


## Enhancing Media Literacy through two ludic tools

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### Abstract

This study examines the potential of game-based learning to address the growing challenges contemporary youth face in navigating misinformation and critically engaging with digital media. Drawing on existing research and data collected from a benchmarking analysis of 21 tabletop games and in-depth interviews with 29 experts, the article highlights the importance of media literacy as a key skill for evaluating information in today's unfiltered social media environment. The benchmarking data were examined through comparative content analysis to identify game mechanics conducive to media literacy, while the interview data were analyzed using a Grounded Theory approach to extract thematic insights on critical skills, effective pedagogical strategies, and youth preferences in gameplay. These analytical strategies ensured methodological rigor and guided the development of two educational games designed to foster critical thinking, collaboration, and ethical decision-making. *Social Media Puppeteers* immerses players in roles such as politicians, journalists, and scientists, encouraging strategic discussions about social media dynamics. By incorporating simplified role-playing game mechanics, it aligns with the literature on experiential learning, fostering interdisciplinary skills and collaboration. In parallel, *Social Media Fake News* uses structured card-based gameplay to teach players how to identify and deconstruct misinformation. This hands-on approach supports research on the effectiveness of interactive tools in enhancing media literacy and critical analysis. Both games demonstrate the cognitive, social, and emotional benefits of tabletop games by promoting empathy, teamwork, and face-to-face collaboration. Through emotionally resonant narratives and role-based decision-making, players engage in immersive experiences that reinforce critical media skills. Adaptable designs and comprehensive guidelines allow educators to tailor these games to various classroom contexts, addressing pressing issues like digital ethics and media manipulation. This study contributes to the growing body of literature on game-based learning, offering a scalable and adaptable model for integrating media literacy education into pedagogical settings.

Keywords: Tabletop games, RPG games, Media Literacy, Adolescents, Fake News.

### Introduction

Contemporary youth face significant challenges in navigating the overwhelming flow of information and combating misinformation, particularly in the unfiltered environment of social media (Krumsvik, 2023; Lauricella & Herdzina, 2020). Media literacy has become an essential skill for critically evaluating content, understanding biases, and making informed decisions in a media-saturated world.

In recent years, games have gained recognition as powerful tools for supporting education, personal well-being, and social connections (Cauberghe et al., 2021; Ohannes et al., 2021). Educational games actively engage players through strategic thinking and identification with narratives or characters, extending their influence beyond the gaming experience itself (Bowman, 2019; Moro et al., 2022). Although the roles in games are fictional and do not involve real-world scenarios, they are treated as authentic within the gaming context, mirroring the expectations and interaction dynamics of real professional situations (Winardy & Septiana, 2023)

For instance, Tabletop Role-Playing Games (TRPGs) provide significant educational benefits, such as promoting interdisciplinary learning, enhancing literacy, and fostering social skills (Kaylor, 2017; Spinelli, 2018; Zalka, 2012). TRPGs are a unique type of role-playing game where players narrate their actions while a moderator describes the

outcomes. These games rely on structured rules and die mechanics to guide decision-making, blending reading for information with action-driven storylines.

Role-play, both in games and education, shares a common feature: the need for participants to agree on roles and responsibilities to ensure successful collaboration. In educational contexts, role-play sessions teach students the importance of establishing and adhering to shared expectations, which serves as a model for societal consensus (Winardy & Septiana, 2023). Similarly, in role-playing games (RPGs), players must align on their roles and actions to navigate challenges set by the game master effectively. Without this consensus, confusion arises, hindering progress. For example, a player portraying a journalist character in an RPG would be expected to investigate and report on events, just as a player in an educational role-play would be tasked with fulfilling their role within the agreed parameters of the simulation.

Research demonstrates that well-designed games enhance creativity, problem-solving, and collaboration while making complex topics more accessible (Holik et al., 2024; Hughes et al., 2024). Moreover, they empower players to critically analyze media influences, addressing key issues like misinformation and digital security (Contreras-Espinosa & Eguia-Gomez, 2024a). These immersive experiences are particularly valuable in promoting media literacy and critical thinking skills, especially during crises (Moro et al., 2022).

The Blind review project responds to these challenges by leveraging games to develop critical media literacy competencies among adolescents. As part of this initiative, two educational games were created: Social Media Fake News, a tabletop game, and Social Media Puppeteers, a TRPG (Tabletop Role-Playing Game). Both games aim to engage young players in understanding media consumption, identifying disinformation, and exploring its broader societal implications.

To design these tools, the project team conducted benchmarking of tabletop games and consulted experts to gather insights and suggestions. Additionally, RPGs, a popular genre among adolescents, were analyzed as inspiration for creating games that combine engaging gameplay with educational content. These games encourage players to explore multiple scenarios and outcomes, reinforcing the importance of learning through failure and strategic decision-making.

This article highlights the contributions of the Blind review project, funded by the European Media and Information Fund (project 269094), and presents how these games can serve as innovative educational tools for fostering critical media literacy in young people. By equipping educators with resources to integrate these games into classrooms, the project seeks to create meaningful learning experiences that prepare adolescents to navigate the complexities of a media-driven world.

### **Media literacy and games**

The concept of media literacy within the context of video games has gained increasing relevance, particularly due to the potential of digital games to cultivate critical skills in players (Glas et al., 2023). This approach goes beyond simply mastering digital technologies; it also encompasses the ability to interpret, analyze, and create media content—skills that are essential in an increasingly digitized world.

According to Vuorikari, Kluzer, and Punie (2022), digital competencies are vital for active citizenship in the digital age, with media literacy standing out as a fundamental component. Video games, by engaging players with various types of media such as social networks, print, radio, and television, can promote media literacy often without players being fully aware of the process. This direct interaction with media within the game's context facilitates both the understanding and creation of content (Zimmerman, 2009). However, it is important to acknowledge the

limitations of games in teaching comprehensive media skills. These limitations become evident when media use is treated as a peripheral element rather than as an integral part of the game's narrative or mechanics.

Additionally, video games play a crucial role in fostering critical thinking. Players are often required to make ethical decisions and manage resources, equipping them with skills to navigate the challenges of the modern digital society (Gee, 2003). These decision-making processes and problem-solving scenarios embedded in gameplay encourage players to reflect on broader societal dynamics, making games valuable tools for learning and personal development.

### **Tabletop games as tools for education**

Board games are a classic form of entertainment, characterized by their physical structure and the use of elements such as boards, cards, die, or tokens to facilitate gameplay. Throughout history, these games have been a popular source of leisure, adapting to different cultures and eras (Mackay, 1978). Beyond providing entertainment, they allow participants to socialize and, in many cases, engage with intellectual or creative challenges.

Recent studies have explored the potential of board games as educational tools in various settings and for diverse student groups (Bayeck, 2020). Beyond their playful nature, these games unexpectedly reflect cultural, social, and spatial perceptions embedded within their dynamics and structures (Randl & Lasansky, 2023).

One of the most notable advantages of tabletop games lies in their independence from digital technology, which makes them both accessible and versatile. Unlike video games, they do not require electronic devices or internet connectivity, rendering them particularly suitable for contexts of digital disconnection or environments with limited technological infrastructure (Warren et al., 2021). Moreover, tabletop games inherently promote face-to-face interaction, fostering interpersonal communication and collaborative learning without the mediation of screens or digital platforms (Tan, Neill, & Johnston, 2016). This dynamic contributes to the development of social and cognitive skills in ways that are often more immediate and tangible than in digital formats.

To date, prior research has not identified significant disadvantages in the use of tabletop games for educational purposes (Warren et al., 2021), which further supports their value as pedagogical tools. Their simplicity, durability, and low operational cost position them as a sustainable and timeless alternative—adaptable to diverse contexts and usable without the need for software updates or technical maintenance.

Board games play a crucial role in early childhood and among younger audiences, especially when prolonged screen time is not advisable, and the focus is on fostering interpersonal relationships (Gashaj, Dapp, Trninic, & Roebbers, 2021). Through face-to-face interaction, they offer a healthy alternative that strengthens family and friendly bonds while promoting empathy and mutual understanding. In this regard, the concept of emotional intelligence, as defined by Daniel Goleman (2020), becomes essential. This form of intelligence, which involves recognizing and managing one's own emotions as well as those of others, is enhanced by board games as they encourage cooperation and communication in a playful and enriching way.

### **Role playing games and role in education role-play**

Role-Playing Games (RPGs) can be defined as the product of the interaction between players or between the player(s) and gamemaster(s) within a specific framework (Stenros & Hakkarainen, 2003). An RPG consists of six components: a game world, an imaginary world where players can explore freely; a narrative, which consists of sequences of events that provide the game with its storytelling elements (Bowman, 2019); participants, which include both players and a referee; characters, which are defined individuals within the game, characterized by

both quantitative and qualitative traits, and which develop through interactions with the game world; the game master, the person who controls the game world beyond a single character and is responsible for adjudicating the rules; and interaction, which refers to how players engage with the game world through their characters, utilizing a wide range of options (Hitchens & Drachen, 2008).

To summarize, RPGs function through a system of rules that creates a unique portrayal of reality, with gameplay structured around how things work within the RPG framework. For example, in *Dungeons & Dragons*, perhaps the most well-known game of this particular type (Jahromi, 2017), a character must roll a 20-sided die and achieve a sufficiently high result to successfully climb a cliff. Within this framework, players create characters and play roles as directed by the game master. The game master's role is to present narrative scenarios, such as 'rescuing a noble,' within an imagined world. This fictional world serves as a stage where players can interact with both the world and other players through the medium of their characters (White et al., 2018).

In the case of educational role-play, roles are assigned based on specific learning objectives (Rønning & Bjørkly, 2019). For example, a law student might take on the role of a lawyer representing a client in a mock trial. During the exercise, the student is expected to behave according to the norms and expectations of the legal profession, including presenting arguments and interacting with the judge and other parties. Although this role is fictional, as it does not involve a real case, it is treated as authentic within the context of the activity, reflecting the same expectations and interaction dynamics as in a real professional situation (Winardy & Septiana, 2023).

Similarly, in RPGs, a character is not created in isolation. Each character comes with an imagined role connected to the game world. This role may be tied to a game mechanic or represent a societal relationship that mirrors real-life experiences. For example, if a player creates a character who is a clergy member of a specific religion in a fantasy world, other players may expect that character to act in a particular way or hold certain beliefs based on the fictional religion in the game. The presence of roles in both educational role-play and RPGs means that both can be used as educational tools, particularly for teaching about the expectations and behaviors associated with holding a role in society. Among younger individuals, imitating the roles of others is a natural process (Winardy & Septiana, 2023).

## **Methodology**

Before designing the two games, a benchmarking analysis of 21 existing tabletop games related on media literacy and the fight against disinformation and misinformation was conducted (see Table 1). The primary objective of this analysis was to identify relevant game mechanics and dynamics that could serve educational purposes effectively.

The sample was selected through systematic Google searches using keywords such as "games," "fake news," "media literacy," "news," and "media." Micro-RPG formats were also included to broaden the scope. A note on why the selection solely depended on this Google search: despite the growing scholarly interest in educational games, there is no centralized repository or comprehensive database categorizing tabletop games by thematic focus. Therefore, Google remains one of the most accessible and inclusive tools to explore the diverse and dispersed landscape of independent and commercially published games addressing disinformation and media literacy.

Games were included in the analysis only if they explicitly tackled media literacy concepts, the notion of fake news, or the mitigation of disinformation and misinformation. Priority was given to those that could present a meaningful educational framework and an immersive gameplay experience. Of the 20 games analyzed, 17 were

card-based, two incorporated a board (G2), and three were RPGs (G18, G19, and G20). Notably, only two of these games (Fake News and Fake News: The Improv Game!) have been previously referenced in literature.

Table 1: List of Tabletop Games and Role-Playing Games analyzed.

No.	Game	Date	Community
G1	Truth Be Told	2009	12+
G2	The Resistance	2009	13+
G3	The Big Bang Theory: Fact or Fiction Card Game (2012)	2012	12+
G4	Fact or Fiction Card Game	2013	12+
G5	Fake news	2017	12+
G6	Fake news or Not?	2017	12+
G7	Fake News Game: Kanye Edition	2018	12+
G8	The news game. Fact from fiction/ political edition)	2018	-
G9	Mischief Media: The Game of Fake News	2018	10+
G10	LAMBOOZLED!	2019	11+
G11	Fake News: The Improv Game!	2019	11+
G12	¿Verdad o bulo? Coronavirus Edition	2020	14+
G13	P1: Pandemonium	2020	-
G14	Trump News Game	2021	10+
G15	Make Fake News Great Again	2021	16+
G16	Liar Liar: The Game of Truths and Lies	2022	14+
G17	Fake News Health Board Game	2020	-
G18	The Fake News Fiesta	2023	12+
G19	Deducing Seducing Detectives	2023	12+
G20	The Declassifier: Stories	2023	12+
G21	Verso al Mazo	2023	16+

Source: own elaboration

Simultaneously, 29 experts were interviewed. The data collected from these interviews were analyzed using the Grounded Theory approach (Glaser and Strauss, 1967). The interviews explored key questions, including the role of media literacy in times of crisis, the competencies needed to confront misinformation, and preferences among young people regarding game dynamics. The interview transcripts were analyzed to define emerging categories related to critical skills, effective educational methodologies, and youth preferences for game dynamics. These categories were integrated with the results of the benchmarking analysis to design two games that incorporate problem-solving mechanics, immersive narratives, and educational scenarios based on competencies identified during the research.

The selection of interviewees encompassed a diverse array of experiences in teaching, focusing predominantly on individuals aged 12 to 20 years old. Perspectives were gathered from educators and professionals with expertise in producing various forms of audiovisual media, games, blogs, videos, animations, graphics, and podcasts. The team interviewed teachers, educators, journalists, and some crisis management professionals with expertise in game design (Table 2). The diversity of the interviewees was intentionally sought to collect multifaceted perspectives on media literacy among youth. Participants included secondary and higher education teachers, educators, vice presidents of regional associations, parents' associations, school directors, librarians, town hall officials, journalists, and a newspaper director. Interviewees provided informed consent, acknowledging the

research objectives, processes, risks, and benefits. Each interview lasted approximately 100 minutes, was video-recorded, and subsequently transcribed. These interviews were conducted via the Zoom video conferencing application between May and July 2023.

Table 2: Distribution of interviewees per country.

Country	Teachers	Educators	Journalists	Total
Spain	6	1	3	10
Portugal	4	3	2	9
Italy	4	3	3	10
Total	14	7	8	29

Source: own elaboration

To ensure methodological rigor, the data collected from both the benchmarking analysis and the expert interviews were systematically analyzed using qualitative techniques appropriate to their respective natures. The benchmarking of the 21 tabletop games was conducted using comparative content analysis, focusing on identifying recurring game mechanics, narrative strategies, and educational goals related to media literacy. Games were categorized based on their structure (e.g., card-based, board-based, RPGs), gameplay objectives, and the presence of mechanics such as emotional manipulation, role-based dynamics, and collaborative play. This typological analysis allowed for the identification of game elements most conducive to fostering critical media literacy skills.

For the 29 expert interviews, a Grounded Theory approach (Glaser & Strauss, 1967) was applied to analyze the transcripts. This iterative process involved open coding of the data to identify emergent themes, followed by axial coding to link categories and concepts across interviews. Thematic patterns were refined into three overarching domains: (1) key media literacy competencies needed by youth, (2) pedagogical strategies perceived as effective in combating misinformation, and (3) game dynamics preferred by young learners. The triangulation of this coded data with findings from the benchmarking analysis informed the design of the two games, ensuring that the educational content and mechanics addressed real pedagogical needs and expert recommendations. The integration of both analyses, content-based for existing games and theme-based for expert insights, enabled a data-driven design process. The dual strategy strengthened the validity of the research by grounding the development of the games in both existing practices and domain-specific expertise.

### The tabletop games

The analysis of tabletop games provided a comprehensive understanding of the mechanics involved, enabling the identification of key characteristics that stand out in these products. This evaluation revealed that simple mechanics designed to raise awareness about misinformation, along with those that recognize the complexities of information in today's society, are particularly effective. Most of the analyzed games emphasized the importance of identifying credible information sources and understanding the factors contributing to the spread of misinformation. Additionally, games that incorporate persuasive narratives and emotional language proved to be highly engaging, highlighting the value of emotionally resonant educational content for users.

Interviews with educators revealed that, while students are adept consumers of media content, they often lack the critical skills necessary to evaluate and produce audiovisual content (Contreras-Espinosa & Eguia-Gomez, 2024b). These findings underscore the importance of fostering critical thinking in students to help them assess the credibility and bias of media messages. Preparing young people for responsible participation in an evolving media landscape—where ethical considerations in content production and consumption are crucial—also emerged as a priority. In response to these insights, two games were developed to address these challenges. One game includes cards depicting common misinformation scenarios, encouraging players to identify and address fake news. The second game incorporates role-playing elements, allowing participants to explore the consequences of sharing unverified information. Both games reflect emerging themes from the research, such as the need to foster fact-checking skills and promote collaborative work.

The benchmarking analysis and interviews informed the design of these games, as outlined below. The game analysis highlighted the potential of mechanics that allow players to create and disseminate fake news, paired with persuasive narratives and emotional language. These elements can make a new game not only interactive but also immersive. Collaborative dynamics, as emphasized in the interviews, could further enhance gameplay by encouraging teamwork and providing opportunities for players to discuss and analyze the information presented together (Contreras-Espinosa & Eguia-Gomez, 2024b). This approach not only strengthens critical thinking skills but also addresses students' observed lack of maturity and resistance to constructive criticism.

Finally, both the game analysis and the interviews stressed the importance of creating game content that is relevant and relatable to students' everyday lives. Designing a game that reflects real-world situations and incorporates concrete examples can increase players' emotional connection and engagement. Furthermore, including resources for educators to adapt the game's content to the existing curriculum would facilitate its integration into the classroom, thereby maximizing its educational impact.

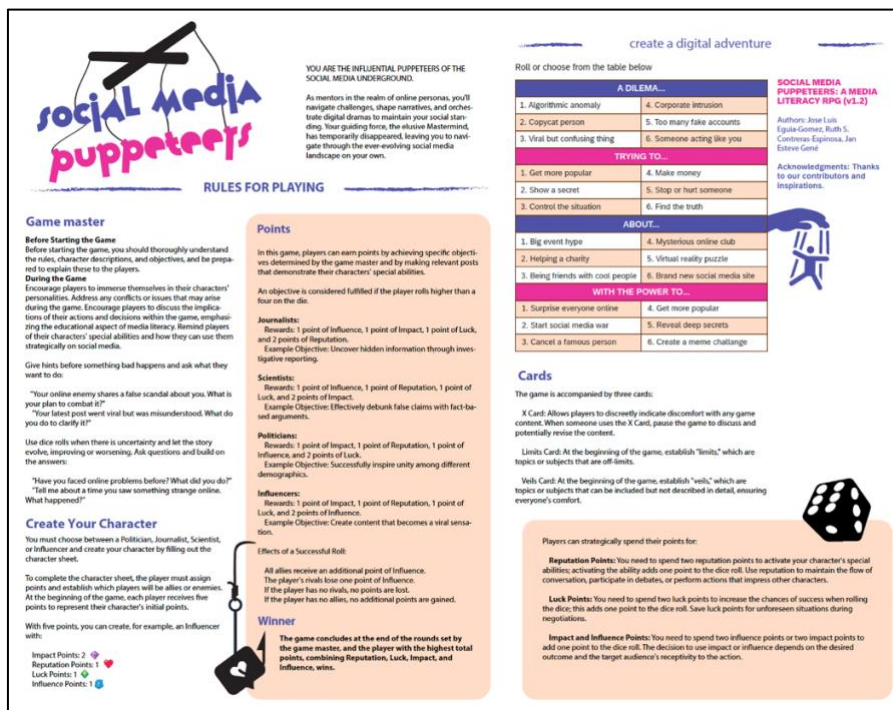
### **Social Media Puppeteers**

Social Media Puppeteers is a micro role-playing game (RPG) designed to foster media literacy, critical thinking, and an understanding of social media dynamics. Micro RPGs are typically compact, easy to learn, and focused on specific themes. In this case, the format was adapted to create an engaging educational tool that aligns with the needs of players aged 11 to 17. The game incorporates traditional RPG mechanics, such as character creation and die rolling, but emphasizes educational objectives and learning outcomes tailored to media literacy.

Players assume the roles of politicians, journalists, scientists, or influencers competing to gain influence on a fictional social media platform while promoting media literacy. Points are earned by completing objectives tied to each character's unique role and abilities. Designed for 3 to 6 players, the game achieves a balance between interaction and competition, fostering meaningful engagement through character-based decision-making, strategic discussions, and collaborative play. The game can also be adapted for larger groups, ensuring flexibility in diverse educational settings. The gameplay is structured to last approximately 60 minutes, including character selection, gameplay, and post-game discussions. However, the duration can vary depending on the group's familiarity with the game and the depth of classroom discussions. While post-game reflections are recommended for enhanced learning, the game can also be played as a standalone activity.

A key feature of Social Media Puppeteers is its simplicity. The rules are condensed into a single page, providing guidelines for character creation, core mechanics, and permissible actions (Figure 1). This one-page summary enables players to quickly grasp the essentials and begin playing without requiring an extensive rulebook.

Figure 1: One-page rule summary.



Source: Social Media Puppeters.

Players take turns posting messages or content on the fictional platform "Social Media Y" to gain influence. To post, players roll a six-sided die (D6) and add a bonus based on their character's role:

- Politician: +1 for inspiring unity.
- Journalist: +1 for investigative reporting.
- Scientist: +1 for fact-based arguments.
- Influencer: +1 for creating viral sensations.

The player with the highest roll earns influence points, which can be used strategically to activate special abilities or saved for later rounds. Other players can comment on or challenge posts, forming alliances or rivalries. The game concludes after four rounds or when a player reaches a predetermined influence goal. The winner is the player with the most influence points; there are no losing conditions.

Each character is designed to represent a specific societal role, with unique abilities and challenges that enrich gameplay:

-Politician: A visionary leader who unites people under a shared cause. Their special ability, Inspire Unity, allows them to spend influence points to gain support from specific demographics. However, they must balance credibility and authenticity in their messaging.

-Journalist: A truth-seeker dedicated to fostering democratic participation. With the Investigative Reporting ability, they can uncover hidden information about other characters by spending influence points. Their challenge lies in balancing accurate reporting with the pressure for attention-grabbing headlines.

-Scientist: An educator championing critical thinking. Using the Fact-Based Argument ability, they can debunk false claims by spending influence points. Their main challenge is simplifying complex concepts into accessible and engaging content.

-Influencer: A charismatic figure shaping attitudes through entertaining content. Their Viral Sensation ability allows them to create far-reaching posts by spending influence points. Their challenge is maintaining authenticity while resonating with diverse audiences.

Players can further personalize their characters through character sheets, adding depth and immersion to the experience (Figure 2). This role is fictional; but it is treated as genuine within the context of the activity, with the same expectations and interaction dynamics as in a real professional setting.

Figure 2: Character sheets: Journalist, Scientist, Politician and Influencer.

The figure displays four character sheets side-by-side, each for a different role: Journalist, Scientist, Politician, and Influencer. Each sheet is a form with various sections for player input:

- Character description:** Includes a character illustration, a name field, a background field, an appearance field, and an attributes section with four icons: Impact (purple diamond), Reputation (red heart), Luck (green diamond), and Influence (blue shield).
- Backstory:** A large text area for writing a brief backstory, with a note: "Note: Create a brief backstory for your character, outlining their motivations and values."
- Influence points:** A section for tracking influence, including a "Current influence" field, a "Character's posts" table with columns for Context (1, 2, 3), Objective, and Strategy, and a "Note: Use this section to record your character's posts in 'Social Media Platform X'. Describe the context, strategy, and objectives for each post. You may use additional sheets if needed."
- Allies and Rivals:** Two text areas at the bottom for listing allies and rivals.

Source: Social Media Puppeteers.

The teacher acts as a facilitator, ensuring a smooth and educational experience. Preparation involves familiarizing themselves with the game's rules, character roles, and objectives. Essential materials include character cards, influence markers, a D6 die, and optional handouts or props. Teachers should establish a respectful and inclusive environment, emphasizing that the game is both an enjoyable activity and a learning opportunity. During gameplay, the teacher introduces the game objectives and roles, encouraging students to fully engage with their characters. They monitor progress, ensuring equal participation, and mediate any conflicts. Periodic reminders about characters' abilities help players strategize effectively. Teachers are also encouraged to pause the game occasionally to facilitate discussions about players' actions and their alignment with character goals.

To enhance the educational impact, comprehensive guidelines have been designed not only to facilitate classroom activities, called Etivities (Figure 3), but also to support teachers throughout all stages of the game: before, during, and after gameplay. Briefly, some of them are described. Pre-Game Phase: Introduce media literacy concepts and discuss their relevance in today's digital landscape. Encourage students to share their perspectives on social media's role in shaping public opinion. During Gameplay: Pause periodically to discuss players' strategies and their alignment with character objectives. Facilitate comparisons between in-game dynamics and real-world social media practices. Use recent examples of misinformation or viral content to draw parallels. Post-Game Reflection: Lead a discussion on lessons learned about social media's impact. Analyze how alliances and rivalries influenced gameplay

and compare them to real-world social dynamics. Encourage students to critically evaluate a real-world social media campaign, focusing on its objectives, impact, and ethical considerations.

Figure 3: Example of Etivity for classroom implementation.

<b>MODULE 4 – The game</b>	
<b>Etivity - Social Media Puppeteers: Media Literacy and Fake News in Times of Crisis Session</b>	
<i>By Jose Luis Eguia-Gomez and Ruth Sofia Contreras-Espinosa</i>	
<b>1. Scenario</b>	
In this e-tivity we suggest a session with the game Social Media Puppeteers	
<b>2. Etivity structure</b>	
<b>Etivity title</b>	Social Media Puppeteers: Media Literacy and Fake News in Times of Crisis Session
<b>Purpose</b>	<ol style="list-style-type: none"> <li>1. Understand what fake news is and how it is created.</li> <li>2. Identify common techniques used in the creation of fake news.</li> <li>3. Develop critical skills to evaluate the veracity of information.</li> <li>4. Foster collaboration and constructive discussion about the impact of fake news.</li> </ol>
<b>Brief summary of overall tasks</b>	In this session, players will use the Micro Role-Playing Game (RPG) Social Media puppeteers with a constructivist focus
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Character sheets</li> <li>• A six-sided die (D6)</li> <li>• Tokens to represent points</li> <li>• Whiteboards or paper for notes</li> <li>• Markers or pens</li> </ul>

Source: Social Media Puppeteers.

Social Media Puppeteers serves as a versatile educational tool, combining the engaging mechanics of micro RPGs with a meaningful exploration of media literacy. By immersing students in character-driven scenarios, the game fosters critical thinking, collaboration, and a deeper understanding of social media dynamics. Its adaptability and alignment with classroom objectives make it a valuable resource for educators seeking innovative methods to address the challenges of media literacy in the digital age.

**Social Media Fake News**

The card game Social Media Fake News was designed to engage players in understanding the features that make news stories susceptible to manipulation and falsehood. The primary objective of the game is for players to be the first to run out of cards by constructing a fabricated news story. The game consists of two main types of cards: News Construction Cards, which feature sensational headlines, emotional language, and polarizing elements, and Action Cards, which introduce counterstrategies that allow players to challenge their opponents' stories.

The game is designed for 2 to 6 players, with an ideal group size of more than two participants. The game includes several components: a board, News Construction Cards, Action Cards, Counterattack Cards, and, optionally, Topic Cards. It typically lasts around 30 minutes, although the duration may vary depending on the players' familiarity with the rules and game dynamics. In a classroom context, the game duration could be extended due to discussions that emerge from gameplay. However, it can also be played outside of a classroom setting without such discussions. The core gameplay mechanics are centered around News Construction Cards. These cards contain elements such as striking headlines, emotional language, references to stories, and polarizing phrases that drive the narrative of

fabricated news stories. Action Cards introduce additional layers of strategic interaction, enabling players to force their opponents to retract or modify their statements. The player who is left with the most cards when the game ends is considered to have lost.

To begin, all the cards are shuffled, and each player is dealt six cards. The remaining deck forms a "News Construction" pile, placed face down. The game commences with the first player drawing a News Construction Card, which sets the topic for the news story. Players then take turns constructing the story, beginning with a "Striking Headline" Card (green card) if they have one in hand. If not, they must draw a card from the face-down deck. The following player adds to the story with an "Exaggeration of the Facts" Card (pink card), and subsequent players continue following the color-coded sequence as indicated on the board. Each column on the board corresponds to a specific stage in news construction, guiding the player's move. If a player lacks the necessary card for a given column, they must draw from the pile until they obtain a card that fits.

The game progresses until players reach the "Focus on Sensitive or Controversial Topics" section, demarcated by a black line on the board. At this point, the news headline is considered complete, and a second round begins. During the second round, players can continue expanding their stories, adding elements such as "Lack of Context or Balanced Perspective" (purple column), citing unreliable or anonymous sources (orange column), or further promoting polarization and conflict (black column). The first player to run out of cards wins the game.

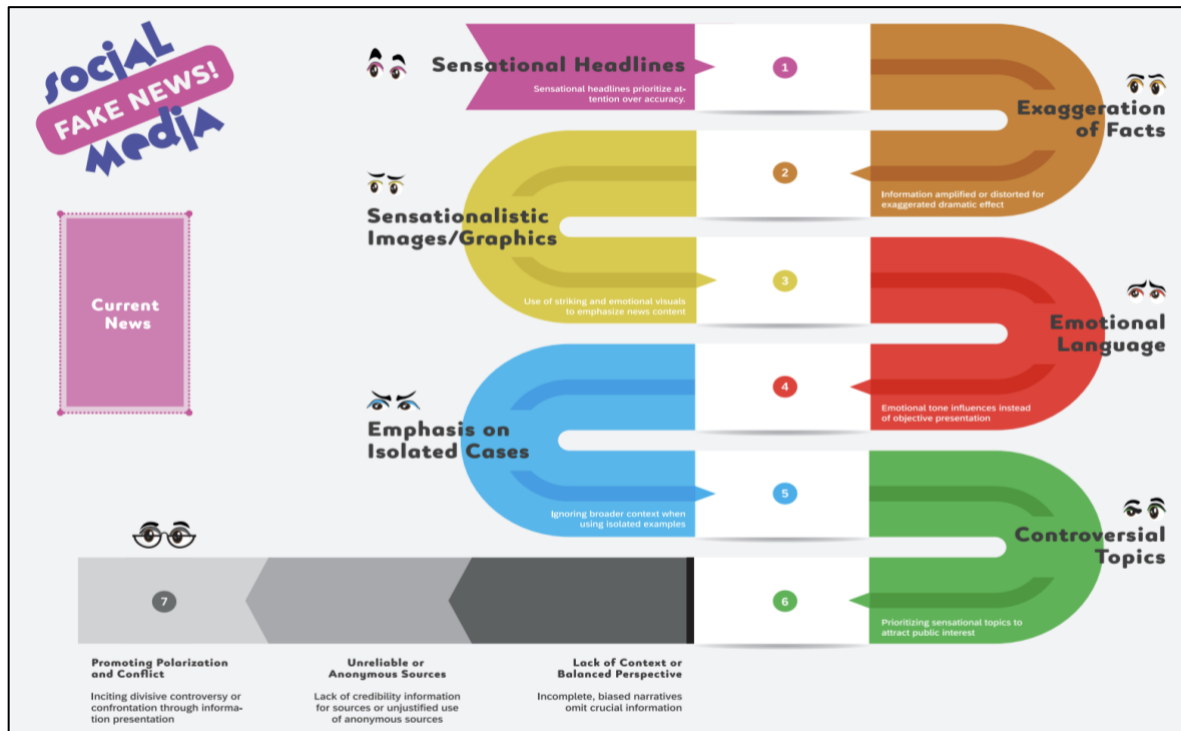
The game's structure follows a sequence of columns that guide the creation of sensationalist news, as outlined in the following stages (Figure 4). Sensationalistic Headlines: Players begin by using exaggerated, eye-catching headlines designed to grab attention, even at the expense of factual accuracy. Exaggeration of Facts: Players amplify or distort information to make it appear more dramatic or impactful than it truly is. Use of Sensationalistic Images or Graphics: This stage involves the strategic use of visuals designed to evoke emotional reactions, further reinforcing the sensational tone of the news. Emotional and Biased Language: Players incorporate emotionally charged or biased language to manipulate the audience's sentiments, rather than providing an objective presentation of the facts. Emphasis on Isolated Cases: Exceptional or isolated examples are presented as though they represent broader trends or issues, often ignoring the larger context. Focus on Sensitive or Controversial Topics: At this stage, players prioritize issues such as violence, scandals, or conflicts to attract attention.

Lack of Context or Balanced Perspective: Key details that could provide a more complete or objective view of the topic are omitted, enhancing the sensationalism of the news story.

Unreliable or Anonymous Sources: Players introduce unverified or anonymous sources to support the story, undermining its credibility. Promoting Polarization and Conflict: Finally, the news story is crafted to deepen divisions, creating controversy or conflict among different groups or individuals.

Once the black line is reached in the first round, the news headline is considered complete. Players then begin the second round, where they can continue building upon the initial headline by adding elements from the various columns, without restrictions. The columns used in this game were inspired by the guidelines set forth by the Federación de Asociaciones de Periodistas de España (FAPE) and the World Ethical Charter for Journalists (International Federation of Journalists, June 2019), which emphasize ethical journalism practices and the importance of balanced, objective reporting. A simple ten-point guide for assessing news has been included (Figure 5). This guide provides a straightforward framework to evaluate the credibility and reliability of the information they encounter on social media.

Figure 4: Game board



Source: Social Media Puppeteers.

Figure 5: Ten-point guide for assessing news

### Social Media Fake News

Follow these guidelines when assessing news

- 1** Consult multiple reliable sources: Check the news from different respected media outlets and compare details. Genuine stories are likely reported by several reliable sources.
- 2** Verify the original source: Ensure the news comes from a legitimate and trustworthy source. Be wary of lesser-known websites or those lacking credibility.
- 3** Investigate the author: Look into the author's background and credentials. A trustworthy journalist or writer will have a verifiable track record.
- 4** Seek official statements: Check for official statements from government sources, organizations, or experts that support the information.
- 5** Look for evidence and data: Credible news will be supported by facts and evidence. Search for data, testimonials, images, or videos that confirm the story's accuracy.
- 6** Identify biases: Examine whether the news exhibits any bias or ideological slant. Objective news should present facts without distortion.
- 7** Use verification tools: Utilize online tools such as fact-checking websites to determine the accuracy of news.
- 8** Check the date: Ensure the news is not old or outdated. Sometimes, false news resurfaces as if it were current.
- 9** Consult experts: For complex or technical topics, seek the opinion of experts or specialists to validate the information.
- 10** Be cautious of sensationalist content: News that is excessively sensationalist or shocking warrants further review, as it can often be misleading.

Source: Social Media Puppeteers.

The News Construction Cards are color-coded to help players easily identify their categories and their function within the game. Each color group contains cards that focus on specific types of language or imagery used in the construction of fake news. Green Cards: Used to create a striking headline, these cards contain terms such as "Outstanding," "Achievement," "Success," or "Progress." Pink Cards: These cards enable players to exaggerate facts, with phrases like "Shocking," "Important," or "Extraordinary." White Cards: Representing sensationalistic images, these cards are key to emphasizing the emotional tone of the news. Yellow Cards: These cards include emotional and biased language such as "Exciting" or "Amazing." Blue Cards: These cards highlight isolated facts, using phrases like "Curious spot," "A unique solution," or "Strange shadow." Lilac Cards: Focused on sensitive or controversial topics, such as "Humanitarian crisis." Purple Cards: These cards encourage the omission of context or a balanced perspective, with phrases like "Credible reference book." Orange Cards: Related to unreliable or anonymous sources, these cards include phrases such as "Politician X from an unreliable source." Black Cards: These cards are used to introduce polarizing and divisive language, such as "Only the naive believe in that theory." (Figure 6). The cards intentionally include grammatical errors, highlighted in red, to emphasize the fact that many fake news stories often contain such mistakes. These errors serve as a reminder that misinformation frequently lacks the attention to detail and accuracy found in credible sources, highlighting the importance of critical thinking when evaluating news.

Figure 6: Four cards of the News Construction Cards



Source: Social Media Puppeteers.

The game also includes Action Cards, which introduce counterstrategies to challenge opponents' moves. For example, the "I Pass, I Don't Believe It" card allows a player to skip their turn, while the "Typographical Errors" card forces an opponent to take all cards with spelling mistakes. Other Action Cards allow players to force opponents to take cards related to unreliable sources, images, or polarization, or even swap cards with other players. When the deck is depleted, the discard pile is no longer shuffled and reused.

An optional variation of the game includes Topic Cards, which introduce specific topics for players to discuss and explore after the game. These cards cover issues such as wars, politics, and technological advances, such as "Advances in Artificial Intelligence in Healthcare." The inclusion of these Topic Cards encourages deeper reflection

and discussion on the themes presented during the game, offering a valuable tool for educators and facilitators in fostering critical thinking about media literacy and fake news.

To maximize the educational impact, comprehensive guidelines for classroom implementation, assessment, and reflection have been developed (Figure 7). These guidelines enable teachers and trainers to integrate the game into diverse pedagogical contexts, tailoring sessions to varying durations—from 20 to 60 minutes—to accommodate school schedules or extracurricular activities. Sessions can be revisited to focus on specific news topics, concepts, or learning objectives, fostering deeper discussions and reinforcing digital literacy skills. The game serves as a versatile tool, acting as a bridge, mediator, and catalyst for follow-up activities. Educators can leverage current events, social media trends, and recent news to create dynamic, relevant learning experiences that engage students more effectively.

Figure 7: Example of Etivity for classroom implementation.

<b>Etivity - Social Media Fake News: Media Literacy and Fake News in Times of Crisis Session</b>	
<i>By Jose Luis Eguia-Gomez and Ruth Sofia Contreras-Espinosa</i>	
<b>1. Scenario</b>	
In this e-tivity we suggest a session with the game Social Media Fake News	
<b>2. Etivity structure</b>	
<b>Etivity title</b>	Social Media Fake News: Media Literacy and Fake News in Times of Crisis Session
<b>Purpose</b>	<ol style="list-style-type: none"> <li>1. Understand what fake news is and how it is created.</li> <li>2. Identify common techniques used in the creation of fake news.</li> <li>3. Develop critical skills to evaluate the veracity of information.</li> <li>4. Foster collaboration and constructive discussion about the impact of fake news</li> </ol>
<b>Brief summary of overall tasks</b>	In this session, players will use the board game Social Media Fake News with a constructivist focus
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Social Media Fake News Board Game (with cards and board already prepared).</li> <li>• Whiteboards or pa</li> </ul>
<b>Timing</b>	1 hour

Source: Social Media Puppeteers.

Social Media Fake News serves as both an engaging and educational tool to raise awareness about the mechanisms behind the construction of fake news stories. By incorporating game-based learning, it enables players to actively explore and understand the elements that contribute to misinformation, providing them with the knowledge to critically evaluate news and media in real life.

## Discussion

The reviewed literature highlights the challenges that contemporary youth face in navigating the overwhelming flow of information and combating misinformation, especially within unfiltered social media environments (Lauricella & Herdzina, 2020; Krumsvik, 2023). Media literacy emerges as a critical skill in addressing these issues, and the games Social Media Puppeteers and Social Media Fake News directly respond to this need. Social Media Puppeteers immerses players in roles such as politicians, journalists, and scientists, simulating real-world dynamics to encourage critical thinking. This approach aligns with the emphasis in prior research on experiential learning as

a powerful tool for fostering analytical skills (Moro et al., 2022). Similarly, *Social Media Fake News* deconstructs misinformation by guiding players to identify and critique fabricated news stories, reflecting the importance of interactive and hands-on approaches to teaching media literacy. Both games make abstract concepts, like misinformation and bias, accessible and relatable to students' daily experiences, which is consistent with previous findings in the field (Carenzio, Pasta & Ferrari, 2024; Contreras-Espinosa & Eguia-Gomez, 2024a).

Role-playing games (RPGs) have long been recognized for their capacity to enhance interdisciplinary learning, literacy, and social skills (Kaylor, 2017; Spinelli, 2018; Zalka, 2012). The design of *Social Media Puppeteers* draws directly on these educational benefits by incorporating RPG mechanics such as character creation and role-based gameplay, which engage players in critical discussions about social media. Insights gathered from educator interviews further support the value of RPG elements in fostering immersive and collaborative learning experiences, consistent with the findings of Winardy and Septiana (2023). The game's simplified mechanics, including its one-page ruleset, make it particularly accessible to younger audiences, addressing the challenge of bridging the gap between complex RPG frameworks and the needs of novice players.

The literature also highlights the social and emotional benefits of tabletop games, emphasizing their ability to foster interpersonal relationships and empathy through face-to-face interaction (Cauberghe et al., 2021; Gashaj et al., 2021). Both games build on this foundation by promoting collaboration and engagement. *Social Media Puppeteers* facilitates alliances, rivalries, and group discussions that mirror the social dynamics of real-world digital interactions, while *Social Media Fake News* fosters debate and teamwork as players analyze and critique each other's narratives. These findings underscore the potential of tabletop games to combine social interaction with meaningful educational content, offering a unique platform for exploring complex societal issues.

Emotional and narrative engagement are further key elements addressed by both games. Previous research underscores the role of emotionally resonant narratives in enhancing learning outcomes (Bowman, 2019; Hitchens & Drachen, 2008). In *Social Media Puppeteers*, players' decisions are tied to their characters' success or failure, fostering emotional investment in the gameplay. Meanwhile, *Social Media Fake News* uses cards with emotionally charged language and exaggerated narratives, mirroring real-world misinformation tactics to raise awareness of these strategies. By incorporating emotional and narrative elements, both games create immersive experiences that effectively reinforce critical thinking and media literacy skills.

Collaboration and adaptability are recognized in the literature as essential factors for the success of educational games (Holik et al., 2024; Hughes et al., 2024). Both *Social Media Puppeteers* and *Social Media Fake News* reflect these priorities through their flexible designs, which allow teachers to adapt them to different classroom contexts. Comprehensive guidelines for preparation, gameplay, and post-game reflection support their implementation, while the games' collaborative mechanics encourage teamwork and critical analysis of misinformation. These features align with the literature's call for educational tools that are not only engaging but also capable of addressing pressing issues such as digital ethics and media manipulation (Moro et al., 2022).

Educator interviews reveal a significant gap in students' ability to critically evaluate and produce media content (Contreras-Espinosa & Eguia-Gomez, 2024b). The two games effectively address this gap by teaching players to identify and deconstruct fake news in *Social Media Fake News* and by encouraging strategic decision-making and critical evaluation of social media content in *Social Media Puppeteers*. Additionally, the focus on ethical considerations and collaborative problem-solving in both games offers practical solutions for fostering responsible digital citizenship.

Overall, the findings demonstrate a strong alignment with existing research on the educational potential of games. *Social Media Puppeteers* and *Social Media Fake News* exemplify how game-based learning can effectively tackle media literacy and critical thinking challenges. By combining immersive gameplay with collaborative and adaptable

designs, these games bridge theoretical insights with practical applications in real-world educational contexts. They reinforce the importance of integrating tabletop games into curricula as tools to prepare students for critically engaging with a media-saturated world.

## Conclusion

The findings of this study underscore the critical role of game-based learning in addressing the challenges contemporary youth face in navigating misinformation and fostering media literacy. Both Social Media Puppeteers and Social Media Fake News emerge as effective tools for engaging students in critical thinking and ethical decision-making, addressing a significant gap identified in the literature. By aligning with research emphasizing experiential learning, these games demonstrate how abstract concepts such as misinformation, bias, and ethical media practices can be translated into relatable, interactive, and educational experiences.

The design of Social Media Puppeteers leverages the proven benefits of tabletop games and role-playing games, incorporating simplified mechanics and immersive gameplay to make interdisciplinary learning, literacy, and social collaboration accessible to younger audiences. Its integration of character-driven narratives reflects its alignment with prior research, highlighting RPGs' capacity to foster collaborative problem-solving and engagement. Similarly, Social Media Fake News deconstructs misinformation through a structured, hands-on approach that teaches players to critically analyze and construct news stories, enhancing their ability to recognize manipulation in media content. The broader implications of these findings reinforce the social and emotional benefits of tabletop games as highlighted in the literature. These games not only provide opportunities for face-to-face collaboration but also promote empathy, teamwork, and debate. Through narrative and emotional engagement, they further enhance the immersive experience, allowing players to internalize key lessons on critical thinking and responsible digital behavior. The adaptability of both games ensures their relevance across diverse educational settings, supported by comprehensive guidelines for implementation and reflection, which empower educators to maximize their pedagogical potential.

The study is not without limitations. The analysis is primarily exploratory and based on a limited number of qualitative data sources, including a single brainstorming task and a set of interviews with 29 experts. While these insights are valuable, they do not provide generalizable evidence of the games' long-term impact on learners' media literacy or behavioral change. Additionally, the games have been designed and tested in specific educational and cultural contexts; their effectiveness in other regions, age groups, or learning environments remains to be evaluated.

Future research should explore the scalability of these games across different age groups and cultural contexts, assessing their long-term impact on students' critical media skills and ethical awareness. Further studies could also investigate how integrating these games into broader curricula might enhance their effectiveness and examine their potential to address other pressing educational challenges, such as digital security and online ethical behavior. Social Media Puppeteers and Social Media Fake News exemplify the potential of innovative educational tools to bridge theoretical and practical gaps in media literacy education. By fostering critical thinking, collaboration, and ethical awareness, these games contribute meaningfully to preparing students for informed participation in a media-saturated world. Their adaptability and alignment with existing research highlight their value as a sustainable approach to modern educational challenges, offering a model for future interventions in this critical field.

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