Evergreen Valley College (EVC) shares the state’s commitments to affordable education, reduced time to graduation, and improved student success, particularly for underrepresented populations. To that end, EVC is actively redesigning their curricula for online delivery and is presently engaged in a broader student success initiative. EVC proposes **Innovate Evergreen** to make a deeper and more transformative investment by implementing a mobile solution that leverages adaptive learning technologies, to deliver high-quality, rigorous, flexibly-paced instruction and assessment using a Competency Based Education (CBE) format. CBE has the potential to be a transformative approach to higher education that honors students’ prior learning, while simultaneously allowing underprepared students to master content. The platform leverages Open Educational Resources to build in supplemental content to complement existing course curricula, adding rigor and depth to support student learning across this spectrum.

From the student success perspective, this innovation further personalizes students’ learning pathways to meet the diverse needs and expectations of 21st Century students, including those who are underprepared and those underrepresented in high-wage, high-demand IT jobs. The platform’s unique subscription model reduces both costs and time to graduation and prepares students for 21st Century IT careers with a coding certificate.

**Innovate Evergreen** proposes to implement CBE in EVC’s Computer & Information Technology certificate program to demonstrate its utility to achieve the desired goals, and to replicate the project at San Jose City College. A comprehensive, integrated evaluation guides continuous improvement and generates a knowledgebase and evidence to inform future efforts to expand CBE throughout California.
Contact Information for Representative of Fiscal Agent
Please include the following information for a representative of the California community college district or the California community college that will serve as the fiscal agent for any award:

- Name and Title: Lena Tran
- Name of Organization: Evergreen Valley College
- Email Address: lena.tran@evc.edu
- Phone Number: 408.531.6126
- Mailing Address: 3905 Yerba Buena Road, San Jose, CA 95135

Assurance and Signature
Please replicate the assurance below, followed by the printed name and signature of the chief executive officer of the fiscal agent:

“I assure that I have read and support this application. I understand that, if this application is chosen for an award, Evergreen Valley College will serve as the fiscal agent for the award and that the responsibility of the fiscal agent includes distribution of funds to any other participants in the application pursuant to any agreement between the participants. I also understand that, if this application is chosen for an award, the Committee on Awards for Innovation in Higher Education may request submittal of reports or other information.”

Printed Name of CEO: **HENRY YONG**

Signature of CEO: **Henry Yong 02/01/17**
1. From the perspective of students, what is the problem you are trying to solve?

The rich variety of cultures in San Jose, which both enhance and enrich campus life, contribute to one of the most diverse student bodies within the system of California Community Colleges (CCC). EVC’s student body is comprised of approximately 14,000 students with a high number of 1) first generation students (46%), who often lack social capital useful in navigating higher education systems; 2) English language learners (33%) who require support to master content delivered in their second language; and 3) student populations underrepresented in the high-tech, high-demand careers dominant in the local economy (EVC students: 53% female, 39% Hispanic, 33% Asian, 8% White; low-income evidenced by: 76% receive grants or scholarships, 56% Pell, and 60% state fee waivers). Common barriers to access and success include lack of family support, the need to work full-time, feeling intimidated by the long-term commitment, the extended time needed to graduate when attending part-time, and the generally high cost of higher education. Furthermore, students may come with advanced skillsets developed through prior coursework, on the job, or in the Military, or conversely, be underprepared for the rigors of postsecondary education, and in either case, need more personalized instruction and support. Finally, today’s students are more tech-savvy than ever before, and come from high-tech school, home, and work environments and demand mobile solutions for nearly everything, including their education.

EVC is presently engaged in a broad student success initiative aimed at supporting retention, graduation, and timely completion for underrepresented populations. EVC’s investments in student success allow them to provide additional advising support, tutoring, mentoring, career exploration and planning, degree planning, employment and housing assistance, FAFSA application assistance, scholarships and book vouchers, pre-college preparation programs, veteran-specific services, and disability-specific services. Innovative programs such as Mother-Daughter pairs enrolling together, adding English listening skills, and speaking/writing courses are underway and proving successful in course completion and program retention for English language learners. The proposed innovation complements these efforts by providing an alternative mobile delivery platform that is responsive to students’ needs and has demonstrated success in reducing time to graduation, reducing costs, and retaining students in similar settings. EVC is targeting its Computer and Information Technology (CIT) certificate due to the relevance of its coding skills in the local labor market and offering it to approximately 500 students over the three-year project.

Relevance to Higher Education Challenges: Presently, public attention is focused on exploding costs of higher education coupled with increasing rates of defaulted student loans, which is often attributed to poor retention and graduation efforts on behalf of the colleges that leave students with incurred debt and no credentials. Improving retention and graduation rates increases the likelihood that future employment will allow loan repayment, however, many students are arriving on campuses across the country underprepared for the rigors of higher education, or with other barriers to success as described above. Innovate Evergreen is responsive to these current challenges for California colleges, and colleges nationally, by providing a novel application of mobile technology that reduces time to completion, reduces costs, and improves student outcomes, including retention. While this proposal focuses on a CIT certificate, it’s important to note the CBE approach can be expanded to reduce time to completion at the associate and baccalaureate degree levels, CBE results in fully portable credentials (i.e., courses/credits that meet degree requirements and articulate/transfer), and can be replicated in other high demand fields and at other California institutions.
2. What is the innovation?

EVC proposes to implement an innovative technology—Brainstorm—which is a mobile CBE delivery platform developed by Ellucian. This technology was selected as the basis of our innovative model, in part, because of the seamless integration with Ellucian’s Colleague student information system, already in use at EVC as well as many other higher education institutions in the state. Competency based learning models are an innovative approach to teaching and learning since they remove traditional requirements for seat time and acknowledge the prior learning students bring to and academic experience. Brainstorm and the CBE model of faculty development and use of technology combines an intentional and transparent approach to curricular design with an academic model in which the time it takes to demonstrate competencies varies for each student. Simultaneously, the expectations about learning are held constant. Students acquire and demonstrate their knowledge and skills by engaging in learning assessments, exercises, activities, and experiences that align with clearly defined programmatic outcomes. Students show what they know and how well they know it through multiple ways of evaluating their learning, including multiple-choice tests, presentations, demonstrations, and development of research papers. Multiple-choice assessments are scored automatically. Projects and papers are typically scored by evaluators or faculty members working with a common rubric. Beginning with the end in mind, allows faculty more efficient means of teaching and moves students through courses more time and cost effectively.

Innovate Evergreen’s proposed CBE project reflects the five guiding principles for high quality CBE programs (Johnson & Soares, 2014):

1. The degree reflects robust and valid competencies.
2. Students are able to learn at a variable pace and are supported in their learning.
3. Effective learning resources are available any time and are reusable.
4. The process for mapping competencies to courses, learning outcomes, and assessments is explicit.
5. Assessments are secure and reliable.

CBE has gained considerable attention as an innovative alternative to traditional higher education that meets the needs of a broad range of student populations, and is the fastest growing model in higher education today (Weise, 2014; Cunningham, Key, & Capron, 2016). Flexible and personalized, CBE paths have the potential to help underrepresented students who have struggled to complete college and earn quality postsecondary credentials that lead to good jobs with good pay. President Obama highlighted CBE in a 2013 speech when he said, "The idea would be if you’re learning the material faster, you can finish faster, which means you pay less and you save money." When fully implemented, this platform operates on a subscription model where students have access to course content for a set period, at a set price, and complete as many competencies as possible. EVC CIT program faculty ensure students complete a minimum number of competencies.

EVC is currently redesigning curriculum for online delivery as part of CCC’s online education initiative which has created the largest course exchange in the country. Innovate Evergreen will demonstrate how CBE can advance progress towards the state’s goals of reducing time to complete and reducing total cost of attendance using a digital CBE platform that employs an outcomes-first design. Transitioning from online to CBE starts with analysis of the competencies needed to master course requirements (e.g., deconstructing curriculum). Curricula will be reconstructed for mobile delivery and supplemented with OER content to build in additional depth and rigor as well as saving students money on books and supplies. This
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innovation will allow students to have control over their learning and to utilize adaptive learning technologies to create personalized learning pathways. The proposed technology provides opportunities for collaboration and access to faculty, advisors, and experts at high-value moments through integration with EVC’s existing mobile solutions and IT infrastructure. Students with prior knowledge may complete content and assessments quickly, and move on to the next, thus completing course requirements in less time than a traditionally taught course. Students who do not have prior learning, or who need additional instruction to master course content, build knowledge and master competencies through guided exploration of the OER knowledge base. The platform uses a pretest to determine where a student is academically and presents relevant content needed to master the targeted competency. Milestone tests are used to evaluate where students need to focus their learning and assessments confirm competency.

Innovate Evergreen will provide a new level of personalized, flexibly-paced learning, with innovations that meet individuals’ unique skills, goals, and life constraints, with curricular pathways that show students what to master to reach their goals. This innovative CBE and adaptive learning technology also promotes student success by re-imagining faculty-student engagement with authentic, substantive interactions, insightful feedback, actionable dashboards, and built-in interventions. The proposed platform allows students to engage in convenient bursts of learning (e.g., as a student-parent waits for child taking swimming lessons, they can access class content or commuter students can complete assessments on the bus) and accumulate competencies at their own pace and on their own schedule. The system integrates with EVC’s student dashboard system which connects directly to academic advisors and program counselors. The system will also help learning come alive through collaborative and crowdsourced study halls, peer-to-peer environments, and searchable, compounded knowledge base of conversations and course content. Student progress is tracked through their dashboard which is integrated to EVC’s student information systems. Course grades will be updated upon completion so students and advisors can track progress towards completing degree requirements in real-time, as compared to traditionally offered courses which are only added to transcripts at the end of each semester. It is anticipated that for some students, the satisfaction of being able to monitor their progress toward completion will serve as an important source of motivation.

Innovate Evergreen is designed to link directly the local employment landscape by targeting EVC’s Computer and Information Technology certificate, which includes in-demand foundational coding skills. Using a quasi-experimental design that calls for offering the CBE CIT certificate to half of incoming students, and traditional delivery CIT courses to the other half of incoming students, generates the foundational evidence needed to support broad adoption of CBE throughout the institution’s academic program offerings, as well as adoption of CBE programs at other institutions of higher education in California, and nationally.

The logic model, included as the first attachment to this proposal, broadly illustrates Innovate Evergreen’s approach to integrating CBE into its efforts to provide online and mobile learning solutions that are directly responsive to the needs and expectations of their students.

The logic model clearly outlines a theory of change which will result from implementing this innovative program and includes the inputs, the student academic cycle, the measureable outputs and outcomes. Specific strategies for academic success and student support are also illustrated in this logic model to provide greater detail. Innovate Evergreen clearly addresses the need for innovation to make college completion and transfer more efficient for students and institutions through faculty development, rethinking how courses are structured and delivered, and best uses of available educational technologies.
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3. How will you implement this innovation?

A. Organizations Involved. The lead institution, EVC, will be responsible for implementation of Innovate Evergreen, and overall project management, results, and reporting. Lead by EVC’s Business and Workforce Development Dean, Dr. Lena Tran, the project includes EVC faculty for the CIT certificate, representative of EVC’s IT department, a representative from SJCC, an Ellucian Brainstorm specialist, and the project evaluator.

EVC will receive training and technical support for the project from Ellucian, the developer of the Brainstorm© platform. EVC’s sister campus, SJCC will replicate the project in year three to build a knowledge base around successful replication processes and to inform future efforts to bring technology enabled CBE to scale.

B. Mitigation of Risks. Careful oversight of Innovate Evergreen will minimize risks and ensure the effective and efficient implementation and management of the project, contributing to successful outcomes. In-depth research into the history and evolution of CBE initiatives and adaptive learning have informed the development of Innovate Evergreen and are the underpinning of the proposed platform which ensures the innovation is linked to evidence-based practices that get the desired results.

Risks associated with this include challenges to faculty engagement with students, technology acceptance, state approvals, as well as intrinsic student motivation to persist. Innovate Evergreen is designed to ensure faculty-initiated, regular, and substantive interaction with students, specifically to mitigate risks associated with student engagement and motivation to persist. The selected platform is an innovative, next generation mobile solution that delivers quality education while acknowledging the realities of today’s more diverse, non-traditional learners. Ellucian is an industry leader in mobile education technology solutions which ensures a high degree of usability and mitigates risks associated with technology acceptance. Finally, the leadership team and course faculty will engage in due diligence to ensure stakeholders understand the difference in delivery methods doesn’t alter the content or rigor of the state-approved course curriculum and that students are still assessed for mastery of the competencies.

C. Timeline of Actions. Upon award the project leadership will operationalize the following milestones (based on a May 2017 start date):

1. **May 2017, quarterly**: EVC convenes project leadership team to develop the project implementation and management plan, including a regular project meeting schedule. Additional members will be added to the leadership team during implementation, specifically the evaluator and a representative from SJCC. Periodic meetings throughout the project period contribute to effective and efficient project management and results in successful project outcomes.

2. **May and June 2017**: EVC will secure the services of an evaluator to create a comprehensive evaluation plan, including key metrics and data collection instruments and protocols, annual reports, and final project report, and who will participate in regular project meetings and conduct semi-annual site visits.

3. **May through December 2017, ongoing**: EVC Administrators ensure CBE course delivery has necessary state approvals starting with faculty vetting and the college curriculum committee. State approval is not expected to be a barrier since the course content does not change when the curriculum is redesigned for CBE delivery.

4. **May 2017 through June 2020**: Ellucian provides technical support to EVC and SJCC in years one, two, and three to ensure effective and efficient course operations.
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5. **June to August 2017:** Purchase and integration of the proposed platform with EVC’s existing IT infrastructure and Web-based services.

6. **June 2017:** Ellucian provides two three-day workshops for faculty and administrators to ensure they know how the platform works, how to integrate the platform with administrative functions, how to leverage the platform to drive student engagement, and how to deconstruct course curricula into competencies and reconstruct it for delivery using the proposed platform.

7. **July 2017 through August 2017:** CIT certificate courses undergo redesign for CBE delivery.

8. **July 2017 through April 2020:** Evaluator collects and analyzes data throughout the project period with support from participating faculty and college administrators who ensure that data collection follows the evaluation plan. Data on key metrics is reviewed quarterly to provide adequate opportunity to fine tune the project and optimize project results.

9. **Fall Semester 2017, ongoing:** approximately half of EVC’s fall CIT enrollments will be directed into CBE while the other half will be directed into the traditional course delivery options (either face to face or online) to create similar cohorts for evaluation.

10. **May 2018:** Annual report.

11. **Fall Semester 2018, ongoing:** new cohorts of students begin CIT certificate program.

12. **May 2019:** Annual report, initial results, publications, and presentations become available.

13. **Summer 2019:** project replication at SJCC.

14. **Fall Semester 2019, ongoing:** new cohorts of students begin CIT certificate program at both EVC and SJCC.

15. **May 2020:** Project results are disseminated.

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### Innovate Evergreen Gantt Chart

<table>
<thead>
<tr>
<th>Key Milestones</th>
<th>Year One May 2017 - April 2018</th>
<th>Year Two May 2018 - April 2019</th>
<th>Year Three May 2019 - April 2020</th>
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<td>Q1</td>
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<tr>
<td>• Leadership Team Meetings</td>
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<td>• Brainstorm Purchase and Integration</td>
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<td>• Technical Support from Ellucian</td>
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<td>• Faculty and Administrator Training</td>
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<td>• Convert CIT certificate to CBE</td>
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<tr>
<td>• Enroll EVC CIT Students in Traditional and CBE Cohorts (Fall semester; 100 annually)</td>
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<tr>
<td>• Replicate at SJCC</td>
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<tr>
<td>• Enroll SJCC CIT Students in Traditional and CBE Cohorts (Fall semester; 100 in 2019)</td>
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<tr>
<td>• Collect Evaluation Data</td>
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<td>• Conduct Focus Groups</td>
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<td>• Produce Annual Reports</td>
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<td>• Publish Evaluation Results</td>
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4. How does this innovation align with other efforts you are undertaking, and how does it relate to other efforts in higher education in California?

EVC’s existing efforts to meet state expectations are twofold – curriculum redesign for online delivery and support services that increase student success. In the context of curriculum redesign, **Innovate Evergreen** will be a deeper and more transformative investment in online delivery with the potential to reduce cost of attendance and time to completion. The mobile nature of the platform complements efforts to implement smart technologies throughout the institution, and is supported by recent investments in mobile laptop carts, smart classrooms, and campus-wide Wi-Fi connectivity.

**Innovate Evergreen** integrates into EVC’s broad focus on student success, which has led to programs and services that reflect current best practices and evidence-based strategies in career pathways, academic advising, and student support services by establishing another high-impact practice that is specifically responsive to students’ needs around personalized learning and mobile solutions. EVC received a Title III grant focusing on underrepresented and struggling students through enhancement of Student Support Services, including tutoring and individual counseling programs as well as other student support services that help students to succeed. EVC operates several targeted outreach and support programs as well, including ASPIRE (Asian/Pacific Islander Resources for Excellence), Affirm (Academic Force For Inspiration Retention & Matriculation), SEAASE (Southeast Asian American Student Excellence) Program, and Enlace Program (aimed at Chican@/Latin@ students), to specifically support underrepresented populations. Additionally, assessment, orientation, counseling, and follow-up support are provided to new students. These are designed to improve success by closing the achievement gap among at-risk, low-income, underprepared, and underserved students.

A CBE model allows students to demonstrate mastery of skills and earn stackable credentials and certifications, which contribute to graduation requirements for degree programs. Stackable credentials and certifications gained popularity as part of the career pathway approach, which emerged early in the 21st century in response to record high unemployment during the Great Recession and the resulting “skills gap narrative” that suggested that even well-educated applicants did not possess the 21st skills needed for open positions. Career pathways link educational preparation to career goals and help guide students to the courses and programs that prepare them for the jobs they want. This innovation allows students to complete some program requirements more quickly, and because it’s a mobile solution, students easily engage in convenient, mobile bursts of learning and accumulate competencies conveniently.

**How Innovate Evergreen is different:** California’s community colleges have been standardizing their curricula and adopting the Canvas learning management system statewide to streamline online courses and ensure portability of credits and courses. This projects creates the foundation for a statewide deployment of CBE, which is different in a few key ways. Where online courses are offered on a semester basis and students must engage in teaching and learning throughout each semester, CBE students can enroll in the program in fall and move through competencies at their own pace, completing a course in less than a semester and move on to the next one before the start of the spring semester meaning they can complete certificate requirements more quickly.

**Other efforts to achieve programmatic goals:** EVC also offers developmental and remedial courses to prepare students for their postsecondary programs, dual enrollment and pre-college programs for high school students that allow them to enroll in college well-prepared with completed credits, and workforce certifications that support employment and promotion.
5. How could this innovation be scaled up within the setting in which you work and replicated in other areas in California?

The proposed CBE project holds tremendous potential for replication across the spectrum of higher education. While the initial implementation is in a community college setting, the Brainstorm platform can be implemented in any educational setting from K12 to postsecondary (undergraduate and graduate levels). CBE can be used to teach a wide array of course content from STEM to liberal arts, and assess student competencies to establish proficiency. More than 80% of California Community Colleges (CCC) are already utilizing Ellucian’s student information systems, meaning easy adoption of the same platform while utilizing the CIT content developed through this investment. CCC has experience standardizing online learning through their universal adoption of the Canvas LMS for online courses, and the proposed CIT courses already have state approval for online delivery. Innovate Evergreen can easily replicate this model by adopting policies that standardize CBE throughout the system based on the best practices and lessons learned from the Canvas project.

CCC include 113 colleges, the nation’s largest system of higher education and a critical entry point to higher education in the state and nationally. The community colleges provide post-secondary access to anyone age 18 and older, regardless of prior academic achievement. This open-door policy inevitably means that students arrive with a wide array of skills and interests, from those woefully underprepared for learning to those with advanced skills (gained through military service, prior learning experiences, or on-the-job). Brainstorm is specifically designed to be adaptive to students’ individual needs so they can demonstrate what they already know while building new foundational skills, and in the end all learners are proficient in the course competencies. Faculty are trained to engage students in the learning and assessment process, and to ensure deep understanding of the content. This innovative approach holds great promise to meet the diversity of needs among California’s community college students and improve key metrics of success such as time to completion, cost of completion, enrollment, retention and graduation of underrepresented populations, and persistent demographic wage gaps.

Initially, Innovate Evergreen will focus on the CIT certificate at EVC, converting courses centered on coding skills into the CBE format and making them available to EVC students. The innovation will then be replicated in year three at EVC’s sister college, San Jose City College, informed by the evaluation and results of implementation at EVC, which combine to provide information and data about the process of replicating the innovation and bringing the innovation to scale. This project establishes a competitive case for broad implementation of CBE, particularly in disciplines connected to high-wage, high-demand careers in Silicon Valley, due to the way CBE closes the achievement gap for underrepresented populations, improves retention and graduation rates, and reduces time to completion and overall costs for all students.

Ideally, these courses and credits will be portable across all institutions of higher education in the state. Initially, CBE courses will meet the same graduation requirements as the same course delivered traditionally at either EVC or SJCC. Specific support from the state and the California Community College system, in the form of a CBE policy or system-wide CBE articulation plan, is necessary to ensure these credits are fully portable throughout California’s higher education ecosystem. Not only will this support ongoing CBE efforts at EVC and SJCC, it also supports broad implementation of CBE throughout the state at all levels of postsecondary education. Presentations, a web presence and information will be shared to allow other CA institutions to replicate and tailor the model to their faculty and student needs.
6. What evidence suggests that this innovation would be effective in addressing the problem identified in your response to Item 1 and implemented successfully?

Since 1990, the number of colleges offering CBE programs has increased threefold nationwide, with as many as 150 offering some form of competency-based programming, and as many as 400 others with programs in development; by 2020 the number of colleges offering CBE is expected to reach 750 (Flemming, 2015). While most colleges offer programs in business, education, and healthcare, many also focus on engineering education and other technology-related fields. Driving this growth will be programs designed explicitly around employer demand. This growing trend in higher education is driven by student needs and expectations, as previously noted. Students expect mobile solutions and convenient access to everything, including education, and adult students are most interested in programs that lead directly to improved employment situations. Recent research by the American Enterprise Institute and the Lumina Foundation (2015) indicates that 57% of adults between 25 and 44 who do not already have it, want postsecondary education, 42% want self-paced instruction, and 40% want to progress faster to get their degree.

The proposed platform’s innovative adaptive learning technology personalizes the CBE learning process to honor prior learning, building skills that contribute to mastering course content even for underprepared learners. Common among EVC students are barriers to access and success including lack of family support, the need to work full-time, feeling intimidated by the time commitment necessary to complete program requirements, and the high cost of higher education. These challenges are typical of students across the state. Innovate Evergreen is designed to specifically address these barriers through the key innovative strategies.

First, it is a mobile platform that allows students to integrate their learning and assessment into their daily activities by allowing for bursts of learning at their convenience. The mobile platform provides a learning option that is particularly beneficial to students who have heavy demands on their schedule (e.g., work, parenting, family responsibilities, etc.), and the platform also facilitates authentic faculty-student engagement, which ensures optimal student learning regardless if they are leveraging prior knowledge to move quickly through the material or working diligently to master new material. Peer-to-peer collaboration embedded in the delivery platform supports modern trends in student communication, where shared, cloud-based note taking and online study groups are becoming the norm. Students can also complete course requirements more quickly through CBE, which reduces time to graduation, and moves them into related careers or transfers them to four year programs more quickly.

Second, the subscription model means that students can complete as many competencies as possible, for one flat fee, based on their prior knowledge, abilities, and time-on-task, which drives down both time and costs for students who move rapidly through content. Subscription fees are based on completing a set number of competencies and the cost is comparable to traditional tuition and fees. However students can add competencies at no additional cost if they complete the initial material prior to the end of their subscription period, and thus complete more degree requirements for the same cost.

Third, Brainstorm integrates with EVC’s existing student information system, Colleague, to ensure students are connected to the full range of student support programs and services offered at the college, especially Web-based tutoring. The system has the capacity to guide students through competencies that are directly related to their Comprehensive Student Educational Plan, and their progress can easily be tracked through their existing student dashboard by both the student and their academic advisor.
7. What information will you use to assess the success of this innovation in addressing the program’s goals, and how will that assessment be used to inform future efforts?

**Innovate Evergreen** will be evaluated using a mixed methods approach that considers both qualitative and quantitative data elements which are collected throughout the project period, and contribute to both process and project evaluations. The process evaluation documents project implementation and project management, and ensures the project achieves the proposed milestones in an efficient and timely manner. The program evaluation documents project results and provides evidence of the success of both CBE and the selected platform. Results are shared with the project leadership team on a quarterly basis and published in an annual project report. The leadership team utilizes the evaluation of the results, along with input from project personnel, to inform all future project activities with a focus on quality and continuous improvement. Annual reports may also inform efforts to replicate CBE in other programs and institutions, and to bring the innovation to scale statewide.

Process data will consist of meeting schedules, training schedules, number of faculty trained in creating CBE content and using the platform, date CBE courses become available, number of EVC courses converted to CBE for mobile delivery, number of CBE enrollments at EVC, number of SJCC courses converted to CBE for mobile delivery, number of CBE enrollments at SJCC, and other metrics related to the milestones, timeframe, and implementation plans. Periodic review of this information allows the project leadership to monitor implementation and management of the project and to provide timely assistance and support when needed to ensure project goals are achieved efficiently and effectively.

**Qualitative Data**: Students and faculty will complete surveys at key points in the implementation process and participate in focus groups held twice per year to provide insights into what is working, whether it works for everyone, what needs improvements, and their overall satisfaction. Data will be organized around common themes and summarized to highlight challenges, barriers, successes, and lessons learned.

**Quantitative Data**: A quasi-experimental comparison of student outcomes (i.e., course grades, GPA, retention, time-to-completion, total credits accumulated, transfer, etc.) between groups of students will demonstrate the effectiveness of CBE and the selected platform. Using normative group equivalence, the outcomes of students using Brainstorm will be compared to those of students taking the same course, from the same instructor, using traditional pedagogies and delivery formats (i.e., online, blended, or face-to-face). Outcomes for CBE students will also be examined to determine if particular groups of students have results outside the normal distribution, either positive or negative.

All qualitative and quantitative data described above will be cleaned and coded to ensure the anonymity of respondents, and disaggregated to examine the user experience across the full spectrum of demographic variables (e.g., gender, race/ethnicity, social-economic status, first-generation status, etc.), and presented to the project leadership to inform future project activities and included in annual reports. Presentations and publication of results in other formal and informal venues will inform broad adoption of CBE throughout California’s higher education landscape.
8. What resources or commitments, or both, do you currently have to support this innovation, and how will implementation of this innovation be sustainable over the long-term?

Evergreen Valley College has the technological infrastructure to support the implementation of the proposed innovations, largely due to previous investments in technology-based learning and services designed in recent years to support student success, improve retention and graduation, and reduce time to and cost of graduation. In particular, EVC has invested in online content and delivery as a result of CCC’s Course Exchange initiative. This mobile delivery platform will be integrated into the existing infrastructure and ongoing costs associated with offering CBE courses on this platform will be institutionalized to support the growth of CBE as an option throughout EVC’s program offerings.

The primary ongoing expense for the college is software maintenance and faculty professional development associated with deconstructing curriculum and rebuilding it in the CBE format. By integrating these costs into EVC’s operational budget, CBE can be expanded across EVC’s program offerings, including developmental and remedial content, transfer curricula, universal competencies, and student success courses, as well as program specific content.

This one-time infusion of funding allows for the initial investment in the technology platform and training necessary to launch CBE courses in the CIT certificate program. Ellucian will create CBE train-the-trainer courses that teach the fundamentals of Brainstorm for administrators and faculty based on the training offered to EVC through this project to allow for future training and professional development of EVC faculty and staff, and support the expansion of CBE course options throughout the institution.

Innovation funds also support a rigorous, scientifically valid, and culturally responsive evaluation of the project to document results and inform replication and scaling efforts. Results from this initial investment will provide a compelling case for broader implementation of CBE throughout the institution, and provide the foundation for future institutional investments, foundation funding, and competitive discretionary grants (state and federal) to expand CBE throughout California.

References


Attachment A

Innovate Evergreen

Logic Model
Innovate Evergreen: Evergreen Valley College Competency Based Education Project

**Inputs**

**Key Investments (2014 -2016)**
- Implementation of high impact practices – 24/7 online tutoring, tablet & laptop carts, orientation, personal counseling – and use of intrusive academic advising process.
- Smart Classrooms and student dashboards. Curriculum redesign for online delivery.

**Planned Investments (2017-)**
- Brainstorm platform, training, support, and train-the-trainer.
- IT Upgrades – Additional Smart classrooms, laptop carts, etc. Curriculum redesign for online and mobile delivery.

**Institutional Capacity**
- Project personnel and faculty, support of leaders.
- Project management process.
- Project partners (SJCC, Ellucian).
- Project Plan to bring CBE to scale – institution, system, state.

**Technology**
- IT Infrastructure.
- Brainstorm® platform & training.
- Expertise needed to redesign curriculum to CBE format and platform.

**Outputs**

**Year 1:**
- Train 5/10 EVC faculty/admins.; CIT cert. in CBE format; enroll 100 EVC students.

**Year 2:**
- Train 8/15 EVC & SJCC faculty/admins.; enroll 100 EVC students; evaluation results available.

**Year 3:**
- Train 8/15 EVC & SJCC fac./admins.; create train-the-trainer; enroll 100/100 EVC/SJCC students.

**Long-Term Outcomes**

**Efficiency:** Brainstorm’s subscription model drives down the cost of credits and reduces time to graduation. After the initial investment in the platform, ongoing costs are institutionalized, and CBE can be expanded across EVC.

**Access:** The mobile platform improves access and contributes to work/life/school balance while meeting student demand for mobile solutions.

**Portable Credentials:** Students complete the same course requirements as those who take the class in traditional settings. This model leverages existing articulation agreements.

**Scalable Program Model:** CBE is an innovation that can be replicated in other programs, at other levels, and at other institutions across system and state.

**Student Life Cycle**

**First-Semester**
- College Success Course
- Assessment Center
- Peer Tutoring and Peer Mentors
- Initial Education Plan required for enrollment

**Second-Semester**
- Program counselors and academic advisors
- Comprehensive Student Education Plan (CSEP) required after 15 credits
- Student Success and Support Program
- Counseling Center
- Outreach program for Dreamers
- Student ambassadors
- Health center
- WIN/CalWORKS

**Third-Semester**
- Web-based Career Exploration
- Career Planning Course
- Career Assessment Course
- Career Development Workshops
- Virtual Career Planner
- Job & Internship Board

**Fourth-Semester**
- General Education transfer curriculum
- Transfer Planning Course
- Credit/course articulation agreements

**Successful Student Graduates**

Brainstorm is available to students 24/7, students can enroll any time, students accumulate competencies at their own pace, competencies are stackable credentials that lead to course credits which meet specific degree requirements. CBE credits can be combined with traditional course credits to meet degree requirements. Rapid completion of competencies reduces time to graduation and total cost of attendance.