# CSUDH RFP for Action Research Project for Fostering the Strategic Use of Data to Improve Student Success

# What problem are you trying to solve?

The number one problem that needs to be addressed on the CSUDH campus is extremely low retention and graduation rates.

Within an action research paradigm this problem is three fold:

- 1. Deficiencies in using existing data in PeopleSoft that is available through system and campus dashboards due to either lack of access to the data or a lack of knowledge about the full scope of available information
- 2. Missing information in the form of any comprehensive and regularly sought feedback from students about the conditions that lead to their success or failure
- **3.** Absence of a local, campus-based strategy for the triangulation of data in CSU dashboards, student feedback, and trends in academic offerings that are based on the unique and campus-specific needs of a highly at-risk population of Dominguez Hills' students

# What evidence do you have that this is a problem?

Evidence of CSUDH having low retention and graduation rates in the system can be found in the summary table below.

CSU - Dominguez Hills Graduation Initiative: 2025 Goals						
FIRST-TIME/FULL-TIME FRESHMAN GRADATION RATE GOALS						
	<u>Baseline</u>	<u>Peer Group</u>	<u>Additional</u>	<u>2025</u>		
_	<u>Rate</u>	<u>Benchmark</u>	<u>Improvement</u>	<u>Goal</u>		
6-Year Graduation Rate Goal (2019 Cohort)	28%	45%	12%	40%		
4-Year Graduation Rate Goal (2021 Cohort)	4%	N/A	8%	12%		
TRANSFER GRADATION RATE GOALS						
4-Year Graduation Rate Goal (2021 Cohort)	56%	N/A	6%	62%		
2-Year Graduation Rate Goal (2023 Cohort)	22%	N/A	8%	30%		
FRESHMEN ACHIEVEMENT GAP GOALS						
6-Year URM/non-URM Graduation Rate						
Gap Goal (2019 Cohort)	10%	N/A	50%	5%		
6-Year Pell/non-Pell Graduation Rate Gap						
Goal (2019 Cohort)	2%	N/A	50%	1%		

The following factors related to the history and access mission of the institution lead to low persistence and graduation rates on campus.

<u>Factors Impacting CSUDH's Low Retention and Graduation</u> Diversity: % Underrepresented Minority Enrollment Access: % of Pell Recipients Overall Graduation Rate CSU System Ranking 3rd Highest 2nd Highest Lowest URM Graduation Rate Black and Asian Student Graduation Rate Difference in Graduation Rate by Gender Difference in Graduation Rate within Ethnicities by Gender

Proportion Part-Time Students Proportion of Students Age 25+ Student Preparation - Average High School GPA Student Preparation - Estimated Median SAT/ACT Federal Loan 3-Year Default Rate Total E & G Expenditures per Student FTE Percent of Full-Time Faculty Full-Time Undergrad Student Faculty Ratio Low Lowest Little Difference Asian and Non-URM Males Do Better Highest Highest 2nd Lowest Lowest Bottom Quartile Middle Lowest High

#### **Deficiencies in Using Existing Data**

Campus dashboards are in early phases of development and the system dashboard has recently become available. Faculty and staff with responsibility for designing and implementing interventions are unfamiliar with the content, scope and potential use of available information. A preliminary example of the types of data that are currently not being mined by the campus community are outlined below.

#### Student variables

Trends in academic outcomes in GE, perquisites, and major courses with change of major patterns in disciplines

Association between students' needs like employment, finances, number of dependents and childcare on campus policies

Proportion of minority and female faculty in relation to gender differences in graduation rates Student engagement variables

Participation in HIPS, time with faculty outside the classroom, academically relevant courses, etc. Variables related to a sense of belonging

Clubs, leadership and service opportunities, cohort groups, being with the same advisor, etc. Institutional and programmatic variables

Time gap between declaring a major and taking the first course in the discipline Impact of time lapses between changing majors and delay in degree attainment Source of advising and the selection of a major

General reasons for delayed degree attainment and specific reasons associated with majors Benchmark for persistence levels in disciplines or majors for other institutions in our Carnegie Classification

The above list of variables represent some of the potential data items that exist and can be used by faculty and staff to design targeted interventions, change policies, and implement initiatives that close achievement gaps.

#### Missing Information in the Form of Student Feedback

PeopleSoft information allows us to observe and track the relationships between student and institutional variables with student success outcomes. To be able to establish stronger cause and effect relationships between students' course taking patterns, and persistence and graduation, we need to collect feedback on students' perceived reasons for progress or the lack of it on campus. This information can be collected through student surveys at strategic points in students' progression from entry to exit in the CSUDH pipeline. Currently, systematic and regularly scheduled student feedback isn't available on campus.

# Lack of Faculty Input in Triangulation of Data Available in Dashboards, Student Feedback, and Academic Offerings to Improve Programs and Policies

Lack of time and resources keeps the CSUDH action research program from improving graduation rates. Faculty represent an untapped resource and their experience both in and out of the classroom is vital in our effort to improve student success. They need time to help staff and the institution connect the dots between dashboard metrics on course taking patterns, student feedback, and other programmatic offerings at the disciplinary level. Currently, this effort on the part of faculty is spotty and restricted to a few selected studies. Lacking is a complete framework in which multiple groups of faculty and staff triangulate data from several sources, and create polices that build on each other in a lock-step sequence. Having a coordinated institutional effort will enable students to succeed as freshmen from entry to exit in a four year period.

# What is your hypothesis for the cause of this problem?

When dashboard metrics, student feedback and a study of the characteristics of CSUDH academic offerings are assessed as a whole in a collaborative effort by faculty and staff, it will enable the campus to identify meaningful interventions targeted at Dominguez Hill's unique student body.

# What is your proposed methodology for validating AND TESTING THIS HYPOTHESIS, AND HOW WILL YOU INCORPORATE NATIONAL RESEARCH FINDINGS INTO THIS PROCESS?

<u>Strategy 1: Implement Action Research.</u> Implement a comprehensive program of action research involving student surveys that document student feedback. See attachment titled CSUDH Action Research Surveys Aimed at Closing the Achievement Gap for details.

Currently, CSUDH administers two surveys to collect student feedback and outcomes. These two involve the NSSE for assessing student engagement and the CLA for measuring general education learning outcomes. A third survey listed as the Survey of Non-Returning Students is scheduled for implementation in November 2014. The administration of these three surveys is in progress for 2014-15. In addition to these three initiatives there are several other important milestones in a student's career when CSUDH is missing the opportunity to learn about why students do or do not succeed. These include opportunities to collect student feedback through surveys of admitted students who do or do not enroll, enrolled student satisfaction surveys, withdrawing student surveys when students ask for transcripts, and surveys of graduates and alumni. The action research project being proposed here extend the current work of the CSUDH office in a meaningful way and enhance the use of data to make policy decisions. This action research proposal will involve faculty and IR personnel who collaborate to design and implement these studies. There are no such teams providing thought leadership in connecting IR surveys and dashboard information at this time. A total of eight student surveys will form the core of the action research proposal. Each study team will involve an IR staff member, two faculty and one undergraduate student researcher identified through one of the CSUDH campus labs promoting undergraduate student research as HIPS. The two labs with faculty and students involved on campus, will be the Urban Research Center in Sociology and Applied Cognition Lab in Psychology. The teams will be assigned to develop and refine the survey methodology, produce reports of survey findings, and use the results to propose improvements in student retention and graduation.

Additionally, the teams of CSUDH survey researchers and IR personnel will conduct literature reviews on each survey being implemented and will incorporate best practices in their study design.

#### Strategy 2: Use Research Findings to Change Policy and Programs in Retaining and Graduating Students.

Having data and action research findings does not alone guarantee campus change that can lead to improved retention and graduation. The next step is to involve faculty and staff stakeholders in using the data to change ineffective policies and programs. For graduation and persistence rates to improve on campus, each team of faculty and staff implementing surveys will be tasked to propose at least two substantive changes in campus policies or programs. This exercise in closing the loop requires the action researchers to extend their work by connecting the results of surveys with students' academic, personal and demographic histories in PeopleSoft.

Funding provided through the Chancellor's Office paves the way for faculty to take time away from their regular teaching workload to help the campus improve student retention. Faculty workload does not carry any responsibility for data-driven institutional research. However, they possess the specialized knowledge of research methodology and the framework of varied rich academic disciplines to help CSUDH design and implement new interventions. By accepting the responsibility with paid assignments faculty will act as an advisory group or as special consultants for the CSUDH action research program. Having accepted additional paid responsibility beyond regular faculty commitments will allow such individuals to combine their personal and professional expertise to help the University reduce the gaps in student retention and graduation.

National research findings document a voluminous body of literature showing a need for us to not simply assess for the sake of assessing, but to use our findings to make a difference. CSUDH will complete the proposed action project with faculty and staff teams to propose at least two substantive changes in campus policies or programs. These proposals will stem from each of the eight survey research initiatives and available dashboard information.

<u>Strategy 3: Offer Workshops on Data Analytics.</u> Create workshops on data analytics for the CSUDH faculty and staff by IR personnel and some faculty power users of institutional data. The goal will be to educate the campus community about the scope and availability of existing information found in campus and system dashboards.

National research on what works with offering effective workshops will be incorporated in the workshop design.

#### What actions will you take and when?

Projects under the three strategies will commence in Spring 2015 and conclude in Fall 2016.

# Spring 2015 and Summer 2015 Activities:

<u>Workshops on Data Analytics</u>: Design, promote and run two comprehensive workshops for faculty and staff engaged in improving student retention and graduation. The audience for the workshops will include management, staff, faculty and administrators in CSUDH colleges, Academic Affairs and Student Affairs. The purpose of the workshop will be to familiarize those with responsibility for student success with existing student feedback available in NSSE and CLA surveys, and People Soft information in campus and CSU system dashboards.

The workshops will be offered by a joint team of faculty and IR personnel.

There will be pre and post workshop assessment to determine participants knowledge and skills of PeopleSoft data and metrics available in CSU dashboards. Participant satisfaction will be assessed as well.

<u>Implementing Action Research</u>: In Spring 2015, the Survey of Non-Returning Students, NSSE and CLA administration will proceed as on-going and currently scheduled institutional programs. These three studies are added to the action research agenda as there are currently no joint faculty and staff teams overseeing their implementation or use of results. As part of the action research agenda it will be possible to obtain release time for faculty and stipends for students to engage with these studies like the other new research programs proposed below. To these three existing studies will be added five new CSUDH action research initiatives:

# **Existing Initiatives**

- (1) NSSE
- (2) CLA
- (3) Survey of Non-Returning Students

# New Surveys

- (4) Survey of Students Requesting Transcripts
- (5) The Admitted Student Questionnaire (ASQ) a standardized survey by College Board
- (6) Student Satisfaction Surveys
- (7) Survey of Graduating Students, and
- (8) Alumni Survey

Under the proposed action research program the teams comprising of IR staff, two faculty members and an undergraduate student researcher will develop the survey methodology for implementation of each study in Spring 2015.

Data collection for the surveys, noted above will begin in Spring 2015 and complete in Summer 2015. The Survey for Non-Returning Students is currently anticipated to be a phone survey conducted with CampusLabs software. The Survey of Students Requesting Transcripts is likely to be an on-line survey asking students about their reasons for leaving CSUDH that can be implemented in Spring 2014. The Admitted Student Survey by the College Board is anticipated to be administered to all 2015-16 admitted students after April 1, 2015. The Student Satisfaction surveys will be designed and administered in Spring 2014. The survey of Graduating Students is proposed as an on-going survey administered at commencement or just prior to the ceremony. Finally, Alumni Survey will also be an on-going and regularly scheduled survey that is administered to alumni five years after graduation. The first such CSUDH Alumni survey will be administered in Summer 2015. There will be pre and post assessments to determine faculty participants knowledge, skills, and satisfaction with studies aimed at improving student graduation. Similarly, student participants will undergo pre and post assessments designed by their faculty mentors that document gains in their skills in research methodology.

#### Fall 2015 Activities:

The proposed deliverables for each of the eight surveys will be completed in Fall 2015. They include the following:

# Report 1: Comprehensive Survey

This will include a report fit for an academic journal publication on a survey that includes all the topics included in behavioral science disciplines. The report would have a problem, review of literature, research methodology, results, and discussion. The goal will be for the faculty, staff and student team members to produce a report that can be published or be accepted for presentation in local or national forums. This report will demonstrate the use of HIPS employing undergraduate student researchers who are trained in research methods while simultaneously assisting the CSUDH campus community to make data driven decisions.

#### Report 2: Linking Survey Findings to Institutional or System Dashboards

This report will examine survey findings in the context of available institutional data in PeopleSoft and system dashboards. Such data could include student course taking patterns, factors associated with CSUDH academic and student affairs programs, or other institutional variables. Some examples of questions that link survey responses to data available in campus dashboards are mentioned below.

Example 1. If withdrawing students state that courses were scheduled at inconvenient times then study the schedule of offerings at the institution, college and program level. Do the students need weekend or evening classes? Will on-line or hybrid courses provide a solution? Are courses offered at times that are convenient to faculty or students or based on availability of facilities?

Example 2. If the students report feeling alone or isolated on campus then study the link between their feedback to variables like that of ethnicity, gender, level of academic preparation, and financial need to persistence patterns. Examine the nature of courses attempted by sub-groups of students to identify the presence or lack of HIPS in their courses. Alternatively, it would be possible to examine participation rates for these students in Student Affairs programs and clubs.

# Report 3: Two or More Recommendations for Program or Policy Changes Leading to Higher Graduation Rates

This report will provide two or more recommendations for change on campus. It will develop an implementation plan by involving campus stakeholders in the offices or functions that are involved. The action research team will partner with the relevant administrators and staff to do the following: research the logistical steps involved in the change; develop a timeline; provide an estimate of needed resources; and complete the work of the action research project with a plan that is ready to be executed.

# Would multi-campus collaboration strengthen your solution? If so are you willing to collaborate with other campuses using similar solutions?

A multi campus collaboration would be useful in providing a forum for the exchange of ideas regarding research methodology and best practices in use to increase student persistence. There are many common

survey tools being used to collect student feedback in the system. One opportunity for collaboration would be for a few schools in the system to organize a colloquium in which faculty and staff present their studies for improving student success through the use of data found in dashboards. Future cross institutional teams could work on collectively employing NSSE or CLA results to make improvements on their campus.

# How and when will you know if your project is successful? What short and long term metrics/targets will you establish to provide an indication of success? How will you sustain and potentially increase the scale of your project once the one-time funds are gone?

Following are the short term metrics for the successful completion of the project:

- Workshops offered on data analytics for campus stakeholders
- Implement action research involving eight survey studies
- Produce three written reports on each survey
- Pre and post assessment of workshop participation to document gains in campus community's knowledge of data available to improve retention
- Pre and post assessment to show satisfaction of faculty and student participants in their ability to increase student retention on campus
- Faculty pre and post assessments of undergraduate student researchers' knowledge of research methods
- Publication and presentations from the survey research teams to regional or national audiences

The long term metrics for the successful completion of the project include reaching the freshmen and transfer graduation goals, and the URM/non-URM and Pell/non-Pell gap goals identified below for 2025.

CSU - Dominguez Hills Graduation Initiative: 2025 Goals						
FIRST-TIME/FULL-TIME FRESHMAN GRADATION RATE GOALS						
	<u>Baseline</u>	<u>Additional</u>	<u>2025</u>			
_	<u>Rate</u>	<u>Improvement</u>	<u>Goal</u>			
6-Year Graduation Rate Goal (2019 Cohort)	28%	12%	40%			
4-Year Graduation Rate Goal (2021 Cohort)	4%	8%	12%			
TRANSFER GRADATION RATE GOALS						
4-Year Graduation Rate Goal (2021 Cohort)	56%	6%	62%			
2-Year Graduation Rate Goal (2023 Cohort)	22%	8%	30%			
FRESHMEN ACHIEVEMENT GAP GOALS						
6-Year URM/non-URM Graduation Rate						
Gap Goal (2019 Cohort)	10%	50%	5%			
6-Year Pell/non-Pell Graduation Rate Gap						
Goal (2019 Cohort)	2%	50%	1%			

The action research projects outlined in this proposal will assist in making steady annual increments in reaching these goals.

Once these one-time funds are no longer available the campus will have benefited by having built the infrastructure to conduct on-going studies. While the faculty and students will not be available to work on these assessment studies the process will be in place for Institutional Research to continue administering the surveys

on an on-going basis. The involvement of faculty and staff through the action research paradigm helps to change the campus culture in favor of making more data driven decisions. The changed culture will provide momentum for further studies. The scale of the current action research projects can be expanded in the future to include studies that link campus and Clearinghouse data.