that students focus primarily on performance rather than understanding. Structured debriefing sessions may encourage discussion of the intentions behind different roles, the cues used to assess credibility, the consequences of sharing misleading content, and strategies for verifying information beyond the game, such as checking sources or consulting multiple sources. The development of

supplementary learning materials to support such reflection therefore becomes central to the intended learning outcomes.

5.4 Limitations and Future Development

This study presents a design case and early prototyping process rather than an evaluation of learning outcomes. While the iterative development and testing provide insights into usability, engagement, and the potential of the role-based structure, the study does not yet allow conclusions about long-term learning effects, transfer of skills, or classroom implementation at scale. Several limitations are important to consider. The testing contexts varied across iterations and included both informal and semi-structured settings, which may influence how participants engaged with the game. In addition, the prototype relies on predefined content elements. While this supports accessibility and gameplay flow, it may limit opportunities for more open-ended exploration and expression. Finally, the contextual dimension of critical digital literacy is less fully developed within the prototype, as the simulated environment cannot fully capture the complexity of real-world media ecosystems.

These limitations point to several directions for future development. Further iterations will focus on increasing content variation, refining feedback mechanisms, and strengthening the integration of contextual indicators, for example through features that highlight source credibility and cross-referencing practices. In addition, the influencer role and overall narrative structure can be further developed to improve coherence and progression. Beyond the game itself, the integration of supplementary teaching materials and structured debriefing activities will be essential for classroom implementation. Future research will therefore include controlled classroom studies to examine how the game functions in authentic educational settings and to assess its impact on children's critical digital literacy over time.

6. Conclusion

This paper has presented the design and early prototyping of a role-based classroom game aimed at supporting children's critical digital literacy in the context of misinformation. By translating abstract literacy concepts into concrete gameplay mechanics, the design enables children to engage with the production, circulation, and evaluation of digital content from multiple perspectives.

The findings from the iterative design process suggest that a role-based structure can make key aspects of digital information environments tangible and accessible for younger learners. In particular, the combination of production-oriented and analytical roles supports a shift from viewing critical digital literacy as a set of evaluative skills toward understanding it as a practice-based competence developed through participation. At the same time, the study highlights important pedagogical and ethical considerations, including the balance between engagement and reflection, and the need to carefully frame activities that involve the construction of misleading content. These findings emphasise that the educational value of such designs depends not only on gameplay, but also on how they are integrated into classroom practice through facilitation and reflection. Future work will focus on further development of the prototype and empirical studies in classroom settings to examine its impact on children's critical engagement with digital information over time.

Ethics Declaration: The study was conducted as part of the SafeChilDe project and received ethical approval from the Research Ethics Committee at the University of Southern Denmark. The early prototype testing reported in this paper consisted of exploratory, low-risk testing with children recruited through the researchers' personal and professional networks, with parental consent obtained prior to participation. No sensitive personal data were collected, and observations were used solely to inform iterative design decisions.

AI Declaration: AI tools were used for image generation, code assistance, and language refinement. All research design, analysis, and final content were developed and verified by the authors.

References

- Adler Berg, F. S. et al. (2025) Børn og misinformation på sociale medier: De 5-12-åriges oplevelser og perspektiver, Syddansk Universitet.
- Blom, J. N. and Hansen, K. R. (2020) "Falske nyheder i børnehøjde", [online], Nationalt Videncenter for Læsning, <https://www.videnomlaesning.dk/viden-og-vaerktoejer/forskerklummen/2020/falske-nyheder-i-boernehoejde/>
- Børns Vilkår (2024) Børn og sociale medier.
- Carlomagno, N., Di Tore, A. and Sibilio, M. (2014) "Role playing and perspective taking: An educational point of view", International Journal of Digital Literacy and Digital Competence, Vol. 5, No. 2, pp 49–58.

- DR (2024) Børns brug af sociale medier, Danmarks Radio.
- ElevenLabs (n.d.) AI voice generator, [online], <https://elevenlabs.io/>
- Elsner, M., Atkinson, G. and Zahidi, S. (2025) Global Risks Report 2025, World Economic Forum, [online], <https://www.weforum.org/publications/global-risks-report-2025/>
- Kiili, K., Siuko, J. and Ninaus, M. (2024) "Tackling misinformation with games: A systematic literature review", *Interactive Learning Environments*, Vol 32, No. 10, pp 7086–7101.
- Kolb, D. A. (1984) *Experiential learning: Experience as the source of learning and development*, Prentice-Hall, Englewood Cliffs.
- Krämer, J., Hemi, M. E. and Levin, O. (2025) "Simulation-based learning for social–emotional learning in teacher education: A systematic literature review", *Education Sciences*, Vol. 15, No. 2, p 129.
- Lave, J. and Wenger, E. (1991) *Situated learning: Legitimate peripheral participation*, Cambridge University Press, Cambridge.
- Literat, I., Chang, Y. K. and Hsu, S. Y. (2020) "Gamifying fake news: Engaging youth in the participatory design of news literacy games", *Convergence: The International Journal of Research into New Media Technologies*, Vol. 26, No. 3, pp 503–516.
- Ofcom (2024) *Children and Parents: Media Use and Attitudes Report*, [online], <https://www.ofcom.org.uk/media-use-and-attitudes/media-habits-children/children-and-parents-media-use-and-attitudes-report-2024/>
- Papert, S. (1980) *Mindstorms: Children, computers, and powerful ideas*, Basic Books, New York.
- Piaget, J. (1952) *The origins of intelligence in children*, International Universities Press, New York.
- Roozenbeek, J. and van der Linden, S. (2019) "Fake news game confers psychological resistance against online misinformation", Palgrave Communications.
- Salen, K. and Zimmerman, E. (2001) *Rules of play: Game design fundamentals*, MIT Press, Cambridge.
- University of Southern Denmark (n.d.) SafeChilDe – Safeguarding Children’s Democratic Agency, [online], <https://www.sdu.dk/da/forskning/forskningsenheder/samf/safechilde/projektbeskrivelse>
- Unity Technologies (n.d.) Unity game development platform, [online], <https://unity.com/products/unity>