

Achieving A Vision for Pre-College at UW-Madison

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The 1997 NCES* report, *Confronting the Odds: Students At Risk and The Pipeline to Higher Education*, provided clear confirmation that UW-Madison's approach to programming for minority and/or disadvantaged pre-college students was right on target.

* National Center for Education Statistics

Students identified as “at risk” are more likely to participate in higher education if the following “critical junctures” are provided and addressed:

- encouragement to **aspire to opportunities available through higher education** (by the 10th grade)
- assistance in developing **critical academic skills**
- participation in **entrance exams**
- **application to college**
- **enrollment in college**

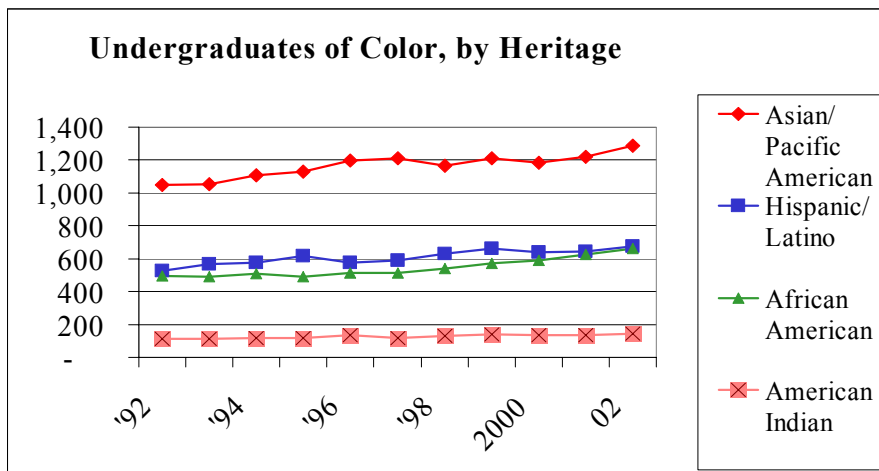
Each of our major M/D pre-college programs covered some of these “critical junctures.”

- NASA/Sharp Plus
- Research Apprentice Program (RAP)
- Summer Science Institute (SSI)
- Engineering Summer Program (ESP)
- Academic Skills Development Workshop
- College Access Program (CAP)
- **Upward Bound**

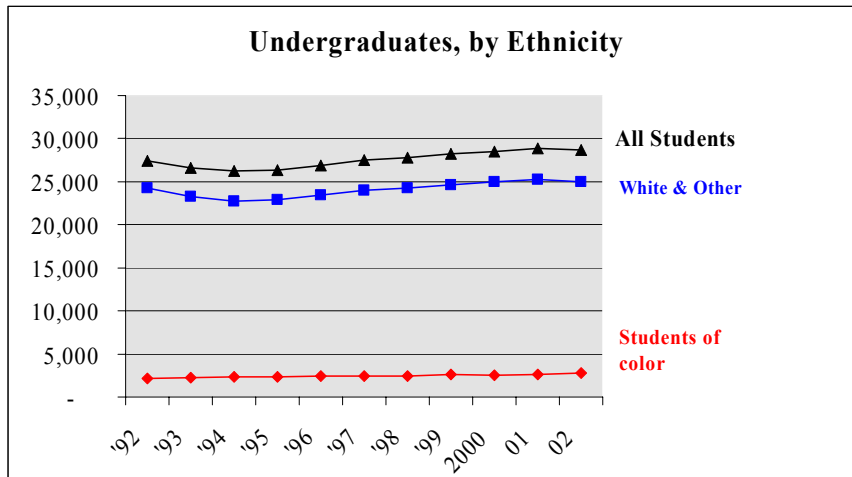
But, with the exception of Upward Bound, no single program provided for these junctures “in sequence” as a **true pipeline program.**

Considering the challenges we faced as an institution and more broadly as a state, it was clear that we needed to take systematic steps to address the need to enlarge the pool of potential students from under-represented and/or disadvantaged groups.

Our African-American and American Indian Enrollments have been flat over the last ten years:



Figures showing total enrollment by ethnicity underscore **the need to increase student diversity:**



- **87 % of all Wisconsin high school students graduate, the 2nd highest rate nation-wide.**
- **But while Wisconsin's graduation rate for white students is 92%, it has the nation's lowest rate for Black students: only 40% graduate from high school.**
- **Milwaukee statistics are worse: only 34% of black students graduate from high school, compared to 74% for whites.**
- **Targeted minorities, especially American Indian and Hispanic groups, have similar low completion rates.**

Another of our challenges was underscored in the headline of a 2002 study by a Washington think-tank...



A study released by a Washington think tank estimated several states' spending on prisons and corrections grew at six times the rate of their spending on higher education, and **by the close of the millennium—in some states—more Blacks were in prisons from 1985 to 2000 than there were in the states' higher education systems.**

The study titled “Cellblocks Or Classrooms? The Funding of Higher Education and Corrections and Its Impact on Black Men,” covered all 50 states. Of those states at least 13, including Connecticut, New Jersey, Pennsylvania, Indiana, Michigan, Missouri, Ohio, **Wisconsin, Delaware, Louisiana, Oklahoma, Texas and Alaska were estimated in 2000 as having more Blacks in prisons than in higher education.**

By 1998, I was ready to move toward developing a **college pipeline designed to:**

- **Keep students in school, and increase their academic achievement through **skills development and enrichment****
- **Help ensure that they **graduate from high school****
- **Encourage them to **apply for admission to college****
- **Help ensure their **admissibility to UW-Madison****

Based on the research findings of national and UW-Madison studies, there was **good evidence to support this decision.**

The focus on pre-college pipeline initiatives is justified by

- **National and statewide data that show participation in a pre-college program is a powerful and effective way to get our minority and/or disadvantaged students to stay in school and go to college.**

- **Students in the Upward Bound Program are four times more likely to earn an undergraduate degree than those students from similar backgrounds who did not participate in the same program**
- **85 percent of those in the Upward Bound Programs in the UW System institutions go to college**
- **80 percent of the students who attended the UW-Madison Summer Science Institute, and 93 percent of those who attended the Academic Skills Development Workshop attend college**

In 1996, a year before the NCES study and three years before the launch of PEOPLE, the **UW-Madison Pre-College Council had been charged by the Provost to determine:**

“...how to weave pre-college programming into the fabric of the University of Wisconsin-Madison.”

The Council study involved a survey of the programming and administration of

- **UW-Madison’s vast array of pre-college programs, attended annually by some 12,000 K-12 students**
- **Pre-college programs at 21 major institutions across the US**

The Council study, *Pre-College Programs: Moving Into the Future*, recommended that M/D programs:

- Formalize the **developmental sequence** of campus M/D programs, i.e. a pipeline design
- Seek **ways to collaborate** on administration, recruiting, programming and assessment across all colleges
- Increase the **involvement of community and business** in planning, instruction and assessment

With the full support of the chancellor and the provost, I took the lead in 1998 to plan and develop UW-Madison's pipeline program: **PEOPLE, or Pre-College Enrichment Opportunity Program for Learning Excellence.**

The design was drawn along the lines of Upward Bound—we took a program that worked and ramped it up into what I believe a successful pipeline program should be.

- **PEOPLE** was launched in Summer 1999 with a **first-ever cohort of 66 rising 10th Graders from 18 inner-city high schools** in the Milwaukee Public School District (MPS)
- The following Summer of 2000, the **Middle School PEOPLE Program** was established.

The Program

| Level | Middle School (Madison) | High School |
|------------------------------------|---|-------------|
| 7 th -9 th | Summer 3-wk half-day workshops Fall-Spring Academy | |
| 10 th -11 th | Summer 3-wk Residential Program in science, math, writing & fine arts Academic year enrichment & skills building | |
| Rising 12 th | 7-wk Residential Summer Internship & Research | |
| Undergraduate Admitted | 8-week Summer Bridge for undergraduate credit | |

The **Middle School** Curriculum: Students have the opportunity to explore the following topics in hands-on workshops for 3 weeks in the summer:

- Architecture
- Computer Animation
- Rocket & Space Travel
- Fun with Chemistry
- Hip Hop and Sound Design
- How Your Body Works
- Newspaper Publishing
- Mysteries of Plants
- Documentary Video Production
- Starting Your Own Business
- See the World Through An Engineer's Eyes (*For Girls Only*)
- The Little Things Within Us
- Teen Zine
- Web Graphics Workshop
- Limnology
- Law
- Theatre & Drama
- Veterinary Science

For their academic year program, Madison Middle School PEOPLE students come to campus for bi-weekly courses in:

- Foundations of **Algebra**, and **Reading and Writing** for the College-Bound.
- The classes are taught by **UW professors, academic staff, and graduate students.**
- Emphasis is on **building skills** through preparatory courses in mathematics, reading, writing, and computer literacy.
- These courses are offered Monday through Thursday afternoons and Saturday mornings **on the UW-Madison campus.**

The High School Curriculum: For the **first two summers**, students attend a **three-week summer residential program** on the UW-Madison campus that includes

- **math and writing** workshops
- skills development in the **biological, physical, engineering, biomedical, & health sciences**.
- There is also an evening curriculum in **fine arts and performing arts**, as well as enrichment and recreational activities.
- The academic year program involves UW faculty, staff, and students meeting with PEOPLE students and parents for **continued academic skills development** sessions, university orientation programs, and cultural enrichment activities.

In their Third Year summer,

- PEOPLE students participate in a **seven-week Residential Internship & Research Experience**
- They work under the **supervision of university faculty**, instructional staff and researchers or with a public or corporate sponsor.
- Emphasis is on **learning and applying methods of scientific inquiry and analysis** in the biological, physical, and social sciences.

In Summer 2003 71 Third-Year PEOPLE students completed 7-week research and internship placements with:

- WI Department of Commerce Minority Business Enterprises and International & Export Development
- Meriter Hospital's Exercise Physiology & Physical Therapy Clinic, Sports Medicine clinics, and the Nursing School
- Madison Chiropractic, and Health & Fitness Centers
- Media agencies including The Madison Times, WYOU Television, the WI State Journal, WSUM Radio, *La Comunidad* and UW-Madison's School of Journalism
- School of Veterinary Medicine's Large Animal Clinic and private veterinary clinics

- The Law School
- Computer Science and the Division of Information Technology
- Psychology & Counseling
- Community Organizations like Centro Hispano
- Theatre & Drama with the Madison CTM
- CUNA Mutual, State Farm, Restaino Bunbury, Mortgage 2000, John Deere, the Business School
- MMSD Middle Schools, Social Work, & Child Development

During the summer after graduation from high school and admission to the UW-Madison:

- **PEOPLE** students participate in an **eight-week Bridge Program**
- take rigorous **university level courses** and earn credits toward an undergraduate degree,
- **experience the life of an undergraduate** by living, studying and interacting with other students, faculty and staff on the campus, and
- **prepare for their first fall semester** as full-fledged UW-Madison undergraduates.

How many PEOPLE? What are our numbers?

- The Middle School PEOPLE Program had **288** students in hands-on workshops this past summer.
- The High School PEOPLE Program had **328** students
 - 100 10th Graders in the 1st Year class;**
 - 99 11th Graders in the 2nd Year class;**
 - 71 12th Graders in the 3rd Year class.**
- There are now two cohorts of PEOPLE UW-Madison undergraduates, **24** admitted in 2002, and **20** admitted in 2003.

As a program, **PEOPLE** will reach full maturity by 2006, with 11 cohorts in the pipeline:

- **3 Middle School cohorts**
- **3 High School cohorts**, with a “first year” class comprising new/entering rising 10th graders from Milwaukee, Waukesha, Racine, and Ho Chunk public schools and graduates from the Middle School program
- **5 UW-Madison undergraduate cohorts**, ranging from entering freshmen to 5th-year seniors

| YEAR | High School | | | | | Middle School | | | | | | |
|-----------------------|-------------|--------|--------|--------|--------|---------------|--------|--------|--------|--------|--------|--------|
| | Coht 1 | Coht 2 | Coht 3 | Coht 4 | Coht 5 | Coht 1 | Coht 2 | Coht 3 | Coht 4 | Coht 5 | Coht 6 | Coht 7 |
| 1999 | 66 | | | | | | | | | | | |
| 2000 | 47 | 65 | | | | 92 | | | | | | |
| 2001 | 41 | 57 | 95 | | | 81 | 114 | | | | | |
| 2002 | 24 | 51 | 82 | 107 | | 61 | 98 | 119 | | | | |
| 2003* | 21 | 20 | 71 | 99 | 158 | 90 | 113 | 85 | | | | |
| <i>Projected</i> 2004 | 20 | 19 | 67 | 94 | 150 | 186 | 107 | 81 | 100 | | | |
| 2005 | 19 | 18 | 64 | 89 | 143 | 176 | 202 | 77 | 95 | 100 | | |
| 1,134 2006 | 18 | 17 | 61 | 85 | 135 | 167 | 192 | 173 | 90 | 95 | 100 | |

* For the first time, the entering High School cohort is made up of rising 10th graders from Milwaukee, Waukesha, Racine, and Madison students who completed the Middle School program.

Citing the efforts of the National Science Foundation (NSF) to spur universities and colleges to produce a diverse scientific workforce, an article in *Science Magazine* (Vol. 301, 22 August 2003) reprinted the list of nine essential traits of university programs that do a good job of training minorities and women scientists.

I took a look at the traits in the **BEST* list of “what works” in elementary and secondary schools, higher education and the workforce, as a check-back to see how the **PEOPLE** Program “measured up.” This is what I find:**

***for Building Engineering and Science Talent**

| Essential Traits (BEST List) | PEOPLE |
|---------------------------------|--|
| 1. Institutional leadership | An initiative led by the chancellor, provost and vice chancellor , in collaboration with corporate leaders Leadership by the Vice Chancellor for Student Affairs; housed in the School of Education |
| 2. Targeted recruitment | Accepts highly motivated students of African American, Native American, Hispanic/Latino, Asian American especially targeted Southeast Asian American, and/or disadvantaged background who may not be college-bound |
| 3. An engaged faculty | Faculty from schools and colleges across UW-Madison are involved in curriculum development, teaching, mentoring, research and internship experience, and program evaluation |

| Essential Traits (BEST List) | PEOPLE |
|---|--|
| 4. Personal attention | Each student is provided with individual support and encouragement in the pursuit of a rigorous program to build study skills, explore and strengthen academic and career interests, and gain a positive experience of university life |
| 5. Peer and intergenerational participation | <u>Pre-college students</u> from different schools and school districts are brought together in the program and form strong and close bonds as they travel the pipeline <u>Undergraduate and graduate students from UW-Madison</u> who serve as mentors, tutors, and instructors have indicated in program evaluation and survey instruments that their interactions with PEOPLE students have increased their sense of community and institutional connection |

| Essential Traits (BEST List) | PEOPLE |
|----------------------------------|--|
| 6. Comprehensive financial aid | Financial support is provided through <u>partnerships</u> with the UW Foundation, the Wisconsin Alumni Association, the state, UW-Madison administration and the corporate sector |
| 7. Extended research experiences | Third-Year High School students have an intensive 7-week residential research and internship experience , during which PEOPLE students work with <u>university faculty, scientists, staff, and community professionals</u> to learn the rudiments of scientific research and inquiry |

| Essential Traits (BEST List) | PEOPLE |
|--------------------------------------|--|
| 8. Bridge programs to the next level | Transitional programs prepare the students to move from the middle-school level to the high school level; from high school to undergraduate work through the 7-week research and internship experience and the summer bridge program of for-credit college courses and on-campus life and interconnections with faculty, staff and non-PEOPLE peers |
| 9. Continuous evaluation | A comprehensive and intensive program evaluation process is in place, with qualitative and quantitative indicators of student, parent, teacher, staff satisfaction and measurable outcomes |

To sum up, my vision in building PEOPLE is that of a continuing pipeline—

- From **Middle School** into
- **High School** into
- **Undergraduate Program** anywhere, but especially at **UW-Madison**, then to
- **Graduate and/or Professional School**

And, very important, PEOPLE is designed to increase the achievement and academic success of our students. It has the hallmarks of the kind of successful program to “combat underperformance,” as described by Harvard President emeritus **Derek Bok in his *Chronicle for Higher Education* “**Point of View**” article, dated **October 24, 2003—****

Aligned with Bok's four major "do's" the PEOPLE Program

- holds **high expectations for participating students**— who feel that they have been selected for their academic promise and will be held to high standards
- encourages **group solidarity and cooperation** among participating students
- provides enough **financial aid** to avoid economic burdens that might distract them from their studies,
- and finally, connects the students to **faculty mentors and successful minority professionals** who play prominent roles in strengthening motivation and ensuring appropriate help when needed.