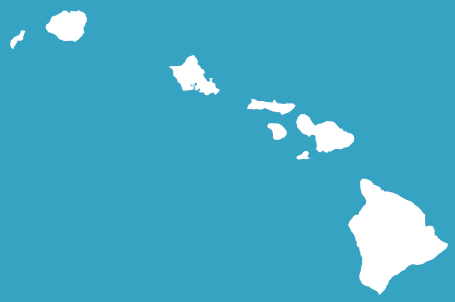
2022 Hawai‘i School Health Profiles Highlights Report



Hawai‘i State Department of Education
June 2024

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Learn more:

- Hawai‘i State Department of Education (HIDOE) - https://www.hawaiipublicschools.org
- School Health Profiles Survey - https://www.cdc.gov/healthyyouth/data/profiles

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ABOUT THE SCHOOL HEALTH PROFILES SURVEY

Purpose of this Report

The purpose of this report is to provide information on the current implementation of practices that support students' health in Hawai'i's public secondary schools and highlight professional development needs as expressed by the survey participants. This report includes selected results from the 2022 School Health Profiles (Profiles) survey in the State of Hawai'i. When used in conjunction with the Youth Risk Behavior Survey (YRBS) results and additional tools and data sources, these results may be used to describe practices, promote program strengths, and identify areas of focus to inform planning and actions that strengthen and improve school-based health efforts across the state. These results may also be used by community partners to support the collective efforts to improve students' health literacy, skills, and outcomes.

Introduction

As part of Cooperative Agreement PS18-1807 with the Centers for Disease Control and Prevention (CDC), the Hawai'i State Department of Education (HIDOE) administers the YRBS and the Profiles. The HIDOE has participated in the Profiles since 1998. Weighted data for the principal and lead health education surveys has been available since 2006. In Hawai'i, the Profiles is conducted biennially in the spring semester on even-numbered years in secondary schools.

During the 2020 Profiles administration, schools rapidly adapted to the school building closures and implemented distance learning due to the COVID-19 pandemic. To help reduce any burden on schools, the CDC extended the survey administration through the fall semester of 2020.

The Profiles assists state and local education and health agencies in assessing school health policies and practices, including:

- Characteristics of school health education requirements and content;
- Physical education and physical activity;
- Practices related to bullying and sexual harassment;
- School health policies related to tobacco-use prevention and nutrition;
- School-based health services;
- Family engagement and community involvement; and
- School health coordination.

The CDC developed the Profiles questionnaires in collaboration with representatives of state, local, and territorial departments of health and education.

Sampling

In 2022, the HIDOE conducted the Profiles as a census survey that included all public secondary HIDOE and charter schools containing at least one of grades 6 through 12. Elementary schools with grade 6 as the highest grade level were excluded from the sample. The sample included a total of 122 public secondary schools, which included sub-site samples of 90 HIDOE schools and 32 charter schools.

Data Collection and Analysis

For each school that was sampled, two self-administered questionnaires were used to collect data – one for the school principal and one for the lead health education teacher (the person most knowledgeable about health education at the school). The two computer-scannable questionnaire booklets were mailed to 122 public secondary schools. The 2022 questionnaires are available at https://www.cdc.gov/healthyyouth/data/profiles/questionnaires.htm

- **Among all public secondary schools**, one or both questionnaires were received from 93% of eligible sampled schools. Usable questionnaires were received from principals in 89% of schools and from lead health education teachers in 89% of schools.
- **Among HIDOE schools**, one or both questionnaires were received from 96% of eligible sampled schools. Usable questionnaires were received from principals in 92% of schools and from lead health education teachers in 92% of schools.
- **Among charter schools**, one or both questionnaires were received from 84% of eligible sampled schools. Usable questionnaires were received from principals in 81% of schools and from lead health education teachers in 78% of schools.

The response rates for the statewide sample and all sub-site samples were greater than or equal to 70%. Therefore, the statewide results are weighted and representative of all Hawai‘i public secondary schools containing at least one of grades 6 through 12 in Hawai‘i. The results are also weighted and representative of the sub-site samples: HIDOE and charter schools.

The CDC analyzed the results from all Hawai‘i public schools in 2020 and 2022 for statistically significant differences, which were determined based on t-test analysis ($p < 0.05$).

The CDC provided the nationwide estimates. To calculate these estimates, data from regular public secondary schools were combined across all participating states plus the District of Columbia, including those without representative data, and state-level final weights were aggregated. (CDC, 2024)

Table 1. Total number and response rate of participating public HIDOE schools and charter schools.

	Principal Survey	Lead Health Education Teacher Survey
HIDOE (Non-Charter) Schools (90 eligible schools)	83 surveys 92% response rate	83 surveys 92% response rate
Charter Schools (32 eligible schools)	26 surveys 81% response rate	25 surveys 78% response rate
TOTAL (122 eligible schools)	**109 surveys** **89% response rate**	**108 surveys** **89% response rate**

Limitations

Several limitations of Profiles should be noted:

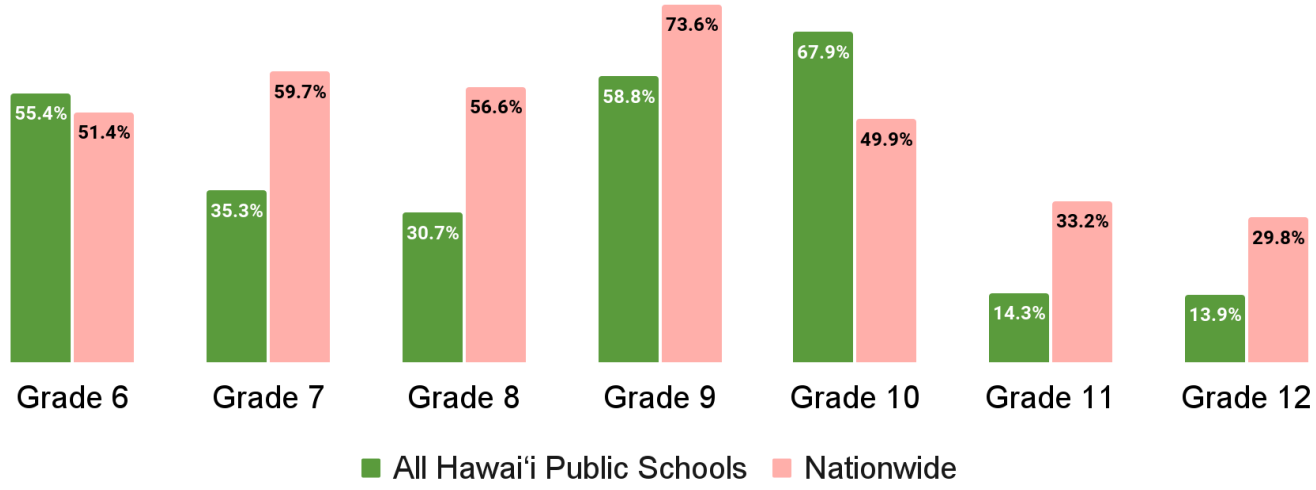
1. The Profiles results apply only to public secondary schools as no private schools were included in the sample;
2. Because the data were combined across middle schools and high schools for the majority of questions, differences in policies and practices between the two levels might be masked (e.g., no statewide health education course requirements for middle school promotion; 0.5 health education credit requirement for high school graduation);
3. Because the data were combined across HIDOE schools and charter schools for all questions (noted in the data tables as "All Hawai'i Public Schools"), differences in policies and practices between the HIDOE schools and charter schools might be masked (e.g., per the Hawai'i State Board of Education's (BOE) annual report to the 2022 Legislature on charter schools, BOE Policy 103-5 Sexual Health Education is not applicable to charter schools);
4. The data were self-reported by school principals and lead health education teachers and might be subject to bias toward the reporting of more positive policies and practices; and
5. The Profiles results do not provide an in-depth assessment of all elements of school health. (CDC, 2019)

2022 SCHOOL HEALTH PROFILES RESULTS

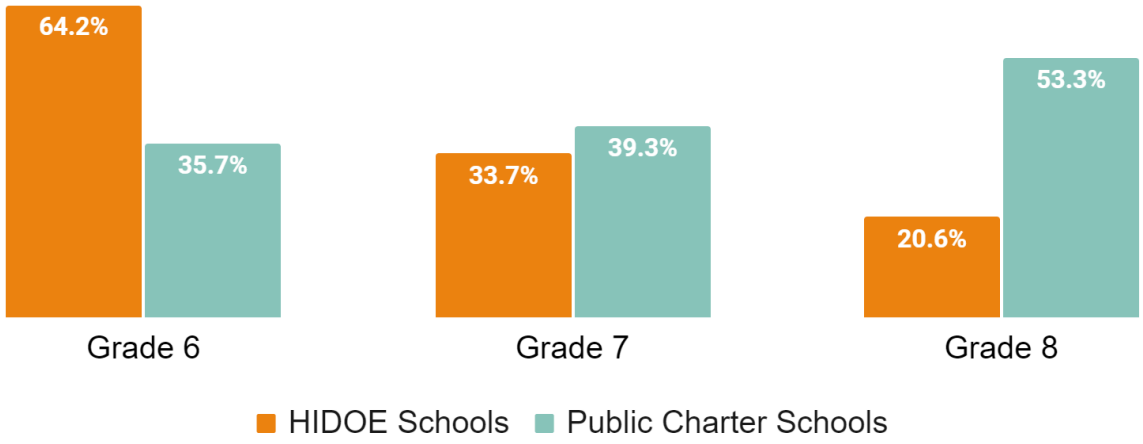
Health Education

Overview of Health Education

Overall, Hawai'i's public secondary schools provided less required health education courses than the US.
Source: Table 3 (2022 Profiles)

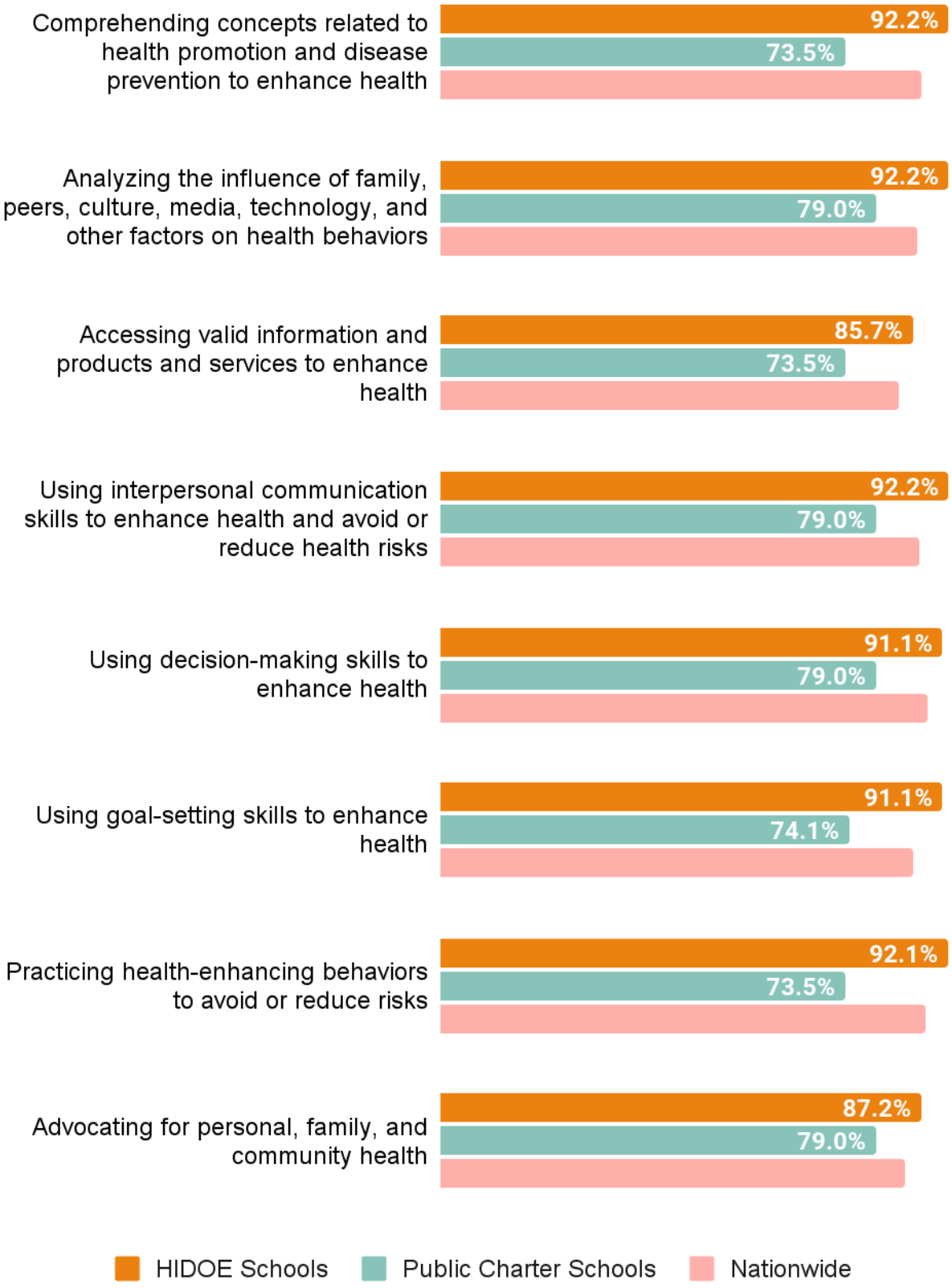


In Hawai'i, public charter schools provided more required health education courses in middle school than HIDOE schools.
Source: Table 3 (2022 Profiles)

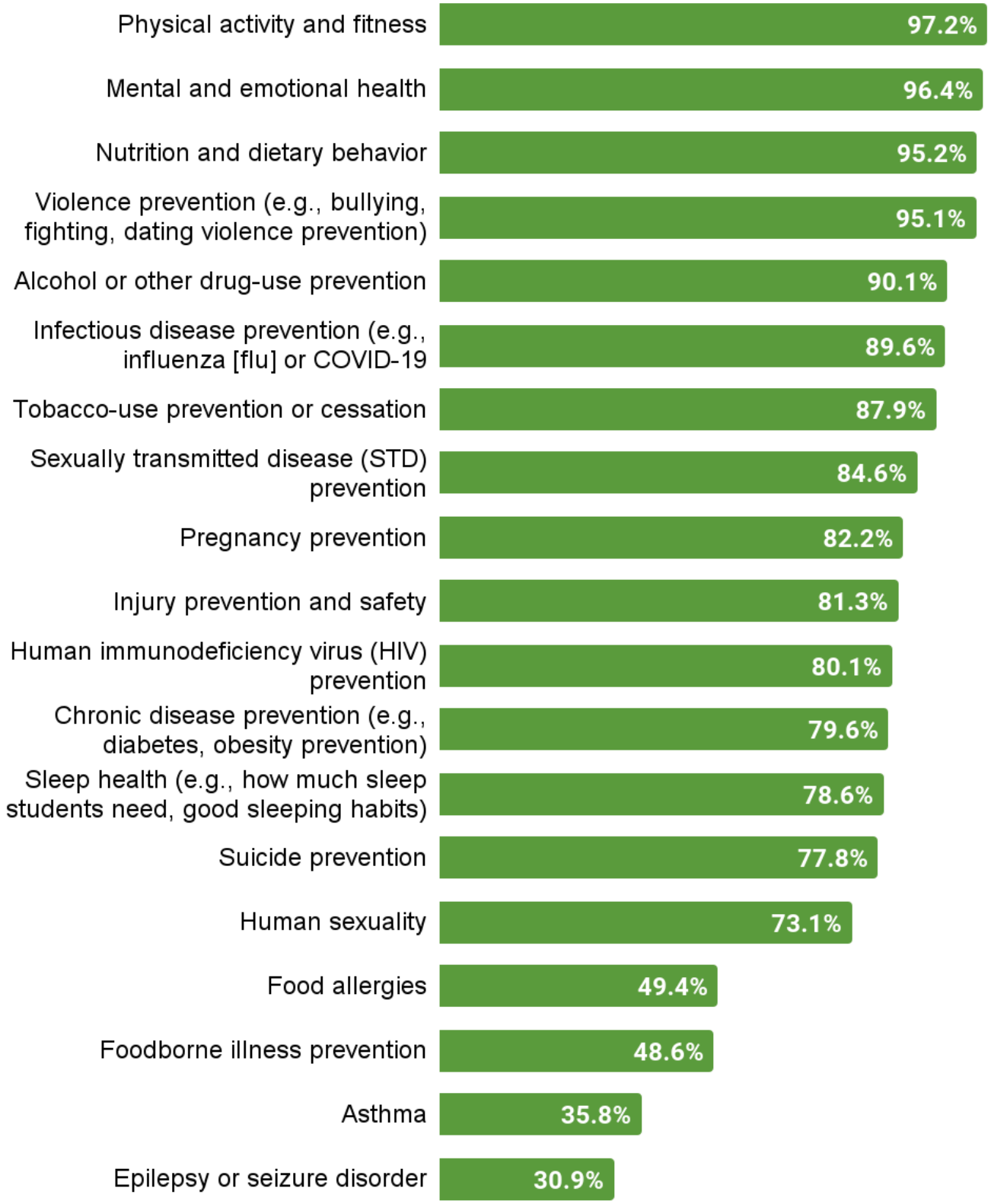


Hawai'i's public secondary schools' health education curriculum addresses skills aligned to the National Health Education Standards.

Source: Table 5 (2022 Profiles)

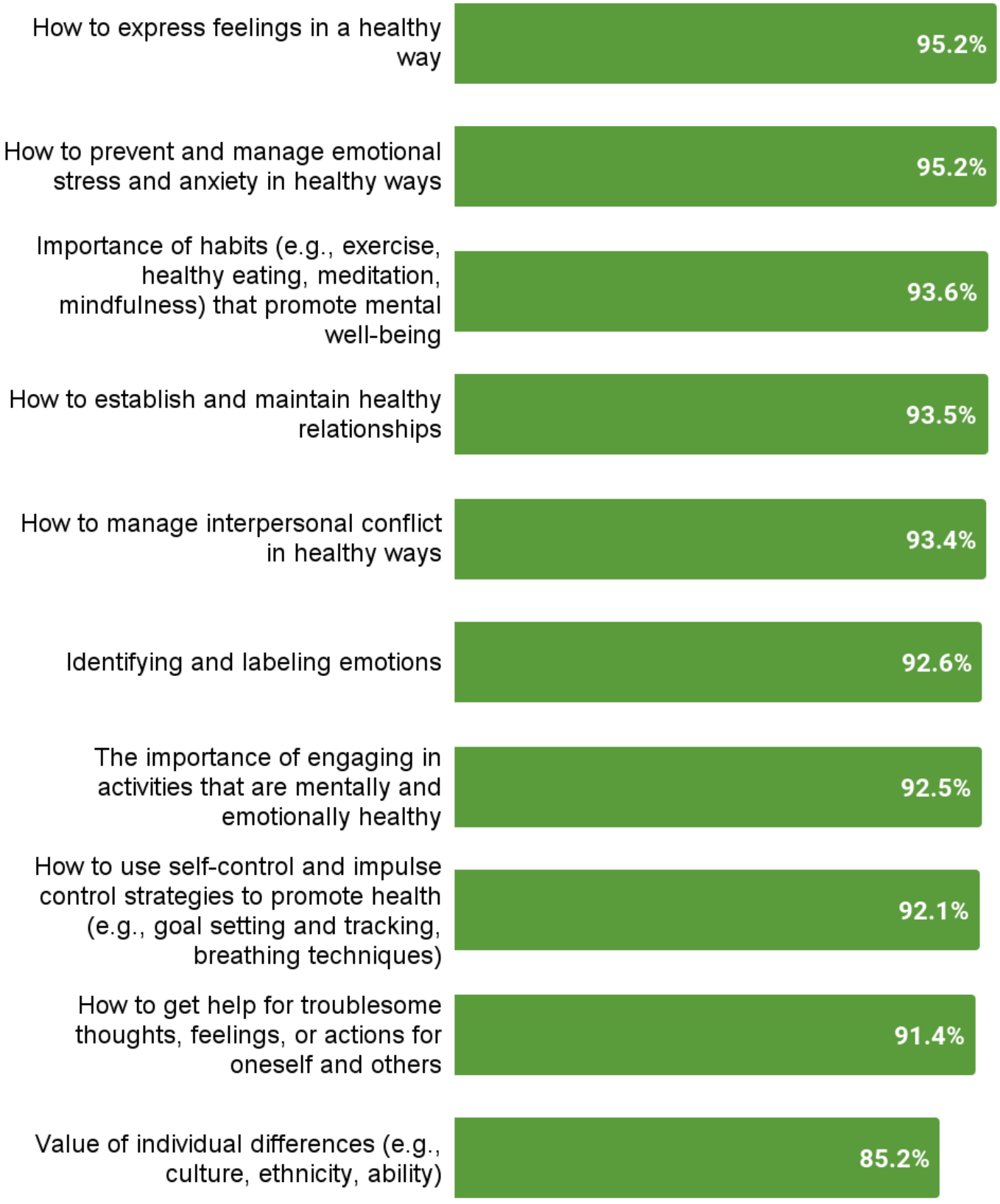


Required health education courses in Hawai'i's public secondary schools included a variety of health topics.
Source: Table 8 (2022 Profiles)

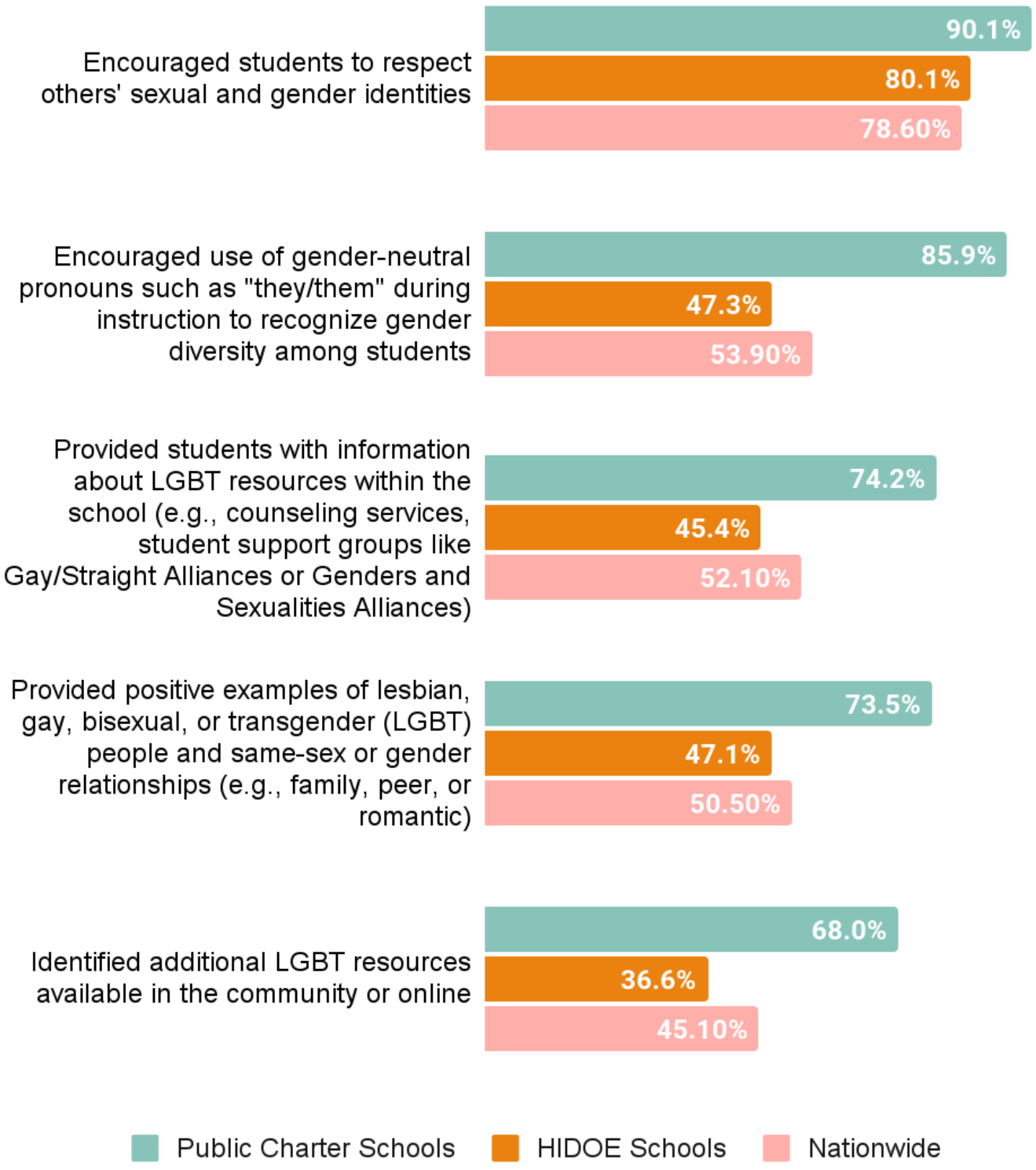


Within required health education, most of Hawai‘i’s public secondary schools taught a variety of mental and emotional health topics.

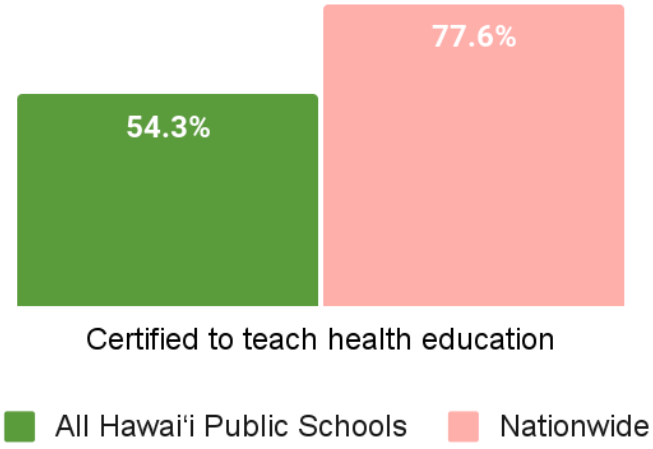
Source: Table 9 (2022 Profiles)



Within required health education at Hawai'i's secondary schools, public charter schools implemented more inclusive practices when providing sexual health education than HIDOE schools.
Source: Table 21 (2022 Profiles)



Hawai'i's public secondary schools had less lead health education teachers who are certified to teach health education than the US.
Source: Table 31 (2022 Profiles)



These are the top professional development interests of lead health education teachers in Hawai'i's public secondary schools.
Source: Tables 27-29 (2022 Profiles)

Teaching Methods	Health-Related Topics	Sexual Health Education Topics
1. How to support lesbian, gay, bisexual, and transgender (LGBT) students (e.g., bystander intervention skills, implementing safe spaces, use of inclusive language, providing students with information about LGBT resources within the school) (75.3%) 2. Teaching skills for behavior change (69.0%) 3. Encouraging family or community involvement (67.4%) 4. Using interactive teaching methods (e.g., role plays, cooperative group activities) (65.6%) 5. Assessing student performance in health education (64.8%)	1. Mental and emotional health (73.8%) 2. Suicide prevention (73.1%) 3. Violence prevention (e.g., bullying, fighting, dating violence prevention) (68.9%) 4. Human sexuality (66.1%) 5. Sleep health (e.g., how much sleep students need, good sleep habits) (63.5%)	1. Identifying appropriate modifications to the sexual health curriculum to meet the needs of all students (67.6%) 2. Engaging parents in sexual health education (65.3%) 3. Using a variety of effective instructional strategies to deliver sexual health education (65.2%) 4. Building student skills in human immunodeficiency virus (HIV), other sexually transmitted diseases (STD), and pregnancy prevention (64.4%) 5. Aligning lessons and materials with the district scope and sequence for sexual health education (63.4%)

Required Health Education Courses

A **required health education course** is defined on the Profiles questionnaire as one that students must take for graduation or promotion from school and includes instruction about health topics such as injuries and violence, alcohol and other drug use, tobacco use, nutrition, HIV infection, and physical activity.

The results in Tables 2 and 3 show the extent to which health education courses are required for students in grades 6 through 12 and the importance of these requirements. School health education could be an effective means to reduce and prevent serious health problems in the United States, including cardiovascular disease, cancer, motor vehicle crashes, homicide, and suicide.[1] The Institute of Medicine has recommended that schools require a one-semester health education course at the secondary school level;[1] however, the benefits of a health education curriculum increase when students receive at least three consecutive years of a quality health curriculum.[2] The importance of school health education is also supported by the establishment of *Healthy People 2030* Adolescent Health research objective (AH-R06): increase the proportion of schools requiring students to take at least two health education courses from grade 6 to 12.[3] (CDC, 2021)

Table 2. Percentage of secondary schools in which students took required health education courses in grades 6 through 12.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Required 2 or more health education courses	**39.5**	**30.4▼**	25.3	43.4	48.4

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

[1] Institute of Medicine. *Schools and Health: Our Nation's Investment*. Washington, DC: National Academy Press; 1997.

[2] Lohrmann DK, Wooley SF. Comprehensive school health education. In: Marx E, Wooley SF, eds. *Health Is Academic: A Guide to Coordinated School Health Programs*. New York, NY: Teachers College Press; 1998, pp. 43-66.

[3] U.S. Department of Health and Human Services. *Healthy People 2030.* Office of Disease Prevention and Health Promotion. June 2021. Available at: https://health.gov/healthypeople/objectives-and-data/browse-objectives/schools/increase-proportion-schools-requiring-students-take-least-2-health-education-courses-grade-6-12- ah-r06.

Table 3. Percentage of secondary schools that taught a required health education course in each of the following grades (among schools with students in that grade).

	All Hawai'i Public Schools*		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Grade 6	44.3	55.4	64.2	35.7	51.4
Grade 7	46.0	35.3	33.7	39.3	59.7
Grade 8	23.6	30.7	20.6	53.3	56.6
Grade 9	59.0	58.8	51.3	78.6	73.6
Grade 10	62.7	67.9	71.0	59.6	49.9
Grade 11	8.8	14.3	10.1	26.3	33.2
Grade 12	5.9	13.9	9.7	26.3	29.8

**Analysis for statistically significant differences between 2020 and 2022 for all Hawai'i public schools is not available.*

Lead Health Education Survey

Materials for Health Education

Health education materials relate to instruction about health topics such as injuries and violence, alcohol and other drug use, tobacco use, nutrition, HIV infection, and physical activity. The results in Tables 4 and 5 include instruction that is not required and instruction that occurs outside of health education courses.

According to the Joint Committee on National Health Education Standards, quality health education is guided by access and equity principles that call for clear curriculum direction, including goals, objectives, and expected outcomes; a written curriculum; clear scope and sequence of instruction for health education content; and plans for age-appropriate student assessment.[1] Moreover, describing the essential knowledge and skills necessary for health education instruction can help to improve teacher instructional competency. Key instructional skills for creating safe and inclusive learning spaces, planning and implementing instruction, assessing student performance, and communicating effectively with school and community stakeholders using a variety of methods may improve students' learning experiences and outcomes.[2] (CDC, 2021)

Table 4. Percentage of secondary schools that provided those who teach health education with materials for teaching health education.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Goals, objectives, and expected outcomes for health education	77.3	76.8	75.7	81.1	86.2
A chart describing the annual scope and sequence of instruction for health education	**51.9**	**58.5▲**	60.1	52.3	68.5
Plans for how to assess student performance in health education	51.4	55.7	56.6	52.3	70.7
A written health education curriculum	53.1	57.2	55.5	63.8	75.2
Written instructional competencies for health education teachers (i.e., the essential knowledge and skills teachers need to be effective educators)	Not available	50.9	52.5	44.8	71.5

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

[1] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

[2] Hattie J. *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge; 2008.

The results in Table 5 address the extent to which schools have a health education curriculum that is based on, or is consistent with, current content and skills aligned with the National Health Education Standards.[1] The importance of school health education is supported by the establishment of *Healthy People 2030* Adolescent Health research objective (AH-R06): increase the proportion of schools requiring students to take at least two health education courses from grade 6 to 12.[2] (CDC, 2021)

Table 5. Percentage of secondary schools in which the health education curriculum addressed each of the following skills aligned to National Health Education Standards.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Comprehending concepts related to health promotion and disease prevention to enhance health	**95.4**	**87.8▼**	92.2	73.5	87.3
Analyzing the influence of family, peers, culture, media, technology, and other factors on health behaviors	92.5	89.1	92.2	79.0	86.7
Accessing valid information and products and services to enhance health	87.1	82.9	85.7	73.5	83.1
Using interpersonal communication skills to enhance health and avoid or reduce health risks	**95.4**	**89.1▼**	92.2	79.0	86.9
Using decision-making skills to enhance health	**96.6**	**88.3▼**	91.1	79.0	88.4
Using goal-setting skills to enhance health	**93.1**	**87.1▼**	91.1	74.1	86.0
Practicing health-enhancing behaviors to avoid or reduce risks	**95.5**	**87.7▼**	92.1	73.5	87.9
Advocating for personal, family, and community health	88.6	85.3	87.2	79.0	84.5

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

[1] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

[2] U.S. Department of Health and Human Services. *Healthy People 2030.* Office of Disease Prevention and Health Promotion. June 2021. Available at: https://health.gov/healthypeople/objectives-and-data/browse-objectives/schools/increase-proportion-schools-requiring-students-take-least-2-health-education-courses-grade-6-12- ah-r06.

Sexual health education is defined on the Profiles questionnaire as a systemic approach that uses medically-accurate, developmentally-appropriate, and culturally inclusive content to equip students with the essential knowledge and skills needed to avoid HIV, other STDs, and unintended pregnancy.

Sexual health education uses systematic, evidence-informed teaching strategies to provide medically accurate, developmentally appropriate, and culturally inclusive content and skills needed to address the physical, mental, emotional, and social dimensions of human sexuality.[1-5] (CDC, 2021)

As part of a planned and sequential health education framework, sexual health education delivered by well-qualified and trained teachers helps adolescents develop functional knowledge and skills to prevent risk behaviors associated with HIV, other sexually transmitted infections (STI), and unintended or mistimed pregnancy.[2] (CDC, 2021)

The results in Table 6 reflect materials needed to facilitate sexual health education delivery in schools, including a scope and sequence[5], curriculum resources for teachers and students, and methods to assess student knowledge and skills related to sexual health. These results also align with guidance presented in the Health Education Curriculum Analysis Tool[3] and the National Health Education Standards.[6] (CDC, 2021)

Table 6. Percentage of secondary schools that provided those who teach sexual health education with materials for teaching sexual health education (among schools that teach sexual health education).

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
An approved health education scope and sequence that includes learning objectives, outcomes, and content to guide sexual health education instruction	71.3	66.3	66.8	64.2	77.9

Lead Health Education Survey

[1] Lohrmann DK, Wooley SF. Comprehensive school health education. In: Marx E, Wooley S, Northrop D, eds. *Health Is Academic: A Guide to Coordinated School Health Programs*. New York, NY: Teachers College Press; 1998, pp. 43–45.

[2] Kirby D, Coyle K, Alton F, Rolleri L, Robin L. *Reducing Adolescent Sexual Risk: A Theoretical Guide for Developing and Adapting Curriculum-Based Programs*. Scotts Valley, CA: ETR Associates; 2011. Available at: https://healtheducationresources.unesco.org/library/documents/reducing-adolescent- sexual-risk-theoretical-guide-developing-and-adapting.

[3] Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool*: *Module Sexual Health (SH)*. 2012. Available at: http://www.cdc.gov/healthyyouth/hecat/pdf/HECAT_Module_SH.pdf.

[4] Centers for Disease Control and Prevention. *Characteristics of An Effective Health Education Curriculum*. Available at: https://www.cdc.gov/healthyschools/sher/characteristics/index.htm.

[5] Centers for Disease Control and Prevention. *Developing a Scope and Sequence for Sexual Health Education*. 2016. Available at: https://www.cdc.gov/healthyyouth/hecat/pdf/scope_and_sequence.pdf.

[6] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

Table 6. Percentage of secondary schools that provided those who teach sexual health education with materials for teaching sexual health education (among schools that teach sexual health education). (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
A written health education curriculum that includes objectives and content addressing sexual health education	70.5	64.6	62.9	71.0	76.8
Teacher pacing guides for sexual health education (i.e., schedules that regulate a teacher's pace of the unit or curriculum)	55.0	52.7	52.6	53.1	62.2
Teaching resources (e.g., lesson plans, handouts) to support sexual health education instruction	**71.8**	**65.4▼**	65.7	64.2	76.2
Strategies that are age-appropriate, relevant, and actively engage students in learning	73.0	71.3	69.4	78.6	78.5
Methods to assess student knowledge and skills related to sexual health education	67.0	67.7	68.6	64.2	73.6

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Required Health Education

Required health education is defined on the Profiles questionnaire as any classroom instruction on health topics, including instruction that occurs outside of health education courses, which students must receive for graduation or promotion from school.

Not all health-related instruction takes place in health education courses.[1] The results in Table 7 address whether schools require any classroom instruction on health topics, including instruction that occurs outside of health education courses. (CDC, 2021)

Table 7. Percentage of secondary schools in which health education instruction is required for students in any of grades 6 through 12.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Required health education instruction for students in any of grades 6 through 12	85.0	83.2	83.1	83.3	88.6

Lead Health Education Survey

[1] Centers for Disease Control and Prevention. *Results from the School Health Policies and Practices Study 2014.* U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2015;1-180. Available at: https://www.cdc.gov/healthyyouth/data/shpps/pdf/SHPPS-508-final_101315.pdf.

Table 8 addresses the extent to which health-related topics, skills, and the prevention of health risk behaviors are taught in required courses in secondary school. In accordance with *Healthy People 2030* objective AH-R06, calling for an increase in the proportion of schools requiring students to take at least two health education courses from grade 6 to 12[1], schools can provide health education on topics including unintentional injury; violence; mental and emotional health, including suicide prevention; tobacco use and addiction; alcohol or other drug use; HIV/AIDS, sexually transmitted infections (STI), and unintended pregnancy; food and nutrition; infectious disease prevention; and inadequate physical activity to help prevent adolescent morbidity and mortality. Chronic health conditions such as epilepsy or seizure disorder, diabetes, asthma, and food allergies may also affect students' physical and emotional well-being, school attendance, academic performance, and social participation. Mental health conditions, such as depression, are associated with a greater likelihood of sexual risk behaviors, chronic health conditions such as obesity, and violence.[2] Given the clustering of health risks and conditions, many students face the added burden of living with co-occurring conditions that impact their physical, mental, and emotional health and ability to be academically successful.[3-5] (CDC, 2021)

Additionally, schools play a vital role in supporting positive mental and emotional health among children and youth.[6-8] Research suggests school mental health services, and mental health promotion strategies, such as social emotional learning, can positively impact student, family, and school-level outcomes.[9,10] The opportunity for academic success is increased when communities, schools, and families work together to meet students' health and learning needs within safe and supportive school environments.[11,12] Providing health education in these areas contributes to raising awareness of these health conditions within the broader school community. (CDC, 2021)

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[1] U.S. Department of Health and Human Services. *Healthy People 2030.* Office of Disease Prevention and Health Promotion. June 2021. Available at: https://health.gov/healthypeople/objectives-and-data/browse-objectives/schools/increase-proportion-schools-requiring-students-take-least-2-health-education-courses-grade-6-12- ah-r06.

[2] Brooks TL, Harris SK, Thrall JS, Woods ER. Association of adolescent risk behaviors with mental health symptoms in high school students. *Journal of Adolescent Health* 2002;31(3):240-246.

[3] Michael SL, Merlo CL, Basch CE, Wentzel KR, Wechsler H. Critical connections: health and academics. *Journal of School Health* 2015;85(11):740-58.

[4] Jones LC, Mrug S, Elliott MN, Toomey SL, Tortolero S, Schuster MA. Chronic physical health conditions and emotional problems from early adolescence through midadolescence. *Academic Pediatrics* 2017;17(6):649-55.

[5] Maslow GR, Hill SN, Pollock MD. Comparison of positive youth development for youth with chronic conditions with healthy peers. *Journal of Adolescent Health* 2016;59(6):716-21.

[6] Atkins MS, Hoagwood KE, Kutash K, Seidman E. Toward the integration of education and mental health in schools. *Administration and Policy in Mental Health and Mental Health Services Research* 2010;37(1-2):40-47.

[7] Wells J, Barlow J, Stewart-Brown S. A systematic review of universal approaches to mental health promotion in schools. *Health Education* 2003;103(4):197-220.

[8] Stephan SH, Weist M, Kataoka S, Adelsheim S, Mills C. Transformation of children's mental health services: The role of school mental health. *Psychiatric Services* 2007;58(10):1330-8.

[9] Sanchez AL, Cornacchio D, Poznanski B, Golik AM, Chou T, Comer JS. The effectiveness of school-based mental health services for elementary-aged children: A meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry* 2018;57(3):153-165.

[10] Taylor RD, Oberle E, Durlak JA, Weissberg RP. Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Dev* 2017; 88:1156-1171. https://doi.org/10.1111/cdev.12864.

[11] National Asthma Education and Prevention Program, National School Boards Association, American School Health Association, American Diabetes Association, American Academy of Pediatrics, Food Allergy and Anaphylaxis Network, Epilepsy Foundation. Students with chronic illnesses: guidance for families, schools, and students. *Journal of School Health* 2003;73(4):131-132.

[12] Taras H, Brennan JJ. Students with chronic diseases: nature of school physician support. *Journal of School Health* 2008;78(7):389-396.

Table 8. Percentage of secondary schools in which teachers tried to increase student knowledge on health-related topics in a required course in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Alcohol or other drug-use prevention	87.5	90.1	92.6	82.6	91.1
Asthma	**47.4**	**35.8▼**	32.5	45.6	51.5
Chronic disease prevention (e.g., diabetes, obesity prevention)	76.7	79.6	83.8	66.9	82.6
Epilepsy or seizure disorder	28.6	30.9	26.4	44.2	41.3
Food allergies	48.8	49.4	46.8	57.1	61.8
Foodborne illness prevention	50.2	48.6	50.3	43.6	60.4
Human immunodeficiency virus (HIV) prevention	74.9	80.1	79.7	81.3	79.9
Human sexuality	72.7	73.1	72.8	74.1	74.2
Infectious disease prevention (e.g., influenza [flu] or COVID-19 prevention)	**72.9**	**89.6▲**	90.4	87.1	84.9
Injury prevention and safety	**73.9**	**81.3▲**	82.4	78.0	83.0
Mental and emotional health	**84.5**	**96.4▲**	95.3	100.0	94.3
Nutrition and dietary behavior	94.5	95.2	94.7	96.5	92.2
Physical activity and fitness	97.0	97.2	96.3	100.0	97.0
Pregnancy prevention	**73.8**	**82.2▲**	82.3	81.8	76.1
Sexually transmitted disease (STD) prevention	**78.6**	**84.6▲**	82.5	91.5	79.9
Sleep health (e.g., how much sleep students need, good sleeping habits)	Not available	78.6	80.0	74.6	78.1
Suicide prevention	**69.1**	**77.8▲**	75.9	83.6	82.5
Tobacco-use prevention or cessation	89.8	87.9	90.1	80.8	89.4
Violence prevention (e.g., bullying, fighting, dating violence prevention)	**86.1**	**95.1▲**	93.5	100.0	93.6

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
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Mental and Emotional Health Topics

Mental and emotional health influences both physical health and academic outcomes.[1,2] The topics included in Table 9 reflect key concepts covered in many social-emotional learning (SEL) programs and have been associated with increased social and emotional skills, attitudes, behavior, and academic performance.[3,4] These topics are consistent with the Health Education Curriculum Analysis Tool modules and emphasize the importance of health education addressing the ability to process and understand information and experiences and the ability to regulate and express feelings and emotions.[5] These results provide important information about the extent to which mental and emotional health is being taught. (CDC, 2021)

Table 9. Percentage of secondary schools in which teachers taught specific mental and emotional health topics in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Identifying and labeling emotions	Not available	92.6	93.0	91.3	84.4
How to express feelings in a healthy way	Not available	95.2	95.3	95.0	88.3
The importance of engaging in activities that are mentally and emotionally healthy	Not available	92.5	91.9	94.4	88.9
How to manage interpersonal conflict in healthy ways	Not available	93.4	92.9	95.0	87.3

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[1] Aarons GA, Monn AR, Leslie LK, Garland AF, Lugo L, Hough RL, et al. Association between mental and physical health problems in high-risk adolescents: A longitudinal study. *Journal of Adolescent Health* 2008;43(3):260-267.

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[3] Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development* 2011;82(1):405–432.

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Table 9. Percentage of secondary schools in which teachers taught specific mental and emotional health topics in a required course for students in any of grades 6 through 12 during the current school year. (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
How to prevent and manage emotional stress and anxiety in healthy ways	Not available	95.2	95.3	95.0	88.7
How to use self-control and impulse control strategies to promote health (e.g., goal setting and tracking, breathing techniques)	Not available	92.1	92.9	89.4	85.9
How to get help for troublesome thoughts, feelings, or actions for oneself and others	Not available	91.4	90.3	95.0	86.9
Value of individual differences (e.g., culture, ethnicity, ability)	Not available	85.2	81.9	96.3	85.3
How to establish and maintain healthy relationships	Not available	93.5	92.7	96.3	88.0
Importance of habits (e.g., exercise, healthy eating, meditation, mindfulness) that promote mental well-being	Not available	93.6	91.6	100.0	89.3

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Nutrition and Dietary Behavior Topics

Table 10 shows the curricula content related to nutrition and dietary behavior. Nutrition education can occur in the classroom and other places on the school campus (e.g., the cafeteria) and can reinforce healthful eating behaviors.[1,2] Nutrition education should be part of a comprehensive school health education curriculum aligned with the National Health Education Standards[3,4] and includes concepts and skills to promote healthy eating.[4-6] This list of 23 nutrition topics is based on the *2020–2025 Dietary Guidelines for Americans*,[7] CDC guidelines,[6] the School Health Index,[8] the Health Education Curriculum Analysis Tool,[4] and the Institute of Medicine.[9] As part of nutrition education, it is important for students to learn how to follow an eating plan for healthy growth and development. *Healthy People 2030* objective AH-R06 calls for an increase in the proportion of schools requiring students to take at least 2 health education courses from grades 6-12.[10] (CDC, 2021)

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[1] *Institute of Medicine. Nutrition education in the K-12 curriculum: The role of national standards: Workshop summary*. Washington, DC: The National Academies Press; 2013.

[2] Hayes D, Contento IR, Weekly C. Position of the American Dietetic Association, School Nutrition Association, and Society for Nutrition Education: comprehensive school nutrition services. *Journal of the Academy of Nutrition and Dietetics* 2018;118:913-919.

[3] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

[4] Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool*. 2012. Available at: https://www.cdc.gov/healthyyouth/hecat/index.htm.

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[8] Centers for Disease Control and Prevention. *School Health Index.* 2017. Available at: https://www.cdc.gov/healthyschools/shi/index.htm.

[9] Institute of Medicine. *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation.* Washington, DC: The National Academies Press; 2012.

[10] U.S. Department of Health and Human Services. Healthy People 2030. Office of Disease Prevention and Health Promotion. June 2021. Available at: https://health.gov/healthypeople/objectives-and-data/browse-objectives/.

Table 10. Percentage of secondary schools in which teachers taught specific nutrition and dietary behavior topics in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Benefits of healthy eating	**88.8**	**94.1▲**	93.3	96.5	89.2
Benefits of drinking plenty of water	89.8	93.2	92.1	96.5	89.1
Benefits of eating breakfast every day	**79.0**	**85.0▲**	81.1	96.5	86.0
Food guidance using the current Dietary Guidelines for Americans (e.g., MyPlate, healthy eating patterns)	77.9	80.4	82.3	74.2	83.4
Using food labels	80.2	80.0	79.9	80.6	83.2
Differentiating between nutritious and non-nutritious beverages	**82.2**	**87.2▲**	87.6	85.9	84.4
Balancing food intake and physical activity	84.6	87.8	88.5	85.9	86.8
Eating more fruits, vegetables, and whole grain products	88.6	91.5	89.9	96.5	86.6
Choosing a variety of options within each food group	Not available	86.6	85.0	92.2	84.8
Choosing nutrient-dense foods and beverages that reflect personal preferences, culture, and budget	Not available	74.2	69.2	89.4	79.4
Choosing foods and snacks that are low in solid fat (i.e., saturated and trans fat)	79.8	83.2	82.5	85.2	82.2
Choosing foods, snacks, and beverages that are low in added sugars	84.2	83.9	83.5	85.2	84.1
Choosing foods and snacks that are low in sodium	79.0	77.4	76.4	80.5	80.3

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
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Table 10. Percentage of secondary schools in which teachers taught specific nutrition and dietary behavior topics in a required course for students in any of grades 6 through 12 during the current school year. (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Eating a variety of foods that are high in calcium	71.3	71.0	71.3	69.9	78.6
Eating a variety of foods that are high in iron	68.4	71.3	70.1	75.2	76.2
Food safety	62.9	68.6	61.9	88.7	75.4
Preparing healthy meals and snacks	74.6	76.5	70.0	96.5	79.0
Risks of unhealthy weight control practices	**69.4**	**77.4▲**	72.3	92.9	81.2
Accepting body size differences	74.7	77.2	73.1	89.4	81.7
Signs, symptoms, and treatment for eating disorders	**59.5**	**69.4▲**	67.8	74.1	77.5
Relationship between diet and chronic diseases	**69.7**	**76.5▲**	76.9	75.2	78.2
Finding valid information about nutrition (e.g., differentiating between advertising and factual information)	Not available	79.8	75.5	92.9	80.1
Food production, including how food is grown, harvested, processed, packaged, and transported	56.3	61.1	53.7	83.4	66.9

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*

Lead Health Education Survey

Physical Activity Topics

Table 11 shows the extent to which physical activity concepts are taught in a required course. Health education that includes physical activity concepts increases the likelihood of students increasing their participation in physical activity,[1-3] reinforces what has been taught in physical education,[4] and assists students in achieving the National Health Education Standards and National Physical Education Standards.[5,6] The content also aligns with the Health Education Curriculum Analysis Tool and Physical Education Curriculum Analysis Tool (PECAT).[7,8] (CDC, 2021)

Table 11. Percentage of secondary schools in which teachers taught specific physical activity topics in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Short-term and long-term benefits of physical activity, including reducing the risks for chronic disease	89.3	91.3	91.2	91.8	91.4
Mental and social benefits of physical activity	91.7	93.4	91.2	100.0	92.5
Health-related fitness (i.e., cardiorespiratory endurance, muscular endurance, muscular strength, flexibility, and body composition)	87.1	88.8	86.3	96.5	91.3

Lead Health Education Survey

[1] Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *Morbidity and Mortality Weekly Report* 2011;60(No. RR-5).

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[5] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

[6] SHAPE America. *National Standards & Grade-level Outcomes for K-12 Physical Education*. Champaign, IL: Human Kinetics; 2014.

[7] Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool*. 2012. Available at: http://www.cdc.gov/healthyyouth/hecat/index.htm.

[8] Centers for Disease Control and Prevention. *Physical Education Curriculum Analysis Tool*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2019.

Table 11. Percentage of secondary schools in which teachers taught specific physical activity topics in a required course for students in any of grades 6 through 12 during the current school year. (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Phases of a workout (i.e., warm-up, workout, and cool down)	85.1	85.6	83.8	91.2	88.3
Recommended amounts and types of moderate, vigorous, muscle-strengthening, and bone-strengthening physical activity	81.6	84.2	81.3	92.9	87.3
Decreasing sedentary activities (e.g., television viewing, using video games)	84.7	88.9	87.5	92.9	90.4
Preventing injury during physical activity	83.5	86.7	84.6	92.9	88.4
Weather-related safety (e.g., avoiding heat stroke, hypothermia, and sunburn while physically active)	**78.0**	**72.7▼**	67.4	88.7	80.3
Dangers of using performance-enhancing drugs (e.g., steroids)	**58.1**	**66.9▲**	64.2	75.2	78.8
Increasing daily physical activity	**88.3**	**95.1▲**	93.4	100.0	92.8
Incorporating physical activity into daily life (without relying on a structured exercise plan or special equipment)	**87.2**	**93.2▲**	92.7	94.7	91.1
Using safety equipment for specific physical activities	**66.7**	**76.5▲**	74.7	82.4	83.3
Benefits of drinking water before, during, and after physical activity	89.6	89.9	87.7	96.5	91.6

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*

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Violence Prevention Topics

Experiences with violence, including bullying victimization, are positively associated with aggression and internalizing symptoms and negatively associated with self-esteem and future optimism. Negative bystander behavior, that is, not intervening when witnessing someone else being bullied, is positively associated with aggression and negatively associated with future optimism. Conversely, positive bystander behaviors when witnessing bullying are positively associated with academic achievement, self-esteem, and future optimism.[1] Therefore, including these concepts in violence prevention education is important. The concepts assessed here are consistent with the topics included in the Health Education Curriculum Analysis Tool module and with the literature that reflects that strategies that promote positive school climate and relationships, support positive behavior, and use SEL-specific classroom practices and curricula are key components of effective SEL programs. School-based, universal violence prevention programs have strong evidence of effectiveness in decreasing rates of violence and aggressive behavior among school-aged children.[2] (CDC, 2021)

[1] Evans CBR, Smokowski PR, Rose RA, et al. Cumulative bullying experiences, adolescent behavioral and mental health, and academic achievement: An integrative model of perpetration, victimization, and bystander behavior. *Journal of Child and Family Studies* 2019;28:2415–2428. Available at: https://doi.org/10.1007/s10826-018- 1078-4.

[2] Hahn R, Fuqua-Whitley D, Wethington H, et al. Task Force on Community Preventive Services. Effectiveness of universal school-based programs to prevent violent and aggressive behavior: a systematic review. *American Journal of Preventive Medicine* 2007;33(2 Suppl):S114-29. Available at: https://www.sciencedirect.com/science/article/pii/S0749379707002371.

Table 12. Percentage of secondary schools in which teachers taught specific violence prevention topics in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Building empathy (e.g., identification with and understanding of another person's feelings)	Not available	90.6	90.9	89.6	84.2
Perspective taking (e.g., taking another person's point of view)	Not available	89.7	89.7	89.6	82.0
Strategies for being a positive bystander (e.g., safely de-escalating, preventing, or stopping bullying and harassment)	Not available	76.9	74.7	84.0	81.3
Describing how stigma, bias, and prejudice can lead to stereotypes, discrimination, and violence	Not available	69.9	65.0	85.9	77.6
Identifying the signs and symptoms of when someone may be thinking of hurting themselves	Not available	73.9	74.2	73.0	81.1
Getting help to prevent or stop violence (including inappropriate touching, harassment, abuse, bullying, hazing, fighting, and hate crimes)	Not available	84.2	82.5	89.6	84.2
Getting help for self or others who are in danger of hurting themselves	Not available	84.9	84.6	85.9	84.0

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Tobacco Use Prevention Topics

Table 13 shows the tobacco-use prevention curricula content. Since nearly all tobacco product use begins during youth and young adulthood,[1] and in 2021, nearly half of youth who vape were seriously interested in quitting,[2] programs that prevent the onset of tobacco use during the school years are crucial. When implemented in conjunction with broader community-based mass media campaigns that show strong evidence of their effectiveness in reducing tobacco use among adolescents, school-based tobacco prevention programs that address multiple psychosocial factors related to tobacco use among youth and that teach the skills necessary to resist those influences have demonstrated consistent and significant reductions or delays in adolescent smoking.[1-11] Social influence programming has reduced smoking onset by as much as 50%, with effects lasting up to 6 years, and with effects including reduction of the use of other tobacco products as well.[4] (CDC, 2021)

In addition, these results indicate the extent to which schools align with the components of the National Health Education Standards and the Health Education Curriculum Analysis Tool, which provide frameworks for decisions about the lessons, strategies, activities, and types of assessment to include in a health education curriculum.[12,13] (CDC, 2021)

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[1] U.S. Department of Health and Human Services. *Preventing Tobacco Use among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2012.

[2] Smith TT, Nahhas GJ, Carpenter MJ, et al. Intention to Quit Vaping Among United States Adolescents. *JAMA Pediatr.* 2021;175(1):97–99. Available at: https://pubmed.ncbi.nlm.nih.gov/32804194/.

[3] U.S. Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2000.

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[12] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

[13] Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool*. 2012. Available at: http://www.cdc.gov/healthyyouth/hecat/index.htm

Table 13. Percentage of secondary schools in which teachers taught specific tobacco-use prevention or cessation topics in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Identifying tobacco products and the harmful substances they contain	79.2	79.4	83.7	66.0	83.2
Identifying short- and long-term health consequences of tobacco product use	80.6	81.7	86.4	66.7	83.8
Identifying social, economic, and cosmetic consequences of tobacco product use	**67.9**	**74.7▲**	78.9	61.4	78.9
Understanding the addictive nature of nicotine	79.2	80.5	83.8	69.7	82.7
Effects of nicotine on the adolescent brain	73.6	75.0	76.6	69.7	80.0
Effects of tobacco product use on athletic performance	**63.6**	**71.3▲**	72.7	66.7	76.0
Effects of second-hand smoke and benefits of a smoke-free environment	73.7	72.8	76.1	62.5	80.1
Understanding the social influences on tobacco product use, including media, family, peers, and culture	75.5	79.0	83.5	65.0	81.6
Identifying reasons why students do and do not use tobacco products	**74.2**	**81.5▲**	83.9	73.4	81.4
Making accurate assessments of how many peers use tobacco products	58.2	52.9	54.9	46.5	65.5

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 13. Percentage of secondary schools in which teachers taught specific tobacco-use prevention or cessation topics in a required course for students in any of grades 6 through 12 during the current school year. (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Using interpersonal communication skills to avoid tobacco product use (e.g., refusal skills, assertiveness)	74.4	76.2	78.7	67.9	79.7
Using goal-setting and decision-making skills related to not using tobacco products	**63.3**	**73.3▲**	74.9	67.9	75.6
Finding valid information and services related to tobacco-use prevention and cessation	69.1	68.9	69.7	66.0	73.1
Supporting others who abstain from or want to quit using tobacco products	64.5	68.7	68.4	69.7	71.9
Identifying harmful effects of tobacco product use on fetal development	**55.4**	**63.6▲**	63.7	63.2	71.9
Relationship between using tobacco products and alcohol or other drugs	69.8	72.5	75.2	63.2	79.2
How addiction to tobacco products can be treated	62.7	62.8	63.0	62.5	74.5
Understanding school policies and community laws related to the sale and use of tobacco products	72.8	69.3	71.4	62.5	76.6
Benefits of tobacco product cessation programs	48.9	53.4	52.3	57.2	62.5

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*

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Table 14 shows the types of products that are covered as part of tobacco prevention education. It is recommended that tobacco prevention curricula focus on all tobacco products, not just conventional cigarettes.[1,2] In recent years, the tobacco product landscape has diversified, and since 2014, e-cigarettes have been the most commonly used tobacco product among youth.[3,4] These results show the various tobacco products addressed through the curricular content.[5,6] (CDC, 2021)

Table 14. Percentage of secondary schools in which teachers taught about specific tobacco products in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Cigarettes	76.7	80.2	83.0	71.8	82.6
Smokeless tobacco (e.g., chewing tobacco, snuff, dip, snus, dissolvable tobacco)	**74.7**	**67.1▼**	70.8	56.0	79.7
Cigars, little cigars, or cigarillos	**57.0**	**49.3▼**	51.0	44.0	68.5
Pipes	46.5	46.5	49.7	36.7	62.3
Electronic vapor products (e.g., e-cigarettes, vapes, vape pens, e-hookahs, mods, or brands such as JUUL)	83.9	82.9	86.5	71.8	84.1

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

[1] Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control Programs — 2014*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

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[6] Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students —United States, 2019. Morbidity and Mortality Weekly Report Surveillance Summaries. Nov 6 2019;68(12):1-22. Available at: https://www.cdc.gov/mmwr/volumes/68/ss/ss6812a1.htm.

Alcohol and Other Drug-Use Prevention Topics

Table 15 shows the degree to which generally recommended topics are covered in required school-based alcohol and other drug use prevention education. Most alcohol and other drug use prevention programs are implemented in schools, and it is important to include components that have proven to be effective in promoting drug-free lifestyles among adolescents. These components include developing refusal skills, understanding and resisting social influences, and establishing non-drug use as the norm.[1-2] In addition, several of the topics in this table align with the health behavior outcomes identified in the Centers for Disease Control and Prevention's Health Education Curriculum Analysis Tool module focused on alcohol and other drug use prevention.[3] Finally, curricular content on this topic contributes to prevention efforts related to the recent rise in opioid-related drug overdoses and deaths, many of which can be attributed to prescription opioid misuse.[4] (CDC, 2021)

[1] Botvin GJ, Griffin KW. School-based programmes to prevent alcohol, tobacco and other drug use. *International Review of Psychiatry* 2007;19(6):607-615.

[2] Tobler NS, Stratton HH. Effectiveness of school-based drug prevention programs: A meta-analysis of the research. *Journal of Primary Prevention* 1997;18(1):71-128.

[3] Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool.* 2012. Available at: www.cdc.gov/healthyyouth/hecat/index.htm.

[4] Centers for Disease Control and Prevention. *Opioid Overdose: Understanding the Epidemic*. 2018. Available at: https://www.cdc.gov/drugoverdose/epidemic/index.html.

Table 15. Percentage of secondary schools in which teachers taught specific alcohol and other drug-use prevention topics in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Differences between proper use and abuse of over-the-counter medicines and prescription medicines	62.9	66.6	71.8	50.9	77.6
Harmful short- and long-term physical, psychological, and social effects of using alcohol and other drugs	79.6	82.1	87.7	65.1	83.3
Situations that lead to the use of alcohol and other drugs	76.6	80.3	84.3	68.4	82.4
Alcohol and other drug use as an unhealthy way to manage weight	**44.1**	**51.9▲**	52.7	49.3	65.2
Identifying reasons why individuals choose to use or not to use alcohol and other drugs	77.3	80.1	84.0	68.4	82.0
Using interpersonal communication skills to avoid alcohol and other drug use (e.g., refusal skills, assertiveness)	77.7	77.6	82.3	63.4	81.7
Supporting others who abstain from or want to quit using alcohol and other drugs	67.8	67.0	67.7	65.1	75.1
Understanding the social influences on alcohol and other drug use, including media, family, peers, and culture	77.3	82.0	86.5	68.4	82.8
How to persuade and support others to be alcohol and other drug free	70.0	69.3	70.7	65.1	77.5

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Sexual Health Topics

Tables 16 and 17 show sexual health education curricula content. The National Health Education Standards outline knowledge and skills that students should attain after completing a quality health education program.[1] Further, the National Sex Education Standards (NSES) provides guidance on essential content and skills to inform medically-accurate and age-appropriate sex education for K-12 students.[2] (CDC, 2021)

Sexual health education programs can increase knowledge and skills to prevent unintended pregnancy and decrease the risk of HIV and sexually transmitted infections.[3-5] Given variability among adolescents in cognition, social maturity, and sexual experience, curricula should be tailored to meet the unique needs of younger and older adolescents, and include a variety of relevant sexual health topics and content areas.[6-9] To coincide with the learner's maturity level and cognitive abilities, the progression of sexual health education concepts and skills increase in complexity as the sequence advances up grade levels.[10] The Centers for Disease Control and Prevention's Health Education Curriculum Analysis Tool provides a guide to medically-accurate and developmentally-appropriate knowledge and skills expectations for sexual health content and skills for students, aligned with the National Health Education Standards.[2,11] (CDC, 2021)

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[1] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

[2] Future of Sex Education Initiative. (2020). National Sex Education Standards: Core Content and Skills, K-12 (Second Edition). Available at: https://siecus.org/wp- content/uploads/2020/03/NSES-2020-2.pdf.

[3] Goesling B, Colman S, Trenholm C, Terzian M, Moore K. Programs to reduce teen pregnancy, sexually transmitted infections, and associated sexual risk behaviors: a systematic review. *Journal of Adolescent Health* 2014;54(5):499–507.

[4] Kirby D. *Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases*. Washington, DC: The National Campaign to Prevent Teen Pregnancy; 2007. Available at: https://powertodecide.org/sites/default/files/resources/primary-download/emerging- answers.pdf.

[5] Robin L, Dittus P, Whitaker D, Crosby R, Ethier K, Mezoff J, Miller K, Pappas-Deluca K. Behavioral interventions to reduce incidence of HIV, STD, and pregnancy among adolescents: a decade in review. *Journal of Adolescent Health* 2004;34(1):3-26.

[6] Kirby D, Coyle K, Alton F, Rolleri L, Robin L. *Adolescent Sexual Risk: A Theoretical Guide for Developing and Adapting Curriculum-Based Programs.* Scotts Valley, CA: ETR Associates, 2011. Available at: https://healtheducationresources.unesco.org/library/documents/reducing-adolescent-sexual-risk-theoretical-guide-developing-and-adapting.

[7] Pedlow CT, Carey MP. Developmentally appropriate sexual risk reduction interventions for adolescents: rationale, review of interventions, and recommendations for research and practice. *Annals of Behavioral Medicine* 2004;27(3):172-184.

[8] Gowen LK, Winges-Yanez N. Lesbian, gay, bisexual, transgender, queer, and questioning youths' perspectives of inclusive school-based sexuality education. *The Journal of Sex Research* 2014;51(7):788-800.

[9] Snapp SD, McGuire JK, Sinclair KO, Gabrion K, Russell ST. LGBTQ-inclusive curricula: Why supportive curricula matter. *Sex Education* 2015;15(6):580-96.

[10] Centers for Disease Control and Prevention. *Developing a Scope and Sequence for Sexual Health Education*. 2016. Available at: https://www.cdc.gov/healthyyouth/hecat/pdf/scope_and_sequence.pdf.

[11] Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool.* 2012. Available at: www.cdc.gov/healthyyouth/hecat/index.htm.

Table 16. Percentage of secondary schools in which teachers taught specific sexual health topics in a required course for students in any of grades 6, 7, or 8 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
How HIV and other STDs are transmitted	58.8	60.1	60.2	60.0	67.7
Health consequences of HIV, other STDs, and pregnancy	56.6	56.3	55.1	60.0	67.1
The benefits of being sexually abstinent	57.7	61.5	63.7	55.0	68.5
How to access valid and reliable health information, products, and services related to HIV, other STDs, and pregnancy	**42.8**	**57.0▲**	56.1	60.0	61.5
The influences of family, peers, media, technology and other factors on sexual risk behaviors	52.4	57.8	55.4	66.8	66.5
Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy	52.3	53.5	51.5	60.0	62.8
Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy	54.3	54.7	53.1	60.0	61.8
Influencing and supporting others to avoid or reduce sexual risk behaviors	**46.3**	**56.7▲**	55.8	60.0	61.3
Efficacy of condoms, that is, how well condoms work and do not work	**44.6**	**59.1▲**	58.8	60.0	51.0
The importance of using condoms consistently and correctly	**42.6**	**54.2▲**	53.8	55.4	46.7
How to obtain condoms	40.6	47.7	46.4	52.6	37.4

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 16. Percentage of secondary schools in which teachers taught specific sexual health topics in a required course for students in any of grades 6, 7, or 8 during the current school year. (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
How to correctly use a condom	42.6	46.7	44.3	55.4	32.6
Methods of contraception other than condoms	**44.7**	**54.9▲**	55.4	53.2	48.0
The importance of using a condom at the same time as another form of contraception to prevent both STDs and pregnancy	44.6	52.5	55.4	43.0	45.3
How to create and sustain healthy and respectful relationships	58.7	65.4	65.7	64.3	70.3
The importance of limiting the number of sexual partners	52.3	45.1	47.0	39.4	55.8
Preventive care (such as screenings and immunizations) that is necessary to maintain reproductive and sexual health	47.3	51.1	53.6	43.0	56.2
How to communicate sexual consent between partners	46.7	52.9	53.8	49.8	55.6
Recognizing and responding to sexual victimization and violence	**40.0**	**50.1▲**	52.3	43.0	55.5
Diversity of sexual orientations and gender identities	38.8	45.8	43.1	55.4	45.6
How gender roles and stereotypes affect goals, decision making, and relationships	32.2	38.1	38.1	37.8	48.8
The relationship between alcohol and other drug use and sexual risk behaviors	47.3	51.8	51.4	53.2	63.8

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*

Lead Health Education Survey

Table 17. Percentage of secondary schools in which teachers taught specific sexual health topics in a required course for students in any of grades 9, 10, 11, or 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
How HIV and other STDs are transmitted	**80.6**	**89.0▲**	91.8	82.4	88.3
Health consequences of HIV, other STDs, and pregnancy	**80.6**	**89.0▲**	91.8	82.4	88.1
The benefits of being sexually abstinent	**80.6**	**89.0▲**	91.8	82.4	87.7
How to access valid and reliable health information, products, and services related to HIV, other STDs, and pregnancy	**78.7**	**89.0▲**	91.8	82.4	85.3
The influences of family, peers, media, technology and other factors on sexual risk behaviors	**76.5**	**89.7▲**	89.1	91.3	86.0
Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy	**72.7**	**86.8▲**	88.8	82.4	84.6
Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy	72.7	79.4	78.1	82.4	82.4
Influencing and supporting others to avoid or reduce sexual risk behaviors	**74.6**	**85.2▲**	86.3	82.4	82.4
Efficacy of condoms, that is, how well condoms work and do not work	78.7	82.3	86.3	72.5	77.0
The importance of using condoms consistently and correctly	74.4	81.3	86.3	68.1	74.2
How to obtain condoms	74.9	76.3	75.4	78.7	64.4

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 17. Percentage of secondary schools in which teachers taught specific sexual health topics in a required course for students in any of grades 9, 10, 11, or 12 during the current school year. (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
How to correctly use a condom	67.4	73.4	75.4	68.1	59.8
Methods of contraception other than condoms	78.7	85.2	83.6	89.4	75.9
The importance of using a condom at the same time as another form of contraception to prevent both STDs and pregnancy	73.0	78.4	80.9	72.5	74.4
How to create and sustain healthy and respectful relationships	**78.3**	**94.7▲**	100.0	82.4	88.1
The importance of limiting the number of sexual partners	**72.7**	**81.9▲**	85.9	72.5	83.4
Preventive care (such as screenings and immunizations) that is necessary to maintain reproductive and sexual health	74.9	75.5	80.9	62.7	82.7
How to communicate sexual consent between partners	72.7	78.4	80.9	72.5	81.3
Recognizing and responding to sexual victimization and violence	**70.4**	**78.4▲**	80.9	72.5	80.5
Diversity of sexual orientations and gender identities	**62.1**	**75.0▲**	71.9	82.4	65.4
How gender roles and stereotypes affect goals, decision making, and relationships	**60.3**	**75.0▲**	71.9	82.4	70.2
The relationship between alcohol and other drug use and sexual risk behaviors	**76.4**	**89.0▲**	91.8	82.4	86.9

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Tables 18 and 19 show the extent to which students were assessed on their skills to perform behaviors associated with reduced sexual risk behaviors. When adolescents are confident in their ability to perform behaviors (known as self-efficacy) and when they have practice in implementing behaviors, they are more likely to engage in protective behaviors and to refrain from sexual risk behaviors.[1,2] The skills listed are part of sexual health education and are based on the characteristics of sexual health education curricula as listed in the Health Education Curriculum Analysis Tool,[3] the National Health Education Standards,[4] and the National Sex Education Standards.[5] (CDC, 2021)

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[1] Kirby D, Coyle K, Rolleri L, Forrest A, Robin L. *Reducing Adolescent Sexual Risk: A Theoretical Guide for Developing and Adapting Curriculum-Based Programs.* Scotts Valley, CA: ETR Associates; 2011. Available at: https://healtheducationresources.unesco.org/library/documents/reducing-adolescent- sexual-risk-theoretical-guide-developing-and-adapting.

[2] Gavin LE, Catalano RF, David-Ferdon C, Gloppen KM, Markham CM. A review of positive youth development programs that promote adolescent sexual and reproductive health. *Journal of Adolescent Health* 2010;46(3):S75-S91.

[3] Centers for Disease Control and Prevention. *HECAT Module SH. Sexual Health Curriculum*. 2012. Available at: http://www.cdc.gov/healthyyouth/hecat/pdf/HECAT_Module_SH.pdf.

[4] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence.* 2nd edition. Atlanta, GA: American Cancer Society; 2007.

[5] Future of Sex Education Initiative. (2020). National Sex Education Standards: Core Content and Skills, K-12 (Second Edition). Available at: https://siecus.org/wp- content/uploads/2020/03/NSES-2020-2.pdf.

Table 18. Percentage of secondary schools in which teachers assessed the ability of students to apply skills aligned to National Health Education Standards in a required course for students in any of grades 6, 7, or 8 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Comprehend concepts important to prevent HIV, other STDs, and pregnancy	48.6	53.3	55.1	47.6	62.3
Analyze the influence of family, peers, culture, media, technology, and other factors on sexual risk behaviors	50.3	51.5	52.7	47.6	60.2
Access valid information, products, and services to prevent HIV, other STDs, and pregnancy	42.6	50.4	53.3	40.9	55.1
Use interpersonal communication skills to avoid or reduce sexual risk behaviors	**50.3**	**58.6▲**	61.9	47.6	61.0
Use decision-making skills to prevent HIV, other STDs, and pregnancy	48.2	55.1	57.3	47.6	61.1
Set personal goals that enhance health, take steps to achieve these goals, and monitor progress in achieving them	54.1	56.1	58.7	47.6	63.4
Influence and support others to avoid or reduce sexual risk behaviors	42.3	50.2	53.1	40.9	57.3

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 19. Percentage of secondary schools in which teachers assessed the ability of students to apply skills aligned to National Health Education Standards in a required course for students in any of grades 9, 10, 11, or 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Comprehend concepts important to prevent HIV, other STDs, and pregnancy	81.0	83.4	90.3	64.7	86.0
Analyze the influence of family, peers, culture, media, technology, and other factors on sexual risk behaviors	75.1	78.1	83.1	64.7	83.3
Access valid information, products, and services to prevent HIV, other STDs, and pregnancy	79.1	78.1	83.1	64.7	81.7
Use interpersonal communication skills to avoid or reduce sexual risk behaviors	**74.8**	**85.2▲**	92.8	64.7	84.0
Use decision-making skills to prevent HIV, other STDs, and pregnancy	81.0	83.8	87.9	72.5	84.2
Set personal goals that enhance health, take steps to achieve these goals, and monitor progress in achieving them	**71.1**	**85.5▲**	90.3	72.5	82.3
Influence and support others to avoid or reduce sexual risk behaviors	72.9	79.9	85.5	64.7	80.9

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 20 shows the extent to which students were provided opportunities to practice skills to avoid undesired or unprotected sexual risk behaviors.[1] National Health Education Standards 2-8 identify the essential skills students should be able to do as a result of their health education in schools.[2] An effective curriculum builds essential skills - including assessing the accuracy of information, analyzing influence, communication, refusal, and decision-making, as well as goal-setting and self-management - that enable students to build their personal confidence, deal with social pressures, practice health-enhancing behaviors, and avoid or reduce risk behaviors.[2-4] When adolescents are provided opportunities to practice skills individually and with peers, they may be more likely to apply these skills in real life.[5] (CDC, 2021)

Table 20. Percentage of secondary schools in which teachers provided students with the opportunity to practice the following skills in a required course for students in any of grades 6 through 12 during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Communication, decision-making, goal-setting, or refusal skills related to sexual health (e.g., through role playing)	68.4	72.7	73.0	71.7	64.3
Analyzing the influence of family, peers, culture, media, or technology on sexual health	66.8	68.3	67.1	71.7	67.2
Accessing valid sexual health information, products, and services	**60.6**	**68.3▲**	69.9	63.3	61.9

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

[1] Kirby D, Coyle K, Alton F, Rolleri L, Robin L. *Reducing Adolescent Sexual Risk: A Theoretical Guide for Developing and Adapting Curriculum- Based Programs*. Scotts Valley, CA: ETR Associates; 2011.

[2] The Joint Committee on National Health Education Standards. *National Health Education Standards: Achieving Excellence*. 2nd edition. Atlanta, GA: American Cancer Society, 2007.

[3] Centers for Disease Control and Prevention. *Health Education Curriculum Analysis Tool*. 2012. Available at: www.cdc.gov/healthyyouth/hecat/index.htm.

[4] Future of Sex Education Initiative. National Sex Education Standards: Core Content and Skills, K-12 (Second Edition), 2020. Available at: https://siecus.org/wp- content/uploads/2020/03/NSES-2020-2.pdf.

[5] Herbert PC, Lohrmann DK. It's all in the delivery! An analysis of instructional strategies from effective health education curricula. *Journal of School Health* 2011; 81(5):258-264.

Lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ) youth need inclusive sexual health education that is consistent with the scientific evidence and reflects their lived experiences and identities. However, results from the National School Climate Survey indicate that among LGBTQ students who received school-based sexual health education, approximately 79% reported no inclusion of LGB topics and 83% reported no inclusion of transgender/gender non-conforming topics.[1] Further, the national landscape of school-based sexual health education is highly variable. As of early 2019, only 12 states articulate explicit requirements for the discussion of sexual orientation as part of sexual health education, and only 9 of these states require discussions of sexual orientation to be inclusive.[2] The impact of such exclusions can be far-reaching, as students in states with more inclusive sexual health education reported lower odds of experiencing school-based victimization and adverse mental health outcomes.[3] (CDC, 2021)

There are a number of inclusivity-related practices teachers and school staff can engage in to support LGBTQ youth in classroom and school environments. For example, delivering an inclusive sexual health education curriculum, which incorporates LGBTQ individuals, histories, events, and relationships, and incorporates gender-neutral names and pronouns, is critical for supporting LGBTQ youth.[4] According to the National School Climate Survey, students with inclusive LGBTQ curricula in their schools have a greater sense of belonging to their school community, hear fewer homophobic and transphobic remarks, and are less likely to be victimized or feel unsafe at school than those without inclusive curricula.[1] Moreover, teachers can share resources from school and community-based LGBTQ-serving organizations to connect youth with information and services in their communities.[4] (CDC, 2021)

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[1] Kosciw JG, Greytak EA, Zongrone AD, et al. *The 2017 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools*. 2018. New York: GLSEN.

[2] Guttmacher Institute. Sex and HIV Education. Available at: https://www.guttmacher.org/state-policy/explore/sex-and-hiv-education.

[3] Proulx CN, Coulter RW, Egan JE, Matthews DD, Mair CJ. Associations of lesbian, gay, bisexual, transgender, and questioning–inclusive sex education with mental health outcomes and school-based victimization in US high school students. *Journal of Adolescent Health* 2019:64(5):608-614.

[4] GLSEN. Safe Space Toolkit: *A Guide to Supporting Lesbian, Gay, Bisexual and Transgender Students in Your School*. 2019; 1-52. Available at: https://www.glsen.org/sites/default/files/2019- 11/GLSEN%20English%20SafeSpace%20Book%20Text%20Updated%202019.pdf.

Table 21. Percentage of secondary schools in which teachers implemented inclusive practices when providing sexual health education in a required course for students in grades 6 through 12 during the current school year (among schools that teach sexual health education).

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Encouraged use of gender-neutral pronouns such as "they/them" during instruction to recognize gender diversity among students	53.9	56.4	47.3	85.9	53.9
Provided positive examples of LGBT people and same-sex or gender relationships (e.g., family, peer, or romantic)	**45.4**	**53.4▲**	47.1	73.5	50.5
Encouraged students to respect others' sexual and gender identities	77.3	82.4	80.1	90.1	78.6
Provided students with information about LGBT resources within the school (e.g., counseling services, student support groups like Gay/Straight Alliances or Genders and Sexualities Alliances)	**39.9**	**52.2▲**	45.4	74.2	52.1
Identified additional LGBT resources available in the community or online	**37.4**	**44.1▲**	36.6	68.0	45.1

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Parent and Family Involvement

Table 22 shows whether schools are providing health information to students' families. School programs that engage parents and link with the community yield stronger positive results.[1-3] Studies aimed at promoting physical activity, healthy eating, and preventing childhood obesity have identified parent engagement and home activities as beneficial components.[4-7] School-based tobacco prevention programs and community interventions involving parents and community organizations have a stronger impact over time when working in tandem rather than as separate, stand-alone interventions.[8] Parents also are teenagers' primary sex educators, able to capitalize on teachable moments when youth may be more open to learning new information.[9] Parents can continue prevention messages delivered in school, thereby enhancing the likelihood of sustained behavioral changes.[10] Increased communication affects both parenting and health practices of parents. Communicating information on healthy lifestyles aims to reinforce the child's coursework at school, facilitate communication with parents about school activities, and increase parent knowledge of healthy living.[11] (CDC, 2021)

Knowledge about chronic health conditions such as asthma, food allergies, and diabetes and how they might impact student health and academic outcomes is important for families. Parents should be aware of the school health services available and how they can benefit their children; in schools where services are minimal or lacking, parents can advocate for increased nursing and health services.[12] School-based family asthma educational programs for children that include caregivers can positively impact the quality of life and asthma management of children with asthma. Other outcomes that can be positively affected by school-based family asthma educational programs include absenteeism from school, physical activity intolerance, and emergency hospital visits as a result of asthma exacerbations.[13] For students with food allergies, ensuring that parents have the knowledge to help keep their children safe from potential exposure to all foods that might trigger an allergic reaction is an important role schools can play.[14] Additionally, diabetes is a condition with increasing prevalence among youth in the United States. Until recently, young children and teens almost never got type 2 diabetes, which is why it used to be called adult-onset diabetes. Now, about one-third of American youth are overweight, a problem closely related to the increase in kids with type 2 diabetes, some as young as ten years old.[15] Therefore, creating awareness among parents about diabetes may increase knowledge and the potential of appropriate activities for prevention. (CDC, 2021)

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[1] Centers for Disease Control and Prevention. *Parent Engagement: Strategies for Involving Parents in School Health*. Atlanta, GA: U.S. Department of Health and Human Services; 2012.

[2] Centers for Disease Control and Prevention. *Parents for Healthy Schools: A Guide for Getting Parents Involved from K–12*. Atlanta, GA: U.S. Department of Health and Human Services; 2015.

[3] Association for Supervision and Curriculum Development, Centers for Disease Control and Prevention. *Whole School, Whole Child, Whole Community: A Collaborative Approach to Learning and Health.* Alexandria, VA: Association for Supervision and Curriculum Development; 2014. Available at: http://www.ascd.org/ASCD/pdf/siteASCD/publications/wholechild/wscc-a-collaborative- approach.pdf.

[4] Wang Y, Cai L, Wu Y, et al. What childhood obesity prevention programmes work? A systematic review and meta-analysis. *Obesity Reviews* 2015;16(7):547-565.

[5] Waters E, de Silva-Sanigorski A, Buford BJ, Brown T, Campbell KJ, Gao Y, Armstrong R, Prosser L, Summerbell CD. Interventions for preventing obesity in children. *Cochrane Systematic Review* 2011. Available at: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD001871.pub3/full.

[6] Sobol-Goldberg S, Rabinowitz J, Gross R. School-based obesity prevention programs: a meta-analysis of randomized controlled trials. *Obesity* 2013;21(12):2422–2428.

[7] Lantz PM, Jacobson PD, Warner KE, et al. Investing in youth tobacco control: a review of smoking prevention and control strategies. *Tobacco Control* 2000;9:47-63.

[8] Szapocznik J, Coatsworth JD. An ecodevelopmental framework for organizing risk and protection for drug abuse: a developmental model of risk and protection. In: Glantz M, Hartel CR, eds. *Drug Abuse: Origins and Interventions*. Washington, DC: American Psychological Association; 1999, pp. 331-366.

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Table 22. Percentage of secondary schools that provided parents and families with health information designed to increase parent and family knowledge of health-related topics during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Alcohol or other drug-use prevention	30.9	33.4	35.3	28.1	48.3
Asthma	15.4	17.6	16.1	21.9	31.0
Chronic disease prevention (e.g., diabetes, obesity prevention)	Not available	21.2	19.4	26.0	39.0
Food allergies	21.6	23.0	20.6	29.8	38.3
HIV, other STD, or pregnancy prevention	26.5	21.9	19.1	29.8	37.2
Nutrition and healthy eating	**47.4**	**33.0▼**	30.0	41.4	48.2
Physical activity	40.0	37.1	32.6	49.8	48.9
Preventing student bullying and sexual harassment, including electronic aggression (i.e., cyber-bullying)	**67.5**	**51.3▼**	51.1	51.9	58.0
Tobacco-use prevention or cessation	42.5	42.6	43.0	41.4	46.5

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 23 shows whether teachers develop family-based education strategies involving parents in discussing health topics with their children. Supporting learning at home is a type of involvement promoted in CDC's *Parent Engagement: Strategies for Involving Parents in School Health.*[1] Engaging parents in homework assignments or other health activities at home can increase the likelihood that students receive consistent messages at home and in school and decrease the likelihood that they engage in health-risk behaviors.[2-4] (CDC, 2021)

Table 23. Percentage of secondary schools in which teachers gave students health education homework assignments or activities to do at home with their parents during the current school year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Teachers gave students health education homework to do with parents	58.7	53.1	55.3	46.9	45.4

Lead Health Education Survey

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Professional Development

Tables 24, 25, 27, and 28 address the importance of professional development for teachers. It is critical that teachers be well-prepared when they begin teaching and that they continue to improve their knowledge and skills throughout their careers.[1-4] Professional development increases educators' confidence in teaching subject matter and provides opportunities for educators to learn and practice innovative techniques, and to exchange ideas with peers. The Institute of Medicine's Committee on Comprehensive School Health Programs in Grades K-12 recommended that health education teachers should be expected to participate in ongoing, discipline-specific in-service programs to remain abreast of new developments in their field.[5] (CDC, 2021)

Educators who have received professional development in health education report increases in the number of health lessons taught and their confidence in teaching.[6-10] Staff development is associated with increased teaching of important health education topics, including comfort with topics and teaching strategies that support inclusive instruction for sexual and gender minority youth.[6-10] Research also suggests teachers receiving training on culturally-responsive pedagogy improved their understanding of culturally-and linguistically-diverse students and those with varying abilities, tailored instructional strategies, and enhanced their support for students.[11-13] School districts that have improved their professional development activities have seen a rise in student achievement.[14-15] (CDC, 2021)

Tables 26 and 29 show the extent to which professional development about sexual health education and HIV, STDs, or pregnancy prevention has been received by the lead health education teacher. As new information and research on prevention is available, those responsible for teaching sexual health should receive continuing education that provides current information on effective prevention, health education intervention strategies, and priority populations identified as most at-risk for pregnancy and HIV/STD infection.[16-19] (CDC, 2021)

Effective implementation of school health education and sexual health education are linked directly to adequate teacher training programs.[7,20-21] School health education designed to decrease students' participation in risk behaviors requires that teachers have appropriate training to develop and implement school health education curricula.[20-21] Staff development activities for health education teachers need to focus on engaging teaching strategies that facilitate student mastery of critical health information and skills, appropriate lesson modification and differentiation to meet student learning preferences, use of relevant assessment strategies to measure student performance, and alignment to national, state, and local policies related to sexual health education.[22-24] Moreover, staff professional development must adapt to changing instructional models used by schools, including virtual and hybrid-based instruction. Emerging research suggests that virtual professional development is associated with improving teacher subject content knowledge in general education.[25] Professional development opportunities for teachers to design and implement sexual health education curricula and pedagogy strategies would inform current and future teaching practices in school health.[26] (CDC, 2021)

[1] Public Education Network. *Teacher Professional Development: A Primer for Parents and Community Members*. Washington, DC: Public Education Network; 2004.

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[7] Clayton HB, Brener ND, Barrios LC, Jayne PE, Everett Jones S. Professional development on sexual health education is associated with coverage of sexual health topics. *Pedagogy in Health Promotion* 2018;4(2):115-24.

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Table 24. Percentage of secondary schools in which the lead health education teacher received professional development (e.g., workshops, conferences, continuing education, any other kind of in-service) on teaching methods during the past two years.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Teaching students with physical, medical, or cognitive disabilities	43.1	42.6	44.0	38.4	55.7
Teaching students of various racial/ethnic and cultural backgrounds	**37.9**	**45.3▲**	47.7	37.9	57.5
Teaching English language learners (ELL)	46.9	49.4	53.8	36.6	47.5
How to support LGBT students (e.g., bystander intervention skills, implementing safe spaces, use of inclusive language, providing students with information about LGBT resources within the school)	**23.0**	**31.3▲**	29.4	36.8	39.7
Using interactive teaching methods (e.g., role plays, cooperative group activities)	50.6	45.3	42.3	54.3	54.8
Encouraging family or community involvement	**29.4**	**37.2▲**	33.0	49.3	45.9
Teaching skills for behavior change	36.8	41.1	39.0	47.2	51.2
Classroom management techniques (e.g., social skills training, environmental modification, conflict resolution and mediation, behavior management)	**58.5**	**51.2▼**	49.5	56.0	62.2
Assessing student performance in health education	Not available	29.1	31.0	23.6	36.8

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 25. Percentage of secondary schools in which the lead health education teacher received professional development (e.g., workshops, conferences, continuing education, any other kind of in-service) on health-related topics during the past two years.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Alcohol or other drug-use prevention	26.9	26.9	25.4	31.4	38.3
Asthma	15.1	15.5	10.0	32.5	28.1
Chronic disease prevention (e.g., diabetes, obesity prevention)	21.3	24.1	21.3	32.5	31.8
Epilepsy or seizure disorder	21.0	21.9	19.5	29.1	33.7
Food allergies	16.1	18.3	14.8	29.1	32.7
Foodborne illness prevention	17.6	17.6	13.1	31.5	26.8
Human immunodeficiency virus (HIV) prevention	**24.3**	**17.1▼**	13.5	28.1	30.9
Human sexuality	24.1	21.4	18.1	31.5	33.8
Infectious disease prevention (e.g., influenza [flu] or COVID-19 prevention)	**29.4**	**44.6▲**	40.6	56.7	57.0
Injury prevention and safety	33.7	30.7	19.5	65.2	46.1
Mental and emotional health	51.4	50.6	46.1	64.5	63.8
Nutrition and dietary behavior	**26.1**	**20.5▼**	18.3	27.4	30.7
Physical activity and fitness	**42.3**	**29.0▼**	27.9	32.5	41.8
Pregnancy prevention	**22.6**	**16.2▼**	13.6	24.0	23.9
Sexually transmitted disease (STD) prevention	**25.2**	**14.9▼**	13.6	18.9	27.8
Sleep health (e.g., how much sleep students need, good sleep habits)	Not available	19.4	14.5	34.2	23.7
Suicide prevention	45.5	46.7	43.6	56.0	58.3
Tobacco-use prevention or cessation	**45.5**	**22.1▼**	17.1	37.2	33.6
Violence prevention (e.g., bullying, fighting, dating violence prevention)	**44.0**	**32.1▼**	24.3	56.0	50.8

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 26. Percentage of secondary schools in which the lead health education teacher received professional development related to teaching sexual health education during the past two years.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Aligning lessons and materials with the district scope and sequence for sexual health education	**26.4**	**18.3▼**	17.9	19.7	33.7
Creating a comfortable and safe learning environment for students receiving sexual health education	**27.2**	**17.8▼**	15.8	23.6	33.3
Connecting students to on-site or community-based sexual health services	17.4	16.7	14.4	23.6	25.0
Using a variety of effective instructional strategies to deliver sexual health education	**22.3**	**16.4▼**	15.3	19.7	29.3
Building student skills in HIV, other STD, and pregnancy prevention	**22.0**	**12.8▼**	11.9	15.5	26.3
Assessing student knowledge and skills in sexual health education	**20.5**	**12.0▼**	9.4	19.7	26.7
Understanding current district or school board policies or curriculum guidance regarding sexual health education	**24.2**	**17.6▼**	15.6	23.6	31.1
Identifying appropriate modifications to the sexual health curriculum to meet the needs of all students	21.0	16.8	13.2	27.5	27.7
Engaging parents in sexual health education	15.0	12.4	8.5	23.6	19.7
Delivering virtual or eLearning sexual health education instruction	Not available	13.1	11.0	19.2	22.0

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 27. Percentage of secondary schools in which the lead health education teacher would like to receive professional development on teaching methods.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Teaching students with physical, medical, or cognitive disabilities	67.2	63.3	56.5	82.3	63.3
Teaching students of various racial/ethnic and cultural backgrounds	62.2	59.5	54.1	74.5	59.8
Teaching English language learners (ELL)	58.1	59.4	53.5	76.0	52.6
How to support lesbian, gay, bisexual, and transgender students (e.g., bystander intervention skills, implementing safe spaces, use of inclusive language, providing students with information about LGBT resources within the school)	74.0	75.3	70.1	89.6	61.3
Using interactive teaching methods (e.g., role plays, cooperative group activities)	**71.1**	**65.6▼**	63.5	71.4	58.7
Encouraging family or community involvement	70.0	67.4	62.1	82.3	65.9
Teaching skills for behavior change	**78.3**	**69.0▼**	64.4	81.8	68.6
Classroom management techniques (e.g., social skills training, environmental modification, conflict resolution and mediation, behavior management)	59.7	63.4	58.2	77.6	59.8
Assessing student performance in health education	Not available	64.8	61.3	74.5	61.4

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Lead Health Education Survey

Table 28. Percentage of secondary schools in which the lead health education teacher would like to receive professional development on health-related topics.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Alcohol or other drug-use prevention	**71.9**	**62.5▼**	63.4	60.1	63.8
Asthma	**57.1**	**50.0▼**	49.3	51.9	40.8
Chronic disease prevention (e.g., diabetes, obesity prevention)	**67.0**	**57.2▼**	55.2	62.8	54.9
Epilepsy or seizure disorder	**59.1**	**51.4▼**	51.5	51.3	46.0
Food allergies	**56.5**	**47.1▼**	44.5	54.4	44.0
Foodborne illness prevention	**52.6**	**46.2▼**	44.3	51.3	39.7
Human immunodeficiency virus (HIV) prevention	**61.5**	**54.7▼**	52.8	60.1	47.6
Human sexuality	71.0	66.1	63.1	74.3	58.0
Infectious disease prevention (e.g., influenza [flu] or COVID-19 prevention)	57.5	53.0	51.5	57.2	47.3
Injury prevention and safety	**61.7**	**52.6▼**	54.8	46.6	50.9
Mental and emotional health	78.6	73.8	73.5	74.9	73.7
Nutrition and dietary behavior	**70.5**	**59.2▼**	59.0	59.7	61.5
Physical activity and fitness	**63.4**	**48.8▼**	49.1	48.1	57.8
Pregnancy prevention	**63.0**	**52.5▼**	51.5	55.4	48.3
Sexually transmitted disease (STD) prevention	**63.0**	**55.3▼**	53.9	59.2	52.1
Sleep health (e.g., how much sleep students need, good sleep habits)	Not available	63.5	60.7	71.1	56.4
Suicide prevention	73.0	73.1	72.6	74.3	68.7
Tobacco-use prevention or cessation	**68.0**	**56.5▼**	55.2	60.1	57.0
Violence prevention (e.g., bullying, fighting, dating violence prevention)	**76.2**	**68.9▼**	67.0	74.3	68.0

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*

Lead Health Education Survey

Table 29. Percentage of schools in which the lead health education teacher would like to receive professional development related to teaching sexual health education.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Aligning lessons and materials with the district scope and sequence for sexual health education	59.8	63.4	66.2	55.2	51.4
Creating a comfortable and safe learning environment for students receiving sexual health education	61.0	61.8	58.8	70.5	55.2
Connecting students to on-site or community-based sexual health services	65.0	62.4	58.5	73.3	52.8
Using a variety of effective instructional strategies to deliver sexual health education	67.0	65.2	63.3	70.2	58.4
Building student skills in HIV, other STD, and pregnancy prevention	59.9	64.4	63.1	68.1	53.8
Assessing student knowledge and skills in sexual health education	61.3	60.7	61.1	59.7	54.5
Understanding current district or school board policies or curriculum guidance regarding sexual health education	64.1	62.3	62.2	62.4	54.0
Identifying appropriate modifications to the sexual health curriculum to meet the needs of all students	65.6	67.6	65.6	73.3	57.6
Engaging parents in sexual health education	65.5	65.3	61.0	77.8	53.5
Delivering virtual or eLearning sexual health education instruction	Not available	58.5	55.3	67.6	47.0

Lead Health Education Survey

Professional Preparation, Qualification, and Experience

Tables 30-32 show the extent to which lead health education teachers are formally trained in the topic of health education and the teaching experience and credentials of the lead health education teacher. Health education teachers need to be academically prepared and specifically qualified on the subject of health.[1] Research suggests teacher characteristics such as professional development attendance, certification type, educational background, and years of experience are associated with improving student knowledge gained in health education.[2] In one study, health education teachers reported more positive attitudes toward teaching, higher levels of satisfaction with teaching, and more supportive school environments when compared to all other content teachers.[3] Additionally, pre-service training in health education is associated with increased teaching of important health education topics.[4] To retain teachers and promote high-quality teaching and learning within school health education[5], it is critical to understand the unique characteristics, experiences, and behaviors of health education teachers through continued research and practice-based efforts.[6] (CDC, 2021)

[1] National Commission on the Role of the School and the Community to Improve Adolescent Health. *Code Blue: Uniting for Healthier Youth*. Alexandria, VA: National Association of State Boards of Education; 1990.

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Table 30. Percentage of secondary schools in which the major emphasis of the lead health education teacher's professional preparation was in a specific discipline:

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Health education or health and physical education combined	46.5	50.8	54.9	39.5	54.8
Physical education or kinesiology	19.1	14.3	17.5	5.3	19.3
Other education degree	10.4	10.0*	8.2	15.3	Not available
Home economics or family and consumer science, biology or other science, or nutrition	**10.2**	**6.2▼**	6.5	5.3	6.1
Nursing or counseling	**6.7**	**2.5▼**	1.5	5.3	8.4
Public or other	**7.1**	**16.1▲**	11.4	29.5	5.0

Bold *= Statistically significant difference between 2020 and 2022 ▲ = Statistically significant increase ▼= Statistically significant decrease*
**Analysis for statistically significant differences between 2020 and 2022 for all Hawai'i public schools is not available.*
Lead Health Education Survey

Table 31. Percentage of secondary schools in which the lead health education teacher is certified, licensed, or endorsed by the state to teach health education in middle school or high school.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	US
	2020	2022	2022	2022	2022
Had a lead health education teacher who is certified to teach health education	58.5	54.3	66.3	19.6	77.6

Lead Health Education Survey

Table 32. Percentage of secondary schools in which the lead health education teacher had two or more years of experience teaching health education courses or topics.

	All Hawai'i Public Schools*		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Had a lead health education with two or more years of teaching experience	86.0	81.0	87.0	61.4	88.2

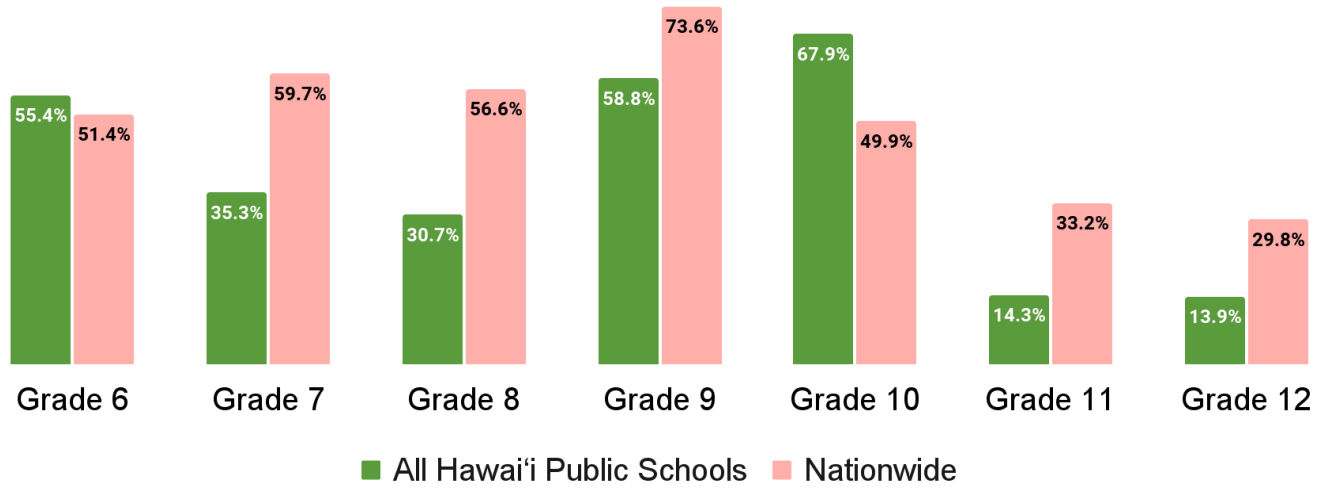
**Analysis for statistically significant differences between 2020 and 2022 for all Hawai'i public schools is not available.*
Lead Health Education Survey

2022 SCHOOL HEALTH PROFILES RESULTS

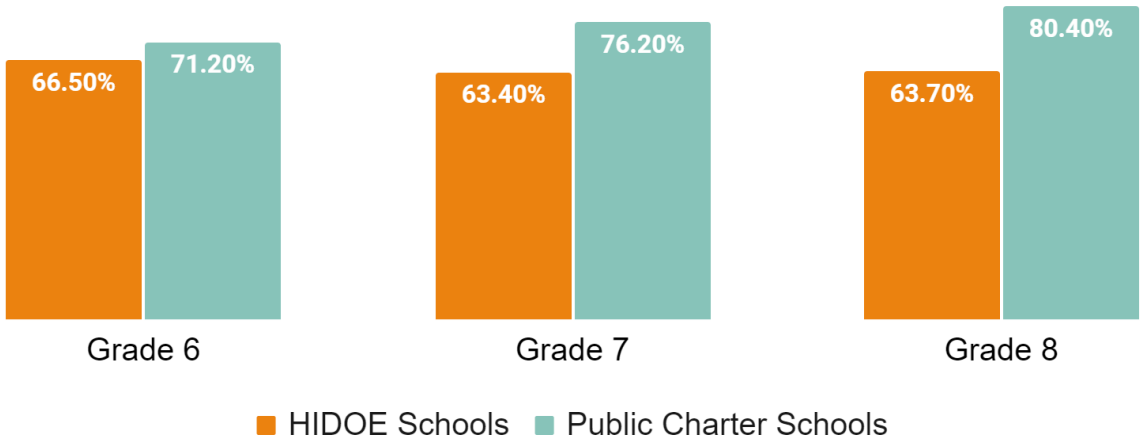
Physical Education and Physical Activity

Overview of Physical Education and Physical Activity

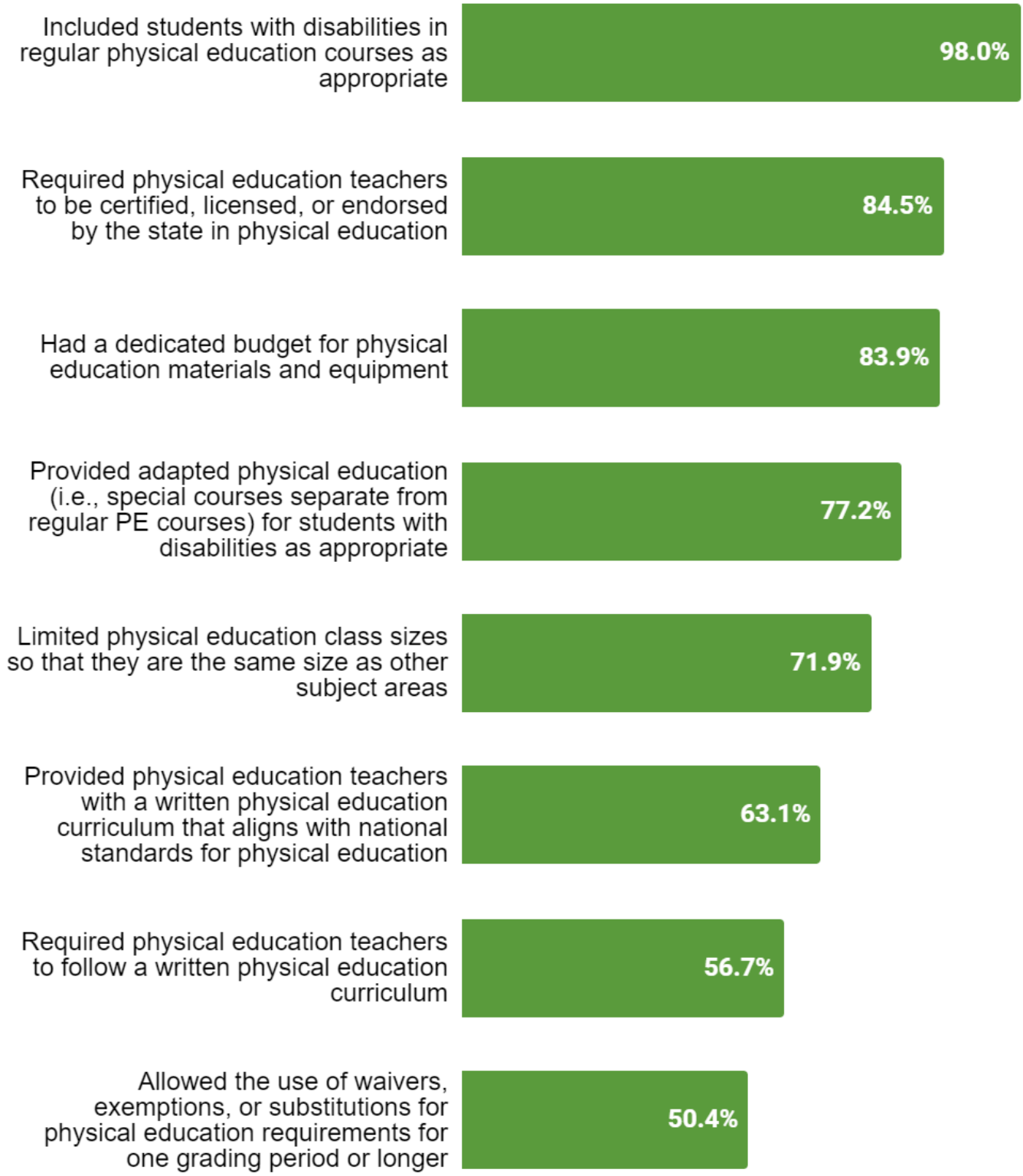
Overall, Hawai'i's public secondary schools provided less required physical education courses than the US.
Source: Table 33 (2022 Profiles)



In Hawai'i, public charter schools provided more required physical education courses in middle school than HIDOE schools.
Source: Table 33 (2022 Profiles)

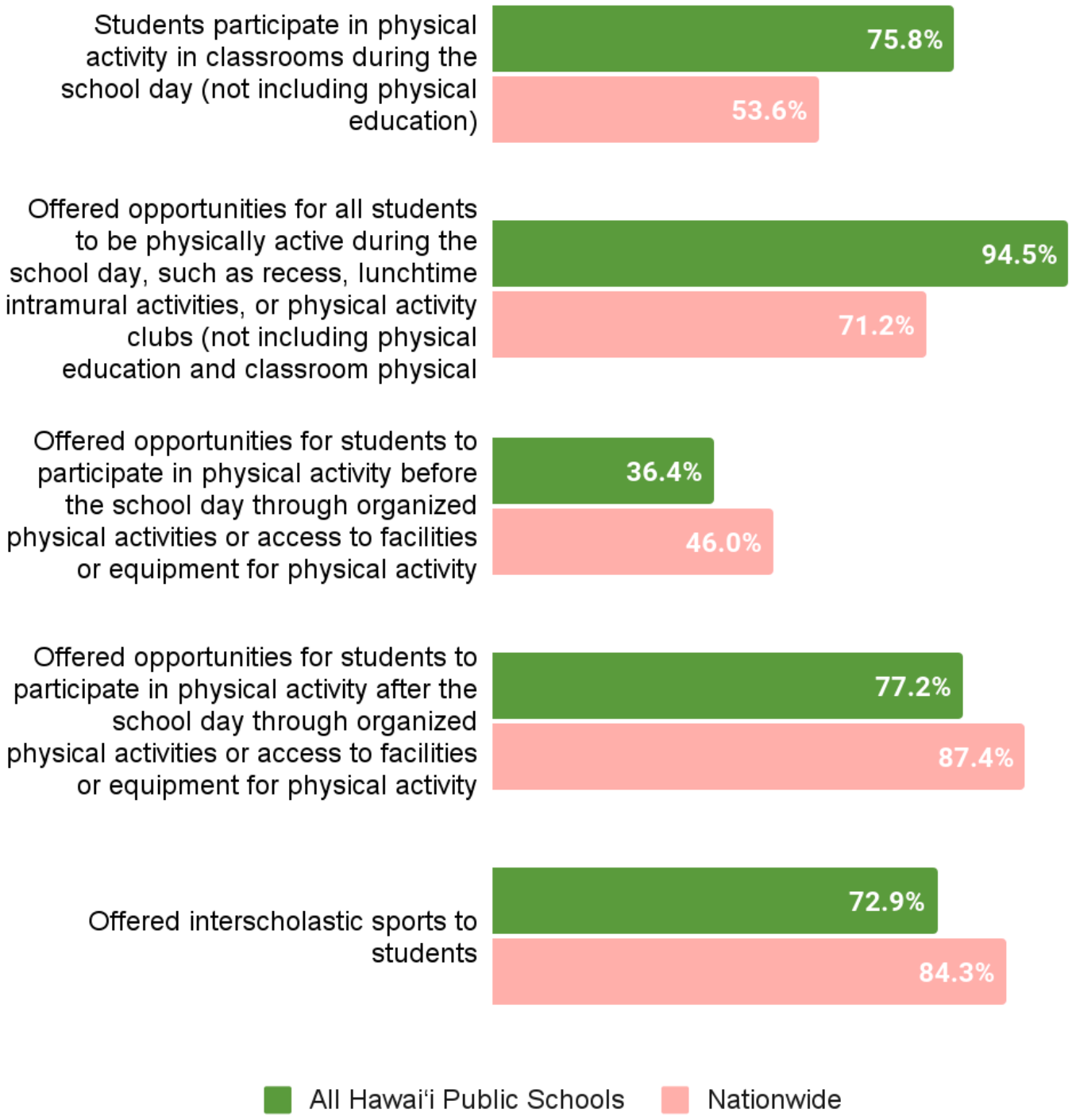


Hawai'i's public secondary schools implemented a variety of physical education practices.
Source: Table 34 (2022 Profiles)



Overall, Hawai'i's public secondary schools provided more physical activity opportunities during the school day than the US.

Source: Tables 36 and 37 (2022 Profiles)



Required Physical Education

Required physical education is defined on the Profiles questionnaire as instruction that helps students develop the knowledge, attitudes, skills, and confidence needed to adopt and maintain a physically active lifestyle that students must receive for graduation or promotion from school.

Physical education provides students with the knowledge, attitudes, skills, behaviors, enjoyment, and confidence to adopt and maintain physically active lifestyles.[1-5] The importance of physical education in promoting the health of young people is supported by *Healthy People 2030* Physical Activity baseline objective (ECBP-01): increase the proportion of adolescents who participate in daily school physical education.[6] (CDC, 2021)

Table 33. Percentage of secondary schools that taught a required physical education course in each of the following grades (among schools with students in that grade).

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Grade 6	**83.6**	**68.5▼**	66.5	71.2	94.3
Grade 7	**75.3**	**67.9▼**	63.4	76.2	93.3
Grade 8	70.8	69.7	63.7	80.4	91.4
Grade 9	88.7	87.5	84.3	94.6	93.6
Grade 10	78.3	77.1	79.3	72.5	73.7
Grade 11	40.8	39.8	29.5	62.9	58.2
Grade 12	36.1	36.1	24.1	62.9	56.1

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Principal Survey

[1] SHAPE America. *National Standards & Grade-level Outcomes for K-12 Physical Education*. Champaign, IL: Human Kinetics; 2014.

[2] SHAPE America. *The Essential Components of Physical Education*. Reston, VA: SHAPE America; 2015.

[3] Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *Morbidity and Mortality Weekly Report* 2011;60(No. RR-5).

[4] Institute of Medicine. *Educating the Student Body: Taking Physical Activity and Physical Education to School*. Kohl HW III, Cook HD, eds; Committee on Physical Activity and Physical Education in the School Environment; Food and Nutrition Board; Institute of Medicine. Washington DC: The National Academies Press; 2013. Available at: http://www.nap.edu/catalog.php?record_id=18314.

[5] Centers for Disease Control and Prevention. *Physical Education Curriculum Analysis Tool.* Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2019.

[6] U.S. Department of Health and Human Services. *Healthy People 2030.* Office of Disease Prevention and Health Promotion. June 2021. Available at: https://health.gov/healthypeople/objectives-and-data/browse-objectives/physical-activity.

Physical Education Practices

Table 34 shows the extent to which schools are implementing key physical education policies and curricular approaches identified in *The Essential Components of Physical Education*. This document identifies four essential components to help schools create a strong foundation for physical education programs: 1) policy and environment; 2) curriculum; 3) appropriate instruction; and 4) student assessment.[1,2] Specifically, the policy and environment component raises awareness of the critical policies that need to be in place to ensure physical education is part of a well-rounded education for all students.[3,4] Strongly worded and well-monitored physical education policies have the potential to improve physical education programs and increase physical activity levels among students. The curriculum component underscores the need for a physical education curriculum that aligns with national standards for physical education.[5] The appropriate instruction and student assessment components are also important aspects of the curriculum. Appropriate instruction aligns the student objectives and outcomes with the learning activities that are identified in the curriculum.[1,2] Student assessments provide evidence of whether students have achieved grade-level outcomes and national and state standards. [1,2,5] (CDC, 2021)

Table 34. Percentage of secondary schools that engaged in physical education practices.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Provided physical education teachers with a written physical education curriculum that aligns with national standards for physical education	66.7	63.1	72.7	35.5	84.3

Principal Survey

[1] SHAPE America. *The Essential Components of Physical Education*. Reston, VA: SHAPE America—Society of Health and Physical Educators; 2015. Available at: http://www.shapeamerica.org/upload/TheEssentialComponentsOfPhysicalEducation.pdf.

[2] Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *Morbidity and Mortality Weekly Report* 2011;60(No. RR-5).

[3] Institute of Medicine. *Educating the Student Body: Taking Physical Activity and Physical Education to School*. Kohl HW III, Cook HD, eds; Committee on Physical Activity and Physical Education in the School Environment; Food and Nutrition Board; Institute of Medicine. Washington DC: The National Academies Press; 2013. Available at: http://www.nap.edu/catalog.php?record_id=18314.

[4] Ward DS. *School policies on physical education and physical activity*. San Diego, CA: Active Living Research; 2013. Available at: http://activelivingresearch.org/sites/default/files/Synthesis_Ward_SchoolPolicies_Oct2011_1.pdf.

[5] SHAPE America. *National Standards & Grade-level Outcomes for K-12 Physical Education*. Champaign, IL: Human Kinetics; 2014.

Table 34. Percentage of secondary schools that engaged in physical education practices. (Continued)

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Required physical education teachers to follow a written physical education curriculum	55.8	56.7	62.9	38.6	78.7
Allowed the use of waivers, exemptions, or substitutions for physical education requirements for one grading period or longer	**43.5**	**50.4▲**	52.1	45.5	56.3
Allowed teachers to exclude students from physical education to punish them for inappropriate behavior or failure to complete class work in another class	4.4	3.4	3.5	3.2	9.8
Required physical education teachers to be certified, licensed, or endorsed by the state in physical education	81.6	84.5	93.8	57.5	95.9
Limited physical education class sizes so that they are the same size as other subject areas	73.6	71.9	70.3	76.5	58.1
Had a dedicated budget for physical education materials and equipment	80.1	83.9	92.6	59.2	85.8
Provided adapted physical education (i.e., special courses separate from regular PE courses) for students with disabilities as appropriate	75.8	77.2	84.0	57.4	81.3
Included students with disabilities in regular physical education courses as appropriate	99.0	98.0	98.7	95.8	99.2

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*

Principal Survey

Physical Education and Physical Activity Professional Development

Physical education teachers should have professional development opportunities that help them build new knowledge and skills to improve physical education and increase students' physical activity.[1-3] PE teachers who participate in staff development programs are more likely to use recommended teaching methods such as holding group discussions, implementing physical activity stations, videotaping student performances, testing students' knowledge related to PE, giving fitness tests, keeping students physically active the majority of PE class time, and explaining to students the meaning of fitness scores.[4] Professional development for PE teachers provides skills for improving PE classes through student engagement in physical activity and the content of lessons taught.[5-7] (CDC, 2021)

Table 35. Percentage of secondary schools in which any physical education teachers or specialists received professional development (e.g., workshops, conferences, continuing education, any other kind of in-service) on physical education or physical activity during the past year.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Any physical education teachers or specialists received professional development on physical education or physical activity	**75.3**	**58.7▼**	72.2	20.5	76.7

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Principal Survey

[1] SHAPE America. *National Standards & Grade-level Outcomes for K-12 Physical Education.* Champaign, IL: Human Kinetics; 2014.

[2] SHAPE America. *The Essential Components of Physical Education*. Reston, VA: SHAPE America—Society of Health and Physical Educators; 2015. Available at: http://www.shapeamerica.org/upload/TheEssentialComponentsOfPhysicalEducation.pdf.

[3] Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *Morbidity and Mortality Weekly Report* 2011;60(No. RR-5).

[4] Davis K, Burgeson CR, Brener ND, McManus T, Wechsler H. The relationship between qualified personnel and self-reported implementation of recommended physical education practices and programs in U.S. schools. *Research Quarterly for Exercise and Sport* 2005; 76(2):202-211.

[5] Kelder S, Mitchell PD, McKenzie TL, Derby CA, Strikmiller PK, Luepker RV, Stone EJ. Long-term implementation of the CATCH physical education program. *Health Education and Behavior* 2003;30(4):463-475.

[6] Lander NJ, Barnett LM, Brown H, Telford A. Physical education teacher training in fundamental movement skills makes a difference to instruction and assessment practices. *Journal of Teaching in Physical Education* 2015;34(3):548-556.

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Physical Activity

To promote physical activity in addition to physical education, schools can offer students other opportunities to be physically active through coordinated school physical activity programs (CSPAP) that incorporate practices such as classroom physical activity, intramural sports or physical activity clubs, or interscholastic sports.

The goals of a CSPAP are to provide (1) a variety of school-based physical activities to enable all students to participate in at least 60 minutes of moderate-to-vigorous physical activity each day and (2) coordination among the CSPAP components so that all students will be fully physically educated and well-equipped for a lifetime of physical activity. (Institute of Medicine, 2013)

The results in Table 36 examine the extent to which schools provide physical activity opportunities outside of physical education. Schools play a critical role in helping students participate in the recommended 60 minutes of physical activity every day.[1,2] To achieve this recommendation, it is important to provide physical activity opportunities, such as classroom physical activity, recess, lunchtime intramurals, and physical activity clubs, in addition to physical education.[3-6] Students can accumulate physical activity through these opportunities and such participation can also enhance time on task, attentiveness, concentration in the classroom, and academic performance.[7,8] (CDC, 2021)

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[1] U.S. Department of Health and Human Services. *2008 Physical Activity Guidelines for Americans.* Washington, DC: U.S. Department of Health and Human Services; 2008.

[2] Institute of Medicine. *Educating the Student Body: Taking Physical Activity and Physical Education to School*. Kohl HW III, Cook HD, eds; Committee on Physical Activity and Physical Education in the School Environment; Food and Nutrition Board; Institute of Medicine. Washington DC: The National Academies Press; 2013. Available at: http://www.nap.edu/catalog.php?record_id=18314.

[3] Physical Activity Guidelines for Americans Midcourse Report Subcommittee of the President's Council on Fitness, Sports & Nutrition. *Physical Activity Guidelines for Americans Midcourse Report: Strategies to Increase Physical Activity among Youth.* Washington, DC: U.S. Department of Health and Human Services; 2012.

[4] Centers for Disease Control and Prevention. *A Guide for Developing Comprehensive School Physical Activity Programs.* Atlanta, GA: US Department of Health and Human Services; 2013.

[5] Centers for Disease Control and Prevention. *Strategies for Classroom Physical Activity in Schools*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2018.

[6] Centers for Disease Control and Prevention and SHAPE America—Society of Health and Physical Educators. *Strategies for Recess in Schools*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2017.

[7] Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, Nihiser AJ. The association between school-based physical activity, including physical education, and academic performance: a systematic review of the literature. *Preventive Medicine* 2011;52 Suppl 1:S10-20.

[8] Centers for Disease Control and Prevention. *Health and Academic Achievement*. Atlanta, GA: Centers for Disease Control and Prevention; 2014. Available at: https://www.cdc.gov/healthyschools/health_and_academics/pdf/health-academic- achievement.pdf.

Table 36. Percentage of secondary schools that offered physical activity opportunities for students.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Students participated in physical activity in classrooms during the school day (outside of physical education)	74.1	75.8	70.6	91.0	53.6
Offered opportunities for all students to be physically active during the school day (e.g., recess, lunchtime intramural activities, or physical activity clubs)	**90.9**	**94.5▲**	93.8	96.3	71.2
Offered interscholastic sports to students	76.2	72.9	83.2	42.9	84.3

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Principal Survey

Table 37 shows the extent to which students are provided the opportunity to participate in physical activities before and after the school day, through intramural activities, physical activity clubs, and interscholastic sports. Offering a variety of opportunities can increase students' physical activity and help them attain their 60 minutes of daily activity.[1,2] According to SHAPE America, intramural activities, physical activity clubs, and recreation clubs contribute to young people's physical and social development. Additionally, intramural activities or physical activity clubs offer students the opportunity to be involved in planning and implementing such programs and offer safe and structured opportunities to be physically active.[3-6] (CDC, 2021)

School or community-based sports programs provide structured time for students to accumulate minutes of physical activity, establish cooperative and competitive skills, and learn sport-specific and performance-based skills. Evidence indicates that participation in sports is related to higher levels of participation in overall physical activity.[7] Additionally, participation in sports programs has been associated with improved mental health and fewer risky health behaviors.[7,8] (CDC, 2021)

Table 37. Percentage of schools that offered opportunities for students to participate in physical activity through organized physical activities or access to facilities or equipment for physical activity.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Before the school day	**59.2**	**36.4▼**	38.5	30.1	46.0
After the school day	**87.0**	**77.2▼**	84.1	57.5	87.4

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Principal Survey

[1] Physical Activity Guidelines for Americans Midcourse Report Subcommittee of the President's Council on Fitness, Sports & Nutrition. *Physical Activity Guidelines for Americans Midcourse Report: Strategies to Increase Physical Activity among Youth.* Washington, DC: U.S. Department of Health and Human Services; 2012.

[2] Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *Morbidity and Mortality Weekly Report* 2011;60(No. RR-5).

[3] Pate RR, O'Neill JR. After-school interventions to increase physical activity among youth. *British Journal of Sports Medicine* 2009;43:14-18.

[4] Beets M, Beighle A, Erwin H, Huberty J. After-school impact on physical activity and fitness. A meta-analysis. *American Journal of Preventive Medicine* 2009;36(6):527-537.

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[6] Bocarro JN, Kanters, Michael A, Edwards MB, Casper JM, McKenzie TL. Prioritizing school intramural and interscholastic programs based on observed physical activity. *American Journal of Health Promotion* 2014;28(3):S65-S71.

[7] Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, Nihiser AJ. The association between school-based physical activity, including physical education, and academic performance: a systematic review of the literature. *Preventive Medicine* 2011;52 Suppl 1:S10-20.

[8] Brown DR, Galuska DA, Zhang J, Blanck HM, Ainsworth BE. Physical activity, sport participation, and suicidal behavior: U.S. high school students. *Medicine & Science in Sports & Exercise* 2007; 39(12):2248-2257.

Table 38 examines whether schools are developing and evaluating a Comprehensive School Physical Activity Program (CSPAP). CSPAP is a framework for planning and organizing activities in school physical education and physical activity.[1-3] The goal of a CSPAP is to increase physical activity opportunities before, during, and after school and to increase students' overall physical activity and health.[1,2] Healthy and physically active students tend to have better grades, school attendance, cognitive performance (e.g., memory), and classroom behaviors (e.g., on-task behavior).[4] The Centers for Disease Control and Prevention's Comprehensive School Physical Activity Programs: A Guide for Schools outlines a step-by-step process to develop, implement, and evaluate a CSPAP.[2] This process helps schools develop a yearly plan for physical education and physical activity that they can implement and evaluate. The plan can be for CSPAP exclusively or incorporated into school improvement or other school health plans.

Table 38. Percentage of schools that developed and evaluated a Comprehensive School Physical Activity Program (CSPAP).

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Had a written plan for providing opportunities for students to be physically active before, during, and after school (e.g., Comprehensive School Physical Activity Program plan).	19.6	21.4	16.9	34.3	25.0
Assessed opportunities available to students to be physically active before, during, or after school	**57.8**	**48.2▼**	49.3	45.2	51.2

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Principal Survey

[1] Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *Morbidity and Mortality Weekly Report* 2011;60(No. RR-5).

[2] Centers for Disease Control and Prevention. *A Guide for Developing Comprehensive School Physical Activity Programs.* Atlanta, GA: US Department of Health and Human Services; 2013.

[3] Centers for Disease Control and Prevention. *Increasing Physical Education and Physical Activity: A Framework for Schools*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2017.

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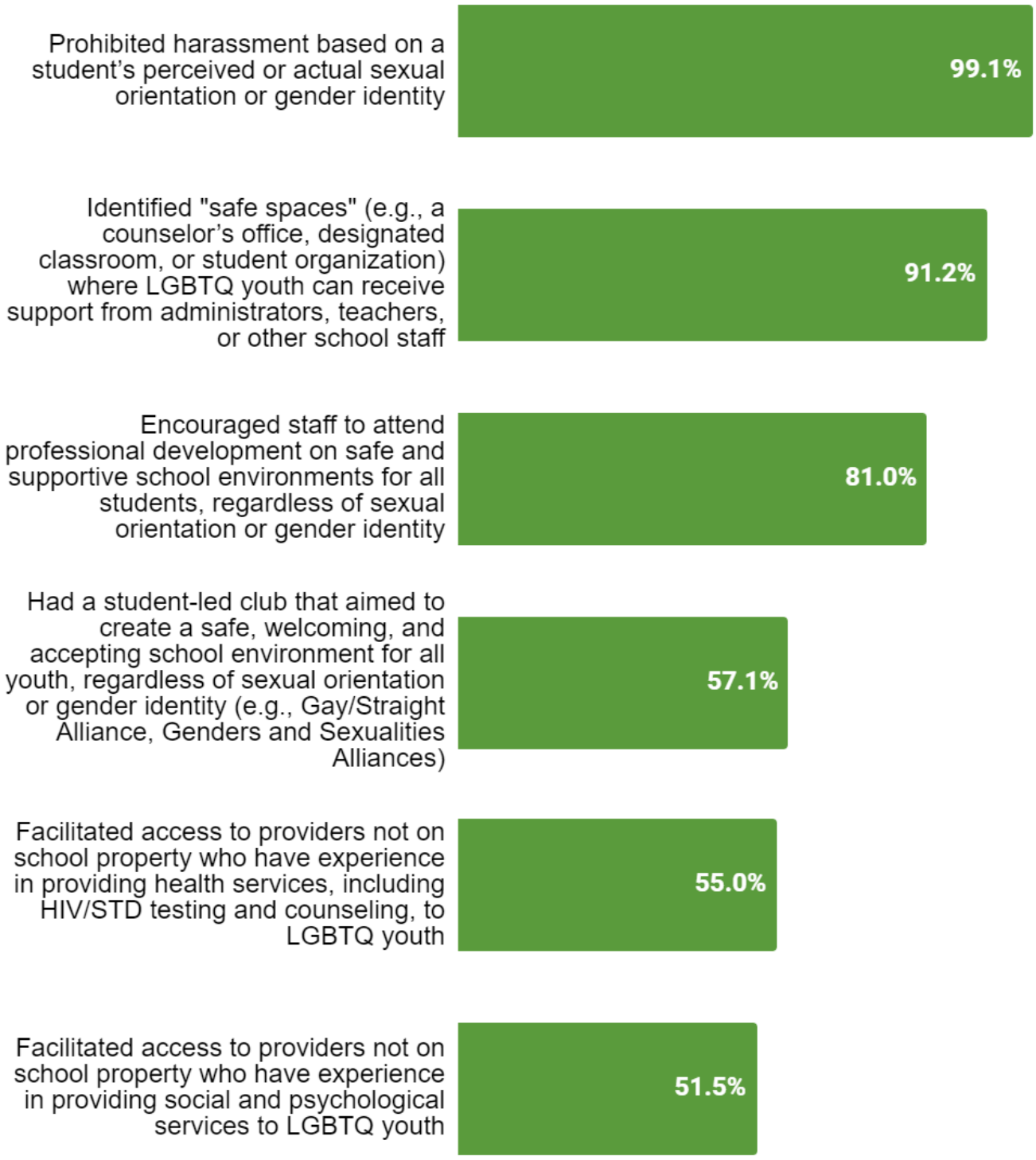
2022 SCHOOL HEALTH PROFILES RESULTS

Health-Promoting School Environment

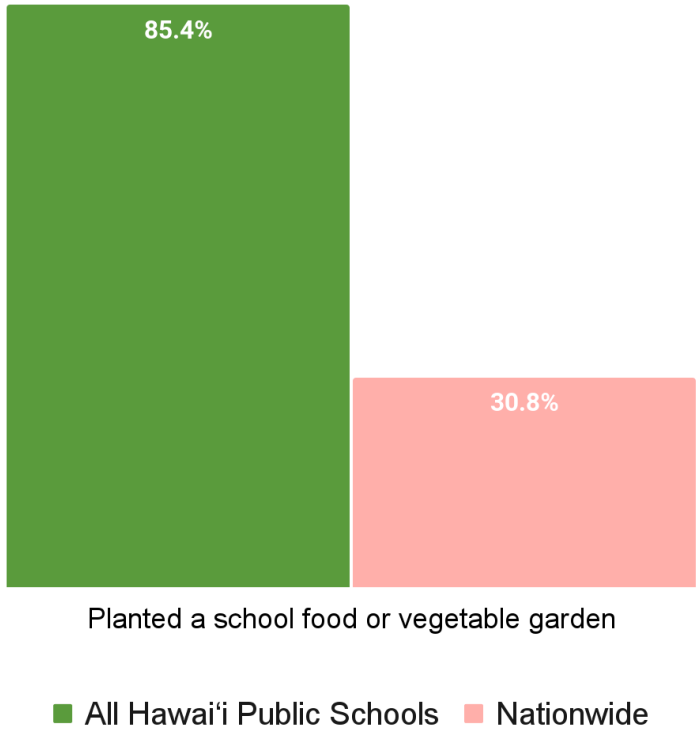
Overview of Health-Promoting School Environments

Hawai‘i’s public secondary schools implemented a variety of practices related to LGBTQ youth.
Source: Tables 39 and 40 (2022 Profiles)



Most of Hawai‘i’s public secondary schools have a school garden.

Source: Table 41 (2022 Profiles)



Safe and Supportive School Environments for LGBTQ Students

Gay/straight alliances (GSA) or similar clubs are associated with greater safety for LGBTQ youth. LGBTQ youth who attend schools with a GSA are less likely than those at schools without such clubs to report violence victimization and have reduced rates of absenteeism.[1,2] In addition, LGB youth who attend schools with gay/straight alliances or similar clubs, those who attend schools with an anti-bullying policy, and those who feel that there is a school staff member who could be approached about a problem have a lower risk of suicidality than those who attend schools without these respective supports available,[1,3] and transgender youth in schools that prohibit harassment, have a gay/straight alliance or similar club on campus, and access to a supportive teacher report increased feelings of safety at school and reduced absenteeism.[2,4] (CDC, 2021)

Table 39. Percentage of secondary schools that had a student-led club that aimed to create a safe, welcoming, and accepting school environment for all youth, regardless of sexual orientation or gender identity (e.g., Gay/Straight Alliance, Genders and Sexualities Alliance).

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Had a student-led club	54.8	57.1	65.5	33.7	48.3

Principal Survey

[1] Goodenow C, Szalacha L, Westheimer K. School support groups, other school factors, and the safety of sexual minority adolescents. *Psychology in the Schools* 2006; 45(3):573-589.

[2] Greytak EA, Kosciw JG, Boesen MJ. Putting the "T" in "resource": The benefits of LGBT-related school resources for transgender youth. *Journal of LGBT Youth* 2013; 10(1-2):45-63.

[3] Hatzenbuehler ML, Birkett M, Van Wagenen A, Meyer IH. Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health* 2014;104(2):279-286.

[4] McGuire JK, Anderson CR, Toomey RB, Russell ST. School climate for transgender youth: A mixed method investigation of student experiences and school responses. *Journal of Youth and Adolescence* 2010;39(10):1175-1188.

Table 40. Percentage of secondary schools that engaged in practices related to LGBTQ youth.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Identified "safe spaces" (e.g., a counselor's office, designated classroom, or student organization) where LGBTQ youth can receive support from administrators, teachers, or other school staff	**82.2**	**91.2▲**	92.7	86.7	87.3
Prohibited harassment based on a student's perceived or actual sexual orientation or gender identity	**96.8**	**99.1▲**	98.8	100.0	98.0
Encouraged staff to attend professional development on safe and supportive school environments for all students, regardless of sexual orientation or gender identity	**85.2**	**81.0▼**	82.5	76.7	81.8
Facilitated access to providers not on school property who have experience in providing health services, including HIV/STD testing and counseling, to LGBTQ youth	51.4	55.0	54.4	56.7	52.5
Facilitated access to providers not on school property who have experience in providing social and psychological services to LGBTQ youth	54.0	51.5	47.9	61.4	62.8

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*

Principal Survey

School Gardens

School garden programs can increase students' nutrition knowledge, willingness to try fruit and vegetables, and positive attitudes about fruits and vegetables.[1-7] School gardens vary in size and purpose. Schools may have window sill gardens, raised beds, greenhouses, or planted fields. For example, schools may grow plants outdoors or indoors, directly in the soil, in containers, or using aquaponic or hydroponic systems. (CDC, 2023)

There are many ways for students to engage in a school garden – planning, preparing the soil, planting seeds, observing and caring for plants, harvesting, collecting and analyzing data, and preparing food in class. Schools can provide learning experiences in the garden to support students' understanding of the content standards, strengthen cultural connections, and increase social-emotional skills.

Table 41. Percentage of schools that planted a school food or vegetable garden.

	All Hawai'i Public Schools		HIDOE Schools (Non-Charter)	Public Charter Schools	Nationwide
	2020	2022	2022	2022	2022
Planted a school food or vegetable garden	**72.3**	**85.4▲**	85.3	85.7	30.8

Bold *= Statistically significant difference between 2020 and 2022* ▲ *= Statistically significant increase* ▼*= Statistically significant decrease*
Principal Survey

[1] Davis JN, Spaniol MR, Somerset S. Sustenance and sustainability: maximizing the impact of school gardens on health outcomes. *Public Health Nutr*. 2014;18(13):2358–2367.
[2] Langellotto GA, Gupta A. Gardening increases vegetable consumption in school-aged children: A meta-analytical synthesis. *Horttechnology*. 2012;22(4):430–445.
[3] Community Preventative Services Task Force. *Nutrition: Gardening Interventions to Increase Fruit and Vegetable Consumption Among Children. Finding and Rationale Statement*. https://www.thecommunityguide.org/sites/default/files/assets/Nutrition-Gardening-Fruit-Vegetable-Consumption-Children-508.pdf. Accessed on May 16, 2019.
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CDC. (2023, January 10). *Healthy eating learning opportunities and nutrition education.* https://www.cdc.gov/healthyschools/nutrition/school_nutrition_education.htm

CDC. (2024, May 15). *School health profiles explorer*. https://profiles-explorer.cdc.gov

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