The **Office of Planning and Analysis (OPA)** is UC Berkeley’s institutional research office. Our purpose is to transform data into decision support that helps Berkeley better fulfill its teaching, research, and public service mission and live up to our campus goal of promoting access and excellence.
Welcome

Public universities operate in an increasingly competitive world as we work to attract students and research with fewer resources from the state and increasing calls for accountability by government officials and the public. Within this environment, Berkeley continues to succeed and our Office of Planning and Analysis (OPA) is determined to provide institutional research that not only explains our success, but also identifies opportunities for improvement.

As Chancellor Nicholas Dirks said in his introductory message to the campus, “We are all in this together.” We couldn’t agree more. At OPA, we don’t have all the answers, but we are committed to working with other units on campus to provide decision support. Through our collaborations we produce analyses that you can trust – ones that begin to answer critical questions; capture the interest, attention and imagination of campus leadership, faculty and staff; and provide a vision of what is possible through data integration.

We focus our efforts in critical areas where we believe we can make a difference. This year, much of our work focused on student outcomes and ways to understand and improve graduation rates and student experiences. Through this annual report, we share what we have learned to date and some of our future directions – highlighting our efforts to understand the institution’s issues and communicate them with data-driven stories.

Under the direction of our Associate Vice Chancellor-Chief Financial Officer (AVC-CFO), Erin Gore, we are taking the lead to advance our Institutional Data Management and Governance (IDMG) initiative. We’re committed to building a culture of evidence through efforts to centralize data into an enterprise data warehouse and create dashboards in Cal Answers which are easy to use, integrated, and aligned to critical decision making processes. We understand there is change fatigue and that you may have concerns about another tool, but with Cal Answers we simplify and are here to help engage and empower our campus community.

With that we invite you to review this report, which provides highlights of the work we completed over this year and links throughout the report to additional resources (online version at http://opa.berkeley.edu/). If you have suggestions for future collaborations, areas we should examine, or ways to help us improve, please let us know by sending me an e-mail at phb@berkeley.edu. Thanks and Go Bears!

Pamela Brown
OPA Executive Director
Overview

Early in 2012-13, OPA provided the standard campus metrics for student outcomes: graduation rates and time to degree. By all counts, Berkeley was – and still is - doing very well with graduation rates going up and time to degree going down.

As a part of our analytical practice, however, whenever we provide campus-level summary statistics, we do additional analyses to see if these findings reflect the general experience of all types of students on campus. When we began to reach further into the graduation rates data we found that students placed on academic probation in their first year had significantly lower graduation rates than their peers. This was an important and new finding. Academic probation rates have received considerable positive attention in recent years as the campus has worked hard - and succeeded - to reduce the number of students placed on probation. While the number of students who are placed on academic probation in their first year is small (~5%), the data showed us an area where we can improve.

In the first section of this report, we provide a summary of the path we took this year to better understand student outcomes, which in many cases is the result of collaborative work with others on campus. We start in the beginning of the year with the standard work we did on graduation rates, time to degree, and academic probation - which led us to investigate students’ first year experiences and obstacles to their success. Next, we take you on our journey to analyze the new student survey data and review what the students shared about their initial impressions and experience with access to courses, advice on course selection, and affordability. Throughout the year, we augmented what we learned from the survey data with existing information that we or our campus colleagues developed on ways we are reaching out to students via the curriculum, financial aid, advising, and the campus climate.

In the second section, we share ways that we are working to support our analytical community to build a culture of evidence, how you can get involved, and how together we can help Berkeley answer the questions of today and tomorrow. We are committed to inspiring and empowering the campus to ask questions about data so you, too, can locate insights to perform your jobs well. We ultimately measure our success on the expansion of analytical strength across the campus, the accomplishments and understanding derived from the information we provide, the increasing complexity of the questions asked, and our collective ability to answer them.
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Collaborating with campus: decision support through the lens of student outcomes analyses
What do we know about undergraduate outcomes?

Graduation rates brief
OPA’s Russ Acker and Alan Underwood compared Berkeley to our public and UC peer universities and found Berkeley’s 6-year graduation rates for fall-entrant freshmen have improved over time, and been 90% and 91% for the last five years. Spring-entrant freshmen, including those who participate in the Fall Program for Freshmen, have even higher graduation rates at 92% after five and a half years.

Fall-entrant transfers have 4-year graduation rates at 89% or 90%, whereas spring-entrant transfers have comparable graduation rates around 85%. Graduation rates improved over time, along with differential graduation rates by sub-population, which have narrowed.

Academic probation brief: profile of new Berkeley undergraduates on academic probation
OPA’s Sereeta Alexander partnered with colleagues in Undergraduate Admissions and academic units to build on a previous report and continue campus dialogue. This year’s brief highlights the demographic and academic correlates associated with new Berkeley students being placed on academic probation, followed by the relationship between early academic probation and graduation rates.

As shown in the graduation rates brief, Berkeley students perform well academically; however, despite these positive trends, a subset of students are placed on academic probation early in their academic studies at Berkeley. While the numbers represent only a fraction of new students (~5%), among those entering in fall 2011, 200 freshmen and 160 transfers were placed on probation as a result of either their first- or second- term cumulative Berkeley grade point average (GPA).

Common across both freshmen and transfer entrants, we see graduation rates suffer for those on academic probation in their first year at Berkeley. Only about 60% of students on first-year probation graduate within the measured timeframe, while over 90% of those not on probation graduate in the same number of semesters.

For transfers in particular, we find international students have a significantly higher probation rate than their domestic counterparts, whereas for freshmen, results show prior GPA (i.e., high school GPA) is a major factor associated with first-year probation. Also of note is our discovery of a relationship between first-generation college and probation for freshmen, but not transfers.
What do new students say?

New students’ start

An overwhelming majority of students reported that their Berkeley experience was off to a good start. When asked to complete the sentence, “overall, I’m off to a ____”, nearly 70% of new freshmen and 65% of transfers said they were off to “a very good start” or “a really fantastic start.” That figure jumps to 92% for freshmen and 89% for transfers when “a good start” is included.

SONS: first impressions of Berkeley

Each fall semester, newly entering freshmen and transfer students are invited to complete the SONS, sharing their initial impressions, concerns, and experiences as they transition to UC Berkeley. SONS covers topics such as college aspirations and learning goals, perceived skill levels across a number of academic and social areas, anticipated obstacles and support systems, affordability and financial aid, and the campus climate for diversity. In addition, SONS gives us valuable baseline information that can later be mapped to the continuing students’ experiences (via the UC Undergraduate Experience Survey — UCUES), and academic outcomes.

Perceived obstacles to success

When asked about what they perceived as their obstacles to success during the first year, freshmen were more concerned about poor study behaviors; feeling depressed, stressed, or upset; and bad study environments. Transfer students shared concerns about feeling depressed, stressed, or upset, in addition to concerns over poor study behaviors and the impact of paid employment and competing family responsibilities.
What are we doing to improve the curricular experience?

In our third year of implementation, OPA’s Jenna Allen continued our partnership with the Vice Provost – Teaching, Learning, Academic Planning and Facilities (VP-TLAPF), the Registrar’s Office, and faculty and staff in impacted units to direct a portion of fee increases toward the delivery of courses in key areas of the curriculum that are critical to undergraduate students’ intellectual development, academic success, and timely graduation. The table to the right shows progress to date with increasing offerings to improve students’ access to the courses they need.

This project provided good background to determine the functionality and metrics that we want to include in our Cal Answers curriculum dashboards and apply to curriculum management and planning for all courses on the campus.

### Cal Answers: student curriculum dashboards

Student Curriculum reporting – an Operational Excellence (OE) and Executive Vice Chancellor and Provost (EVC) supported project - brings course offering and enrollment data into Cal Answers. The first release of dashboards provides campus units with tools to both monitor their curriculum today and plan for tomorrow:

#### Curriculum Long-Term Planning:
This dashboard provides an official source for course offerings, enrollments, average class size, and student credit hours for any course by semester and over time. With 10 years of historical data, campus units can use this tool to identify curriculum trends.

#### Weekly Enrollment Management:
This dashboard allows campus units to track classes offered, enrollment counts and limits, wait list counts and limits, percentage of classes filled, and more during the registration period. Updated on a weekly basis, campus units can use this tool to monitor the curriculum and make timely decisions about course offerings based on demand.

### Common Good outcomes to date

<table>
<thead>
<tr>
<th>Field</th>
<th>Common Good outcomes to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math &amp; Science (2010-13)</td>
<td>10 Increase in Course Section Offerings Above Baseline</td>
</tr>
<tr>
<td>Reading &amp; Composition (2010-13)</td>
<td>234 Increase in Course Section Offerings Above Baseline</td>
</tr>
<tr>
<td>Foreign Language Instruction (2011-13)</td>
<td>3,697 Increase in Course Enrollments Above Baseline</td>
</tr>
<tr>
<td>New undergraduates were asked to indicate their level of satisfaction in accessing courses. As seen in the chart below, satisfaction levels were high with the variety of courses available, availability of courses to fulfill pre-requisite requirements, and general education/breadth requirements.</td>
<td></td>
</tr>
</tbody>
</table>

### Satisfaction accessing courses

<table>
<thead>
<tr>
<th></th>
<th>New Freshmen</th>
<th>New Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety of courses available</td>
<td>94%</td>
<td>86%</td>
</tr>
<tr>
<td>Courses available to fulfill pre-requisite requirements</td>
<td>83%</td>
<td>86%</td>
</tr>
<tr>
<td>Courses available for general education/breadth requirements</td>
<td>83%</td>
<td>88%</td>
</tr>
<tr>
<td>Access to small classes</td>
<td>72%</td>
<td>73%</td>
</tr>
<tr>
<td>Get into lectures/seminars of your choice</td>
<td>64%</td>
<td>78%</td>
</tr>
<tr>
<td>Get into discussion sections/labs of your choice</td>
<td>64%</td>
<td>75%</td>
</tr>
</tbody>
</table>

We know students’ ability to gain access to classes is critical in lowering their time to degree, so we continue to support Common Good Curriculum, develop curriculum reporting in Cal Answers, and innovate methods to understand degree pathways...
Understanding degree pathways

Looking forward we will provide tools that allow us to understand better the pathways students take – or need to take – to get their degrees and add important information to the discussion on how best to mount the curriculum and support advising to help all students graduate on time.

As an introduction to what we may see, OPA’s Russ Acker created the chord diagram to the right for our 2011-12 Annual Financial Report. This graphic of 2011-12 bachelor’s degree recipients shows the portion of courses taken outside of their college or division, and indicates that our students went well beyond satisfying their major requirements. As a total graduating class, 54% of the courses taken were not in their college or division. This figure would be even higher if we looked outside the individual department rather than the college or division.

As academic units begin to get greater insight about their trends in offerings and demand for courses, we also want them to understand their interconnectedness with other units on campus and help us develop strategies to meet their individual unit and common good goals.
In addition to improving students’ experiences navigating the curricular system, we wanted to understand how they make decisions about the courses they take. OPA partnered with advising staff to share what we knew from SONS, academic program review, and curricular review in order to help students and advisers succeed...

**SONS: curricular decisions**

The SONS briefing note on curricular decisions shows the top factors influencing course selection are shared among new student populations - specifically courses that fulfill major requirements, courses they found interesting, and courses where they were intellectually curious. The most influential source of guidance for freshmen and international students was another student, for transfers it was a major advisor, and for California and out-of-state domestic students it was a CalSO counselor.

We also found that high school teachers and counselors, friends, family, and fellow Cal students all recommended using AP credit instead of taking courses, but Cal advisors recommended students take courses at Cal. Also, California residents and out-of-state domestic students were much more likely to come with AP credits than international students.
Locally grown, locally owned advising

OPA has been supporting campus advising and the work of the Advising Council in multiple ways. In support of the Program Effectiveness Working Group, one of three working groups convened by the Council, Elizabeth Wilcox (a joint report to OPA and VP-TLAPF) created a macro-level conceptual model for developing learning outcomes for undergraduate advising. We also developed a range of assessment tools to be used with existing analytical tools like Cal Answers and UCUES to help advising units better evaluate service and identify strategic planning issues relevant to long-range planning.

This work was presented at the Western Regional National Academic Advising Association (NACADA) conference and the team presentation – Locally Grown, Locally Owned Advising Assessment – was recognized as the Best of Region 9. The OPA contribution to this presentation featured blended strategies for using institutional data and macro-level analysis to support and facilitate local assessment. Among the key macro-level findings were:

- There is an important relationship and positive correlation between satisfaction with faculty and staff advising.
- Differences in the structural design and delivery of advising greatly impact satisfaction levels across Berkeley’s Schools and Colleges.
- The resourcing and operational strategies used to support and deliver advising also impact satisfaction levels.
- There is an important relationship between satisfaction with advising and other key components of the academic experience (e.g., access to faculty outside of the classroom, opportunities for research, and engagement in enrichment programs).

OPA is continuing to support the work of the Council in Phase II of this important change initiative and is currently developing standard metrics to support planning and decision making for Berkeley’s more than 100 curricular and co-curricular advising units.
How can we make Berkeley more affordable?

SONS: affordability perspectives

In the SONS, Berkeley undergraduates also shared with us their perspectives about affordability. California residents (72%) and students with family incomes less than $80k (69%) are more likely to agree costs are manageable than out-of-state (50%), international (56%), and students from families with incomes between $80k and less than $150k (61%).

There was no difference by residency types when asked about concern paying for the next academic year, with 70% indicating some level of concern. When asked about strategies to reduce expenses and meet first year financial needs, California residents (84%) and out-of-state students (70%) had applying for aid as a top strategy. International students, instead, planned to save on textbooks (51%) and take more classes (36%) as top strategies.

Student Financials reporting – an Operational Excellence project – joins OPA’s Kelle Jacobs and the Financial Aid and Scholarships Office to facilitate the best decisions possible regarding access to affordable education and financial planning. These reports provide insight to critical campus goals:

- Access: Who are we serving with our aid programs? How can we preserve and improve access for qualified students from a broad socioeconomic range?
- Affordability: Is a UC Berkeley education a good value? Are qualified students at all levels of financial need able/willing to pay the net cost of attendance?
- Academic Excellence: How can UC Berkeley optimize the allocation of its financial aid budget to attract/retain a high-quality and diverse student body?
- Financial Sustainability: To what extent will changes in outside aid levels and trends in the financial profiles of admitted students impact UC Berkeley’s financial model?
Andrew Eppig (a joint report to OPA and Vice Chancellor for Equity and Inclusion) found respect rates at Berkeley vary greatly among groups and correlate with the relative size of the affinity group on campus. Berkeley students report hearing stereotypical or negative views more frequently from other students, rather than from faculty or other instructors. For students in under-represented groups, more frequent reports of negative views correlate with lower rates.

Under-represented groups are more likely to feel that they value diversity more than the campus. When under-represented groups feel that diversity is as important for the campus as it is for them personally, there is a buffering effect, such that respect rates are increased. Students who are members of multiple marginalized groups are more likely to feel lower respect rates compared to students who are members of fewer marginalized groups.
Looking ahead

Empowering the campus: developing UC Berkeley’s analytical community
Collectively creating a culture of evidence

Successes on campus come from working together. We believe the same is true as we create a culture of evidence on campus. We know together we can make decisions better...

**We include and excel, together**

In Berkeley’s 2011-12 Annual Financial Report, OPA’s Alan Underwood produced the honeycomb graphic to the right. Our intention was to illustrate that the successes one sees at Berkeley are not isolated incidents but part of what is generated from the breadth and depth of the Berkeley campus. Our goal in producing this graphic was to see our interconnectedness as we celebrate our accomplishments of the year.

Looking ahead, we hope as units obtain greater access to institutional data they not only look at the trends for their units, but also for other units on the campus. We envision that together we can identify ways to strengthen our depth and breadth as we strive to keep Berkeley great.

2012-13 Berkeley successes: due in part to the depth and breadth of campus collaboration
In Summer 2012, Berkeley hosted our second **IDMG Summer Series**, including a capstone symposium. Our goal through this series was to have faculty and staff think about ways to analyze and present data, particularly as more information becomes available through Cal Answers. The symposium featured keynote speaker Jeff Heer, who discussed **Interactive Data Analysis**, along with presentations by IDMG Data Visualization Contest winners; this session showed how far we have improved developing data presentations and reinforced our Berkeley Operating Principle “we imagine and innovate.” In June 2013, Berkeley held an IDMG Summer Session with Mark Rittenberg: “Storytelling is Part of Presenting Data Better.” These sessions would not have been possible without the hard work and dedication of the **Cal Assessment Network (CAN)**, **Business Process Analysis Working Group (BPAWG)**, Policy Analysts Roundtable, OE, AVC-CFO, and **Learning + Organizational Development** units. If you have ideas or want to support our 2014 IDMG Summer Series, please contact OPA’s IDMG Program Manager Josh Blatt.

**IDMG Roadmap**

![IDMG Roadmap Diagram]

We continue to develop our IDMG roadmap and support for our goal-making campus data easily accessible, reliable, consistent, and secure to support informed planning, decision-making, and communication...
Cal Answers is a tool that simplifies the way we access, view, analyze, and present data to help us make decisions better and achieve campus goals. From performing big tasks like developing your unit’s annual budget to conducting day-to-day inquiries like reviewing last month’s on-contract spending, Cal Answers helps you quickly and easily find the data to inform your work. The Western Association of Schools and Colleges (WASC) – in its highest rating (highly developed) for our graduation rate submission – cited Berkeley’s investment in Cal Answers as a factor in that rating.

OPA is partnering with the Information Systems and Technology Enterprise Data Warehouse team and other campus experts to integrate data-collection systems, consolidate reporting tools, and enhance analytical support to improve the quality of operational planning and decision-making campus-wide. Through the efforts of many initiatives each focused on a specific subject area, the team is building out the data incrementally. As more subject areas are added, cross-functional reporting and integrated analysis capabilities will improve, enabling richer and more robust reporting capabilities than any single campus operational system could provide.

The power of integration

Cal Answers provides quick, easy access to accurate information that will help you get fast facts and so much more…
As of June 2013, Cal Answers includes student curriculum and student financials dashboards, along with student demographics/outcomes and procurement dashboards (including this one produced by OPA and IST’s Danny Grieb.) You can use Cal Answers to monitor your goals, improve your processes, inform your decisions, and communicate to internal and external colleagues.

Over the summer, Cal Answers data will expand to include:
- Human resource census and diversity reporting
- Principle investigator grant activity
- Student cumulative debt
- Course grades
- Course enrollments by majors, along with a view on students and the courses they take
- Expanded procurement data to consolidate spend activity

Future releases in the planning stages include:
- Instructor activity and time/location for courses (i.e., Class Schedule and Instructor Record data managed by OPA’s Linda Wong)
- Contracts and grants, along with financials
- UC Path activity

So get involved with Cal Answers today! We need your feedback on what works and how we can make it better. OPA’s Jean Calise is managing communications and training, along with our website – calanswers.berkeley.edu – which is the starting point for all Cal Answers activity: log in, get started as a new user, sign up for newsletters, catch up on release news, review learning materials, and more. With you, we can help Berkeley continue to reimagine the world and shape the future together.
Office of Planning and Analysis (OPA)
- OPA home page
- Analyses and reports
- Campus statistics
- Campus surveys

Undergraduate outcomes
- Graduation Rates brief
- Academic Probation brief
- Factors Leading to Academic Probation for New Undergraduates presentation

Survey of New Students (SONS) briefing notes
- First Impressions at Berkeley
- Curricular Decisions
- Affordability Perspectives

Advising support presentations
- Student Responses to Academic and Co-Curricular Advising
- Locally Grown-Locally Owned Advising Program Evaluation
- Developing Learning Outcomes for Undergraduate Advising

Campus climate presentation
- Assessing Campus Climate Trends for Undergraduates

Institutional Data Management and Governance (IDMG) materials
- IDMG home page
- 2012 IDMG Summer Series and Symposium

Cal Answers materials
- Cal Answers home page
- We Simplify video
- Quick Start guide and video
- Student Curriculum dashboards
- Student Demographics and Outcomes dashboards
- Student Financials dashboards
- Procure to Pay dashboards
- Active initiatives, including HR Census, PI Portfolio, and Undergraduate Applicant

NOTE: If you are viewing a hard copy of our annual report and wish to access these links, visit the online version with active links on the OPA website: http://opa.berkeley.edu/
Appreciations

The word cloud below highlights some of the Berkeley units we had the privilege and honor to work with in 2012-13. We learned from you, while our work helped support your efforts and our campus goals. We look forward to working with you again in 2013-14!

NOTE: As statisticians, we know it is 100% likely we have inadvertently forgotten to mention some key partners in this report. We apologize, and please know that any such omissions are statistically significant to us because we include and excel together.
Office of Planning and Analysis

655 University Hall
Berkeley, CA 94720
opa.berkeley.edu

Contact Us

Pamela Brown – Executive Director (phb@berkeley.edu)

Russ Acker – IDMG Support (racker@berkeley.edu)

Sereeta Alexander – Campus Surveys and Academic Program Support (sereeta@berkeley.edu)

Jenna Allen – Academic Program Support (jenna.allen@berkeley.edu)

Josh Blatt – IDMG and Operational Excellence (jblatt@berkeley.edu)

Jean Calise – Communications (jeancalise@berkeley.edu)

Andrew Eppig – IDMG and Equity and Inclusion (aeppig@berkeley.edu)

Danny Grieb – Cal Answers Procure to Pay (daniel.grieb@berkeley.edu)

Kelle Jacobs – Cal Answers Student Finance (kelle@berkeley.edu)

Ridhima Nerlekar – Campus Surveys (nerlekar@berkeley.edu)

Alan Underwood – Enrollment Planning, Peer Analyses, and College Guides/Rankings (alanu@berkeley.edu)

Elizabeth Wilcox – Academic Program Support (ewilcox@berkeley.edu)

Linda Wong – IDMG Support/CSIR (linwong@berkeley.edu)