

Cal-PASS

Transitions

Success at Every Level

From the Executive Director:

OLAP Improves Reports, Analysis

Online Analytic Processing, or OLAP, is a word that Cal-PASS staff will be using a great deal in the coming months. OLAP is a business intelligence tool that enables better data reporting and analysis. Cal-PASS members who have used our current queries know that these reports are static, providing a snapshot of a particular point in time—like a picture that cannot be changed. OLAP makes that picture come alive. Users can manipulate cubes to drill down, to look at specific groups, add variables, and change the view (how they look at the data).

For example, one of the cubes being developed lets the user select the highest level math course a student successfully completed in high school and then identi-

fies the first math course they took in post-secondary education. The user can look at the success of these transitioning students and aggregate the results by ethnicity and gender. Using the locally assigned password, the views are just a few clicks away. Other cubes look specifically at the effect of interventions such as learning communities and special classes.

These cubes provide flexibility that can greatly improve the user's understanding of what is being studied, however most users will require some training first. Cal-PASS will be conducting these trainings throughout the coming year.

None of this work would be possible without the generous support of the William and Flora Hewlett Foundation and the James S. Irvine Foundation. These foundations have been actively supporting our work. Several foundations support Cal-PASS and enable state dollars to be leveraged to allow users to examine the data around particular innovations or transition points and, where appropriate, make changes to practice.

The first rollout of these cubes was at the SSPIRE conference in mid-September and met with great interest and success. Cal-PASS will be developing a complete rollout schedule in the coming months. Look for announcements on the Cal-PASS Web site at www.calpass.org.

Cal-PASS Sessions at Conference

The 2008 Strengthening Student Success Conference* is right around the corner, taking place at the Marriott Hotel in Anaheim October 1–3. The following are highlights of the Cal-PASS strand sessions in which conference attendees will have the opportunity to participate:

Presenters will explore ways that qualitative and quantitative data can be used to assess, adjust and advance interventions to increase student success by integrating student services and instruction in the session **“Using Data to Improve Student Services and Instruction”**; participants will engage in an interactive discussion of placement systems at community colleges and gather ideas for refining placement in the session **“Leveraging the California Standards Test: An Early Alert System for Remediation Needs of Entering Community College Students”**; the presentation **“Bridging Worlds in Education for EL Students”** will describe two bridge programs created to help high school EL students transition to community college; the **“Algebra: Readiness and Support”** session will present two prongs of Algebra readiness: a regional

continued on page 4

In This Issue...

Data Cube Development	2
Concurrent Courses Initiative	2
Pre-Calculus Document	3
Custom Data Files	3
Data Submission	4
How to Reach Us	4

Developing Data Cubes: User-Friendly Reports

As described in the executive director's column this month, Online Analytic Processing (OLAP), or "data cubes," is an exciting advancement in Cal-PASS' capacity for data reporting and analysis. While the development process is lengthy, it begins quite simply with our users asking questions.

These questions are first answered with custom reports developed by the research team in collaboration with local faculty and researchers. The initial reports help define the key metrics and provide the logic for designing the underlying data structure and programming for cube development. The cubes are designed using Microsoft SQL Business Intelligence Design studio, which integrates with Cal-PASS' current data management and analysis processes. Once the prototype cube has been designed, the IT department deploys the cube on a password-protected user portal for testing and improvement. While the standard displays in design studio are functional, Dundas controls and similar overlays are being used to make information more accessible.

Screen shot of a cube showing success rates of project participants in all English and math courses at an institution for 2007–2008.



The figure above is a screen shot of a cube designed to assist the evaluation of a special project. As an example, the display shows the success rates of participants in all English and math courses at an institution in a single academic year. Authorized users can use this cube to add more detail, such as adding "Course Transfer Status" to compare transferable and non-transferable classes. Cube deployment is accompanied by user-training workshops and "webinars" to help users take advantage of this cutting-edge, on-demand data access.

The Concurrent Courses Initiative

In support of its commitment to success at every level, Cal-PASS will partner with the Community College Research Center (CCRC) at Teachers College, Columbia University, and the James Irvine Foundation to provide student outcome data for the Concurrent Courses Initiative. This initiative supports eight concurrent course partnerships among high schools, community colleges, and universities across California. These partnerships each have a plan to encourage college attendance among traditionally underrepresented populations on their campuses by offering academically rigorous, career-focused dual enrollment opportunities in disciplines such as renewable energy, healthcare, and multimedia. These opportunities will give high school students an early start on college careers in these fields by allowing them to take college courses and receive credit from both their high school and the college.

Past research has found that participation in dual enrollment is positively related to student outcomes, such as enrollment in college and progress to a degree. CCRC will use the student outcome data provided by Cal-PASS to continue studying the benefits of concurrent enrollment, which will provide information vital to filling a nagging gap in the research as well as revealing ways in which to improve education policy and practice.

Cal-PASS has already begun updating member-sharing agreements to allow CCRC access to the participating institutions' data. Cal-PASS will participate in this initiative until June 2011. For more information, contact Lauren Davis Sosenko, associate director for Special Projects, at lsosenko@calpass.org or (562) 743-9304.

Pre-Calculus Deconstruction Document on Horizon

This summer, Cal-PASS brought together 13 math educators from around the state to deconstruct the 39 K–12 content standards within math analysis, trigonometry, and linear algebra. These three math disciplines are often combined in pre-calculus courses, and this Pre-Calculus Deconstruction Project marks the fourth math content standards deconstruction project by Cal-PASS. The Algebra I, Algebra II, and Geometry Content Standards Deconstruction publications are available on the Cal-PASS Web site: www.calpass.org

"I think you and your department will find these [deconstructed math standards] useful for learning the standards in-depth, writing lesson plans, writing classroom assessments, constructing common assessments, writing curriculum, and many other activities."

Lisa Grant
Mathematics Specialist
Escondido Union High School District

Each of the Cal-PASS content standards deconstruction projects involved secondary and post-secondary faculty from around the state who worked together in discipline-specific groups to take an in-depth look at the California Content Standards. The goals of the deconstruction projects are to help faculty gain a fuller understanding of both the scope and depth of the standards; to de-

velop assessment items associated with each standard at the computational/procedural, conceptual, and application levels; and to initiate discussions of exemplar practices regarding teaching the standards. The resulting deconstructed standards documents include a breakdown of each standard into its component parts, a list of prerequisite skills as well as new skills needed to master each standard, the level of conception used in teaching the new knowledge (using "Bloom's Taxonomy"), assessable results of the standard, and model assessment items.

The deconstructed standards documents are excellent resources for high school faculty who are teaching courses specific to the content standards and to post-secondary faculty who are teaching remedial courses that cover similar content as the K–12 standards. The documents have been used across the state for teacher training, scope and sequence development, and textbook selection. In order to document the efficacy, impact, and outcomes resulting from the use of these documents, Cal-PASS welcomes feedback from any faculty, department, or institution. Contact Dr. Shelly Valdez (svaldez@calpass.org) to let Cal-PASS know how these documents have been put into practice in your institution.

Creating Custom Data Files

"You don't know what you don't know."

Overused catch phrase, or does it really mean something?

It is challenging to set up a data collection system with enough flexibility to meet unknown needs. Data collection systems are usually set up for a specific purpose and include only the data fields that will be needed to quickly and efficiently answer known questions. Cal-PASS has a very rich dataset for K–12, community college, and university students and can answer a multitude of questions from core student, course, and award data. But occasionally—and lately, more often—Cal-PASS receives requests for reports that need to integrate existing data with information on those same students that isn't currently part of the database. Rather than expand the collection for each of these requests, the IT staff has opted to collect "custom data files."

Custom files are comma-delimited text files that contain enough Cal-PASS-defined standard information to be able to link them to the Cal-PASS core data, but allow customization through "user-defined" fields. There are two components to a custom file: standard elements and custom elements. The standard elements are the first nine data fields in the student file that create the core data. The custom elements are any data that the user wants to marry with the core Cal-PASS data. These custom elements are supplied using a format that allows the user to define both the field name as well as the allowable values. Most often, custom files are designed with guidance from the Cal-PASS research and IT departments.

continued on page 4

Custom Data Files *cont.*

An example of a custom file use would be for Career Advancement Academies. This community college program is designed to support evaluation and program improvement by analyzing support service data (from a custom file) in relation to student course outcomes for certain English and math sections. The Gilbert Foundation in Los Angeles is also using custom data files to look at data from community-based organizations that provide student support services to secondary students. The foundation is interested in seeing how these students fare in their academic work both in the current year as well as when they transition to higher education, and the relationship of those outcomes to the services they received from the community organizations. There are several other projects using custom data files, including SSPIRE and the Concurrent Course Initiative funded by the Irvine Foundation.

Using custom files provides Cal-PASS members with endless possibilities for analysis and evaluation of all inputs to the student academic experience.

Data Submission

Data Submission Time Again:

The Cal-PASS data submission site is now open and accepting data for academic years 2007–2008 and earlier. All data should be submitted by November 30, 2008. For assistance, please contact help@calpass.org. And, check out our new tutorials on the Web!

Data Submission Stars!

Thank you to the following school districts that submitted data within the first week of open-data submission: San Benito Unified, San Bruno Park Elementary, Charter Oak Unified, Whittier Union High School District, West Contra Costa, McSwain, La Mesa Spring Valley, Petaluma Joint Union High School District, and Otis School of Art and Design.

Cal-PASS Sessions at Conference *cont.*

Algebra readiness course and a high school Algebra II support course, and give participants an opportunity to discuss effective strategies relative to essential standards; in the session “**Regional Writing Rubrics for English Success**,” presenters and participants will discuss two regional programs that sought to improve the writing level of high school students in an effort to reduce the percentage of students enrolled in remedial English courses in college; and the session titled “**Weaving Data Into Action**” will review how faculty in Cal-PASS PLCs have done just that. Topics will include posing initial questions, reviewing baseline data, planning evaluations for interventions, and assessing effectiveness.

**Note: the 2008 conference is sold out.*

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A Partnership of the California Community Colleges Chancellor's Office
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