Message to Educators

As we stand at the precipice of a technological revolution, the power of artificial intelligence (AI) and its accompanying fields, like machine learning (ML), neural networks (NN), and natural language processing (NLP), have the potential to reshape society in ways previously deemed the stuff of science fiction. It is paramount that the educators of today acquaint themselves with these transformative tools to ensure students will not be merely passive consumers but active creators and informed citizens in an AI-driven world.

Teaching AI fosters a foundational understanding of these technologies and their implications. By introducing these concepts at all ages, we empower students with a critical lens through which to view an increasingly digital world. This knowledge will serve them well, irrespective of their chosen profession, as AI permeates all sectors, from healthcare to arts to commerce and beyond.

This issue of Root & STEM focuses on three primary aspects of AI: machine learning, neural networks, and natural language. This edition's lesson plans are the perfect gateway to the world of AI for young learners, with unplugged, hands-

on activities that transition into exploring digital tools to help learners understand how AI functions and how it processes programs. Learners also get the chance to design their own machine-learning models and neural networks.

Let's ensure our students are future-ready, enabling them to harness AI for the betterment of society, rather than being led by it.

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