

REAL Community College Initiative

Executive Summary

Objectives

- To implement the **R**eformed **E**ducation for **A**ll **L**earners (REAL) Initiative and offer high school graduates and young professionals an opportunity to study at a community college
- To enrich community colleges with **B**lended¹ and **E**xperiential² **S**tudent **T**raining (BEST) options featuring Learning Ledgers' approaches to teaching & learning

Challenges

International Standing: The United States held the world standard in education in the post-World War II era. Fifty years later, the writing, math, and science performances in the United States are average (see TIMSS report,³ PISA study,⁴ and NAEP assessments⁵). US schools rank 20th out of 30 countries in high school graduation rates, 24th in college graduation rates, and 27th in college graduation rates of scientists and engineers.⁶

Educating American Citizens: According to the US Census Bureau, only 36.0% of citizens 25 and older earned a bachelor's degree⁷ (in 2019). While wages increased for college educated citizens in the past 50 years, salaries remained stagnant for non-college educated citizens. This encompasses 2/3rd of the American population.

College Costs: The estimated full-time college costs for 2021-22 are shown in Figure 1 (which is extracted from the College Board).⁸ Mean family incomes in 2020 were the following for the highest to lowest quintiles: \$286,390, \$130,150, \$84,680, \$52,330, and \$21,260.⁹ Clearly it is a major challenge for middle class American families to pay their children's college bills.

Digital Era & COVID: Advances in technology have changed our lives, ranging from how we live life, to how we learn, to which types of jobs we perform, and how we work today. This forced us to integrate technology into all aspects of human existence and was accelerated by COVID. Rather than fighting technological change, we need to embrace it, and move forward into the future.

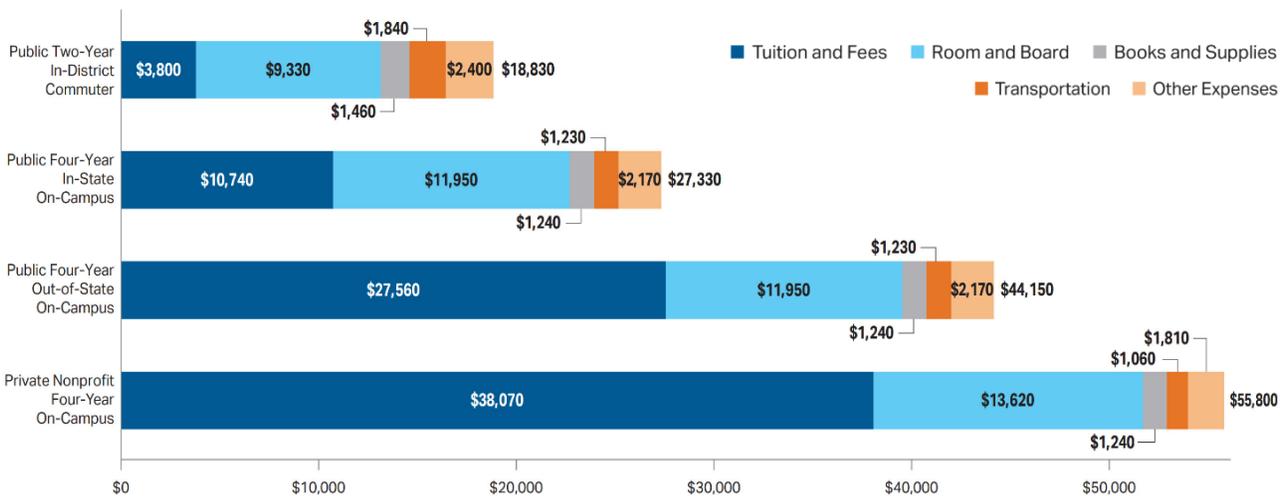


Figure 1: Average Estimated Full-Time Undergraduate Budgets for 2021-22

REAL Solutions

The solution consists of **R**eforming **E**ducation for **A**ll **L**earners (REAL) at Community Colleges. Public community colleges are more affordable than 4-year colleges. Community colleges provide a platform for obtaining a bachelor's degree if students wish to continue with school. The REAL community college opportunity includes the following:

- **R**eformed **E**ducation
 - Pedagogy → Adapt concepts from the Learning Ledgers Pedagogy Framework
 - Curricula → Adapt elements of the Learning Ledgers Curriculum Proposal
 - Digital Era & Covid Lessons → Use Blended Educational Models
 - Job Market → Skills Training & Empowerment Model
 - Applied Knowledge → On-the-Job Training & with Experiential Learning
- For **A**ll **L**earners (Diverse, Inclusive & Equitable)
 - Applies to people from all backgrounds (diverse)
 - Adaptable to all types of learners (inclusive)
 - Affordable for all socioeconomic classes (equitable)
 - Not free but with need-based stipends and paid internships
 - Accountability – students need to demonstrate progress
 - Accessible to everyone, including students in remote locations

BEST Approaches

This approach consists of providing community colleges with **B**lended and **E**xperiential **S**tudent **T**raining (BEST) options. This model takes the best elements of face-to-face and online instruction to create single integrated “blended” courses. These courses then offer learning experiences that are more effective and enjoyable than those of hybrid models (which simply supplement traditional face-to-face courses with fully online options). The “experiential” component integrates internships into the curriculum. Students will have a chance to gain valuable work experience, earn a living, and get college credit provided they successfully complete a series of “integration” assignments.

In practical terms, the BEST program would look like the following. Students will take about $\frac{3}{4}$ of their courses remotely. These courses will be supplemented with in-person seminars and homework help sessions, offered locally in small group settings. The remaining $\frac{1}{4}$ of courses will be taught locally in face-to-face classrooms. The skills courses and two business courses (described on page 4) have already been developed by Learning Ledgers. Courses for other majors will be developed in collaboration with the participating community colleges. Carefully trained experts from the local business community will teach these courses. Pedagogy workshops and coaching sessions for these experts will be offered through Learning Ledgers. Volunteers from the retired business community will serve as mentors to the students.

In addition to taking courses, students will work in paid internships in the corporate world, small businesses, or nonprofit organizations. Students will be required to attend roundtables, complete homework assignments (connecting materials learned in class with the skills learned on the job), and hand in a term paper. This positions students to receive credit for “internships with roundtables” that count towards their degree. All this will ensure that students will be able to successfully complete an associate degree while working in a job and earning a living.

REAL Pilot – Nantucket

Collaboration

- [Learning Ledgers Foundation](#) is a 501(c)(3) nonprofit corporation with the mission to develop online and in-person curricula, offer professional development to educators, and transform how we prepare students for success in the 21st Century workforce.
- [Nantucket Community School](#) provides a diverse level of high-quality, affordable programs, encourages life-long personal growth, and reaches out to all members of the community. It has deep roots in the community.
- [Bristol Community College](#) provides an accessible, innovative, and inclusive education that prepares students to navigate and succeed in the ever-changing world.

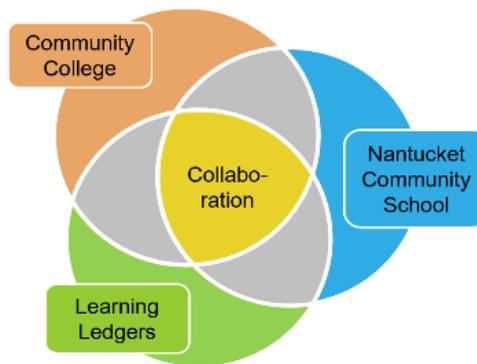


Figure 2: Collaboration

Why Nantucket?

Nantucket does not have a community college. Locals want to attend college¹⁰ but cannot – due to weather restraints and the high commuting costs to off-island colleges. Nantucket has a large pool of well-connected retired professionals willing to teach courses and mentor students.

Value Add

- Nantucket Community School offers resources, island facilities, and business partners.
- Learning Ledgers provides its BEST model which features an activity package and uses digital era pedagogy. Learning Ledgers staff will offer coaching for educators and mentors.
- Bristol Community Colleges already offer many online courses with additional ones created during COVID.

Learning Ledgers’ BEST Approach

This project uses the BEST model, which organically fuses a blended academic college immersion with a practical corporate on-the-job learning experience. The BEST model uses elements of “experiential” and “blended” teaching and learning by adding a series of “activities” that turn it into a well-connected and coherent student experience. Assessments and strategies to make learning and growth visible to students are integrated seamlessly into the entire package. The activity package consists of in-person technology-aided interactive lectures, computer laboratory exercises, LMS¹¹ facilitated reflection homework, in-person seminars, on-the-job training, face-to-face roundtables, two-way mentoring opportunities, peer mentoring circles, and an online wiki-site for Q&A.

The [activity package](#) is described here and summarized in Figure 3.

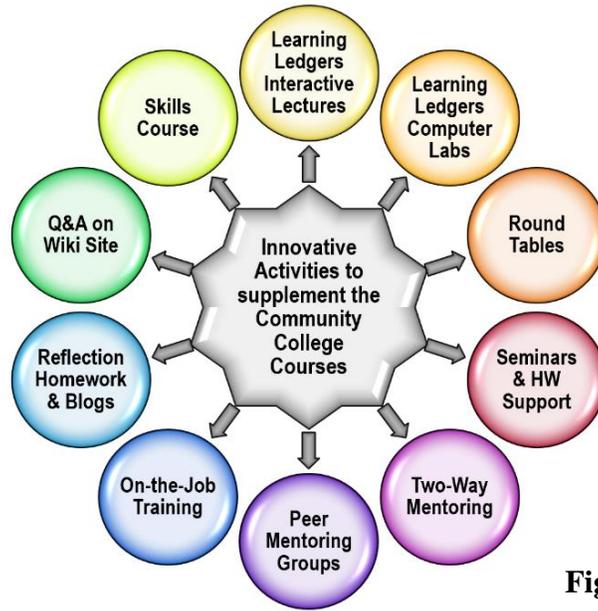


Figure 3: Activity Package

Students will participate remotely in online modules offered by Bristol Community College. These courses will be supplemented with in-person homework help seminars through the Nantucket Community School and the [Essential Skills](#) course. In the second and third semesters students will take the in-person Learning Ledgers courses, featuring interactive lectures and computer labs.

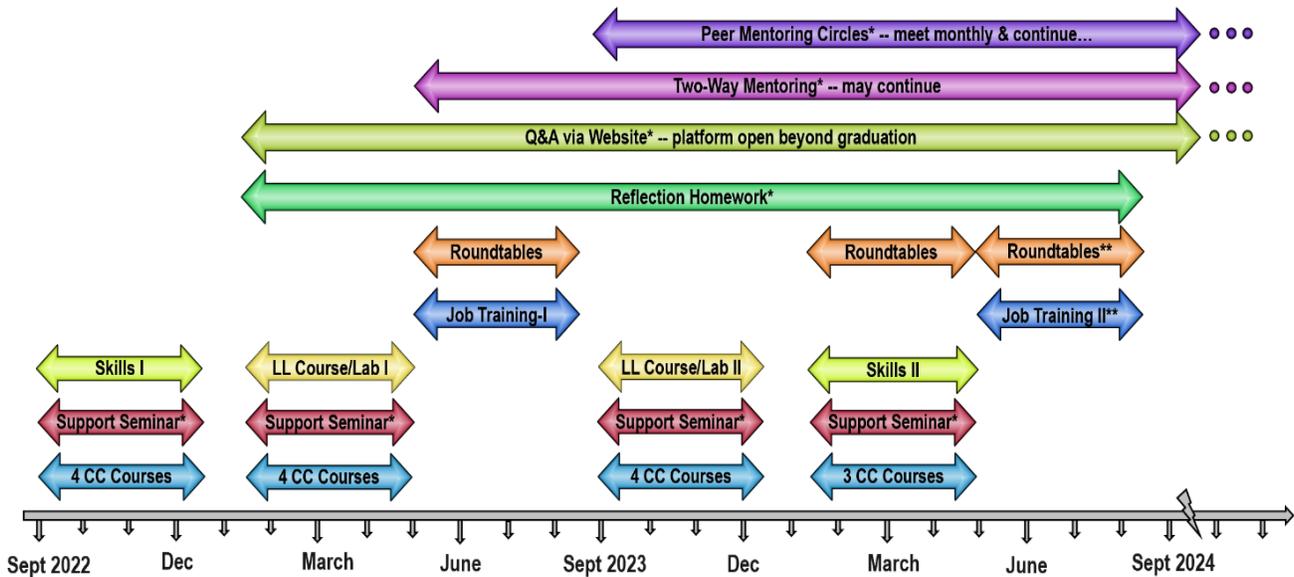


Figure 4: Courses & Activities

Homework consists of personal reflections and blogs by and for other students. They will also post questions on the wiki-site to be answered by peers, mentors, and Learning Ledgers staff. In the summers, students will work full-time – receive college credit and earn a living. On-island roundtables and two-way mentoring teams will help students connect the material learned in class with practical on-the-job applications. In the third semester, students will form peer mentoring groups which will strengthen the community formed during the first year and will ensure

sustainability throughout the program and beyond graduation. Students will take the required courses for their major at Bristol and select electives on island. [Curriculum example here](#).

Technology innovations and the rise of artificial intelligence have affected how we live, work, and interact with each other, including how we think and learn. While there has been much progress in understanding how we learn, most educational institutions still use instructional methods from the last century. This project will explore strategies of bringing research into the classroom. We will implement the [Learning Ledgers' Pedagogy Framework](#) that utilizes our own [Six-Step Teaching & Learning Model](#). Technology has changed the workforce economy. Already many traditional jobs¹² have disappeared, with more slated to disappear in the next 20 years.¹³ Most colleges do not adequately prepare students for the changing workforce economy. Rather than training students for specific professions, our approach focuses on teaching students the [Essential Skills](#) (Figure 5) they need to successfully adapt to the ever-changing demands of the workforce.

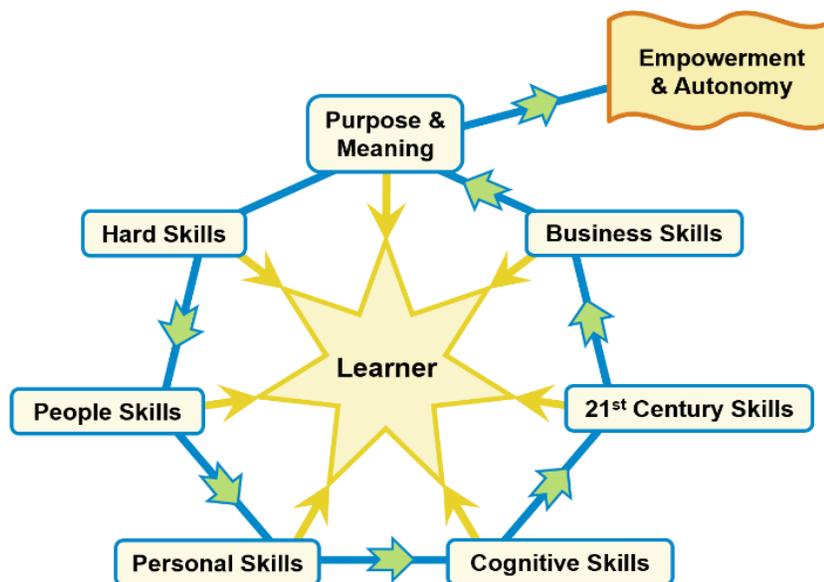


Figure 5: Skills-Based Approach

Timeline and Milestones

1. Collaborate on adapting elements of the proposed [activity package](#) into both college's curricula and creating sequences for popular majors. Example of a [business sequence](#) here.
2. Design courses (in business, nursing, STEM & humanities) with Bristol.
3. Promote facilitators/instructors to lead those seminars on-island.
4. Reach out to the community and identify potential on-island mentors.
5. Coach instructors from the local community in teaching and learning.
6. Advertise the courses in the local paper and recruit professionals to take individual courses.
7. Recruit students and young professionals on Nantucket to start in January 2023.

Assessment

Continuous assessment will be integrated into the project from beginning to end. The purpose goes beyond measuring progress and includes making learning and growth visible to the students themselves. Assessment is performed by Lectica¹⁴ using an evidence-based electronic scoring system that measures growth and cognitive development, thus quantifying program success.

ROI for Nantucket and its Residents

The proposed student work/study schedule accommodates Nantucket's seasonal labor market. While students will receive compensation during the summers, they will need financial support during the school year (grants that offer scholarships will be explored as part of this project). Although this program has a higher cost per student than a regular online community college, it features a significant return on investment. It provides value to students by giving them an academic foundation that helps develop relevant work skills. The program thereby enhances students' upward mobility and increases their earnings, which in turn, will strengthen the local economy.

Sustainability

This initiative will organically create a community for students. We envision that the two-way mentoring and the peer mentoring groups will last beyond the span of the program. Graduates will be encouraged to continue using the Q&A wiki-site. Since there is a demand for qualified resident workers on Nantucket, finding gainful employment on the island should not be a challenge. While we cannot expect all graduates to stay, we suspect that many will – and may continue to be engaged in the program. As alumni they can lead peer mentoring groups. With additional training, they can facilitate roundtables and teach the skills courses, ensuring continuity.

Scalability

- This collaboration explores a blended and experiential approach to educating students.
- This project is portable. Other locations and communities in the US can be explored. Collaborations with multiple community colleges are also possible.

Contact

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¹ [Blended Models](#) organically blend face-to-face and online modules. Blended models take only the best elements of each environment and create single, coherent, pedagogically sound experiences that are richer than simply combining online and in-person classrooms (as in the case of Hybrid Models).

² Experiential Education Models are refined [Dual Models](#) that organically integrate course work with on-the-job learning. This model is institutionalized and implemented in some European countries and explored in the US under a variety of names: [Cooperative Experiences](#), [Vocational Training](#), [Apprenticeship Programs](#), or [Internship Opportunities](#).

³ [TIMSS 2019-International-Results-in-Mathematics-and-Science.pdf \(iea.nl\)](#)

⁴ [PISA - PISA \(oecd.org\)](#)

⁵ <https://nces.ed.gov/nationsreportcard/about/> and [Home \(nagb.gov\)](#)

⁶ [Public Education Reform | American Center for Transforming Education \(discovery.org\)](#)

⁷ [U.S. Census Bureau Releases New Educational Attainment Data](#)

⁸ [PowerPoint Presentation \(collegeboard.org\)](#), Figure CP-1

⁹ [Household Income Quintiles | Tax Policy Center](#)

¹⁰ ReMain Nantucket study, 2014, [Abstract of "Learn without Leaving"](#) and [Executive Summary](#)

¹¹ LMS = Learning Management System. The LMS of Bristol Community College is [Blackboard](#)

¹² [20 Jobs That Have Disappeared - TheStreet](#); [24 Jobs That No Longer Exist | Mental Floss](#); [8 Jobs From 50 Years Ago That Are Obsolete \(businessinsider.com\)](#); [Obsolete Jobs Due to Technology - 09/2021 \(linktoworks.com\)](#).

¹³ [15 Disappearing Jobs that Won't Exist in 2030 \(careeraddict.com\)](#); [15 Jobs That Will Disappear in the Next 20 Years Due to A.I. - Alux.com](#); [19+ Automation & Job Loss Statistics | Fortunly.com](#); [U.S. Lost Over 60 million Jobs—Now Robots, Tech & Artificial Intelligence Will Take More \(forbes.com\)](#).

¹⁴ [Lectica](#) is a tax exempt 501(c)(3) organization. See [overview](#) and videos on [measuring robust learning](#), [learning cycles](#), [understanding complexity](#) and [leadership decision making](#).