

FOR EXCELLENCE IN MIAMI-DADE PUBLIC SCHOOLS

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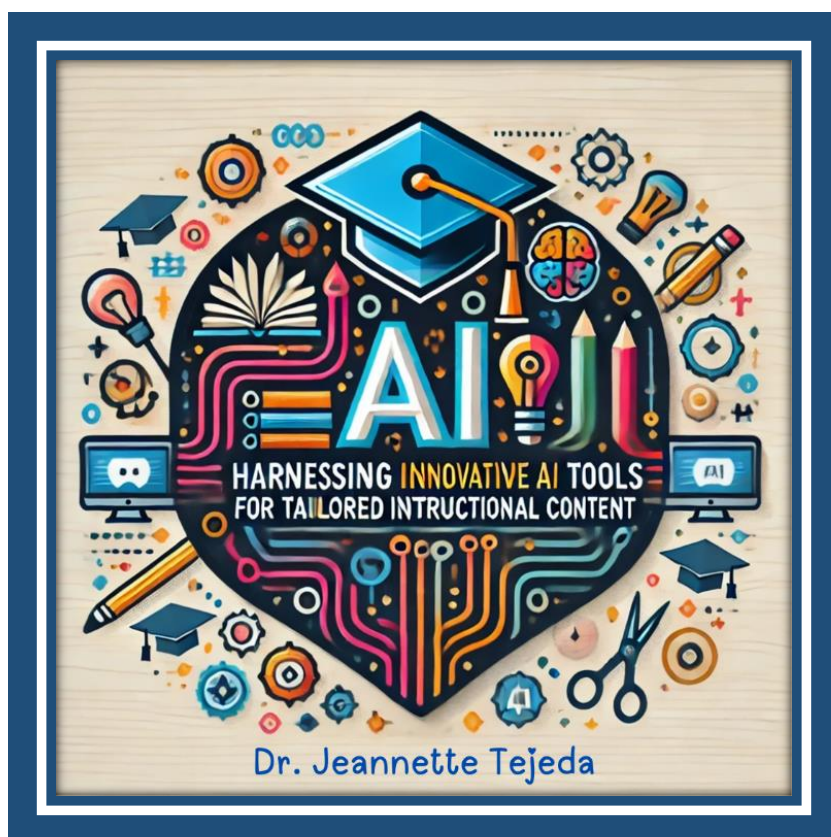
Ideas with

IMPACT

TECHNOLOGY IN THE CLASSROOM

**Teach Smarter,
Not Harder:
AI for DI!**

IDEA PACKET SPONSORED BY:



Teach Smarter, Not Harder: AI for DI!

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GOALS AND OBJECTIVES

GOALS:

- Equip educators with AI tools for creating differentiated instructional resources.
- Enhance personalized learning experiences for students.
- Promote equity in education through customized content.

OBJECTIVES:

- Teachers will learn to use AI to create leveled reading materials.
- Educators will understand how to generate AI-powered questions and graphic organizers.
- Participants will develop skills to integrate AI into their teaching practices.
- Teachers will explore ethical considerations in using AI for education.

FLORIDA STANDARDS

ENGLISH LANGUAGE ARTS (ELA) STANDARDS:

- **ELA.4.R.2.1:** Explain how relevant details support the central idea, implied or explicit.
 - *Implementation:* Teachers will use AI tools to help students identify and summarize key details in texts that support the central idea.
- **ELA.7.R.2.1:** Explain how individual text sections and/or features convey meaning.
 - *Implementation:* Through AI-powered text differentiation, educators will adapt texts to highlight how different sections contribute to the overall meaning, aiding in comprehension.
- **ELA.9.R.1.1:** Analyze how key elements enhance or add to the meaning of a text.
 - *Implementation:* AI tools will assist teachers in creating critical thinking prompts that encourage students to analyze literary elements and their contributions to the text's meaning.
- **ELA.12.R.3.1:** Evaluate an author's choice of setting, plot structure, and characterization.
 - *Implementation:* Teachers will generate questions and discussions using AI that prompt students to evaluate and critique the author's choices in their readings.

MATHEMATICS STANDARDS:

- **MAFS.K12.MP.1.1:** Make sense of problems and persevere in solving them.
 - *Implementation:* AI tools can provide personalized problem-solving activities and support materials tailored to students' proficiency levels, helping them understand and tackle mathematical problems effectively.
- **MAFS.K12.MP.4.1:** Model with mathematics.
 - *Implementation:* Teachers can use AI to create visual aids and graphic organizers that help students model mathematical concepts and real-world scenarios.

SCIENCE STANDARDS:

- **SC.4.N.1.1:** Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
 - *Implementation:* AI tools will assist in generating inquiry-based learning activities and resources that encourage students to explore scientific concepts and develop explanations based on their investigations.
- **SC.912.L.14.52:** Explain the basic functions of the human immune system, including specific and nonspecific immune response, vaccines, and antibiotics.
 - *Implementation:* Educators can use AI to create differentiated instructional materials that simplify complex scientific concepts, making them accessible to students at various learning levels.

SOCIAL STUDIES STANDARDS:

- **SS.6.W.1.3:** Interpret primary and secondary sources.
 - *Implementation:* AI tools will help teachers generate differentiated reading passages and comprehension questions that guide students in interpreting historical sources.
- **SS.912.A.7.7:** Analyze the impact of foreign policy on domestic affairs (e.g., Bay of Pigs, Cuban Missile Crisis, Vietnam War).
 - *Implementation:* Through AI-generated prompts and activities, students will engage in critical analysis of historical events and their impacts, fostering a deeper understanding of social studies content.

COURSE OUTLINE/OVERVIEW

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One-Hour Session: Training Teachers to Use AI for Differentiated Instruction

- 1. Introduction to AI in Education (10 minutes)**
 - Overview of AI tools (CoPilot, MagicSchool.ai)
 - Ethical considerations in AI usage
- 2. Hands-On Activity: Creating Leveled Reading Materials (20 minutes)**
 - Demonstration on selecting texts and summarizing using AI
 - Teachers practice creating leveled reading materials
- 3. AI-Powered Text Differentiation (15 minutes)**
 - Generating differentiated reading passages
 - Reflection on the process and student impact
- 4. Developing Critical Thinking Prompts and Graphic Organizers (15 minutes)**
 - Using AI to generate multiple-choice and open-ended questions
 - Creating visual aids tailored to lesson objectives

LESSON PLAN AND STEP-BY-STEP GUIDE

LESSON PLAN AND STEP-BY-STEP GUIDE

This lesson plan and step-by-step guide is designed for teachers who are interested in turnkeying the session at their own school with other educators. It provides a comprehensive approach to training teachers on using AI tools to differentiate instruction, ensuring that they can effectively implement the strategies and tools discussed in their own classrooms. This guide includes detailed instructions, scripts, and hands-on activities that facilitate an engaging and productive training session for other teachers.

OBJECTIVE: Train teachers to use AI tools for creating differentiated instructional materials.

MATERIALS:

- Computers with internet access
- CoPilot and MagicSchool.ai accounts

LESSON PLAN TO TRAIN OTHER TEACHERS

1. INTRODUCTION TO AI IN EDUCATION (10 min.)

- Present an overview of AI tools available for educators.
 - **Script:** "Today we will explore how AI can help us differentiate instruction. Tools like CoPilot and MagicSchool.ai can streamline the creation of tailored educational resources."
- Discuss ethical considerations and best practices in AI usage.
 - **Script:** "While using AI, it is crucial to consider ethical implications, such as data privacy and the accuracy of AI-generated content."

2. CREATING LEVELED READING MATERIALS (20 min.)

- Demonstrate how to select texts and use AI for summarization.
 - **Script:** "Let's start by selecting a text and using AI to summarize it for different reading levels. Watch as I demonstrate the process."
- Allow teachers to practice creating leveled reading materials for different student levels.
 - **Activity:** "Now it's your turn. Use CoPilot to summarize a text for at least two different reading levels."
- Discuss how this can support the standards: **ELA.4.R.2.1** and **ELA.7.R.2.1**.

3. AI-POWERED TEXT DIFFERENTIATION (15 min.)

- Show how AI can be used to differentiate reading passages.
 - **Script:** "Next, we'll see how AI can adapt a single reading passage to suit various proficiency levels."
- Provide hands-on practice and share examples of differentiated texts.
 - **Activity:** "Using MagicSchool.ai, modify a reading passage to create versions for different student levels."
- Reflect on how this aligns with standards: **ELA.9.R.1.1** and **ELA.12.R.3.1**.

4. DEVELOPING CRITICAL THINKING PROMPTS AND GRAPHIC ORGANIZERS (15 min.)

- Use AI tools to generate questions and graphic organizers.
 - **Script:** "AI can also help us generate questions and graphic organizers tailored to our lesson objectives."
- Create visual aids that match lesson objectives and reading levels.

- **Activity:** "Use AI to create a set of multiple-choice questions and a graphic organizer for the text you summarized earlier."
- Discuss how these practices align with various standards, including **MAFS.K12.MP.4.1** and **SC.4.N.1.1**.

RESOURCE LIST

BOOKS, MOBILE DEVICES, APPS, INTERNET SITES, AUDIO/VISUALS:

- CoPilot (Free access)
- MagicSchool.ai (Subscription required)
- Laptops/Computers with internet access

SUPPLIES AND SUPPLEMENTAL MATERIALS:

- Computers or laptops with internet access
- Subscription to AI tools (e.g., MagicSchool.ai)

OVERALL VALUE

This workshop provides a cutting-edge approach to differentiated instruction using AI to customize educational content for each student's learning level. By equipping teachers with tools to create resources such as leveled reading materials, critical thinking prompts, and graphic organizers, this project addresses individual student needs, enhancing cognitive development and engagement. This efficient, inclusive method allows educators to focus on adapting instruction to meet diverse learning styles, promoting a successful, equitable learning environment.

WORKSHOP LEARNING OUTCOMES

- **AI Tailoring:** Adjust educational content to each student's level.
- **Critical Thinking:** Generate AI-powered prompts to boost analysis and discussion.
- **Graphic Organizers:** Use AI for creating visual aids to simplify complex ideas.
- **Quick Resource Creation:** Efficiently produce materials for diverse learning needs.
- **Inclusivity:** Promote equity with AI strategies that cater to all learners.

MATERIALS REQUIRED

- Free Access to CoPilot: <https://copilot.microsoft.com/>
- Subscription to MagicSchool.ai: <https://www.magicschool.ai/>
 - Free subscription available
- Computers or Laptops with Internet Access

RESOURCES NEEDED

- Computers or laptops with internet access for individual teacher use.

SPECIAL NOTE

This packet is now tailored for a one-hour training session that teachers can use to turnkey this training to other educators. It meets all the guidelines provided by The Education Fund Idea Expo and is ready for submission.