Date of Hearing:  April 3, 2024

ASSEMBLY COMMITTEE ON EDUCATION
Al Muratsuchi, Chair
AB 2652 (Muratsuchi) – As Introduced February 14, 2024

**[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 in its jurisdiction.]**

**SUBJECT**:  State Department of Education:  artificial intelligence working group

**SUMMARY**:  Requires the Superintendent of Public Instruction (SPI), in consultation with the State Board of Education (SBE), to convene a working group for the purpose of exploring how artificial intelligence (AI) and other forms of similarly advanced technology are currently being used in education, as specified.   Specifically, **this bill**:

1) Requires the SPI, on or before January 1, 2025, in consultation with the SBE, to convene a working group for the purpose of:

   a) Exploring how AI and other forms of similarly advanced technology are currently being used in education;

   b) Identifying how they may be used in the future; and

   c) Developing best practices to ensure that those technologies advance, rather than harm, educational quality, pupil critical thinking and writing skills, and the essential work of certificated and classified employees.

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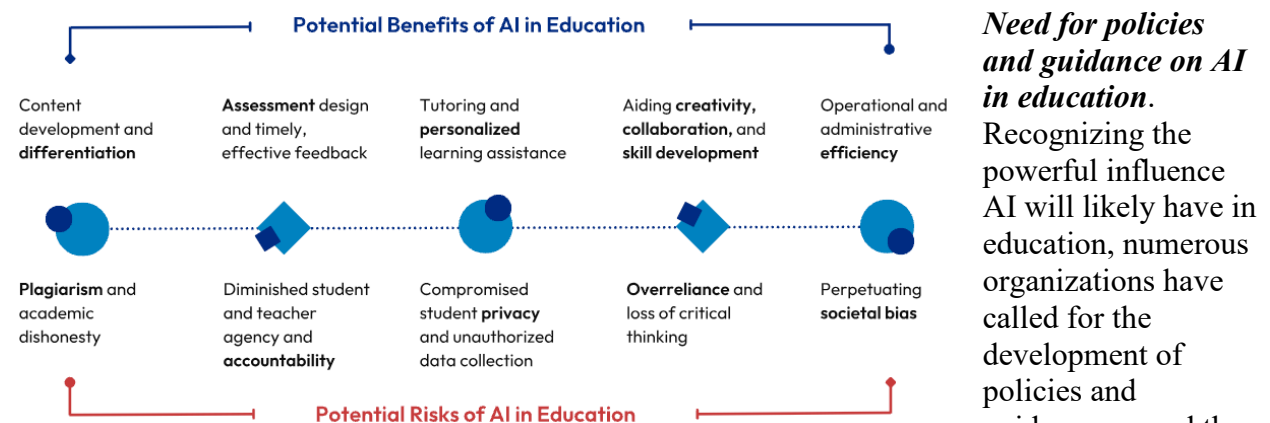
4) States that if a school district requires more than two courses in mathematics for graduation from high school, the district may award a student up to one mathematics course credit for successfully completing a "category C" approved computer science course. (EC 51225.35)

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**: Unknown

**COMMENTS**:

*Need for the bill*. According to the author, "Artificial intelligence has the potential to assist teachers and enhance quality of education. It also has the potential to enable plagiarism, reduce critical thinking skills and displace essential workers. AB 2652 directs the Superintendent of Public Instruction to convene a working group comprised of various stakeholders to thoughtfully address how schools can best integrate this new technology so that it works with us, not against us."

*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, and 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 artificial intelligence.

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 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 indicates that teachers recognize the role AI can play in their professional development (Xue, 2022).

But 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 more clear, 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.***  The California Federation of Teachers writes, "AI at its best holds the promise of allowing certificated and classified workers more time to focus on interacting with students and less time on lower priority tasks. For example, versions of this technology collect data inputs from teachers and organize it such that much less time is wasted collating documents or struggling with spreadsheets. More advanced AI can help teachers prepare lesson plans, develop appropriate and effective tests, and help personalize strategies to make the learning process more engaging for students.

While the time-saving potential of such technology is significant, so is the risk that it could someday be used to devalue, deskill, or even displace teachers. Any AI in education workgroup
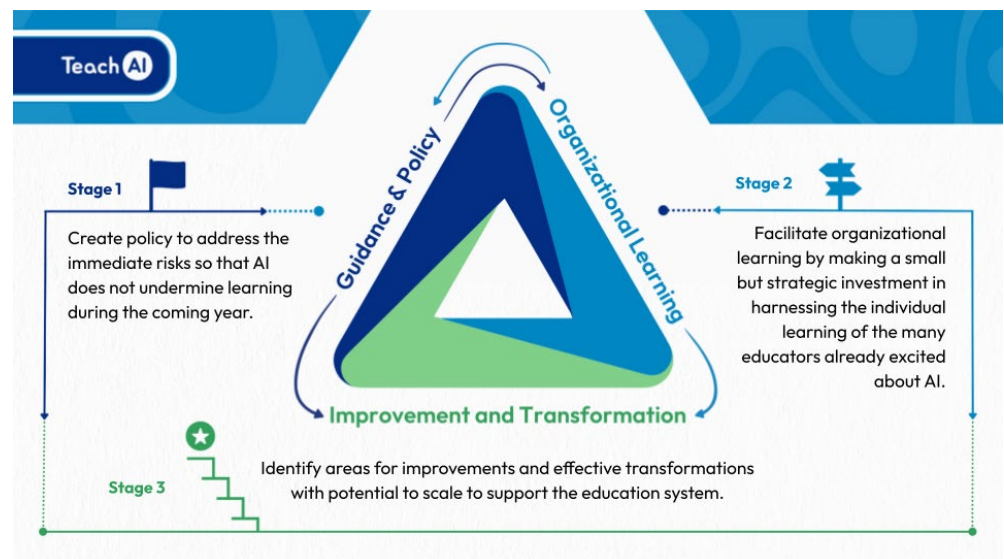
must adequately reflect our belief that teachers and classified workers are and always will be essential, they will always be essential in at least their current numbers, and if anything, we actually need far more of them, regardless of what future technological advances arrive.

We believe the primary question facing any AI in education workgroup should be how and in what contexts AI should be allowed to enter the classroom at all. Where it harms student critical thinking skills, where it removes teacher discretion from the equation, where student data privacy is not adequately protected, and where its introduction would exacerbate existing inequities throughout our education system, its use should be prohibited.

AI should also never be used to eliminate or devalue education worker jobs or applied as an excuse to allow educator and classified worker staffing numbers to fall even farther. We have even seen explicit evidence of AI tutors being developed as a response to wage increases won by education workers, confirming that for some working in AI research, the point of this technology is obviate the need for our members. In other words, this technology is already being used to retaliate against us—and intentionally replace us—for demanding something closer to a living wage. AI should never be used in this way, and any AI in education workgroup should be directed to develop recommendations enshrining this concept in law or some other form of enforced policy."

***Recommended Committee amendments.  Staff recommends that this bill be amended* to:**

1)  Add findings and declarations.

2)  Require the SPI, on or before January 1, 2025, in consultation with the SBE, to convene a working group for the purpose of:

    a)  Identifying safe and effective uses of AI in education settings;
    b)  Developing guidance on the safe use of AI in education ;
    c)  Developing a model policy for LEAs and charter schools regarding the safe and effective use of AI in ways that benefit, and do not harm, pupils and educators; and
    d)  Identifying other ways in which the state can support educators in developing and sharing effective practices involving AI that minimize risk and maximize benefits to pupils and educators.

2)  Specify the composition of the workgroup to include:
    a)  Current, credentialed teachers serving in elementary and secondary teaching positions;
    b)  Classified public school staff;
    c)  School site administrators;
    d)  School district or county office of education administrators;
    e)  University and community college faculty;
    f)  Representatives of private sector business or industry; and
    g)  Pupils enrolled in public school.

3)  Require that at least half of the workgroup be comprised of credentialed current classroom teachers with experience or expertise in artificial intelligence in public education.

4)  Require the Task Force to conduct the following activities:

a) Assess the current and future state of AI use in education, as specified;

b) Identify safe and effective uses of AI in education settings, as specified;

c) Solicit input from educators and students on their experience using these technologies;

d) Develop guidance for LEAs and charter schools on the safe use of AI in education which addresses, as specified;

e) Develop a model policy for LEAs and charter schools regarding the safe and effective use of artificial intelligence in ways that benefit, and do not harm, students and educators, as specified;

f) 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;

g) Conduct at least six public meetings to incorporate feedback from students, families, and relevant stakeholders; and

h) Submit a report to the appropriate policy and fiscal committees of the Legislature, the Legislative Analyst's Office, the SBE, and the Department of Finance, on the process and products of the task force in meeting the requirements of this section, and any related findings or recommendations.

5) Establish definitions for terms used in the Act, as specified.

6) Make implementation of the act contingent on an appropriation for its purposes.

***Related legislation.*** 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 state board 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 artificial intelligence 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 AFL-CIO
California Labor Federation, AFL-CIO
California School Employees Association
Los Angeles County Office of Education

**Opposition**

None on file

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