



Environmental Scan of Health Education Teacher Preparation Programs

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WAYNE STATE
Division of Kinesiology



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Table of Contents

Executive Summary	III
Report	1
Introduction	1
Objectives.....	2
Methodology.....	2
Results	4
National Assessment.....	4
Program Type Assessment	5
State by State Assessment	13
State Certification Policies.....	32
Conclusion	34
Recommendations	35
References.....	37

Introduction

Undergraduate majors in education, including health education (HE), have significantly declined over the past 50 years (U.S. Department of Education, 2019). Demands on teachers in many schools have prioritized meeting criteria for test scores versus focusing on the whole child (Cardina and Fegley, 2016; Mann and Lohrmann, 2019; Videto and Dake, 2019). These challenges have resulted in limited teachers with formal school health education professional preparation available to teach HE within schools, a decrease in quality in valuable HE delivery within schools and a lack of effective preparation for HE teachers (Birch et al., 2019; Economic Policy Institute, 2019; Brener et al., 2017).

The Whole School, Whole Community, Whole Child (WSCC) model is the latest framework utilized and promoted by the Centers for Disease Control and Prevention (CDC) and ASCD to address the whole child, including health and health education in schools (CDC, 2020). Research has shown that when HE is delivered effectively in schools, students show improvements in health as well as key academic outcomes (Smith, Potts-Datema, and Nolte, 2005; Chiang, Meagher and Slade, 2015; Brener et al., 2017, Birch et al., 2019). In order to deliver effective health education in schools, health teacher preparation programs must provide training in utilizing the WSCC model as well as required coursework in key areas of health education. A review of health teacher preparation programs throughout the United States was conducted from August 2019 to June 2020. This review was completed to determine whether content in the WSCC model and other key areas of child health (e.g., nutrition, chronic disease, mental health, etc.) were included in health teacher professional preparation curriculum so that teachers are well-prepared to enter practice.

Background

In 2018, the Society for Public Health Education (SOPHE) was awarded a cooperative agreement with the CDC School Health Branch to strengthen capacity and training in school health education, particularly related to the WSCC framework. One priority area includes strengthening health teacher preparation in higher education, with the first task being the completion of an environmental scan. The scan aims to:

- Determine what programs currently exist in health education professional preparation across the United States; and
- Identify gaps in health education professional preparation programs in which tools and resources from the Centers for Disease Control and Prevention (CDC) and other partners might be able to address these gaps.

Methodology

An initial web search of health education (HE) and physical education (PE) teacher preparation programs found several hundred programs available to individuals to become "certified" as a health or physical education teacher. These certifications could be conducted with no prior teacher education background/major as some online programs stated a requirement of a "Bachelor's degree." The focus was shifted to HE and PE teacher preparation programs which were either state-approved or accredited programs. Accreditation of teacher preparation programs is recognized through the Council for the Accreditation of Educator Preparation (CAEP).

State-approved and CAEP accredited programs within each state were identified and reviewed using an online database. Members of SOPHE's School Health Think Tank provided

feedback on the list of programs assessed and added programs for inclusion. Contact information for HE/PE program leads at each college/university were also identified and documented within the project database.

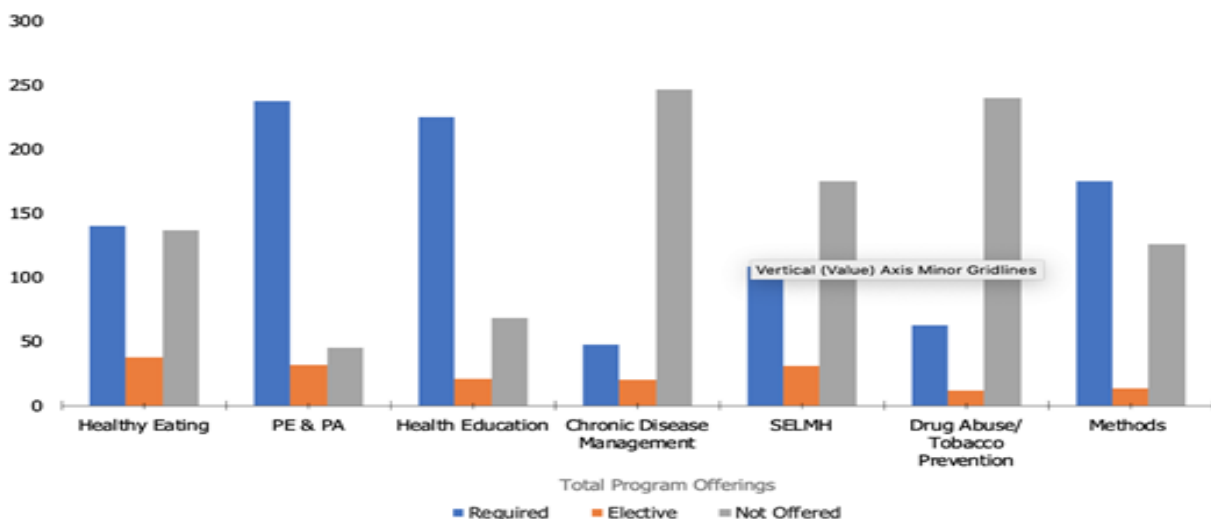
Programs were reviewed for type of teacher preparation program (Ten categories were assessed: 1: health education (only), 2: physical education (only), 3: a combination of health and physical education, 4: health education minor, 5: physical education minor, 6: health and physical education minor, 7: health education major non-school teaching track, 8: physical education major non-school teaching track, 9: health education and physical education major non-school health teaching track, 10: single course for certification) and curriculum offered within school health content areas such as drug abuse/tobacco prevention and the CDC School Health Branch priority areas which include: health education, nutrition education, physical activity, physical education, social emotional learning/mental health and management of chronic conditions. Programs were also assessed for requiring a methods course in teaching HE as well as required student teaching hours within the content area. Codes were created to assess whether courses were required, offered or not provided within each program.

Findings

In total, 386 programs were initially assessed for the scan and included programs within 256 public institutions and 130 private institutions. Seventeen programs were not CAEP accredited but were state-approved. Nineteen programs are housed in historically Black universities and colleges and Latino/Latinx and Hispanic serving institutions. Due to limitations of information on program websites, and the closure of colleges and universities as a result of the COVID-19 pandemic, 71 programs could not be evaluated at this time.

Overall, most HE and PE teacher preparation programs required courses in general health education (71%), PE and physical activity (PA) (76%) and nutrition education (44%). The least required and also least offered courses were chronic disease management (15% required), drug abuse and tobacco prevention (20% required) and social emotional learning/mental health (35% required) (Figure 1).

Figure 1: Program Offerings by School Health Content Area



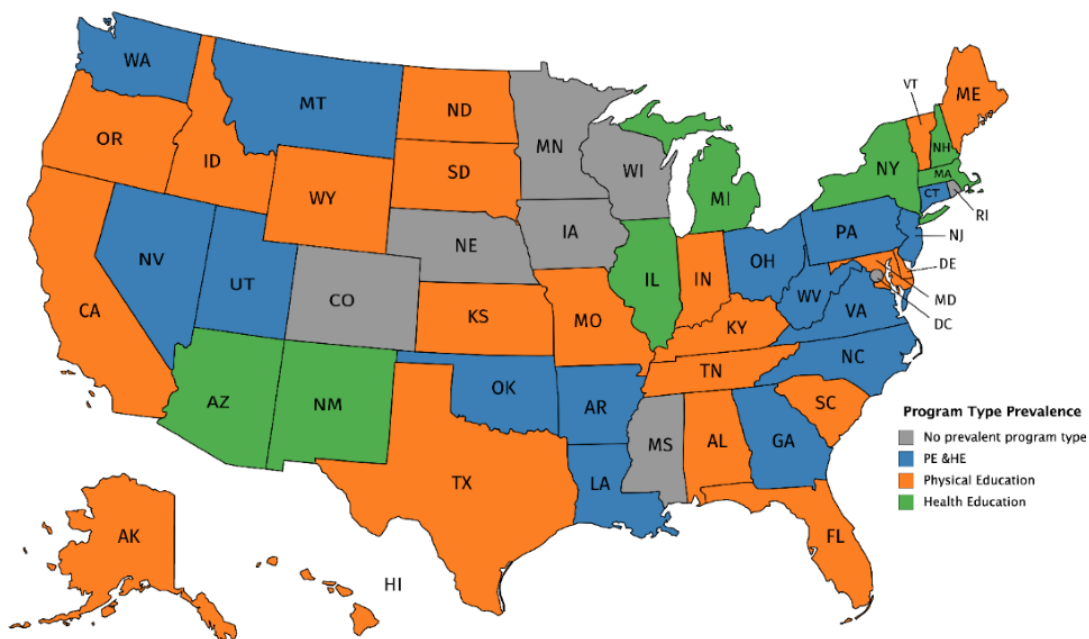
Program types were also assessed for their alignment to school health content areas. Combination programs (HE and PE) had the most required courses in physical education/physical activity (85%) and health education (82%). HE and PE programs had the least required courses offered for drug abuse/tobacco prevention (23%) and chronic disease management (12%). In addition, 68% of the combination programs required a methods course in teaching health education to students. In terms of student teaching requirements 20 programs required specific health education student teaching hours (16%), while most 45% (56 programs) required student teaching hours that were not health education specific.

Health Education stand-alone programs had the most required courses in health education (93%) and nutrition education (64%). HE programs had the least required courses in chronic disease management (36%) and drug abuse/tobacco prevention (39%). A large majority of programs also required a methods course in teaching health education to students (85%).

Physical Education stand-alone programs had the most required courses in physical education and physical activity (90%) and health education (45%). PE programs had the least required courses in chronic disease management (6%) and drug abuse/tobacco prevention (5%). A quarter of programs also required a methods course in teaching physical education to students (22%). PE programs also required student teaching hours to be specific in their area of study (PE) (48%).

One program was reviewed that offered a Minor in Health Education (Minnesota State University). Physical education and physical activity were the one required course listed and general health education and a methods course in teaching health education were listed as electives. No other courses within the school health content areas were offered within the HE Minor program reviewed.

Figure 2: Most Prevalent Teacher Preparation Programs Types by State

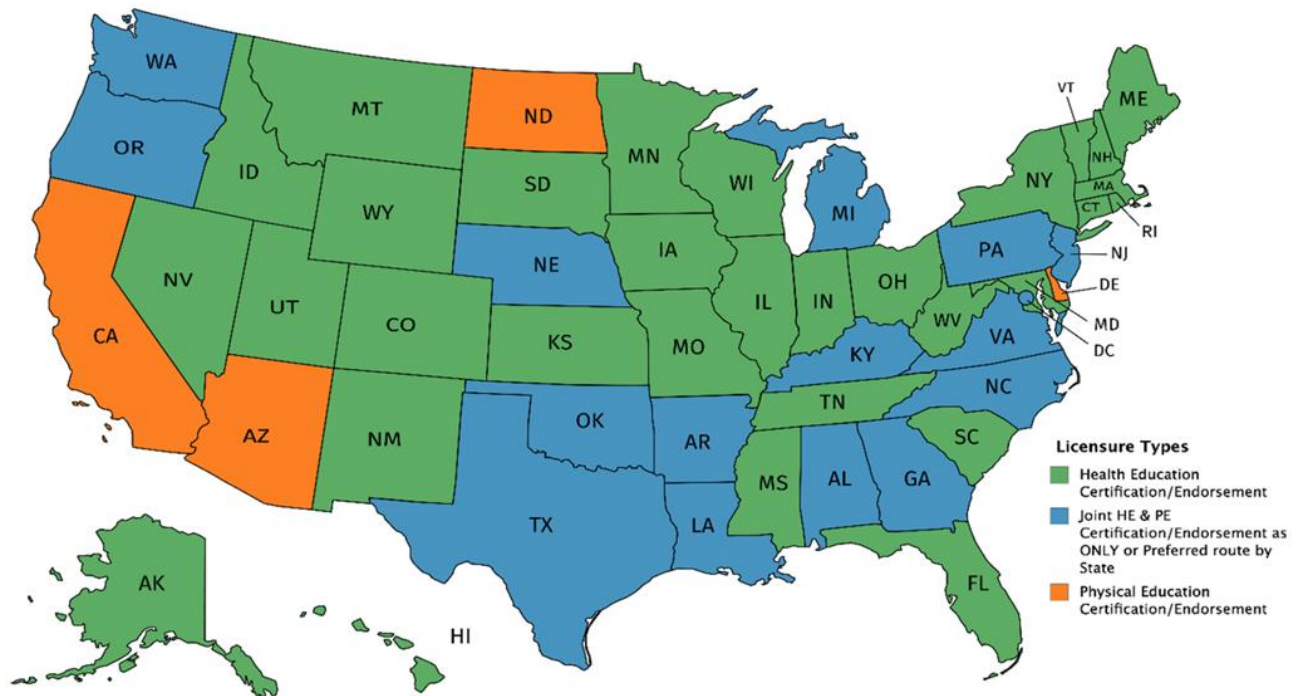


Two programs were reviewed that offered a Minor in Physical Education. Of these programs both required a PE/PA course to be taken. Four programs were reviewed that offered a health education major in a non-school teaching track. All but one of these programs (75%) required health education, nutrition education and a methods course. One program also required a course in social emotional learning/mental health.

State Certification Policies

State-level policies around certification/endorsement to teach health and/or physical education within the 50 states and the District of Columbia was also assessed. Thirty-one states (AK, CO, CT, FL, HI, IA, ID, IL, IN, KS, MA, MD, ME, MN, MO, MS, MT, NH, NM, NV, NY, OH, RI, SC, SD, TN, UT, VT, WI, WV, WY) had a certification or endorsement policy that required a separate certification for health education. This often included completing a bachelor’s degree from an accredited program with a major in health and/or completing a minimum number of semester hour course work within health education as well as passing a content exam with a minimum score. Fifteen states and DC (AL, AR, DC, GA, KY, LA, MI, NC, NE, NJ, OK, OR, PA, TX, VA, WA) had policies that included certification for both health and physical education (one code for both areas). Some states had a separate health education code but notices from state departments of education indicated newer policies pending for joint certification (e.g., MI, PA). The remaining four states (AZ, CA, DE, ND) have a physical education certification/endorsement that enables you to teach health education in schools (Figure 3).

Figure 3: State Certification Policies for Health and Physical Education Teachers



Conclusions

Overall, program type (HE, PE or joint HE/PE) dictated coursework offered and required within health education teacher preparation programs throughout the United States, even when certification and endorsement policies were taken into consideration. HE stand-alone programs provided the greatest amount of coursework across the school health content areas and also required a methods course in teaching health education more often within program curriculum (85% of programs). Joint HE/PE programs also had a significant amount of coursework across the school health content areas; however, many were lacking in the areas of chronic disease management, mental health and drug use prevention. Stand-alone PE programs provided the least amount of required or elective courses across the content areas, especially in areas beyond physical activity/physical education and general health education.

Of the programs reviewed in this initial scan, required coursework provided to pre-service teachers included general health education, physical education/physical activity and nutrition education. There were noted gaps in the provision of courses related to chronic disease management, drug abuse and tobacco prevention and social emotional health/mental health. Given that these are areas prioritized by national, state and local leaders and assist in the provision of comprehensive health education for students, these gaps should be addressed. Teachers will need to equip students with the knowledge and skills necessary to deal with issues such as mental health, diabetes management, drug abuse, e-cigarette use and communicable diseases such as COVID-19.

State-level policies around certification and endorsement were primarily centered on the completion of health-focused coursework, attainment of a Bachelor's degree within an accredited or state-certified program and completion of a content exam (with a minimum passing score). The results of this scan provide numerous avenues SOPHE, CDC and other partners can take to engage teacher preparation programs across the country for improved teacher training and delivery of effective health education in schools.

SOPHE School Health Cooperative Agreement **Environmental Scan of Health Education Teacher Preparation Programs**

Introduction

Undergraduate majors in education, including health education (HE), have significantly declined over the past 50 years (United States Department of Education, 2019). Reductions in state education funding have resulted in low-paying teaching jobs and increased student loan debt. Additionally, demands on teachers in many schools have prioritized meeting criteria for test scores versus focusing on the whole child and many current HE teachers do not feel supported or secure in their positions (Cardina and Fegley, 2016; Mann and Lohrmann, 2019; Videto and Dake, 2019). These challenges have resulted in limited teachers with formal school health education professional preparation available to teach HE within schools, a decrease in quality in valuable HE delivery within schools and a lack of effective preparation for HE teachers (Birch et al., 2019; Economic Policy Institute, 2019; Brener et al., 2017).

The Whole School, Whole Community, Whole Child (WSCC) model is the latest framework utilized and promoted by the Centers for Disease Control and Prevention (CDC) and ASCD to address the whole child, including health and health education in schools (CDC, 2020). The WSCC model incorporates a 10-component approach (Figure 1) to improve the physical and psychosocial environment of the school-community and encourages collaboration among and between HE teachers, school staff, parents, and the community. Research has shown that when HE is delivered effectively in schools, students show improvements in health as well as key academic outcomes (Smith, Potts-Datema, and Nolte, 2005; Chiang, Meagher and Slade, 2015; Brener et al., 2017, Birch et al., 2019). In order to deliver effective health education in schools, health teacher preparation programs must provide training in utilizing the WSCC model as well as required coursework in key areas of health education. A review of health teacher preparation programs throughout the United States (U.S.) was conducted from August 2019 to June 2020. This review was completed to determine whether content in the WSCC model and other key areas of child health (e.g., nutrition, chronic disease, mental health, etc.) were included in health teacher professional preparation curriculum so that teachers are well-prepared to enter practice.

Background

In 2018, the Society for Public Health Education (SOPHE) was awarded a cooperative agreement with the CDC School Health Branch to strengthen capacity and training in school health education, particularly related to the WSCC framework. One priority area includes strengthening health teacher preparation in higher education, with the first task being the completion of an environmental scan. The scan aims to:

- Determine what programs currently exist in health education professional preparation across the United States; and
- Identify gaps in health education professional preparation programs in which tools and resources from the Centers for Disease Control and Prevention (CDC) and other partners might be able to address these gaps.

To our knowledge, no such comprehensive examination of existing teacher preparation programs in health education has been conducted and published since the turn of the century. To complete the environmental scan, SOPHE contracted with Dr. Rachael Dombrowski and her colleagues at Wayne State University to provide additional expert advice

in SOPHE's efforts to strengthen professional preparation health education programs. SOPHE also convened an advisory School Health Think Tank. Health Education and other school health-related leaders from across the United States and CDC School Health Branch staff were convened in November 2019 to provide advice and strategic direction on the development of an environmental scan. In total 19 leaders participated in the SOPHE School Health Think Tank via quarterly meetings to discuss the project and provide insight. In January 2020, preliminary findings of the environmental scan (from 20 states) were shared in a two-day face to face meeting with the Think Tank at CDC headquarters in Atlanta. Members recommended adjustments to the methodology of the scan and future directions. The Think Tank also met with SOPHE staff in May and July 2020 to provide additional feedback. This final report incorporates many of the suggestions and recommendations of the Think Tank members and presents the overall findings of the scan. The Think Tank will continue to serve in the coming year and will provide direction on next steps for the SOPHE School Health Project in partnership with CDC.



Figure 1. Whole School, Whole Community Whole Child model by the Centers for Disease Control and Prevention, June 24, 2020, retrieved from <https://www.cdc.gov/healthyschools/wsc/index.htm> Copyright 2014 by the Centers for Disease Control and Prevention and ASCD.

Objectives

The objectives of the Environmental Scan of Health Education Teacher Preparation programs are as follows:

1. Explicate and document curriculum available to preservice teachers in health and physical education teacher preparation programs in the U.S. 50 states and District of Columbia.

2. Assess how this relates to state-level requirements for certification/designation in teaching health and physical education in public schools.
3. Identify the gaps in available curriculum for preservice teachers in health and physical education teacher preparation programs.

Methodology

An initial online search of health education (HE) and physical education (PE) teacher preparation programs found several hundred programs available to individuals to become “certified” as a health or physical education teacher. These certifications could be conducted with no prior teacher education background/major as some online programs stated a requirement of a “Bachelor’s degree.”

To help narrow the environmental scan to align more closely with the project objectives, the focus was shifted to HE and PE teacher preparation programs which were either state-approved or accredited programs. Accreditation of teacher preparation programs is recognized through the Council for the Accreditation of Educator Preparation (CAEP).

State-approved and CAEP accredited programs within each state were identified and reviewed using an online database. Members of SOPHE’s School Health Think Tank provided feedback on the list of programs assessed and added programs for inclusion. Contact information for HE/PE program leads at each college/university were also identified and documented within the project database.

Teacher preparation programs at the Bachelor’s level were reviewed within each college/university. First, programs were reviewed to determine if a health education, physical education or combination health and physical education teacher preparation program was available. After review, the program was coded as:

Table 1: Program Type Codes

Program Type	Code
Health Education (stand-alone)	1
Joint Health Education and Physical Education	2
Physical Education (stand-alone)	3
Health Education Minor	4
Physical Education Minor	5
Joint Health Education and Physical Education Minor	6
Health Education Major non-school teaching track	7
Physical Education Major non-school teaching track	8
Joint Health Education and Physical Education Major non-school teaching track	9
Single course for certification	10

If available, course catalogs and curriculum within each program were reviewed for the following: 1) alignment with school health content areas such as drug abuse/tobacco

prevention and the CDC School Health Branch priority areas which include: health education, nutrition education, physical activity, physical education, social emotional learning/mental health and management of chronic conditions, 2) required courses within the health and physical education teacher education program curriculum, 3) available but non-required courses within the health and physical education teacher program curriculum and 4) unavailable courses. Codes were created for each of the required versus non-required curriculum and documented within the database and included the following:

- required and available courses = 1;
- non-required and available courses = 2;
- courses not offered = 3.

Availability of online course work for health and physical education teacher preparation was also documented within the database when noted on program websites.

If a health or physical education teacher preparation program was not available, other similar teacher preparation programs (e.g., family and community sciences) were reviewed. If no other similar programs were available, the general teacher education preparation course curriculum was reviewed as follows: 1) alignment with the school health content areas, 2) required courses within the teacher education curriculum, 3) available but non-required courses within the teacher education curriculum and 4) unavailable courses. If there was no alignment, the program was removed from the scan.

Universities and colleges from Puerto Rico and Guam were not included in the review. For-profit universities (e.g., University of Phoenix) were also not included in the scan due to inconsistent schedules for program offerings.

In total, 386 programs were initially assessed for this scan and included programs within 256 public institutions and 130 private institutions. Seventeen programs were not CAEP accredited but were state-approved. Nineteen programs are housed in historically Black universities and colleges and Latino/Latinx and Hispanic serving institutions. Due to limitations of information on program websites, and the closure of colleges and universities as a result of the COVID-19 pandemic, 71 programs could not be evaluated at this time. The tables and assessment that follows includes a full review of 315 programs throughout the United States.

Results

National Assessment

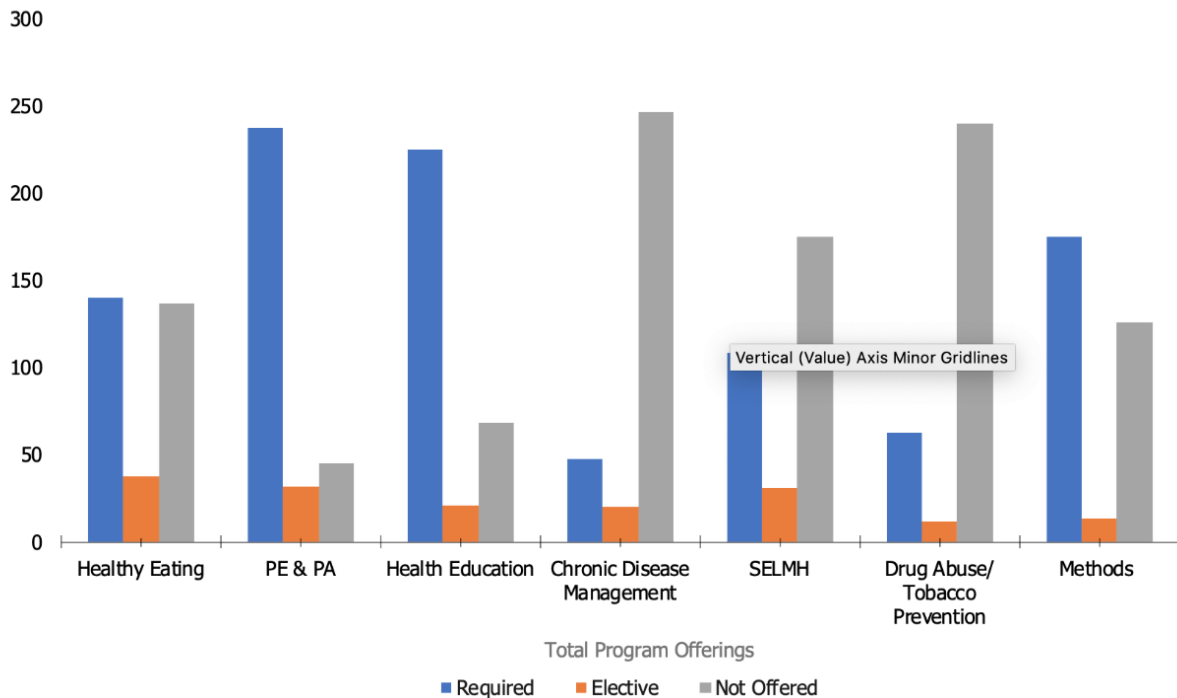
Overall, most HE and PE teacher preparation programs required courses in general health education (71%), PE and physical activity (PA) (76%) and nutrition education (44%). The least required and also least offered courses were chronic disease management (15% required), drug abuse and tobacco prevention (20% required) and social emotional learning/mental health (35% required) (Table 2).

In terms of elective courses, (courses offered but not required within the curriculum) most programs offered nutrition education (12%), social emotional learning/mental health (10%) and PE and PA (10%). Least offered electives included drug abuse and tobacco prevention (4%), general health education (7%) and chronic disease management (6%) (Figure 2).

Table 2: Required and Elective Course Alignment with School Health Content Areas

	Nutrition Education (NE)	Physical Education & Physical Activity (PE/PA)	Health Education (HE)	Chronic Disease Management (CDM)	Social Emotional Learning/ Mental Health (SEL/MH)	Drug Abuse/ Tobacco Prevention (DA/TP)
Required	140	238	225	48	109	63
Elective	38	32	21	20	31	12
Not Offered	137	45	69	247	175	240
Totals	315	315	315	315	315	315

Figure 2: Program Offerings by School Health Content Area



Program Type Assessment

All 386 programs were reviewed to determine type of teacher preparation curriculum offered. Ten categories were assessed and are listed in Table 1.

A majority of programs (23 states) offered physical education (45%), while 27% offered combination health and physical education (14 states) and 12% (6 states) offered health education as a stand-alone curriculum. Eight states did not have one prevalent program over the other. Thirteen states, including populous states such as California, do not offer a stand-alone HE teacher preparation program within their institutions, nor do they offer joint health and physical education teacher preparation programs (Figure 3, Table 3).

Table 3: Most Prevalent Teacher Preparation Programs Types by State (includes District of Columbia)

State	HE	PE	HE & PE	HE Minor	PE Minor	PE & HE Minor	HE Major Non-Teaching	PE Major Non-Teaching	HE&PE Non-Teaching	Single Course	Total
AL	1	10	6	0	0	0	0	0	0	0	17
AK*	0	1	0	0	0	0	0	0	0	0	1
AR	0	4	7	0	0	0	0	0	0	0	11
AZ*	0	1	0	0	0	0	0	0	0	0	1
CA*	0	7	0	0	0	0	0	0	0	1	8
CO	0	1	1	0	0	0	0	0	0	0	2
CT	1	0	3	0	1	0	0	0	0	0	5
DC	2	2	1	0	0	0	0	0	0	0	5
DE*	0	3	0	0	1	0	0	0	0	0	4
FL	1	2	1	0	0	0	0	0	0	0	4
GA	0	1	3	0	0	0	0	1	0	0	5
HI*	0	2	0	0	0	0	0	0	0	0	2
IA	1	1	1	0	0	0	0	0	0	0	3
ID*	0	1	0	0	0	0	0	0	0	0	1

Health Education Teacher Preparation Programs
Environmental Scan Findings

State	HE	PE	HE & PE	HE Minor	PE Minor	PE & HE Minor	HE Major Non-Teaching	PE Major Non-Teaching	HE&PE Non-Teaching	Single Course	Total
IL	6	4	4	0	0	0	0	0	0	0	14
IN	6	13	9	0	0	0	0	0	0	0	28
KS*	0	2	0	0	0	0	0	0	0	0	2
KY	0	3	1	0	0	0	0	0	0	0	4
LA	0	2	10	0	0	0	0	0	0	0	12
MA	3	2	1	0	0	0	0	0	0	0	6
MD	3	5	1	0	0	0	0	0	0	0	9
ME	1	2	0	0	0	0	0	0	0	0	3
MI	14	4	7	0	0	0	1	0	1	0	27
MN	0	2	2	1	0	0	0	0	0	0	5
MO	0	3	2	0	0	0	0	0	0	0	5
MS	2	3	3	0	1	0	0	0	0	0	9
MT	0	0	3	0	0	0	1	0	0	0	4
NC	7	3	14	0	0	0	0	0	0	0	24

Health Education Teacher Preparation Programs
Environmental Scan Findings

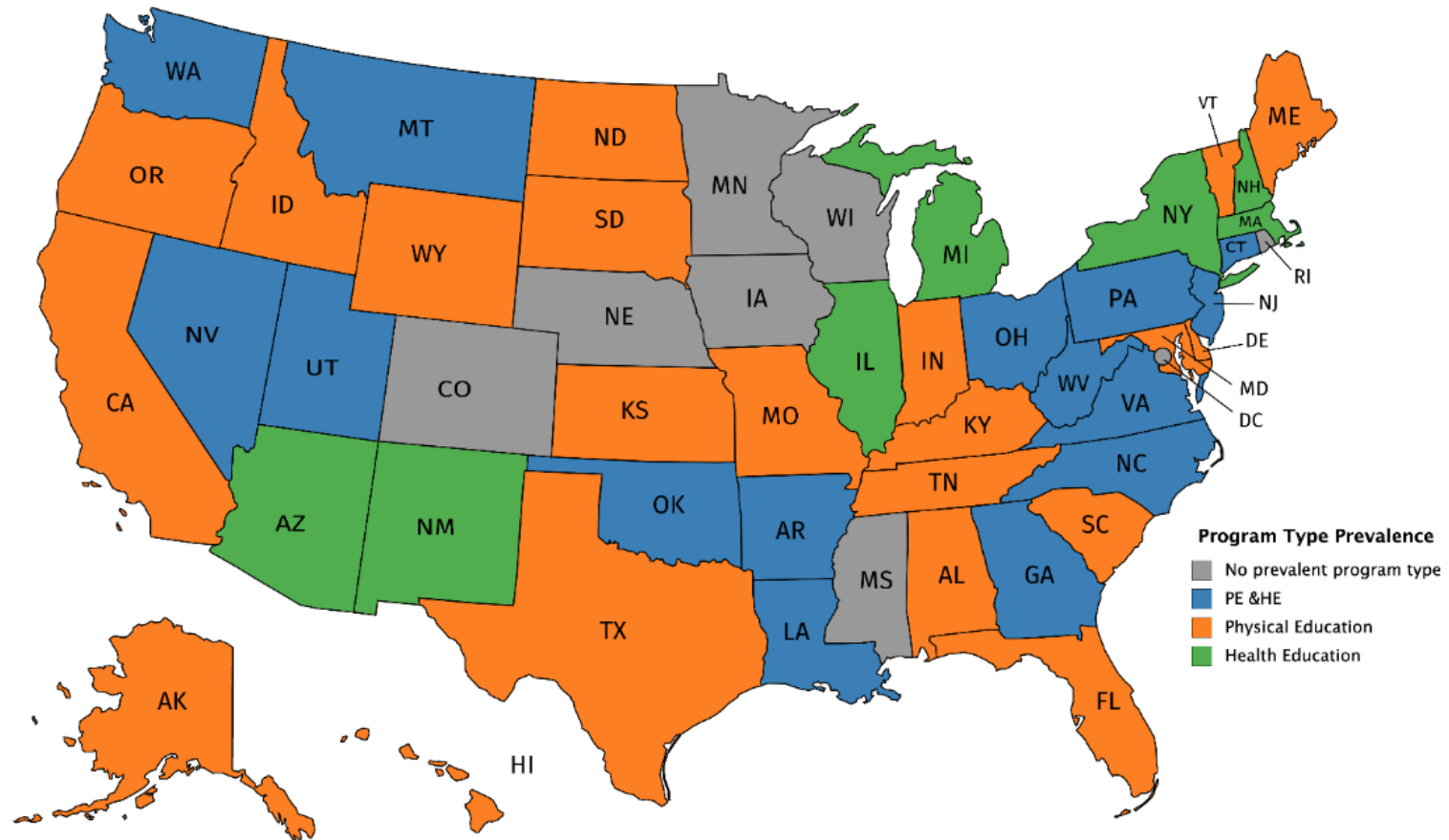
State	HE	PE	HE & PE	HE Minor	PE Minor	PE & HE Minor	HE Major Non-Teaching	PE Major Non-Teaching	HE&PE Non-Teaching	Single Course	Total
ND	3	4	0	0	0	0	0	0	0	0	7
NE	0	1	1	0	0	0	0	0	0	0	2
NH	3	1	1	0	0	0	0	0	0	0	5
NJ	0	1	5	0	0	0	0	0	1	0	7
NM	1	0	0	0	0	0	0	0	0	0	1
NV*	0	1	0	0	0	0	0	0	0	0	1
NY	11	2	5	0	0	0	0	0	0	0	18
OH	10	3	11	0	0	0	0	0	0	0	24
OK	0	4	9	0	0	0	0	2	1	0	16
OR*	0	1	0	0	0	0	0	0	0	0	1
PA	2	0	6	0	0	0	0	0	0	0	8
RI	1	0	1	0	0	0	0	0	0	0	2
SC*	0	19	0	0	0	0	1	0	0	0	20
SD*	0	3	0	0	0	0	0	0	0	0	3

Health Education Teacher Preparation Programs
Environmental Scan Findings

State	HE	PE	HE & PE	HE Minor	PE Minor	PE & HE Minor	HE Major Non-Teaching	PE Major Non-Teaching	HE&PE Non-Teaching	Single Course	Total
TN	0	4	1	0	0	0	0	0	0	0	5
TX	4	5	4	0	0	0	0	0	0	0	13
UT	0	0	1	0	0	0	0	0	0	0	1
VA	0	1	9	0	0	0	0	0	0	0	10
VT*	0	1	0	0	0	0	0	0	0	0	1
WA	0	0	1	0	0	0	0	0	0	0	1
WI	1	0	0	0	0	0	1	0	0	0	2
WV	5	4	7	0	0	0	0	0	0	0	16
WY*	0	1	0	0	0	0	0	0	0	0	1

	Most prevalent program Type
*	Indicates no HE program (stand alone or joint)

Figure 3: Most Prevalent Teacher Preparation Programs Types by State (includes District of Columbia)



Program types were also assessed for their alignment to school health content areas. Combination programs (HE and PE) had the most required courses in physical education/physical activity (85%) and health education (82%) as expected. HE and PE programs had the least required courses offered for drug abuse/tobacco prevention (23%) and chronic disease management (12%). In addition, 68% of the combination programs required a methods course in teaching health education to students (Table 4). In terms of student teaching requirements 20 programs required specific health education student teaching hours (16%), while the majority 45% (56 programs) required student teaching hours that were not health education specific (Table 5).

Table 4: Required and Elective Course Alignment to School Health Content Areas for Combination Programs

Type		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
PE & HE	Required	63	106	102	15	54	29	85
	Elective	18	8	9	8	13	3	5
	Not Offered	44	11	14	102	58	93	35
	Total	125	125	125	125	125	125	125

Table 5: Student Teaching Requirements by Program Type

	HE and PE	HE Only	PE Only
HE Specific and Required	20	34	1
Non-HE Specific and Required	56	3	50
Not Required	10	12	19
Other Requirements	39	24	34
Total	125	73	104

*Note: Not all programs could be reviewed on this measure via the website alone; requests for course curriculum were made to Program Administrators

Health Education stand-alone programs had the most required courses in health education (93%) and nutrition education (64%). HE programs had the least required courses in chronic disease management (36%) and drug abuse/tobacco prevention (39%). A large majority of programs also required a methods course in teaching health education to students (85%) (Table 6). In addition, HE programs also required health education specific student teaching hours among 47% of programs (Table 5).

Table 6: Required and Elective Course Alignment to School Health Content Areas for Health Education Programs

Type		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
HE	Required	47	27	68	26	34	28	62
	Elective	9	16	2	6	12	4	3
	Not Offered	17	30	3	41	27	41	8
	Total	73	73	73	73	73	73	73

Physical Education stand-alone programs had the most required courses in physical education and physical activity (90%) and health education (45%). PE programs had the least required courses in chronic disease management (6%) and drug abuse/tobacco prevention (5%). A quarter of programs also required a methods course in teaching physical education to students (22%) (Table 7). PE programs also required student teaching hours to be specific in their area of study (PE) (48%) (Table 5).

Table 7: Required and Elective Course Alignment to School Health Content Areas for Physical Education Programs

Type		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
PE	Required	22	94	47	6	18	5	23
	Elective	10	8	8	5	6	5	5
	Not Offered	72	2	49	93	80	94	76
	Total	104	104	104	104	104	104	104

One program was reviewed that offered a Minor in Health Education (Minnesota State University). Physical education and physical activity were the one required course listed and general health education and a methods course in teaching health education were listed as electives. No other courses within the school health content areas were offered within the HE Minor program reviewed.

Two programs were reviewed that offered a Minor in Physical Education. Of these programs both required a PE/PA course to be taken. One program (Eastern Connecticut State University) required a course in health education, nutrition and social emotional learning/mental health. This program also listed chronic disease management as an elective course. No programs offered a joint minor in health and physical education.

Four programs were reviewed that offered a health education major in a non-school teaching track. All but one of these programs (75%) required health education, nutrition and a methods course. One program required a course in social emotional learning/mental health (Table 8).

Table 8: Health Education Major Non-Teaching Track Required and Elective Course Alignment with School Health Content Areas

Type		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
HE Major Non-Teaching	Required	3	2	3	0	1	0	3
	Elective	0	0	0	0	0	0	0
	Not Offered	1	2	1	4	3	4	1
	Total	4	4	4	4	4	4	4

Three programs were reviewed that offered a physical education major in a non-school teaching track. All programs required a physical education/physical activity course. Two programs required a nutrition course (67%) and one program required health education, chronic disease management and social emotional learning/mental health as a component of the curriculum. No programs offered a methods course (Table 9).

Table 9: Physical Education Major Non-Teaching Track Required and Elective Course Alignment with School Health Content Areas

Type		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
PE Major Non-Teaching	Required	2	3	1	1	1	0	0
	Elective	0	0	1	0	0	0	0
	Not Offered	1	0	1	2	2	3	3
	Total	3	3	3	3	3	3	3

Three programs were also reviewed that offered a joint health and physical education major in a non-school teaching track. All programs required physical education/physical activity and general health education courses in their curriculum. Two programs (67%) required a methods course and a course in nutrition. One program required a course in drug abuse/tobacco prevention (Table 10).

Table 10: Joint HE/PE Major Non-Teaching Track Required and Elective Course Alignment with School Health Content Areas

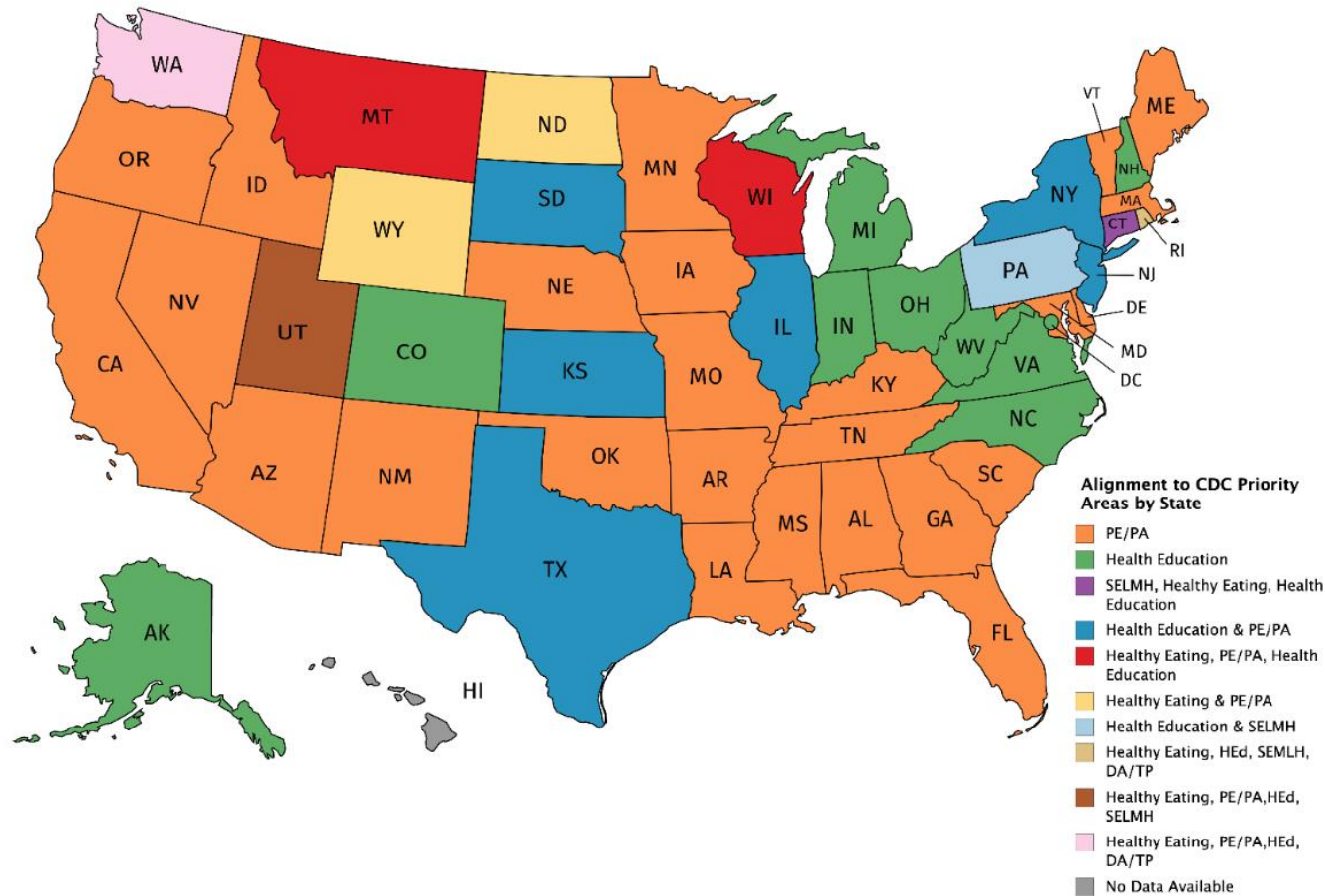
Type		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
HE/PE Major Non-Teaching	Required	2	3	1	1	1	0	0
	Elective	0	0	1	0	0	0	0
	Not Offered	1	0	1	2	2	3	3
	Total	3	3	3	3	3	3	3

One program (San Diego State University) was listed as providing a single course for certification to become a Health Education teacher. The course curriculum for this program was unable to be reviewed online and a request to review the curriculum was submitted to the department head.

State by State Assessment

All states including the District of Columbia (DC) were reviewed in this environmental scan, excluding United States territories. Twenty-eight states had programs that required courses in PE/PA within their curriculums, sixteen states had health education as a top requirement. Five states had nutrition education as the most required course within their programs. Connecticut was the only state that had social and emotional learning and mental health courses as most required within their programs at the time of this review (Figure 4). Each state and their alignment to the school health content areas are outlined below.

Figure 4: Alignment of School Health Content Areas by State



Alabama

Sixteen programs were reviewed in Alabama (AL); a majority of courses aligned with PE & PA (88%) as a majority of programs were PE only within Alabama. Several programs also require health education (56%) within their coursework and require students to take a methods course in teaching physical education (63%). Courses that were not offered and least required included social emotional learning and mental health, drug abuse/tobacco prevention and chronic disease management (Table 11).

Table 11: Alabama Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
AL	Required	6	14	9	3	0	2	10
	Elective	2	1	3	0	0	0	0
	Not Offered	8	1	4	13	16	14	6
	Total* Evaluated	16	16	16	16	16	16	16

Alaska

One program was reviewed in Alaska (AK) and was a PE stand-alone program. The only required courses included physical education and physical activity. Health education was provided as an elective course within the curriculum. (Table 12).

Table 12: Alaska Required and Elective Course Alignment with School Health Content Areas.

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
AK	Required	0	1	0	0	0	0	0
	Elective	0	0	1	0	0	0	0
	Not Offered	1	0	1	1	1	1	1
	Total* Evaluated	1	1	1	1	1	1	1

Arkansas

Eight programs were reviewed in Arkansas (AR). Almost all programs (88%) require a course in physical education/physical activity. Half of the programs require nutrition education and 63% of courses require a course in health education. Thirty-seven percent of courses require a methods course in teaching health and/or physical education (as most were joint programs in AK). Only two programs require a course in drug abuse/tobacco prevention and no coursework in chronic disease management or social emotional learning/mental health was required in any program (Table 13).

Table 13: Arkansas Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
AR	Required	4	7	5	0	0	2	3
	Elective	0	0	0	0	0	0	0
	Not Offered	4	1	3	8	8	6	5
	Total* Evaluated	8	8	8	8	8	8	8

Arizona

One program was reviewed in Arizona and was a physical education stand-alone program. Only one course in physical education/physical activity is required as a component of this curriculum. No other school health content areas were offered as either a required or elective course (Table 14).

Table 14: Arizona Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
AZ	Required	0	1	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	1	0	1	1	1	1	1
	Total* Evaluated	1	1	1	1	1	1	1

California

Four programs were reviewed in California (CA) and all were stand-alone physical education programs. All four programs require a course in physical education/physical activity. No other school health content area courses were provided as required or elective courses (Table 15).

Table 15: California Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
CA	Required	0	4	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	4	0	4	4	4	4	4
	Total* Evaluated	4	4	4	4	4	4	4

Colorado

Two programs were reviewed in Colorado (CO); all programs aligned with health education (100%), require a methods course in teaching health education (100%), and one program (Colorado State University-Fort Collins) also requires nutrition education and social emotional learning/mental health curriculum in their teacher prep curriculum. Neither program offered courses in drug abuse/tobacco prevention or chronic disease management (Table 16).

Table 16: Colorado Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
CO	Required	1	0	2	0	1	0	2
	Elective	0	1	0	0	0	0	0
	Not Offered	1	1	0	2	1	2	0
	Total*Evaluated	2	2	2	2	2	2	2

Connecticut

Four programs were reviewed in Connecticut (CT); 100% of all programs aligned with nutrition education and health education. Seventy-five percent of programs require a methods course in teaching health education. One program (Eastern Connecticut State University) included all school health content areas within their curriculum as required courses, with the exception of chronic disease management, which is provided as an elective. Programs were deficient in including drug abuse and tobacco prevention required courses (Table 17).

Table 17: Connecticut Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
CT	Required	4	3	4	1	2	0	3
	Elective	0	0	0	1	2	2	0
	Not Offered	0	1	0	2	0	2	1
	Total*Evaluated	4	4	4	4	4	4	4

Delaware

Two programs were reviewed in Delaware (DE) and were designated as physical education stand-alone programs. Both programs require a course in physical education/physical activity. No other school health content areas are required within the curriculum of either program (Table 18).

Table 18: Delaware Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
DE	Required	0	2	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	2	0	2	2	2	2	2
	Total*Evaluated	2	2	2	2	2	2	2

District of Columbia

Three programs were reviewed in the District of Columbia (DC). Sixty-seven percent of programs require a course in health education. One program (American University) also

requires courses in nutrition education and a methods course in teaching health education. None of the programs reviewed require courses in chronic disease management, social emotional learning/mental health or drug abuse prevention/tobacco prevention (Table 19).

Table 19: District of Columbia Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
DC	Required	1	1	2	0	0	0	1
	Elective	0	0	0	0	0	0	0
	Not Offered	2	2	1	3	3	3	2
	Total* Evaluated	3	3	3	3	3	3	3

Florida

Four programs were reviewed in Florida (FL); Half of the programs evaluated have health education and physical education and physical activity as a required component of preparation programs. Reviewed programs were deficient in chronic disease management, drug abuse/tobacco prevention and social emotional learning. Only one program requires a methods course for teaching physical education to students (Table 20).

Table 20: Florida Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
FL	Required	1	3	2	0	0	0	1
	Elective	0	0	0	0	0	0	0
	Not Offered	3	1	2	4	4	4	3
	Total* Evaluated	4	4	4	4	4	4	4

Georgia

Four programs were reviewed in Georgia (GA). All programs require a course in physical education/physical activity within their curriculum and all but one program (75%) require a course in health education. Two programs require a methods course in teaching health education and physical education (as most were joint programs in GA) and one program (Brenau University) also requires a course in nutrition, social emotional learning/mental health and chronic disease management. This program was offered as a PE Major in the non-teaching track. No programs require courses in drug abuse prevention/tobacco prevention within their curriculum (Table 21).

Table 21: Georgia Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
GA	Required	1	4	3	1	1	0	2
	Elective	1	0	1	0	2	0	0
	Not Offered	2	0	0	3	1	4	2
	Total* Evaluated	4	4	4	4	4	4	4

Hawaii

Although Hawaii (HI) had two programs, both physical education, their curriculums were not available for review at this time (Table 22).

Table 22: Hawaii Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
HI	Required	0	0	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	0	0	0	0	0	0	0
	Total* Evaluated	0	0	0	0	0	0	0

Idaho

One program was reviewed in Idaho (ID) and was a physical education stand-alone program. The only coursework required includes courses in physical education/physical activity. No other coursework within the school health content areas is required within this program (Table 23).

Table 23: Idaho Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
ID	Required	0	1	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	1	0	1	1	1	1	1
	Total* Evaluated	1	1	1	1	1	1	1

Illinois

Twelve programs were evaluated in Illinois (IL); 75% of programs require health education, 50% of programs require drug abuse/tobacco prevention and 42% of programs require coursework in physical education/physical activity within their curriculum. Programs were deficient in providing chronic disease management and social emotional learning/mental health as part of their preparation. Sixty-seven percent of all programs require a methods course in teaching health education to students (Table 24).

Table 24: Illinois Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
IL	Required	4	5	9	1	2	6	8
	Elective	3	5	0	2	3	0	0
	Not Offered	5	2	3	9	7	6	4
	Total* Evaluated	12	12	12	12	12	12	12

Indiana

Twenty programs were evaluated in Indiana (IN); 70% of programs require health education and 60% of programs require physical education and activity within their curriculum. Reviewed programs were deficient in chronic disease management and drug abuse and tobacco prevention. Sixty percent of programs require a methods course in teaching physical education (Table 25).

Table 25: Indiana Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
IN	Required	8	12	14	1	8	2	12
	Elective	4	4	2	4	1	1	3
	Not Offered	8	4	4	15	11	17	5
	Total* Evaluated	20	20	20	20	20	20	20

Iowa

Three programs were evaluated in Iowa (IA), housed at two private institutions. All programs align with physical education and physical activity, however two programs at Luther College offers the coursework as an elective. Two programs require health education within their curriculum and one program also requires coursework in drug abuse/tobacco prevention, chronic disease management and a methods course in teaching health education as part of their teacher preparation curriculum. Coursework in social emotional learning/mental health and nutrition education were offered as electives in most of the programs (Table 26).

Table 26: Iowa Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
IA	Required	0	1	2	1	0	1	1
	Elective	2	2	0	0	1	1	1
	Not Offered	1	0	1	2	2	1	1
	Total* Evaluated	3	3	3	3	3	3	3

Kansas

Two programs were reviewed in Kansas (KS) and both were physical education stand-alone programs. Both programs require courses in physical education/physical activity and health education. One program also requires a methods course in teaching physical education. No programs require coursework in nutrition, chronic disease management, social emotional learning/mental health or drug abuse/tobacco prevention (Table 27).

Table 27: Kansas Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
KS	Required	0	2	2	0	0	0	1
	Elective	1	0	0	0	1	1	1
	Not Offered	1	0	0	2	1	1	0
	Total* Evaluated	2	2	2	2	2	2	2

Kentucky

Three programs were reviewed in Kentucky (KY); most were physical education stand-alone programs. All programs require coursework in physical education/physical activity. One program requires coursework in health education and nutrition. Another program offered nutrition, chronic disease management and a methods course in teaching physical education as electives (Table 28).

Table 28: Kentucky Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
KY	Required	1	3	1	0	0	0	0
	Elective	1	0	1	1	0	0	1
	Not Offered	1	0	1	1	3	3	2
	Total* Evaluated	3	3	3	3	3	3	3

Louisiana

Eight programs were reviewed in Louisiana (LA); most were joint HE/PE programs. All programs require coursework in physical education/physical activity. Half of the programs in LA require coursework in health education and social emotional learning/mental health. Sixty-three percent of programs require a methods course in teaching HE and PE and two programs require coursework in drug abuse/tobacco prevention. Nutrition education was offered as an elective within two programs and chronic disease management and social emotional learning/mental health were offered as an elective within one program (Table 29).

Table 29: Louisiana Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
LA	Required	0	8	4	0	4	2	5
	Elective	2	0	2	1	1	0	0
	Not Offered	6	0	2	7	3	6	3
	Total* Evaluated	8	8	8	8	8	8	8

Maine

Two programs were reviewed in Maine (ME). Both programs require coursework in physical education/physical activity. One program requires courses in health education, social emotional learning/mental health and methods in teaching health education. Programs were deficient in offering nutrition education, chronic disease management and drug abuse prevention/tobacco prevention within their curriculum (Table 30).

Table 30: Maine Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
ME	Required	0	2	1	0	1	0	1
	Elective	0	0	0	0	0	0	0
	Not Offered	2	0	1	2	1	2	1
	Total* Evaluated	2	2	2	2	2	2	2

Maryland

Eight programs were evaluated in Maryland (MD); 75% of programs require physical education and physical activity and four programs require health education as a component of their preparation programs. Programs were deficient in chronic disease management, nutrition education and drug abuse/tobacco prevention. Private institutions were deficient in all school health content areas. Half of all reviewed programs require a methods course in teaching physical education to students (Table 31).

Table 31: Maryland Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
MD	Required	2	6	4	2	3	2	4
	Elective	0	0	0	0	0	0	0
	Not Offered	6	2	4	6	5	6	4
	Total* Evaluated	8	8	8	8	8	8	8

Massachusetts

Six programs were evaluated in Massachusetts (MA); 67% of programs require both nutrition education, and physical education/physical activity and a majority require a methods course in teaching health education as part of their curriculum. The programs were deficient in social emotional learning and mental health, drug abuse/tobacco prevention and chronic disease management (Table 32).

Table 32: Massachusetts Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
MA	Required	4	4	4	2	1	1	4
	Elective	0	2	0	0	0	0	0
	Not Offered	2	0	2	4	5	5	2
	Total* Evaluated	6	6	6	6	6	6	6

Michigan

Eighteen programs were evaluated within Michigan (MI); 78% of programs require health education, 72% require nutrition education, 56% require physical education/physical activity and 89% require a methods course in teaching health education as a component of their curriculum. Programs were deficient in chronic disease management and drug abuse and tobacco prevention (Table 33).

Table 33: Michigan Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
MI	Required	13	10	14	3	4	1	16
	Elective	2	0	2	2	4	0	0
	Not Offered	3	8	2	13	10	17	2
	Total* Evaluated	18	18	18	18	18	18	18

Minnesota

Five programs were evaluated in Minnesota (MN). All programs require coursework in physical education/physical activity. Half of the programs require coursework in health education. One program (Minnesota State University Mankato), a joint HE/PE program, requires coursework in all six school health content areas and also requires a methods course in teaching health education to students. Forty percent of programs had nutrition education, health education and a teaching methods course in health education as electives (Table 34).

Table 34: Minnesota Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
MN	Required	1	5	2	1	1	1	1
	Elective	2	0	2	0	0	1	2
	Not Offered	2	0	1	4	4	3	2
	Total* Evaluated	5	5	5	5	5	5	5

Mississippi

Eight programs were reviewed in Mississippi (MS); 88% of programs require coursework in physical education/physical activity and 75% of programs require coursework in health education within their curriculum. Three programs (38%) also require coursework in nutrition education, social emotional learning/mental health and a methods course in teaching health education. Only two programs require coursework in drug abuse/tobacco prevention. Programs were deficient in requiring coursework in chronic disease management (only one program requires) (Table 35).

Table 35: Mississippi Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
MS	Required	3	7	6	1	3	2	3
	Elective	1	1	1	0	0	0	0
	Not Offered	4	0	1	7	5	6	5
	Total* Evaluated	8	8	8	8	8	8	8

Missouri

Four programs were evaluated in Missouri (MO); 100% of programs require courses in physical education/physical activity and 75% of programs require coursework in health education within their curriculum. Half of the programs require a methods course in teaching health education. One program requires coursework in nutrition education and another requires coursework in social emotional learning/mental health. Programs were deficient in providing coursework in chronic disease management and drug abuse/tobacco prevention (Table 36).

Table 36: Missouri Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
MO	Required	1	4	3	0	1	0	2
	Elective	0	0	0	0	1	0	0
	Not Offered	3	0	1	4	2	4	2
	Total* Evaluated	4	4	4	4	4	4	4

Montana

Four programs were evaluated in Montana (MT); 100% of programs require courses in health education, physical education/physical activity and nutrition education. Seventy-five percent of programs require coursework in social emotional learning/mental health and also require a methods course in teaching health and/or physical education to students. Half of the programs assessed require a course in drug abuse/tobacco prevention. Programs were deficient in offering coursework in chronic disease management (Table 37).

Table 37: Montana Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
MT	Required	4	4	4	0	3	2	3
	Elective	0	0	0	0	0	0	0
	Not Offered	0	0	0	4	1	2	1
	Total* Evaluated	4	4	4	4	4	4	4

Nebraska

Two programs were assessed in Nebraska (NE). Both programs require coursework in physical education/physical activity within their curriculum. One program (University of Nebraska at Kearney) also requires coursework in health education, nutrition education and a methods course in teaching health education within their curriculum. Programs were deficient in offering coursework in chronic disease management, social emotional learning/mental health and drug abuse/tobacco prevention (Table 38).

Table 38: Nebraska Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
NE	Required	1	2	1	0	0	0	1
	Elective	0	0	0	0	0	0	0
	Not Offered	1	0	1	2	2	2	1
	Total* Evaluated	2	2	2	2	2	2	2

Nevada

One program (a PE stand-alone program) was reviewed in Nevada (NV). The only required coursework within the curriculum includes courses in physical education/physical activity (Table 39).

Table 39: Nevada Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
NV	Required	0	1	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	1	0	1	1	1	1	1
	Total* Evaluated	1	1	1	1	1	1	1

New Hampshire

Five programs were evaluated in New Hampshire (NH); All programs offer health education within their preparation programs (Keen State University offers as an elective), 60% of programs require nutrition education as a component of their curriculum and 80% of programs require a methods course for teaching health education to students. Programs were deficient in drug abuse/tobacco prevention and chronic disease management (Table 40).

Table 40: New Hampshire Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
NH	Required	3	2	4	1	2	0	4
	Elective	1	1	1	1	2	1	0
	Not Offered	1	2	0	3	1	4	3
	Total* Evaluated	5	5	5	5	5	5	5

New Jersey

Seven programs were evaluated in New Jersey (NJ); All programs require coursework in health education and physical education/physical activity. Eighty-six percent of programs require a methods course in teaching health education to students. Nutrition education courses are required in 71% of programs and social emotional learning/mental health is required within 57% of programs. Three programs (43%) require coursework in drug abuse/tobacco prevention. Only one program requires coursework in chronic disease management (Table 41).

Table 41: New Jersey Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
NJ	Required	5	7	7	1	4	3	6
	Elective	0	0	0	0	0	0	0
	Not Offered	8	0	0	6	3	4	1
	Total* Evaluated	7	7	7	7	7	7	7

New Mexico

One program was reviewed in New Mexico (NM) and was a health education program within the “family and consumer sciences education” major. The program requires coursework in health education, nutrition education, social emotional learning/mental health and also requires a methods course in teaching health education to students. The program is deficient in offering coursework in chronic disease management and physical education/physical activity, as there is a separate major for physical education teaching at this institution (Table 42).

Table 42: New Mexico Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
NM	Required	1	0	1	0	1	1	1
	Elective	0	0	0	0	0	0	0
	Not Offered	0	1	0	1	0	0	0
	Total* Evaluated	1	1	1	1	1	1	1

New York

Fifteen programs were evaluated within the state of New York (NY); 67% of programs aligned with health education and 60% with social emotional learning/mental health. Collectively, programs were deficient in chronic disease management and drug abuse/tobacco prevention. Seventy-three percent of programs require a methods course in teaching health education to students within their curriculum (Table 43).

Table 43: New York Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
NY	Required	9	9	10	5	9	5	11
	Elective	1	2	1	1	1	1	0
	Not Offered	5	4	4	9	5	9	4
	Total*Evaluated	15	15	15	15	15	15	15

North Carolina

Twenty programs were evaluated in North Carolina (NC); 95% were aligned with the health education school health content area, 65% were aligned with the physical education/physical activity school health content area and 75% require a methods course in teaching health education as a component of their curriculum. Programs were deficient in chronic disease management, nutrition education and drug abuse/tobacco prevention within their curriculum (Table 44).

Table 44: North Carolina Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
NC	Required	5	13	19	3	9	4	15
	Elective	3	4	1	0	2	2	0
	Not Offered	12	3	0	17	9	14	5
	Total* Evaluated	20	20	20	20	20	20	20

North Dakota

Seven programs were evaluated in North Dakota (ND); six programs were deficient in chronic disease management except for North Dakota University which offers a variation of the school health content area as part of their preparation program. Forty-three percent of programs aligned with nutrition education, health education and social emotional learning/mental health. Fifty-seven percent aligned with physical education/physical activity. North Dakota State University was the only program to offer a variation of drug abuse/tobacco prevention as a requirement. About half of evaluated programs (43%) require a methods course in teaching physical and/or health education to students (Table 45).

Table 45: North Dakota Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
ND	Required	3	4	3	0	3	1	3
	Elective	2	1	1	1	2	0	2
	Not Offered	2	2	3	6	2	6	2
	Total* Evaluated	7	7	7	7	7	7	7

Ohio

Twenty-two programs were reviewed in Ohio (OH); 91% of programs require health education, 73% require nutrition education, 55% require physical education/physical activity and 77% require a methods course in teaching health education within their teacher preparation curriculum. Programs were deficient in chronic disease management and drug abuse/tobacco prevention (Table 46).

Table 46: Ohio Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
OH	Required	16	12	20	4	10	9	17
	Elective	2	4	1	2	4	2	1
	Not Offered	4	6	1	16	8	11	4
	Total* Evaluated	22	22	22	22	22	22	22

Oklahoma

Fourteen programs were reviewed in Oklahoma (OK). All programs require a course in physical education/physical activity and 79% of programs require coursework in health education. Four programs (29%) require coursework in nutrition education, social emotional learning/mental health and drug abuse/tobacco prevention within their curriculum. Only one program requires a methods course in teaching health education to students. Coursework in chronic disease management was not offered within any of the programs reviewed (Table 47).

Table 47: Oklahoma Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
OK	Required	4	14	11	0	4	4	1
	Elective	0	0	0	0	0	0	0
	Not Offered	10	0	3	14	10	10	13
	Total* Evaluated	14	14	14	14	14	14	14

Oregon

One program in Oregon (OR) was reviewed for this scan and was a PE stand-alone program. The only required coursework includes courses in physical education/physical activity (Table 48).

Table 48: Oregon Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
OR	Required	0	1	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	1	0	1	1	1	1	1
	Total* Evaluated	1	1	1	1	1	1	1

Pennsylvania

Six programs were included for the state of Pennsylvania (PA); all evaluated programs require health education within their teacher preparation curriculum and also require a methods course in teaching health education to students. Nutrition education and physical

education/physical activity are required in 66% of programs and social emotional learning/mental health coursework is required in 83% of programs. Programs were deficient in chronic disease management and drug abuse/tobacco prevention (Table 49).

Table 49: Pennsylvania Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
PA	Required	4	4	6	1	5	2	6
	Elective	1	0	0	0	1	0	0
	Not Offered	1	2	0	5	0	4	0
	Total* Evaluated	6	6	6	6	6	6	6

Rhode Island

Two programs, both from public institutions, were reviewed in Rhode Island (RI); both programs required health education, nutrition education and social emotional learning/mental health as a component of their teacher preparation curriculum. One program was deficient in chronic disease management and physical education/physical activity. One program required a methods course in teaching health education to students (Table 50).

Table 50: Rhode Island Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
RI	Required	2	1	2	1	2	2	1
	Elective	0	0	0	0	0	0	1
	Not Offered	0	1	0	1	0	0	0
	Total* Evaluated	2	2	2	2	2	2	2

South Carolina

Thirteen programs were evaluated within South Carolina (SC). Almost all programs (92%) require coursework in physical education/physical activity. Over half of all programs (54%) require coursework in health education. Five programs (38%) require coursework in social emotional learning/mental health as well as a methods course in teaching health education to students. Programs were deficient in requiring coursework for drug abuse/tobacco prevention and chronic disease management (Table 51).

Table 51: South Carolina Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
SC	Required	2	12	7	0	5	0	5
	Elective	1	0	0	0	0	1	0
	Not Offered	10	1	6	13	18	12	7
	Total* Evaluated	13	13	13	13	13	13	13

South Dakota

Three programs were reviewed in South Dakota (SD); all programs require coursework in physical education/physical activity and health education. Sixty-seven percent of programs require coursework in social emotional learning/mental health and also require a methods course in teaching physical education to students (as all were PE stand-alone programs). Programs were deficient in offering coursework in chronic disease management and drug abuse/tobacco prevention and only one program required a course in nutrition education (Table 52).

Table 52: South Dakota Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
SD	Required	1	3	3	0	2	0	2
	Elective	0	0	0	0	0	0	0
	Not Offered	2	0	0	3	1	3	1
	Total* Evaluated	3	3	3	3	3	3	3

Tennessee

Five programs were assessed in Tennessee (TN). All programs require coursework in physical education/physical activity within their curriculum. Three programs (60%) require coursework in health education and 40% of programs require course work in nutrition education. Programs were deficient in providing courses in chronic disease management, social emotional learning/mental health and drug abuse/tobacco prevention. None of the programs provided a methods course in teaching health and/or physical education to students (Table 53).

Table 53: Tennessee Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
TN	Required	2	5	3	0	0	1	0
	Elective	0	0	0	0	0	0	0
	Not Offered	3	0	2	5	5	4	5
	Total* Evaluated	5	5	5	5	5	5	5

Texas

Twelve programs were included for the state of Texas (TX); 83% of programs require health education and physical education/physical activity within their teacher preparation curriculum and 50% of programs require a methods course in teaching physical and/or health education to students. Social emotional learning/mental health is required in 67% of programs and chronic disease management is required in 58% of programs. Programs were deficient in offering drug abuse/tobacco prevention courses within their curriculum, as it is required in only four programs (33%) (Table 54).

Table 54: Texas Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
TX	Required	7	10	10	7	8	4	6
	Elective	2	1	0	2	1	0	0
	Not Offered	3	1	2	2	3	8	6
	Total* Evaluated	12	12	12	12	12	12	12

Utah

One program was available in Utah for review (Brigham Young University); the program requires nutrition education, physical education/physical activity, health education, social emotional learning and social emotional learning/mental health within the coursework. The program is deficient in chronic disease management, drug abuse and tobacco use prevention and teaching methods. The program is a joint PE/HE program (Table 55).

Table 55: Utah Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
UT	Required	1	1	1	0	1	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	0	0	0	1	0	1	1
	Total* Evaluated	1	1	1	1	1	1	1

Virginia

Nine programs were reviewed in Virginia (VA); 78% of programs require health education and 67% of programs require physical education/physical activity within their teacher preparation curriculum. Programs were deficient in chronic disease management, social emotional learning/mental health and drug abuse/tobacco prevention. Half of all programs require a methods course in teaching health education to students (Table 56).

Table 56: Virginia Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
VA	Required	4	6	7	1	1	1	5
	Elective	2	1	1	1	1	0	0
	Not Offered	3	2	1	7	7	8	4
	Total* Evaluated	9	9	9	9	9	9	9

Vermont

One program was available for review for the state of Vermont (VT) (The University of Vermont). The program is a PE stand-alone program. The program is deficient in all other school health content areas except for physical education/physical activity (Table 57).

Table 57: Vermont Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
VT	Required	0	1	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	1	0	0	1	1	1	1
	Total* Evaluated	1	1	1	1	1	1	1

Washington

One program was available for review for the state of Washington (WA) and is a joint HE/PE program. The program requires students to enroll in nutrition education, physical education/physical activity, health education, drug abuse/tobacco prevention and teaching methods. The program is deficient in chronic disease management and social emotional learning/mental health (Table 58).

Table 58: Washington Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
WA	Required	1	1	1	0	0	1	1
	Elective	0	0	0	0	0	0	0
	Not Offered	0	0	0	1	1	0	0
	Total* Evaluated	1	1	1	1	1	1	1

West Virginia

Eleven programs were reviewed for West Virginia (WV); all evaluated programs require health education and 64% of programs require physical education/physical activity within their teacher preparation curriculum. Programs reviewed were deficient in offering courses related to drug abuse/tobacco prevention and nutrition education. Eight programs (73%) require a methods course in teaching health education to students (Table 59).

Table 59: West Virginia Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
WV	Required	4	7	11	5	8	3	8
	Elective	2	3	0	0	1	0	1
	Not Offered	5	1	0	6	2	8	2
	Total* Evaluated	11	11	11	11	11	11	11

Wisconsin

Two programs were reviewed in Wisconsin (WI); all programs require nutrition education, physical education/physical activity and methods as part of their course work. University of Wisconsin at Whitewater requires social emotional learning/mental health as part of their coursework, whereas University of Wisconsin Stout did not. Both programs are deficient in chronic disease management and drug abuse/tobacco prevention courses (Table 60).

Table 60: Wisconsin Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
WI	Required	2	2	2	0	1	0	2
	Elective	0	0	0	0	0	0	0
	Not Offered	0	0	0	2	1	2	0
	Total* Evaluated	2	2	2	2	2	2	2

Wyoming

One program was available for review for the state of Wyoming (WY) (University of Wyoming). The University of Wyoming requires candidates to enroll in nutrition education and physical education/physical activity. The program is deficient in health education, chronic disease management, social emotional learning/mental health, drug abuse/tobacco prevention and teaching methods (Table 61).

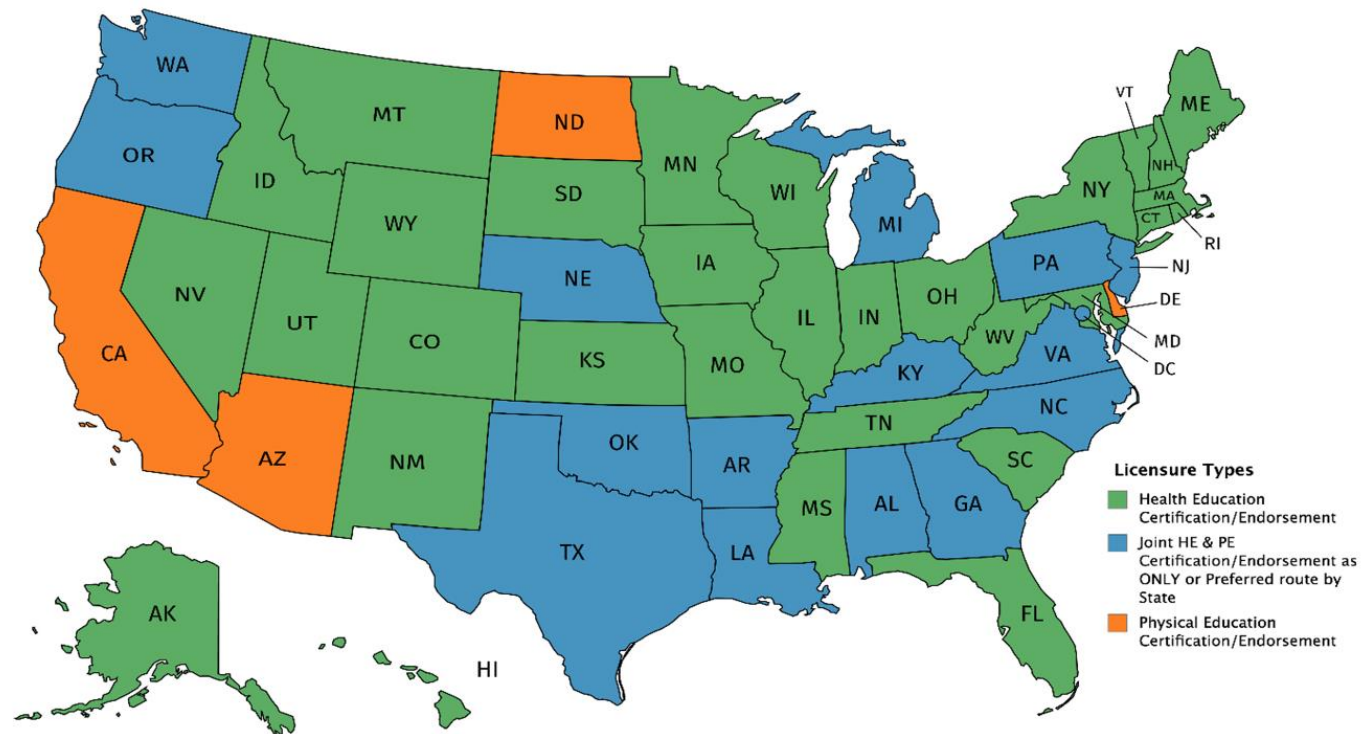
Table 61: Wyoming Required and Elective Course Alignment with School Health Content Areas

State		NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
WY	Required	1	1	0	0	0	0	0
	Elective	0	0	0	0	0	0	0
	Not Offered	0	0	1	1	1	1	1
	Total* Evaluated	1	1	1	1	1	1	1

State Certification Policies

State-level policies around certification/endorsement to teach health and/or physical education within the 50 states and the District of Columbia was also assessed. Thirty-one states (AK, CO, CT, FL, HI, IA, ID, IL, IN, KS, MA, MD, ME, MN, MO, MS, MT, NH, NM, NV, NY, OH, RI, SC, SD, TN, UT, VT, WI, WV, WY) had a certification or endorsement policy that required a separate certification for health education. This often included completing a bachelor's degree from an accredited program with a major in health and/or completing a minimum number of semester hour course work within health education as well as passing a content exam with a minimum score. Fifteen states and DC (AL, AR, DC, GA, KY, LA, MI, NC, NE, NJ, OK, OR, PA, TX, VA, WA) had policies that included certification for both health and physical education (one code for both areas). Some states had a separate health education code but notices from state departments of education indicated newer policies pending for joint certification (e.g., MI, PA). The remaining four states (AZ, CA, DE, ND) have a physical education certification/endorsement that enables you to teach health education in schools (Figure 5).

Figure 5: State Certification Policies for Health and Physical Education Teachers



Highlights

New York and Rhode Island had some of the strongest requirements to receive the HE certification.

New York certification requirements included:

1. Completion of a New York State Education Department certified program
2. Passing the edTPA in the subject area and the Praxis Content exam
3. Bachelor's Degree with minimum 2.5 GPA
4. 30 semester hours of coursework in health
5. 40 days of student teaching in health

Rhode Island certification requirements included:

1. Completion of Rhode Island Department of Education (RIDE) certified program
2. Bachelor's Degree in health or closely related field
3. 12 weeks of student teaching in health
4. 60 hours field experience prior to student teaching
5. Must demonstrate content and pedagogical competencies by RIDE approved national professional association
6. Must demonstrate deep understanding of applicable student standards and proficiency in designing and implementing standards-based instruction assessment
7. Must pass content exam (score to pass based on GPA)

Three states, Texas, Indiana and West Virginia allowed the certification/endorsement to be added to the teacher's license by passing the content exam alone (no required coursework). San Diego State University is offering classes on a single enrolment basis which can count towards certification/endorsement.

State Policies and Curriculum Alignment

State certification/endorsement policies were also aligned to the school health content topic areas to determine if policies influenced course offerings and curriculum within HE and PE teacher preparation programs.

States that had a separate certification/endorsement for health education required the most coursework in health education (73%), physical education and physical activity (70%), nutrition education (45%) and social emotional learning/mental health (40%). Programs were deficient in offering courses for chronic disease management and drug abuse/tobacco prevention. Fifty-seven percent of programs required a course in teaching health or physical education as a component of their curriculum. In terms of program types within these states, 49 programs were HE, 52 were joint HE/PE programs, 62 were PE programs, one program was an HE-minor program, two were PE-minor programs and three were programs for HE majors on a non-school teaching track.

Table 62: Health Education Certification Policy Alignment to School Health Content Areas

	NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
Required	76	118	123	26	68	38	96
Elective	20	24	9	11	15	9	11
Not Offered	73	27	37	132	86	122	62
Total* Evaluated	169	169	169	169	169	169	169

States that had joint certification/endorsement for health and physical education required the most coursework in physical education/physical activity (82%), health education (76%), nutrition education (47%) and social emotional learning/mental health (30%). Programs were deficient in providing coursework related to chronic disease management and drug abuse/tobacco prevention. More than half the programs (58%) required a methods course in teaching health and physical education to students. Within these states program types reviewed included 21 HE programs, 73 joint HE/PE programs, 31 PE programs, one program for HE majors on a non-school teaching track, three programs for PE majors on a non-school teaching track and three programs for joint PE and HE majors on a non-school teaching track.

Table 63: Joint Health and Physical Education Certification Policy Alignment to School Health Content Areas

	NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
Required	62	108	100	22	39	24	77
Elective	16	7	11	8	14	3	1
Not Offered	54	17	21	102	79	105	54
Total* Evaluated	132	132	132	132	132	132	132

States that had a certification/endorsement for physical education only (no separate or joint HE certification or endorsement) had the most required coursework in physical education/physical activity (78%) and was deficient in all other school health content areas as only three programs required coursework in health education, nutrition education and social emotional learning/mental health. Less than a quarter of programs reviewed (21%) required a methods course in teaching physical education to students. Within these states programs reviewed included three HE programs and 10 PE programs.

Table 64: Physical Education Certification Policy Alignment to School Health Content Areas

	NE	PE/PA	HE	CDM	SEL/MH	DA/TP	Methods
Required	3	11	3	0	3	1	3
Elective	2	1	1	1	2	0	2
Not Offered	9	2	10	13	9	13	9
Total* Evaluated	14	14	14	14	14	14	14

Conclusions

Overall, program type (HE, PE or joint HE/PE) dictated coursework offered and required within health education teacher preparation programs throughout the United States. This was true when state certification and endorsement policies were taken into consideration as states that had separate HE certification and endorsement policies did not have a greater number of HE programs within those states. However, the programs within the HE certification states did provide greater alignment to the school health content areas, as opposed to joint certification states, or PE certification states. Proportionally, HE stand-alone programs provided the greatest amount of coursework across the school health content areas and also required a methods course in teaching health education more often within program curriculum (85% of programs). Joint HE/PE programs also had a significant amount of coursework across the school health content areas, however many were lacking in the areas of chronic disease management, mental health and drug use prevention. Stand-alone PE programs provided the least amount of required or elective courses across the school health content areas, especially in areas beyond physical activity/physical education and general health education.

Of the programs reviewed in this scan, required coursework provided to preservice teachers included general health education, physical education and physical activity and nutrition education. There were noted gaps in the provision of courses related to chronic disease management, drug abuse and tobacco prevention and social emotional health/mental health. Given that these are key areas of health education prioritized by national, state and local agencies and partners, and help to provide a comprehensive health education curriculum to youth, these gaps should be addressed. In addition, teachers will need to equip students with the knowledge and skills necessary to deal with issues such as mental health, diabetes management, drug abuse, e-cigarette use and communicable diseases such as COVID-19 in order to achieve health literacy and promote children's health (Auld et al., 2020).

State-level policies around certification and endorsement were primarily centered on the completion of health-focused coursework, completion of a Bachelor's degree within an accredited or state-certified program and completion of a content exam (with a minimum passing score). Two states, New York and Rhode Island, went beyond these criteria and even required teaching hours in health and/or experience hours. It may be helpful to garner some information from state officials in these localities to understand how their more stringent policies propels or hinders teachers from obtaining a health education certification. In addition, there were several states, including populous states like California, that trained teachers in stand-alone physical education programs, with very little to no coursework in health education. More information should be garnered from programs within these states to understand who provides health education within schools and the quality of health education delivery among youth within these states.

Recommendations

The results of this scan provide numerous avenues SOPHE, CDC and other partners can take to engage teacher preparation programs across the country for improved teacher training and delivery of effective health education in schools. Each scenario is provided and discussed below as options for next steps for the SOPHE School Health Project.

OPTION 1: Prioritize collaborations with states that have the most prevalent HE stand-alone programs (6 states: IL, MA, MI, NH, NM, NY).

- Pros: Allows for greater strengthening of HE stand-alone programs and creates a mentor group that could assist other programs throughout the country. Changes within these programs may have a greater impact on the youth populations within these states.
- Cons: States are located in limited regions of the country (mostly northeast and Midwest states). States may not be able to conduct regional or across-state mentorship due to differences in state policies and certification/endorsement. These programs are already strong and providing additional resources may be a detriment to other, more needy programs. Working with these states leaves out the 13 states without any HE programs (AK, AZ, CA, DE, HI, ID, KS, NV, OR, SC, SD, VT, WY).

OPTION 2: Prioritize collaborations with states that have most prevalent joint HE/PE programs (14 states: AR, CT, GA, LA, MT, NC, NJ, OH, OK, PA, UT, VA, WA, WV).

- Pros: Includes work in a greater number of states and regions. Strengthens joint HE/PE programs which could have been lacking in a number of school health content areas. Could train strong HE programs within these states (if present) to become mentors for others within their state. Changes within these programs may have a greater impact on the youth populations within these states.
- Cons: Some states represented here do not have strong programs in terms of teaching across the key school health content areas, so may not be able to model/mentor for others. Changes in programs may require many years of work to improve course offerings and teacher trainings. Working with these states leaves out the 13 states without any HE programs (AK, AZ, CA, DE, HI, ID, KS, NV, OR, SC, SD, VT, WY).

OPTION 3: Prioritize collaborations with states that have most prevalent stand-alone PE programs (23 states: AL, AK, AZ, CA, DE, FL, HI, ID, IN, KS, KY, MD, ME, MO, ND, NV, OR, SC, SD, TN, TX, UT, WY).

- Pros: Provides for a greater spread across the country and includes work in more regions. Strengthens PE stand-alone programs, which many are lacking in several school health content areas. Changes within these programs may have a greater impact on the youth populations within these states. Includes the 13 states without any HE or joint PE/HE programs within their state, such as populous California.
- Cons: States represented here may not have strong programs in terms of teaching across the key school health content areas so may not be able to model/mentor for others. Changes in programs may require many years of work to improve course offerings and teacher trainings. Shifts the focus away from HE teacher education programs.

OPTION 4: Collaborate with the HE certification/endorsement states.

- Pros: Provides for a greater spread across the country as there are 31 states that have a separate HE certification/endorsement process. Allows for collaboration among strong HE programs with joint HE/PE and PE stand-alone programs within each state.
- Cons: Does not include some of the populace PE-only states like California.

OPTION 5: A combination of 1, 2, 3 or 4.

- Combining 1 and 2, could eliminate most of the cons presented, however would still leave out the 13 states with no HE or joint PE/HE programs.
- Combining Options 2 and 3 or 1 and 3 would include the 13 states with no HE or joint PE/HE programs and would eliminate much of the cons presented in either case.

- Selecting Option 4 and including some of the PE only states in Option 3 would also be a good option to include strong programs with weaker, less diverse programs.
- Option 5 would enable SOPHE, CDC and partners to collaborate with strong HE programs as well as impact a greater number of states and regions throughout the country. It would also help to address some of the gaps presented in the PE stand-alone and joint HE/PE programs presented in this report.

Additionally, further assessment within states may be needed to determine future directions of the SOPHE School Health Project. For example, qualitative inquiry within some of the key states and with faculty and staff leading key programs may help with understanding why some states do not have HE teacher preparation programs (even within a joint program) and may also help to illustrate why some programs are deficient in many of the school health content areas (e.g., mental health, drug and tobacco prevention, chronic disease prevention). We recommend continuing the assessment utilizing qualitative inquiry in combination with the options presented above for years three and four of the SOPHE School Health Project.

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