

WHAT SHOULD STUDENTS LEARN ABOUT AI IN CS?

NLPS 4565: Computing Foundations for a Digital Age and the Indiana Academic Standards in Computer Science (CS) highlight Artificial Intelligence's (AI) relationship to computing, providing opportunities to learn the computer science concepts behind AI and help students to evaluate AI tools and their products. The following instructional frameworks provide a scope, a sequence, example resources, and formative assessments to help teach AI concepts in these grade levels!

NLPS 4565: Computing Foundations for a Digital Age

Potential competency sequence for teaching AI topics in CS

<u>4565.D5.4</u>	Examine how emerging technologies are impacting a variety of practices (e.g., use of facial recognition in policing, AI-generated news products).
<u>4565.D1.2</u>	Describe the difference between traditional algorithms and artificial intelligence/machine learning (AI/ML) algorithms and, at a high level, describe how AI/ML algorithms work.
<u>4565.D5.5</u>	Evaluate the use of emerging technologies (e.g., generative AI) for accuracy and to meet specific needs.
<u>4565.D5.3</u>	Examine tradeoffs in computing technologies through current events related to broad ideas including privacy, communication, and automation

K-8 Indiana Academic Standards Frameworks in Computer Science

The frameworks below contain resources that address AI content

<u>6-8.CD.4</u>	Describe what distinguishes humans from machines, focusing on ways we can communicate, as well as ways computers use models of intelligent behavior.
<u>3-5.CD.4</u>	Describe what distinguishes humans from machines, focusing on human intelligence versus machine intelligence.

