

A photograph of two students, a boy and a girl, working on a project. The boy is standing and pointing at a component on a breadboard, while the girl is sitting and looking at it. They are in a classroom setting with other students and equipment visible in the background. The image is overlaid with a large orange semi-circle on the right side, which contains the title and other text.

AI Explorers: With All the Buzz Around AI, Where Should You Begin?

Start an AI Explorers working group and follow the Explore - Explain - Express cycle to make the best choices for your school!

For use by educators,
leaders and coaches

 **bsd** education

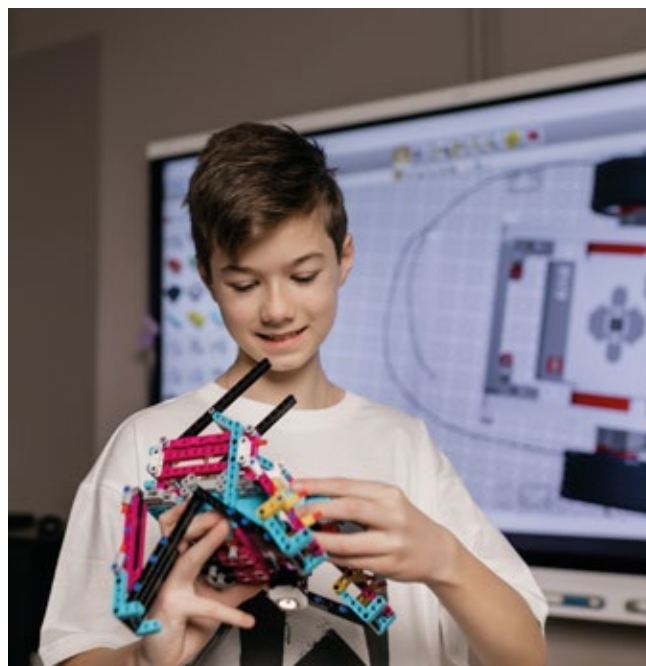
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BSD Education **Position Statement** **about the use of** **AI in Education**

BSD Education welcomes technology advancements, including those related to AI, and recognizes the potential benefits that these advancements can bring to education. We are committed to working with educators to identify areas where the knowledge of AI can be integrated into the curriculum in meaningful ways that support student learning and development.

At BSD Education, we also recognize the importance of ensuring that any use of AI in education is safe and educationally appropriate, especially in terms of data privacy and integrity. As such, we are actively exploring ways to help educators integrate AI into their teaching practices via our online platform, in a way that aligns with best practices and guidelines for responsible AI use in education. We realize that in due time, there will be laws, safety protocols and specific applications of AI that will revolutionize how AI is used in Education. We intend to stay ahead of the curve by closely monitoring and reviewing the latest advancements.



We believe that AI has the potential to transform the way that students learn and engage with the world, and we are committed to supporting educators in harnessing the power of AI to create innovative and effective learning experiences.

Inside BSD, our different teams are exploring and using AI in ways that enhance our work and to build structures to demonstrate how organizations can effectively use AI as collaborative and empowering tools instead of tools that replace people.

We have developed this AI Explorers guide to help educators and administrators navigate the uncertainty of using AI and offer a framework that is similar to how we approach AI as an ed tech company.





As AI continues to grow and become more prevalent in our daily lives, it is important that educators are equipped to teach students how to interact with this technology safely and responsibly. The AI Explorers program is designed to enable educators to explore AI and develop their understanding of how it can be used in the classroom while ensuring the safety and privacy of their students.

What is an AI Explorers program?

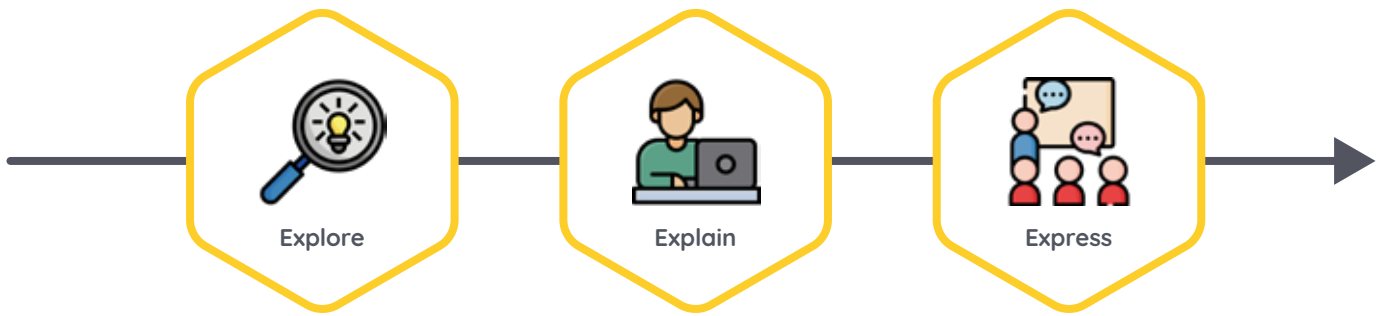
AI Explorers are a small group of individuals within the school who are keen to explore the use of currently available AI tools, test their effectiveness, research them and offer guidance to the rest of the school about how, when and what types of AI technology to adopt for everyday use.

Who should be on the AI Explorers team?

- At least one leader
- 3-5 educators from a variety of subject areas and grade levels
- A small number of students will be needed to provide occasional feedback, but won't necessarily be involved in every step of the working group's process

Explore - Explain - Express

A framework for exploring AI



Following pedagogical best-practices from the educational philosophy of constructionism, we suggest that members of the AI Explorers program approach the use of AI tools with a lens of playfulness and curiosity by experimenting, using imaginative ways to see how AI might provide more agency to educators and students.

Explore

Using curiosity and imagination, explore the world of AI by playing with technologies, building prototypes, creating processes, and then explore what happens when you make changes or do things differently. When you discover something useful, describe it to others and share it with the working group.

Explain

Use the lens of a parent, educator, student, and administrator to think about all of the possible benefits and repercussions of the use of a possible AI tool. Here are some questions to consider:

- Does the tool collect private information?
- Does the tool require sign-up?
- Is there a cost associated with it?
- Is it easy to adopt or does it require professional development?
- Have other schools had success with the tool?
- Are there any legal or ethical concerns?
- Other questions unique to your working group.

Express

Once the working group has thoroughly experimented, tested and reviewed an AI tool, make a plan or a report about how the tool might be implemented and share what the benefits and concerns might be. This doesn't have to be a formal report, but it should be comprehensive and easy to understand, especially for those who haven't learned much about AI. Consider making a presentation about the working group's findings and suggestions. This report will be shared to a larger school audience for further evaluation and discussion before any final decision is made.

AI Explorers

Process

How to setup an AI Explorers working group at your school

1. Form the AI Explorers working group and decide who will participate
2. Decide the appropriate time, place and occurrence for the meeting
3. Choose a few AI tools to experiment with and who will explore them
4. Follow the Explore - Explain - Express cycle to determine the use and effectiveness of any AI tool
5. Propose any AI adoptions to a wider audience at the school for feedback
6. Inform parents of any AI tool adoptions and information about opting-out

Conduct Mini Tests

As part of the Explore - Explain process it is important to test and use an AI tool thoroughly yourself as an educator to determine if it is safe, appropriate and accessible. Then, if necessary, test the AI tool with a small group of students to see how they respond, what questions they have and if the tool works the way you intended. Make sure that parents have consented to the small group tests. Collect reflections and any data that you might need for the report.



AI Tool Categories

We prefer not to recommend particular products or services, but instead here is a list of different categories of AI tools that you can explore with the committee. The changing nature of AI means that some products that are available today will be greatly different or not even available a year from now. With a good understanding of the different types of AI tools, you will be better equipped to know about their use and limitations. The list provided below is just a few of the many ways that AI can be used in education settings.

- 1 Text Generation:** AI-powered writing tools can help students to improve their writing skills, generating suggestions for sentence structure, grammar, and vocabulary. These are commonly labeled as a GPT (Generative Pre-trained Transformer) and are based on Large Language Models (LLM).



- 2 Image Recognition:** AI-powered image recognition tools can help students to identify and classify objects and images, improving their visual literacy skills.

- 3 Image Generation:** AI-powered tools can be used to generate realistic images based on input from students, allowing them to explore creativity and design.



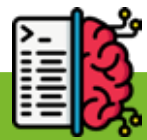
- 4 Pose and Gesture Detection:** AI tools can be used to analyze student movements and provide feedback on posture and movement, helping students to improve their physical and motor skills.



- 5 Language Translation:** AI-powered translation tools can help students with limited English proficiency to better understand course materials and participate more fully in classroom discussions.



- 6 Automated Grading and Feedback:** AI tools like image recognition and sentiment analysis can be used to grade assignments and provide feedback on student work, freeing up the educators' time for other tasks.



- 7 Personalized Learning:** AI algorithms can analyze student data to create personalized learning experiences that adapt to the individual needs and learning styles of each student.



- 8 Recommendation Systems:** AI algorithms can analyze learning data to provide recommendations for relevant course materials and resources, helping students to stay engaged and motivated.



A Note on Algorithmic Bias in AI

When exploring AI tools for education it is important to notice how algorithmic bias might affect the tool, depending on the context and how it is used. Algorithmic bias refers to the tendency of AI algorithms to reflect and potentially amplify existing biases and inequalities in the data they are trained on.

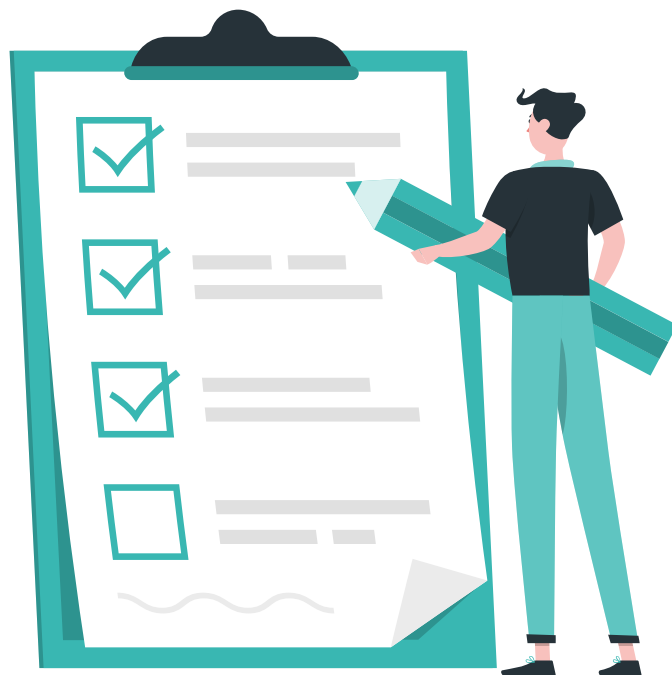
For example, when exploring the use of AI chatbots, it is important to consider how biases in language data might affect the tool's responses and interactions with students. AI chatbots are trained on large amounts of natural language data, which may reflect biases and stereotypes that exist in society. For example, if a student asks a question about a certain culture or ethnicity, the response generated by the AI chatbot may perpetuate harmful stereotypes or biases associated with that group.

Make sure that your AI Explorers working group understands that bias is implicit in all forms of AI tools but may not be easy to evaluate or understand. Consider the impacts and learning opportunities of algorithmic bias in the review step.

Adoption Considerations

Once the AI Explorers working group has completed the Explore - Explain - Express process and is ready to share findings with a larger group, here are some considerations that will help build a robust AI plan at your school:

- ☐ Develop a school wide policy or statement about how the school uses AI
- ☐ Hold forums with parents to discuss the use of AI
- ☐ Make sure to have opt-out plans for any tool selected
- ☐ Consult with IT directors and technical staff to make sure the tool works well in the school IT infrastructure
- ☐ Seek advice from experts and leaders in the field of AI and education
- ☐ Consider professional development around the topic of AI literacy for all staff
- ☐ Realize that the nature of AI tools is rapidly changing, so don't make difficult-to-change decisions, instead take a flexible approach
- ☐ Ensure that the tools are compatible with assistive technologies and that they do not create barriers for students with different learning needs



Next Steps

The AI Explorers program will help schools understand the practical application of existing AI tools. But, there are other ways to engage with the expanding field.

At BSD we are committed to helping students become creators of technology, not just users, while also helping educators teach technology fields. To that end, here are two suggestions for expanding your school's AI teaching and learning capacity:

Teach Students to Create AI

BSD START - Our free course includes an entry-level AI project. You and your students will build an image classifying tool powered by machine learning.

[Create a BSD START account](#)

AI Professional Development for Teachers

BSD LEARN - Introduction to AI: Useful Classroom Tools for Teaching About Data Bias.

A 3-hour, self-guided professional development experience. In this course, you will:

- Explore how different types of data bias affect the prediction of AI tools.
- Learn how to design simple AI systems that account for data bias.
- Create your own AI image recognition tools that can predict and identify data of your choice.

[Enroll in BSD LEARN's Introduction to AI](#)



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Contact Us

BSD is at the forefront of making cutting edge technology and future-ready skills accessible at the K-12 level. If you have questions about how to create and build a real-world relevant technology education program, there's no shortage of ways we can help. You can reach us at **info@bsd.education**.

Thanks!



Let's Build Something Different Together



Start integrating future-ready skills today

For more information contact us at

info@bsd.education