

# Parent. TEEN

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## the college LIFE

what ivy league  
schools really want  
Rx for freshman angst

frustrated with

here's help

## teens in orbit

the great NASA space colony design contest

◀ driving  
around: it's  
not where you  
go but who  
you're with



my friend  
has an  
eating

DISORDER  
how can  
I help?

the  
\$100 million food  
supplement that's dazzling  
high school athletes

for  
bay  
area  
families  
with  
teens

FREE



# OVERCOMING Freshman Angst

**A**dapting to college life, academically and socially, is probably the greatest worry of incoming freshmen—if only they could put a name to their free-floating anxiety.

It's of concern to universities and colleges across the country as well. Large, small, urban or rural, higher learning institutions realize that creating support systems easing college entry will have a big payoff: successful students, higher grades and increased retention.

Two years ago, California State University at Humboldt established the Living and Learning Program blending residential life and academics. The University of California at Davis took a narrower approach and started the Emerging Scholars Program in its math department in 1990 to upgrade an entering student's calculus skills to fit the more rigorous demands of college-level math.

Different paradigms, same goal: to help students develop community through cooperative learning in a new and often impersonal environment.

"New students spend a lot of time in their living environment, and living in residence halls is about learning, too," says Rees Hughes, director of student activities and housing at Humboldt and innovator of the Living and Learning Program. "Our overall mission was to create a seamless experience."

HSU's basic plan houses LLP students together and pre-enrolls them (a boon to overwhelmed freshmen) in pairs of introductory level classes in one of seven tracks: English and Speech, History and Geography, English and

Political Science, English and Sociology, Math and Chemistry, Botany and Biometrics, and Psychology and Speech.

"Living and Learning borrows significant elements from a San Diego State University program that takes a large urban campus and breaks down its size to create community," explains Mr. Hughes. "Here at small, rural HSU (with an undergraduate population of 6500, 50 is considered a large

**Initial results from the program's introduction show a dramatic rise in 13% in student retention at the university, but a spotty increase in grade point averages. The program is a work in progress.**

class; 150 is the largest lecture class), we use the same model to overcome different challenges to achieve the same result."



## Two programs point the way for how colleges deal with the loneliness and anxiety of incoming freshmen

Freshman Scott Dalander, a graduate of Antioch High, has already found "sharing the same classes with the people I live with makes it easy to get help on tough subjects."


There are additional perks. The residence halls that house Living and Learning students are equipped with their own 24-hour, four-computer labs. The rest of the 1,400 live-in students without computers vie for use of one of 10 computers in a central computer lab with more limited hours and keyed entry. LLP coordinator Santina Chiricosta arranges in-hall tutoring sessions and extra-curricular activities, such as faculty-guided trips to local tidepools and museums. Professors hold extra office hours in the dorms.

An important component of LLP is its focus on increased self-knowledge as a key to success. There are three required workshops during the year: the Meyer-Briggs personality indicator test; learning styles; and setting up study groups. A ropes course is held early in the year, and summer reading is assigned. This year's incoming class read Steven Covey's *Seven Habits of Highly Effective People*. University Seminar, a recommended two-unit course, covers hot topics such as sexuality, alcoholism, and campus involvement opportunities, and offers small peer-led discussion groups.

Initial results from the program's introduction show a dramatic rise of 13% in student retention at the university, but a spotty increase in grade point averages. The program is a work in progress. "We're still tinkering and learning ourselves from our experiences," says Hughes.

There are plans to create more major-related tracks and to thematically link classes within tracks, and to devise a parallel strategy for Humboldt's many transfer students.

Living and Learning is open to admitted students who have applied to live in residence halls. About 100 of 750 freshmen choose this option. Although all but two of the tracks require placement exams, this is not an honors program. "We try to make sure all academic avenues are represented," explains Hughes. A short application includes a one-page statement about what a student hopes to gain from LLP, and Ms. Chiricosta talks to every



Kelvin Song, UC Davis teaching assistant, offers advice to Calculus 21 students.

### So far from home

The average HSU student is at least 500 miles from home, very often from a larger city than forested Arcata, population 15,000. "The largest major of incoming freshmen is 'undeclared.' Students are trying to find a home academically speaking as well, so it's good to be with others in the same situation," Hughes says.

Seeing the same faces in class and in the dorm makes it easy to form study groups and make friends. Sophomore Shara Pierson-Vukovich from Sacramento recalls, "Every Sunday night we would all study together. Saturdays we'd go to midnight movies; we'd have whipped cream and pillow fights. I know it provided a strong base to allow me to do other things, and that academically, I did much better than I expected."

student and some parents at least once to make sure of a good fit. Students who think the program is strictly for enhancing one's social life may be disappointed. The tight social community that evolves is a byproduct of cooperative learning.

## Calculus is the Cornerstone at UC Davis

UC Davis' Emerging Scholars Program works toward similar academic, social and emotional growth via mastery of calculus, the cornerstone of math, engineering and science majors. "The year-long program is not an honors class implying acceleration, but a commitment to in-depth coverage of a make-or-break subject," says the program's creator and director, Professor Duane Kouba.

"Calculus at Davis is hard and fast, and those in ESP have a distinct advantage."

Patterned on a model developed by Uri Treisman at UC Berkeley in 1978, the program gives 50 ESP students their own three-hours-a-week lecture section during the first quarter, already an advantage since first-year math classes at Davis enroll up to 500 students. Regular Calculus 21 has an additional one-hour lab; the ESP version divides into two 25-student sections for five hours per week, each overseen by a professor and one to two undergraduate teaching assistants. Students work in groups of three or four to solve the day's problems. ESP students are absorbed into the larger lecture classes in the second and third quarters, but keep the intimate lab set-up through the year.

ESP personalizes what is often thought of as a sterile discipline. Romances and friendships bloom. Working with the same group five hours a week builds community, with the math department lounge becoming a social center. "This is not the place for students who like to sit alone in a corner and do math," says Kouba, who can barely contain his enthusiasm for his program.

For ESP teaching assistant Kelvin Song, a graduate of Mission High in San Francisco double-majoring in aeronautical and mechanical engineering, ESP's greatest effect last year was that he developed the habit of working with people. "I was kind of a rigid student and expected ESP



Niki Renda helping students help themselves.

REBECCA SALTSMAN

calculus to be structured that way—everyone would come in and just do their work. What I found was a more lenient atmosphere, where people work together to piece the puzzle together to get the big picture."

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Minority, financial-need and non-urban students are targeted for the program, and they get the 1,000 letters Kouba's budget allows him to send out. In reality, the program is open to all students who meet the preliminary requirements: at least 540 on the math SAT, and passing a placement test. High school calculus is not a prerequisite.

As with Living and Learning, everyone returning the ESP application is screened with an informal interview. "It is somewhat subjective," admits Dr. Kouba. "The most important criteria are a willingness for the time commitment, a sense of responsibility, and enthusiasm for being part of a community."

ESP students have averaged a grade point above regular calculus students since the program's inception.

Winter quarter 1997, 85% of ESP students received As and Bs; the average calculus grade at Davis is a C. About 90% of those who start ESP stay with the program, often seeing their grades improve through the year, even though the material gets progressively more difficult.

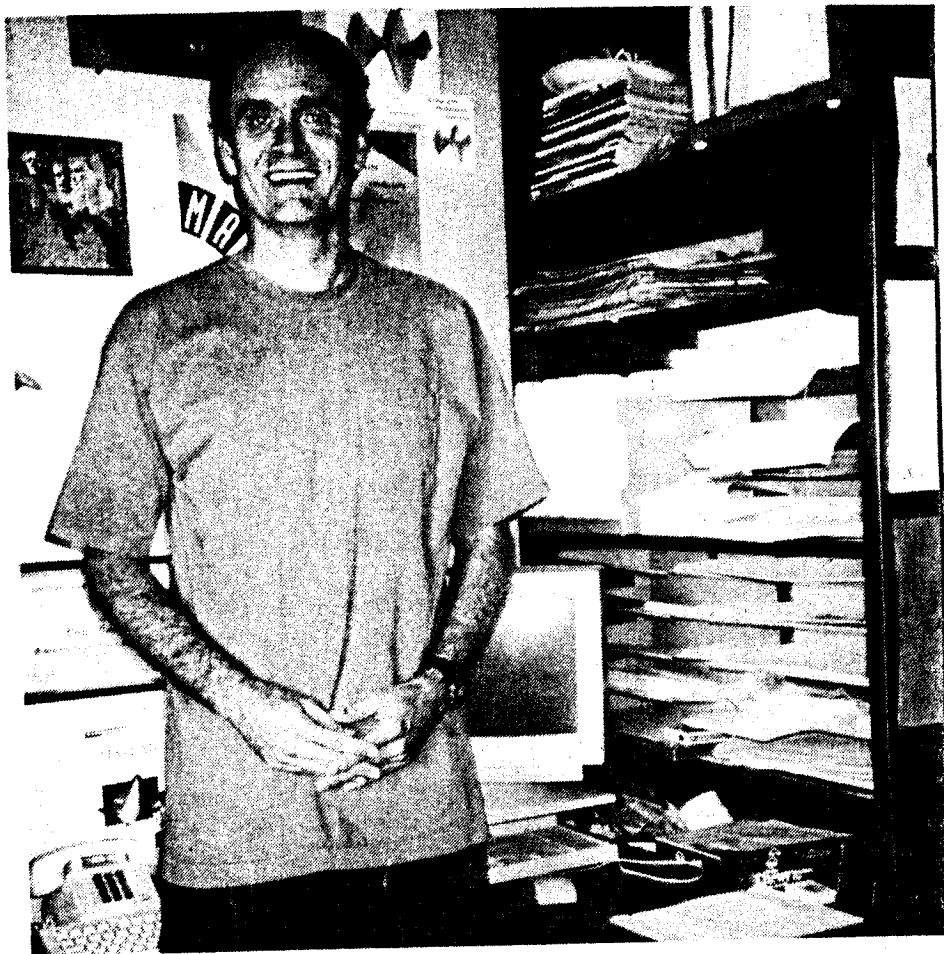
Kouba handpicks the cream of the crop to be the next year's teaching assistants. Math major Niki Renda clearly had the people skills and sense of cooperative learning Dr. Kouba was looking for. She had been president of the math and tutoring clubs and a peer minister while at Presentation High School in San Jose. "I thought ESP would be the most wonderful program in the whole world. Because of the labs, I thought it would help me learn to discipline my time." The straight-A calculus student did research last summer at MIT and has her sights set on a Ph.D. in statistics.

As assistants, she and Kelvin monitor labs, act as a resource, guide study groups in the right direction by "helping them help themselves," hold extra review sections and, perhaps most importantly, are positive role models. Recalls Niki, "I remember how much advice I asked of my T.A. Students can ask a professor, but to have an older student who just recently succeeded was great. It was an honor to be asked to be a TA."

It takes some effort to ferret out the programs that will enable a freshman to turn a remote or large state school into a community. But once a student accesses that key, be it through math or student housing, the administration stands ready to facilitate. The passion with which Hughes and Kouba speak about their programs makes it clear that this is not just about numbers, even in the math department.

As Kelvin Song so aptly states, "Kouba's mission is to pass the fire on to other people."

*Editor's note:* Many public colleges and some private ones now routinely offer seminars, courses and "cohort" programs to help incoming freshmen adjust to college life. This article by no means exhausts the available offerings.)



Math Professor Duane Kouba, guru of UCD's Emerging Scholars Program.

*Santa Monica resident Amelia Saltsman wrote "The Johnston Way," about an experimental college within the University of Redlands for the August/September issue of Parent.TEEN. She is also a frequent contributor to our sister publication, Parents' Press. ♦*

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