

Emerging Technologies and Instructional Materials in the Educational Environment

The Board believes in order to adequately prepare modern learners for the future advances in technology should first be explored within the education environment. Furthermore, the Board encourages staff to investigate economical ways to utilize multi-media, computers, electronic devices, and other emerging technologies as a part of the curriculum. By embracing emerging technologies thoughtfully, our district will empower students and staff to be lifelong learners, problem solvers, and responsible digital citizens.

Various emerging technology tools analyze large amounts of information and detect patterns using that information to draw a conclusion. Emerging technology tools then improve the conclusions drawn based upon additional data reviewed, patterns found, and prior conclusions drawn. Emerging technology tools for the education environment have the potential to automate classroom organizational tasks, enhance individualized student learning and teaching, improve assessment of student learning, and even enhance research and professional development for educators.

Examples of emerging technologies are, but are not limited to, the following:

- Artificial Intelligence (AI) - Computer systems or software that perform tasks requiring human intelligence, including but not limited to learning, decision-making, and language processing.
- Generative Artificial Intelligence - AI technologies that can generate new content, including text, images, audio, and video, based on their training data. These tools can be used for creative and educational purposes but must be used with consideration for accuracy, appropriateness, and originality.
- Large Language Models (LLMs) - A type of AI that processes and generates human-like text based on vast amounts of data. LLMs can understand, converse, translate, and create content in natural language.
- Machine Learning - A subset of AI that involves computers learning from data without being explicitly programmed for specific tasks.
- Natural Language Processing (NLP) - AI's ability to understand and generate human language.

However, emerging technology tools can be vulnerable to inaccuracy in some significant ways. Emerging technology tools can: have bias in how the tools detect patterns; detect patterns/draw conclusions based on inaccurate data; and may not be fully accessible to students with differing abilities.

It is valuable for students to understand the potential uses and limitations of this imperfect technology in an educational environment where emerging technology tools have been carefully selected and are monitored and reviewed within appropriate guidelines. For this reason, human oversight and decision making must lead the selection, use, and review of emerging technology tools in the education environment.

Only humans can verify the accuracy of emerging technology tools and apply proper context to any information generated from them. Emerging technology tools will never be the sole determining factor used to make decisions related to student learning, assessment, academic integrity, and behavior. All decisions must be made by appropriate licensed staff and based upon a holistic analysis of available evidence.

Privacy must be protected when using generative emerging technology tools. Emerging technology tools draws conclusions based on analysis of data. No personally identifiable information about students or staff will be shared with emerging technology tools, without prior written consent from the parent or guardian of the student, or from the student/staff if applicable. Permission must be granted prior to students using open-source emerging technology tools that may share information outside the tool itself and with any entities outside the control of the privacy terms and conditions of the emerging technology tool.

Use of emerging technology tools by students and staff will be at all times appropriate to the educational environment and subject to all applicable laws, regulations and policies. This includes but is not limited to the Family Education Rights and Privacy Act, Children's Internet Protection Act, and the Children's Online Privacy Protection Rule; as well as district policies on student conduct, copyright protections, student records, personnel records, bullying and harassment, staff/student technology responsible use, and staff/student expression.

The Superintendent and/or designee(s), working in collaboration with relevant staff, will develop guidelines necessary to carry out the intent of this policy.

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Emerging technology tools will be vetted by relevant stakeholders including, but not limited to the district's IT staff and, when related to student learning or assessment, by the district's curriculum and learning staff. Adoption and implementation of emerging technology tools must be approved by either the district's executive directors of elementary, secondary, or special education, and the district's chief technology officer. Decisions to use emerging technology tools should be focused on:

- **Protection of students:** Any emerging technology tools used in the district must comply with the requirements to safeguard students from accessing obscene material harmful to minors including child pornography.
- **Privacy:** Personally identifiable information of students will not be shared without necessary written consents. Further, any emerging technology tools utilized must meet the requirements of the School Official exemption listed in FERPA and described in district policy 7300.
- **Accessibility:** Is the tool available to students of all abilities? If not, what comparable alternatives will be offered to ensure an equitable learning environment for all students?
- **Accuracy:** To the extent reasonable, the emerging technology tool should be both reliable and unbiased in its pattern recognition, and data used by the tool should be verified for accuracy.
- **Transparent and Interruptible:** Student use of emerging technology tools must be able to be monitored by licensed staff to safeguard the appropriateness of the learning experience for the student and monitored for accuracy of the emerging technology tool.

Academic Integrity

Use of emerging technology tools in research and graded work by students must include proper source citations. Copyright protections must be strictly adhered to. Students who fail to comply with these requirements may face discipline as stated in relevant district policies.

Appropriate Use

Prior to using emerging technology tools, classroom teachers will clearly state how emerging technology tools may be used to engage in and complete educational tasks and assignments. Classroom teachers will establish appropriate parameters for emerging technology tool usage and will monitor student use of emerging technology tools as appropriate.

Prohibited Uses

Students will not use emerging technology tools to access or create information that is discriminatory, constitutes bullying or harassment, share confidential or personally identifiable information of others, or access/create material that is harmful to minors, obscene, or child pornography. Any violation of this regulation will be treated as a violation of relevant district policies and may be subject to loss of access to the emerging technology tool and further discipline.

