

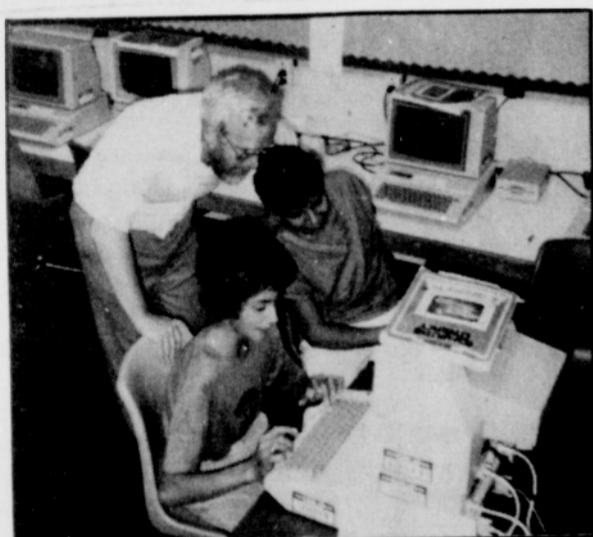


# living the DREAM

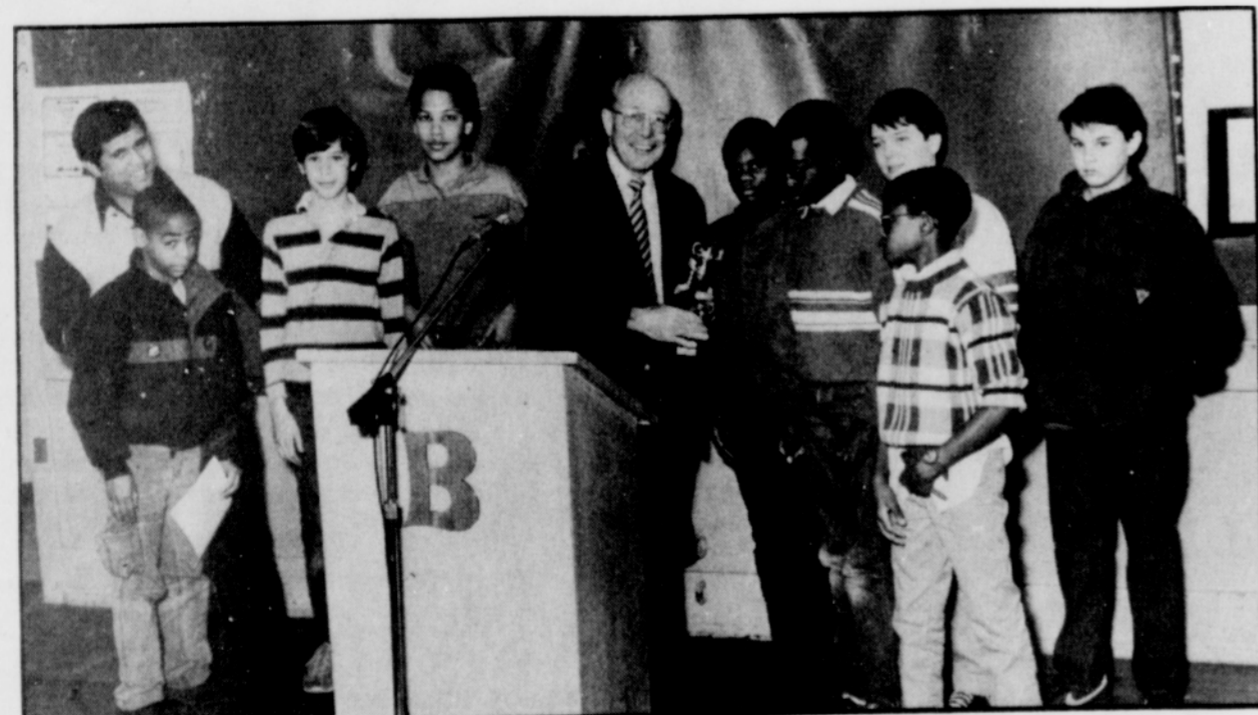
**P**ortland MESA, now in its third year, is a program sponsored by Portland Public Schools and the School of Engineering and Applied Science at Portland State University. Project Coordinator is Renee Wilkerson-Anderson.

The program is open to all students at participating schools but its mission is to encourage minority students to enter careers in math, science, and engineering.

The 1987-88 MESA program has 410 students, two-thirds of which are minority. Participating middle schools are Beaumont, Fernwood, Whitaker, Tubman, Ockley Green, Binnsmead, Mt. Tabor, Kellogg, and Portsmouth; high schools are Jefferson, Grant and Benson.



Ken Krause, Tubman MESA Advisor, works with Emiro Gonzales and Eddie Broeth on the terminal.



Beaumont students present trophies they won at a math/science competition to Principal Thomas Marineau. MESA Advisor, Sterling Eltagonde is at back left.

MESA students participate in a rich variety of activities including: study groups, science labs, technical site visits with hands-on activities, speakers, design contests, math and science competitions, college visitations, college preparatory

activities—such as SAT study groups, and mentorship and internship opportunities.

"MESA activities are done on the students own time," noted Wilkerson-Anderson, "after school and on weekends."

#### NATIONAL AND LOCAL NEED

"There is a urgent need for MESA type programs," stated Gary Potter, Assistant Director for the Oregon Department of Transportation, referring to Bureau of Labor statistics showing that nationally Blacks comprise only 3.7% of all engineers, 3.2% of architects, 2.5% of natural scientists, 3.3% of physicians and dentists, and 3.0% of lawyers and judges.

Potter continued, "As a major employer of civil engineers in the state it's part of our responsibility to take leadership in developing Oregon's minority youth."

"Mentorship and internship opportunities for students from programs like MESA will be an integral part of our affirmative action effort," said Potter, "they can be a bridge into our Engineer Trainee program."

The Engineer Trainee program provides summer employment for students enrolled in a college civil engineering program, and pays from \$1194 to \$1313 per month. In a given year, 10 to 20 Trainee positions are available.

#### EMPLOYER CONTRIBUTIONS

"We have received significant contributions from both the private and public sector," states Penny Fukui, Career Coordinator.

During the summer of 1987, Tektronix employed six MESA interns. Minimum wage was \$4.95 per hour.

Tektronix will increase the number of interns from six to twelve this year. In addition, the Tektronix Foundation has initiated a college scholarship fund of \$25,000 for MESA students.



Camille Greenidge



Stephanie Bell

Three of last year's Tek interns are now freshman engineering students; Stephanie Bell at the University of Washington, Heidi Durrow, Stanford, and Camille Greenidge, Portland State. Pamela Clegg, Leila Aziz, and Byron O'Brien, the remaining interns, are 10th, 11th, and 12th graders respectively, at Jefferson High.

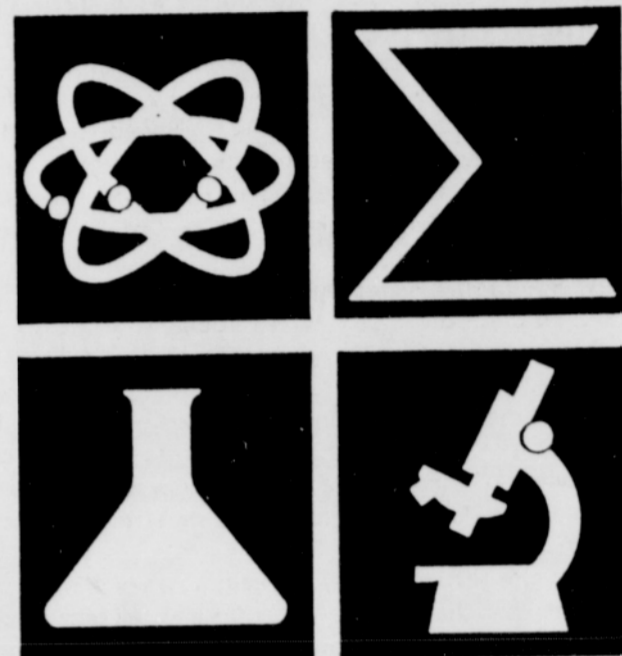
The Army Corps of Engineers initiated a "loaned professional" program with MESA. Russell Smith, a mechanical engineer with the Corps, has functioned as a technical advisor and MESA/Industry liaison for the program.

#### PARENT SUPPORT GROUP

Another accomplishment that has pleased the MESA staff is the development of the Portland MESA Parent Support Group. Approximately 50 parents belong to the volunteer group.

Emphasis is on sharing information among parents—"what seems to work and what doesn't, as we attempt to raise our kids," stated Don Warfield, one of the group leaders.

Panel discussions at the last meeting included effective communications with your school and student, opportunities in MESA, coping with parental anxieties, developing good study habits, and productive communication about grades.



PORTLAND

## MESA

Mathematics, Engineering, Science Achievement

Jon Ibanez, a student at Mt. Tabor, wrote of his mentorship with Larry Olson and Larry Christianson of the State Highway Division...

...Before they extend or build a road, they need to measure everything and list what's around the area. They need to know how many trees, light poles, telephone poles, etc. are in the area.

But before they can do anything about the roads there has to be an idea of what needs to be done. What design will the road look like? How much will the project cost?

Then there is contract plans and bid letting, low bid will be the one to build the road.

Then construction starts. The last step is final acceptance.

Mr. Christianson showed us a computer used to design roads or bridges. Ben and I played around with this computer and put trees between the freeways. That was fun. After our visit Larry gave Ben and me M&M's for a small snack. I hope to do the trip again.

This position of engineer will only fit men and women who are patient and like to work with many details. They also have to know math because if there's a wrong measurement, the whole project will be a disaster.

The Oregon Department of Transportation

CIVIL RIGHTS SECTION  
412 Transportation Building  
Salem, Oregon 97310  
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#### AWARD WINNERS

##### 1986-87 MESA AWARD WINNERS

Sixty-eight students received incentive awards last year. To receive an incentive award a student must receive A's and B's in their math and science classes and participate in a minimum number of MESA activities. Award winners were:

##### BEAUMONT

Christine Allen  
Aaron Ashford  
Robert Ingram  
Britt Jura  
James McKenzie  
Nicol Olds  
Meredith Rainey  
Jonathan Stokes  
Heidi Whitcomb

##### BENSON

Alisa Benjamin  
Yolanda Blume  
Burnadetta Mallisham  
Sheila Randall

##### BINNSMEAD

Anthony Fischer  
Tony Fung  
Dwayne Lewis  
Stanley Mar  
Joshua McCleary  
Hendrik Somadi  
Min Sung

##### FERNWOOD

Julia Alexander  
Lyla Bradley  
Duane Burton  
Bill Campbell  
Christopher Dawson  
Elizabeth Laws  
Adrienne Livingston  
Alex Montgomery  
Stacey Parnell  
Todd West

##### GRANT

Stephanie Bell  
Ester Colbert  
Mary Eilent Colbert  
Traci Fantz  
Sharon Kenney

##### JEFFERSON

Leila Aziz  
Pamela Clegg  
Nilesh Dayal  
Linh Hong  
Sonia Hult

Jodi Lewison  
Michelle Robertson  
Trisa Watson

##### KELLOGG

Tina Dunn  
Deanna Gillespie

##### MT. TABOR

Melissa Ching  
Jonathan Ibanez  
Dang Tran  
Peter Yue

##### OCKLEY GREEN

Rochelle Watson

##### TUBMAN

Eduard Broeth  
Marilyn Ceaser  
Sandra Ceaser  
Emiro Gonzales  
Stephanie Jenkins  
Nicole McCray  
Heather O'Brien  
Tanya Shiffer

Bun Tan  
Kwame Warfield  
Shannon Wilson  
Sarah Wood

##### WHITAKER

LuJuane Brown  
James Fenceroy  
Malaina Guzman  
Dominic Hall