**Workshop Content for Teachers on AI & AI Tools**

**1. Introduction to AI for Education**

* **What is AI?**  
  AI is the simulation of human intelligence in machines, enabling them to perform tasks such as problem-solving, learning, and decision-making.
  + *Relevance in Education*: AI helps in customizing learning paths, automating tasks, and providing real-time insights.
* **AI in Everyday Life:**  
  Examples include virtual assistants (Siri, Alexa), adaptive learning platforms (Duolingo, Khan Academy), and tools like Grammarly.

**2. Benefits of AI in Education**

* **Personalized Learning:**  
  Platforms like **Socratic** and **DreamBox Learning** adapt content to individual student needs.
* **Task Automation:**  
  Tools such as **Gradescope** and **Google Classroom** streamline grading and administrative workflows.
* **Enhanced Engagement:**  
  Use gamified platforms like **Quizizz** and **Nearpod** to make learning interactive.

**3. AI Tools for Teachers and Students**

**A. Content Creation**

* **Canva**[**https://www.canva.com/**](https://www.canva.com/) **Create engaging visuals, presentations, and lesson plans.**
* **Synthesia**[**https://www.synthesia.io/**](https://www.synthesia.io/) **Generate AI-powered educational videos with customizable avatars.**
* **Murf.ai**[**https://www.murf.ai/**](https://www.murf.ai/) **Create voiceovers for multimedia lessons with natural-sounding AI voices.**

**B. Assessment and Feedback**

* **Gradescope**[**https://www.gradescope.com/**](https://www.gradescope.com/) **Automate grading for assignments and exams.**
* **Classcraft**[**https://www.classcraft.com/**](https://www.classcraft.com/) **Track student progress using gamification strategies.**
* **Quizlet**[**https://quizlet.com/**](https://quizlet.com/) **Interactive flashcards and quizzes for easy learning.**

**C. Student Engagement**

* **Kahoot!**[**https://kahoot.com/**](https://kahoot.com/) **Create fun, game-based quizzes for students.**
* **Padlet**[**https://padlet.com/**](https://padlet.com/) **Collaborative boards for brainstorming and group activities.**
* **Explain Everything**[**https://explaineverything.com/**](https://explaineverything.com/) **A digital whiteboard tool for interactive lessons.**

**D. Administrative Assistance**

* **Trello**[**https://trello.com/**](https://trello.com/) **Organize tasks and plan projects efficiently.**
* **Otter.ai**[**https://otter.ai/**](https://otter.ai/) **Automatically transcribe lectures, meetings, and discussions.**
* **Zoom**[**https://zoom.us/**](https://zoom.us/) **Conduct virtual classrooms and meetings.**
* **Google Meet**[**https://meet.google.com/**](https://meet.google.com/) **Free platform for video conferencing and online classes.**

**E. Language and STEM Learning**

* **Duolingo**[**https://www.duolingo.com/**](https://www.duolingo.com/) **AI-driven app for learning new languages.**
* **WolframAlpha**[**https://www.wolframalpha.com/**](https://www.wolframalpha.com/) **Computational engine for solving STEM-related problems.**

**F. Classroom Collaboration**

* **Pear Deck**[**https://www.peardeck.com/**](https://www.peardeck.com/) **Interactive slides for engaging classroom presentations.**
* **Nearpod**[**https://nearpod.com/**](https://nearpod.com/) **Collaborative lessons with real-time feedback.**

**G. Accessibility Tools**

* **Kurzweil 3000**[**https://www.kurzweiledu.com/**](https://www.kurzweiledu.com/) **Learning tools designed for students with disabilities.**
* **Seesaw  
  https://web.seesaw.me/  
  Student-driven digital portfolios and activity tracking.**

**4. Ethical Use of AI**

* **Privacy Concerns:**
  + Ensure compliance with privacy standards (e.g., FERPA, GDPR).
  + Use tools with secure data encryption like **Seesaw**.
* **AI Inclusivity:**
  + Choose tools designed for diverse learning needs (e.g., **Kurzweil 3000** for students with learning disabilities).
* **Avoiding Bias:**
  + Evaluate AI systems regularly to ensure fairness in recommendations and decisions.

**5. Practical Applications**

* **Lesson Plans:**
  + Use **ChatGPT** for generating diverse lesson ideas tailored to different student groups.
  + Create interactive timelines with **Timeline JS** for history lessons.
* **Case Studies:**
  + Example: Schools using **DreamBox** for adaptive math learning and seeing improved test scores.
  + Teachers utilizing **Pear Deck** to make presentations interactive and boost engagement.