Date of Hearing: June 26, 2024

ASSEMBLY COMMITTEE ON EDUCATION
Al Muratsuchi, Chair
SB 1288 (Becker) – As Amended April 15, 2024

[Note: This bill was double referred to the Assembly Committee on Privacy and Consumer Protection and will be heard by that Committee as it relates to issues under its jurisdiction.]

SENATE VOTE: 37-0

SUBJECT: Public schools: artificial intelligence working group

SUMMARY: Requires the Superintendent of Public Instruction (SPI) to convene a working group on artificial intelligence (AI), and requires that working group to develop expanded guidance and a model policy on AI for use by local educational agencies (LEAs) and charter schools. Specifically, **this bill**:

1) Establishes the following definitions:

   a) "Educator" means a certificated or classified employee of an LEA or charter school; and

   b) "Local educational agency" means a school district or county office of education (COE).

2) Requires the SPI, in consultation with the State Board of Education (SBE), to convene a working group for the following purposes:

   a) Identifying specific uses of artificial intelligence that negatively impact student development, jeopardize student data security, or risk the jobs of educators, and developing recommendations on how to best protect students and educators from these types of AI;

   b) Expanding guidance on safe, responsible, and strategic uses of AI in education, where educators deem AI to be appropriate;

   c) Developing a model policy, reflecting evidence-based research, for LEAs and charter schools regarding the safe and effective use of AI in ways that benefit, and do not negatively impact, educational quality, student critical thinking and writing skills, creativity, and the essential work of educators; and

   d) Identifying other ways in which the state can protect students and educators from any potential negative impacts of AI while supporting educators in creating effective practices.

3) Requires the working group to include all of the following:

   a) Current, credentialed public school teachers serving in elementary and secondary teaching positions;

b) Classified public school staff;

c) Schoolsite administrators;

d) School district or COE administrators;

e) University and community college faculty;

f) Representatives of private sector businesses or industries; and

g) Students enrolled in public schools.

4) Requires the working group to do all of the following:

a) Assess the current and future state of AI use in education, including both of the following:

i) The current state of AI used by LEAs and charter schools, including all of the following:

(1) Technologies most commonly in use;

(2) The typical cost of those technologies;

(3) The ownership structure of those technologies;

(4) The ownership structure of student- and employee-created materials;

(5) The licensing agreements for those technologies;

(6) The ability to access source code for those technologies;

(7) The degree to which educators were involved in the decision to use AI; and

(8) AI as a topic of instruction in developing class content.

ii) Anticipated and potential developments in AI technology in education.

b) Conduct at least three public meetings to incorporate feedback from students, families, and relevant stakeholders into the assessment. Permits these meetings to be held by teleconference.

c) Detail current uses of AI in education settings and recommend action based on this research, in such a way that best protects students and educators from the potential negative impacts of AI including through the identification of all of the following:

i) Examples of human-centered AI that aid, further, and improve the education process and the work of educators;

    ii)   Examples of human replacement AI that could negatively impact student development, jeopardize student data security, or risk the jobs of educators; and

    iii)   Strategies to ensure the collective opportunity to offer meaningful feedback before any given form of AI is introduced to students or educators.

5) In performing the work required by this subdivision, solicit input from educators and students on their experience using AI technologies.

6) Requires the working group, on or before January 1, 2026, to develop guidance for LEAs and charter schools on the safe use of AI in education that addresses all of the following:

    a) Academic integrity and plagiarism;

    b) Acceptable and unacceptable uses of AI for students and educators;

    c) Student and educator data privacy and data security;

    d) Parent and guardian access to information that students enter into AI systems; and

    e) Procurement of software that ensures the safety and privacy of students and educators, and the protection of their data.

7) Requires the working group, on or before July 1, 2026, to develop a model policy for LEAs and charter schools regarding the safe and effective use of AI in ways that benefit, and do not negatively impact, students and educators. Requires that this policy include all of the following topics:

    a) Academic integrity and plagiarism;

    b) Acceptable and unacceptable uses of AI for students and educators;

    c) Student and educator data privacy and data security;

    d) Parent and guardian access to student information;

    e) Procurement of software that ensures the safety and privacy of students and educators and their data;

    f) Effective use of AI to support, and avoid risk to, teaching and learning;

    g) Effective practices to support, and avoid risk to, educators and students;

    h) Strategies to ensure that AI does not exacerbate existing inequities in the education system; and

    i) Professional development strategies for educators on the use of AI.

8) Identify other ways in which the state can support educators in developing and sharing effective practices that minimize risk and maximize benefits to students and educators, including, but not limited to, establishing communities of practice on the use of AI in education.

9) On or before January 1, 2027, submit a report to the Legislature presenting the assessment and any findings or recommendations related to the assessment.

10) Requires the CDE to post on its website the guidance and the model policy.

11) Makes the meetings of the working group subject to the Bagley-Keene Open Meeting Act.

12) Dissolves the working group upon submission of the report.

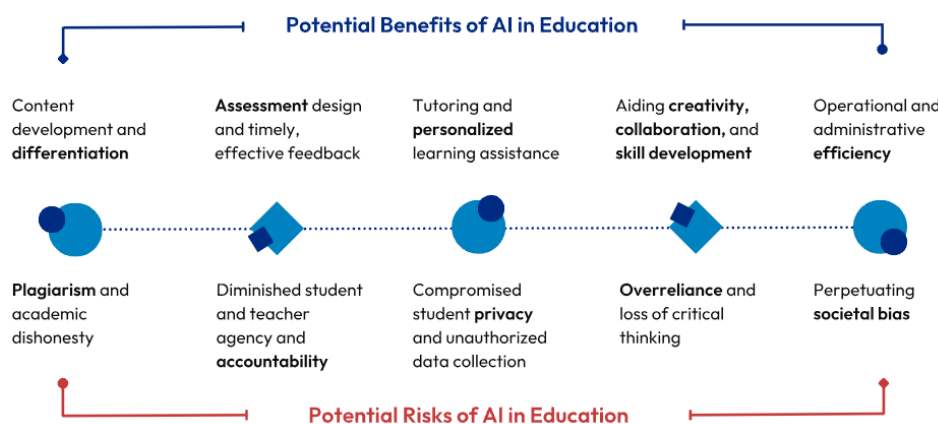13) Sunsets the provisions of the bill on January 1, 2031.

EXISTING LAW:

1) Requires the SPI to convene a computer science strategic implementation advisory panel to develop recommendations for a computer science strategic implementation plan, and requires the panel to submit recommendations for a strategic plan to the SBE by January 15, 2019.

2) Requires the plan to include, at a minimum, recommendations on all of the following:

   a) Broadening the pool of teachers to teach computer science;

   b) Defining computer science education principles that meet the needs of students in all grades; and

   c) Ensuring that all students have access to quality computer science courses.

3) Requires the Instructional Quality Commission (IQC) to consider developing and recommending to the SBE, on or before July 31, 2019, computer science content standards for kindergarten and grades 1 to 12, pursuant to recommendations developed by a group of computer science experts.

4) States that if a school district requires more than two courses in mathematics for graduation from high school, the district may award a student up to one mathematics course credit for successfully completing a "category C" approved computer science course. (EC 51225.35)

5) Requires the California State University (CSU), and requests the University of California (UC), to develop guidelines for high school computer science courses that may be approved for the purposes of recognition for admission. (EC 66205.5)

6) Through regulation, authorizes holders of credentials in mathematics, business, and Industrial and Technology Education (ITE), as well as holders of supplementary authorizations in computer science, to teach computer science. (California Code of Regulations, Title 5, Section 80005)

FISCAL EFFECT: According to the Senate Appropriations Committee, this bill could result in one-time General Fund costs in the high tens of thousands to low hundreds of thousands of dollars for the California Department of Education (CDE) to coordinate and convene the workgroup. This estimate assumes that the workgroup would consist of up to 20 members who would not receive compensation, and have three meetings. These costs would also cover CDE staffing to create and oversee the workgroup, facilitate meetings, and develop the report, and travel expenses for workgroup members.

COMMENTS:

Need for the bill. According to the author, "The use of generative artificial intelligence (GenAI) increased rapidly over the last year with the release of ChatGPT and other GenAI companies. While algorithms have been used in personalized student learning, voice assistants, and grammar correction programs, GenAI is quickly becoming a larger presence in the education space. The Pew Research Center recently reported that roughly one in five teenagers who are aware of ChatGPT, a popular GenAI, indicate they have utilized it in completing their schoolwork. Additionally, AI is increasingly being embraced as an educational topic of study. AI courses are included in computer science education, with the proportion of new computer science PhD Graduates who specialized in AI almost doubling since 2010. Due to the increasing use of GenAI programs, schools have been forced to engage with the emerging technology, encountering issues such as a lack of centralized teacher training on GenAI, unauthorized use by students to complete assignments, and concerns on algorithmic biases. Given the profound impact the use of AI on students and teachers can have, California must develop guardrails and guidelines for AI's use in education. SB 1288 establishes the space for needed experts to develop guardrails and guidelines for the use of AI in education."

Benefits and risks associated with AI in education. AI presents both risks and benefits for California schools. Benefits may include new curriculum, instruction, assessment, and administrative tools for educators, as well as new opportunities for individualized support for students. Risks are largely associated with the use or misuse of imperfect technology within inequitable contexts, which may compromise privacy, perpetuate bias, facilitate plagiarism, lead to poor quality instruction, exacerbate inequities, and threaten educator agency and stability.

Potential Benefits of AI in Education

Content development and **differentiation**

Assessment design and timely, effective feedback

Tutoring and **personalized** learning assistance

Aiding **creativity, collaboration,** and **skill development**

Operational and administrative **efficiency**

Plagiarism and academic dishonesty

Diminished student and teacher agency and **accountability**

Compromised student **privacy** and unauthorized data collection

Overreliance and loss of critical thinking

Perpetuating **societal bias**

Potential Risks of AI in Education

Need for policies and guidance on AI in education. Recognizing the powerful influence AI will likely have in education, numerous organizations have called for the development of policies and guidance around the use of AI in education. The U.S. Department of Education notes that: "Policies are urgently needed to implement the following:

1) Leverage automation to advance learning outcomes while protecting human decision making and judgment;

2) Interrogate the underlying data quality in AI models to ensure fair and unbiased pattern recognition and decision making in educational applications, based on accurate information appropriate to the pedagogical situation;

3) Enable examination of how particular AI technologies, as part of larger edtech or educational systems, may increase or undermine equity for students; and

4) Take steps to safeguard and advance equity, including providing for human checks and balances and limiting any AI systems and tools that undermine equity."

In 2023, TeachAI, in collaboration with Code.org, CoSN, Digital Promise, the European EdTech Alliance, James Larimore, and Policy Analysis for California Education (PACE), launched an AI Guidance for Schools Toolkit to help school systems meet the urgent need for guidance on the safe, effective, and responsible use of AI.

The AI Toolkit highlights seven key principles for educators to consider in developing guidance on AI and education for their staff and students:

1) **Purpose**: Use AI to help all students achieve educational goals;

2) **Compliance**: Reaffirm adherence to existing policies;

3) **Knowledge**: Promote AI literacy;

4) **Balance**: Realize the benefits of AI and address the risks;

5) **Integrity**: Advance academic integrity;

6) **Agency**: Maintain human decision-making when using AI; and

7) **Evaluation**: Regularly assess the impacts of AI.

What is the State's role, and where do we start? AI applications in education are developing with remarkable speed and with few guardrails. In comparison, state policy develops and is implemented at a glacial pace. In this dynamic environment – and in a local control policy environment- what is the appropriate state role, and what, if anything, should the state address first? ***The Committee may wish to consider the following framework*** for thinking about the state's role and priorities for engagement:

- Safety first. The AI Toolkit recommends that school systems start with guidance addressing immediate concerns such as data protection and academic integrity. State guidance around important safety topics such as student privacy in relation to state and federal law could be useful.

- Effective use. The AI Toolkit encourages a second stage focused on learning about effective use of AI in instruction, teacher support, and management and operations. The

state could make investments in peer learning systems such as communities of practice. Given the slow pace of state action, and the likelihood that practice innovations happen at the local level, supporting sharing between LEAs may be one of the more effective means of promoting effective practice.

- Improvement and transformation. The AI Toolkit recommends that over time schools continue to review and develop their policies, while providing ongoing support for staff and students to learn about AI so they can utilize it in ways to improve and transform the school system. The state needs a strong feedback mechanism to understand how schools are using AI and which state policies could support safe and effective use, as well as to support broader dissemination of best practices.

What will AI mean for the education workforce? AI may bring both benefits and risks to the education workforce.

AI may help improve teachers' practice by completing repetitive tasks like grading, lesson planning, scheduling, and routine paperwork, freeing up their time for direct instruction. Analysis by McKinsey and Company suggests that AI could help teachers reallocate 20% to 40% of their time to activities that support student learning.
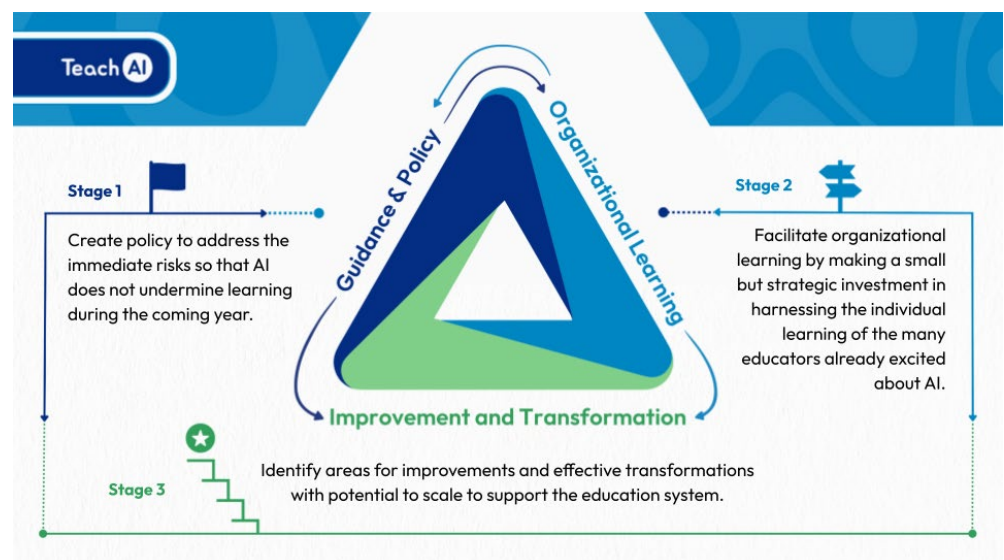
Research also indicates that teachers are concerned about the impact of AI on their profession (McGehee, 2023). Some fear that, in the drive to personalize instruction and optimize for efficiency, teachers, and their pedagogical skill and human connection with students, will be devalued and they will ultimately be replaced.

As the implications of AI on the teaching profession become clearer, teachers need opportunities to learn how to use AI and how to use it to support, rather than supplant, what only teachers can do. (Kleinman, 2023)

Arguments in support. State Superintendent of Public Instruction, Tony Thurmond, writes, "AI is increasingly being integrated into Californians' daily lives. While algorithms have been used in personalized student learning, voice assistants, and grammar correction programs for some time, generative AI (GenAI) is quickly becoming a larger presence in the education space. The use of Gen AI has increased rapidly over the last year with the release of ChatGPT and other GenAI products. This has had a direct impact on education with teachers and students exploring and applying GenAI to educational tasks. Due to increasing use of GenAI programs, schools have been forced to engage with the emerging technology and have encountered issues such as a

lack of centralized teacher training on GenAI, unauthorized use by students to complete assignments, and concerns of algorithmic biases.

The CDE published resources, considerations, and tips on the role of AI in California K-12 schools in fall 2023. While this is an important first step, there is still much to be done. Senate Bill 1288 convenes a work group to make recommendations for policies to address the use of AI in education – specifically, looking at student outcomes and ensuring that the use of AI in teaching and learning practices are not replacing our workforce. This legislation is a critical step in supporting California students to prepare for their futures."

Recommended Committee amendments. Staff recommends that this bill be amended as follows:

1) Add a definition of AI, to read: "'Artificial intelligence' means an engineered or machine-based system that varies in its level of autonomy and that can, for explicit or implicit objectives, infer, from the input it receives, how to generate outputs that can influence physical or virtual environments."

2) Remove the requirement that the working group be convened in consultation with the SBE.

3) Clarify the purposes of the working group, as developing guidance and a model policy.

4) Require that at least half of the working group be composed of current classroom teachers with knowledge of the use of AI in education.

5) Remove a requirement that the working group issue recommendations.

6) Require that the report be sent to the appropriate policy and fiscal committees of the Legislature.

7) Other clarifying and technical changes.

Related legislation. AB 2652 (Muratsuchi) of the 2023-24 Session would require the SPI to convene a workgroup related to AI in educational settings to develop guidance and a model policy for local educational agencies on the safe use of AI in education.

AB 2876 (Berman) of the 2023-24 Session would require the IQC to ensure that instructional materials that it recommends to the SBE for adoption after January 1, 2025, include media literacy content; to consider incorporating AI literacy content into the mathematics, science, and history-social science curriculum frameworks when those frameworks are next revised; and to ensure that the mathematics, science, and history-social science instructional materials that it recommends to the SBE for adoption after January 1, 2025, include AI literacy content.

SB 721 (Becker) of the 2023-24 Session would establish the California Interagency AI Working Group, to deliver a report, as specified, to the Legislature, regarding AI.

SB 1235 (Gonzalez) of the 2023-24 Session would require a public institution of higher education to establish the Artificial Intelligence and Deepfake Working Group, to evaluate and advise the Legislature and the public on the relevant issues and impacts of AI and deepfakes.

AB 1576 (Calderon) of the 2019-2020 Session would have required the Secretary of Government Operations to appoint participants to an AI working group on or before July 1, 2020, to evaluate the uses, risks, benefits, and legal implications associated with the development and deployment of AI by California-based businesses. This bill was held in the Senate Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

California Association of School Business Officials
California Federation of Teachers
California School Employees Association
EdVoice
Generation Up
Kira Learning
Los Angeles County Office of Education
Los Angeles Unified School District
Northern California Youth Policy Coalition
Outschool, Inc.
Perk Advocacy
Scaling Student Success
State Superintendent of Public Instruction Tony Thurmond
TechNet

Opposition

None on file

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