



Bakersfield College

Ellucian Impact Award 2019 Application

February 1, 2019

Prepared by:
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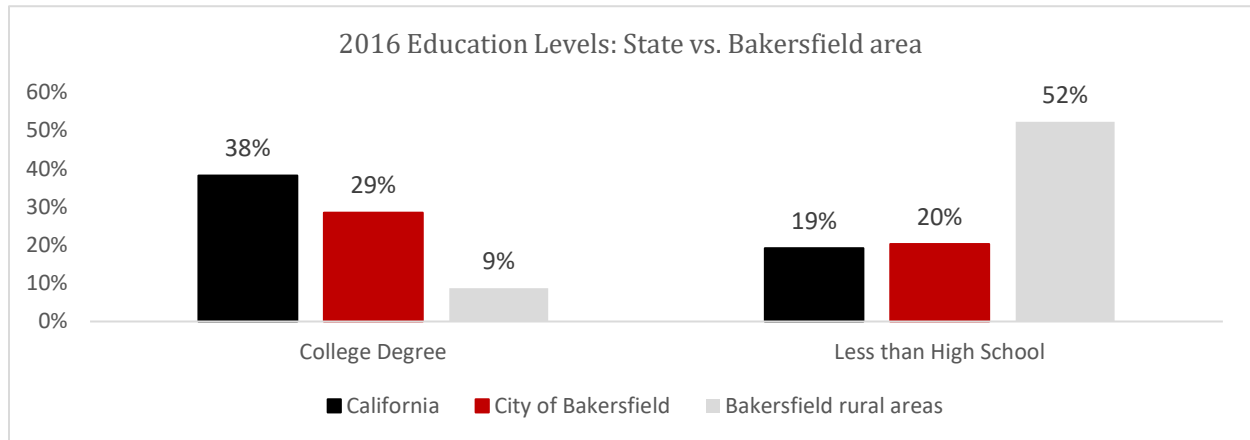
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Please summarize your institution's initiative or project and how technology was applied to support it. Why did this initiative come about? Share details of your progress and illustrate where your organization is now because of this effort.

Bakersfield College (BC) plays a critical role in improving the quality of life for the great majority of the citizens of Kern County who come from underserved communities. For most, higher education is the only way they can attain any measure of a middle class standard of living.

According to data reported by the California Department of Education, Kern County's baccalaureate attainment rates are of significant concern at roughly half the statewide rate. In rural service areas, fewer than three in every 100 residents holds a bachelor's degree or higher. Over 28% of those in BC's service area lack a high school diploma.

The per capita income in the area is among the lowest in California, at just \$21,094 – well below the state average of \$31,458. The U.S. Bureau of Labor Statistics reports that the unemployment rate in Kern County well exceeds the national rate at 7.7% while nearly a quarter of residents live below the poverty line. In many of our service-area rural communities, residents experience poverty rates topping 35% and debilitating unemployment over double the national average.



Bakersfield College's role in addressing persistent barriers to economic and social mobility is magnified in this community where, for too many, a college degree is seemingly out of reach. With intensive focus on strengthening curricular alignment from high school through the Associate Degree for Transfer to baccalaureate attainment, BC has leveraged our partnership with California State University Bakersfield (CSUB) to improve outcomes throughout our region. To promote systems-based, scalable solutions for all students, BC employed a **high-touch, high-tech strategy**.

Our high-touch strategy to promote transfer pathways is threefold:

1. Establishment of an 18-month transfer task force, the **Workgroup to Advance Regional Baccalaureate Attainment** (WARBA) to address alignment with CSUB
2. Operational reorganization of BC faculty and staff into **Completion Coaching Communities** by meta-majors
3. Development of a trained cadre of 30+ **Data Coaches** to support case and cohort management by meta-major with accessible, accurate, and actionable data

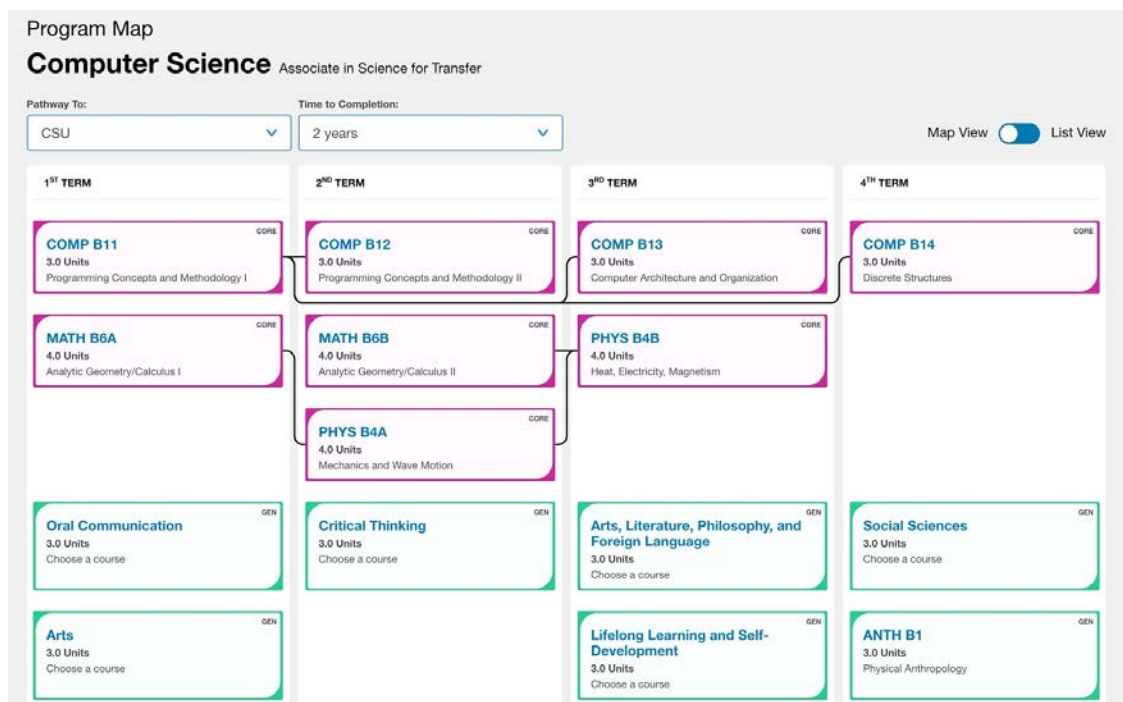
Our high-tech strategy for this project involved a two-prong approach:

1. Development of a 21st century visualization of curriculum into sequenced pathways within the **Program Pathways Mapper** (PPM) tool
2. Development of a **Data Cleanup Tool** to correct inaccuracies from multiple curriculum systems and identify a single “source of truth”

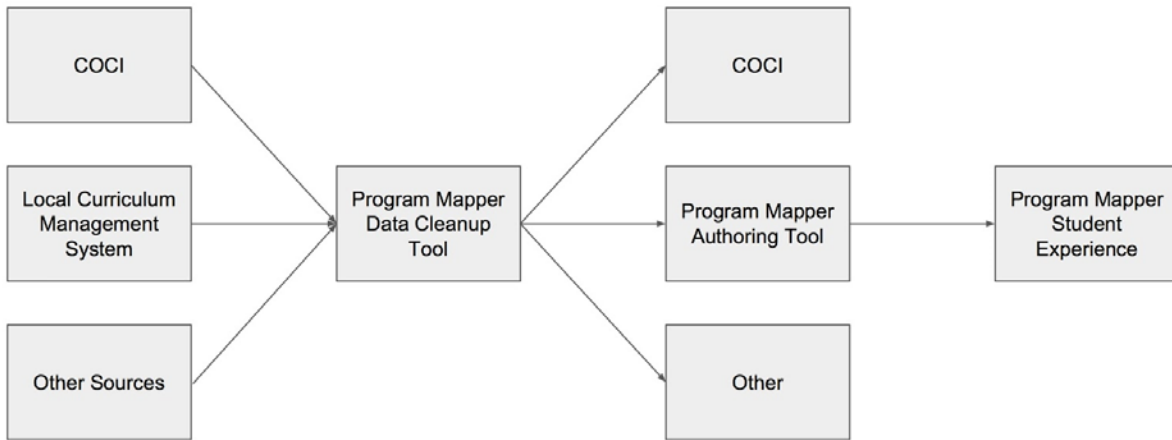
In 2016, BC led the charge to develop a countywide college promise, *The Kern Promise*, focused on Associate Degree for Transfer Pathways. To strengthen and advance work specifically focused on issues of transfer misalignment, BC established a transfer task force: the Workgroup to Advance Regional Baccalaureate Attainment. Through WARBA, faculty leaders from BC and CSU Bakersfield developed a joint Memorandum of Understanding to clarify pathways from the community college to the four-year university – to be later called the **Finish in 4** project.

Through the project’s development, dozens of BC and CSUB faculty organized through in person meetings to identify issues of misalignment across the transfer pathways program-by-program. Through our collaboration, faculty identified course articulation and/or ADT modifications to develop 29 fully-transferable, sequenced semester roadmaps which align coursework from the BC Associate Degree for Transfer through to the CSU Bakersfield baccalaureate.

Following this 18-month project, BC contracted with Concentric Sky with support from the California Community Colleges Chancellor’s Office (CCCCO) to develop the **Program Pathways Mapper** (PPM) tool. The tool helps students visualize their programs in the context of expected employment outcomes, and relied on the course sequencing work BC and CSUB faculty undertook. View the tool at <https://programmmap.bakersfieldcollege.edu/academics>.



The Program Pathways Mapper project required the college to examine its own curriculum data and compare results across Chancellor’s Office Curriculum Inventory (COCI), eLumen (BC’s curriculum management system), and the BC Catalog. Through this work, BC discovered a number of inaccuracies and partnered with Concentric Sky to create the **Data Cleanup Tool** within the Mapper. The Cleanup Tool guarantees imported COCI data is clean and organized before publishing courses and programs into the Mapper. This Cleanup Tool facilitates the heavy-lift faculty and staff do to align coursework across systems by determining which source of information is accurate and publishing a definitive “source of truth.”



As a result of this innovative work, Bakersfield College has established a clear path for community colleges and their transfer partners to advance in collaboration timely baccalaureate completion. With more students graduating with a bachelor’s degree in 120 units and in four years, students and taxpayers save thousands while the students’ path to family sustaining wages vital to the health of our local economy accelerates.



Bakersfield College’s high-touch, high-tech strategies are replicable to improve, at scale, outcomes for students.

What was innovative about the project? For example, did you institution approach the challenge or opportunity in a unique way? Did you use technology or services in a unique way?

Our intersegmental alignment work is unprecedented in that it requires a whole college, whole community effort. The work does not happen in a silo, nor is it applicable only to a small group of students. All of Bakersfield College's 33,000 current students, prospective students from 56 feeder high schools, and thousands of others in our community benefit from the work while both instructional and student affairs units at BC and CSUB are responsible for advancing our shared outcomes.

To approach the challenge to get more students to complete and transfer – on time and without excess units – Bakersfield College has *intentionally designed an innovative, formal structure* through which cross-functional teams of faculty and staff are responsible for advancing four key research-based momentum points to promote timely transfer. The goals have become our college's mantra and the aligned activities our practice. They include:

- BAKERSFIELD COLLEGE**
- Attempting 15+ units in the first term
 - Completion of transfer-level math and English in the first year
 - Attempting 30+ units in the first year
 - Completion of 9 core pathway units in the first year

This formal structure includes 10 *Completion Coaching Communities*, organized by meta-major, with an additional eight Affinity-Based Completion Coaching Communities. Each of the Completion Coaching Communities has a designated Data Coach. *Data Coaches* are faculty, classified staff, and administrators who participate in ongoing training led by the Office of Institutional Effectiveness. This organization of BC faculty, staff, and administrators not only ensures each student is actively helped to pursue the most direct path to his or her educational goal, but illuminates the barriers students experience, allowing the college to respond swiftly and at scale to remove those barriers for all students.

Bakersfield College's data strategy is to *ensure data are accessible and actionable* so that the result improves student outcomes. That is, data are readily available to faculty, staff, and other constituent groups but more importantly the data facilitate solutions to persistent barriers at the institution.

The Data Coaches were instrumental in the early development of the Program Pathways Mapper. They utilized outcomes data to enhance the tool with job outlook and salary information relevant to each meta-major and program of study in a true visual integration of student affairs and instructional outcomes. Further, BC faculty and staff Data Coaches also helped to identify a need for the development of the Data Cleanup Tool.

As designed, Data Coaches translate student need into innovative systems solutions.

The Program Pathways Mapper and Data Cleanup Tool innovatively address the needs of today's students. By taking the static information published just once a year in the college catalog and transforming it into an interactive, visually appealing online tool, the Pathways Program Mapper makes educational planning accessible to students, parents, and high school counselors. Even more importantly, the PPM ensures the course maps are accurate using the Data Cleanup Tool.

The Data Cleanup Tool, designed in partnership with Concentric Sky, allowed BC to:

1. Compare data from multiple curriculum data sources
2. Determine which information is accurate
3. Publish a definitive "source of truth"
4. Keep track of the changes made to data from each source
5. Republish the corrected data back into the original systems

Once the single source of truth was published for our college's curriculum data, the data were made available in the Program Pathways Mapper Authoring Tool. The Authoring Tool is a web application, which facilitated our staff in building visual program maps. Data cannot be modified within the Authoring Tool, ensuring program maps only reflect approved curriculum data.

The Authoring Tool also includes an administrative functionality to allow college administrative users to review all approved programs. Program maps for multiple years can be stored within the Authoring Tool and maps in progress can be shared between users to simplify faculty collaboration. Each map can support transfer to multiple institutions, facilitating the display of articulation agreements with institutions within the CSU and University of California (UC) systems.

Year 1 - Term 1
Total Units: 19.5

CORE COURSES Add Course / Group Add Custom Course Group Add Vertical Spacer

Order	Course Code	Course Title	Course Units	Actions
1	ART B7	Acrylic Painting	4.0	Remove
2	GROUP	Arts	4.0	Remove Edit

GENERAL COURSES Add Course / Group Add Custom Course Group Add Vertical Spacer

Order	Course Code	Course Title	Course Units	Actions
1	--	VERTICAL SPACER	--	Remove
2	GROUP	Language	3.5	Remove
3	--	VERTICAL SPACER	--	Remove Edit
4	CHEM B1B	General Chemistry and Chemical Analysis	5.0	Remove

ELECTIVE COURSES Add Course / Group Add Custom Course Group Add Vertical Spacer

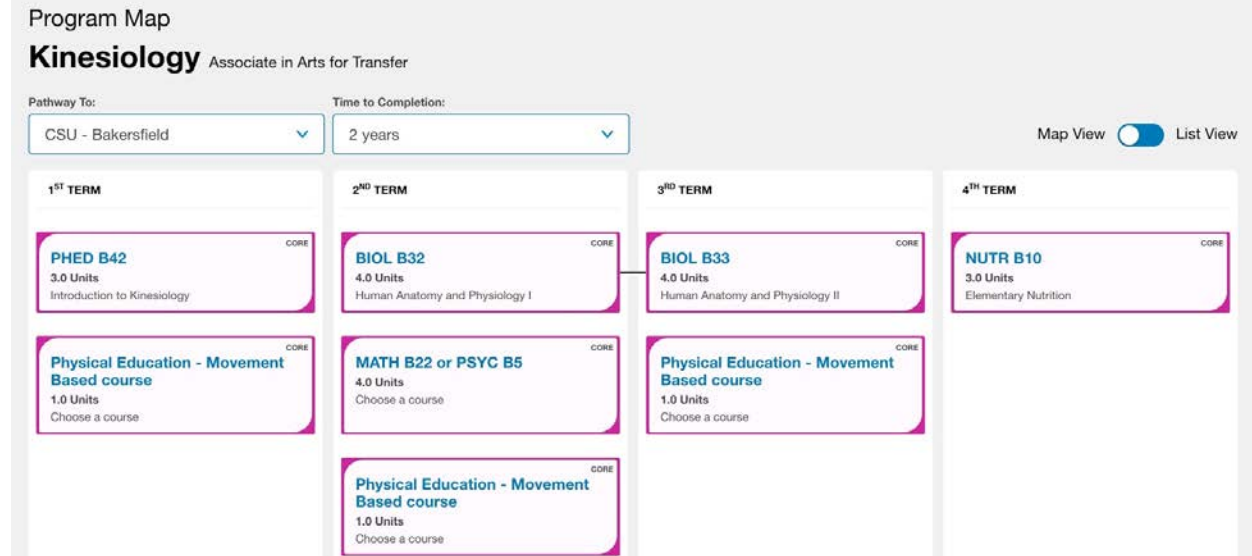
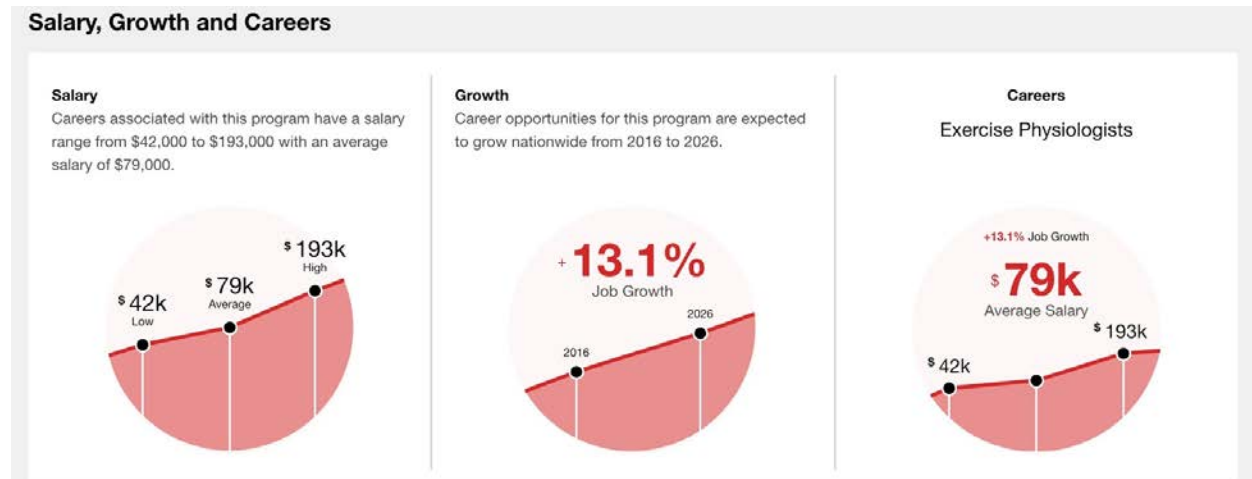
Order	Course Code	Course Title	Course Units	Actions
1	GROUP	Business Administration List B	3.0	Remove

DEVELOPMENTAL COURSES Add Course / Group Add Custom Course Group Add Vertical Spacer

Order	Course Code	Course Title	Course Units	Actions
1	--	VERTICAL SPACER	--	Remove

Bakersfield College publishes program maps as a part of the PPM Student Experience (SE) app, designed for scale. Economic data is derived from a TOP code crosswalk with the SOC codes created by the U.S. Department of Labor, which ensures the labor market data is free and therefore easily scaled for other colleges to utilize.

The SE has passed a rigorous usability audit from the CCC Accessibility Center and conforms to the WCAG 2.0 AA standard for accessibility.



What were the goals of the initiative? What specific improvements did the institution set out to accomplish or what challenges did the institution address?

Equipped with the knowledge that 41% of California jobs will require a bachelor's degree by 2025, BC acknowledging the moral imperative to provide opportunities for social mobility. To address a lack of access, clarity, and mobility through baccalaureate pathways resulting from poor intersegmental alignment and systemic barriers, Bakersfield College has undertaken a whole-college redesign using the guided pathways framework.

In California, the focus on student success could not be clearer. With state investments of over \$1.5 billion since 2012, community colleges have seen substantial increases in resources via various categorical programs. Yet, system-wide progress has been slow, at best.

To find the perfect algorithm – that is, to address efficiently and at scale a poorly designed, misaligned system in a county plagued by poverty and unemployment – Bakersfield College looked to one of the world's most innovative companies: Google. What we found is that scalability is a non-issue in an organization where systems are integrated.

Google Maps starts with the end in mind while a real-time systems integration of various features – from traffic congestion to parks and recreation – ensure one makes informed decisions along his or her journey to the desired destination. Using this inspiration, Bakersfield College's Program Pathways Mapper tool addresses pathway clarity and facilitates student onboarding as a part of our guided pathways framework, characterized by four pillars:

1. Clarify the path
2. Get students on the path
3. Keep students on the path
4. Ensure Learning



In addition, our research-driven momentum points noted in the previous question are the outcomes we seek in order to advance overall certificate, degree, and transfer attainment.

Specific barriers the college has tackled through this initiative include:

1. Staffing and resource management
2. Data Sharing accuracy and efficiency
3. Intersegmental alignment and transfer pathway misalignment

Staffing and resource management | Bakersfield College has creatively leveraged funding sources to expand staffing in support of our intersegmental alignment work. In 2015, BC established an integrated resource planning model to expand our capacity to address institutional barriers to social and economic mobility. BC utilized categorical funding to establish a robust Office of Outreach & School Relations to expand our presence in the high schools and ensure a high-touch onboarding for our first generation students. Since then, the college has seen our student success categorical funding allocations double. When integrated with Basic Skills, Strong Workforce, VTEA, Title V, and other categorical funds, we have scaled implemented at-scale systems-based solutions. Example solutions include our application of multiple measures of assessment to place students in

transfer-level coursework, development of more educational plans to facilitate enrollment in the correct courses than ever before, creation of a robust extended Summer Bridge program, massive expansion of our academic support services, and universal improvement in student outcomes across our momentum points.

Data sharing accuracy and efficiency | For the past several years, BC has diligently worked to address inaccuracies and inefficiencies in data access, analysis, and sharing. To address inadequate staffing and information technology capacity, BC's establishment of a Data Coaching model engaged faculty, staff, and administrators across campus in the deep work required to address barriers in our own systems, which prevent student mobility through their educational pathways. Data Coaches utilize high-tech tools, including CCCApply, AccuPLACER, Banner, Cognos, AccuSQL, Starfish, Canvas, and more to improve our understanding of the student experience.

In addition to our Data Coaching model, ***BC's high-touch approach to partnership development and engagement has led to efficiency in our data sharing.*** For example, BC staff in our Outreach & School Relations may directly access and download Kern High School District student transcripts to facilitate the application of multiple measures of assessment.

Intersegmental alignment and transfer pathway misalignment | To address transfer misalignment, BCe established the Workgroup to Advance Regional Baccalaureate Attainment, through which faculty leaders have developed a joint MOU with our primary transfer partner, CSU Bakersfield. Through high-touch, in person meetings with dozens of faculty from each institution, BC has examined issues of misalignment, developed mutually agreed-upon course sequences, thus creating the data source for the PPM. Further, BC has developed a countywide college promise, *The Kern Promise*, focused entirely on Associate Degree for Transfer Pathways.

High-tech innovations such as the Pathways Program Mapper and Data Coach use of AccuSQL reports, Banner and Cognos report training, and more have complemented and expanded our high-touch strategies to create clarity and efficiency for students, faculty, and staff alike.

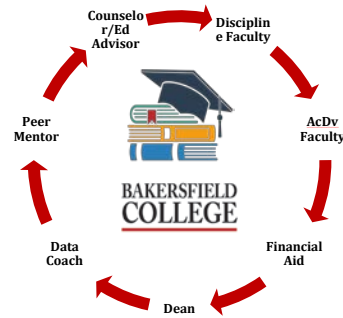
Please indicate the Ellucian technologies or services used to address the challenge or opportunity and explain how they contributed to the success of the project.

Bakersfield Colleges uses Banner as its Student Information System, which houses all student data. Banner plays a key role in helping the college manage initiatives campus-wide. While the PPM is designed to clean curricular data, we have had no need to clean Banner data. This has allowed us to use Banner as a foundation upon which we can reliably build an ecosystem of solutions customized to serve our unique student population.

In practice, Completion Coaching Communities utilize data from multiple sources, including various tools that pull student information from Banner. For example, the college has recently trained Completion Coaches to utilize Starfish Connect and Analytics to pull reports, isolate specific high-need students, and proactively intervene to influence student behavior around our Guided Pathways momentum points.

A major part of our work to advance the transfer agenda at BC is to **enroll more students in transfer-level English and math courses in the first year**. Banner keeps track of all students' programs of study, including their educational goals and transfer outcomes. Utilizing reports from Starfish, counselors and advisors can quickly identify which transfer-intent students have not yet enrolled in the appropriate transfer-level math course as clarified in the Program Pathways Mapper. While there may be 2,500 students in any given meta-major, the report may allow a Coach to isolate a smaller group of students to focus the intervention on a subset of 300 students within that meta-major. Those 300 students then receive targeted messages and support to enroll in the pathway-appropriate math course.

By utilizing Banner data, Bakersfield College has been able to equip Completion Coaches with actionable information they use to organize their work and advance student outcomes. Outcomes data is detailed in question #5.



Describe the effects of the improvement or the success realized. For example, what was the impact of the initiative on students, faculty, and staff?

Bakersfield College's intersegmental alignment work and development of the Program Pathways Mapper tool has been transformational for students, faculty, staff, and our community. While the college is only just beginning to see the outcomes of this innovative project, the impact is clear in our data as discussed elsewhere in this application, and in the work Bakersfield College, CSU Bakersfield, and our high school partners do each day.

Our transfer mapping work and high-tech tools have advanced our ability to serve students in the following ways:

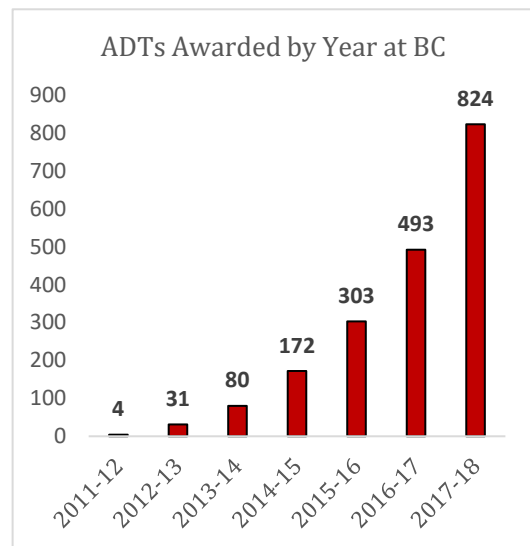
- Clarified curricular pathways for students, high school staff, and parents
- Enabled discipline faculty, particularly department chairs, to identify and correct inaccuracies in curriculum across multiple systems using the Data Cleanup Tool
- Brought discipline faculty and counseling faculty together in the interest of identifying the most efficient educational pathways for students to transfer and career
- Integrated career and salary outlook data in educational advising sessions
- Equipped Completion Coaching Communities with the tools to support students effectively
- Strengthened our partnership with our primary transfer institution, CSU Bakersfield
- Presented a systems-based and easily scalable solution to issues related to data inaccuracies and misalignment for all California community colleges and CSUs

Our intersegmental alignment work is a whole-college effort, engaging discipline faculty in detailed program mapping discussions while faculty and staff explore operational solutions around educational planning, registration, transfer, and more.

Provide quantifiable measurements as a result of the initiative. Examples of quantifiable measurements include improved retention metrics, increased program revenue, or reduced cost of maintaining system integrations. Please include numerical comparisons and anecdotal examples that provide an overview of the situation prior to and upon completion of the initiative.

In our integrated framework, BC has kept laser focus on the end objective: improving baccalaureate attainment rates throughout Kern County. As such, our high-touch work with our primary four-year university partner, CSU Bakersfield, has resulted in at-scale improvements for transfer-intent students. Evidence that demonstrates how our high-touch strategies of structured conversations with a key four-year partner can improve access to baccalaureate completion include:

- Grew Associate Degrees for Transfer pathway offerings by 900%; recognized by the Campaign for College Opportunity in June 2016. BC offers 30 Associate Degrees for Transfer
- Grew Associate Degree for Transfer awards by over 1,400%, contributing to overall degree completion by 58.8% since 2012. ADTs accounted for 45% of all BC awards in 2017-18.
- Average unit accumulation for ADT students is 83 compared to 97 for general AA pathway.
- Increased overall transfer rate in the past four years: 57% to the UC and 43% to the CSU
- Increased transfers to CSU Bakersfield by 36.2% in the last 5 years, with a total of 78.82% of all CSU transfers choosing CSUB. The majority of transfers are Latinx.
- Increased two-year baccalaureate completion of BC transfer students at CSUB from 31% in 2010 to 48% in 2014, exceeding CSU's *Graduation Initiative 2025* goal.



Bakersfield College's work to strategically reduce regional achievement gaps through the intentional design of a student success architecture, through which multiple partners have aligned to **remove systemic barriers and create clarity in the pathways to baccalaureate attainment for students in Kern County**. BC's steadfast work to dismantle systemic barriers have included a laser focus on addressing mass under-placement upon entry, poor advising structures, and misalignment across educational systems. Our data show the impact:

- Since 2012-13, BC more than doubled first-year completion rate of transfer-level English
- Completion of transfer-level math in the first year increased 38% from 12-13 to 17-18.
- Completion rates of BC's Scorecard cohorts have trended upward over the past three years to a new high of 42% for the latest cohort. Disaggregation of completion rates by race show rates for African American and Hispanic/Latinx students are improving
 - From 26.8% to 38.6% for Hispanic/Latinx students
 - From 32% to 39.8% for African American students
 - 30% increase in number of Black students completing transfer-level math in year 1
 - 340% increase in Black students completing transfer-level English in year 1

In addition to the local successes evidenced in our student outcomes data, the success of this project can be seen in investments made at the state level to scale this work to other California community Colleges. As of January 2019, 12 additional colleges have begun onboarding to the PPM, with another 20+ colleges under consideration in the coming months.

Bakersfield College has been a pioneer statewide in guided pathways, with a rich history of creating collaboratives and hosting advisory councils across the state to advance initiatives that impact all community colleges. For example, BC created and led the California Guided Pathways Advisory Committee from 2016-17 and played an instrumental role in securing resources for the guided pathways demonstration project for 20 California Community Colleges and later the \$150 million investment in guided pathways implementation statewide.



Photo: 1 California Guided Pathways Advisory Committee, 2016

Additionally, Bakersfield College is currently leading an advisory committee in partnership with the CCCC and Concentric Sky focused on Educational Systems and Intersegmental Pathways, of which the PPM is a major focus. This task force brings together leaders from all major educational systems in California to discuss opportunities for data alignment to streamline pathways from k12 through to the baccalaureate. BC secured resources for this work by submitting a competitive application and being one of just 14 colleges in the state to earn the CCCC Innovation Award.



Photo: 2 Educational Systems & Intersegmental Pathways Task Force, 2018

In addition to the \$2.3 million Innovation Award, BC earned the California Community Colleges Chancellor's Office Student Success Award for this project in October 2018.