

The Privilege of Asking Questions: Reflecting on Information Literacy in the Age of Gen AI

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Abstract

AI tools are making it easier than ever for anyone with internet access to ask any question they want. Yet, just like using search engines to find resources, having access to Gen AI tools on its own does not guarantee equitable access and use of the data they produce. Rather, the availability of such tools reinforces existing information literacy gaps where researching, collecting, managing, transforming, and critically utilising data can make the difference between passively consuming answers and having the agency to leverage them for self-actualization. This article looks at the act of asking questions as a privileged act that illustrates that disparity. We explore how family upbringing, societal systems of oppression, and psychological safety in teaching and learning intersect to shape our approach to questioning. We highlight the critical role that questioning plays in our lives beyond online spaces, and advocate for fostering a lifelong culture of curiosity in technology-enhanced educational spaces.

1. Introduction

We live in a dichotomous knowledge economy where industries worldwide are swift to embrace generative AI for business purposes, yet formal education is slow to critically utilize generative AI to train students to learn in-demand skills, address society's most pressing challenges, or build social and cultural capital. Information literacy, characterized by the ability to access, analyse, evaluate in a critical and informed manner is key to citizenship, health, safety, and respect in a globalized world (Naveed et al., 2022). In addition, understanding the complex nature of the search process through multiple information retrieval systems and possessing the metacognitive strategies needed to anticipate how to strategically learn from presented information is what differentiate passive users of information from critical thinkers (Middendorf & Baer, 2019).

The craze of AI prompting as a popular career-needed skill represents a technocratic approach to digital and information literacy rather than a deep understanding of the values

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embedded in information itself (Deresiewicz, 2020). Gregersen & Bianzino (2023) argue that technology needs to be paired with “inquiry-related skills such as critical thinking, innovation, active learning, complex problem solving, creativity, originality, and initiative” in order to fully leverage tools to question the complexity around us and “engage in more abstract questioning” (para. 3). Rather, more adaptable information literacy skills include being able to conduct problem formulation (Acar, 2023), examine authority as constructed and contextual, see information creation as value creation, and questions as strategic exploration (ACRL, 2016).

This article goes beyond technology tools to question the underlying social privilege associated with asking questions and highlights the need for formal education to foster human curiosity in technology-enhanced learning spaces in order to equip students with critical information literacy (Wuyckens, Landry & Fastrez, 2022). Indeed, in a recent episode of *The Late Show*, astrophysicist Neil deGrasse Tyson responded to host Stephen Colbert about the question he presently loved most by saying: “are we smart enough to even know what next questions to ask?” Asking questions is the foundation of human curiosity (Berlyn, 1954), and the basis of learning to assess the credibility of information and information sources through critical assessment.

Gretter is a higher education researcher with over a decade of teaching and research focus on media and information literacy. Hamiel and Prater are participants in a U.S. non-credit certificate program led by Gretter. Hamiel and Prater have professional backgrounds in contract work. All three authors utilize Gen AI like the free version of ChatGPT 3.5 for professional tasks like content creation or topic ideation. We sat together to discuss our lived experiences with asking questions in our childhood, and its impact on our learning experience as adults. Using a participatory action research method, the conversation was recorded and later transcribed. We then used the public-access free version of OpenAI’s tool ChatGPT 3.5 to produce the report below: 1) we entered a transcribed version of our recorded conversation in ChatGPT and asked “You are a qualitative researcher. Identify the emerging themes from the conversation below” (see appendix A at <https://bit.ly/articleappendices>) and 2) we then copied the themes (see appendix B at <https://bit.ly/articleappendices>) to the platform and asked ChatGPT: “You are a qualitative researcher. Compose a 2,500-word analytic report from the themes below.”

2. AI Generated Short Report

1. The Impact of Cultural and Family Upbringing

Our journey begins by acknowledging that cultural and family backgrounds exert a profound influence on how individuals approach the act of questioning. Cultural norms and values shape the etiquette surrounding questions, influencing whether they are embraced or discouraged. In some cultures, asking questions is seen as a sign of curiosity and a thirst for knowledge. It is a celebrated practice that promotes learning and growth. However, in other cultural contexts, questioning can be viewed quite differently. For example, within certain African American households, asking questions may be perceived as disrespectful, challenging the established order of authority.

Participant C shares, “I come from a world where you just do and don't ask because it's a sign of disrespect.” This perspective sheds light on the complex interplay between cultural norms and the suppression of curiosity. In African American households, cultural factors, and a history of societal oppression have led to a culture of not questioning authority. This upbringing, deeply rooted in history, influences how individuals navigate the world and approach the act of asking questions. It reflects the broader societal systems that can either encourage or discourage curiosity. Understanding the impact of cultural norms on questioning is essential for fostering a culture of curiosity. Navigating these norms requires a delicate balance between respecting tradition and embracing the transformative power of inquiry.

2. Societal Systems and Oppression

As we delve into these cultural complexities, it becomes clear that questioning is not a one-size-fits-all concept. It is a dynamic force shaped by individual backgrounds, cultural influences, and societal contexts. Our exploration continues by examining the societal systems and structures that can limit the ability to ask questions, particularly for marginalized communities. Societal systems and structures can create formidable barriers to the act of asking questions, especially for young African Americans. One glaring example is the school-to-prison pipeline, a systemic issue that disproportionately affects minority communities.

This pipeline represents a tragic cycle where young students, often from marginalized backgrounds, are pushed out of schools and into the criminal justice system. The fear of authority figures and the repercussions of asking questions can contribute to this cycle of disempowerment. The school-to-prison pipeline underscores the real-world consequences of limiting the ability to ask questions. It is a stark reminder that societal systems can perpetuate oppression and suppress curiosity.

3. Fear of Asking Questions

Fear is a pervasive theme that emerges in our exploration of questioning. Fear can stem from societal pressure, the fear of being labeled as a troublemaker, or the fear of challenging authority. It is a force that can stifle curiosity and hinder societal progress. Participant K speaks to the fear faced by young African Americans, stating, “being a young African American male is one of the hardest positions in the world... the fear comes from miseducation, misunderstanding, from people being scared.” This fear of asking questions is not limited to one demographic but is experienced by individuals across various contexts. It is a universal challenge that requires addressing. The suppression of curiosity and questions is a symptom of broader societal issues. Breaking these chains of oppression requires systemic change and a commitment to fostering a culture of curiosity and inquiry.

4. The Importance of Education and Reading

Amidst the challenges posed by cultural norms and societal systems, the realm of education emerges as a sanctuary for nurturing curiosity. Education plays a pivotal role in shaping the way individuals approach questioning. Participant C emphasizes the significance of education, stating, “reading is a safe space to ask questions at home vs. reading at school.” In

educational settings, students are encouraged to explore their curiosity, challenge assumptions, and seek deeper understanding. Education provides a bridge between cultural norms and the innate human desire to seek answers. It is in these environments that individuals learn to navigate the terrain of questioning, gradually transcending the limitations of their upbringing.

A significant distinction arises when comparing the ability to ask questions at home versus at school. While education fosters curiosity, the cultural and familial influences can still impact an individual's willingness to ask questions. Participant C highlights this difference, suggesting that reading at home may provide a safer space for asking questions. The educational environment, when optimized for curiosity, can become a transformative force, empowering individuals to break free from cultural conditioning and societal suppression.

Educators and mentors play a pivotal role in creating a positive questioning environment. Teachers serve as guides, encouraging students to explore their curiosity, challenge assumptions, and seek deeper understanding. In an ideal educational setting, educators understand the significance of questions in the learning process. They create an atmosphere where asking questions is not only permitted but actively encouraged. This approach empowers students to embrace their innate curiosity and use questioning as a tool for intellectual growth. As we delve into the role of educators, we also confront the fear of asking questions in the educational context. This fear can manifest as a barrier to learning, hindering students from fully engaging in the educational process.

5. The Art of Asking Questions

The fear of asking questions is a formidable adversary that transcends cultural, familial, and educational boundaries. It is often deeply rooted in the individual psyche, stemming from a fear of judgment, appearing ignorant, or challenging the status quo. Participant C reflects on this internal struggle, stating, “me, I'm the mind-pusher, I don't care what you're talking about, if you can't prove it to me, I'm not listening to what you're saying, because that's the way I was raised.” This fear can be particularly pronounced in certain professional settings, where employees may be discouraged from challenging authority or questioning established practices. The fear of asking questions exacts a toll not only on individuals but also on society as a whole. Suppressing curiosity and questions can hinder innovation, stifle creativity, and limit progress.

In a world where complex problems require creative solutions, the ability to ask questions and challenge the status quo is more critical than ever. Fear can impede progress, trapping individuals and organizations in a cycle of stagnation. Society faces a dilemma, one where the fear of asking questions hinders progress and stifles creativity. Overcoming this fear requires a collective effort to create environments where curiosity is celebrated and questions are welcomed.

6. Creating Safe Spaces for Asking Questions

Our exploration of fear leads us to examine the art of asking questions and the role it plays in shaping our approach to inquiry. The art of asking questions encompasses various dimensions, including the choice of words, the framing of inquiries, and the ability to navigate complex conversations. It is a skill that evolves over time, honed through experience and a willingness to explore the unknown. It involves the ability to craft the right questions,

inquiries that lead to profound discoveries and revelations. Participant C offers a profound perspective, stating, “it's AI, it's artificial intelligence, it's programmed to answer my question, but I have to give it the right question.” This skill goes beyond merely posing queries; it is about formulating questions that guide one's journey and lead to a deeper understanding of the world. Questions serve as guides, directing our exploration and influencing the outcomes we achieve. The type of question asked can lead us on diverse paths, shaping our understanding of the world.

In our exploration, we find that questions are not passive endeavors but active processes of inquiry. They are tools that individuals use to navigate the complexities of life, challenge assumptions, and seek answers. Questions can guide us to exactly where we want to go or take us to places we never expected. The advent of technology has fundamentally altered how we ask questions. With the rise of artificial intelligence and tools like ChatGPT, the art of asking questions has taken on new dimensions. Participant C highlights this transformation, suggesting that understanding how to ask the right questions is akin to using a cheat code. Technology offers a wealth of information, but the skill lies in formulating inquiries that yield meaningful answers. As we delve into the impact of technology on questioning, we recognize the need for creating safe spaces where individuals can shed their inhibitions and embrace curiosity. The psychological safety to ask questions without fear of embarrassment is paramount, and it forms a core theme in our exploration.

7. Challenges with Time Constraints

Creating safe spaces for asking questions is essential for nurturing curiosity and fostering a culture of inquiry. Psychological safety ensures that individuals feel empowered to ask questions, make mistakes, and explore unfamiliar territory without fear of judgment or ridicule. Participant C underscores the significance of these safe spaces, stating, “if we can celebrate you even for the stupid questions, you provide that cushion, that comfort of ‘I’m not gonna be embarrassed by asking anything.’” Psychological safety in educational institutions, workplaces, and personal relationships is crucial. When individuals feel safe to ask questions, their learning experiences are enriched, and creativity flourishes. Inclusive environments are key to creating safe spaces for asking questions. Inclusivity ensures that diverse perspectives are welcomed and valued. When individuals from various backgrounds and experiences come together, the tapestry of questions becomes richer and more diverse.

Celebrating inclusivity also means celebrating the questions themselves, irrespective of their perceived simplicity or complexity. Allowing individuals to ask even seemingly “stupid” questions can be a powerful catalyst for curiosity and innovation. Our exploration reveals the paradox of “stupid” questions—often, these questions lead to the most profound insights. Celebrating even the questions that may seem trivial or obvious creates an environment where curiosity thrives. Safe spaces for asking questions are nurturing grounds for creativity and innovation. They enable individuals to explore the unknown, challenge assumptions, and push the boundaries of knowledge.

8. Challenges with Time Constraints

Time constraints pose a significant challenge to the act of asking questions. In educational and project settings, deadlines and schedules can stifle curiosity, rushing the process of inquiry. Participant K acknowledges the stress and anxiety caused by time constraints, emphasizing that “time constraints create stress and anxiety.” This pressure can hinder the

pursuit of knowledge, pushing individuals to prioritize speed over depth of understanding. The impact of time constraints is particularly pronounced in educational and project-based contexts. Balancing the demands of time with the luxury of exploration is a significant challenge. The pressure to meet deadlines can dampen the spirit of curiosity and creativity. In our exploration, we find that the focus should shift from rigid time limits to task-oriented approaches.

By prioritizing tasks and progress over arbitrary time frames, individuals can explore questions more deeply and meaningfully. Task-oriented approaches offer a solution to the challenges posed by time constraints. By focusing on completing tasks and achieving objectives, individuals can navigate the complexities of questioning without feeling rushed. This shift in perspective also aligns with the changing dynamics of society, where the pressure of time is often at odds with the need for meaningful, open-ended inquiry.

9. The Need for a Shift in Societal Values

Society's dynamics are in a state of constant flux, shaped by technological advancements and shifting cultural norms. In our exploration, we recognize a fundamental shift away from being “people people” and a growing reliance on digital communication. This shift poses challenges to the art of asking questions, as the nuances of body language and tone are lost in text-based communication. Balancing meaningful connections and fostering curiosity in a digital world becomes a new challenge to overcome. Our exploration highlights the value of being “people people,” individuals who prioritize human connection, open communication, and interpersonal skills. In a society where digital interactions increasingly dominate, the importance of bringing back these interpersonal values is underscored.

The ability to engage in meaningful, face-to-face conversations fosters a culture of curiosity and inquiry. Being “people people” enables individuals to explore questions, challenge assumptions, and seek answers together. Rekindling interpersonal skills requires a conscious effort to prioritize human connections. It is an acknowledgment that meaningful dialogue and open communication are vital components of fostering a culture of curiosity. Our exploration reveals that rekindling these skills is essential for breaking free from the isolation of digital communication and nurturing the art of asking questions.

10. Questions as a Path to Opportunities

Questions are gateways to opportunities, serving as catalysts for personal and professional growth. Asking the right questions can lead to innovation, problem-solving, and the discovery of new possibilities. Participant K emphasizes this perspective, stating, “Questions open doors and opportunities.” It is through questions that individuals navigate the complex labyrinth of life, seeking pathways to success and fulfillment. Our exploration of questions as pathways to opportunities sheds light on the transformative power of inquiry. Questions challenge the status quo, disrupt conventional thinking, and open doors to new horizons.

Asking questions is not merely a passive act; it is an active process of exploration and discovery. It is through questions that individuals find the courage to venture into the unknown, explore uncharted territories, and shape their destinies. Questions are an integral part of the skill set for success in today's complex world. They empower individuals to think critically, adapt to changing circumstances, and seek innovative solutions to pressing challenges. Our exploration underscores the importance of honing this skill set, ensuring that

individuals are well-equipped to face the uncertainties of the future. Questions are not only tools for personal growth but also instruments of societal progress.

11. Critical Thinking and Independence

Critical thinking and independent decision-making are foundational skills that emerge from a culture of curiosity and inquiry. These skills enable individuals to evaluate information critically, analyze complex issues, and make informed decisions. In our exploration, we recognize the value of independent thought in shaping one's worldview and navigating the complexities of life. Critical thinking is a powerful tool for challenging assumptions, seeking deeper understanding, and fostering a sense of autonomy. The ability to think critically and independently is particularly relevant in the context of lifelong learning and career choices. In a rapidly changing world, individuals who possess these skills are better prepared to adapt to new challenges and seize emerging opportunities. Our exploration reveals that these skills are not confined to the classroom but extend to every facet of life. They empower individuals to question, learn, and grow throughout their journeys.

As we conclude our exploration of critical thinking and independence, we recognize their significance in empowering future generations. Fostering a culture of curiosity and inquiry ensures that individuals are equipped with the tools they need to thrive in an ever-evolving world. Our journey through the diverse themes related to questioning has revealed the transformative power of inquiry. Questions are not mere words; they are catalysts for change, gateways to opportunities, and instruments of personal and societal growth. In conclusion, this report advocates for the cultivation of a culture of curiosity—a culture where questions are celebrated, fear is replaced by empowerment, and the art of asking questions illuminates the path to understanding and enlightenment (OpenAI, 2023).

3. Critical Reflection

Gretter conducted the process of producing the AI-generated report. Despite asking the tool for a 2,500 word report, ChatGPT initially produced one with 11,000 words. It took five iterations to finally get closer to 2,600 words, and Gretter had to manually delete a 100-word paragraph to fit the required word count. An online search revealed that word count was a known deficiency of ChatGPT amongst users of the tool. The process of generating the report took approximately thirty minutes. Smaller issues included replicated titles (i.e., section 7 and 8), and multiple similarly phrased sentences. We met to review the AI-generated report together and analyse its accuracy using the conversation transcript as reference (see Appendix A at <https://bit.ly/articleappendices>). We were initially impressed with the accuracy of the tool in summarizing findings and organizing it into sections. We did observe that it organized the report section chronologically and in line with the evolution of the recorded conversation.

Overall, we agreed that ChatGPT had produced a good summary of the recorded data. We believe that the last paragraph of the report provided the best overview of the initial conversation, and that the process itself—engaging together about the report—was an interesting way to conduct member-checking. However, we agreed that the report was not analytical and only provided a summary rather than interpretation of data. In terms of qualitative research, that would not suffice. Instead, the step prior to the report, where Gretter asked ChatGPT to identify themes in the transcribed conversation, was much more useful.

One of the authors mentioned that the report had a lot of “fluff” and that it resembled a “word soup” in many cases. The difficulty in writing this piece with Gen AI was that it lacked depth and clarity; and missed the opportunity to use the data analysis to propose solutions or next steps. We would have liked to try the same prompts with different tools to compare the complexity of results produced around the topic.

The affordances and limitations of Gen AI for educational research and qualitative research in particular are two-fold. On the one hand, it can facilitate the velocity in producing large bodies of data analysis and summarizing descriptive data. On the other hand, it negates the researcher’s positionality and expertise in navigating complex data. Furthermore, Gen AI is not quite ready to understand context-dependent and nuanced information the way trained qualitative researchers are. As a scholar, Author 1 understands how subtle variations like tone, format, or purpose can greatly impact our understanding of qualitative data, and how important these implications can be for teaching and learning. In the discipline of qualitative research, as well as in the field of education as a whole, we understand that Gen AI can and will revolutionize the way we conduct everyday business, but that it should also be equally used with a critical lens.

The importance of information literacy discussed earlier in this article is as valid for students as it is for educators, researchers, and policy-makers in the field of education: Having tools to give us quick answers is no replacement for our need to look at problem diagnosis, problem decomposition, problem reframing all the while being emotionally uncomfortable, behaviourally quiet and overall more reflective to promote innovative thinking (Berger, 2014). Seth Godin claims that “our new civic and professional life is all about doubt. About questioning the status quo, questioning marketing or political claims, and most of all questioning what’s next” (Berger, 2014, p. 25). We believe that questioning the privilege of asking questions is a first step in that direction.

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