

GENERATIVE-AI AS RESOURCE AGAINST THE “BRAIN ROT”

IA GENERATIVA COME RISORSA CONTRO IL “BRAIN ROT”



Delio De Martino
Università Telematica Pegaso
delio.demartino@unipegaso.it



Angelo Basta
Università Telematica Pegaso
angelo.basta@unipegaso.it



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ABSTRACT

In 2024 “brain rot” was named the “word of the year” by the Oxford English dictionary and it refers to an uncritical overconsumption of low-quality online content.

In this context generative AI could become an educational tool to counteract the brain rot enhancing the critical thinking about texts and images.

The AI, used in a methodologically correct way, could become a key inclusive technology to go beyond the rivalry between image and text.

Nel 2024, “brain rot” è stata nominata “parola dell'anno” dall'Oxford English Dictionary e si riferisce a un consumo eccessivo e acritico di contenuti online di bassa qualità.

In questo contesto, l'IA generativa potrebbe diventare uno strumento educativo per combattere il “marciume del cervello”, potenziando il pensiero critico su testi e immagini.

L'IA, utilizzata in modo metodologicamente corretto, potrebbe diventare una tecnologia inclusiva chiave per superare la rivalità tra immagine e testo.

KEYWORDS

Brain rot, AI, critical thinking, inclusion.

Brain rot, IA, pensiero critico, inclusione.

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Introduction: “brain rot” as word of the year

In December 2024 “brain rot” was declared by the *Oxford English dictionary* the “Oxford word of the year” (Yousef et al., 2025). The statement was made after a public vote involving over 37.000 people that elected this expression among a list of words or expressions studied and selected by Oxford lexicographers for their sociocultural relevance. The final mass vote of this word, closely linked to the new digital media, reflects the social concerns about the onlife modus vivendi (Floridi, 2015), often accused of causing mental distress and impoverishment of the critical thinking.

Indeed, according to the Oxford University Press, the definition of “brain rot” is as follows:

“the supposed deterioration of a person’s mental or intellectual state, especially viewed as the result of overconsumption of material (now particularly online content) considered to be trivial or unchallenging. Also: something characterized as likely to lead to such deterioration”¹.

The use of “brain rot” has seen a significant increase just in the last months. Brain rot was an expression rarely used before 2023 but just between 2023 and 2024 its utilization in the public space increased by 230%². The election of this word of the year follows a trend of words of the year related to the digital world (selfie and post-truth are examples of previous years) and it demonstrates that online environment plays a pivotal role in the social agenda and in linguistic evolution.



Figure 1. Brain rot frequency per million words during 2024.

¹ <https://corp.oup.com/news/brain-rot-named-oxford-word-of-the-year-2024/>

² *Ibidem*.

According to the *Online Etymology Dictionary*³ the etymology of the term “rot” is linked to the Old English “rotian”, a verb that indicated a natural putrefaction or decomposition of animal or vegetable substances. That organic etymological meaning is particularly evocative because it emphasizes the live and plastic nature of the brain, conceived as an organ that is capable of enhancing or declining its cognitive functions depending on the quality of the environment and the semiotic-medial diet.

1. The roots of Brain rot: from the analog to the digital world

The first recorded use of the “brain rot” dates back to 1857 (Yazgan, 2025) when the writer Henry David Thoreau utilized this expression to describe the psychological and social condition of English population of his time within his book *Walden; Or, Life in the Woods*.

In this work Thoreau spoke about the mental decadence in the society comparing it with another organic deterioration, that one of the “potato-rot”. This comparison with a vegetable is perfectly in tune with the previously mentioned etymology of the expression “rot”.

This is the exact mention of “brain rot” by Thoreau, within chapter 18 of *Walden. Or, Life in the Woods*, inserted in an interrogative sentence:

While England endeavors to cure the potato-rot, will not any endeavor to cure the brain-rot, which prevails so much more widely and fatally?

Indeed, even before of the coining of the term by Henry David Thoreau, the concept of brain rot was a question that had been analyzed by intellectuals and philosophers. Plato’s myth of the cave can be read as the first allegory of “brain rot” referred to old media as poetry and theatre. The chained slaves in front of the projection of shadows of the world are unable to recognize that the shadows are a false representation of the world, in a sort of mental degradation, even when they are brought out of the cave (De Blasis, 2020; De Martino et al., 2023).

Many media have been accused of producing “brain rot”, since Plato: even the book was criticized in the myth of Theuth and Thamus, narrated in dialog *Phaedrus*, and could be considered the first medium associated with brain rot because of its

³ <https://www.etymonline.com>

incapacity of ensure a deep learning, unlike the orality of in presence teacher (Gill, 2020).

In modern times the debate about the mental decay has been more and more linked to the increasing power of new media spread during the XX century. For instance, in 1984 George Orwell depicts the mental decay and the erosion of the critical thinking due to the media manipulation by the big brother. In the novel old and new media provoke a sort of brain rot of the population: books (translated into Newspeak language), newspaper and above all telescreens that simultaneously spy and transmit propaganda.

Until the late '90s the most common “brain rot” medium was the television, at the time the mainstream medium. The TV, queen of the house, was accused of addiction and of being a bad teacher for children (Popper & Condry, 1994) and a brain rot technology (Gentzkow & Shapiro, 2006). Among others, in 1997 in *Homo videns*, Giovanni Sartori criticized TV for counteracting the symbolic attitude of the brain, evident in the written language. Due to its endless transmission of low-quality moving images the television is defined an “anthropogenic medium” because, according to the philosopher, it is able to create a new form of “anthropos”, a TV viewer that is more a “videns” than “symbolic” being (Sartori, 2014).

The digital evolution has taken the brain rot to a new level due to the pervasive nature of digital instruments.

Nowadays the conception of “brain rot” is more linked to new digital media, especially the social networks used through smartphones that stimulate “endless scrolling, binge watching and multitasking” (Niwlikar, 2024). The novelty is the overload of low-quality information during the endless social networks scrolling on the smartphone. In comparison with the previous analog media, social networks present some peculiarities that make the brain rot more pervasive, as the massive low quality content availability, the algorithmic user profiling and the filter bubble that provoke polarization and echo chambers (Lanier, 2010).

In neuroscientific terms, digital media could be more dangerous because of the addictive dopamine effect on the brain that leads to an endless cycle of uncritical usage. The neurotransmitters, associated to the addiction of the social network use, are strictly linked with specific actions as receiving notifications on social media or scrolling through social media feeds. As Youssef (et al., 2025) explains: «as engagement on social platforms increases, so does the brain’s need for a dopamine

hit. This creates a loop of perpetual engagement as the brain becomes addicted to the fleeting gratification that comes from new information, likes, or comments». Anyway, in recent years researchers have more and more highlighted the link between depression and social networks especially in teenager using platforms as Instagram (Adeyanju et al., 2021; Khalaf, 2023).

2. AI against brain rot

Generative AI is a powerful tool that can play a dual role: generation of content but also analysis of content, both capabilities could become a key to counteract the brain rot. In both creation and analysis, the activation of the critical and deep personal thinking and the user engagement is essential.

Among the measure to address the phenomenon of brain rot one of the most powerful is the stimulation of the Cognitive resilience and “seek quality over quantity” and practical “active listening” (Niwlikar, 2024).

Indeed, one of the problems is that the semiotic material is consumed in compulsive and excessive way and without critical thinking. What is usually missing during the brain rot scrolling is the deep focus on the scrolled digital media. This missing focus can be defined as an “active listening” attitude: a responsive understanding of the text and image and video consumed with a foggy focus. The “active listening” is a semiotic issue studied by linguistics as Bachtin and Barthes (cfr. Ponzio et al., 2006) that emphasize the importance of a deep listening of all type of the media: texts, images, videos and all variety of syncretic languages. The active listening requires responsivity and a sustained attention to the medium and its meaning.

In this sense just from the most recent technology a tool could be used to counteract the brain rot. Indeed, the artificial intelligence is a tool that, if utilized with appropriate methodologies, also in didactic contexts, could help the recovering of the critical thinking and enhance the deep learning (Larson et al., 2024; Darwin et al., 2024).

Brain rot is caused by a chaotic, rapid, and not-focused overconsumption. But AI, with its capability of deep analysis of the digital text, images video and whatever digital media, could become a means to awaken and stimulate the critical thinking and promote a more focused consumption of the digital media.

The AI could support a student as personal assistant, in order to facilitate a better and more focused analysis of the text, helping a deep understanding of the semiotic deep of the signs of the digital textuality.

We've asked ChatGPT whether generative AI can serve as a tool against the brain rot using the following prompt: «Can Generative AI be used as a resource against the “brain rot”?». The answer⁴ of the ChatGPT identifies five possible ways for AI to counteract the brain rot:

1. “Mental Stimulation Through Conversation”. AI can be considered “Like a Socratic method on demand”).
2. “Creative Prompting”: AI can be asked for writing prompts, story starters etc.
3. “Learning Assistant” Use AI to help you explore topics you're curious about.
4. “Writing Companion or Editor”. “AI can keep your mind engaged by offering feedback or new directions, keeping your writing brain sharp”.
5. “Memory and Organization Support”. AI can be used to summarize and to organize thoughts.

It is also interesting that ChatGPT app itself warns that the tool per se does not guarantee the reduction of brain rot. Indeed in its answer the app clarifies that “passive use” of AI for endless text or image creation without engagement is useless as much as the AI replacement of deep thinking: when AI “think for you rather than with you” and only the “Surface-Level Creativity” is promoted without a personal involvement AI gives only the “illusion of creativity” and it is not effective against brain rot.

Turning to the pedagogical field, a more specific educational-related prompt has been sent to ChatGPT to verify the AI metacognition of the abilities to fight the brain rot in educational environment. The sent prompt is: «How AI can fight the social network brain rot in educational environments?».

The AI answers are similar to the previous ones, but more focused on an educational perspective:

1. “Refocusing Attention with Dialogic Engagement”. This is one of the most important point. Breaking the loneliness of the mass passive digital media consumption the power of dialog is an anti-brain rot practice.

⁴ It is appropriate to consider the icastic nature of the answers of the ChatGPT, that are variable depending on contextual and feedback factors.

The Socratic dialogue based on “thought-provoking, tailored questions” with AI can counteract brain rot activating the brain predisposition to dialogue (Lewis, 2002). The Socratic dialogue is particularly important in many methodologies, from problem solving to collaborative learning and Team based learning (cfr. Basta et al., 2024).

2. “Slowing Down the Feed with Deep-Dive Scaffolding”, creating *structured depth* in learning tasks. AI “can help students break complex topics into steps, build up slowly, and reflect after each stage”.

3. “Building Media Literacy Through Critical Analysis”. This is particularly useful for designing activities in classroom. Media literacy and knowledge of the new alphabets (Rivoltella, 2020) are among the most important objective to counteract the negative side effects of digital revolution. “Students analyze viral content, misinformation, or algorithmic biases *with AI*”. The skill of critical analysis is crucial for the media literacy and it can be supported by AI.

4. “Channeling Meme Energy into Creative Synthesis”. According to the Anderson and Krathwohl taxonomy the highest learning objective is “create”. AI could support a more conscious digital creativity.

The last two points are more psychological and technical:

5. “Encouraging Mindful Digital Practices”. AI became “co-reflector on digital habits” and teacher “can integrate journaling/reflection tools where students talk with AI about their social media usage”.

6. “Creating Algorithmic Counterspaces”. AI can simulate “*alternative algorithms* built for learning” where AI can serve curated content streams based on cognitive goals (e.g. “today, something surprising in history”).

Within this answer AI also inserted a representation of some scenarios of AI-powered actions against the brain rot comparing frameworks without and with AI.

In Practice (Educational Use Cases):






Scenario	Without AI	With AI
 Attention lapses	Mindlessly scrolling Reels	Interactive dialogue to explore curiosity
 Surface learning	Consuming flashy infographics	Creating infographics + critical evaluation
 Dopamine loops	Algorithm-trained addiction	AI-trained scaffolding, reflection, creativity
 Info overload	Clickbait news cycles	Personalized, contextualized AI explanations
 Shallow writing	Copy-paste summaries	Guided synthesis, compare & contrast exercises

Figure 2. ChatGPT scenarios of AI use against the brain rot.

4. The Double Soul of AI: from “Studio Ghibli” to a didactic activity

The double nature of AI as both “brain rotting” technology and “tool to counteract brain rot” has become evident just in recent months, during the spring of 2025, in connection with the AI-generated Studio Ghibli trend that is going viral across all social networks.

The actual Ghibli trend consists of mass production and publishing of AI-generated images in the specific Japanese style of Studio Ghibli and has been made possible by Open AI’s powerful new image generator in ChatGPT 4.0, able to produce high quality images “with relatively unrestricted copyright filters” (Di Placido, 2025).

This is the first viral global mass use of the AI based on the transformation of pictures and photographs in Studio Ghibli style, a peculiar style inspired by the art of the animation director Hayao Miyazaki, founder of the Studio Ghibli (Deckker & Sumanasekara, 2025). This style is characterized by the kindness of the images, the soft colors and delicate, gentle line (Carrozza & Pollicino, 2025).

So social networks in mid 2025 are filling up with images created by AI in the specific Studio Ghibli style. This trend is being criticized for many reasons: the energy waste for the creation of Studio Ghibli images, the alleged copyright infringement and the mass trivialization of a such artistic style for everyday pictures.

Hayao Miyazaki himself has consistently criticized AI, calling it “an insult to life itself” (Murthi, 2016). Today many controversies have emerged around this trend that goes against the ethos of Studio Ghibli and appears a very controversial practice (Goonetillake, 2025).

To resume, the actual Studio Ghibli trend could be considered a practice of brain rot because it encourages the mass superficial and uncritical production of nearly standardized pictures, from personal portraits to unethical violent images, in all social platforms, produced in a compulsory way and overconsumed uncritically all over the world.



Figure 3. A Studio Ghibli ChatGPT generated image.

Nevertheless, considering the dual role of AI, the same phenomenon could provide an opportunity to explore AI's potential as a tool against brain rot. By overturning the mass point of view, the Ghibli trend could serve as the starting point to design AI-enhanced anti-brain rot educational activities.

We asked AI how we might use the popular but controversial Studio Ghibli trend to counteract the brain rot. We employed the following prompt: "Can you apply these ways of fighting brain rot in an educational activity related to the AI-generated Studio Ghibli trend?".

A qualitative analysis of the answer could help to deepen the capabilities and the concrete modality of AI to fight the brain rot in educational environment.

The ChatGPT response is a proposal of an educational activity based on many pedagogical principles, including experiential learning, collaborative learning, Socratic dialogue and learning by doing. The title of the activity proposed by the AI tool demonstrates a particular attention to the textual rhetoric: it is almost a wordplay based on the alliteration of the fricative consonant "f": "From Feed to Frame: Deconstructing the AI-Ghibli Trend". The use of the letter "F" for words that are similar in length but very different in their deep meaning, - "feed" is a passive action while "frame" refers to an active, almost authorial action – illustrates the aim of reversing the brain rot trend.

At the beginning of its answer the AI clearly states the *learning objectives*: "Use the viral AI-Ghibli trend to develop media literacy, critical analysis, creative synthesis, and reflective thinking — all while actively resisting shallow digital consumption habits". The learning objectives reflect, in some ways, Anderson and Krathwohl taxonomy of learning objectives, with a focus on media creation and media analysis (Amer, 2006).

The activity is divided in 5 phases:

«1. Hook – Explore the Trend (15 min)

Start with what they know — and love.

Show a curated reel of AI-generated "Studio Ghibli-style" images from TikTok or Reddit.

Ask:

"What emotions or ideas do these images evoke?"

"What makes something feel 'Ghibli' to you?"

"Why do you think this trend went viral?"

🧠 Brain rot turned into critical attention: we slow down the scroll and name what's happening.».

This situated starting point is a key factor that could ensure a high engagement with the current digital environment. An emotive approach is also an innovative and effective (Hökkä et al., 2020).

The second phase of the activity adopts a more semiotic and deconstructivist approach:

«2. Deconstruction – Media Literacy Lab (20 min)

Analyze what's beneath the surface.

Students work in small groups with a few AI-Ghibli images.

They answer prompts like:

“What visual elements are being borrowed?” (Color, composition, themes?)

“What’s *missing* compared to real Ghibli films?”

“What are the implications of AI mimicking a unique artistic voice?”

■ *Use AI (like me!) to help students generate comparative visual analysis tables or breakdowns.»*

The semiotic approach is linked to a dialogic and collaborative activity. Deep media analysis is a key to counteract the unconscious overconsumption of text, images and video on internet.

The third phase is more theoretical and almost brain-storming style:

«3. Deep Dive – Ethics + Authorship Discussion (20 min)

Reflect on Ai, creativity, and cultural memory.

Prompt a debate or reflective writing:

“Is Ai-generated Ghibli art a tribute, a theft, or something else?”

“What does originality mean in the age of generative media?”

“Who owns a style — and can an algorithm truly be ‘creative’?”

💬 AI can simulate arguments from different voices: Hayao Miyazaki, an AI developer, a copyright lawyer, a digital artist.»

The following phase is creative and reflects the highest learning objective in Anderson and Krathwohl’s learning objectives taxonomy:

«4. Creative Synthesis – Make Your Own with AI (30 min)

Use the trend intentionally and reflectively.

Students use an AI tool (e.g., image generator) to create an original “Ghibli-style” scene.

BUT: they must base it on a personal memory, local folklore, or a topic studied in class.

They include a short artist’s statement:

“Why this subject?”

“What choices did I make to guide the AI?”

“Where is my authorship in the final result?”

🖼️ *They create — but they also interrogate the creation».*

The conclusive part is a dialogic and metacognitive activity:

«5. Closing Reflection – The Feed and the Self (10 min)

Pull back and meta-reflect.

Prompt:

“How is this different from just scrolling through the trend?”

“What does mindful digital creation look like?”

“How can we use viral content as a doorway into deeper thinking?”

Use AI to assist in journaling or even generate a reflective poem or letter to their “scrolling self.”»

This simple example, despite its limitation, offers interesting ideas about how AI methodologies could be developed to enhance the anti-brain rot use of Ai. The key points are: 1) AI experiential learning practice. In general, the proposed activity could be seen as a form of Kolb’s (2015) experiential learning, AI enhanced; 2) semiotic analysis and deconstruction of the media. The semiotic approach could be a crucial key to fight the brain rot (cfr. Rivoltella, 2019); 3) the AI-Socratic dialogue to stimulate metareflection and metacognitive activities to explore ethic and artistic reel reflection; 4) Creativity: the creation as the highest Anderson and Krathwohl taxonomy learning objectives should be a conscious practice and not an automated AI powered action; 5) reflective and problematization activities as closure of the activity demonstrates a focus on enhancing critical thinking.

This approach demonstrated a mix of methodologies and approaches coming from different fields but used in an integrated way to counteract the brain rot and mending the spaces between text and images, and between online social media and critical thinking.



Figure 4. Anti-brain rot activity “From feed to frame” AI representation.

5. School and university experiences of AI as critical thinking tool against the brain rot

The introduction of Artificial Intelligence into educational contexts, from primary schools to universities, represents one of the most significant pedagogical challenges of our time, as it profoundly questions the relationship between technology, subjectivity and the formation of critical thinking.

Numerous studies conducted in recent years have explored how AI, when consciously integrated within methodological frameworks attentive to the reflective and dialogic dimensions of learning, can serve as a catalyst for processes of problematization, critical analysis, and autonomous knowledge construction.

For instance, the extensive study conducted by Holmes, Bialik, and Fadel (2019) highlighted how the use of intelligent tutors and conversational agents, such as autoTutor and DeepTutor, can significantly enhance students’ argumentative reasoning skills, promoting a dialogical posture that disrupts the linearity of transmissive learning and stimulates metacognitive engagement.

In such experiences, AI does not act as a mere information provider but as a “Socratic interlocutor”, capable of eliciting open-ended questions, fostering the negotiation of meaning and supporting the self-explication of cognitive strategies. Similarly, the ASSISTments project developed at Worcester Polytechnic Institute (Heffernan & Heffernan, 2014) demonstrated the effectiveness of AI systems in guiding students through the resolution of complex mathematical problems,

offering adaptive feedback oriented toward heuristic reasoning rather than prescriptive solutions, in line with problem-posing educational practices.

In the university context, significant experiences have been conducted through the use of generative AI for academic writing and argumentative construction. An experimental study involving Chinese university students, showed how the use of platforms such as Cambridge Assessment's Write&Improve enhances not only the linguistic quality of the texts produced but, more importantly, the students' critical capacity to reflect on revision processes, interrogate sources, and articulate personal viewpoints.

However, the pedagogical effectiveness of AI is fully realized only when it is embedded within educational practices that guide its reflective, conscious, and cognitively empowering use. In this regard, as Selwyn (2019) observes, the integration of AI into education urgently calls for the development of not only technical skills but also a robust "algorithmic literacy", understood as the ability to comprehend, interrogate and deconstruct the automated decision-making processes underlying intelligent systems.

Within this perspective, the European project AI4T – Artificial Intelligence for and by Teachers (2021–2024) is particularly noteworthy. This initiative involved several EU members states in training teachers to critically employ AI in the classroom, promoting co-creative educational activities in which AI becomes not a substitute for the teacher but a means of enhancing the educational relationship and fostering collective critical reflection.

Experiences such as the CRADLE Project (Centre for Research in Assessment and Digital Learning, Deakin University) further demonstrate how AI can be used to support authentic assessment practices, encouraging students to develop metareflective capacities regarding the quality of their thinking, the solidity of their arguments and the relevance of their productions to academic standards (Boud et al., 2020).

Across all these experiences, it clearly emerges that Artificial Intelligence, far from being a mere technological support, can become—when guided by conscious pedagogical leadership—a reflective "alter ego", capable of stimulating, sustaining, and orienting critical thinking. AI thus configures itself not as a substitute for the human mind, but as a "dialogic mirror", capable of returning to the learning subject the responsibility to question, problematize, and construct knowledge autonomously and meaningfully.

6. A glance to the future: Virtual assistant AI powered critical thinking tool

The evolution of artificial intelligence technologies seems to delineate a horizon in which the educational virtual assistant may emerge as a true catalyst for critical thinking, acting not merely as a provider of answers, but as a digital maieutic guide, capable of stimulating autonomous and metacognitive reflection.

Within the framework of a pedagogy oriented towards complexity, a properly designed AI assistant could function as a cognitive tutor (Scardamalia & Bereiter, 2006), capable of shaping learning environments where the constant encouragement of problem posing and problem solving promotes higher-order thinking processes.

Unlike the first generations of intelligent tutoring systems, which were predominantly based on adaptive and behaviorist logics (Woolf, 2010), the future of educational AI seems increasingly directed toward the construction of dialogic and heuristic interactions, capable of generating non-linear and deeply situated learning experiences (Laurillard, 2013).

Such assistants, supported by advanced computational learning models, could offer personalized learning scenarios, stimulating divergent exploration and the capacity for critical argumentation through conversational practices inspired by the Socratic dialogue (Bohm, 1996).

It is plausible to envision that the virtual critical thinking assistant will be capable of detecting and analyzing students' cognitive patterns — such as argumentative strategies, recurring biases, and levels of semantic depth — providing dynamic feedback aimed at strengthening the capacity for metacognitive self-regulation (Flavell, 1979).

These assistants could leverage deep neural networks not only to predict responses but also to design calibrated cognitive challenges, capable of maintaining students within an optimal “flow state” for meaningful learning (Csikszentmihalyi, 1990).

Moreover, it will be essential that such tools are integrated within a rigorous ethical and educational framework, avoiding the drift toward the substitution of autonomous thought with prepackaged solutions.

Critical thinking education in the twenty-first century requires not only the availability of sophisticated technologies but also a wise pedagogical orchestration that values doubt, uncertainty, and complexity as constitutive elements of knowledge. Furthermore, an AI robotic application could give an embodied integrated approach to anti-brain rot activities.

In this perspective, the AI assistant for critical thinking will truly represent an emancipatory technology only if designed as a dialogic, non-substitutive tool, capable of awakening, sustaining and refining learners' critical thinking, thus making them conscious authors of their own cognitive journey within an increasingly complex and challenging digital ecosystem.

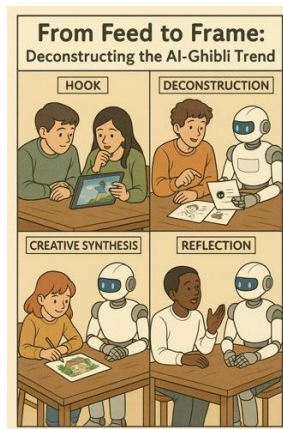


Figure 5. AI robotic version of educational activity “From Feed to Frame”.

Conclusions

The hypothesis of this article is that an appropriate use of AI, guided by innovative and inclusive pedagogical principles and methodologies, could enhance critical thinking and counteract brain rot trends.

Despite the limitations of this study - the use of a single AI generative app (ChatGPT) in the free version, the lack of an in-depth quantitative analysis and the absence of an empirical verification - the preliminary results appear interesting and promising. Starting from a first qualitative analysis of the AI's responses, we can affirm that AI could help to break down the loop of endless scrolling and overconsumption caused by the dopamine-driven habits, and restore a more focused critical thinking approach to the digital media. In and outside the classroom AI-powered activities based on AI experiential learning and Socratic dialogue could act as a brain rot breaker.

Empirical studies in the future could validate this hypothesis and provide new evidence-based approaches to a technology that could become a powerful digital “pharmakon” against the brain rot.

Author contributions

Although all the authors have collaborated on the article, D. De Martino has written the Introduction and § 1-4, A. Basta § 5-6 and the Conclusions.

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