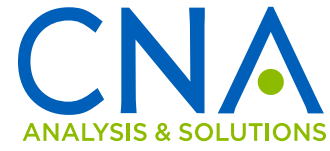


EVALUATION OF THE CONNECTICUT HEALTH AND LIFE SCIENCES CAREER INITIATIVE



About This Study

CNA Education evaluated the Connecticut Health and Life Sciences Career Initiative (HL-SCI), a statewide initiative to prepare workers throughout Connecticut for high-wage, in-demand jobs in health and life science fields. The initiative placed a particular focus on recruiting veterans and workers who are unemployed, underemployed, or displaced by foreign trade.

The HL-SCI Consortium consists of five community colleges, two state universities, and local workforce investment boards. The Consortium developed new health and life science certificate and associate's degree programs and revised existing programs.

The new and revised programs incorporate several core components including:

- Online and hybrid courses
- Online booster modules providing supplemental instruction
- Development of a standardized prior learning assessment (PLA) system to award students credit for prior noncredit coursework, training, and knowledge
- Enhanced job and internship placement services

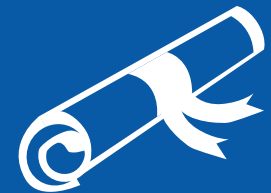
Findings on Performance Relative to Grant Goals

At the beginning of the grant, the Consortium set 17 goals for implementing HL-SCI deliverables and nine goals for student outcomes.

- ✓ Target met or exceeded
- ✗ Target not met

HL-SCI grant deliverable goals

Grant Deliverable	Target	Actual	
1. Number of new certificates and degrees	15	20	✓
2. Number of revised certificates and degrees	34	48	✓
3. Number of students enrolled in new certificates and degrees	600	637	✓
4. Number of existing programs of study revised so that credentials are stacked / latticed	30	44	✓
5. Number of students enrolled in revised certificates and degrees	2,700	4,371	✓
6. Number of students taking online skills assessments	1,350	2478	✓
7. Total math and science booster modules	140	154	✓
8. Number of students taking math and science booster modules	3,200	4,792	✓
9. Number of new online and hybrid courses offered	60	71	✓
10. Number of online modules with feedback / assessment	450	789	✓
11. Total number of students taking online and hybrid courses	2,400	3,248	✓
12. Number of students receiving PLA credits	675	1,629	✓
13. Total number of PLA credits awarded	10,000	15,164	✓
14. Number of additional noncredit programs recognized by CCAP	36	57	✓
15. Number of additional credits available by CCAP	324	719	✓
16. Number of participants placed in internships	360	2,412	✓
17. Number of participants receiving job placement services	2,000	4,248	✓



Students have more choices for programs of study. 20 new certificate and degree programs were added, exceeding the grant goal of 15.



The grant greatly increased the availability of academic supports. 154 new booster modules were added, exceeding the grant goal of 140.

HL-SCI grant student outcome goals

Student Outcome	Target	Actual	
1. Unique participants served	2,700	4,530	✓
2. Number of participants completing a HL-SCI program of study	783	1,069	✓
3. Number of new and continuing participants retained in a HL-SCI program of study (not unique)	2,244	5,152	✓
4. Number of participants completing credit hours	2,430	3,491	✓
5. Total credentials earned	861	1,096	✓
6. Number of completers enrolled in further education	196	234	✓
7. First-time employment for completers	587	388	✗
8. Retention in first-time employment for completers	470	283	✗
9. Number of participants receiving a wage increase	405	1,408	✓

The Consortium greatly expanded access to HL-SCI programs of study by nearly doubling its goal for the number of participants served.

The two unmet goals pertained to employment outcomes for program completers who were not employed at initial program enrollment. However, many HL-SCI participants were still enrolled in their programs of study at the end of the grant period, so there was insufficient follow-up time to assess these outcomes for the majority of participants.

Findings on HL-SCI'S Impact on Student Outcomes

CNA Education also explored the impact of the HL-SCI program on student academic outcomes, including college persistence, credential completion, and credit accumulation. The analysis used matching techniques to compare the outcomes of HL-SCI participants with those of participants in the same or similar programs at their colleges prior to the start of the grant.

- HL-SCI participants and comparison students performed similarly on all outcomes after one and two years of program participation.
- HL-SCI participants in science programs completed approximately one to two courses fewer than HL-SCI participants in all programs after two years of program enrollment.
- HL-SCI participants who received Prior Learning Assessment (PLA) credit were more likely to complete a credential within one or two years than participants without PLA credits.
- HL-SCI participants who received PLA credits were less likely to persist after the first year than participants without PLA credits.

We also examined course completion and performance outcomes for the booster module and online and hybrid course HL-SCI components. HL-SCI participants enrolled in these courses were matched to other students enrolled in the same course before the HL-SCI component was added. Key findings include:

- There were no differences in course completion rates, which were greater than 90 percent before and after the HL-SCI component.
- There is some evidence that course grades were higher for students in online and hybrid courses than for students enrolled in the same course in traditional in-person format.

Findings and Recommendations on Program Implementation

The program evaluation used a mixed methods research approach to assess actual performance relative to grant goals, the implementation of the HL-SCI grant, and the initiative’s impact on student academic outcomes. Findings and recommendations from the implementation analysis include:

FINDINGS

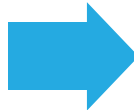
Program Enrollment and Recruitment

Most students learned about their programs independently, although those who did learn about their programs from faculty or staff members at the college found this input to be very influential in their decision to enroll.



Prior Learning Assessments (PLA)

Most students believed that the PLA process was easy to understand, they received the right amount of credit, and they would be able to complete their programs more quickly.



Employment and Placement Services

Students liked that clinical experiences were hands-on and allowed them to apply what they had learned in the classroom. Most students found employment and placement services helpful although some students expressed the need for additional career guidance.



Online and Hybrid Courses

Most participants preferred in-person courses to online and hybrid formats because in-person courses allow for more interaction between students and professors. Some students appreciated online courses because they were convenient and allowed students to complete content at their own pace.



Booster Modules

Most students who had taken booster modules found them useful because they provided another method through which to learn course material.



RECOMMENDATIONS

- Increase efforts by staff at Consortium colleges to recruit students.
- Have college staff members guide students in selecting a program of study.

- Ensure that students who might benefit from prior learning assessments take advantage of the opportunity.
- Ensure that the process for awarding credit is straightforward and transparent.

- Ensure that clinical hours are flexible so that students can meet other obligations.
- Expand access to college and career guidance for continuing students and graduates.

- Improve student engagement and interaction with faculty in online and hybrid courses.
- Continue to offer online and hybrid courses to ensure flexibility for students.
- Further investigate why students perceive that they learn more in in-person courses.

- Maintain and expand student access to booster modules.

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