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.

**HL-SCI grant deliverable goals**

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

Target met or exceeded

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.
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.
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

- 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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