Ways to Enhance Training with AI
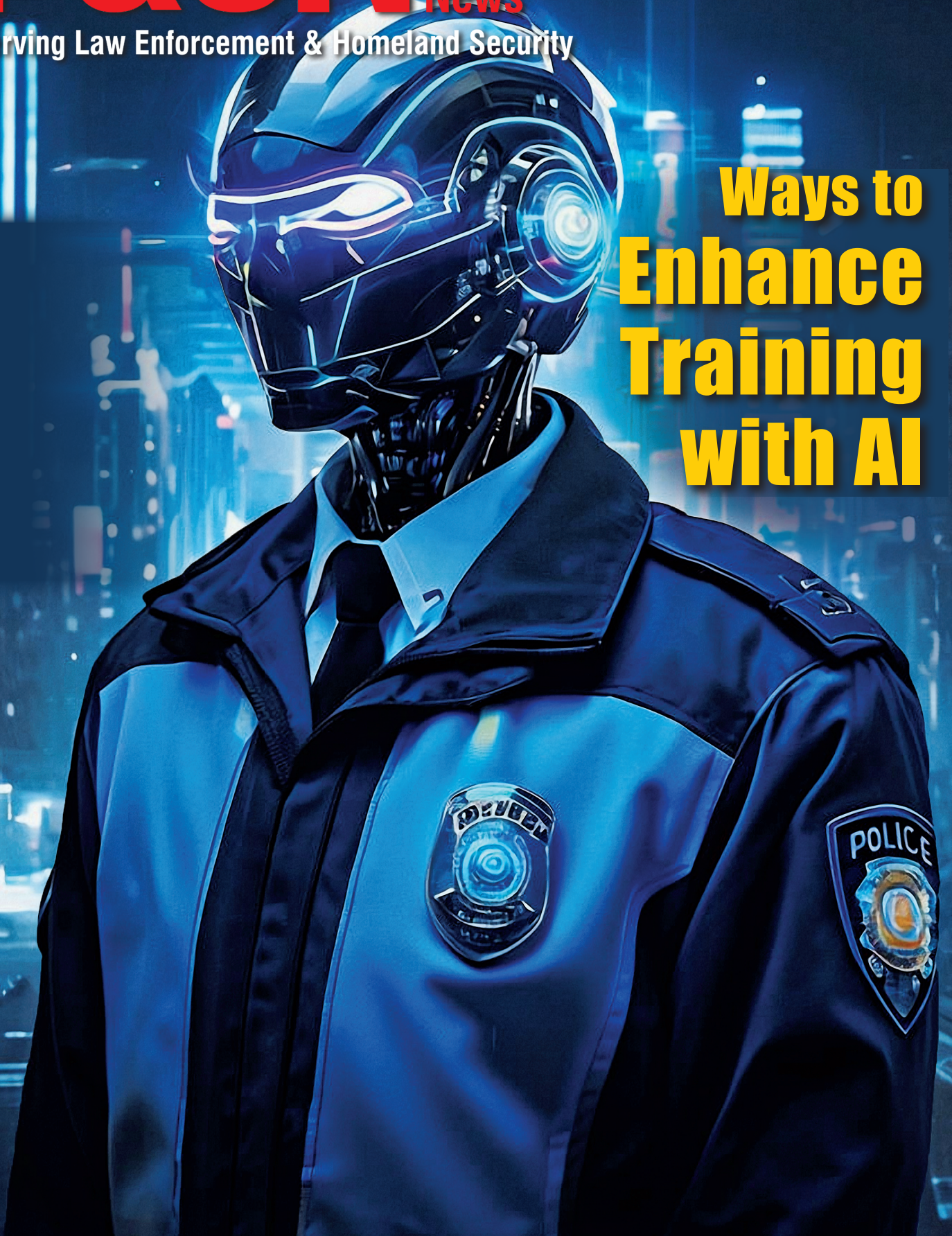
Artificial Intelligence
for Public Safety Trainers and Educators

Most people are familiar with Artificial Intelligence (AI) through tools like Alexa, Siri or ChatGPT, but many still feel apprehensive. It is vital that public safety trainers and educators understand AI and how to use it to enhance training, making it more creative, efficient, effective, and productive.

JOHN G. PETERS, JR.,
PSDS, CTC, Ph.D.

Image by Susan Cipriano from Pixabay

Like immigrants arriving in a new country or culture, we, too, are immigrants to the AI culture and need to assimilate its cultural norms (e.g., natural language processing), behaviors (e.g., false information/hallucinations), language (e.g., prompts) and understand its abilities and limitations so we can thrive and be successful in this "new" and exciting culture.

All technology (think E-mail, cell phones, drones, etc.) can be, will be and has been abused, but this is a discussion for a separate upcoming article. Here, the focus is on sharing timely, valid and reliable information so trainers and educators may enhance their ability to use AI tools in traditional or virtual classrooms.

Not surprisingly, an assortment of quickly developed generic AI programs have emerged targeting public safety professionals who may not be fully aware of their limitations. However, without objective statistically reliable data on how AI is being adopted and used in public safety, these generic programs can cause confusion and concern. Why? They may "force fit" information, provide inaccurate or incomplete information, and often use what AI pioneer, Marvin Minky, called "suitcase words" which are so broad they mean almost anything and lead to misunderstandings.

Artificial Intelligence Defined

The term AI is attributed to John McCarthy (one of the "founding fathers" of artificial intelligence) who defined it as "the science and engineering of making intelligent machines, especially intelligent computer programs." Today, AI is hard to define.

AI has many definitions, but none which include what is depicted on television or in the movies – that robots will mysteriously control humans and the Earth. Professor Thomas Malone, MIT Sloan School of Management, offers a simple and understandable AI definition: "Machines acting in ways that seem intelligent." Another AI definition is found in 15 U.S. Code §9401(3): "A machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments."

Key Components of AI

The three main components of AI are machine learning, Natural Language Processing (NLP) and computer vision. Algorithms which allow computers to learn from data (structured and unstructured) or from themselves form the basis of machine learning. NLP enables machines to understand and respond to human language (e.g., create, compare, etc.). Visual data can be interpreted as aids in decision-making with computer vision.

Crafting and refining prompts is an art. Use free versions of platforms like ChatGPT, Copilot and Gemini to practice and improve your prompt writing skills. The image shown above was created at playground.com, utilizing a 56 word prompt.

Generative AI

This is a form of AI which can create original content that may include text, images, videos, audio, or software. This content is often generated by the instructional designer, trainer or educator in response to his/her desires or requirements.

Prompt Engineering

Many of you reading this article have used AI tools such as OpenAI's ChatGPT, Microsoft's Copilot, Google's Gemini, or similar applications and have made requests with them. These requests are called "prompts." Called "prompt engineering," prompts are the "inputs" given to the AI platform to generate specific "outputs." Like placing an order for food, one tells the waitperson what is wanted (hamburger), unwanted (no pickles), and with other boundaries (cooked medium well). Prompts are similar. You tell the AI platform to perform specific tasks such as create, draw, outline, etc. about a particular topic. Crafting prompts, refining them and setting clear boundaries is indeed a skillful art. Since platforms like ChatGPT, Copilot, Gemini, and others offer free versions, take advantage of them to practice and refine your prompt writing skills.

Prompt Elements

Prompt creation contains four key elements: clarity, context, specificity, and structure. The prompt must be clear and concise (clarity) and provide enough background information (context). For example, begin your prompt by stating that you are an adult police academy instructor who instructs other adults ranging in age between 21 and 55, in order to give it context and clarity. Be specific about what you want (the number of multiple-choice questions and the topic) which will give a logical structure to help guide AI to create the desired output. If the output missed the request, most likely the prompt is missing one or more of these elements. The below matrix identifies prompt examples and their purpose.

As you practice prompt writing, there is always room for improvement. The output is limited only by input creativity. Keep in mind, one might request something from AI that it either cannot or will not produce (such as AI refusing to provide certain information or participate in suspected criminal activities).

Verify! Verify! Verify! + Critical Thinking

Humans and machines must work collectively to avoid output inaccuracies. AI, at times, may "hallucinate" and create unintelligible, inaccurate or fictional information. Examples include lawyers who filed legal briefs created by AI which cited nonexistent cases, or robocalls which misrepresented themselves as humans, or correctly told people to glue cheese onto pizza to keep it from sliding off the slices (accurate, but harmful). Always check on information and reference accuracy by reviewing and verifying the AI output. Periodically, you'll recognize that the AI's output contains factual errors. Remember this simple formula: HP + AI = HCTR, where HP is Human Prompt, AI is Artificial Intelligence, and HCTR is Human Critical Thinking Review. Always critically think about the AI output and verify it for accuracy, reliability and practicality.

Ethical Concerns

Many open AI platforms share input and output with the World Wide Web. Therefore, before uploading documents containing personal or sensitive information, always consider that it may become "public." Some paid platforms have privacy settings to reduce or eliminate this risk.

AI, Instructional Design and Training

AI can be used in each step of the instructional design process, whether using ADDIE (Analysis, Design, Development, Implementation, and Evaluation) or another model. ChatGPT, Copilot or Gemini can be prompted to create instructional goals: "Create ten goals for a lecture on how police officers should drive to avoid accidents." Remember, the instructional designer or trainer is the architect of the prompts for the design or updating of programs. Slide content can also be created. Video creation and editing can easily be done through Descript, OBS Studio, Canva, and similar AI tools. The following table lists a few AI tools which can be used in instructional design and teaching. This is not an exhaustive list.

PROMPT EXAMPLE	PURPOSE
As a trainer of adult police officers, create three multiple-choice questions about why police officers must drive carefully.	To instantly design a quiz to assess learner understanding of the presented information.
Using the same three multiple-choice questions, create an answer key.	Refining the prompt because an answer key was not requested to assist with quiz grading.
Create five goals for a one hour lecture about how much force a police officer is allowed to use in the United States under federal law.	These goals help set the content of the course and evaluate whether the course content will accomplish them.
Create five PowerPoint®-like slides identifying Americans with Disabilities Act accommodations police officers can make when interacting with people who are blind or visually impaired.	Develop slide content which can be modified and placed onto PowerPoint® or similar slides.

ARTIFICIAL INTELLIGENCE FOR PUBLIC SAFETY TRAINERS AND EDUCATORS

AI TOOL	PRIMARY PURPOSE
ChatGPT	Virtual assistant used to create content, quizzes, etc.
Copilot	Virtual assistant used to create content, illustrations, etc.
Descript	Video editor
OBS Studio	Video creation and editing
Tome	Develop presentations from scratch (text or documents)
WellSaid Labs	Voice-overs

AI systems, while powerful, are not infallible. At times, they may generate content which appears plausible, but is actually unintelligible, incorrect or entirely fabricated.
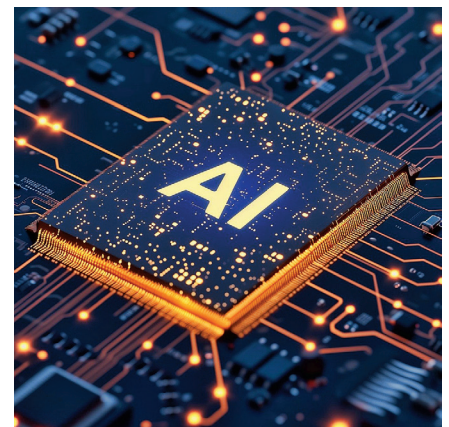
Legal Concerns

There are several legal concerns regarding the use of AI technology. (Many more will be discussed in a follow-up article to appear in the next issue of *Police and Security News*.) For now, always make sure to follow agency policy about using AI and/or using training content developed by AI. Another concern is copyright. The United States District Court for the District of Columbia held in *Thaler v. Perlmutter* (2023) that United States copyright law only protects works of "human creation," not creation by a nonhuman (AI). Similarly, AI is known to capture information from copyrighted works to create output which may create a copyright violation if used in training (think music, drawings, interviews). Slander and libel may also be concerns depending upon how the information created by AI is used in training or in public. Check with local counsel for other legal concerns and remedies and remember to follow your agency's AI policy and procedures.

Summary

While AI was not used to create this article, AI is here to stay and, when used properly, it can serve as a *training personnel multiplier*, improving creativity, efficiency, productivity, and professionalism. While it takes education, training and practice to become an AI "native," the return on investing time to learn AI is huge. Agencies need AI policies and procedures to direct and limit discretion about instructional design and training and other AI uses within the agency. Enough said. Go practice AI prompting. For more information about AI training and education, please visit **ipicd.com**. **P&SN**

John G. Peters, Jr., Ph.D. is a graduate of several AI educational and training programs, including the MIT Sloan School of Management and Computer Science and Artificial Intelligence Laboratory (CSAIL). An experienced instructional designer and trainer for the Institute for the Prevention of In-Custody Deaths, Inc. and the Americans for Effective Law Enforcement, Inc., he earned a postdoctoral Master of Education degree in Career and Technical Education. Dr. Peters testifies as an expert witness in federal, state and international courts.