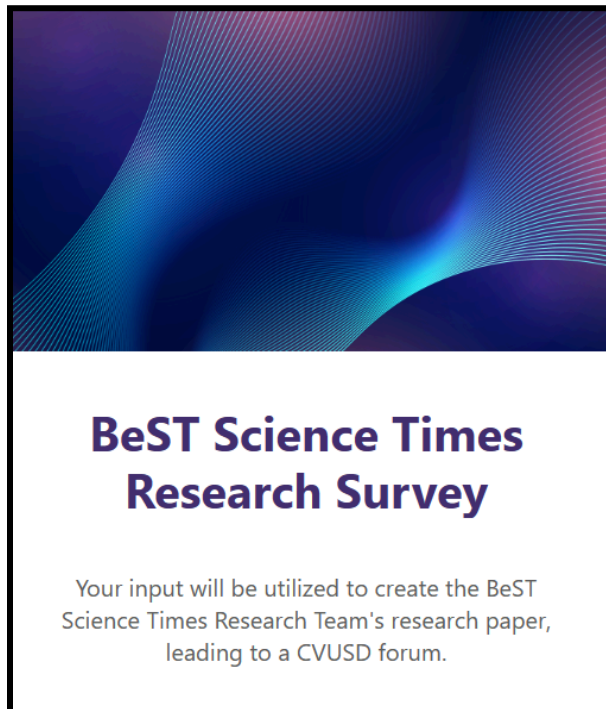


AI Integration in CVUSD Education

- Survey & Forum Report -



BeST Science Times Research Team
April 28th, 2024



Research Team

The BeST Science Times Newspaper and Research Club, founded by Lawrence Kim, aims to raise awareness of science within today's youth. It is composed of two teams, the Newspaper Team and the Research Team. The Newspaper team releases newspaper publications based on student submissions, while the Research Team conducts research on critical interests of students. Our members consist of students from the Biomedical Science and Technology Academy at Chino High School.

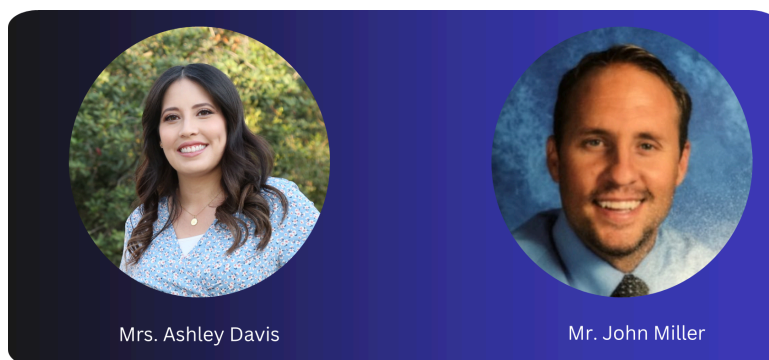


Background

Our research team has worked throughout the span of the 2023-2024 academic year to construct a framework for a research on Artificial Intelligence (AI) usage in education, release a survey receiving over 500 responses, create a report on survey results, and hold a forum for all Chino Valley Unified School District (CVUSD) community members to foster an open discussion. The forum was designed to spark a conversation within our own district regarding an integrative part of educational technology, and our team hopes to further pursue this initiative in collaboration with CVUSD.

Special Acknowledgements

We would like to express our heartfelt gratitude to our largest supporters, Mrs. Davis and Mr. Miller. The work of the BeST Science Times was able to show its light on the surface due to the tremendous amount of advice and support from Mrs. Davis and Mr. Miller, we thank them for their continuous support!



Forum Overview

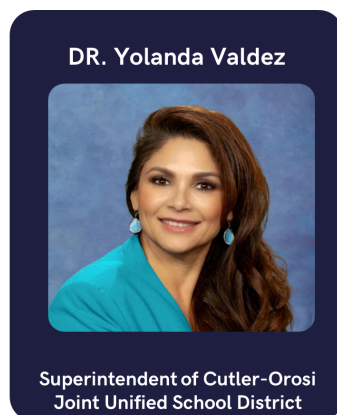
The CVUSD AI in Education Forum was held at Chino High School on April 20th, 2024 from 9:30AM to 12:00PM. The objective was to create an open platform for CVUSD community members to discuss the future of AI usage for students and teachers in education.

9:30AM - 9:40AM	Opening Remarks
9:40AM - 9:50AM	Introduction to AI (Wharton School)
9:50AM - 10:30AM	Session 1 : CVUSD Survey Result
10:30AM - 11:00AM	Session 2 : Local Examples - COJUSD
11:00AM - 11:10AM	AI Usage for Teachers and Students (Wharton School)
11:10AM - 11:50AM	Session 3 : Open Floor Discussion
11:50AM - 12:00PM	Closing

Speaker & Panelists

Our Speaker, Dr. Yolanda Valdez is the esteemed superintendent of the Cutler-Orosi Joint Unified School District (COJUSD), who has first-handedly pioneered her district's steps towards AI integration.

Our Panelists consisted of representatives from diverse backgrounds, ranging from students to district personnels in CVUSD.



Session 1 : CVUSD Survey Result

A total of 512 responses were collected from schools including Chino High School, Chino Hills High School, Ayala High School, Don Lugo High School, Townsend Jr. High School, and Cal Aero Preserve Academy with 54 teachers and 458 students. Major findings are as below, and the full report is attached as <[Appendix 1](#)>.

- a. General results display that more than half of respondents did not have any experience with ChatGPT and are not well-informed about its functions
- b. The view towards AI was hugely leaning negatively, at a rating of -37. Compared to the 78 promoters, there were about 172 neutrals and 267 critics
- c. Confidence in AI reliability was fairly inconfident, as an average of 5.91 was presented when respondents were asked to rate confidence from a scale of 1 to 10
- d. Opinions were split equally regarding plagiarism issues whether AI usage was an act of plagiarism or not

Following the survey report presentation, the panel and audience discussed the issues below.

- a. How would AI educate students alongside teachers?
 - AI provides a diverse array of information from many perspectives, tailoring the learning to the student
 - Students can quickly gain sufficient information in case a teacher is unable to answer a question at the moment
 - It is a powerful tool to make teaching less repetitive and make it more complex. Mundane tasks such as creating pacing guides and rubrics can be mitigated, while further allowing teachers and administrators to spend more time on instruction
 - Teachers would have a critical role in the education system, and AI will bolster that status through providing more time to focus on instruction
- b. Why is a teacher's age and viewpoint towards AI negatively correlated?
 - Teachers belonging in the older generation would have positive viewpoints towards AI due to a lack of personal experience regarding AI's potential implications
 - The introduction of Generation Z teacher workforce marks the beginning of a need for change in teaching methods

- c. Are computers and AI taking away the ability to learn basic educational skills?
- It is evident that more children are reliant on computers and technology starting from a significantly young age.
 - This leads to a potential deterioration of a habit of pursuing answers and problem-solving due to AI's quick responses
 - Strict regulations must be thoroughly assessed, as learning alongside AI is important and necessary in the education system
 - There is a need to reconsider the definition of plagiarism, per the usage of AI models
- d. How is AI currently being used in the classroom?
- An ELA teacher at Chino Hills High School utilizes AI to help students understand books by having AI models imitate the personality of the actual character and fostering discussions.
 - The usage of AI to mimic characters to engage in discussions have displayed competitiveness within students to beat the AI in a debate, leading to a more interactive experience
 - AI has many positive implications, we need to adapt instead of avoid
- e. How are other sectors approaching AI usage?
- In the corporate Information Technology (IT) sector, AI is used to provide new, analytical perspectives that are different from what humans perceive. It also completes tedious tasks at a fast rate including data analysis
 - In the medical field, AI allows medical school students to easily see diagnoses and prescriptions
- f. How should plagiarism be addressed?
- The norm for plagiarism may change: the usage of AI may not be classified as plagiarism anymore to accompany the changing technological age
 - If students are putting effort into utilizing AI the proper way, however the district deems proper, then it should not be flagged as an act of plagiarism. However, merely using AI to gain answers in a few seconds should be marked for plagiarism.

Session 2 : Local Examples - COJUSD

Dr. Valdez provided valuable insight rooting from experience leading COJUSD that has already integrated AI into their education system. She said *“We are in an exploratory place with AI”* and presented how she has used AI and approached it in COJUSD. Dr. Valdez’s full presentation is attached as <Appendix 2>.

Following the presentation, the panels and audiences had Q&As as below.

- a. How is the COJUSD addressing AI in education?
 - COJUSD has seen the benefits of using AI in their education system, especially regarding the “Gift of Time” (saving time through mitigating mundane tasks)
 - District personnel, school administrators, and teachers have agreed to explore AI by sharing a new AI tool every meeting
 - Students use AI as a personal tutor. All high school students in COJUSD are able to use AI (Packback) to proofread and improve writing skills
 - Teachers save time by having disciplinary letters written by ChatGPT
 - Dr. Valdez has encouraged all administrators to have students use AI in classrooms following her initiative in exploring AI on her own
- b. Following COJUSD’s first year of piloting AI usage, what is the next step?
 - An AI Committee will be formed to continue advancing AI usage
 - Policies regarding AI usage will be developed and get board approved
 - Professional learning will continue and improve for staff and students
 - In 2025, a position based on AI in Education will be implemented through the board
- c. Have you been able to integrate AI in Special Education (IEPs)?
 - AI is planned to be integrated into the Local Control and Accountability Plan for funding
 - The special education director uses AI tools to create IEP’s based on data provided
 - Analyzing data is more comprehensive in terms of benefitting special education students
 - Moreover, individualized instruction in special education curriculum is easier to create through AI usage
- d. Are there other usages of AI at the moment?
 - International students are able to use AI to translate material in real-time

- e. What would be a good jumping off point to begin using AI?
 - Encourage and persuade all staff to explore AI usage and integrate it into classrooms
 - Show administrators AI's powerpoint development and curriculum-making potential
 - Provide avenues to explore its abilities and coordinate towards learning

- f. Are there any curriculum available for students and staff to learn about AI?
 - There are no curriculums at the moment.
 - Currently, the instructional leadership team discuss and determine what the preliminary message going out
 - Next year it will be more formalized as teachers are currently using AI on their own now

- g. Will AI remove creativity for children's learning in the future?
 - AI will never replace creativity as we already know it in humans because they are based upon prompt providing
 - People who use AI can actually spark more creativity because of further understanding

Session 3 : Open Floor Discussion

Our panels and audiences had a comprehensive discussion about AI integration in CVUSD and shared common views as below.

- a. AI usage is inevitable, it is a matter of CVUSD's response to it.
- b. Prevention of AI usage would be a huge disadvantage for CVUSD students, therefore the question formed should be how AI can be used ethically.
- c. Understanding academic dishonesty and the extent to which AI usage can project this is important.
- d. Teachers may need to ask students, "How did you use AI platforms to help you understand the concepts" to break the barrier between plagiarism and using it as assistance.
- e. Like students, teachers have different ways of teaching, meaning they should explore with AI to understand proper usages.
- f. Better time optimization will be present, especially with AI managing grading through teacher-provided rubrics as well.

Also, the panels and audiences discussed the issues below in detail.

- a. How can all students use ChatGPT as a tool academically and non academically regardless of socioeconomic status?
 - A curriculum provided in an equitable manner must be implemented.
 - This curriculum can be placed similarly to an elective due to complications in implementing as an A-G requirement; the lack of mandation unfortunately may be unable to achieve the goal of equity due to differing interests of students
- b. How can we ensure that students are getting the correct information from AI?
 - Most responses are accurate. However, encouraging the use google and books to further the credibility is critical
- c. What is the ideal age to expose students to AI?
 - Just like any other common core subject, learning about AI can start as early as elementary years. A continuously rigorating course design will allow students to start off with an on-the-surface exposure in elementary years to deeper analysis in high school
 - AI curriculum are already included in platforms such as Code.org

Conclusion

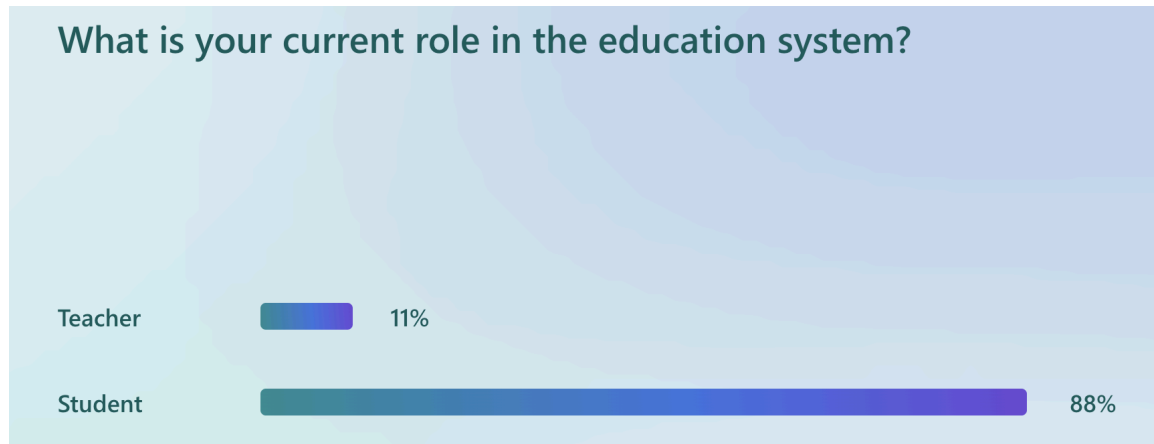
After thorough conversation between community members, the following conclusions were reached:

- a. Generative AI has the potential to better educate students and provide a significant advantage for CVUSD students for their post-secondary education careers
- b. A contemporary system in which a CVUSD teacher is able to integrate AI into their teaching is necessary
- c. The district needs to place effort towards AI implementation in education through encouraging schools to experiment while simultaneously developing appropriate protocols on the district level
- d. *Institutionalize a "CVUSD Committee on Artificial Intelligence Education" to further action in leading students towards the next technological age*
- e. If possible on a district level, create a curriculum integrating AI and its usages

<Appendix 1> CVUSD Survey Results

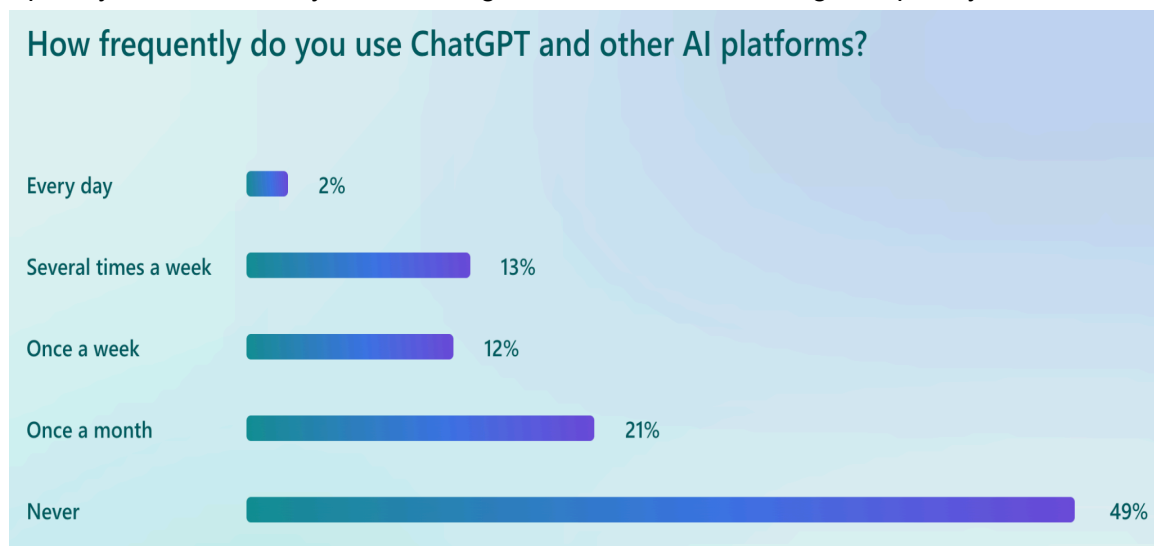
[Total] Responses

We received a total of 512 responses (458 students and 54 teachers) from our community schools, including Chino High, Chino Hills High, Ayala High, Don Lugo, Townsend, and Cal Aero. The student respondents were composed of students grade 7-12, while teacher respondents encompassed diverse age groups, teaching experience, and subject of expertise.



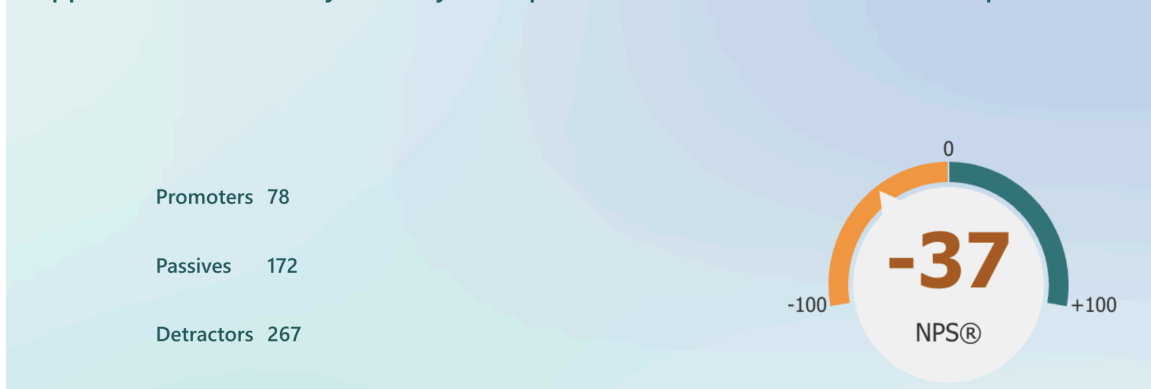
[Total] AI Experiences

Overall, *usage of ChatGPT is very low* in our community, and only a small amount of people use it frequently. Simultaneously, there's a significant difference in usage frequency.



Additionally, *the general viewpoints and experiences towards AI are mostly negative*. This includes implications following a lack of knowledge/experience in AI usage.

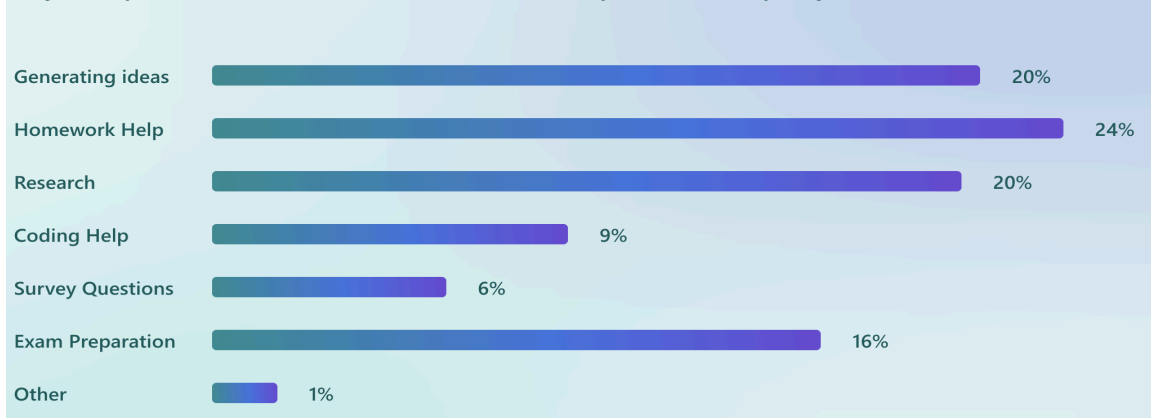
If applicable, how would you rate your experience with ChatGPT and other AI platforms?



[Total] Potential Usages of AI

The general consensus points towards belief in *AI's potential to be used for a variety of purposes including idea generation, homework help, and exam preparation*.

In your opinion, how can ChatGPT and other AI platforms help in your education?

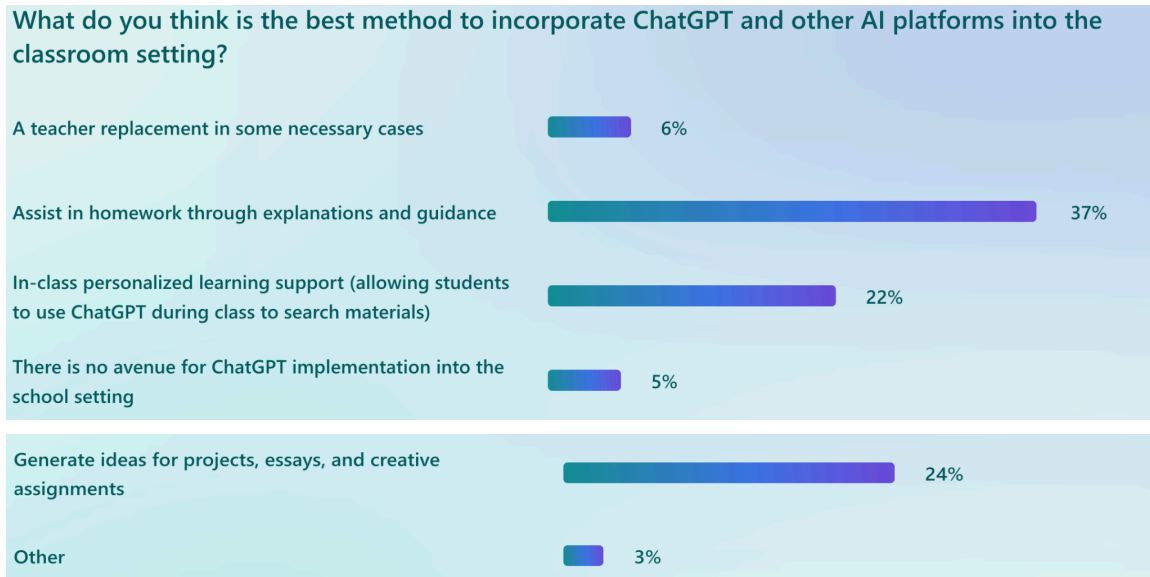


If you use ChatGPT and other AI platforms, what do you use them for?



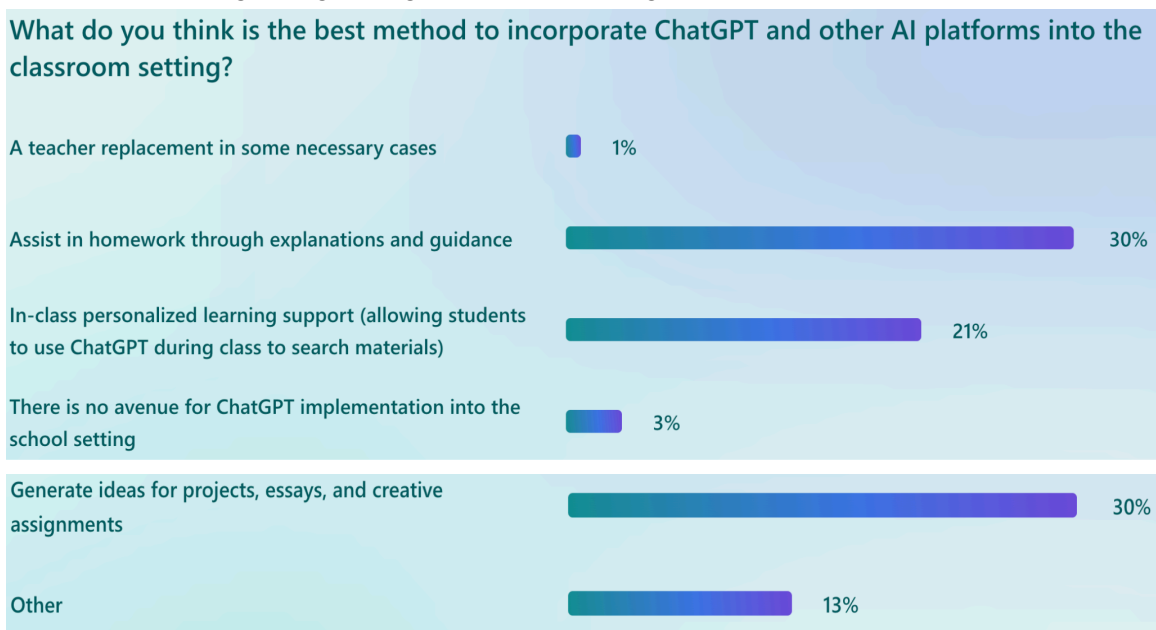
[Students] Potential AI Usage in Class

Students identified a diverse array of methods to utilize AI within their own education including *homework assistance through guidance and in-class personalized learning support*.



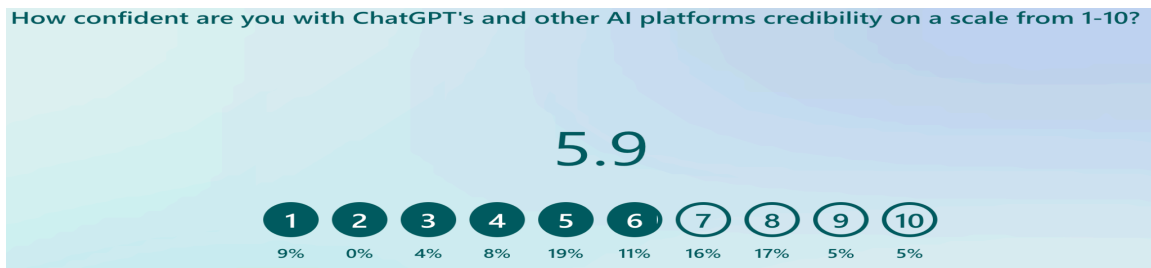
[Teachers] Potential AI Usage in Class

Teacher respondents also identified a diverse array of methods to utilize AI within their own teachings *similar to student responses*. A significant difference can be seen in an increase in teacher responses regarding idea generation for assignments.

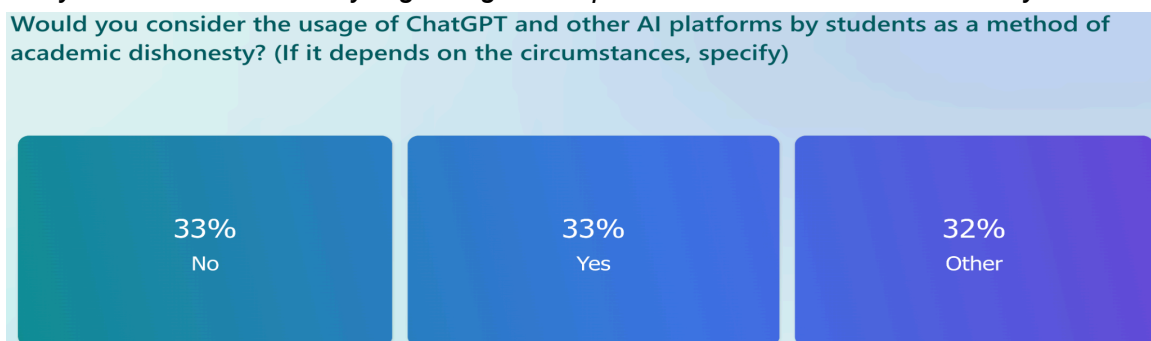


[Total] Confidence in AI Implementation

Paramountly, *confidence in AI's credibility is at a median*, whilst leaning mildly positive. However, *the number of absolute distrust stands at a significant number* as seen by the 9% on "1", while *absolute trust also stands at a similarly significant amount*, with 5% 's on "9" and "10".



Despite conflicting views on AI credibility, a markedly differing result can be seen in the concept of academic dishonesty. Per the equivalent divide between responses, *respondents were evidently faced with uncertainty regarding AI's implications on academic dishonesty*.



[Comments] Specific Usage

General belief holds that CVUSD needs to address the changing sphere of education, and provide avenues for teachers and students alike to experiment with and properly use AI models.

[Optional] Specifically, how can teachers educate students in the presence of ChatGPT and other AI platforms? (The most innovative answer will be used in the research paper)

"I've seen some places where an AI generated historical figure is used to tell the story of their lives or a specific event."

"First off, teachers need to be aware of AI platforms and how they work. The reality is that ChatGPT exists and it does not need to be an enemy for teachers. Teachers should create ways to incorporate AI into their teacher and give students opportunities to utilize it in order to create a better educational environment and more productive society. "

"AI platforms are not going away. Staff should be free to educate students on proper and ethical use, much like the shift in education when calculators became widely available. Any tool can be dangerous, if used incorrectly, so it would be best for teachers to guide students in AI's use and evaluating results generated by AI. The internet was once an unknown, too, and also has dangerous possibilities, but can be full of knowledge and wonder. "

"Students should utilize ChatGPT as a method of "peer" editing. ChatGPT typically has a 76% correctness to their answers. Not exactly in depth, however, absolutely not shallow in it's understanding. A student should utilize this as an "Understanding Check" concept to see if they know more or less than an average AI response."

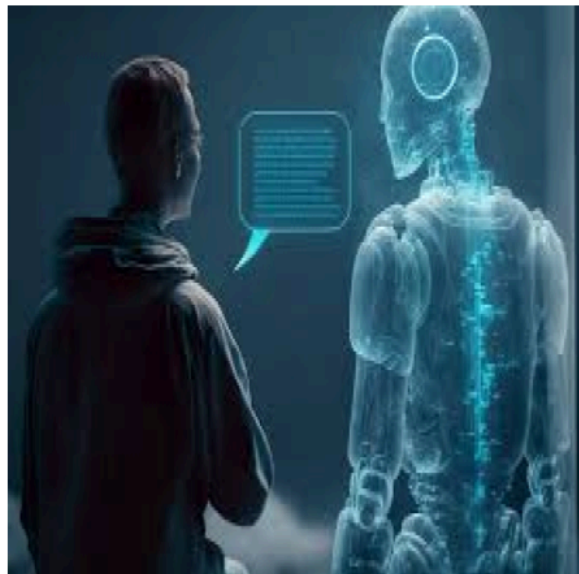
"When it comes to technology, people are always scared of what they don't know. I'm concerned that our district is being highly restrictive on all AI instead of trying to understand what each does and how they can benefit and be implemented in the classroom. Besides ChatGPT how are students implementing AI? I'm looking forward to using AI in my classroom but fear I won't be given the opportunity in this district. A responsible/appropriate use agreement should be in our district for technology. "

<Appendix 2> Local Examples - COJUSD

OUR DISTRICT APPROACH TO AI

Yolanda Valdez
Superintendent
Cutler-Orosi Joint Unified School District

“THE GIFT OF TIME”
SUPPORT
TUTOR



DABBLING WITH AI

THE INSIDE OUT APPROACH

TEACHER APPROACH

Meeting Agenda

Design team

Date: 01.09

Time: 13:00

01. Discussion topics

- topic 1
- topic 2
- topic 3

02. Weekly updates

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03. Priority tasks

- task 1
- task 2

04. Notes

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Plagiarism/Academic Dishonesty

Academic dishonesty is when we knowingly copy another's work or words. This is also sometimes called plagiarism. Copying someone's ideas and words and handing them into our teacher as if they were our own work is not acceptable in any class or assignment. Plagiarism/academic dishonesty can result in a failing grade. Each case is different, and your teacher will determine what will happen if you are caught turning another's work in as your own. Your best option is this: if you are confused on an assignment, you should be asking for help from your teacher or a trusted adult. We are here to help you!



AI Usage Policy

Technology is always changing and advancing the way humans work. Now that the world has access to artificial intelligence that assists humans in generating thoughts and writing texts, we need to make sure OHS students understand when it is and is not appropriate to use AI programs. AI may only be used to assist in idea generating, or as a feedback and revision tool for student generated writing. AI tools may only be used at appropriate times during class and with academic integrity when not in classroom instructional situations. When students choose to use AI in unethical ways they risk these consequences: 1) Automatic zero on an essay or assignment with chance for revision if AI is used to replace students' own work or writing. The highest grade you can receive on the revision is a 3 out of 4; AP a 4 out of 6. 2) Phone call home to inform parents of plagiarism, and 3) Swiss referral notifying administration of academic misconduct. We know OHS students will choose integrity over ease.

 **New Resource:** Stay up to date on all things AI with our new resource library: [AI Training for Educators](#)


A writing assistant for every student and a grading assistant for every instructor...made possible by AI.

Packback is the pioneer of Instructional AI. Packback's mission is to empower every student to be fearlessly curious, develop strong writing skills, and find their unique voice. The Packback "Digital TA" AI powers our award-winning discussion platform, [Packback](#)

DIRECTION FOR STUDENTS

GENERATIVE AI

FOR SCHOOL WORK



by: Miriam Scott
scottysbreaksdown.com

ETHICAL USE

CONCEPT EXPLANATION
Can simplify complex concepts

RESOURCE CREATION
Can create flash cards, revision activities, analytical tools

IDEA GENERATION
Can stimulate creative thinking and ideas as a starting point

FEEDBACK & EVALUATION
Can provide instant feedback on work to improve quality before submission

BRAINSTORMING
Create ideas or topics for work to provide different suggestions or perspectives

REVISION
Create activities to help with better understanding and recall

PRESENTATION SKILLS
Can provide suggestions to improve presentation skills

CITATION & FORMATTING
Can provide correct referencing and in-text citation advice

LOCATE SOURCES
Can use to find sources to help with research. Similar to using Wikipedia or Google

UNETHICAL USE

PLAGIARISM
Using AI-generated content verbatim without proper citation or presenting AI-generated work as your own is unethical and is plagiarism. This would be the same if you took a definition from a Google search.

ASSIGNMENT OUTSOURCING
Using AI to create assignments, essays, or projects without any personal input or understanding undermines the learning process and is considered academic dishonesty. This is the same as a tutor or parent creating your work and you claiming it as your own.

MISREPRESENTING ABILITIES
Using generative AI to complete tasks that are beyond your understanding and presenting the results as your own. This is the same as copying someone's assessment or paragraph and tweaking it to make it look different.

IMPROPER REFERENCE CHECKING
Asking to source references and not checking the validity of the information and relevance. Example: Claiming this is where you sourced information, but you only used ChatGPT.

NEXT STEPS FOR CUTLER-OROSI JOINT UNIFIED SCHOOL DISTRICT

- AI COMMITTEE IS BEING FORMED
- POLICY WILL BE DEVELOPED AND BOARD APPROVED
- PROFESSIONAL LEARNING WILL CONTINUE FOR STAFF AND STUDENTS

