

STATE OF HAWAII
DEPARTMENT OF EDUCATION
KA 'OIHANA HO'ONA'AUAO
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HONOLULU, HAWAII 96804

OFFICE OF THE DEPUTY SUPERINTENDENT

April 10, 2025

TO: The Honorable William Arakaki
Chairperson, Student Achievement Committee

FROM: Heidi Armstrong 
Deputy Superintendent

SUBJECT: Department of Education update on artificial intelligence

1. EXECUTIVE SUMMARY

The Hawai'i State Department of Education (Department) is integrating artificial intelligence (AI) to enhance education. The Department defines AI in alignment with the National Artificial Intelligence Act of 2020 as "a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments." This aims to improve efficiency and equity by automating employee and teacher tasks, and providing personalized student learning and tutoring.

The Department supports AI implementation through cross-office collaboration, providing resources and guidance on an AI website (bit.ly/ocid-ai). This includes AI employee and student guidance, professional learning, pilot program access (e.g., MagicSchool), and updates via 'Enehana magazine (bit.ly/enehana). Ongoing support ensures schools stay current with technological advancements. This presentation will focus primarily on recently developed generative AI that produces new contents or outputs, as opposed to reactive AI that responds to specific inputs or situations without learning about prior experiences (e.g., Alexa), or predictive AI that analyzes historical data and experiences to predict future events or behaviors (e.g., Netflix).

The Department will share examples of AI use from two secondary schools, Moanalua Middle School and Baldwin High School.

2. DESCRIPTION

The presentation on the Department's initiatives in AI will provide:

- A. an overview of AI, its importance in education, and the Department's efforts to support its integration in schools, including cross-office collaboration, guidance for staff and students, and the development of resources;
- B. an opportunity for the Board of Education and the public to understand how the Department is supporting the responsible and effective implementation of AI; and
- C. secondary school examples of AI use at Moanalua Middle School and Baldwin High School.

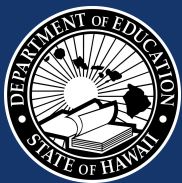
3. PRESENTATION

Dr. Teri Ushijima, Assistant Superintendent for the Office of Curriculum and Instructional Design, will present the attached slides.

Thank you for your continued support of public education.

HA:tu
Attachment: Presentation Slides

c: Office of Curriculum and Instructional Design



HAWAII STATE DEPARTMENT OF EDUCATION **Office of Curriculum and Instructional Design**

Department of Education update on artificial intelligence

Presented to the
Hawaii State Board of Education Student Achievement Committee
April 10, 2025

Heidi Armstrong, Deputy Superintendent of Academics
Dr. Teri Ushijima, Assistant Superintendent, Office of Curriculum and Instructional Design



What is Artificial Intelligence (AI)?



"The term 'artificial intelligence' means a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments."

NATIONAL ARTIFICIAL INTELLIGENCE ACT OF 2020



Why AI? Enhancing Teaching and Learning

AI is rapidly becoming a part of our everyday lives. It is here, and it is changing how we work, communicate, and learn. That is why it is crucial for both educators and students to understand how AI can enhance the learning process.

Here are some ways AI can benefit teaching and learning:

- **Teachers and Staff:** AI can automate time-consuming tasks like grading, lesson planning, and administrative work, freeing up valuable time for personalized instruction and student interaction.
- **Students:** AI tutors can provide personalized support tailored to each student's needs and learning style, offering customized feedback, practice exercises, and on-demand assistance.



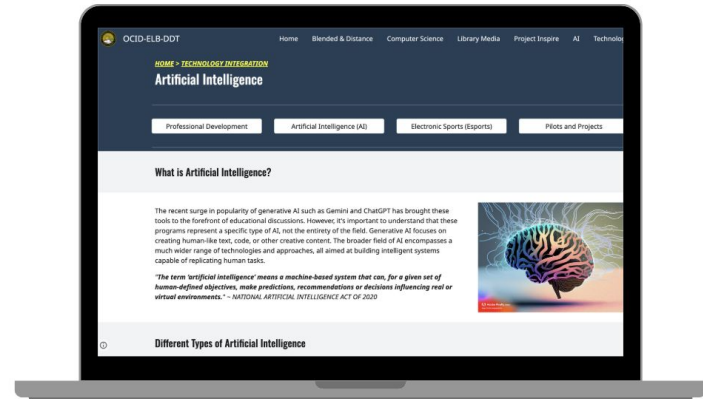


How has the Department been supporting AI?

To effectively address the multifaceted aspects of AI implementation, we have fostered cross-office collaboration and leveraged expertise from across the Department. This collaborative approach has been instrumental in developing resources and guidance tailored to the unique needs of our schools.

Information on the AI website includes:

- Guidance for Staff and Students
- Professional Learning Opportunities
- AI Resources





Cross-office Collaboration & Timeline

A cross-office collaboration was formed to guide and support the integration of AI in education, bringing together diverse expertise from across the Department including team members from the Office of Information Technology Services, the Office of Curriculum and Instructional Design, the Office of Talent Management and the Office of Strategy, Innovation and Performance.

Spring 2023	Fall 2023	Fall 2024	January 2025
Strategic Plan Desired Outcome 3.2.2. Establish a work group to recommend uses of Artificial Intelligence and assistive technology tools (e.g., ChatGPT)	Cross-Office Work Group The cross-office collaborative work group conducted its initial meetings.	Employee Guidance Released The memo with employee guidance was released.	Student Guidance Released The memo with student guidance was released.



Staff & Student Guidance

To support the ethical and responsible use of AI in education, the Department has developed comprehensive guidance for staff and students, including memos and guidance.

Key Topics Covered in the Guidance:

- Responsible AI Use
- Ethical Use of AI
- Privacy and AI

ARTIFICIAL INTELLIGENCE (AI) GUIDANCE for students



1

APPROVAL

To use AI for schoolwork, you'll need your teacher's approval. Ask them for guidance, they want to help you succeed!

2

PRIVATE/PERSONAL INFORMATION

Never share private information with AI. This includes information such as your full name, address, phone number or anything else that could be used to identify you.

3

BIAS AND MISINFORMATION

Remember, AI isn't always right! AI can make mistakes and may even reflect biases in the data it was trained on. Work with your teacher or librarian to find trustworthy sources and check if the information is accurate.

4

SAFETY

Use AI responsibly and ethically. AI is a powerful tool and should be used to create positive and truthful content. Avoid using AI to generate harmful or false information.

5

TRANSPARENCY / CITATION

Any use of AI to aid assignments, projects, or research must be declared. If you use AI-generated content in your work, credit the tool used and never represent AI-generated material as your original work.

Consistent with our mission to provide a quality education for all students, the Hawaii Department of Education embraces the opportunities of Artificial Intelligence (AI) technologies, and seeks to prepare students for a world where such tools will be commonplace. However, it may not always be clear how or when these technologies can be used to assist with classroom assignments and homework. The above guidelines will help students and educators determine when it is appropriate and inappropriate to use AI in HIDOE schools. Provided they have obtained parental consent via the Department's Technology Responsible Use Form (TRUF).

The recommendations outlined in this document will be updated based on ongoing research and development in the field of artificial intelligence.

Hawaii State Department of Education | January 2025

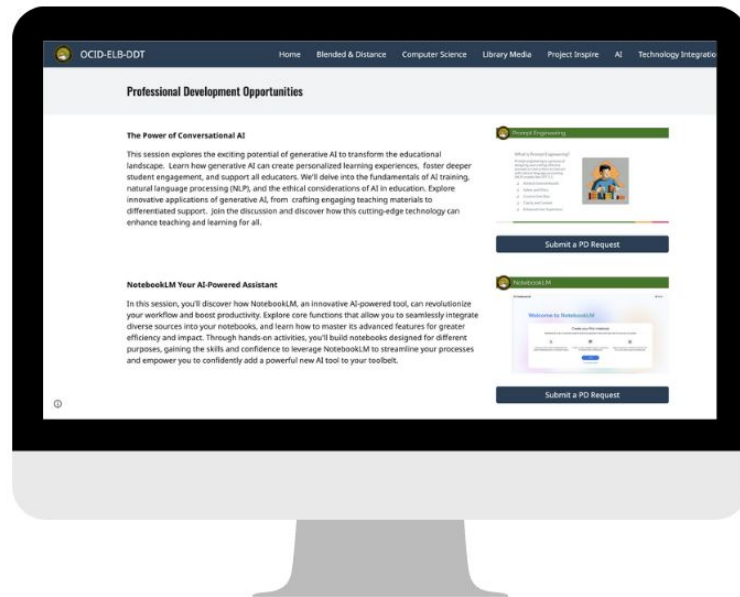




Professional Learning Opportunities & Resources

The Department offers comprehensive support for educators through the AI website, a central hub that includes resources.

Additionally, it provides both synchronous and asynchronous professional learning opportunities to build AI literacy and support effective implementation.





How is the Department currently supporting AI?



Professional Development

- In-Person Sessions
 - AI Literacy PD
- Asynchronous Sessions
 - Overview of AI in the Department
- AI Conference during the Summer 2024 and 2025



Pilot for Staff & Students

MagicSchool Computer Science Pilot for SY2425

- Over 1,000 staff members
- Over 7,000 K-12 students
- Student engagement across subject areas



Publication with Updates

'Enehana (Technology) is a digital magazine that shares updates about emerging technologies like AI to over 600 subscribers throughout the state.

bit.ly/enehana



How does the Department plan to continue supporting AI?



The Department is dedicated to supporting emerging technologies, including AI.

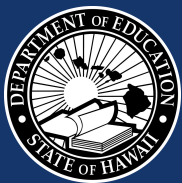
By equipping staff members and students with the tools to thoughtfully integrate these technologies, we are supporting our school communities to be in the forefront of technological advancements in education.



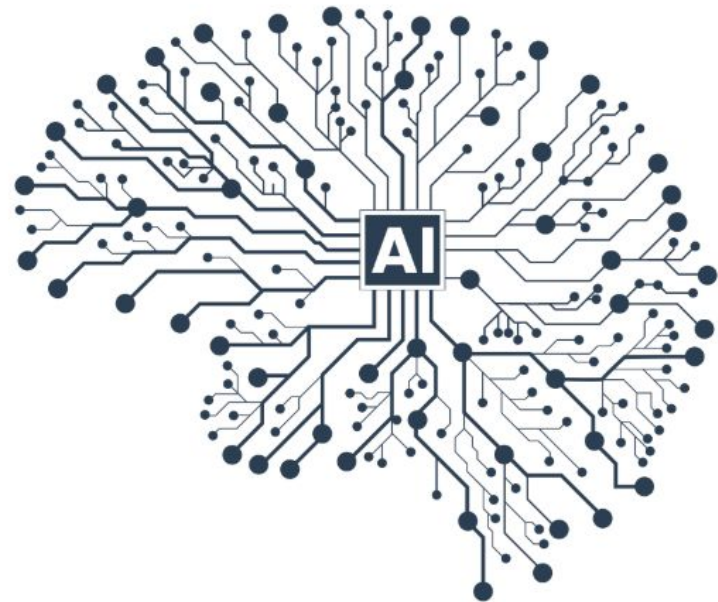
What support can the Board provide?

- Support the appropriate use of AI for students, teachers, and Department employees for learning and efficiency.
- Support work with the integration of technology tools like AI with personalized and authentic student learning.
- Continue to support funding requests to sustain computer science education and the integration of emerging technologies.





Mahalo



This presentation was created with the help of the AI tool, Google Gemini Advanced.



Google. (2024). *Gemini* (May 10 version) [Large language model].
<https://gemini.google.com/app>

Transforming School with AI: Insights from Moanalua Middle School

Komarey Moss, Principal

Kimberly Kim, Social Studies Teacher

Dylan Kwon, Student

Joshua Lum, Student

Wisdom Kalima, Student

Briana Noble, Student

AI Uses for Admin

NotebookLM

- ❖ Used for synthesizing and summarizing reference documents
- ❖ Build understanding
- ❖ Look for answers
- ❖ Take notes

Example

- ❖ Grant applications
- ❖ Competitive Awards
- ❖ Comprehensive Needs Assessment
- ❖ Academic Plan
- ❖ Ch. 19 - reference and discipline reports.

Expedites Admin Work

- ❖ Synthesizes data trends.
- ❖ Target method match
- ❖ Creates enabling activities

Teacher



Lesson Planning

- ❖ Daily Lesson Planning
- ❖ Sub Plans



Guidelines

- ❖ Enhancing and clarifying the rules of the assignment, classroom
- ❖ Parameters



Quick Thoughts

- ❖ Improved communication with peers, parents, and students

What is SchoolAI?

- A website specifically made for students and teachers to use AI in schools
- Teachers can choose a topic for students' research purposes
- Students are only able to ask questions that relate to the topic
- A code is given to the class for a session



READY TO JOIN?

Westward Expansion Research

Name

Space Code

Join

schoolai



Spaces

Launch a student activity

Popular



Sidekick

Give your students managed access to their very own AI assistant.



Find a Space

Discover 1000s of ready-to-launch spaces organized by category.



Create a space

Create a custom space for your students' needs. AI makes it easy!

Tools

Let's write a ...



Lesson Plan



Worksheet



Class Newsletter

[See all tools ->](#)

Assistants

Chat with...



Coteacher



Common Core Expert



Curriculum Coach

[See all assistants ->](#)

Resources

[Knowledge Base](#)[Join Our Sandbox](#)[Become An Insider](#)

Favorites

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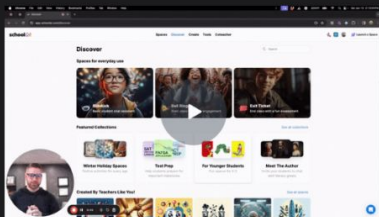
Shared with me

0



My creations

1



AI IN THE CLASSROOM

What is a Space?

Spaces are AI-powered chatbots designed to help students learn. Every space has built-in monitoring & controls for teachers.

Watch the video to learn more!

[Got it!](#)

OUR POV

- Very skeptical of using AI
- Didn't know if we were going to get accurate information
- Thought that it was a tool for cheaters, not learning/ for school
 - Soon found out it made research easier
- Found easy to understand information and guided us in the right direction without handing us the answer
- Helped us understand topics/assignments, refine essays, get feedback

Benefits for Students

- Inspired creative ideas
- Gave out reliable information for assignments
- SchoolAI allowed students to think for themselves, not giving them the answers
- Made learning more effective by not giving vague answers like Google or peers

School Projects

Bill of Rights Essay

period 5

reference
Analysis
Tie up

Why the 1st and 4th amendment is most important to me?

Introduction what is it???

- The Bill of Rights is the first ten amendments of the U.S. Constitution.
- The 1st and 4th amendment offer protection for me as a student.
- So, the 1st and 4th amendment are the most important to me personally.

P1

M 1st amendment

E Cite 1st amendment

A What the 1st protects

T Summarize P1

P2

M 4th amendment

E Cite 4th amendment

A What the 4th protects

T Summarize P2

Conclusion

- The 1st and 4th amendment are the most important to me personally because it protects me, my privacy, and my opinion.
- Summarize 1st and 4th amendment
- Therefore, because these amendments protect me the most, they are the most important to me personally.

Children's Book

Trail Blazers!

*A tale of Courage
On the
Oregon Trail*

By: Joshua Lum



Rights and Responsibility Presentation

GRANTS PASS V. JOHNSON (2024)

DYLAN KWON PERIOD 1

Table Of Contents

01. Facts of the Case

A summarized version of the story behind this case and timeline

02. Ruling of the Case

How the judges decided the outcome of the case

03. Importance of this Case

How this case changed/ added/ taken away from the Constitution or Amendments

04. Future Implications from Case

How this case impacted/affected our nation

05. Brown-e Points

Ridiculous laws across U.S. States



Pros & Cons of AI

- AI is advancing
- Mathway, ChatGPT, Photomath, SchoolAI
- Promotes critical thinking
- Features can restrict access, question limits, teacher monitoring

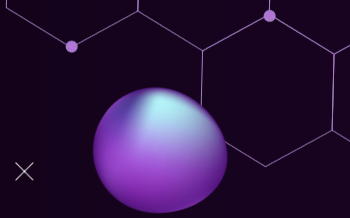
Pros

- Enhances students through guidance
- Designed for students
- Reliable
- Restricted time limit and usage
- Safe

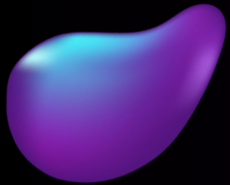
Cons

- Some students may misuse or abuse AI

Student Opinion



Cade: *I think it is really good because I can do many things with it. There are many ups and downs with it but there are many good things I can do with it. SchoolAI has really helped as it has really enhanced my learning as I got a better understanding of the topic we were learning.*



x

AI in Band



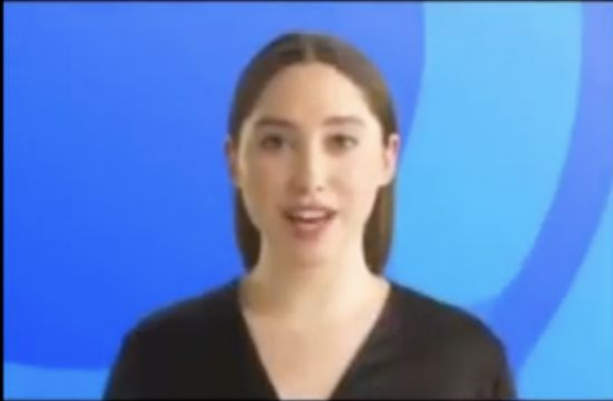
Band students have the opportunity to use AI to create their Music Listening Assignments while developing 21st century life skills like collaboration, creativity, innovation and leadership.

Students in groups of three to four were able to select an instrument or band ensemble of their choice to create a 30-45 second video. Many students used CapCut and AI generated voice overs to create their project.



AI in Band

Hello, welcome to
the MMS news. I'm
your host,



AI IN SCIENCE EDUCATION: A CASE STUDY

**BY DAVID GUNDERSON
BALDWIN HIGH SCHOOL**

This presentation explores the experience of a science teacher integrating AI into grading and feedback for AP Environmental Science lab reports.



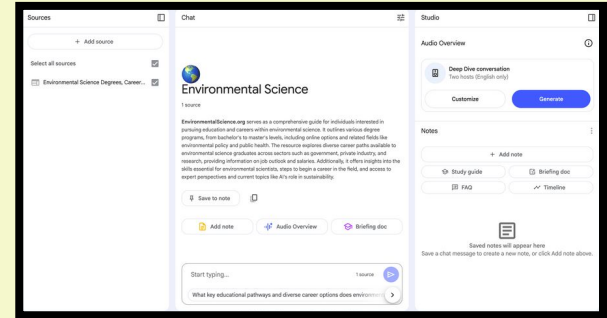
THE INITIAL SITUATION



- I am not known for being tech-savvy and was skeptical of AI in schools.
- Prior to training, there were concerns with students using AI in my classes.
- OCID Training introduced the potential of the NotebookLM program.
- NotebookLM (a closed system) is different from Gemini (an open system).

IMPLEMENTATION

- I used NotebookLM to create a grading rubric.
- Student lab reports and the rubric were input into NotebookLM.
- NotebookLM graded reports based on the rubric and provided specific suggestions for improvement.
- Students were instructed to make improvements based on the feedback and submit a final draft.



STUDENT REACTIONS



- Some students were upset, feeling their work wasn't graded by a person.
- Other students were accepting and saw the value in the AI feedback.

RESULTS



- NotebookLM provided good feedback but made some mistakes that required teacher correction.
- I still had to read each report and adjust the final grade.
- Final lab report grades increased by about 10% from rough draft.
- While my workload wasn't lessened much, the detailed and objective feedback helped students learn to write excellent lab reports.
- I feel more comfortable now using AI to give feedback on written assignments like a lab report.
- In the future I plan on developing lessons and curriculum where students use AI.

MAHALO

