

Introduction (250 words)

At nearly every conference in recent years, at least one speaker has dropped Peter Drucker's famous line that "culture eats strategy for breakfast" to a room full of nodding college leaders.

And while an organization's cultural norms can make or break the conditions for commitment and collaboration, we cannot devalue the power of structure. In *The Fifth Discipline: The Art and Practice of the Learning Organization* (1990), Peter Senge argues that structure influences behavior; altering structures can alter behaviors. In other words, a college will see the outcomes it seeks only when it systematically designs the structure to produce its intended outcomes.

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 efficiently address at scale a poorly designed, mal-aligned 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, BC has developed a meaningful student success architecture to advance the Chancellor's Vision for Success.

Question #1: From the perspective of the student population referred to in the introduction, what was the problem your innovation helped to address on your campus, college, or district? A strong response will define the problem using data that clearly delineates the student population and the disproportionate impact on student success.

The Problem: Lack of Access, Clarity, and Mobility through baccalaureate pathways as a result of poor intersegmental alignment and systemic barriers

Vision metrics: 1) Reduce excess unit attainment, 2) improve associate degree completion, 3) Improve transfer rates, 3) reduce equity gaps, 4) reduce regional achievement gaps

Bleak educational attainment rates, debilitating unemployment topping 35%, and low overall preparedness to enter the UC and CSU systems directly from high school serve as the backdrop for Kern County students. (Question 1, table 1)

According to data reported by the California Department of Education, Kern County's educational attainment rates are bleak, with adults over 25 years of age earning bachelor's degrees at roughly half the rate statewide. In some surrounding rural communities, rates substantially drop to less than 2%. (Question 1, Table 2) In a recent study of 98 of the 100 largest metro regions in the country, researchers at the non-profit Measure of America found that Kern County has the highest rate of disengaged youth in the country. With 21.2% of those ages 16 to 24 neither in school nor working, over 26,000 young people in Kern County are completely disengaged from social mobility.

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 sight. Yet, the community college has historically exacerbated these issues of access, progression, and social mobility through systemic institutional barriers which lead to excess unit attainment, lengthened time to completion, and low transfer rates.

Specific systemic barriers include mass under-placement upon entry, poor advising structures, and mal-alignment across educational systems.

Acknowledging the moral imperative to provide opportunities for social mobility, Bakersfield College has worked 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.

Question #2: Briefly describe the practice or policy that your campus, college, or district needed to change. Precisely describe the innovation and how it addressed the problem outlined in question 1. A strong response will demonstrate how this innovation is consistent with the Vision for Success

Since 2013, BC has removed the walls dividing programs and resources to advance the Chancellor's Vision for Success and improve student outcomes. In recent years, college personnel have invested valuable time and resources into the identification of five, truly integrated and campus-wide goals, of which many funding sources can and do support. The goals have become our college's mantra and the aligned activities our practice. They include:

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

Data-Informed Decision-Making: Despite clarity in our desired outcomes, BC lacked capacity for in-depth use of the data to drive timely and meaningful interventions to advance our student success work. To address this practice, BC recruited and trained a cadre of 30+ **Data Coaches** to utilize data across our momentum points to improve our integrated planning and activities. Data Coaches are faculty, classified staff, and administrators who participate in ongoing training, support campus-wide data projects, and directly support Completion Coaching Communities in their use of cohort-based data to illuminate the needs of students in each pathway.

Using this improved data analysis and sharing capacity, BC has addressed our efforts around intersegmental alignment to create clarity in educational pathways using a high-touch guided pathways framework. Data Coaches have proved instrumental in campus-wide reforms that have created clarity in the student experience. Specifically, analysis performed by BC Data Coaches have led to increased efficiencies and decreased institutional barriers in our use of **multiple measures** of assessment. More accurate placement has shown improved success and sequence completion for thousands of students. (Question 2, Table 1 and Table 2)

Data Coaches have partnered with discipline experts within each meta-major as a part of our **Completion Coaching Community** model. Through this collaboration, BC has expanded our intersegmental alignment efforts to improve pathway clarity and persistence. Examples include:

- Addressed transferability of courses and packaged pathways through high-touch alignment work with CSU Bakersfield; held ongoing coordination meetings with faculty across the two colleges to address issues of mal-alignment
- Developed sequenced pathway program maps for transfer programs in partnership with CSU Bakersfield
- Published pathway maps in the web-based **Pathways Program Mapper Tool**, a visual display of pathway curriculum that will be utilized in spring 2018 high school matriculation efforts to augment educational planning efforts
- Utilized outcomes data to enhance Pathways Program Mapper with job outlook and salary information in a true visual integration of student affairs and instructional outcomes

The Pathways Program Mapper Tool is currently under development and may be viewed at <https://bakersfieldcollege.content.programmapper.ws>. Users may log in using username: review; Password: review.

Question #3: How did your campus, college, or district scale, or begin to scale, this innovation? *A strong response will include data demonstrating the impact of the innovation on a larger number of students over time. Preference will be given to innovations that have been scaled campus, college or district-wide and benefitted the student populations noted in the Introduction.*

Bakersfield College has rapidly scaled our **high-touch, integrated strategies** to serve increasingly large numbers of students with a specific focus on historically marginalized students. With massive enrollment growth from 24,536 students in 2012-2013 to 32,645 students in 2016-17, BC has not only scaled to higher numbers of students but a greater proportion of students, as well. (Question 3, Table 1)

Improved alignment with our high school partners has led to at-scale improvements for incoming students throughout Kern County. Through a high-touch approach to intersegmental alignment, Bakersfield College has grown our footprint in the high schools for matriculation, registration, and dual enrollment. Each strategy started with a pilot and has scaled to address clarity and alignment in all pathways for incoming students.

- Provide on-site matriculation services 49 feeder high schools.
 - In 2016-17, worked with students nearly 9,000 times before they stepped on campus. (Question 3, Table 2)
- Grew dual enrollment by over 1,200% from 235 in 2013-14 to 3,106 in 2016-17. (Question 3, Table 3)
- Applied multiple measures of assessment to incoming students, resulting in massive improvements in college-level placement and subsequent success in those courses. (Question 3, Table 4)
 - Improved college-level English placement from 29% in 2013 to 55% in 2016.
 - Improved college-level math placement from 3% in 2013 to 29% in 2016.
- Improved early educational planning and advising led by **Completion Coaching Communities** has improved progress in momentum points
 - Attempting 15+ units in the first term: from 11.3% to 15.6% from fall 2016 to fall 2017. (question 3, Table 5)
 - Improved college-level English completion from 21% to 25% for Latino students
 - Improved College-level English completion from 9% to 25% for African American students (Question 3, Table 6)

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 includes:

- Grew Associate Degrees for Transfer pathway offerings by 900%; recognized by the Campaign for College Opportunity in June 2016
- Grew Associate Degree for Transfer awards by over 1,400%, contributing to overall BC degree completion by 58.8% since 2012 (Question 3, Table 7). ADTs accounted for 45% of all BC awards in 2017-18. (Question 3, Table 8)
- Average unit attainment for students pursuing the ADT is 83 compared to 97 for the AA/AS general pathway. (Question 3, table 9)
- 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. (question 3, table 10) The majority of transfers are Latino.

Question #4: Explain in detail the specific barriers that were addressed to begin scaling the innovation across the campus, college, or district. A strong response will include a discussion of what resources, programs, staffing or reporting needed to be integrated or braided to achieve the desired changes. This response should give the readers a clear understanding of the experience of change at your campus or district.

Barrier #1: Staffing & resources 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 SSSP and Student Equity funding allocations double; when integrated with Basic Skills, Strong Workforce, VTEA, Title V, and other categorical funds, we have scaled our multiple measures of assessment application by hand to each incoming student's transcript, delivered more educational plans than ever before, created a robust extended Summer Bridge program, massively expanded our supplemental academic support services, and improved outcomes across our momentum points – all with a particular focus on our most underserved students.

Barrier #2: 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, DegreeWorks, 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.

As a result of our enrollment growth led largely by our presence in the high schools, and improvement in student outcomes through our Completion Coaching Community model and use of Data Coach expertise, Bakersfield College has been able to formally establish an Office of Institutional Effectiveness staffed by six full-time staff members.

Barrier #3: Intersegmental alignment and transfer mal-alignment

To address transfer mal-alignment, Bakersfield College has established a Transfer Task Force, 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, the college has examined issues of mal-alignment, developed mutually agreed-upon course sequences, thus creating the data source for the Pathways Program Mapper Tool. Further, BC has developed a county-wide 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.

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Question #5: Explain how your campus or district will collaborate with the Chancellor's Office to disseminate this innovation throughout the state to benefit other colleges seeking to solve a student success issue. A strong response will include broad dissemination strategies that are integrated with current practices, tools and mechanisms to support professional development in the California Community Colleges. This plan will identify activities, responsible individuals, timelines and estimated costs. Although a detailed budget is not required, a thoughtful estimate of the costs to scale this innovation will contribute to a strong application

BC proposes to use award dollars to scale our high-touch, high-tech innovations to improve connectivity and efficiency in our work to advance the Chancellor's Vision for Success of a better California. BC will leverage existing professional development structures, such as IEPI and the RP Group, for our high-touch dissemination strategies while a focus on the high-tech innovation will enhance efficient statewide scalability, saving taxpayer dollars, and creating singular solutions to solve myriad problems. Dissemination strategies will sustain and scale:

--*Innovation #1 BC transfer program mapping and onramp support model by implementing the **Pathways Program Mapper** statewide; integrate the system with a singular curricular database. Support the integration of eLumen, EduNav/Starfish, and CurricuNet in the development of **COCI 2.0**.*

With **CSU Bakersfield** fewer than 10 miles from the BC campus, it is no surprise that over 75% of BC transfers choose CSUB. This increase is evidence of our high-touch strategies to provide structured conversations with a four-year partner to improve baccalaureate completion. BC and **eLumen** co-presented at the Academic Senate SLO conference to disseminate systems-integration strategies to advance this work. These strategies can become a scalable model to *clarify the path* to baccalaureate attainment in a community where educational attainment rates are especially low.

Further, the high-touch BC to CSUB course sequencing has become the data source for the Pathways Program Mapper. **Concentric Sky** worked initially with the **CCC Chancellor's Office** to develop the visual representation for transfer pathways –Pathways Program Mapper – in partnership with BC. The product can be quickly scaled statewide with a common curriculum database.

Lou Delzompo, the Chief Technology Officer for the **Butte Technology Center**, has provided the Pathways Program Mapper team with insight and information about the development and trajectory of the Chancellor's Office Curriculum Inventory (COCI). He has also led high-level meetings with Chancellor's Office, the program mapper team, and other stakeholders, to develop a vision about the development of a single curriculum database that is current and connected to the programs colleges use to maintain curriculum (e.g., eLumen, EduNav, CurricUNET).

--*Innovation #2 BC placement strategies through the establishment of a data sharing point which facilitates intersegmental data sharing of student achievement data. Support Project Glue.AB705 data integration.*

--*Innovation #3 BC Data Coaching Model through the development of a statewide **MIS Data Warehouse**. Will feed college completion communities student contact in line with data to advance momentum points. Support a single, statewide, **cloud-based ERP** to facilitate Project Glue MM/AB705 data integration.*

BC has worked directly with **Cal-PASS Plus** in our early adoption of multiple measures and continues to contract with Ken Sorey and team on county-wide success projects to improve student readiness and success. Additionally, BC and CSU Bakersfield are meeting with the CEO of the **California College Guidance Initiative (CCGI)** to advance college readiness for students across Kern County. With the CSU system already having a common ERP, BC and CSUB's partnership can provide an opportunity for early data integration testing and sharing to help students *enter and stay on the path* toward the baccalaureate degree.

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Innovation Award # 1 Appendix

QUESTION 1

Question 1, Table 1: Rates of UC/CSU Prepared Graduates

Year	California	Kern County
2012-13	39%	30%
2013-14	42%	33%
2014-15	43%	31%

Question 1, Table 2 - Comparative Adult Educational Attainment Levels, 2016

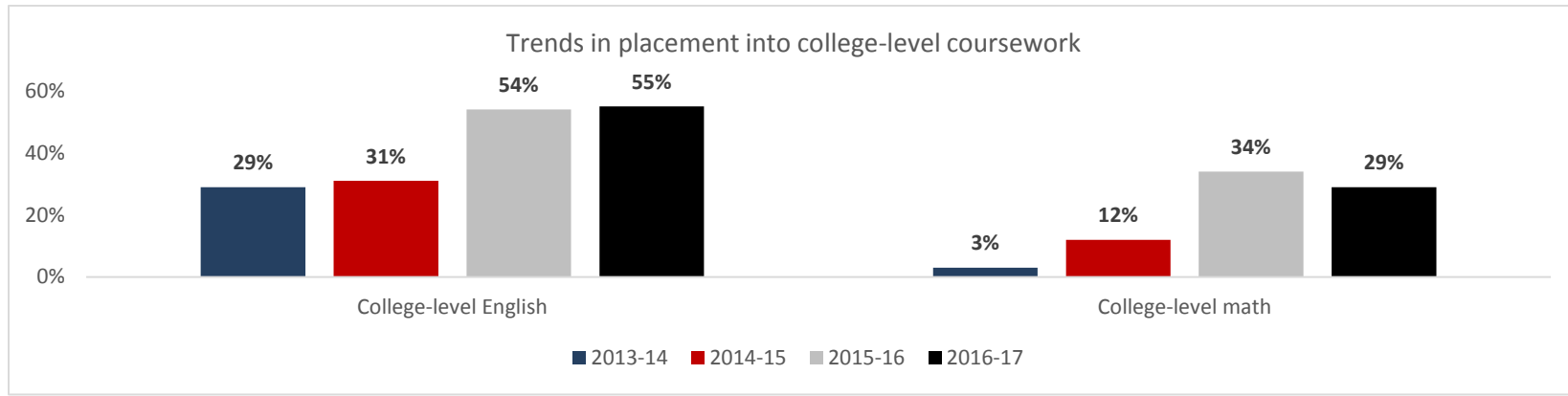
Educational Attainment	State of California	Kern County	BC Service Area	City of Bakersfield	Delano	Northwest Cluster	South Cluster
Less Than High School	19.2%	26.0%	28.3%	20.3%	47.0%	46.1%	63.7%
High School Graduate	20.7%	27.0%	26.4%	25.4%	26.2%	28.3%	19.3%
Associate Degree	7.8%	7.2%	6.8%	7.8%	3.6%	4.4%	2.9%
Bachelor's Degree	19.8%	10.4%	10.4%	13.6%	5.2%	3.9%	1.7%
Graduate Degree	11.6%	5.4%	5.3%	7.1%	1.9%	1.9%	0.6%
Less Than HS & HS Grad	39.9%	53.0%	54.7%	45.7%	73.2%	74.4%	83.0%

Source: ESRI/Cambridge West

Innovation Award # 1 Appendix

QUESTION 2

Question 2, Table 1



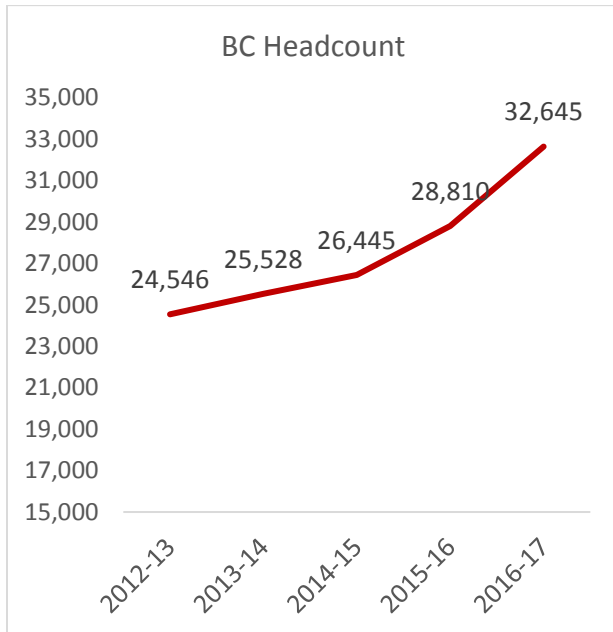
Question 2, Table 2

Transfer Level Achievement English	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
	Cohort Size	Cohort Rate	Cohort Size	Cohort Rate	Cohort Size	Cohort Rate	Cohort Size	Cohort Rate	Cohort Size	Cohort Rate
1-Year										
All	1,804	16.7%	1,751	20.7%	2,021	22.6%	2,135	26.3%	2,300	29.3%
African American	100	9.0%	56	5.4%	63	11.1%	53	11.3%	73	20.5%
Hispanic	1,064	12.0%	1,068	15.1%	1,390	20.0%	1,497	22.7%	1,654	26.7%
White	467	26.8%	448	34.2%	395	32.9%	411	37.7%	402	39.8%
2-Year										
All	1,804	30.2%	1,751	36.8%	2,021	40.2%	2,135	40.2%	2,300	44.6%
African American	100	17.0%	56	21.4%	63	27.0%	53	24.5%	73	34.2%
Hispanic	1,064	24.9%	1,068	31.2%	1,390	37.1%	1,497	36.2%	1,654	41.5%
White	467	43.9%	448	47.8%	395	51.6%	411	54.0%	402	55.0%

Innovation Award # 1 Appendix

QUESTION 3

Question 3, Table 1: BC Headcount trends



Question 3, Table 2: High school Outreach & Placement Strategies

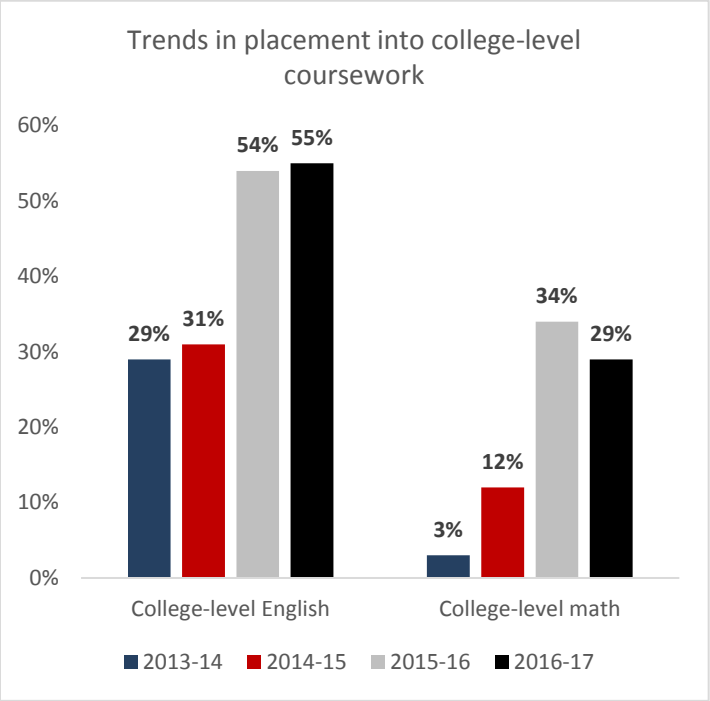
Matriculation Step	# Workshops	# Students Served
Step 1 – Application	34	1502
Step 2 – Orientation	44	1784
Step 3 – Assessment	59	2390
Step 3 – Assessment (non-primary)	34	744
Step 4 – NSW & ASEP	81	2114
Step 5 – Registration	13	Unavailable
Totals:	265	Over 8,534

Question 3, Table 3: High School Concurrent and Dual Enrollment Numbers

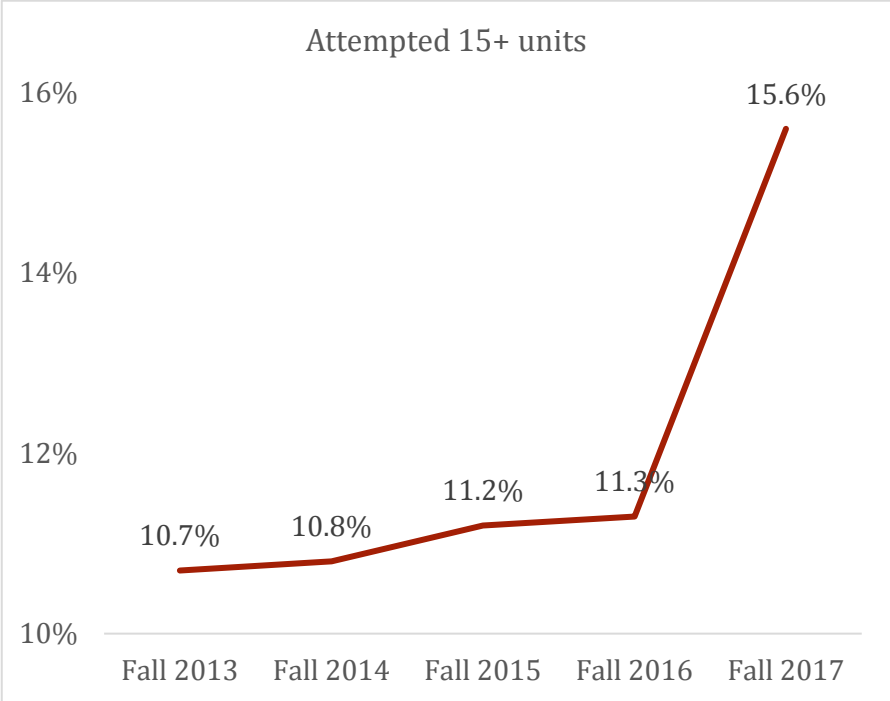
	2013-14	2014-15	2015-16	2016-17
BC Dual Enrollments	235	500	1,710	3,106

Innovation Award # 1 Appendix

Question 3, Table 4

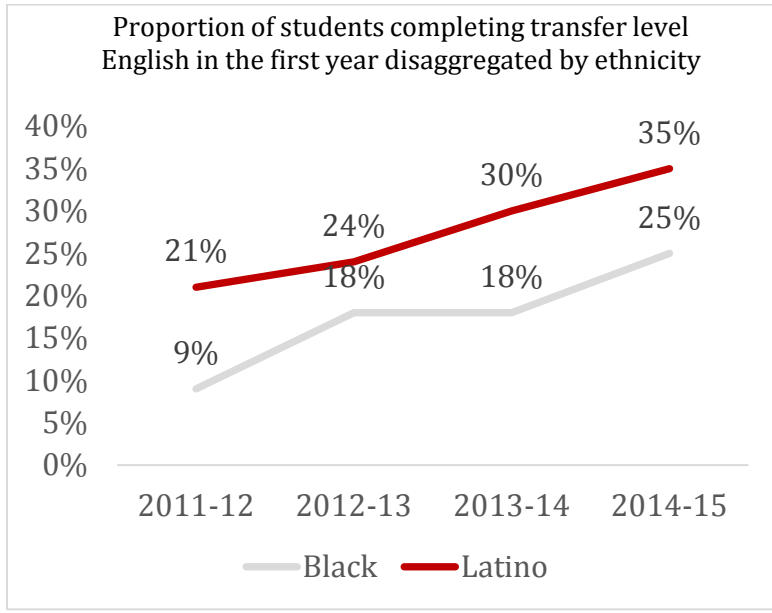


Question 3, Table 5

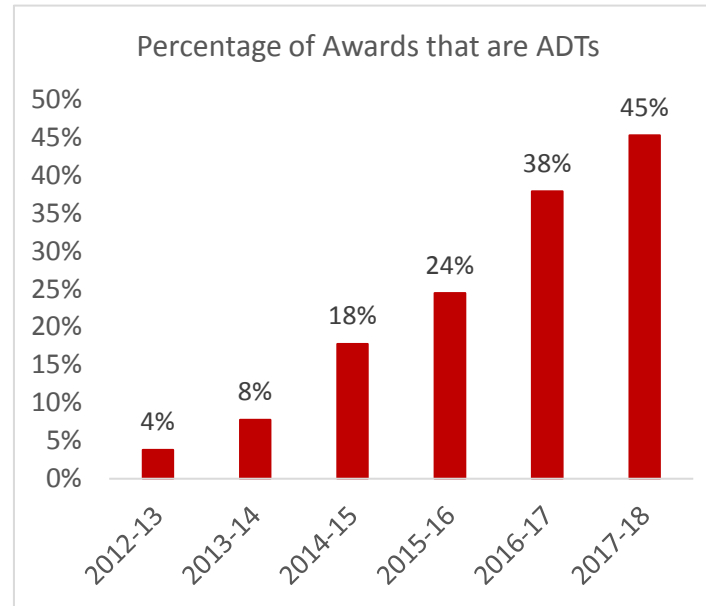


Innovation Award # 1 Appendix

Question 3, Table 6



Question 3, Table 8



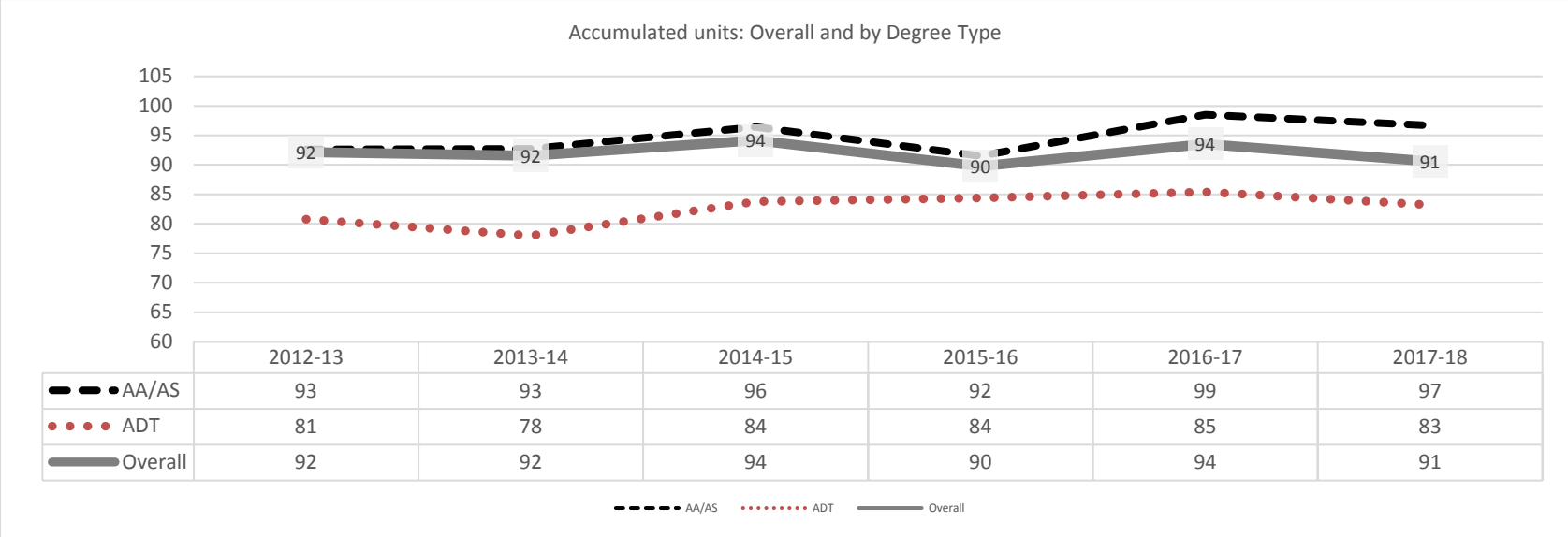
Question 3, Table 7

Award Attainment by Award Type

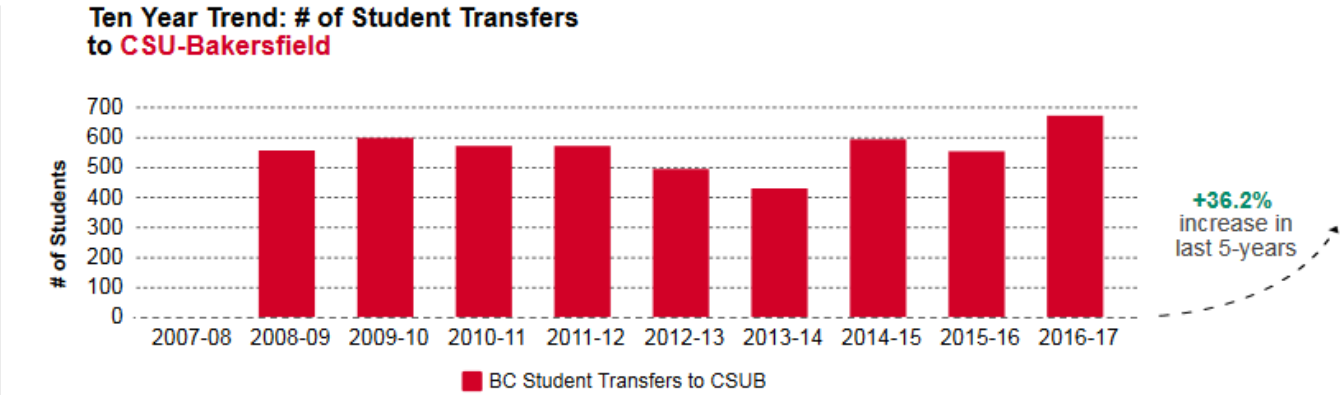
	2012-13	2013-14	2014-15	2015-16	2016-17
AA/AS Degree	783	946	794	933	804
AA-T/AS-T Degree	31	80	172	303	489
AS/ADT TOTAL	814	1,026	966	1,236	1,293
Certificate of Achievement	287	298	299	384	325
Job Skills Certificate	736	721	660	802	842

Innovation Award # 1 Appendix

Question 3, Table 9



Question 3, table 10



Bakersfield College Innovation Award Proposal #1
Statewide Connectivity: BC's High-Tech Dissemination and Scaling Strategies

	Clarify the Path: Curricular Clarity, Accessibility, & Alignment	Enter the Path: Facilitate intersegmental data sharing	Stay on the Path: Advanced Data Integration to Facilitate Local Use
	COMMUNITY COLLEGE PARTNERSHIPS		
Bakersfield College	X		X
Others...?			
	UNIVERSITY PARTNERSHIPS		
CSU Bakersfield	X		
	EXTERNAL PARTNERSHIPS		
CCC Chancellor's Office	X		X
Concentric Sky	X		
Cal-PASS Plus		X	X
CCGI		X	X
Butte Technology Center	X	X	X

Clarify the Path: Sustain and scale BC transfer program mapping and onramp support model by implementing the ***Pathways Program Mapper*** statewide; integrate the system with a singular curricular database. Support the integration of eLumen, EduNav/Starfish, and CurricuNet in the development of ***COCI 2.0***.

Enter the Path: Sustain and scale BC placement strategies through the establishment of a data sharing point which facilitates intersegmental data sharing of student achievement data. Support Project Glue.AB705 data integration.

Stay on the Path: Sustain and scale BC Data Coaching Model through the development of a statewide ***MIS Data Warehouse***. Will feed college completion communities student contact in line with data to advance momentum points. Support a single, statewide, ***cloud-based ERP*** to facilitate Project Glue MM/AB705 data integration.

PARTNERSHIPS

CSU Bakersfield: In 2016, the Campaign for College Opportunity recognized BC for a 900% increase in Associate Degree for Transfer conferrals – a rate which has only increased in the past year with more BC graduates attaining an ADT than any other degree type. With CSU Bakersfield fewer than 10 miles from the BC campus, it is no surprise that the vast majority of students who transfer choose CSUB. The rate has held steadily above 70% of all transfers for the past 10 years.

This increase is evidence of our strong, high-touch strategies to provide structured conversations with a four-year partner to improve baccalaureate completion. Bakersfield College and **eLumen** co-presented at the Academic Senate SLO conference to disseminate systems-integration strategies to advance this work. These strategies can become a scalable model to *clarify the path* to baccalaureate attainment in a community where educational attainment rates are especially low.

Table 1: Associate, Bachelor, and Graduate or Professional Degrees as Highest Level¹

	Population 25 years and over	Highest HS and Equivalent	Highest Some College (no degree)	Highest Associate's degree	Highest Bachelor's degree	Highest Grad or Prof Degree
California	25,257,858	20.7%	21.8%	7.8%	19.8%	11.6%
Kern County	513,437	27.3%	23.6%	7.2%	10.3%	5.1%
Bakersfield City	212,468	25.5%	25.3%	7.9%	13.9%	7.0%

Further, the high-touch work BC has done to sequence courses to CSU Bakersfield will become the data source for the Pathways Program Mapper. **Concentric Sky** worked initially with the **CCC Chancellor's Office** to develop the visual representation for transfer pathways, the Pathways Program Mapper, in partnership with BC. The product can be quickly scaled statewide with a common curriculum database.

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Finally, BC has worked directly with **Cal-PASS Plus** in our early adoption of multiple measures and continues to contract with Ken Sorey and team on county-wide success projects to improve student readiness and success. Additionally, BC and CSU Bakersfield are meeting with the CEO of the **California College Guidance Initiative (CCGI)** to advance college readiness for students across Kern County. With the CSU system already having a common ERP, BC and CSUB's partnership can provide an opportunity for early data integration testing and sharing to help students *enter and stay on the path* toward the baccalaureate degree.

¹ 2015 American Community Survey (5-year estimates) EDUCATIONAL ATTAINMENT California, Kern & Bakersfield <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>