"Discover AI in Daily Life":

An AI Literacy Lesson for Middle School Students

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ABSTRACT

We describe "Discover AI in Daily Life", a lesson in Google's Applied Digital Skills curriculum. The lesson introduces elements of AI literacy and is freely available online at g.co/DiscoverAI. It is designed for middle school students while also supporting high school and adult learners.

1 INTRODUCTION AND MOTIVATION

In recent years, the expanding integration of Artificial Intelligence (AI) in society has been accompanied by increased calls for public understanding of its use and impact. For example, recent efforts have called for greater emphasis on K-12 AI education, so that students may become critical consumers of AI-powered technologies and prepare for civic participation, as well as potentially prepare for AI-related careers [1,2,4,5]. Efforts to support K-12 AI education are in early stages, with experts calling for contributions to standards, research, curriculum, and more [3,5]. In this context, we offer a short, lightweight lesson which can be used on its own or as part of a larger curriculum.

2 APPROACH

The lesson focuses on AI literacy [3], especially helping students recognize where and how AI touches their lives and the lives of others, and understand broad capabilities and challenges with AI. While many choices are possible, in our case we developed a free online resource that requires only an internet browser, is initially available in English, is designed to be highly accessible to learners and educators from a broad range of backgrounds, and can be meaningfully incorporated in a wide range of classes (particularly non-technical ones). By design, the lesson does not focus on programming or implementation details but rather broader concepts and implications. We iteratively gathered and implemented feedback from a middle school student advisor and 9 educators from across the US to ensure the lesson structure, content, pacing and tone were a good fit for the intended audience; e.g. we increased the number of hands-on activities.

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3 THE LESSON

The lesson is comprised of 15 activities that can be followed in sequence or done independently and in total take about 1 to 2 hours to complete. Most of the activities involve watching a video and doing a short assignment such as using an AI experiment, creating an artifact, or responding to questions. The lesson also includes an extended lesson plan for educators.

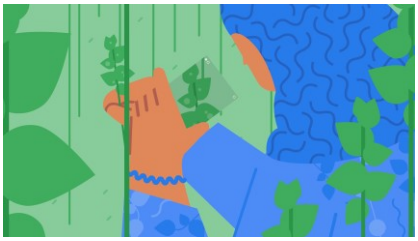

Figure 1: An excerpt from one of the videos, showing a farmer using an AI app to diagnose a problem with her plants

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