

Can You Even Read? Examining Literacy and AI Through Gameplay

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Abstract: This paper discusses a game research-creation which explores the relationship between compromised attention spans and the diminishment of basic literacy skills in the age of Generative AI. By forcing the issue of attention into the game's core mechanic, *Can You Even Read?* brings the new literacy crisis into harsh definition for players. This short, educationally-focused game asks players to consider the increased difficulty of conducting close readings of long form texts, in an attention economy that instead primes them for surface readings of short form texts. The game additionally highlights for players how such sparse attention economies can make would-be readers more susceptible to undermining their own close reading skills through overreliance on Large Language Models (LLMs) as a reading "aide." There is an established base of research recognizing how using LLMs and short-form based social media is undercutting critical thinking skills, literature analysis skills, and attention span (Kosmyna et al. 2025; Yousef et al. 2025; Wardak 2026). Increasingly students are displacing their reading responsibilities onto generative AI (Aljohani 2024; McClain et al. 2026; Stone 2025), relying on AI summaries and analysis of texts, rather than interfacing with the texts themselves. By leveraging Citton's concept of Attention Economy (2017), this game engages with how the enforced attention scarcity of today's digital world stymies critical literacy skills while encouraging LLM reliance to complete reading based tasks. *Can You Even Read?* is a short game which asks the player to navigate text through the simple act of reading. While reading this text, the player becomes inundated with suggestions to stop and have AI summarize what they have read so far, in addition to increasingly aggressive advertisements, SMS texts, and pings from social media. Designed with secondary and postsecondary classrooms in mind, *Can You Even Read?* is a pedagogical tool through which to better understand how the contemporary digital attention economy can impact students' literacy skills. It is, importantly, not a game designed to be won, but to promote thought, questions, and reflections in the player on what it means today to read well, or simply to read at all.

Keywords: Video games, AI, Literacy, Simulation, Game based learning, Attention economy

1. Introduction

Simulation video games have the ability to invite players into critical thinking about how they personally operate in different scenarios, making simulators useful tools for exploring the impact contemporary digital culture has on its users. Unlike digital role-playing games, for example, which can facilitate considerations of how players might behave as someone other than themselves, simulators are often designed to engage the player directly. Simulation video games draw attention to the minutiae of specific acts to create games out of moments of everyday life, like walking or powerwashing, or to magnify specific aspects of larger-scale actions, like the strategy of commanding armies or designing amusement parks (e.g., *Civilization VI* 2016; *RollerCoaster Tycoon* 1999). Attention to the act being simulated, as well as the first person view or lack of avatar, often characterize this play as the player operating as themselves or an omnipotent position within the game. In powerwashing simulators, this can look like hands coming forward and operating onscreen (e.g., *PowerWash Simulator* 2022), while in games like *The Sims* (Maxis 2000), the player is an architect and god of the characters they enact their will upon. Sometimes subtly, sometimes overtly, the avatar or lack thereof communicates that the player themselves (rather than a pre-scripted alterego) is the main character undertaking the simulated task. The design of simulator video games here persuades players to consider how they approach any given task as themselves.

As Bogost argues in *Persuasive Games* (2007), a game embeds persuasion into every facet of its communication, both for the game developer and the player, through procedural rhetoric. Procedural, in the Bogostian sense, refers to the game interface and the games' political, educational, and advertising expressions (Bogost 2007). The messaging of how a game portrays the act of simulation directly conveys the designers' implicit or explicit biases, as seen in *Tenure* (Gaeda 1975), for example, which is a game that asks the player to answer multiple-choice scenario questions based in a secondary-school setting. Bogost discusses how the procedural rhetoric in *Tenure* shows the aggregate impact of "seemingly minor" educator decisions on the school. The choices of the player, and the emergence of the player's underlying pedagogy, then dictate how students, administration, and other educators treat the player-teacher. The rhetoric in *Tenure* comes through in the text of the game, but also the use of multiple-choice questions, which mimic students' test experiences and incorporate many stakeholders' opinions of education.

Frasca's (2002) simulation semiotics follow these same lines, tracing a game's interpretations through the ways in which, purposefully or not, the developer lays their biases bare via code and gameplay. Careful to distinguish narratives from simulations, Frasca underlines the experiential nature of implicit rules and player interpretation. The biases of the developer determine the key characteristics of the simulator. Simulation semiotics and procedural rhetoric align when examining these simulation video games, conveying the developer's experiences walking or powerwashing while eliminating the superfluous, leaving only the representations of the acts simulated.

Can You Even Read? is a video game which simulates the online reading experience of 2026. The player plays as themselves, reading on a device, complete with advertisements, SMS messages, social media notifications and blasts, and AI assistants offering constant support. The interface looks like a stylized pdf reader of the book, *The Picture of Dorian Grey*. The friction of focusing through constant interruptions forms the core mechanic of the game, asking reader-players to push through peripheral distractions. From a procedural rhetoric perspective, our team as researcher-developers aims to draw the player's attention to the deteriorating quiet needed to read and critically engage with a text. The game's rule system was informed by contemporary attention regimes in digital culture, and the compromised attention economy they have produced for consumers. This gameplay was also designed in consideration of current LLM developments, and the increased reliance seen in students on generative AI for completing close-reading related tasks. *Can You Even Read?* is ultimately designed to invite players to reflect on, sit with, or struggle through the competitive, distraction-prone, and precarious attention economy in which we increasingly lead our lives.

2. Literature Review: Attention, Alerts, AI

2.1 Attention

By leveraging Citton's (2017) interpretations of the "attention economy," particularly in relation to the attention regime of alarm (i.e., the media's constant demands for our attention), we can consider how AI affects our compromised attention spans in the digital age. Citton highlights how our digital environments have created a "new economy" in which many cultural goods may be consumed via the Internet "for free," making these goods "non-rival in their communication, but not in their reception." Due to this overabundance of digital goods, an attention economy has surfaced where "the main scarcity—and hence the new source of value—is no longer in the material goods traded among economic agents, but in the *human attention* needed to 'consume' them" (Citton 2017). A new rivalry is created here, wherein digital goods are in competition with each other – and with material cultural products as well, like print books or comics – to capture consumer attention. Here, the regime of alarm is regularly employed as an attention-grabbing tactic.

The regime of alarm is one of four "regimes of attention" proposed by sociologist Dominique Boullier (Citton 2017; see also Boullier 2009; Boullier 2012), and draws attention by targeting consumers with bursts of "sudden stimulation," which may manifest as, "a threat, a warning sign, [or] an opportunity [that] pops out" and demands notice (Citton 2017). While the regime of alarm is at play in the media's frequent reliance on "scandals, crisis, and scoops" to attract our attention (Citton 2017), this attention regime is also at play in digital pop-up notifications. Consider how pop-up messages from social media apps (e.g., notifying us of a friend's new message) or gaming apps (e.g., informing us our "lives" have been recharged and we can play again) attempt to pull our attention from our current on-screen tasks. Importantly, even if we do not fall for the lure of these alarms, instead closing the messages and refusing to open the app at that moment, the mere experience of an alarm via the notification pop-up window is enough to momentarily fracture our attention. Contemporary digital culture thus trains consumers to always, on some level, be mentally prepared to manage the regime of alarm, which fosters an attention economy of split rather than deep focus.

2.2 Alerts

Our current attention economy sets up users for decreased attention spans not only through the regime of alarm (e.g., scandal, pop-up messages), but through oversimplified and quickly-consumed digital content. There is a growing base of research recognizing how using social media and short-form video content is undercutting critical thinking skills, literature analysis skills, and attention span. The term "brainrot" (the Oxford dictionary's word of the year in 2024) means lower brain functioning and damage due to long-term exposure to social media and "inane" shortform video content (*Oxford English Dictionary* 2025). While often used colloquially, the associated damage from such shortform social media use is real and there is a growing qualitative and quantitative research base examining its effects (Gül 2026; Özbay 2026; Chen et al. 2022; Xu et al. 2023; Gao et

al. 2025). In a digital world geared around shortform content, it is difficult to nurture the sustained focus required to absorb – let alone critically consider – long-form content such as literature (Yousef et al. 2025).

One such study discussed how Short Video Addiction, or SVA, is linked with mental and physical impairments, where prolonged cellphone use and watching of shortform content has a negative impact on brain development (Gao et al. 2025). Further, addicted users have been noted to have more “difficulties maintaining attention, have more attention deficits while watching short-form videos, and have impaired attentional concentration for processing interference” (Chen et al. 2022). In one qualitative study, all 113 university education department participants exhibited and reported signs of brainrot and addiction to social media (Gül 2026). The regime of alarm operates here through shortform digital content’s promise of constant and quickly-consumed newness, which is presented to users through alerts both out-of-app (i.e., pop-up notifications of a new TikTok or Instagram post) and in-app (i.e., attention-grabbing video openings or images, intended to alert users enough to pause scrolling). Ironically, it is through user habituation to both fielding and acquiescing to the alerts of social media and short-form digital content, that users can lose their ability to stay alert while consuming long-form content, digital or analog. Through a mix of brainrot and SVA, the regime of alarm and its associated attention-splitting alerts instead draw users back to watch, scroll, and continue engaging with short-form content based digital platforms.

2.3 AI

In an attention economy where our attention is either forcibly or willingly split, consumers may be primed to rely on generative AI tools for deep focus tasks. We can already see how teenaged and postsecondary students, for example, increasingly employ AI to facilitate their studies. A study conducted by the Pew Research Centre reveals that “[o]ne-in-ten teens say they do all or most of their schoolwork with chatbots’ help” (McClain et al. 2026), which ranges from assistance with math problems to outsourcing research tasks to AI. Forty-two percent of students surveyed also used AI to summarize books, articles, or films, rather than spend their attention reading or viewing the assigned materials personally (McClain et al. 2026). Meanwhile, another survey indicated that over a third of college-bound students acknowledged using LLMs to write essays and complete assignments (Goebel et al. 2024). Postsecondary students also rely on AI for assistance with research, essay writing, and assignment editing (Başer et al. 2026; He 2025; Zhang et al. 2025), with one survey revealing that over 40% of its undergraduate student sample admitted to using AI in ways explicitly prohibited by course instructors (Stone 2025). Whether students are using AI as a study partner, research assistant, assignment ghostwriter, language instructor, or any mix thereof, AI utilization is on the rise in digital culture.

While some studies have shown how AI can provide positive individual benefits, by encouraging self-regulated learning (Aljohani 2024; Zhang et al. 2025), it is also important to consider why so many require AI today to pursue self-regulated learning in the first place, and also what skills may be compromised if we become dependent on AI-regulation to achieve our “learning” goals. After all, while certain AI users do learn more easily with AI, as seen for example in EFL learning (Aljohani 2024; Mahapatra 2024; Polakova and Ivenz 2024), other studies show how there are many AI users who rely on AI to produce the end result of a given task, not to teach them the skills required to complete that task themselves (Stone 2025; see also He 2025; Zhai et al. 2024). Additionally, over a third of the undergraduate students surveyed by Stone (2025), in considering the workforce into which they would eventually graduate, agreed “about the industry not caring what tools are used to achieve an end result,” which correlated with students’ ongoing use of AI to complete coursework, even in ambiguous and banned circumstances. For students and other consumers who feel such societally driven pressures towards prioritizing end results over the learning process, AI’s promise of efficiency is a huge draw.

What increases the draw of AI, and predisposes many of us to rely on its immediate task-completing abilities, is our current, compromised attention economy. The distracting, alert-heavy machinations of digital culture today mean that even if we wish to build our skills – either on our own, or with AI’s help – we rarely have the time and undisrupted attention necessary to do so. Hence, the appeal of AI, which takes on the labor of close focus work: reading and analyzing a novel; developing an argument for and writing an essay; researching, reading, and summarizing secondary sources for an assignment. Current attention economies make us susceptible to LLM tools which offer these services, in the process aborting the skill-building that comes with sustained attention. Our game-creation process for *Can You Even Read?* was undertaken to illustrate this diminishment, if not the outright loss, of one of the skillsets that in digital culture is increasingly outsourced to AI: close, critical reading.

2.4 Research-Creation

This project is a research creation of the two authors of this paper. Research-creation as a speculative practice (Leavy 2009; Chapman & Sawchuk 2012) offers a pathway for the construction of *Can You Even Read?*, to demonstrate the different ways attention is stretched and warped, through play as a player and through reading as a scholar. As such, the game and this paper benefit from the depth of reflection asked in the research creation process. In particular, the authors followed Chapman & Sawchuk's (2012) "research-for-creation" approach, an iterative process which allowed the authors to combine topical literature review with creative collaboration and experimental prototyping. Through this method, the authors isolated the three previously addressed topics of main concern, regarding diminished literacy and critical thinking skills in the digital age (i.e., Attention, Alerts, and AI). These three topics informed the game design choices made by the authors throughout the research-creation process, in areas such as gameplay mechanics and game aesthetics. Several outcomes of this process are described in the next section, which details the main gameplay mechanics of *Can You Even Read?* and the authors' intent behind each design decision.

3. Game

Constructed in Unity, this research creation game incorporates several key features that, together, produce an environment that encourages the player to consider where their attention is going. For ease of explanation, we have condensed much of the development into four sections; reading in the game, pop-up alert mechanics, AI bot mechanics, and the inclusion of an "attention monitor." These four aspects of the game, in both their mechanics and their aesthetics, employ procedural rhetoric intended to engage players in the reading practices and attention economy of contemporary digital culture.

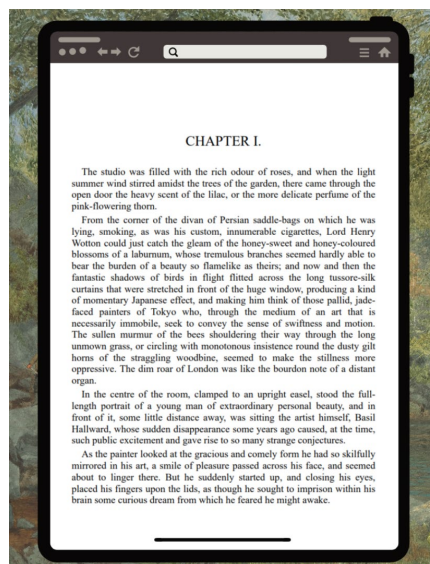


Figure 1: The E-Reader

3.1 Reading the Game

The reading aspect of the game is deceptively simple, incorporating arrow buttons that allow the reader-player to navigate through the book, *The Picture of Dorian Gray*, by Oscar Wilde. The book was chosen for its common use in many North American school contexts and its not-so-subtle metaphors for distorted visions of the world and others. *The Picture of Dorian Gray* was also chosen because it is open source and available widely online, which makes it more vulnerable to being fed into LLMs. Real-life users today can easily ask LLMs for plot summaries and assignment writing based on AI's subsumption of this classical novel, if not upload the novel directly to LLMs themselves. *Can You Even Read?* gamifies this reality, to ask players at what stage they too may abandon the close reading process in favour of AI assistance. Reading and the mechanic of changing the page in-game is simple and easy at first, but becomes more laborious as more and more advertisements, notifications, and AI windows pop up, crowding what is initially supposed to be a straightforward reading experience (Figure 1). Early gameplay is simply reading, without interruptions, aside from those that may supersede the game itself on the actual device it is being played on.

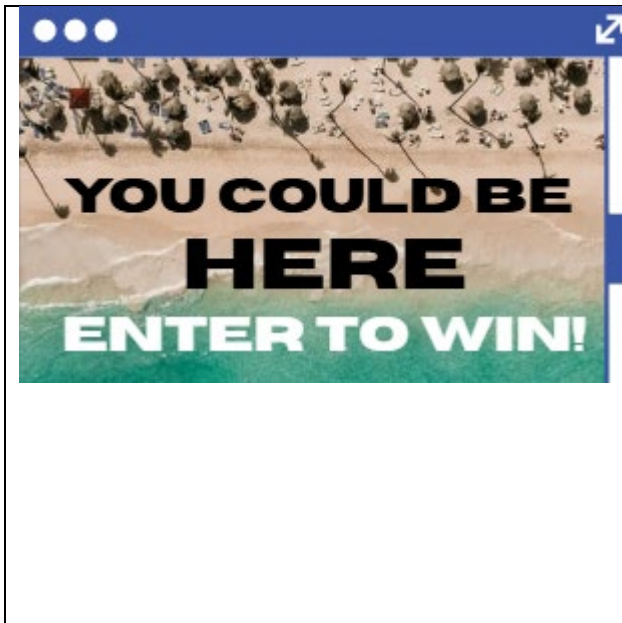


Figure 2: A sample pop-up advertisement

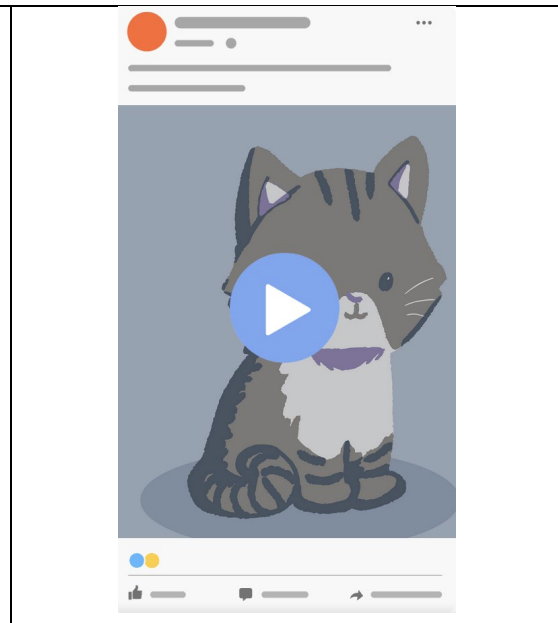


Figure 3: A sample social media notification

3.2 Pop Up and Alert Mechanics

While reading, players are increasingly embedded in the regime of alarm through different types of pop-up alerts. These pop-ups are intended to simulate notification systems that occur on many digital devices, from pop-up advertisements while browsing the web to SMS messages to social media notifications about new uploads. The fake pop-up advertisements (Figure 2) mimic real-world pop-up ads in playing on the attention economy's susceptibility to engaging visuals, simple text, and exciting promises of on-click wish fulfillment. Meanwhile, the social media notifications likewise employ simplistic yet alerting visual and textual effects, through message alerts, which draw attention via the promise of scandal, and video upload notifications (Figure 3), which draw attention via digital consumers' disposition towards SVA. In comparison to these alerts, the e-reader is purposefully text heavy, lacks visuals, and demands more time and thought to achieve a sense of fulfillment. The regime of alarm utilized in this aspect of the game's design positions players to decide whether they will exit out of such pop-ups immediately (to maintain dedicated focus on their close reading task), or if they will accept this lure to split their attention and engage further focus on the notifications beyond their initial, alerting appearance onscreen.

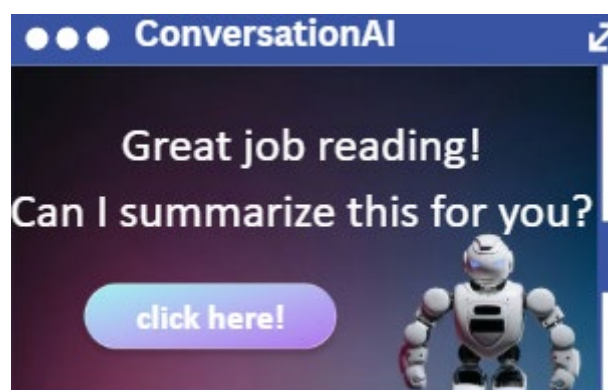


Figure 4: A message from ConversationAI to the player

3.3 AI Mechanics

The game's AI mechanic is also represented as a pop-up window, but its intent is not purely to divert focus from reading, but instead to offer readers an out from close-reading itself. Importantly, our AI mechanic refers to a fake, in-game AI assistant, called ConversationAI, and not to an AI employed at a coding level of game design. Early in their reading, the player is disrupted by an initial message from ConversationAI (Figure 4), which offers to summarize the remainder of the novel for the player. Novel summaries have been produced using a LLM

chatbot. If the player accepts ConversationAI's offer, they will receive a short, randomized AI summary of *The Picture of Dorian Gray*, and the playthrough of the game will end. If ConversationAI is declined, the player can continue using the E-reader to read on their own, while fielding pop-up advertisements and social media notifications that will attempt to disrupt their reading. ConversationAI continues to periodically offer its services to the player, until the player either accepts the AI's help or reaches the end of the novel themselves, by clicking through and past the novel's final page. Through ConversationAI, we bring the stakes of the attention economy into player choice, asking players to decide if they will prioritize efficient end results or comparatively more strenuous critical literacy skill-building.



Figure 5: The Attention Monitor

3.4 Attention Monitor

The attention monitor quantifies for the player how much they are focused on the close reading task. The game starts with the monitor at full but it diminishes (Figure 5) if pop-up messages are left onscreen. The longer a pop-up message remains without being closed by the player, and the more pop-up messages are left onscreen, the faster the monitor bar empties. Whenever the bar reaches three quarters full, half full, and one quarter full respectively, ConversationAI sends the player a new offer to summarize the text. Should the attention monitor ever reach zero, ConversationAI automatically summarizes the novel for players, thus automatically ending their playthrough. While necessarily an imperfect mechanic for measuring the degree of close focus attained, given the contextual and internal nature of how we experience focus, the attention monitor nonetheless invites consideration of one's own focus capacities. In designing gameplay around an onscreen attention monitor, our goal is to draw players' attention to the very fact of attention, and how it may be split, sold, protected, or aborted within contemporary digital culture.

3.5 The Full Picture

Through the described mechanics and their respective aesthetic qualities, the game culminates in a game screen inundated with messages and windows (Figure 6). The simulation of reading becomes a parody of the act of reading, with the novel page a backdrop to the ever growing number of alarms and alerts covering it. These obvious distractions convey the rising sense of and regime of alarm, giving way to an intense number of attention seeking tasks that consistently result in some pull of reader-player attention, even if just enough to close each task window. The procedural rhetoric here inundates players with distractions and friction to the reading experience, making any reading, let alone critical and close reading, nearly impossible.

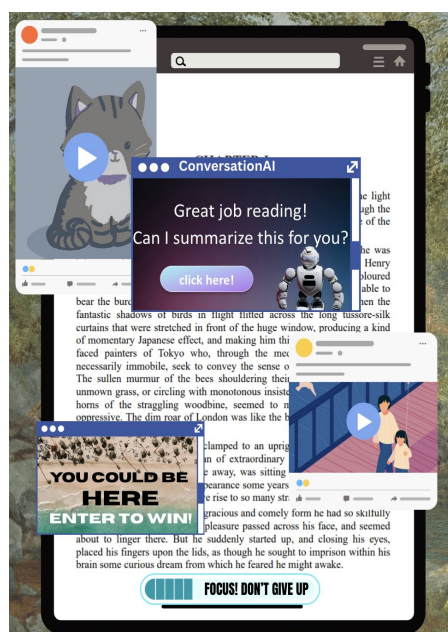


Figure 6: The In-Play Game Screen

4. Conclusion and Future Developments

Can You Even Read? frames the question of attention – where it is being pulled, spent, or foreclosed – through the action of playing a reading simulator. Positioned as neither a condemnation nor a condonation for AI summarizing, instead this game brings the question of what readers are gaining and losing by using LLMs or Chatbots to the forefront of the conversation. As the number of social media users worldwide continues to grow, the act of focused reading, despite alerts and distractions, grows ever more difficult. What becomes important, as these tools and platforms enter every school and workplace, is how users choose to engage with them, and how much of their attention they opt to designate to AI support. This game contributes to wider discussions surrounding AI support tools, attention spans and learning through reading, and was originally designed with educators and students as the intended audience. Ideal for both high school and university, we intend to expand the project into a qualitative research study, with teacher-candidate students as participants and testers, to develop the game further and incorporate their feedback to create a tool for feasible use in schools. The intended use is as a classroom activity to discuss close-reading and attention economies, and encourage further discussion as to what is ceded when using AI to summarize readings.

The project is limited by its use of a single translation of a single text, *The Picture of Dorian Gray*, displayed only in English, with English advertisements and pop-ups. We plan to expand this project in the future to include multiple language translations, and eventually offer an open source version of the program, in which educators can select their own articles and books for the in-game e-reader, creating a tailored activity for all readers. In a digital culture in which SVA and brainrot is on the rise among users, this project ultimately calls for further research and game creation that explores the impacts of generative AI on user attention economies, specifically through the lens of critical reading and literacy.

AI Statement: No AI tools were used in the construction of this paper. In the game described, LLM Chatbots were used to generate AI summaries, which *Can You Even Read?* offers to players in-game via its facsimile generative AI chatbot.

Ethics Statement: Ethical clearance was not required for this paper.

References

- Aljohani, W. (2024) "ChatGPT for EFL: Usage and Perceptions among BA and MA Students", *Open Journal of Modern Linguistics*, Vol. 14, No. 6, pp. 1119–1139. <https://doi.org/10.4236/ojml.2024.146059>.
- Başer, M. Y., Kozak, M., & Erdoğan, İ. (2025) "Do we worry about the use of artificial intelligence and plagiarism? Students' AI-giarism behaviour through the fraud triangle", *The Internet and Higher Education*, Vol. 69, p. 101071. <https://doi.org/10.1016/j.iheeduc.2025.101071>.
- Bogost, I. (2007) *Persuasive Games*, The MIT Press. <https://doi.org/10.7551/mitpress/5334.001.0001>.
- Boullier, D. (2012) "Composition Médiatique d'un Monde Commun à Partir du Pluralisme des Régimes d'attention", in Reber, B., Gossart, C., & Chardel, P. A., *Conflit des Interprétations dans la Société de l'informatio*, Hermès, Paris, pp. 41-57.
- Boullier, D. (2009) "Les Industries de l'attention: Fidélisation, Alerte ou Immersion," *Réseaux*, Vol 154, pp. 233-246
- brain rot, n. meanings, etymology and more | Oxford English Dictionary. (2025) Oed.com. [online] <https://doi.org/10.1093/OED/9028366482>.
- Chapman, O. and Sawchuk, K. (2012) "Research-Creation: Intervention, Analysis and "Family Resemblances", *Canadian Journal of Communication*, Vol. 37, pp. 5-26.
- Chen, Y. et al. (2023) "The effect of short-form video addiction on users' attention", *Behaviour & Information Technology*, Vol. 42, no. 16, pp. 2893–2910. <https://doi.org/10.1080/0144929X.2022.2151512>.
- Citton, Y. (2017) "Restructuring the Attention Economy: Literary Interpretation as an Antidote to Mass Media Distraction", in C. Akdere & C. Baron, *Economics and Literature: A Comparative and Interdisciplinary Approach*, Routledge.
- Frasca, G. (2002) "Ludology: From Representation to Simulation," *SIGGRAPH '02: Proceedings of the 29th International Conference on Computer Graphics and Interactive Techniques*. <https://doi.org/10.1145/2931127.2931198>.
- Firaxis Games. (2016) *Sid Meier's Civilization VI* [PC Game; PlayStation 4; Xbox One], 2K.
- FuturLab. (2022) *PowerWash Simulator* [PC game], Square Enix.
- Gaeda, O. (1975) *Tenure* [videogame], Minneapolis: Control Data Corporation. Retrieved from <http://bogost.com/writing/blog/tenure-the-game/>.
- Gao, Y., Hu, Y., Wang, J., Liu, C., Im, H., Jin, W., Zhu, W., Ge, W., Zhao, G., Yao, Q., Wang, P., Zhang, M., Niu, X., He, Q. and Wang, Q. (2025) "Neuroanatomical and functional substrates of the short video addiction and its association with brain transcriptomic and cellular architecture", *NeuroImage*, Vol. 307, p.121029. doi:<https://doi.org/10.1016/j.neuroimage.2025.121029>.
- Goebel, C., Strauss, D., & Tessier, N. (2024) "AI and Academia: Student Perspectives and Ethical Implications", *Art & ScienceGroup*. <https://www.artsci.com/studentpoll-volume-17-issue-1>.

- Gül, M. (2026) "Students' struggle with digital addiction: the truth of brain rot", *BMC Psychol*, Vol. 14, No. 98. <https://doi.org/10.1186/s40359-025-03880-w>.
- He, M. (2025) "The Impact and Challenges of AI on Students' Writing Skills--Take ChatGPT for example", *SHS Web of Conferences*, Vol. 220, No. 04004. <https://doi.org/10.1051/shsconf/202522004004>.
- Kosmyna, N., Hauptmann, E., Yuan, Y. T., Situ, J., & Maes, P. (2025) "Your Brain on ChatGPT: Accumulation of Cognitive Debt when Using an AI Assistant for Essay Writing Task", *arXiv.org*. <https://doi.org/10.48550/arXiv.2506.08872>.
- Leavy, P. (2009) *Method meets art: Arts-based research practice* (1st ed.), New York, The Guilford Press.
- Mahpatra, S. (2024) "Impact of ChatGPT on ESL Students' academic writing skills: a mixed methods intervention study", *Smart Learning Environments*, Vol. 11, No. 9. doi: <https://doi.org/10.1186/s40561-024-00295-9>.
- Maxis. (2000) *The Sims* [PC game], Electronic Arts.
- McClain, C., Anderson, M., Sidoti, O., & Bishop, W. (2026) "How Teens Use and View AI", Pew Research Center. <https://www.pewresearch.org/internet/2026/02/24/how-teens-use-and-view-ai/>.
- Özbay Ö.(2026) "'Brain Rot' Among University Students in the Digital Age: A Phenomenological Study", *Current Psychiatry Report*, Vol. 28, No. 1. <https://doi.org/10.1007/s11920-025-01658-w>.
- Polakova, P., & Ivenz, P. (2024) "The impact of ChatGPT feedback on the development of EFL students' writing skills", *Cogent Education*, Vol. 11, No. 1. <https://doi.org/10.1080/2331186X.2024.2410101>.
- Sawyer, C. (1999) *RollerCoaster Tycoon* [PC game], Hasbro Interactive.
- Stone, B. W. (2025) "Generative AI in Higher Education: Uncertain Students, Ambiguous Use Cases, and Mercenary Perspectives", *Teaching of Psychology*, Vol. 52, No. 3, pp. 347–356. <https://doi.org/10.1177/00986283241305398>.
- Wardak, M. (2026) "The Brat Brain: ChatGPT and the Crisis of Intellectual Effort in Language Education", *Arab World English Journal*, Vol. 3, No. 1, pp. 55–72. <https://doi.org/10.24093/awej/AI3.4>.
- Xu, Z., Gao, X., Wei, J., Liu, H. and Zhang, Y. (2023) "Adolescent user behaviors on short video application, cognitive functioning and academic performance", *Computers & Education*, Vol. 203, p. 104865. <https://doi.org/10.1016/j.compedu.2023.104865>.
- Yousef, A. M. F., Alshamy, A., Tlili, A., & Metwally, A. H. S. (2025) "Demystifying the New Dilemma of Brain Rot in the Digital Era: A Review", *Brain Sciences*, Vol. 15, No. 3. <https://doi.org/10.3390/brainsci15030283>.
- Zhai, C., Wibowo, S., & Li, L. D. (2024) "The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review", *Smart Learning Environments*, Vol. 11, No. 28. <https://doi.org/10.1186/s40561-024-00316-7>.
- Zhang, Y., Gong, X., Wang, X., Wang, Z., Zhou, J., & Wang, Y. (2025) "Research on the Application and Impact of Generative AI (AIGC) on College Students' Self directed Learning", *The 7th International Conference on Computer Science and Technologies in Education*, pp. 557-560.