Date of Hearing: June 29, 2022

ASSEMBLY COMMITTEE ON EDUCATION
Patrick O'Donnell, Chair
SB 876 (Becker) – As Amended May 19, 2022

SENATE VOTE: 38-0

SUBJECT: Educational technology: Digital Education Equity Program: county offices of education

SUMMARY: Establishes the Digital Education Equity Program (DEEP), administered by the California Department of Education (CDE), in unison with the 58 county offices of education (COEs), to provide technical assistance (TA) and teacher professional development (PD) to local educational agencies (LEAs) on the implementation of educational technology as set forth in policies with the State Board of Education (SBE), upon appropriation of the Budget Act or another statute. Specifically, **this bill**:

1) Establishes the DEEP, administered by the CDE and contingent upon appropriation in the Budget Act or another statute.

2) Defines the following terms:

    a) "Educational technology" to mean technology-based materials, equipment, systems, and networks used for education.

    b) "Local educational agency" to mean a COE, school district, or charter school.

3) Requires the DEEP to provide the guidelines and funding to the 58 COEs to more effectively address educational needs with technology, including, but not limited to:

    a) PD for teachers, school administrators, certificated and classified staff;

    b) Promoting strategies and best practices for increasing the use of technology in classroom instruction;

    c) Digital resource selection and use for pupil instruction;

    d) Digital network infrastructure and recommended bandwidth for LEAs and homes;

    e) TA to LEAs in developing a support system to operate and education technology infrastructure, including improving pupil recordkeeping related to pupil instruction;

    f) Planning, coordination with, and support for local funding and implementation of federal, state, and local programs;

    g) Gaining access and using a variety of funding sources;

    h) TA and information to support access, planning, and the use of high-speed telecommunications networks.

i) Technology planning implementation assistance to rural and technologically underserved LEAs pupil groups;

j) Assistance in the use of online instruction to replace or supplement in-class instruction and to establish online and hybrid learning proficiency for teachers as requested by LEAs served by a COE; and

k) Helping to ensure that instructional technology is aligned to the state's academic content standards and incorporates related pupil learning assessment.

4) Requires the CDE, in consultation with the SBE, to authorize grants to each of the 58 COEs to fund educational technology services as needed by the LEAs served by the COE applying for a grant. Authorizes grant funding to be awarded for subsequent three-year terms and budget allocations to be adjusted based on this funding.

5) Requires grant funding to be awarded based on the extent that a COE provides a clear plan that documents how it plans to address the following:

a) Knowledge of technology to improve teaching and learning;

b) Technology planning and technical assistance;

c) Proven success in providing PD in technology and curriculum integration;

d) An ability to work collaboratively with LEAs and businesses in the region;

e) The ability to deliver services specified in DEEP to all LEAs in the region;

f) The support of the LEAs for the COE in the region;

g) Specified strategies for recording and addressing the needs of LEAs and technologically underserved pupil groups;

h) A plan for evaluating the enactment of, access to, use of, and regional impact of, the services provided by the COE;

i) The capability to assist in the use of online instruction when necessary;

j) A commitment to ensure that instruction using technology is aligned with the State's academic content standards and incorporates related student learning assessments; and

k) The capacity to assist LEAs in developing a local education technology plan.

6) Requires the COE to submit an annual report to the CDE for approval that describes the services provided, the persons served, and the funds expended for related services provided in the prior year in order to receive funding for the second and subsequent years of a grant awarded for DEEP. Requires LEAs within the COE to have the opportunity to comment on the report.

7) Requires the CDE to establish an Office of Educational Technology and Digital Equity with adequate staff to the administer the DEEP. Requires the duties of this office to include, but not be limited to the following:

    a) Providing for the statewide coordination, planning, and evaluation of education technology programs and resources;

    b) Providing adequate staff to provide ongoing support, direction, and coordination of the regional and statewide educational technology services described in the DEEP;

    c) Advancing the use of technology in the curriculum and in the administration of elementary and secondary schools;

    d) Providing ongoing planning, funding, and policy information to the directors for planning distribution to LEAs served by the region; and

    e) Coordinating educational technology planning, policies, and information with other divisions of the CDE to include, but not be limited to, curriculum, assessment, technical support, budget, and PD.

8) Authorizes the Superintendent of Public Instruction (SPI) to provide centralized statewide educational technology services that address local needs. Authorizes the CDE to contract with a COE to provide specific educational technology services that may include, but not be limited to any or all of the following:

    a) Review electronic learning resources including, but limited to software, online resources, and video, for alignment with the academic content standards by the SBE. Requires the results of the reviews to be available online as needed for public educators in the State;

    b) PD focused on digital school leadership for educational administrators in the following areas:

        i) Data-driven analytics;

        ii) Equity;

        iii) Accessibility;

        iv) Integrating technology into:

            1) Curriculum;

            2) Technology planning;

            3) PD needs of staff;

            4) Digital citizenship and privacy; and

            5) Financial planning for technology.

9) Access for schools to training, support, and other resources for technical professionals in the State.

10) Requires the SPI to submit an annual written report to the SBE and the Legislature on the services provided, persons served, and funds expended for the DEEP. Requires a report to be submitted to the Legislature.

EXISTING LAW:

1) Establishes the K-12 High-Speed Network (K-12 HSN), which provides high-speed, high-bandwidth internet connectivy to the public school system for the purposes of enriching pupil experiences and improving pupil academic perfomance. (Education Code (EC) 11800)

2) Authorizes the SPI to award educational technology competitive grants based on a school district's regular average daily attendance (ADA). (EC 33132)

3) Required the stated one-time funds in the education omnibus measure, AB 104 (2015), for school districts to prioritize, among other things, PD, instructional materials, and technology infrastructure. (EC 41207.41)

4) Appropriated funds from the General Fund and the Federal Trust Fund to the SPI for COVID-19 relief and includes LEAs that provide distance learning in the 2020-2021 school year. (EC 43521)

5) Requires LEAs offering in-person instruction for the 2020-21 school year to include all prioritized pupil groups. Prioritized pupil groups include all of the following:

    a) Pupils at risk for abuse, neglect, or exploitation;

    b) Homeless pupils;

    c) Foster youth;

    d) English learners; and

    e) Pupils without access to a computing device, software, and high-speed internet necessary to participate in online instruction, as determined by the LEA. (EC 43521)

FISCAL EFFECT: According to the Senate Committee on Appropriations, while the provisions of the bill would be contingent upon an appropriation, the establishment of the Digital Education Equity Program could result in ongoing Proposition General Fund cost pressure of approximately $18 million each year to fund it. The bill would also result in General Fund cost pressure of about $3 million each year to establish the Office of Educational Technology and maintain a minimum of three full-time equivalent staff to plan, coordinate, and support the provisions of this bill.

COMMENTS:

Provisions of the bill. This bill 1) establishes an educational technology program, the DEEP, within the CDE, to collaborate with all 58 COEs, 2) requires the CDE to issue 3 year grants to each of the 58 COEs to address educational needs with technology, and 3) establishes the Office of Educational Technology and Digital Equity at the CDE, to administer the DEEP and provide for centralized statewide educational technology services.

Need for the bill. According to the author, "Last year I authored SB 767 to create the *Digital Education Equity Program* (DEEP), which this committee passed on a bi-partisan vote. I'm raising this issue again in SB 876 because educational technology is essential for our school districts in the Digital Age.

California educators must have equitable access to the professional development and technical assistance that make use of this technology is possible and equitable. This need is not going away. Educators in many schools lack access to sufficient information and professional development to cost-effectively plan for and implement current and emerging technology to support instruction. Teachers and administrators need access to up-to-date professional learning experiences to effectively integrate the use of technology into instruction. Without a coordinated State and regional focus on policy, programs, and funding, many districts do not have equal access to the resources needed to select, access, and implement technology in classrooms effectively and to provide students access to these resources from homes. SB 876 is a step toward closing the digital divide in California schools."

Digital divide and COVID-19. On March 4, 2020, Governor Newsom declared a State of Emergency in response to the global outbreak of COVID-19. Subsequently, on March 13, 2020, Governor Newsom issued Executive Order (EO) N-26-20, which authorized the physical closure of schools to addresss the novel COVID-19 virus. While schools were given the option to close temporarily, the EO asserted that the State fund schools in order to continue providing high-quality instruction through distance learning and independent study, paying employees, and providing meals to students. Distance learning gave the opportunity for teachers to provide students instruction in different locations from each other to adhere to social distancing health requirements to prevent spread of the COVID-19 virus.

The pandemic upended educational instruction as most LEAs in California opted to shut down, continue instruction through distance learning, and scrambled to provide laptops and connectivity services to all of its students. While many households in California already had internet connectivity prior to the onset of the pandemic, disadvantaged student populations such as low income, Black, and Latino households were less likely to have reliable access to the internet and a digital device. According to a 2022 Public Policy Institute of California (PPIC) *The Digital Divide in Education*, the trend continues although Black and Latino households increased in access to a digital device, access to reliable internet connection remained stagnant from 2020 to present day. Increases in reliable access to internet service moved at a slower rate, from 71% to 75%, which reflects the challenges for households in remote areas where internet infrastructure and low-income households in crowded urban areas that could not afford reliable internet connection. The PPIC also noted that households with school children who had full digital access, which includes both a computing device and an internet connection for educational purposes, increased from 60% in spring of 2020, but stalled at 71% in spring of 2021. Although schools fully operated in-person instruction in the 2021-22 school year, the

COVID-19 pandemic emphasized our reliance and need for technology as distance learning continued for some students in the form of independent study.

Technology in classrooms. Whether being used to supplement teaching a course, e-mail communications, or assigning homework, technological connectivity intensified the necessity for it by the pandemic, and is inevitably essential for its presence moving forward.

According to a 2019 Learning Policy Institute article, the ways in which technology is utilized in the classroom can positively affect academic outcomes such as "advancing learning for high school students that are at the greatest risk of failing a class or dropping out of school when it's interactive rather than one-way, used to support discussions and projects with peers and teachers, and serves as a tool for creation rather than passive consumption. When technologies try to replace teachers, research consistently finds little benefit."

The CDE and technology management. The CDE maintains Information and Technology Branch within the CDE. It primarily serves as an internal department that manages the information technologies for CDE employees and handles the educational data relating to assessments and accountability of schools and students. The Branch is not equipped to support the technical support needs of individual LEAs.

Previously, the state supported a robust Educational Technology program, which included the California Technology Assistance Project (CTAP) and Statewide Education Technology Services (SETS). The CTAP provided a regional network of technical assistance, coordination, and services to schools and school districts in education technology throughout in 11 regions throughout the State. The SETS provided was a centralized program that addressed locally defined needs through 4 projects including an online resource list aligned with state content standards, online resource providing training and support for school information technology staff, resources to support school administrators for school management and data-driven decision making, and access to online assessments and student proficiency assessment data. In 2012, the CTAP and SETS were subsumed into the Local Control Funding Formula. This bill seeks to reestablish similar functions and goals of the CTAP and SETS programs.

County offices of education. According to data from the CDE, California enrolled over six million students in the 2020-21 school year. There are 10,545 public schools, 1,293 charter schools, and 1,029 school districts in the State. For each of the 58 counties in California, there is a COE that serves multiple schools and districts within the region. Each COE is administered by a superintendent and is governed by an elected board. COEs provide a variety services for school districts that might otherwise be difficult or expensive to do on their own such as operating concurrent enrollment at community colleges, developing professional development for staff, or developing parent education programs. Some COEs manage statewide projects such as Kern County, which manages the Fiscal Crisis and Management Assistance Team (FCMAT), who work to help LEAs identify, prevent, and resolve fiscal, operational, and management challenges. Generally, COEs provide direct services to students, which can include special education programs, court schools for juvenile offenders, and Career Technical Education programs. By law, COEs have oversight over the districts and charter schools that they serve, which include approving each district's annual budget, monitoring the quality of school facilities and teachers, and approving of each district's Local Control Accountability Plan. ***The Committee may wish to consider*** that there is a student enrollment in each county that varies widely as evidenced by *Figures 1* and *2 (below),* which illustrates the five largest and five smallest

counties by student enrollment in California. The enrollment ranges from Alpine County with 61 students to Los Angeles County with over one million students in the 2021-22 school year.

Counties with the Highest Student Enrollment

County	Total Enrollment 2021-22 school year
San Bernardino	398,648
Riverside	420,687
Orange	448,729
San Diego	481,102
Los Angeles	1,336,558

(Data Quest, CDE) (Figure 1)

Counties with the Lowest Student Enrollment

County	Total Enrollment 2021-22 school year
Mono	1,702
Trinity	1,519
Modoc	1,382
Sierra	394
Alpine	61

(Data Quest, CDE) (Figure 2)

Single District Counties and Student Enrollment

County	Total Enrollment 2021-22 school year
Alpine	61
Amador	4,038
Del Norte	4,195
Mariposa	1,845
Plumas	2,086
San Francisco	56,379
Sierra	394

(Data Quest, CDE)(Figure 3)

Seven out of the 58 counties have a single district within their jurisdiction, which include Alpine, Amador, Del Norte, Mariposa, Plumas, San Francisco, and Sierra districts, as seen in *Figure 3*. These single district COEs typically function like an extension of the school district office. Since there is a close district-county relationship between the COE and the district, the CDE undertakes oversight duties on behalf of the seven single districts.

The Committee may wish to consider whether the current process in the bill to determine grant award amounts for the DEEP will provide equitable grants across all of the county offices of education when taking into account the number LEAs served and the capacity of the COE.

One example of a ransomware attack on a California LEA. A rural northern California COE became a victim of a ransomware attack in early May of 2022. The attack caused disruptions in e-mail access, financial software, *and internet capabilities were hindered which they would normally use in order to administer standardized testing during a critical time of assessing students' academic progress.* The disruptions lasted for a month and affected a COE that enrolled 6,268 students in the 2021-22 school year. This example highlights a growing trend in similar attacks of and disruption to public school technology infrastructure, and the need for additional support for LEAs to prevent this type of attack in the future.

According to the Federal Bureau of Investigations (FBI), ransomware is a type of malicious software, or malware, which prevents a user from accessing computer files, systems or networks and demands the user pay a ransom for their return. Once a user unknowingly downloads the ransomware onto a computer by, for example, opening an e-mail attachment, the malware is then loaded into the user's computer and locks access to data and files stored in the system.

The FBI was contacted by the COE and their cybersecurity team aided in the situation. The CDE provided further technical assistance to ensure that COE and its affiliated school districts were operating and able to administer standardized testing. As previously mentioned, although the CDE houses a technology services division, it is an internal division that serves to ensure effective technical services and infrastructure for the CDE and generally does not deploy cybersecurity services to LEAs across the state.

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

- Change the implementation date of when the CDE will be authorized to provide grants for the DEEP program from January 31, 2023, to January 31, 2024.

- Require the DEEP grant award process to include minimum grant amounts for small and rural counties, and to consider each county's need for the grant by demonstrating the number of students served, the characteristics of the students including the number of unduplicated and disadvantaged pupils, and description of the current education technology landscape within the county.

- Remove the reference to the local educational technology plan in proposed EC 51871 (b)(11).

- Require the professional development related to digital citizenship be aligned with the Model School Library standards.

Arguments in support. The Santa Cruz COE writes, "For the past 40 years, technology and online instruction have become an increasingly important resource to support teaching and learning opportunities for all students in school and at home. However, since the sunset of the California Technology Assistance Project (CTAP) in 2008, a coordinated network of county office of education technology staff has been absent throughout the state. In addition, even with the growing emphasis and dependence on technology over the years, there is still a significant lack of professional development and assistance to enable teachers and school administrators to effectively use technology to support instruction – especially in rural and underserved urban communities. Consequently, these challenges and other inequities have been exacerbated by the pandemic, which prompted surges in the need for digital devices, connectivity to homes, training, and technical support to enable effective online distance learning instruction."

Related legislation. SB 767 (Becker) of the 2021-22 Session would make various significant changes to educational technology in schools, including the creation of a new education technology grant program; a requirement that state agencies develop criteria for school technology plans and local educational agencies adopt technology plans; and would establish a new office at the CDE to administer the grant program, prepare a state technology plan, provide centralized statewide educational technology services and perform other duties. This bill was held in the Assembly Appropriations Committee.

AB 1176 (E. Garcia) of the 2021-22 Session would establish the California Connect Fund in the State Treasury. The bill, until January 1, 2031, would require the California Public Utilities Commission (CPUC) to develop, implement, and administer the California Connect Program to ensure that high-speed broadband service is available to every household in the state at affordable rates.

AB 1560 (Daly) of the 2021-22 Session would require the SPI to collect information about pupils' access to computing devices and residential broadband service, and would authorize the Department of Technology to enter into a sponsored service agreement on behalf of a LEA with a broadband service provider for providing free or reduced-cost residential broadband service to eligible pupils.

SB 732 (Bates) of the 2021-22 Session would require the CDE to develop and implement a program for COEs, school districts, and charter schools to issue no-cash value vouchers to be distributed to households with eligible pupils, to be used during the 2021–22 fiscal year to assist those households with the impacts of distant or remote learning due to the COVID-19 pandemic. The bill would establish the Rural Broadband Infrastructure Fund as a continuously appropriated fund in the State Treasury in order to provide high-quality broadband service to rural areas that are unserved.

AB 82 (Committee on Budget) Chapter 14, Statutes of 2020, in pertinent part, allowed the CPUC to provide matching funds through the California Advanced Services Fund (CASF) to broadband providers as they pursue funding through the federal Rural Digital Opportunity Fund.

AB 570 (Aguiar-Curry) of the 2019-20 Session would have made numerous changes to CASF, to encourage deployment of broadband technology to all areas of the state. This bill was held on the Senate Floor.

SB 1130 (L. Gonzalez) of the 2019-20 Session would have made numerous changes to CASF, to encourage deployment of broadband technology to all areas of the state. This bill was held on the Assembly Floor.

ACR 268 (Thurmond) Resolution Chapter 221, Statutes of 2018, resolved that the Legislature considers education technology of the highest priority and that the Legislature convene a state level summit conference to address improvements in education technology and related topics.

AB 1665 (E. Garcia), Chapter 851, Statutes of 2017, revised the goal of the CASF to approve funding by December 31, 2022 for infrastructure projects that will provide broadband access to no less than 98% of California households in each consortia region, as identified by the PUC, among other provisions.

AB 1761 (Sweeney), Chapter 801, Statutes of 1997, required the CDE to establish the California Technology Assistance Project of regional consortia to administer a regionalized network of support to schools and school districts. Required the SBE to issue grants to LEAs to serve as lead agencies in each region.

REGISTERED SUPPORT / OPPOSITION:

Support

California Emerging Technology Fund
California Federation of Teachers AFL-CIO
California It in Education
Media Alliance
Napa County Office of Education
Office of The Riverside County Superintendent of Schools
Santa Cruz County Office of Education

Opposition

None on file

Analysis Prepared by: Jocelyn Twilla / ED. / (916) 319-2087, Marguerite Ries / ED. / (916) 319-2087