About 46% of high school graduates enrolled in California State Universities need remedial courses in both math and English to prepare them for college level. These students typically earned B averages in their high school math and English classes. In order to address this issue, Shasta College launched Operation WAVES (Win by Achieving Valuable Essential Skills) to combat low attainment, low skills, and high attrition rates among first-year students. Operation WAVES is part of an ongoing region-wide effort to improve essential academic skills and retention among first-year students. Shasta College also offers SPLASH, the weekend Seminar Program for Learning Achievement and Skills in Higher Education. SPLASH targets first-year students and prospective college students who attend specialized workshops for help in overcoming math anxiety, providing peer support, writing term papers, finding a job, and financial aid and financial planning. The program also offers parent-student workshops. PACE is a college-level, academic program offering General Education, transfer-level courses in a cohort-learning format designed for working adult students. PACE offers courses during the evenings and weekends in 9-week segments. During the 2002-03 academic year, PACE will implement a second track focusing on the social and health services and targeting the needs of students needing workforce training. The report describes several other programs. (NB)
Making WAVES

Victoria A. Hindes
Keri Hom
Keith Brookshaw
Making WAVES
Presentation at the International Conference on the First-Year Experience
Synopsis

Introduction

Many colleges have been profoundly affected by the large influx of under-prepared students who have increasingly characterized college campuses. For example, of the 28,000 freshmen that enrolled at California State Universities (CSU) last year, 17,000 demonstrated reading or math skills well below college level. Even more alarming, many of these students do not complete remedial work during their freshmen year. State universities also claim that about 46% of high school graduates who enroll in the CSUs need remedial courses in both math and English to prepare them for college level. Furthermore, these students typically earned B averages (3.2 GPA on a scale of 4.0) in their high school math and English classes. To address this issue, Shasta College launched Operation WAVES to combat low attainment, low skills, and high attrition rates among first-year students.

Shasta College’s Operation WAVES is part of an ongoing region-wide effort to improve essential academic skills and retention among first-year students. To foster student success, instructional and student services strategies such as accelerated learning, computer assisted instruction, distance education, small learning groups, supplemental instruction, a summer readiness program, specialized weekend seminars, and mentoring were developed to combat low performance and high attrition rates. One of the primary goals of WAVES is creating a student-centered environment and enabling students to Win
by Achieving Valuable Essential Skills. First, WAVES was designed as a self-study of current institutional practices in basic skills essential skills instruction and services. Second, WAVES was intended to provide the means for discovering definitive ways to improve student performance. Third, WAVES sparked the development of a research study, Campus Diversity Climate Survey, and four programs designed to promote student success through cohort learning: The Student-Centered Learning Project, The 3-High Achiever’s Mentor Project, PACE (Program for Accelerated College Education), and SPLASH (Summer Program for Learning Achievement & Skills in Higher Education).

**Background**

The making of the success strategies within Operation WAVES initially involved four rural colleges who share common demographic characteristics and challenges that unite them. The service areas of these rural colleges are extremely isolated and poor, with overwhelming poverty and low education levels among residents. Many students in the region are first in their families to attend college and are in need of extensive individualized academic support. Additionally, faculty who work directly with these students need specialized training in student empowerment, student retention, and classroom assessment. In designing WAVES, the primary implementers examined best practices statewide and worked closely with local high schools in conducting research and planning activities directed at increasing student success among first-year students. WAVES is intended to put theory into action: to promote student success strategies and implement programs specifically designed to address barriers that often prevent students from succeeding.
**Presentation**

The presentation at the International Conference on the First-Year Experience highlighted the projects within *WAVES*. A practical implication that stemmed from this presentation is that a better understanding of students' perceptions provided participants with valuable information to be used in strategic planning. Identification of common themes of student needs and expectations also focused on improving institutional practices such as placement testing, admissions counseling, academic advising, support services, and professional development.

Beginning with the Campus Diversity Climate Survey, the presenters discussed the eighteen-month study involving over 2,000 students from eight participating college campuses across the state—representing the far north, central California and the Bay Area, to southern California regions. Using a survey questionnaire and information from focus groups, this study identified and provided an illustrative view of community college students' perceptions. Focus groups involved 150 students. Diversity issues played an important role in the participants' educational experiences. Students commonly agreed that the following are highly important to them: that instructors treat students of diverse backgrounds with equal respect; that instructors encourage women to participate in class as much as men; that all students regardless of ethnicity, gender, age, disability or sexual orientation have an equal chance of reaching their goals; that they value making friends with students of other cultural and ethnic backgrounds; that they
value faculty who are open and supportive of their learning needs; and that they have found their college to be a positive and supportive educational environment for the pursuit of an education.

The significance of the study is that it provides colleges with information that would enable their staff and faculty to decide how to develop or improve the delivery of academic and student support services and also to broaden teaching methods so as to reach students at all levels of ability and from diverse backgrounds.

The weekend Seminar Program for Learning Achievement and Skills in Higher Education (SPLASH) is patterned after the successful Summer Readiness Program sponsored by the Shasta College EOPS (Extended Opportunities Programs and Services) Program, a two-week scholastic, residential program designed to provide academic, social and personal development skills to eligible students who are low income and educationally disadvantaged. The program offers classes in career exploration; college orientation; body fitness including training, assessment, and conditioning; computer skills; and a geology course that included a weekend field trip. The students earn 4.5 units of college credit as well as triple the high school units (13.5).

An essential component of the Summer Readiness Program is to bring together high-risk students who may have low self-esteem, behavioral issues, or who have difficulties socializing with other students and expose them to a milieu of new social and interactive skills. Students participate in a variety of trust and team building exercises such as a ropes course. Students also participate in consistent interactions with their peers and the residential/community environment requires them to develop a close,
kinship-like relationship with each other and with the Summer Readiness staff. At the conclusion of each summer readiness program, the students become highly motivated and most have learned new academic and social skills that enhance their potential in becoming successful students in college. The newly developed SPLASH is a streamlined version of Summer Readiness and students do not earn college credit. SPLASH targets first-year students and prospective college students. High school juniors, seniors and first-year college students attend specialized workshops together and provide support to each other through organized brainstorming sessions and “think tanks. The program also offers practical workshops such as overcoming math anxiety, term paper writing, financial aid and financial planning, finding a job, and also parent-student workshops to assist parents in understanding what it takes for their children to become successful in college.

PACE is a college level, academic program offering General Education, transfer-level courses in a cohort-learning format designed for working adult students. Students carry a full load of classes with minimal job interference. They attend PACE courses during the evenings and weekends in 9-week segments in order to earn an A.A. (Associates of Arts degree) in transfer general education over five semesters. PACE began at Shasta College four semesters ago and has met its enrollment goal with 25% growth each semester. During the 2002-2003 academic year, PACE will implement a second track focusing on the social and health services and targeting the needs of students needing workforce training. The typical PACE student at Shasta College has been a full time working Caucasian mother in her mid forties or older, who earns an annual salary of
$10,000-$25,000. Interestingly, the program is developing a second population of students in the 18 through 25-age range (these students are the children of the original PACE population). Seventy percent (70%) of PACE students are enrolled Full time in 12 or more semester units. The persistence rates are extremely high for PACE. More specifically, this past semester (Spring 2002), 96% of students completed their PACE courses. Comparatively, instructors report they typically have a 30% attrition rate in their NON-PACE courses (or about 70% of students completing those courses). Over 90% of students identify the goal of transferring to a University for their Bachelor’s degree.

With regard to academic performance, 100% of PACE students’ PACE GPAs are a 2.0 or higher (99% of PACE students’ cumulative G.P.As are 2.0 or higher); 77% of PACE students have a cumulative G.P.A. of 3.0+, 46% have a 3.5+, and 14% have a 4.0. The strengths of PACE are best articulated by the students themselves.

The following excerpts from student testimonials further demonstrate the effectiveness of the PACE strategies: “Working full time to support my Wife and four children has not allowed me enough time to go back to school full time, until now, thanks to PACE. Before going back to school I felt disheartened, and confined in a career that was no longer rewarding. I did not know what direction my life would take, and for the first time I felt my dreams slipping away. Now that I am enrolled in the PACE program, all that has changed. The support I have received from the PACE staff has been invaluable to my success as a student. I’ve never been happier, my self-esteem has grown tremendously, and now I am setting my goals much higher. Law School no longer seems impossible!... Feelings of pride and accomplishment were overwhelming ... The
people are wonderful. We all come to PACE with somewhat the same desire and problems. That being, we all want the degree and we all have busy lives to work around. There are many people in this class with full time jobs and young children and some have had elderly parents to take care of. The study groups help us prepare for tests and the willingness of classmates to help each other with difficult or confusing problems is invaluable... we have developed long term friendships with our classmates”

The 3-High Achievers Mentor Pilot Project was initially developed to help students overcome barriers to education, succeed in their crucial first-year in college, and work toward completing their educational goals. The project design used the Association for Supervision and Curriculum Development (ASCD) 3-High model. The project reflects the core belief that in order to foster student success, students must receive high content course work, teachers must encourage high expectations, and student services must provide high quality support through both academic, personal, and cultural enrichment activities. These “three highs” are central to the purpose of the project. The project follows a tripartite mentor model—a three-team approach—(faculty mentor, peer mentor, mentee). Weekly meetings—face-to-face, by telephone or by email—help foster positive relationships and assist in the acculturation process.

Project activities resulted in positive student outcomes in persistence and retention rates among the cohort of students. Shasta College has institutionalized the project and the Mentor Program was implemented as part of the student services division. The Mentor Program currently has integrated a streamlined procedure that includes identifying potential mentees through the college’s probation system and inviting those
students for an individual counseling appointment where they learn about options available to them, including mentoring and college success courses.

The Student-Centered Learning Project addresses the challenges of underrepresented students, including women, ethnic minorities, re-entry students, and disabled individuals who are at-risk, because their academic progress is jeopardized by a variety of factors including, social, economic, educational, and familial problems. The Student-Centered Learning Project (SCLP) places the student in the center of the learning process. The core of the program is characterized by the effective transmission of information from knowledgeable instructors to active student learners through a variety of modes. Computer-assisted instruction and technology-assisted learning resources hold the most promise for a targeted strategy to address the problems identified in a needs analysis or profile of each learner. This profile includes cultural and academic learning styles.

SCLP provides the individualization and additional assistance to students lacking in math and/or English skills. Students are taught active learning skills through a variety of workshops. Individualized and computer assisted instruction in math and English is provided outside class time, making it easier for students to work at their own pace. Weekly in-person meetings involve students and instructors working together in small groups of three to five. Consistent support through weekly check-ins and follow-ups through email help students to feel comfortable about their learning process because they know someone is there who truly cares. Feedback from faculty promotes far more learning and retention, which builds more positive self-esteem in the students.
The WAVES presentation also involved sharing ideas, resource materials, and initiating a discussion on the practical implications of student success strategies such those used in Operation WAVES. Conference participants recommended future studies such longitudinal studies on PACE and Summer Readiness students.

Conclusion

Information and findings presented at the conference were drawn from qualitative and quantitative data collected through survey, focus groups, and case notes. Strategies presented were intended to enable session participants to have a basis for understanding how to structure their own programs/services, customize the strategies to address their own students' needs, and learn from the participants' challenges and mistakes. The sharing of resources and information also underscored that programs and services can only attempt to address attrition issues among first-year students but cannot account for how individuals will interact within their environment. The delivery of support services, however, could influence and shape students' perceptions and behaviors. Feedback from conference attendees, who were educators from a variety of countries, confirmed that programs such as Operation WAVES illustrate the importance of providing effective student services.
## I. DOCUMENT IDENTIFICATION:

**Title:** International Conference on the First-Year Experience: Making WAVES Presentation at the University of Bath Paper  

**Author(s):** Victoria Hindes, Ed.D; Kerri Hor, Ph.D; Keith Brookshaw, Ed.D.  

**Corporate Source:** Shasta College  

**Publication Date:**

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

- **Level 1** documents allow reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.
- **Level 2A** documents allow reproduction and dissemination in microfiche and electronic media for ERIC collection subscribers only.
- **Level 2B** documents allow reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

**Signature:** Victoria A. Hindes  

**Organization/Address:** Shasta College  

**Date:** 11/5/02
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of California Los Angeles
ERIC Clearinghouse for Community Colleges
3051 Moore Hall
Box 951521
Los Angeles, CA 90095-1521

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: http://ericfacility.org

EFF-088 (Rev. 2/2000)