

Using Open Access AI to Create Military Training from POW Experiences

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ChatGPT is the flagship product of the American artificial intelligence organization OpenAI. As a natural language processing program, ChatGPT leverages artificial general intelligence to generate complex informational responses based on user input.¹ When prompted to describe artificial general intelligence (AGI), ChatGPT stated,

In simple terms, Artificial General Intelligence (AGI) refers to highly autonomous systems or machines that possess the ability to understand, learn, and apply knowledge across a broad range of tasks at a level comparable to human intelligence. Unlike specialized or narrow AI, which is designed for specific tasks, AGI aims to exhibit general cognitive abilities similar to those of humans. It involves machines that can adapt, reason, problem-solve, and learn in diverse situations, much like how humans can apply their intelligence to various activities without being limited to a specific domain. AGI represents a level of artificial intelligence where

machines can handle complex tasks across different domains, demonstrating a versatile and human-like understanding of the world.²

Reminiscent to “HAL” 9000 (a.k.a. Heuristically Programmed Algorithmic Computer) in Stanley Kubrick’s 1968 movie *2001: A Space Odyssey*, AGI has made the leap from science fiction to science fact.³ The goal of OpenAI is to provide society cutting-edge, interactive computer programs that are safe and beneficial to use by anyone.⁴ One way this technology may be useful in a military environment is in developing timely educational curriculum. The application of this technology to support education has already been examined in a military context by way of graduate medical education.⁵

This study explores the use of AGI for curriculum development to prepare military personnel to survive a captivity experience. The data used in this study were from books published by former U.S. prisoners of war (POWs) held in Vietnam between 1964 and 1973. These POWs represented all branches of U.S. military service, most of whom were aviators. Their experiences



U.S. prisoners of war stand in the yard at Hanoi's Nga Tu So prison during an inspection visit in March 1973 by international observers and invited Western journalists. The prison, surrounded by a high brick wall topped with barbed wire, had been a government building before the Vietnam War. Each cell housed about a dozen prisoners of war, and beds consisted of wooden platforms with mats. (Photo by Horst Faas, Associated Press)

included prolonged torture, malnourishment, and periods of isolation.

Of these POWs, many wrote and published works about their captivity experiences and their life experiences afterward. The advancement of AGI has provided a novel avenue to compile their published experiences to identify teaching objectives that could be used by military members through a method of instruction on survival and resilience. Here, survival is defined as “the state or fact of continuing to live or exist especially in spite of difficult conditions,” and resilience is defined as “the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands.”⁶ For the purposes of this study, survival is considered an ongoing process during an event and resilience is a process that can occur both during and after an event. These

are two critical themes necessary to train military personnel in preparation for combat and life post-combat.

Method

This analysis included works exclusively written by former POWs about their captivity experiences in Vietnam. For this pilot study, four published books were selected.⁷ Approximately 80 percent of each book was digitally scanned and uploaded into the freely available ChatGPT version 3.5. Due to text analysis limitations per a single command prompt, segments of each book were uploaded separately. For each segment, ChatGPT was asked to identify ten common themes from the text. Once a set of common themes were developed for each book, all forty themes from the four books were inputted again into ChatGPT. The program was then prompted to develop a set of twelve common themes across them. Next, from these twelve themes,

an intermediary set of themes were developed—one set on survival and another set on resilience. From these latter two themes, teaching objectives were developed focused specifically on survival and resilience.

Results

Table 1 (at the end of the article) shows the themes generated from the writings (the “narrators” are the four authors). The themes gathered include military training, internal and external struggles, comradery with other POWs, cultural and language differences with their captors as barriers, the constant fear and survival they had, not knowing when and if they would be released, and reflections at the time of writing and while in captivity.

From these twelve themes, two sets of themes were prompted, one set for survival (table 2) and one for resilience (table 3), with ChatGPT adding a thirteenth theme in resilience. Both the survival and resilience themes indexed both internal (memory, emotions, identity, and instinct) and external (physical, informational, and unity/support) themes (tables 2 and 3).

These intermediary themes were generated for the final

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stage, which was to develop teaching objectives in these two areas (table 4).

In a side-by-side comparison of the survival and resilience objectives, the differences between them are in bold and italicized. For each of the thirteen themes, the objectives would require students to understand a difference between the two objectives and discuss in detail each of these objectives using these perspectives. The goal would be for students to develop a deeper level of understanding of these areas and how to reflect on and address them in their own learning process.

Discussion

This study was the first of its kind to use AGI technology to derive a set of common themes for captivity-related curriculum development. The major contributions of this study follow:

- First, it is the only research to date to leverage AGI to understand the experience of captivity among former American POWs from their perspective.
- Second, this work demonstrated the ability for AGI to generate domain-specific curriculum based on user inputs relevant to a military context. The use of this novel technology could be leveraged for content generation and instructional design to support instruction to military personnel as part of their military training. This has implications for military schoolhouses responsible for teaching survival, evasion, resistance, and escape curriculum.
- Third, from a methodological perspective, this study has outlined a process to analyze voluminous works

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quickly with face validity from a cohort to produce shared themes across individuals with a shared experience. Future research in this area should consider cataloging all available works from cohort members for inclusion into data analysis. This additional effort will likely generate more comprehensive

and nuanced insights. This study showed both the relevance and promise of leveraging novel AGI technologies to support military-related curriculum development. Moreover, such use of AGI is a major technological advancement in the twenty-first century and the way ahead for civilization. ■

Notes

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4. "OpenAI Charter," OpenAI, accessed 7 March 2024, <https://openai.com/charter>.

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Military Medicine (website), 20 October 2023, <https://academic.oup.com/milmed/advance-article/doi/10.1093/milmed/usad412/7326531>.

6. *Britannica Dictionary Online*, s.v. "survival," accessed 13 March 2024, <https://www.britannica.com/dictionary/resilience>; "Resilience," American Psychological Association, accessed 7 March 2024, <https://www.apa.org/topics/resilience>.

7. Everett Alvarez Jr. and A. S. Pitch, *Chained Eagle: The Heroic Story of the First American Shot Down Over North Vietnam* (Lincoln, NE: Potomac Books, 2005); Charles J. Plumb, *I'm No Hero, a POW Story As Told to Glen DeWerff* (self-pub., 1995); John Borling, *Taps on the Walls: Poems from the Hanoi Hilton* (Chicago: Master Wings Publishing, 2013); Frank Anton and Tommy Denton, *Why Didn't You Get Me Out? A POW's Nightmare in Vietnam* (New York: St. Martin's Paperback, 2000).

Table 1. ChatGPT Facilitated Common Themes Analysis

Theme	Analysis
1. War and Captivity	Central theme involving narrator's experiences as a POW detailing physical and emotional challenges
2. Interrogation and Resistance	Narration highlights interrogations, the resistance to providing information, and consequences of such resistance
3. Physical and Emotional Struggles	Vivid descriptions of the narrator's physical pain, discomfort, and emotional struggles
4. Cultural Divide	Theme of cultural differences and misunderstandings between the American narrator and Vietnamese captors
5. Comradeship and Support	Portrays camaraderie among prisoners, emphasizing interactions, shared experiences, and mutual support
6. Survival Instinct	Exploration of the narrator's instinct for survival, both physically and mentally, amidst the challenges of being a prisoner of war
7. Flashbacks and Reflections	Reflection on past experiences, including training and previous conversations, providing context and insights
8. Communication Barriers	Language barriers contributing to the challenges faced by the narrator, adding complexity to the narrative
9. Loss and Destruction	Touches on the loss and destruction caused by war, including the destruction of the squadron and its impact
10. Uncertainty and Fear	Pervasive theme of uncertainty regarding the narrator's fate, war progress and conditions of captivity. Fear is a constant companion
11. Military Training and Simulation	Describes the intense and realistic conditions pilots undergo during training to prepare for actual missions
12. Combat Experience and Unforeseen Events	Reflection on a combat mission, emphasizing the unpredictability of warfare and the impact of unforeseen events

(Table by authors)

Table 2. ChatGPT Facilitated Common Themes on Survival Analysis

Theme	Analysis
1. Reflection on Personal History	<i>Survival of Memory:</i> The narrator's reflection on personal history is a survival of memory, preserving the experiences and lessons learned during the Vietnam War. The ability to reflect on past events contributes to the survival of the narrator's identity and understanding.
2. War and Captivity	<i>Physical Survival:</i> The central theme revolves around the physical survival of the narrator during captivity. The challenges faced, both physically and emotionally, highlight resilience required for survival in a hostile environment.
3. Interrogation and Resistance	<i>Survival of Information:</i> The narrator's resistance during interrogations is a form of survival, as withholding certain information becomes crucial for personal safety and the well-being of fellow prisoners.
4. Physical and Emotional Struggles	<i>Dual Survival:</i> The text vividly describes the dual nature of survival—physical endurance in the face of injuries, hunger, and harsh conditions, as well as the survival of emotional well-being amidst the mental toll of captivity.
5. Cultural Divide	<i>Survival of Identity:</i> The theme of cultural differences and misunderstandings showcases the narrator's struggle to survive not only physically but also to preserve his identity as an American amid the cultural divide with the Vietnamese captors.
6. Comradeship and Support	<i>Survival through Unity:</i> The camaraderie among prisoners is a testament to the survival through unity. The mutual support, sharing of experiences, and comfort provided by fellow inmates contribute to the collective survival mindset.
7. Survival Instinct	<i>Innate Survival Drive:</i> The exploration of the narrator's survival instinct emphasizes the primal drive to survive, both physically and mentally, as a prisoner of war.
8. Flashbacks and Reflections	<i>Survival of Meaning:</i> The flashbacks and reflections serve as a survival of meaning, providing context to the current situation. They contribute to the narrator's mental resilience by connecting past experiences to the present.
9. Communication Barriers	<i>Survival through Understanding:</i> Overcoming communication barriers becomes essential for survival. The difficulty in understanding and conveying information adds a layer of complexity, and the ability to navigate this contributes to the narrator's survival.
10. Loss and Destruction	<i>Survival through Endurance:</i> The theme of loss and destruction underscores the survival through endurance. The narrator faces the challenge of surviving not only the physical destruction caused by war but also the emotional toll of losing comrades.
11. Uncertainty and Fear	<i>Survival in Uncertainty:</i> The pervasive theme of uncertainty underscores the survival in an unpredictable environment. The constant fear becomes a companion and navigating through it becomes essential for survival.
12. Military Training and Simulation	<i>Preparation for Survival:</i> The narrative beginning with military training emphasizes the intense conditions pilots undergo to prepare for actual missions, highlighting the importance of training for survival in combat situations.
13. Combat Experience and Unforeseen Events	<i>Survival in Unpredictability:</i> The protagonist's reflection on a combat mission underscores the unpredictability of warfare. Survival becomes a result of adapting to unforeseen events and making split-second decisions.

(Table by authors)

Table 3. ChatGPT Facilitated Common Themes on Resilience Analysis

Theme	Analysis
1. Reflection on Personal History	<i>Resilient Memory:</i> The narrator's reflection on personal history demonstrates the resilience of memory. Despite the passage of time and the traumatic nature of war experiences, the narrator persists in recalling and making sense of the past.
2. War and Captivity	<i>Resilience in Adversity:</i> The central theme of physical survival reflects the resilience required to endure the harsh conditions of captivity. The narrator's ability to withstand physical and emotional challenges showcases an overarching resilience in the face of adversity.
3. Interrogation and Resistance	<i>Mental Resilience:</i> The narrator's resistance during interrogations speaks to a mental resilience that enables them to withstand pressure and protect vital information. This mental fortitude is a form of resilience against psychological stress.
4. Physical and Emotional Struggles	<i>Dual Resilience:</i> The dual nature of survival—both physical and emotional—underscores the resilience needed to navigate the challenges. Enduring physical hardships while maintaining emotional well-being reflects a remarkable level of resilience.
5. Cultural Divide	<i>Resilience of Identity:</i> The theme of cultural differences highlights the resilience needed to preserve the narrator's identity amidst a challenging cultural divide. The narrator's struggle signifies a resilient determination to retain their American identity.
6. Comradeship and Support	<i>Collective Resilience:</i> The camaraderie among prisoners signifies a collective resilience. The mutual support and shared experiences contribute to the resilience of the entire group, helping each member cope with the difficulties of captivity.
7. Survival Instinct	<i>Innate Resilience:</i> The exploration of the narrator's survival instinct emphasizes an innate resilience, a primal drive that enables them to adapt and persevere in the face of threats and challenges.
8. Flashbacks and Reflections	<i>Resilience through Reflection:</i> The flashbacks and reflections serve as a form of resilience through meaning-making. The narrator's ability to reflect on past experiences demonstrates resilience in the face of trauma, finding purpose and understanding.
9. Communication Barriers	<i>Adaptive Resilience:</i> Overcoming communication barriers requires adaptive resilience. The narrator's ability to navigate the complexity of language barriers and convey information demonstrates resilience in communication.
10. Loss and Destruction	<i>Enduring Resilience:</i> The theme of loss and destruction underscores the enduring resilience of the narrator. Coping with the emotional toll of losing comrades and facing physical destruction requires a profound level of resilience.
11. Uncertainty and Fear	<i>Navigating Resilience:</i> The pervasive theme of uncertainty underscores the resilience required to navigate unpredictable circumstances. The narrator's ability to face constant fear and uncertainty signifies a resilient approach to survival.
12. Military Training and Simulation	<i>Prepared Resilience:</i> The emphasis on military training highlights a prepared resilience. The intense conditions of training prepare individuals to be resilient in combat situations, emphasizing the importance of mental and physical readiness.
13. Combat Experience and Unforeseen Events	<i>Adaptable Resilience:</i> The protagonist's reflection on a combat mission emphasizes adaptable resilience. Survival in the unpredictability of warfare requires the ability to adapt quickly to unforeseen events, showcasing a resilient mindset.

(Table by authors)

Table 4. ChatGPT Facilitated Common Teaching Objectives on Survival and Resilience Analysis

Theme	Survival	Resilience
1. Reflection on Personal History	<i>Objective: Students will analyze the narrator's reflection on personal history to understand how the survival of memory contributes to the preservation of identity and lessons learned during the Vietnam War.</i>	<i>Objective: Students will analyze instances of the narrator's reflection on personal history to understand and discuss how resilience is portrayed through the persistent recall and sense-making of past traumatic experiences.</i>
2. War and Captivity	<i>Objective: Students will examine the challenges faced by the narrator during captivity, focusing on the physical and emotional aspects, to recognize the resilience required for survival in a hostile environment.</i>	<i>Objective: Students will examine the central theme of physical survival in war and captivity, identifying and discussing the resilience required to endure harsh conditions. They will explore how the narrator's ability to withstand challenges showcases an overarching resilience in the face of adversity.</i>
3. Interrogation and Resistance	<i>Objective: Students will explore the narrator's resistance during interrogations as a form of survival, emphasizing the importance of withholding information for personal safety and the well-being of fellow prisoners.</i>	<i>Objective: Students will analyze the narrator's resistance during interrogations, focusing on the mental resilience required to withstand psychological stress. Discussions will center on the strategies employed by the narrator and the implications of mental fortitude in resisting pressure.</i>
4. Physical and Emotional Struggles	<i>Objective: Students will analyze the dual nature of survival depicted in the text, emphasizing the narrator's physical endurance and emotional well-being amidst the harsh conditions of captivity.</i>	<i>Objective: Students will explore the dual nature of survival—both physical and emotional. Through the narrator's experiences, they will discuss and analyze how maintaining emotional well-being while enduring physical hardships reflects a remarkable level of resilience.</i>
5. Cultural Divide	<i>Objective: Students will examine the theme of cultural differences and misunderstandings to understand the narrator's struggle to preserve his identity as an American amid the cultural divide with the Vietnamese captors.</i>	<i>Objective: Students will examine the theme of cultural differences and discuss the resilience needed to preserve the narrator's identity amidst a challenging cultural divide. The focus will be on the narrator's struggle and determination to retain their American identity.</i>
6. Comradeship and Support	<i>Objective: Students will assess the importance of camaraderie among prisoners as a form of survival through unity, highlighting how mutual support, shared experiences, and comfort contribute to a collective survival mindset.</i>	<i>Objective: Students will analyze the camaraderie among prisoners and discuss how mutual support and shared experiences contribute to the collective resilience of the group. Discussions will explore the role of companionship in helping individuals cope with the difficulties of captivity.</i>
7. Survival Instinct	<i>Objective: Students will explore the narrator's survival instinct, emphasizing the primal drive to survive both physically and mentally as a prisoner of war.</i>	<i>Objective: Students will explore the narrator's survival instinct, discussing the concept of innate resilience as a primal drive that enables adaptation and perseverance in the face of threats and challenges. The focus will be on understanding the biological and psychological aspects of resilience.</i>

(Table by authors)

Table 4. ChatGPT Facilitated Common Teaching Objectives on Survival and Resilience Analysis (continued)

Theme	Survival	Resilience
8. Flashbacks and Reflections	<i>Objective: Students will analyze the role of flashbacks and reflections as a survival mechanism, understanding how they provide meaning and contribute to the narrator's mental resilience.</i>	<i>Objective: Students will analyze the role of flashbacks and reflections in the narrative, focusing on how they serve as a form of resilience through meaning-making. Discussions will explore how the narrator's ability to reflect on past experiences demonstrates resilience in the face of trauma.</i>
9. Communication Barriers	<i>Objective: Students will explore the challenges posed by communication barriers and recognize the importance of overcoming them for survival, emphasizing the complexity added by difficulty in understanding and conveying information.</i>	<i>Objective: Students will explore the theme of overcoming communication barriers and discuss the adaptive resilience required. The focus will be on the narrator's ability to navigate language complexities and convey information, emphasizing the importance of resilience in communication.</i>
10. Loss and Destruction	<i>Objective: Students will examine the theme of loss and destruction, emphasizing survival through endurance as the narrator faces both physical and emotional challenges caused by war and the loss of comrades.</i>	<i>Objective: Students will examine the theme of loss and destruction, discussing the enduring resilience of the narrator. The focus will be on coping with the emotional toll of losing comrades and facing physical destruction, highlighting the profound level of resilience required.</i>
11. Uncertainty and Fear	<i>Objective: Students will analyze the pervasive theme of uncertainty and fear, understanding how survival in an unpredictable environment requires navigating through constant fear and uncertainty.</i>	<i>Objective: Students will explore the pervasive theme of uncertainty, discussing the resilience required to navigate unpredictable circumstances. Analysis will focus on the narrator's ability to face constant fear and uncertainty, signifying a resilient approach to survival.</i>
12. Military Training and Simulation	<i>Objective: Students will explore the narrative beginning with military training to understand the importance of intense preparation for survival in combat situations.</i>	<i>Objective: Students will analyze the emphasis on military training and discuss how it highlights prepared resilience. The focus will be on understanding how intense training conditions prepare individuals to be resilient in combat situations, emphasizing the importance of mental and physical readiness.</i>
13. Combat Experience and Unforeseen Events	<i>Objective: Students will analyze the protagonist's reflection on a combat mission to understand how survival is a result of adapting to unforeseen events and making split-second decisions in the unpredictable context of warfare.</i>	<i>Objective: Students will explore the protagonist's reflection on a combat mission, emphasizing adaptable resilience. Discussions will focus on how survival in the unpredictability of warfare requires the ability to adapt quickly to unforeseen events, showcasing a resilient mindset.</i>

(Table by authors)