Empowering Educators for the AI Era: Insights from Florida International University's (FIU) Code.org AI Foundations Workshop

How can K-12 educators ensure that they have a fighting chance of keeping pace with their students and technology in this AI-driven educational landscape so that they are not left in the dust? The answer isn't hoping AI will slow down—it's empowering teachers with the knowledge and tools they need to lead confidently in AI-integrated classrooms.

Artificial Intelligence (AI) is rapidly transforming education, creating an urgent need for AI literacy among educators and students alike. As schools across the nation grapple with integrating these emerging technologies, Florida International University's [UKG Academy of Computer Science and Education](#) (referred to as Academy henceforth) took decisive action by hosting a comprehensive professional development workshop in partnership with Code.org. This initiative represents more than just training—it's a strategic investment in preparing educators to guide students through an AI-driven future.

From August 4-6, 2025, the Academy hosted the [Code.org AI Foundations](#) workshop at the university's main Miami campus. The three-day intensive brought together 23 secondary educators from Miami-Dade County Public Schools, representing diverse academic disciplines including mathematics, language arts, science, and computer science. This interdisciplinary approach reflects the reality that AI's impact extends far beyond traditional computer science classrooms.

The workshop's curriculum strategically balanced theoretical foundations with practical applications. Participants explored fundamental AI and machine learning concepts while diving deep into critical topics such as data ethics and privacy—essential considerations in today's educational landscape. The program also covered emerging AI applications, including computer vision and natural language processing, providing educators with a comprehensive understanding of current AI capabilities.

A standout feature was the hands-on programming component, where educators learned Python programming through Code.org's integrated development environment. Participants created predictive AI models, gaining firsthand experience with the tools they would later teach. The workshop was further enhanced by Google's [Teachable Machine](#) platform, which reinforced predictive modeling concepts through an intuitive, user-friendly interface.

The workshop's success was anchored by three highly regarded computing educators from South Florida: Michael Sakowicz, Matthew Gross, and Robert Fox. These facilitators skillfully guided participants between dual perspectives—experiencing the content as learners while simultaneously considering pedagogical implications for their own classrooms. This dual-lens approach proved particularly valuable as educators developed strategies for teaching grades 6-12.

Beyond technical skills, the workshop emphasized ethical considerations surrounding AI implementation. Participants engaged in scenario-based discussions about AI's societal impact and brainstormed practical methods for integrating these concepts into their existing curricula. This holistic approach ensured educators could address both the technical and ethical dimensions of AI education.

The workshop's effectiveness is best measured through participant testimonials. Gicel Florian, an educator at John A. Ferguson Senior High School and FIU Adjunct Professor, noted: "The resources and examples provided by Code.org make it easier to scaffold complex ideas for younger learners. I now feel equipped to introduce AI in a way that is both technically sound and pedagogically effective."

Mark Godinez from South Dade Senior High School emphasized the confidence-building aspect: "The training provided me with the confidence to teach AI to students in grades 9-12. I learned different approaches to teaching AI." This sentiment was echoed by Lois Seaman, Senior Lab Mentor at Hammock Middle School's Verizon Innovative Lab, who expressed enthusiasm for continued learning: "I will continue to attend courses online and in-person as I am loving learning about AI."

All three facilitators observed exceptional engagement throughout the workshop, with participants actively contributing to discussions and embracing hands-on activities. This enthusiasm demonstrates educators' commitment to professional growth and their recognition of AI's importance in modern education.

The workshop's timing proved particularly strategic, coinciding with the Florida Department of Education's August 2025 updates to state CS standards, which now include AI topics. Recognizing the importance of these changes, the Academy collaborated with four distinguished Florida CS educators to analyze the implications for students, educators, and administrators. This collaborative effort resulted in a comprehensive summary of the updates.

Free Resources Alert: This essential guide to the new Florida State CS Standards is freely available to all stakeholders at: https://heyzine.com/flip-book/6d5047220e.html.
Teach AI, a Code.org initiative in partnership with other organizations, provides free resources and toolkits to educators worldwide for AI literacy.

Building on the workshop's success, the Academy is developing an "AI for Educators" micro-credential badge program for K-12 teachers. This initiative aims to create sustainable pathways for AI education at scale while seeking sponsorships to ensure cost-free access for South Florida educators, demonstrating the Academy's commitment to long-term educational transformation rather than one-time training events.

As Academy Director Dr. Giri Narasimhan envisions, these efforts collectively work toward closing the CS educator gap, expanding the regional tech talent pipeline, and building sustainable learning communities that prepare students for 21st-century careers. Echoing the same sentiments, Academy Co-Director and former high school CS educator Nimmi Arunachalam remarked: "AI literacy for our South Florida students starts with our teachers who can help grow our efforts to have a multi-fold impact on how AI tools and concepts can transform our educational landscape."

The Academy's leadership team further stressed that AI training must reach all K-12 teachers, not just CS teachers, just as it needs to reach all K-12 students, not just those interested in technology.

The Code.org AI Foundations workshop exemplifies how strategic professional development can empower educators to embrace technological change rather than simply react to it. By combining technical training with pedagogical guidance and ethical considerations, the Code.org AI Foundations curriculum is a replicable model for AI educator preparation.

As AI continues reshaping educational landscapes, initiatives like this become not just beneficial but essential for all K-12 teachers. The workshop's success in reaching teachers from varied backgrounds demonstrates that when provided with proper support and resources, all educators are ready to embrace the challenge of preparing students for an AI-driven future.

The Academy's ongoing commitment to excellence and innovation positions South Florida as a leader in AI education, creating ripple effects that will benefit students, educators, and the broader regional technology ecosystem for years to come.

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Note: This content was developed with editing assistance from AI tools including Claude AI (Anthropic), ChatGPT (OpenAI), and Copilot (Microsoft).