

Impact of a STEM CTE Intervention on Student Career Interest and Course-Taking Behavior

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Introduction

Demand for highly trained healthcare workers has grown steadily (National Science Board, 2020; U.S. Bureau of Labor Statistics, 2023b). In the United States, healthcare industry employment is projected to grow by 10.8 percent between 2022 and 2032, significantly faster than the average of all other occupations (Dubina et al., 2022; U.S. Bureau of Labor Statistics, 2023a). Demand for nurse practitioners and healthcare support occupations (e.g., physical therapist assistants, home health, and personal care aides) is anticipated to be especially high, driven by an aging population and new healthcare delivery models (Dubina et al., 2022; U.S. Bureau of Labor Statistics, 2023a). Within this context, the call for a more diverse healthcare workforce is growing. Evidence accumulates that a representative healthcare workforce is important to improving healthcare access, patient satisfaction with care, and health outcomes, particularly for patients of color (Hall et al., 2015). Efforts to diversify the healthcare workforce, however, have yielded modest results (Taylor et al., 2022). The share of physicians, nurses, and nurse practitioners who are Black or Latinx continues to lag behind their share in the overall population (U.S. Bureau of Labor Statistics, 2023a).

Literature Review

A growing body of research indicates that participation in Career and Technical Education (CTE) programs, which typically involve a combination of career-oriented courses, internships,

and other work-based learning, can improve academic outcomes and workforce readiness (Jacob, 2017). Studies have found that students who take multiple CTE courses are more motivated and engaged in course content, take more and higher-level math and science courses, are more likely to earn bachelor's degrees, and are less likely to drop out of high school (Stone & Lewis, 2012; Tamim & Grant, 2013). Participation in upper-level CTE courses is associated with a nearly 2 percent wage increase for each course taken (Kreisman & Stange, 2019). The learning science literature suggests that learning in context better aligns with adolescents' attention and motivational biases for learning through exploration and apprentice-like pedagogy (Richardson et al., 2016). It helps students grasp the relevance of academic subjects, engage in the material at a deeper and more personal level, synthesize their varied in-school and out-of-school experiences, and develop informed and realistic postsecondary and career plans (Tamim & Grant, 2013).

Research on CTE courses in science, technology, engineering, and math (STEM) fields (e.g., engineering, computer science, health science) echoes the findings in the general CTE literature. Participation in STEM CTE courses has been linked to increased odds of graduation, increased odds of advancing further in traditional mathematics and sciences courses in high school, and increased odds of pursuing STEM studies in postsecondary education (Gottfried, 2019; Gottfried & Bozick, 2016; Plasman & Gottfried, 2018; Sublett & Plasman, 2017). The applied STEM literature purports that utilizing math and science skills differently from traditional STEM courses helps students gain a more thorough understanding of the material. Students can connect concepts taught across the academic STEM spectrum and see the application of these concepts in real life.

Disparate STEM CTE course participation rates, however, suggest inequities in access to courses, especially advanced CTE courses. Data show that although participation in at least one CTE course is similar for White, Black, and Latinx students (80%, 75%, and 74%, respectively), the pattern looks different for participation in multiple CTE courses (National Center for Educational Statistics, 2013). Twenty-two percent of white students, 18 percent of Black students, and 16 percent of Latinx students achieve the CTE concentrator status of three CTE courses. A study of CTE participation in Illinois found similar underrepresentation in CTE courses with a STEM focus (Hamilton et al., 2015). In the STEM CTE courses, disparities were prevalent for Black and Latinx students as well as females, whose rate of CTE participation was significantly less than their male peers (64.1% male vs. 35.9% female).

CTE courses have been identified as a promising strategy to meet the healthcare workforce demand and expand the pipeline of professionals of color (DeLuca et al., 2006). Approximately 12 million high school students—nearly three-quarters of the U.S. high school population—enroll in one or more CTE courses during high school (Advance CTE, 2022). Data show high CTE participation rates among Black, (75%) and Hispanic (74%) students. However, less than half of CTE participants go on to concentrate in a career cluster (earn at least two credits) with white students (40%) completing at higher rates than their Black (35%) and Hispanic (32%) peers (U.S. Department of Education, 2019).

Study Overview

This study examined the extent to which the Teachers and Students for Community Oriented Research and Education (TSCORE) project, a CTE intervention designed to strengthen rates of health science CTE participation, was associated with positive outcomes for students. The intervention focused on teachers and students in urban and under-resourced schools with limited access to healthcare professionals. Teacher professional development, connections with healthcare professionals, and curriculum development focusing on project-based learning were the core elements of the TSCORE project. This study looked at the impact of the intervention on students in the TSCORE classrooms and was guided by two research questions.

Research Question 1: To what extent is student participation in TSCORE classes associated with increased self-efficacy, perceptions of health science professionals, motivation and interest in pursuing health science careers?

Research Question 2: To what extent is the TSCORE project associated with increased CTE health science course-taking?

The TSCORE Project

TSCORE was developed to address the disparities in CTE course quality and access in Kansas. Teachers were given the opportunity to strengthen the quality of instruction and real-world learning opportunities in urban, under-resourced high schools through the development of an industry partnership model. Given the complexity of career development within the classroom, critical pedagogy served as a theoretical lens for evaluating the TSCORE intervention impact on students' self-efficacy, perceptions, motivation, interests, and behaviors within the realm of health science education and careers. Critical pedagogy emphasizes elements of critical awareness to students' realities, root causes of inequities, and transformative learning (Alonso Luaces et al., 2018; Freire, 1970). Application of critical pedagogy framework for TSCORE is described in depth by Alonso Luaces et al. (2018).

Two districts with existing CTE health science pathways were recruited to participate in the project. The two urban districts serve over 71,000 students, including a significant percentage of minority students (73%) and students living below poverty (77%) (Kansas State Department of Education, 2019). Although CTE courses are popular at the high school level, the number of students who complete at least two courses in the health science pathway is relatively low (49%; M. Kollman, personal communication, May 2016). The TSCORE theory of change involving critical pedagogy asserts that teachers with strong, up-to-date knowledge, connections to industry, and a deep understanding of their students' realities, deliver rigorous educational opportunities for their students. TSCORE teachers participated in a four-week summer professional development (PD) program at a local academic medical center. The main deliverable of the PD was a teacher-created unit (2-3 weeks long) to be implemented with students in the health science pathway during the academic year. The units were tied to each teacher's specific content standards, connected to local health disparities, and include expert panels, hands-on activities, and off-site educational experiences for students to engage with community partners.

TSCORE PD was developed with research around PD effectiveness in mind and thus, was content-focused, incorporates active learning, and includes ongoing coaching and expert support (Darling-Hammond et al., 2017). During morning sessions in Week One, medical center faculty helped teachers to define and critically reflect on health disparities while providing context-specific data. In the afternoons, an instructional coach guided teachers to identify the competencies/standards for their units and to explore connections with local research. Tours of the community's health resources sparked teachers' interest in the neighborhoods surrounding the school and deepened their understanding of health issues affecting their students. The teachers met with faculty and TSCORE staff to define ideas for their units based on feedback from faculty and community partners.

Week Two dove into what researchers do. The faculty introduced teachers to current research projects and invited them to observe and participate in job-embedded contexts. Participating teachers had daily consultations with experts and participated in guided reflection led by experienced educators. In Week Three, a multifaceted team of researchers introduced teachers to methods of data collection, particularly ethnography, surveys, observation, and interviews. A consultant from the school district led hands-on pedagogical sessions on active learning, encouraging teachers to apply acquired work-based knowledge to their units. During the final week of summer PD (Week Four) teachers finished their units' content, scheduled guest speakers from their newly developed professional networks, confirmed field trip sites, and considered research mentors or topic experts for student projects. TSCORE staff provided a final review of the units before teachers returned to the classrooms.

The TSCORE model included a year-long implementation support program that offered on-site coaching, at least three hours of classroom observations, externships, and industry connections during the academic year. The TSCORE PD coordinator met with teachers at their schools as they started to implement their units. The goal of the observations was to provide on-site and on-time feedback on active learning strategies, student engagement and connections to health disparities in the local community. Moreover, as part of the T-Score professional development, TSCORE provided one-day individualized teacher externships for each teacher at the medical school campus and at different community sites (Alonso Luaces et al., 2023). The goal of the externships was to bridge classroom learning with the real world, meet with experts in the field to obtain feedback on their TSCORE-created units, and increase collaboration with University of Kansas Medical Center (KUMC) faculty.

At the end of the academic year, teachers uploaded their units to the TSCORE project website. To date, fifteen units have been shared on the website, including units on asthma, health informatics, diversity in healthcare, and healthcare advocacy.

Methods

TSCORE was implemented in 2016-2020. During the first year, staff developed and pilot-tested the professional development curriculum. The full implementation of the curriculum occurred from 2017 to 2019. Twenty teachers participated in the program. A quantitative design was employed to evaluate the outcomes of the TSCORE project. A pre-test and post-test design was used to examine self-efficacy, perceptions of health science professionals, motivation, and interest in pursuing health science careers. To assess CTE completion course-taking behavior, an

interrupted time series design was employed. This approach allowed the researchers to look at CTE participation before, during, and after the program. These two methods helped provide a more robust analysis of the program and its impact on students and the CTE system.

Participants

Participants included students from two urban school districts in Kansas enrolled in the CTE Health Science Pathway between 2016 and 2020. Surveys were sent to the entire population of health science teachers and their students for TSCORE-partnered classrooms. The pre-test and post-test analysis focused on student survey responses collected in TSCORE classrooms between 2017-2019. This sample consisted of 205 students from 6 schools with matched pre-test and post-test survey data, as outlined in Table 1. Participant characteristics were similar to the sociodemographic characteristics of students in the school districts.

Table 1. Participant Characteristics

Characteristics	%	n
Gender		
Male	25.4%	53
Female	74.2%	152
Race/Ethnicity		
Asian	10.2%	21
Black	15.1%	31
White	32.7%	67
Hispanic	49.2%	101
American Indian /Alaska Native	2.4%	5
Native Hawaiian/ Other Pacific Islander	1.5%	3
Other	2.4%	5
Primary Language		
English	74.1%	152
Spanish	19.1%	39
Other	6.8%	14

Note: The survey allowed participants to select one or more options for race/ethnicity.

Procedures

At the beginning of the school year, students in TSCORE teachers' classrooms and their parents received an information packet from the study team with information about the study's purpose, the voluntary nature of the study, and the confidentiality of the data. The teacher collected consent forms from interested parents and students.

Survey data were collected using Qualtrics (Qualtrics, Provo, UT), an online survey platform. Prior to teaching the TSCORE unit, teachers administered the pre-test survey. The post-test survey was distributed after the completion of the unit. The surveys were identical in content. Surveys were available in English and Spanish; the average completion time was 10 minutes. To capture pathway completion, the school districts provided the aggregate CTE course completion for students enrolled in the CTE health science pathway between 2016-2019.

Measures

Student Survey

The research team developed a survey instrument to measure four domains: a) self-efficacy, b) perception of health science professionals, c) interest in health science programs and careers, and d) motivation. To measure these domains, survey questions from the STEM Career Interest Questionnaire (Christensen et al., 2013) and the STEM Career Interest Survey (Kier et al., 2014) were adapted for use with students in CTE health science courses. Both reference surveys demonstrated reliability, with Cronbach's alpha scores equivalent to 0.78 and 0.76 respectively, both a respectable range according to guidelines (Christensen et al., 2013; Kier et al., 2014). All adapted survey items, which included rewording items referencing science to include health science in the survey, were placed on an agreement Likert scale. A member of our leadership team who is proficient in English and a native Spanish speaker translated all the documents from English into Spanish. The translated documents were then sent to a unit on the medical school campus that works exclusively with the Latinx community in Kansas and were reviewed by of two native Spanish speakers. Finally, back-translation by a native speaker of English fluent in Spanish was used to certify that the translations are true and accurate. Back-translation involves translating from English back to Spanish and subsequently evaluating the equivalence between the source and target versions (Chen & Boore, 2010). Copies of the Spanish and English versions of the instrument are provided in the Appendix.

District Data: CTE Completion and Graduation

School-level data were requested from the two participating districts. The data included CTE credits earned and CTE concentrator status (concentrator = 2+ CTE credits)

Data Analysis

Student Survey

Data were analyzed using STATA 15.1 (StateCorp, 2017). Students were given the option of an English or Spanish version of the survey. Approximately eight percent ($n = 27$) of the pre-test respondents utilized the Spanish version of the survey at pre-test, while only seven percent ($n = 21$) chose the Spanish version at the post-test. For pragmatic purposes and to center the neutral response at 0, the Likert scale was recoded to a numeric scale ranging from -2 (Strongly

Disagree) to 2 (Strongly Agree). Pre-test and post-test responses were compared statistically using a paired-observation t-test.

District Data

Data were analyzed using EXCEL16.17 (Microsoft, 2018). A repeated measures analysis of variance was conducted to assess whether the number of health science CTE completers increased between 2016 and 2019, the years before and during TSCORE implementation.

Results

Research Question 1: To what extent is student participation in TSCORE classes associated with increased self-efficacy, perceptions of health science professionals, motivation and interest in pursuing health science careers?

Students were asked to rate their self-efficacy, perceptions of health science professionals, and interest and motivation to learn about health sciences and to pursue careers in health science fields. Table 2 provides results for the matched sample.

Table 2. Changes in Students' STEM Self-Efficacy, Perception of Health Sciences, Interest and Motivation for Health Science Careers

ITEM		PRE-TEST MEAN	POST-TEST MEAN	MEAN DIFFERENCE
SELF-EFFICACY AND PERCEPTION OF HEALTH SCIENCES				
Health science is something I can be good at (Self-Efficacy)		0.65	0.82	0.18*
	BIPOC	0.61	0.79	0.17*
	White	0.69	0.88	0.19
Health science professionals provide important services to the community (Perceptions)		0.87	1.27	0.40**
	BIPOC	0.83	1.29	0.46**
	White	0.93	1.36	0.43*
Health sciences is a good career for minorities and women (Perceptions)		0.78	1.25	0.47**
	BIPOC	0.76	1.25	0.49**
	White	0.73	1.33	0.60**
Health science professionals do many things that I like to do (Perceptions)		0.63	0.95	0.32**
	BIPOC	0.65	0.90	0.25**
	White	0.53	1.00	0.47*
STEM INTEREST AND MOTIVATION				
I would like to become a health science professional (Interest)		0.39	0.76	0.37**
	BIPOC	0.38	0.77	0.39**
	White	0.33	0.70	0.37*

I would like to go to a college and get a degree in a health science field after high school		0.59	0.89	0.30**
(Interest)	BIPOC	0.53	0.91	0.37**
	White	0.72	0.94	0.22
I would like to take more science classes that focus on health		0.52	0.64	0.12
(Interest)	BIPOC	0.48	0.58	0.10
	White	0.58	0.71	0.13
Learning about health in my community has increased my interest in health science careers		0.57	0.70	0.13*
(Interest)	BIPOC	0.61	0.77	0.16*
	White	0.45	0.56	0.09
I am motivated to study health sciences in high school		0.55	0.72	0.16*
(Motivation)	BIPOC	0.54	0.65	0.10
	White	0.18	0.5	0.35*

Note: BIPOC represents Black, Indigenous, and people of color.

*p < .05; **p < .01

For nine out of the ten items, TSCORE students demonstrated a statistically significant increase from pre-test to post-test. In all four domains – self-efficacy, motivation, perceptions of health science careers, and interest in pursuing health science coursework/career - scores from pre-test to post-test increased. The post-test means ranged from 0.64 to 1.29, indicating overall agreement that health sciences was a field they could be good at, an attractive profession, and a career pathway of interest and motivation. We also examined the pre-test and post-test change scores for Black, Indigenous, people of color (BIPOC) and white students separately. BIPOC students demonstrated statistically significant increases in three of the four domains examined including self-efficacy, perceptions of health science professionals, and interest in pursuing programs and/or health science careers. White students demonstrated increases in all four domains. At the item level, there were some differences by race/ethnicity. For two items, “I would like to become a health science professional” and “I would like to pursue a degree in health science,” BIPOC students and not white students demonstrated statistically significant increases. For the item “I am motivated to study health science in my high school,” white students and not BIPOC students demonstrated statistically significant increases from pre-test to post-test.

Research Question 2: To what extent is the TSCORE project associated with increased CTE course-taking in STEM fields?

District data were used to evaluate the changes in CTE course-taking during the TSCORE project (Table 3). Project leaders hypothesized that increased rigor, relevance, and student interest in the CTE Health Science Pathway courses would lead to increased enrollment in courses. To address this question, data for the CTE pathway courses were collected for 2016-2019. During 2016-2017, the program was being pilot tested and not implemented in the classroom. Full implementation of TSCORE occurred in 2017-2018 and 2018-2019. Researchers

anticipated that the number of CTE concentrators (students completing 2+ CTE courses) would increase during those years.

Table 3. Number of Health Science CTE Concentrators

SCHOOL	2016-2017	2017-2018	2018-2019
School A	56	90	166
BIPOC	43	70	104
White	13	20	62
School B	6	141	137
BIPOC	2	44	26
White	4	97	111
School C	17	56	61
BIPOC	14	34	37
White	3	22	24
School D	107	107	156
BIPOC	53	53	57
White	54	54	99
School E	80	93	100
School F	35	85	129
TOTAL*	301	572	749

A one-way repeated measures analysis of variance was used to evaluate if CTE course concentration increased between 2016-2017 and 2018-2019. The results of the ANOVA indicated a significant time effect, Wilk's Lambda = .202, $F(2, 4) = 7.90$, $p=.04$. Follow-up comparisons indicated that the pairwise differences between 2016-2017 and 2018-2019 and 2017-2018 and 2018-2019 years were statistically significant. We also examined CTE course concentration for BIPOC and white students in four of the schools with race and ethnicity data. For BIPOC students, the number of CTE concentrators increased from 112 students in 2016-2017 to 224 students in 2018-2019. For white students, CTE course concentrators increased from 74 students in 2016-2017 to 296 students in 2018-2019. The growth represented a 100% increase in the number of BIPOC CTE concentrators and a 300% increase in the white CTE concentrators. The repeated measures analysis of variance did not indicate a statistically significant increase for either group when analyzed separately.

Discussion

Despite ongoing efforts to diversify the healthcare workforce, low-income and minority students remain underrepresented in the healthcare industry, one of the fastest-growing segments of the 21st-century economy (National Science Board, 2020). Health science CTE programs show considerable promise for addressing this gap. Students participating in STEM CTE programs are more likely to pursue rigorous coursework, post-secondary programs, and STEM careers (Stone & Lewis, 2012; Tamim & Grant, 2013). Moreover, students engaged in real-world learning display greater self-efficacy and motivation, earn higher grades, and demonstrate the cognitive and non-cognitive skills to be successful in the healthcare workforce (Gottfried & Bozick, 2016). High-quality CTE programs are not the norm, however, and under-resourced school districts often fall short of providing authentic learning experiences. Inexperienced teachers, outdated curricula, and weak connections to industry inhibit their ability to provide robust STEM learning for students (Brand, 2008; Bridwell-Mitchell, 2017).

The TSCORE project provides a model for transforming CTE programs in under-resourced communities. By leveraging medical school, community health, and hospital partners and empowering teachers through professional development, the program seeks to overcome traditional CTE barriers. The model is built on the belief that teachers in any community, with the right connections, resources, and training, can cultivate students' interest and pursuit of health science pathways and careers (Ramaswamy et al., 2019).

In our study, there was a statistically significant increase from pre-test to post-test in students' self-efficacy, motivation, perceptions of health science careers, and interest in pursuing health science programs and careers. The TSCORE program was intentional in connecting teachers and students to a diverse group of healthcare providers and students responded positively to this exposure. Subgroup analysis revealed that the program was particularly effective in increasing BIPOC students' interest in pursuing health science degrees and careers.

Health science pathway participation also increased during the TSCORE program. Although we were not able to track individual students, we examined school-level trends in CTE health science concentrator rates (2+ courses) and saw significant gains from the first year of program implementation. Students completing 2+ health science courses increased 59% between year 1 and year 2 and 131% between year 1 and year 3 of the program. Neither of the school districts implemented major changes to the CTE pathway programming during those years.

Limitations

The study has some limitations worth noting. The research design did not include a control group so attributing results to the program should be done cautiously. Our study found a positive change from pre-test to post-test in self-efficacy, motivation, perceptions and interest in health science, and course-taking behavior, but there may have been other factors that influenced these outcomes as well. Second, we were not able to train all health science teachers in the two school districts. Although we trained 20 teachers over four years, some health science teachers were not able to participate. This limits the generalizability of the study at the school level. Finally, we had hoped to track student course-taking behavior at the individual level but were only able to track school level participation. Our study demonstrated a marked increase in health science course-taking behavior, but we cannot attribute this solely to TSCORE student enrollment.

Increases may also have been due to other factors (e.g., increased interest in health science programs, increased popularity of health science teachers, and word-of-mouth from students). Anecdotal evidence indicates that students who participated in TSCORE classes enrolled in additional health science courses. In future studies, we will examine the student-level effects using the statewide database to track participants over time.

Conclusion and Recommendations

This study demonstrates that under-resourced schools can build health science CTE pathways with appropriate support from community and industry partners. We found that students in TSCORE classrooms significantly improved self-efficacy, motivation, perceptions and interest in health science careers. Our two TSCORE school districts – both serving significant numbers of minority and low-income students – were able to increase the number of health science pathway concentrators by 131% over the course of two years. The gains were larger for white students compared to BIPOC students, a finding warranting further investigation.

Based upon our experience and research, we offer a set of four recommendations for educators and industry partners seeking to utilize the TSCORE model in their local community:

1. Identify a backbone organization that can facilitate the partnership model. In TSCORE, the local academic medical center served as the backbone organization –providing the staff to coordinate activities, mobilize resources, and ensure accountability of all involved partners. Our recommendation is to select the organization with the strongest resources, district buy-in, and network connections to convene the partnership.
2. Create an advisory committee of teachers, CTE leaders, and industry partners to guide the vision and strategy of the partnership program. Ideally, committee members are in decision-making positions so that policies and practices can be implemented quickly. We convened our advisory committee nine months before the official start of TSCORE. Our committee used this time to get to know one another, identify shared goals and strategies, discuss resources, and create an implementation plan for the first year. Funding for this project Currently, the advisory group meets regularly to ensure we are on track with our goals.
3. Assess the needs and capacity of the district’s health science CTE pathway before implementing the partnership model. CTE requirements and curricular opportunities vary by state, district, and even school. Make sure your advisory committee understands how CTE programs are implemented at the school level and what industry partnerships are already in place. Committee members should also take time to explore any barriers to enrollment and persistence in CTE programs (prerequisites, grade requirements, scheduling conflicts, transportation needs, etc.). Understanding the opportunities and barriers helped us develop sequential CTE coursework and activities available to all students.
4. In TSCORE, empowered teachers transformed their classrooms into places where students could explore and study what health science professionals really do. We learned that giving teachers the training, tools, connections, and support was fundamental to overhauling the health science CTE program. We also learned that teachers need time and support – sometimes multiple years - to make the connections and implement the desired change in their classrooms. The TSCORE model allowed teachers to progress at their own pace.

We recognize that there are several strategies to grow and diversify the STEM workforce pipeline. We believe TSCORE highlights the potential of CTE pathway programs to be a significant contributor to this effort.

APPENDIX

TSCORE STUDENT SURVEY

English Version

Q1 What is your gender? Female Male

Q2 What is your primary language? English Spanish Other

Q3 Are you Hispanic / Latino(a)? Yes No

Q4 What is your race?

American Indian / Alaska Native

Asian


Black / African American

White

Native Hawaiian / Pacific Islander

Other (please specify): _____

Q5 Please rate your level of agreement with the following statements.

	Strongly Agree  Strongly Disagree					Not Sure
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Health sciences is a good career area for both minorities and women.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health sciences professionals provide important services to the community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing math and science is important for me to be successful in my future career.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health sciences professionals get to do many of the things that I like to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health science is something I can be good at.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to become a health sciences professional.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to go to a college and get a degree in a health sciences field after high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am motivated to study health sciences in high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning about health in my community has increased my interest in health sciences careers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to take more science classes that focus on health.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Spanish Version

P1 ¿Cuál es su género? Femenino Masculino

P2 ¿Cual es su primer idioma? Ingles Español Otro

P3 ¿Es usted Hispano(a) / Latino(a)? Si No

P4 ¿Cual es su raza/etnicidad?

Indio Americano / Nativo de Alaska

Asiático

Negro / Afroamericano

Blanco

Nativo Hawaiano / isleños del Pacifico

Otro (por favor especifique): _____

P5 Por favor clasifique su nivel de acuerdo con los siguientes enunciados.

	Totalmente de acuerdo					Totalmente en desacuerdo					No estoy seguro/a
	←									→	
La ciencias de la salud es una buena área de estudios tanto para minorías como para las mujeres.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Los profesionales de las ciencias de la salud brindan servicios importantes a la comunidad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tener conocimientos de matemáticas y ciencias es importante para ser exitoso/a en mi carrera a futuro.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Los profesionales de la ciencias de la salud hacen muchas cosas que a mí me gusta hacer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
La ciencias de la salud es algo en lo que yo puedo ser bueno.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Me gustaría llegar hacer un profesional de la ciencias de la salud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Después de la preparatoria me gustaría ir a la universidad y obtener una licenciatura en el área de la ciencias de la salud.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estoy motivado/a de estudiar la ciencias de la salud en la preparatoria.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aprender acerca de la salud de mi comunidad ha incrementado mi interés en las carreras de ciencias de la salud.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Me gustaría llevar más clases de ciencias con un enfoque en la salud.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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