



Post-COVID School Wellness Matter

10th Annual School Wellness Summit
Tuesday, October 3, 2023
Solvang, CA

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Session Objectives

- Review background context for local school wellness policy (LSWP) legislation as a starting place for what’s next
- Interpret LSWP outcomes data and challenges
 - Impacts of local school wellness policy on school food environments & child health
 - Findings of LSWP quality evaluations
 - Challenges that remain
- Next Steps
 - Sources of district/school data
 - Models to promote LSWP engagement
 - Ideas for promoting district re-engagement in LSWP



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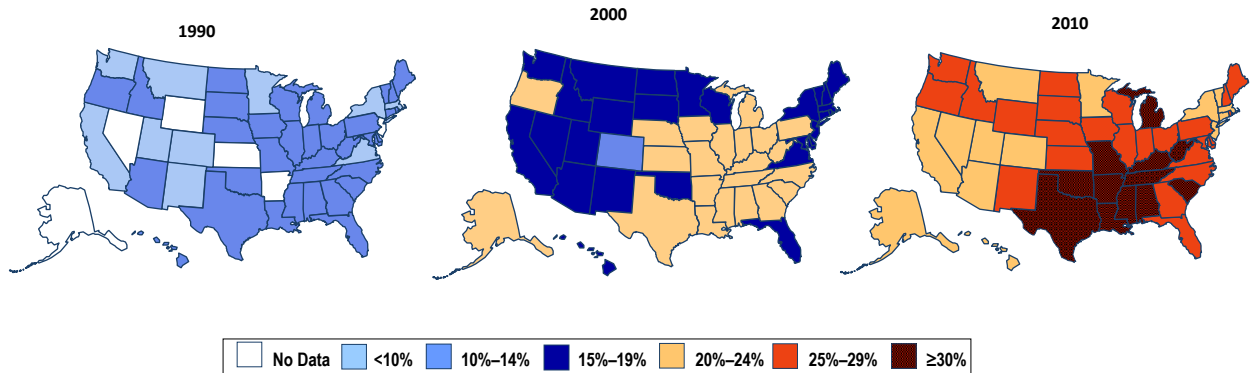
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Background – Context of LSWP Mandates

Obesity Trends* Among U.S. Adults BRFSS, 1990, 2000, 2010

(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)



Source: Historical: Maps of adult obesity by State and Territory, 1985 – 2010. Adult obesity Prevalence Maps. Centers for Disease Control and Prevention <http://www.cdc.gov/obesity/data/prevalence-maps.html>

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Background: “Child Obesity Epidemic”

- The number of children who are obese tripled since 1980 (now > 16%)
 - Prevalence of Overweight, Obesity, and Severe Obesity Among Children and Adolescents Aged 2 – 19 Years.: Centers for Disease Control and Prevention. <https://www.cdc.gov/nchs/data/hestat/obesity-child-17-18/obesity-child.htm>
- Rates of childhood diabetes also dramatically increased
- Widening of health disparities
 - 1 in 3 children born > 2000 will develop diabetes in their lifetime.
 - 1 in 2 among children of color

Narayan KM, et al. Lifetime risk for Diabetes Mellitus in the United States. JAMA 2003;290:1884-1890.
- Mid 2000's: All living U.S. Surgeon's General Summit on Obesity – “Threat to National Security” & “America Listen!”
 - <https://www.youtube.com/watch?v=4uOvKpZlJ1w>

“The youth of today are the first generation predicted to have a lower life expectancy than their parents.”

Olshansky, S. Jay et al. “A Potential Decline in Life Expectancy in the United States in the 21st Century.” *The New England Journal of Medicine* 352.11 (2005): 1138–1145

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Background: Local School Wellness Policy Mandates

Each public-school district that participates in federal school meal programs to must adopt a LSWP

Child Nutrition & WIC
Reauthorization Act 2004

Healthy, Hunger-Free Kids Act
(HHFKA) 2010

USDA Final Rule 2016

2004 Act:

LSWP must be in place by July 2007 including:

- Goals for nutrition, nutrition education & physical activity & other school-based activities
- Nutrition guidelines for foods and beverages available during the school day
- Ensure stakeholder participation
- A plan for periodic compliance assessment
- Public disclosure of policy

HHFKA:

- Clarified USDA to sets standards for foods & beverages served and sold on campus during the school day
- Req. policies to limit food and beverage marketing to only those that meet the USDA "Smart Snacks" guidelines
- Expanded documentation of SWP leadership, public involvement and communication, triennial evaluation, policy updates & public reporting.
- Established Farm to School Program under USDA to support higher nutrition standards.

Final Rule mandates policy updates to comply with the HHFKA requirements by June 30, 2017.

Source: Local School Wellness Policy, CA Dept. of Education <https://www.cde.ca.gov/ls/nu/he/wellness.asp>

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Impact of LSWP Mandates pre-COVID

- Significant improvements to the nutritional value of school meals and competitive food and beverage offerings as well as student purchasing of these items at school.

Mansfield JL, Savaiano DA. Effect of school wellness policies and the Healthy, Hunger-Free Kids Act on food-consumption behaviors of students, 2006–2016: a systematic review. *Nutrition Reviews*. 2017;75(7):533-55214.

Cohen J, Schwartz MB. Documented Success and Future Potential of the Healthy, Hunger-Free Kids Act. *Journal of the Academy of Nutrition and Dietetics*. 2020;120(3):359-362.

- USDA school meal study found school meal participants “consumed lunches and breakfasts of higher nutritional quality, respectively, than their nonparticipating peers.”

School Nutrition and Meal Cost Study. Food and Nutrition Service. US Department of Agriculture. October 2021 <https://www.fns.usda.gov/school-nutrition-and-meal-cost-study>

Note: Impact on child obesity difficult to assess due to multifactor origins of obesity



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Impact of COVID-Related School Closures

- **↑ Child obesity rates during COVID school closures after holding steady for many years**
 - *“Persons aged 2–19 years in all BMI categories except underweight experienced significant increases in their rate of BMI change during the pandemic.”*
 - *Longitudinal Trends in Body Mass Index Before and During the COVID-19 Pandemic. MMWR. Centers for Disease Control. September 17, 2021/70(37):1278-1283. <https://www.cdc.gov/mmwr/volumes/70/wr/mm7037a3.htm>*
 - *Indicates that LSWP and healthier school meals may have curbed childhood obesity in previous years*
 - *Healthier School Lunches May Have Curbed Childhood Obesity. Education Week. June 16, 2023. <https://www.edweek.org/leadership/healthier-school-lunches-may-have-curbed-childhood-obesity-new-study-finds/2023/06>*
- **By 2022 Child poverty more than doubled from 5.2% to 12.4% according to a recent report by the U.S. Census Bureau**
 - **↑ rates for all racial-ethnic groups with large increases for Hispanic, Black and Native Americans**
 - *U.S. Census Bureau. Poverty in the U.S: 2022. September 12, 2023. <https://www.census.gov/library/publications/2023/demo/p60-280.html>*

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LSWP Challenges

- LSWP evaluations show:
 - *Inconsistent policy quality persists*
 - *High adoption of model policies (nearly verbatim)*
 - *Trend of low district-level engagement in policy development process*
- LSWP is not the only child health issue school must manage with tight resources
- Rates of child food insecurity, obesity and chronic disease risk are still too high!
- Rates of child/family food insecurity and health disparities are still too high!

Childhood Obesity Facts. Centers for Disease Control and Prevention. May 2022. <https://www.cdc.gov/obesity/data/childhood.html>

Key Statistics & Graphics. Food Security in the U.S. Economic Research Service. U.S. Department of Agriculture. June 2023. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/>



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Ideas to ↑ District Engagement in LSWP Development



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Identify Local Pressing Problems that Relate to LSWP

All of the following can be linked with LSWP initiatives

- **Learning**
 - ✓ links with eating breakfast, food quality and physical activity...
- **Absenteeism**
 - ✓ school breakfast increases attendance...
- **Physical Health**
 - ✓ diet quality/allergies/special needs and physical activity...
- **Climate Emergencies**
 - ✓ heat emergencies/hydration & water access, school closures...
- **Sustainability**
 - ✓ local food/farm to school, composting/waste management, Safe Routes to School...

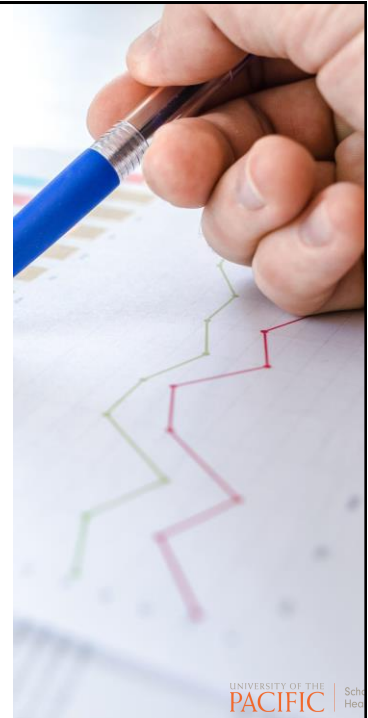
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Embrace Your Data to Support your Local Priorities

Important sources of public local district data

- Ed-Data Education Data Partnership (CDE/EdSource/FCMAT)
 - <https://www.cde.ca.gov/ds/ad/>
 - <https://www.ed-data.org/>
- California Healthy Kids Survey
 - <https://www.wested.org/project/california-healthy-kids-survey-chks/>
- Fitnessgram
 - <https://www.cde.ca.gov/ta/tg/pf/>
 - <https://www.ed-data.org/>

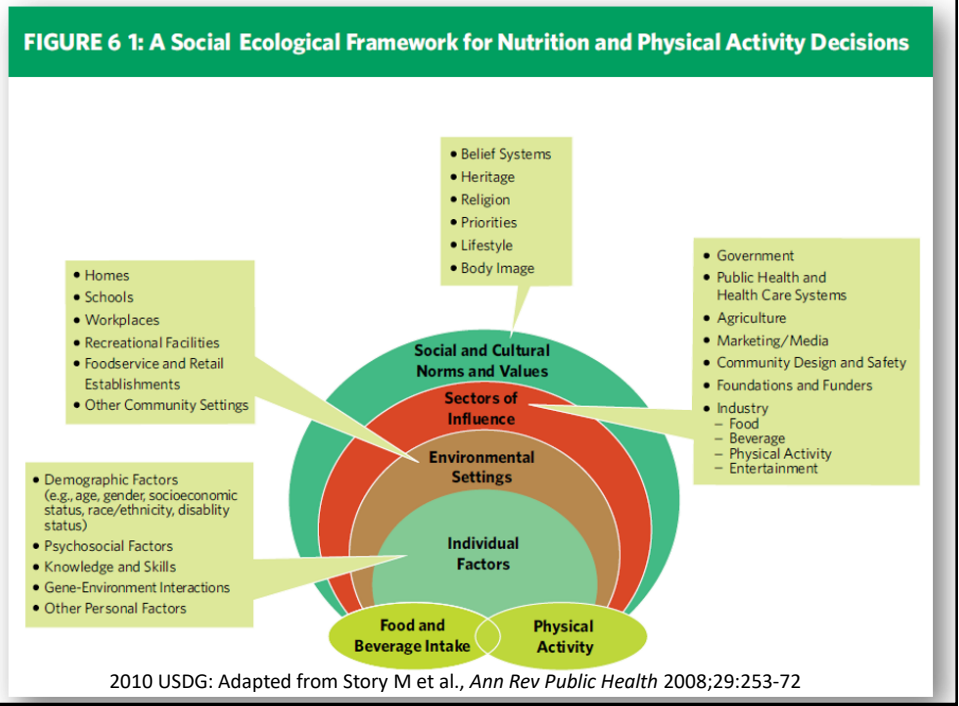


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↑ Engagement with Your Community

Emphasize:

- 1) Social Determinants of Health
- 2) Local priority needs



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Rally Support by Aligning LSWP with Education Frameworks

Whole School, Whole Community, Whole Child (WSCC) Model



<https://www.cdc.gov/healthyschools/wsc/index.htm>

WSCC Components

- Physical education and physical activity
- Nutrition environment and services
- Health education
- Health services
- Counseling, psychological, and social services
- Employee wellness
- Social and emotional school climate
- Physical environment
- Family engagement
- Community involvement

Categories

- Supporting healthy student behaviors
- Supporting school health services
- Supporting safe and positive school environments
- Supporting the engagement of family and community

Michael SL, Merlo CL, Basch CE, Wentzel KR, Wechsler H. Critical connections: health and academics. J Sch Health.2015; 85: 740-758

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Align LSWP Priorities with Funding Priorities through WSCC

Whole School, Whole Community, Whole Child (WSCC) Model

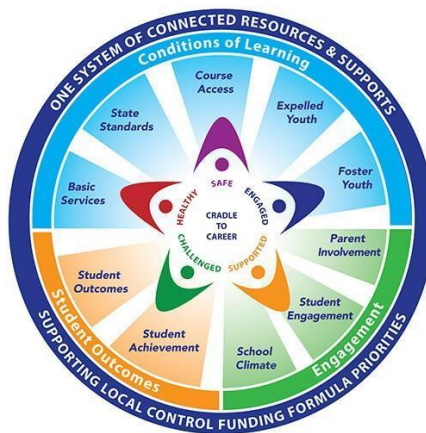
Local Priorities



<https://www.cdc.gov/healthyschools/wsc/index.htm>

Local Control Funding Formula Priorities/ Whole Child Resource Map


California Department of Education
<https://www.cde.ca.gov/eo/in/lcff1sys-resources.asp>



Local Control Accountability Plan (LCAP)

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Ideas to Broaden District-Level LSWP Engagement

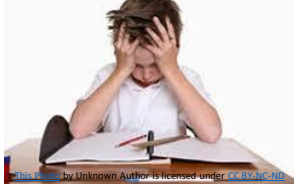
“A Good Solution Solves Multiple Problems”

Larry Cohen, Founder & Executive Director
Prevention Institute

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Food Insecurity Impacts Learning

(↓ Physical & Mental Health)



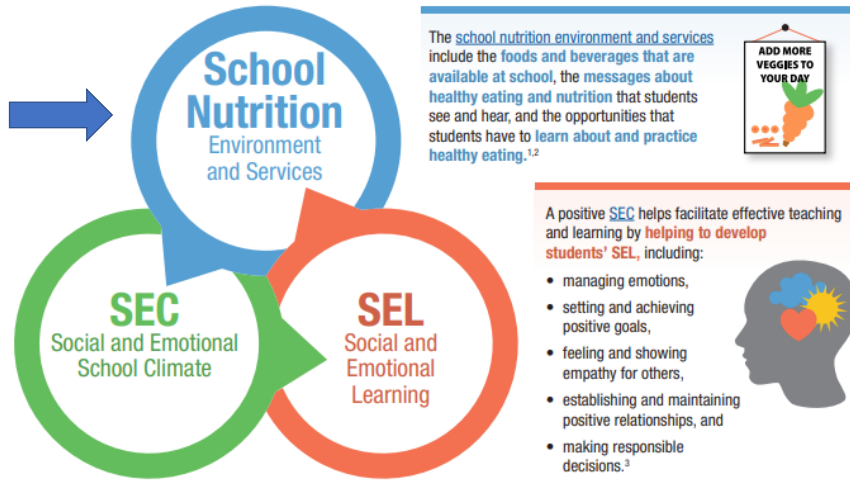
- **Mental, substance use disorder health care use increased among children and youth in food insecure households**
 - Ye M, et al. Associations between food insecurity and assistance with asthma and symptomology burden among children in a safety-net practice. Presented at: American Thoracic Society International Conference; May 19-24, 2023; Washington, D.C.
<https://consumer.healthday.com/physician-s-briefing-insecurity-2662326682.html>
- **Food Insecurity associated with higher odds of asthma and wheezing during exercise among children**
 - Ye M, et al. Associations between food insecurity and assistance with asthma and symptomology burden among children in a safety-net practice. Presented at: American Thoracic Society International Conference; May 19-24, 2023; Washington, D.C.
<https://www.healio.com/news/pulmonology/20230720/food-insecurity-raises-odds-for-asthma-wheezing-with-exercise-in-children>
- **Higher ultra-processed food consumption is associated with depressive symptoms and lower brain volume in the areas of reward processes and conflict monitoring**
 - Contreras-Rodriguez O, et al. Consumption of ultra-processed foods is associated with depression, mesocorticolimbic volume, and inflammation. *J Affect Disord.* 2023;335:340-348. <https://www.sciencedirect.com/science/article/pii/S0165032723006365>

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School Nutrition Policies and Practices Can Support the Social and Emotional Climate and Learning

The [Whole School, Whole Community, Whole Child](#) framework shows how multiple aspects of the school environment support students' health, well-being, and academic success. This brief describes connections between the school nutrition environment and services, the social and emotional climate (SEC) in school, and activities that support students' social and emotional learning (SEL).



• https://www.cdc.gov/healthyschools/nutrition/pdf/321123-A_FS_SchoolNutrition.pdf

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How School Food Impacts Social & Emotional Climate



The SEC includes the social factors that can affect an individual's **emotional well-being and behavior, and social and emotional development.**

A positive SEC helps create **safe and supportive learning environments** that can impact student engagement in:

- school activities,
- relationships with other students, staff, family, and community, and
- academic performance.

School nutrition policies and practices can affect the overall SEC. For example:

- Providing adequate seat time for meals gives students the opportunity to socialize and connect with their peers.
- Encouraging teachers to eat meals with students can help reinforce healthy eating behaviors and strengthen relationships with students.
- Communicating to parents, teachers, and staff about how to access school meal programs and the benefits of these programs can promote equity.²
- Keeping private which students receive free or reduced-price meals or have meal debt can help eliminate stigma associated with participation in school meal programs. This can help create a safe school environment that discourages bullying or embarrassment from singling students out.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

• https://www.cdc.gov/healthyschools/nutrition/pdf/321123-A_FS_SchoolNutrition.pdf

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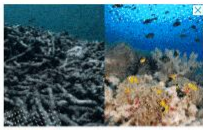
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← ↻ 📄 <https://time.com/6313822/earth-outside-safe-operating-space-for-humanity-study-warns/>

☰ TIME

SCIENCE • CLIMATE CHANGE

Earth Is Mostly Outside Its 'Safe Operating Space For Humanity,' Study Warns

BY SETH BORENSTEIN / AP | SEPTEMBER 13, 2023 3:45 PM EDT

Earth is exceeding its "safe operating space for humanity" in six of nine key measurements of its health, and two of the remaining three are headed in the wrong direction, a new study said.

<https://time.com/6313822/earth-outside-safe-operating-space-for-humanity-study-warns/>

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High Rates of Climate Anxiety in Young People

A 2021 report, published in the journal *Lancet Planetary Health* surveyed >10,000 young people (ages 16 – 25) across 10 countries found:

- *Nearly 60% of young people approached said they felt very worried or extremely worried.*
 - *More than 45% of those questioned said feelings about the climate affected their daily lives.*
 - *Three-quarters of them said they thought the future was frightening. Over half (56%) say they think humanity is doomed.*
- ✓ **Climate education tied to taking positive actions reduces anxiety**
 - ✓ **School food environments can both positively impact student health and take positive actions toward improving environmental sustainability**

Hickman C. et al. Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey. *Lancet Planetary Health*. 2021;5(12):e863-e873. [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(21\)00278-3/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(21)00278-3/fulltext)


Majority of US Adults Believe Climate Change is Most Important Issue Today Feb. 2020 <https://www.apa.org/news/press/releases/2020/02/climate-change>


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Climate Change Strategies – Can Engage Broader Groups in Health Issues

Which part(s) can your community address?

Environmental
Sustainability
Focus






MITIGATION

Efforts to reduce or prevent emission of heat-trapping gases.

Example:
Transition toward renewable energy, reduce deforestation etc.



ADAPTATION

Action that helps cope with the effects of climate change.


Example:
New barriers to protect against rising sea-levels.

Health
Focus

Source: What's the difference between climate change mitigation and adaptation? World Wildlife Fund. <https://www.worldwildlife.org/stories/what-s-the-difference-between-climate-change-mitigation-and-adaptation>

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Climate Adaptation - Health Example: Hydration & Water Access on Campus

Extreme heat days are increasing – how are you managing?

- Water access across campuses essential for adequate hydration
- Recent study shows a school drinking water promotion and access program improved water consumption and weight status
 - Effectiveness of a School Drinking Water Promotion and Access Program for Overweight Prevention. Pediatrics. 2023;152(3):e2022060021. <https://pubmed.ncbi.nlm.nih.gov/37545466/>
- Water breaks are ESSENTIAL during heat waves

- Would expanded LSWP language improve water access and hydration in your district?
- Would LSWP PE/PA language about timing of outside activities and access to water be beneficial for climate adaptation?

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Is Hydration & Water Access on Your Campus Adequate



Source: Effective Access to Drinking Water in Schools: Nutrition Policy Institute. Research Brief. April 202.

<https://ucanr.edu/sites/NewNutritionPolicyInstitute/files/348566.pdf>

Water in Schools Best Practice Resources:

- Grummon, A., Hampton, K.E., Oliva, A., Brindis, C.D., Patel A.I. Water Works: A Guide to Improving Access to and Consumption of Water in Schools to Improve Health and Support Learning. (2014). <http://waterinschools.org/pdfs/WaterWorksGuide2014.pdf>
- Increase Access to Drinking Water in Schools. Centers for Disease Control. April 2021. https://www.cdc.gov/healthyschools/features/water_access.htm



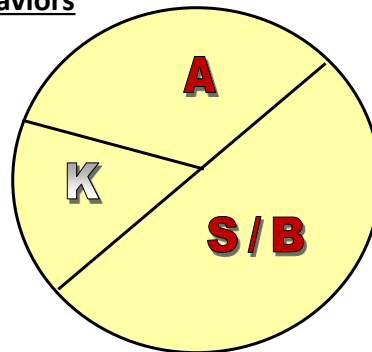
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Include CA Standards-Based Nutrition Education

Emphasis on development of health skills and behaviors

Which are “skilled-based”?

- Essential Concepts
- Analyzing Influences
- Accessing Valid Information
- Interpersonal Communication
- Decision Making
- Goal Setting
- Practicing Health Enhancing Behaviors
- Health Promotion



K = Knowledge **A = Attitudes** **S/B = Skills/Behaviors**

- California Health Education. Orange County Department of Education <https://californiahealtheducation.org/Pages/Home.aspx>
- CA Healthy Kids Resource Center. <https://www.californiahealthykids.net/home>



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Climate Mitigation - Sustainability Farm to School Opportunity

- **↑ national trend in adoption of F2S strategies**
 - 42% of USDA F2S Census respondents in 2013 to 72% in 2019
 - USDA Farm to School Census and Comprehensive Review. 2021. <https://www.fns.usda.gov/cfs/farm-school-census-and-comprehensive-review>
- **Co-benefits from local food procurement on:**
 - *health and educational outcomes,*
 - *local agricultural economies, and*
 - *potential for reduced food processing and transportation to lower the carbon footprint of school meals*



Bobronnikov E, Boyle M, Grosz M, et al. Farm to School Literature Review. Prepared by Abt Associates, Contract No. AG-3198-B-16-0015. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2021. <https://www.fns.usda.gov/cfs/farm-school-census-and-comprehensive-review>

Chang KM, Hess JJ, Balbus JM, et al. Ancillary health effects of climate mitigation scenarios as drivers of policy uptake: a review of air quality, transportation and diet co-benefits modeling studies. Environ Res Lett. 2017;12(11).

Prescott MP, Cleary R, Bonanno A, Costanigro M, Jablonski BBR, Long AB. Farm to School Activities and Student Outcomes: A Systematic Review. Advances in nutrition (Bethesda, Md.). 2020;11(2):357-374.

U.N. Climate Warning Also Comes with Clear Steps to Cut Emissions. Time. July 4, 2023. <https://time.com/6312381/un-climate-warning-offers-solutions/>

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Farm to School Approach Works

3-pronged Evidence-Based Approach promoted and funded by USDA
Encompasses a range of strategies to:

1. **↑ access** to fresh food through school meals
2. activities that **↑ consumption** of these nutritious foods through classroom food and agriculture education
3. **hands-on participation** in school gardens



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- Research Shows Farm to School Works. Food and Nutrition Services. U.S. Department of Agriculture <https://www.fns.usda.gov/f2s/im-new-farm-school>

- About Farm to School. National Farm to School Network. <https://www.farmtoschool.org/about/what-is-farm-to-school>

- Farm to School. CA Department of Education. <https://www.cde.ca.gov/ls/nu/he/farmtoschool.asp>



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“An effective school health program can be one of the single most cost-effective investments a nation can make to simultaneously improve education and health.”

- Health promoting schools. World Health Organization

https://www.who.int/health-topics/health-promoting-schools#tab=tab_2

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