The Internet is a Loaded Gun: Ray Bradbury's Prophetic View of Digital Literacy

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Shortly before his death in 2012, Ray Bradbury made headlines by finally allowing his novel *Fahrenheit 451* to be published as an e-book. The news was a shock to many, as Bradbury had been an adversary of the internet for decades. His books, including *Fahrenheit 451,* contain themes of anti-censorship, the importance of literacy, and warnings of over-reliance on technology. Due to his apprehensions regarding technology, Bradbury refused for decades to allow his books to be made available in an electronic format because he believed the internet to be "a big distraction."[1] Despite this, in 2011, when his copyright deal was renewed with Simon and Schuster, his agent explained that renewing the hardcover rights would not be possible without including e-book rights, and Bradbury finally agreed to publish his novels digitally. Afterward, Bradbury told *Wired*: "I find it amusing that I'm on the internet now, because I've criticized it, but mainly I've criticized it on the basis of 'what are you going to do with it?' I've been afraid of people playing their life away with too many toys. All I want to do is warn people, that's all. We can use it as a good tool; we can use it for information. I hope it's an experiment that works."[2]

If recent years of digital culture have proven anything, it is that Bradbury was correct to be concerned about the distractions of the internet, and our over-dependence on it. However, his optimism in regard to what the internet could offer, was also well-founded. The internet, simply put, is a tool designed by humans for humans to communicate and to enhance public accessibility

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[1] Tim Carmody, "Digital Holdout Ray Bradbury Brings *Fahrenheit 451* To E-Readers," *Wired*, November 30, 2011, https://www.wired.com/2011/11/fahrenheit-451-digitized/.

[2] Carmody, "Digital Holdout".

of information. Learning how to use tools is just as important as creating them. With so much information readily available, most people assume a first search result is always the answer and go no further to verify its accuracy. Without proper instruction in information literacy, the general public cannot always distinguish between information, *mis*information, and *dis*information.

Additionally, an abundance of digital content leads to dependence on constant visual stimulus. When information is presented as straight text, with no flashing lights or exciting sound effects, people are more likely to dismiss it and find a more entertaining source, regardless of its quality. Pan et al's 2007 study, which focused on eye tracking and user search behavior, found that the average searcher was likely to use aesthetically pleasing results pre-selected by Google's PageRank even though their study found that these were not always the most relevant source.[3] The ability to evaluate information critically is not used by passive information seekers. People should be active and vigilant in their approach to navigating, accessing, and using digital information, and those skills must be learned. In the digital era, information literacy instruction is a necessary addition to all curricula, from kindergarten to adult education, in order to ensure Bradbury's dystopian vision does not become a reality.

Bradbury and Technology

Besides being a bestselling author of multiple novels, Ray Bradbury was a fierce advocate of free thought and adopted a strong anti-technology stance: he did not drive, avoided airplanes, disliked the internet, and kept his books from being available in digital form.[4] The themes of technology, censorship, and freedom of thought appear in many of his literary works. Bradbury also spent a significant amount of time advocating for libraries, especially on matters of censorship. After graduating high school during the Great Depression, he took a more auto-didactic approach to learning instead of continuing to a college education. He went to his local library three days a week for ten years, where he spent hours reading and learning everything he could. He credits his intellect and success in later years to his extensive reading. Prior to 2012, he refused to allow his books to be available digitally. In one particular instance, when Yahoo! offered to publish one of his books, he is quoted as saying: "To hell with you and to hell with the internet. It's distracting. It's meaningless; it's not real. It's in the air somewhere."[5] Bradbury's statements about technology and the internet often get misinterpreted as him despising the internet. Looking at the context of his statements, it is more accurate to conclude that he feared the effects of the internet for its potential impact on society. He worried about people over-indulging due to the ease and simplicity of digital culture, and about the short- and long-term cognitive effects of the internet on people.

In *Fahrenheit 451*, Bradbury tells the story of an oppressive society that attempts to eliminate all sources of complexity, contradiction, and confusion to ensure simple happiness for

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[3] Bing Pan, Helene Hembrooke, Thorsten Joachims, Lori Lorigo, Geri Gay, and Laura Granka, "In Google We Trust: Users' Decisions on Rank, Position, and Relevance," *Journal of Computer-Mediated Communication* 12, no. 3 (April 1, 2007): 801–23, https://doi.org/10.1111/j.1083-6101.2007.00351.x.

[4] Daphne Patai, "Ray Bradbury and the Assault on Free Thought," *Society* 50, no. 1 (February 1, 2013): 41, https://doi.org/10.1007/s12115-012-9617-x.

[5] J. Steinhauer, "A Literary Legend Fights for a Local Library," *The New York Times*, June 19, 2009.

all.[6] The 1953 novel follows Guy Montag, who starts as a book-burning fireman but becomes a book-reading rebel. Numerous scholars have noted themes such as mass exploitation, technology, and censorship as a replacement for free thought. According to McGiveron, "People grow unwilling to give up their pleasures, even momentarily, by thinking deeply about anything, and they also become unwilling to violate the norms of society by expressing any original thought."[7] The characters in the novel have grown accustomed to a life where they do not have to make their own choices and instead blindly follow their government's lead.

While our current reality is not as extreme as the dystopia Bradbury created, similarities do exist in our modern internet behaviors and digital culture. Hajare and Patil note that people "believe in online information" in preference to engrossing themselves in books, and that today "Google is [an] essential part of our life and knowledge."[8] When seeking out information, the average person will turn to Google and take the first result at face value without applying their own critical evaluation of the content or authority of the source. In *Fahrenheit 451,* Professor Faber explains to protagonist Montag why simplified, visual information is compelling: "It becomes and is the truth. Books can be beaten down with reason. But with all my knowledge and skepticism, I have never been able to argue with a one-hundred-piece symphony orchestra, full color, three dimensions."[9] In the twenty-first century, people have grown so accustomed to a quick answer that they rarely take the time to investigate that answer for themselves.

Digital Information-Seeking

As the growth and popularity of the internet have increased over the past few decades, the ways individuals find, evaluate, and use information have changed dramatically. The internet has been an excellent tool for expanding access to information. However, like all tools, its abilities depend on learning how to use it conscientiously. Unfortunately, it has become far more common in today's society to use a basic internet search and choose the result from an aesthetically pleasing video or website. According to the Pew Internet and American Life Project, 73% of Americans have used a search engine, and 59% report using a search engine every day; 83% of those specifically cite using Google.[10] Typically, no additional time is spent determining the credibility, relevance, or accuracy. Often, the result is millions of people unknowingly believing

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[6] Ray Bradbury, *Fahrenheit 451* (New York: Simon and Schuster, 1953).

[7] Rafeeq O. McGiveron, "What 'Carried the Trick'"? Mass Exploitation and the Decline of Thought in Ray Bradbury's *Fahrenheit 451*," *Extrapolation* 37, no. 3, October 1996, 246. https://doi.org/10.3828/extr.1996.37.3.245.

[8] Ashwini Tukaram Hajare and Prakash Anna Patil, "Ray Bradbury's *Fahrenheit 451*: Authentic Future Dystopia," *Literary Endeavour* 10, 4, July 2019, 60-63. https://literaryendeavour.org/files/9ntrxfi5c5p49yrjldzd/2019-07%2009.Ray%20Bradbury's%20Fahrenheit%20451%20Authentic%20Future%20Dystopia-Ashwini%20Tukaram%20Hajare%20and%20Dr.%20P.%20A.%20Patil.pdf.

[9] Bradbury, *Fahrenheit 451*, 96.

[10] "Pew Internet and American Life Project", Library of Congress, accessed February 27, 2022, https://www.loc.gov/item/lcwaN0003976/.

misinformation, which in the case of health and wellness information, can often lead to dangerous or self-destructive lifestyle choices. In Pan et al.'s study on the Google search process and user experience, the researchers note that it is difficult to measure how closely users' search results match their search intentions. They note a number of potential issues, including this: "some have argued that those algorithms, such as PageRank, simply set up a rich-get-richer loop, whereby a relatively few sites dominate the top ranks."[11]

Google's PageRank is an algorithm designed to measure popularity and importance to determine the order in which it displays results to users. Scholars have noted several potential biases with the algorithm, including the fact that Google prioritizes results from its affiliated companies and other major companies with whom they do business. Safiya Umoja Noble notes in particular that "Google directs web traffic to mainstream corporate news conglomerates, which increases their ability to shape the political discourse."[12]

Google—and other general search databases, such as Yahoo! and Bing—work by parsing not the entire web, but their own indexed databases of webpages. In Google's case, this is an index of billions of pages designed to return the desired result to the user; they prioritize the results based on relevance and value to the specific keywords. This process is called ranking, and Google has several search algorithms dedicated to determining which pages should appear first. The algorithms include factors such as the search terms used, the content and functionality of the websites, and the authority of the website. In many ways, these algorithms work efficiently and help users find their desired content. For all of the benefits, however, there are also disadvantages to relying on algorithms. First and foremost, Google programmers are essentially determining the authority and relevance of sources for the user. Outsourcing a task as important as evaluating information means that users are trusting Google to make the decisions for them. People turn to Google because it offers the simplest solution, and users have grown accustomed to receiving information instead of actively seeking it out. Furthermore, Noble has shown that cultural and racist biases are involved in Google's search algorithm: despite women constituting over half of internet users, their online presence is not as impactful as male voices; and this is especially true of women of color.[13]

As digital information has become more popular, a number of scholars have attempted to determine an individual's digital skills in terms of finding and evaluating information, although at this point no definitive measure exists to determine an individual's information literacy level. In her study of internet users, Eszter Hargittai examined participants as they completed seventeen different tasks related to information retrieval. In her findings, she notes that most individuals were eventually successful in finding the requested information, although some participants failed as many as half of the tasks. Those who failed were encouraged to continue searching for a minimum of five minutes unless the participant exhibited frustration and expressed a need to move on. Many participants, especially those between the ages of thirty and sixty, struggled to enter valid search terms. However, no definitive correlation between age and necessary search skills was found.[14]

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[11] Pan et al., "In Google We Trust," 802.

[12] Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: New York University Press, 2018), 49.

[13] Noble, *Algorithms of Oppression*, 49.

[14] Eszter Hargittai, "Second-Level Digital Divide: Differences in People's Online Skills," *First Monday* 7, no. 4 (2002): 14, https://doi.org/10.5210/fm.v7i4.942.

Another study in this research area by Choi et al. determined that disadvantages exist for the disabled, elderly, racial minorities, and people of low socioeconomic status. Specifically, female participants of color over sixty with less education and a low socioeconomic status were determined to have the lowest information literacy levels in the study.[15] These findings indicate that a significant disparity exists in information literacy skills in a variety of demographics. Users in these demographics are more challenged to find and evaluate digital information, and many simply choose not to use digital information at all. Many individuals from these demographics lack regular access to the internet, and those that do have access are more likely to find and believe misleading or false information.

Internet Dependence and Visual Stimulus

Although part of the reason for this one-stop-shop kind of information-seeking behavior is a lack of information literacy skills, Bradbury leads us to consider an additional factor: humans adjusting to and then being unable to give up simple pleasures. Over the past few decades, as the internet has evolved, people have grown more accustomed to readily available information. On the surface, easily accessible information is wonderful. However, a problem arises once people start building a dependence on having their answer within a single click. Not only are people set on receiving information instantaneously, but they also tend to specifically seek out visually engaging, or aesthetically pleasing, websites—regardless of the actual quality of the source. In Helena Seow Hong Lee's 2018 dissertation, she examines the effects of visual cues on information-seeking and notes that poor content, accessibility, and website design lead to irritation in online users, which in turn has a negative impact on users' perception of the credibility and integrity of the sources.[16] This often leads individuals to navigate away from a poorly designed page and automatically perceive the site to be of lower credibility. Many researchers have studied the effects of visual stimuli on the brain, especially in relation to digital media. Reyna et al. explain that neurons have been found to regulate and mediate the reception of visual stimuli in the brain. Emotion can precede cognition. Their study explains that multiple characteristics (including the graphics, font, grammar, and ease of navigation) have an effect on how credible information is found to be.[17] This explains why users of digital information are more likely to deem a website credible by basing their decision on how aesthetically appealing the content is to them.[18] Much like in *Fahrenheit 451,* people grow accustomed to a certain level of simplicity and ease of use when it becomes the standard. The aesthetic representation of information in the digital space can be used to enhance

[15] Jaewon Royce Choi, Joseph Straubhaar, Maria Skouras, Soyoung Park, Melissa Santillana, and Sharon Strover, "Techno-Capital: Theorizing Media and Information Literacy through Information Technology Capabilities," *New Media and Society* 23, no. 7 (2021): 1989-2011. https://doi.org/10.1177/1461444820925800.

[16] Helena Seow Hong Lee, "Scent and Cues in the Forage for Information: The Roles of Task and Topical Knowledge in the Evaluation of Information Patch," (PhD diss., Nanyang Technological University, 2018), 21. https://dr.ntu.edu.sg/handle/10356/75724.

[17] Jorge Reyna, Jose Hanham, and Peter Meier. "The Internet explosion, digital media principles and implications to communicate effectively in the digital space," *E-Learning and Digital Media* 15, no. 1 (January 2018): 42. https://doi.org/10.1177/2042753018754361.

[18] Reyna, "The Internet Explosion," 42.

people's understanding. However, since it is relatively simple in 2023 for someone to create a well-designed website, this often leads to the spread of misinformation and disinformation.

Misinformation and Disinformation

In the digital age, since false and misleading information has become widespread, scholars have begun to create a clear distinction between the two types of misleading information. Since these terms are new, they often are used interchangeably; it is worth taking the time to define and compare the current terminology. *Mis*information refers to information that is false or inaccurate, but that is not spread with the intent to deceive. For example, a user might share an article on social media without checking its veracity and objectivity. *Dis*information, on the other hand, is false information spread with the intention of being deceptive.[19] An example of disinformation could be the sharing of an article that uses distorted facts to support a political viewpoint. Disinformation in the twenty-first century can be created by corporations, political interest groups, media organizations, and individuals, for the purpose of swaying others toward a particular idea or opinion. It should also be noted that a crossover can exist when misinformation *turns into* disinformation. For example, a group or individual continues to share a piece of misinformation despite knowing that it is false.

Once again, Bradbury is way ahead of us, with a fine example of disinformation in his 1950 story "The Veldt." The Hadleys grow increasingly suspicious of the violent messaging in their "Happy-life home," which can recreate any scene in complete aural and physical detail, similar to today's virtual reality technology.[20] No one, before the main characters, questions the accuracy or credibility of any of Happy-life's simulations. Their finally questioning the images presented to them suggests that individual thought and critical analysis are important skillsets in countering disinformation.

Bhawna Narwal takes the classification of false information a step further in her research, creating a scale of seven types of fake news, including: false connection, satire, false context, misleading context, manipulated content, imposter content, and fabricated content. At the top of the scale, she defines false connection as typically poor or ill-researched journalism that is not necessarily created with the intention to deceive. At the very bottom of her scale, fabricated content is defined as being used for the purpose of parody or entertainment, to provoke, or gain political influence.[21] Even though the term "fake news" did not make its way into the American vernacular until 2016, it is not a new concept. Misleading or fake information has been a problem for centuries, long before the internet. Social media and digital culture make it significantly easier for misinformation and disinformation to spread quickly and deceive the public. Fake news works not by spreading blatantly false information, as it would be easy to discredit and ultimately would not spread very far; instead, people or groups creating fake news or disinformation work with half-

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[19] Meira Gebel, "Misinformation vs. disinformation: What to know about each form of false information, and how to spot them online," *Business Insider*, January 15, 2021, https://www.businessinsider.com/guides/tech/misinformation-vs-disinformation.

[20] Ray Bradbury, "The Veldt," in *The Stories of Ray Bradbury*, (New York: Knopf, 1980), 196-207.

[21] Bhawna Narwal, "Fake News in Digital Media," *International Conference on Advances in Computing, Communication Control and Networking (ICACCCN)* (2018), 978, https://doi.org/10.1109/ICACCCN.2018.8748586.

truths to make their audience think that it is genuine.[22] An effective fake news source reinforces an idea or an opinion that a target demographic already believes, and manipulates it into a more extreme stance.

Active versus Passive Information-Seeking

In addition to the multitude of misinformation and disinformation in the digital space, there is also the problem of how people interact with information. As Reyna et al. explain, users engage with material based on what appeals to them aesthetically; the visual stimulus from the bright colors, flashing lights, or interesting site design have a mesmerizing effect on the psyche. Beyond that, when people do take the time to search for information, rarely are they fully engaged with the material: instead of being active information seekers, they are passive ones. Passive information-seekers might read or skim an article and comprehend some information, but they are not engaging in higher-order critical skills, such as forming further questions based on what they are reading. Waggoner et al. explain the fundamental difference: active information-seekers will control the information they receive.[23] Marina Bazhydai further defines active information-seeking as curiosity driven by internal rewards rather than external ones.[24] If someone's curiosity about a subject is because of their own desire, they are more likely to read, take in, and critically examine the contents of an article.

Within Bradbury's literary works, we find a number of examples of themes, motifs, and symbols that require (or reward?) an active reader. Bradbury's short story "The Murderer", for example, about a psychiatrist who visits a prisoner who continuously destroys forms of technology, includes references to classical music playing in the background. A passive reader may not pay any attention to this, and probably would not consider the chaotic sound that "Stravinsky mating with Bach" and "Haydn unsuccessfully repulsing Rachmaninoff" would create. However, an active reader would likely take note of the music and infer the music is meant to represent a state of chaos in this society that heavily values technology.[25]

Making the Internet an Experiment that Works

The problems of digital information-seeking, including poor information literacy skills and internet dependence, have been noted. The question remains: what is to be done to improve the situation online? As Bradbury said, the internet has a lot of potential as a tool for information, but

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[22] Narwal, "Fake News," 979.

[23] Ashley S. Waggoner, Eliot R. Smith, and Elizabeth C. Collins, "Person perception by active versus passive perceivers," *Journal of Experimental Social Psychology* 45, no. 4 (2009): 1028, https://psycnet.apa.org/doi/10.1016/j.jesp.2009.04.026.

[24] Marina Bazhydai, "Social Learning Mechanisms of Knowledge Exchange: Active Communication, Information Seeking and Information Transmission in Infancy," PhD diss., Lancaster University, 2020: 13. https://doi.org/10.17635/lancaster/thesis/1181.

[25] Ray Bradbury, "The Murderer," in *The Golden Apples of the Sun and Other Stories* (New York: Avon, 1997), 49-57.

it is also a tool with potentially disastrous consequences. Tools require instructions for proper use; in the case of the internet, there are no explicit instructions for how to locate, evaluate, and use digital information. Some colleges and universities have started offering information literacy courses; some are required for graduation, while others are not. Additionally, there are a number of online resources for learning information literacy skills. The irony is that a person must be able to locate these resources in order to use them and evaluate the credibility of the source. Mossberger and Tolbert, in their 2021 article, discuss the digital divide and point out that even though 83% of the United States population has some type of broadband connection, access is unevenly distributed. For example, in certain areas of Memphis, only 26% of the population have broadband internet access. Other rural areas fare no better.[26] Their article makes the case that in addition to physical access to the internet, certain skills are necessary for finding and evaluating information online. This is not the first article to suggest specific information literacy skills. The American Library Association (ALA) in 2015 created the *Framework for Information Literacy for Higher Education* which outlines six necessary frames for information literacy instruction: authority is constructed and contextual; information creation as a process; information has value; research as inquiry; scholarship as conversation; and searching as strategic exploration.[27] These six frames have been used by librarians and education professionals for teaching students how to develop their information literacy skills. This framework is worthwhile for more than just students: it can be utilized by professionals, scholars, and general users. The first three frames in particular directly relate to the best practices for accessing, evaluating, and using digital information; and they each echo what we learn from Bradbury's fiction.

Frame 1: Authority is Constructed and Contextual

This frame posits that a source's credibility and expertise should be evaluated based on specific information needs and context; it also notes that different communities may recognize different types of authority and that the information needed will help determine the level of authority required.[28] In the digital age where misinformation and disinformation are consistent problems, this is a particularly important frame to teach. It is also important to note that people's backgrounds, education, and personal biases affect what information they deem as authoritative and credible. This frame has been the most heavily discussed in the research, especially in recent years. Andrea Baer further unpacks this frame by writing that constructed and contextual authority encourages people to adopt a complex view, which leaves them open to new perspectives and careful evaluation of all evidence.[29] The average person struggles with this concept in the digital age. *Fahrenheit 451*'s dystopian world where there is no individual thought at all is an excellent

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[26] Karen Mossberger and Caroline J. Tolbert. "Digital Citizenship and Digital Communities: How Technology Matters for Individuals and Communities," *International Journal of E-Planning Research* 10, no. 3 (2021): 20, https://doi.org/10.4018/IJEPR.20210701.oa2.

[27] "Framework for Information Literacy for Higher Education," American Library Association, accessed September 1, 2022, (February 9, 2015). https://www.ala.org/acrl/standards/ilframework.

[28] "Framework for Information Literacy."

[29] Andrea Baer, "It's All Relative? Post-Truth Rhetoric, Relativism, and Teaching on 'Authority as Constructed and Contextual'." *College & Research Libraries News* (February 1, 2018): 73. https://doi.org/10.5860/crln.79.2.72.

example of what happens when authority is not constructed and contextual; in the novel, citizens simply believe what they are told without question.

Frame 2: Information Creation as a Process

This frame involves a variety of techniques for researching, creating, revising, and disseminating information: the ALA framework encourages instructors to acknowledge in their teaching that different types and formats of information are valued differently.[30] For example, aesthetically pleasing information in a short video format may be designed for the purpose of entertainment; in that context, fact-checking material and documenting source material is not often the top priority. A research article, on the other hand, in a peer-reviewed journal pays more attention to providing factual, innovative, and well-documented research. Scholars supported by grants or other institutional funding may have competing interests that could change the context and overall authority of the article.

In addition to his many stories and novels, Bradbury wrote scripts for the television series *The Ray Bradbury Theater* based on his short stories, including "The Veldt", "A Sound of Thunder" and "The Murderer". Looking at the story and the corresponding televised version of "The Murderer" illustrates that the two media highlight different aspects. The television version, being for a different audience, focuses merely on telling the story as a form of entertainment. In the television version some of the dialogue from the prisoner about his views on technology is left out; this dialogue in the story adds a thought-provoking discussion about the overall effects of technology. Additionally, in adapting for the screen, Bradbury changed the end of the story, to have the murderer come back into the room and smash the psychologist's lapel phone, a device similar to a smartwatch.[31] The short story, on the other hand, closes with the interview ending, and what's left is a string of sounds from the many forms of technology. Television is constrained by factors such as the production budget and time frame, whereas in literature the author is free to write whatever they choose. ALA's second frame suggests that the creation of information (and, implicitly, the medium which carries it) is an equally important factor to the information itself.

Frame 3: Information Has Value

This frame posits that several dimensions of the value of information exist; it can be used for education, influence, negotiation, or understanding the world. This frame also points out that legal and socioeconomic interests influence information production and dissemination.[32] This brings the conversation back to what Sofiya Noble discussed in her book about the many biases and disparities that exist in digital information culture. Information can be technically accurate but swayed towards a particular belief. For example, research created or funded by a for-profit company will be biased solely because of the company's financial backing. Determining not only who authored the source, but also what affiliations or political interests the author has, are critical

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[30] "Framework for Information Literacy."

[31] Ray Bradbury, "The Murderer," *The Ray Bradbury Theater* season 4, episode 2 (1990).

[32] "Framework for Information Literacy."

for evaluating information. A related lesson we might take from Bradbury's *Fahrenheit 451* is that the counter to the controlling uniformity of the wall-to-wall media that fill the homes of most of the novel's characters is the diversity of the individual voices of the authors of the burned books.

Lifelong Learning

The importance of learning these skillsets can not be understated. Currently, information literacy is beginning to be taught at some colleges and universities, at the discretion of the institutions. However, not every campus requires an information literacy class, and what's more, few people besides college students are receiving this information. As digital information is a tool available to the general public, it is critically important that the general public know information literacy principles. Rebecca Eynon and Lars-Erik Malmberg determine in their study that individuals who are well-off financially, with a strong educational background, are more likely to be lifelong learners.[33] This is important because people who are lifelong learners are more likely to search for information about how to more efficiently find, evaluate, and use digital sources. Disparities exist in lifelong learners based on education, race, and socioeconomic status.

Ray Bradbury knew years ago that the internet was a double-edged sword and rightly acted with caution. He had no use for it in his personal life, but he warned others about its consequences and advocated for using it in the best possible manner. Presently, it is clear that Bradbury was concerned about internet dependence and the harmful effects of letting technology be a substitute for individual thought. Information literacy skills are necessary for all users of digital information. Training the general public how to find, evaluate, and use information will help to minimize the spread of misinformation and disinformation online, as people will have the knowledge necessary to make informed decisions about the credibility of information. The internet is an impressive and comprehensive tool that can both help and harm; it depends solely on how it is used and what precautions people take to use it effectively.

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[33] Rebecca Eynon and Lars-Erik Malmberg, "Lifelong Learning and the Internet: Who Benefits Most from Learning Online?" *British Journal of Educational Technology* 52, no. 2 (2021): 569, https://doi.org/10.1111/bjet.13041.

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Abstract

In addition to being a bestselling author, Ray Bradbury was also a voracious reader and lifelong advocate of libraries and literacy. His books, including his most famous work, *Fahrenheit 451*, include themes of anti-censorship, the importance of literacy, and warnings of over-reliance on technology. Bradbury's attitude towards technology was always more concern than hatred—concern for society's over-dependence on technology. Recent years of digital culture have proven that Bradbury was correct to be concerned about dependence on the internet for constant visual stimulus. However, his optimism, in regard to what the internet could offer, was also well-founded. The internet, simply put, is a tool designed by humans for humans to communicate and enhance the public accessibility of information. Without proper instruction in information literacy, the general public cannot always distinguish between information, *mis*information, and *dis*information. Bradbury's view of technology, as evidenced in several of his works—including, *Fahrenheit 451, The Illustrated Man,* and episodes of *The Ray Bradbury Theater*—warns of how overreliance on technology can lead to a belief in misinformation and a decline in information literacy skills.