

## SECME

February 1, 1994

R. Guy Vickers  
Executive Director  
c/o Georgia Institute  
of Technology  
Atlanta, GA 30332-0270  
404/894-3314

**Southeastern  
Consortium  
for  
Minorities  
in  
Engineering**

**Member  
Engineering Colleges:**

University of Alabama  
Birmingham, AL 35294  
University of Alabama  
Huntsville, AL 35807  
The University of Alabama  
Tuscaloosa, AL 35486  
Tuskegee University  
Tuskegee, AL 36083  
Howard University  
Washington, DC 20059  
Florida A&M University  
Florida State University  
Tallahassee, FL 32316-2175  
Florida Atlantic University  
Boca Raton, FL 33432  
Florida Institute of Technology  
Melbourne, FL 32901

University of Central Florida  
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University of Florida  
Gainesville, FL 32611  
University of Miami  
Coral Gables, FL 33124  
University of South Florida  
Tampa, FL 33620  
Georgia Institute of Technology  
Atlanta, GA 30332  
The University of Georgia  
Athens, GA 30602  
University of Louisville  
Louisville, KY 40292  
Southern University  
Baton Rouge, LA 70813  
The University of Mississippi  
University, MS 38677  
North Carolina A & T State Univ.  
Greensboro, NC 27411

North Carolina State University  
Raleigh, NC 27607  
Clemson University  
Clemson, SC 29631  
University of South Carolina  
Columbia, SC 29208  
Christian Brothers College  
Memphis, TN 38104  
Memphis State University  
Memphis, TN 38152  
Tennessee State University  
Nashville, TN 37203  
University of Tennessee  
Knoxville, TN 37916  
University of Tennessee-Chattanooga  
Chattanooga, TN 37402  
Old Dominion University  
Norfolk, VA 23508  
University of Virginia  
Charlottesville, VA 22901

Ms. Annie Whatley  
Office of Minority Economic Impact and Diversity  
The United States Department of Energy (DOE)  
1000 Independence Avenue, SW  
Washington, D.C. 20585

Dear Ms. Whatley:

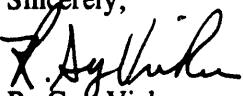
Enclosed are the Technical Progress and Federal Cash Transaction reports for the first quarter of "Establishing the SECME Model in the District of Columbia." Many exciting activities and projects have been instituted to date. A major reason for the program's success is the strong endorsements from D.C. Public Schools superintendent, Dr. Franklin Smith and from the University of the District of Columbia's Dean of Physical Science, Engineering and Technology, Dr. Philip Brach. By reviewing the work plan in the summary of the report, you will see that all of the objectives to date have been met. Indeed, this has been a very rewarding and productive period of progress toward the objectives of the grant.

SECME Program Coordinator Brenda Simmons has done an exemplary job in implementing the SECME Model in the District of Columbia Public Schools. She and Ms. Dorothy Barton, D.C. Public Schools SECME Program Director, have done an outstanding job working with SECME teams in SECME schools to develop implementation/action plans for each school.

Professor Calvin Brooks, SECME Engineering Faculty Consultant at the University of the District of Columbia and National Society of Black Engineers (NSBE) students are working with the SECME school teams to plan for SECME activities and The Annual Mousetrap Car, Poster and Essay Competitions.

The work that we have achieved with the support of the United States Department of Energy has been highly valuable in providing opportunities for greater academic achievement in mathematics and science for minority students in the District of Columbia. It has also facilitated a strong partnership in the District that will grow in the future.

Sincerely,

  
R. Guy Vickers  
Executive Director

RGV:rab

Enclosures

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**MASTER**

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## QUARTERLY REPORT

Submitted to:

The United States Department of Energy (DOE)  
1000 Independence Avenue, SW  
Washington, D.C. 20585  
Attention: Ms. Annie Whatley  
Office of Minority Economic Impact and Diversity

Establishing the SECME Model in the District of Columbia

September 1, 1993 - December 31, 1993

by:

Southeastern Consortium for Minorities in Engineering (SECME)  
c/o Georgia Institute of Technology  
Atlanta, GA 30332-0270

Contact:  
R. Guy Vickers  
Executive Director  
(404) 894-3314

## DISCLAIMER

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OSTI

This report contains a description in chronological order of the planning, progress, and activities completed during the first quarter (September - December, 1993) of the United States Department of Energy (DOE)/Southeastern Consortium for Minorities in Engineering (SECME) grant. We have made excellent progress in *Establishing the SECME model in the District of Columbia Public Schools* (D.C. Public Schools). Monthly Exhibits of supporting documentation are included in the attached Appendices.

### **September, 1993**

On September 23, a meeting was held with Ms. Joan Brown, Executive Assistant to the Superintendent, D.C. Public Schools; Mrs. Annie Whatley, DOE; Mr. R. Guy Vickers, SECME Executive Director, and Ms. Brenda Simmons, Program Coordinator of SECME to initiate plans for implementing the DOE/SECME proposal. After an information exchange from each of the partners in the SECME Model, plans were made for introducing the SECME program to the school system's administrators and principals. Ms. Brown discussed the school system's goals relative to the teaching of mathematics and science as it relates to Goal 4 in *The Challenge of America 2000*. She also described the current status of programs directed at increasing achievement in mathematics and science in D.C. Public Schools. Guy Vickers and Brenda Simmons explained the SECME program delivery process and suggested strategies for program implementation for the enhancement of the D.C. Public School mathematics and science achievement. A decision was made to focus on the middle and junior high schools in the District of Columbia. Everyone worked together to organize an informational meeting with the Superintendent and key administrators from the D.C. Public Schools as well as the Dean of Engineering and key engineering faculty members from the University of The District of Columbia (UDC).

On September 29, a meeting for administrators and leaders in the SECME Model was held. The purpose of the meeting was to develop a plan for successful establishment of SECME programs in the DC Public Schools. The following were in attendance: District of Columbia Public Schools, Dr. Franklin L. Smith, Superintendent; Dr. Joan W. Brown, Executive Assistant to the Superintendent and Ms. Frances Brock, Supervising Director for Science; University of the District of Columbia: Dr. Philip Brach, Dean of the College of Physical Science, Engineering and Technology and Dr. Winson Coleman, Director of Science and Engineering Center; DOE: Ms. Annie Whatley, Office of Minority Economic Impact and Diversity; SECME: Ms. Brenda Simmons and Mr. R. Guy Vickers. (See

The following objectives were achieved:

- Introduced the SECME model
- Established a plan to initiate and sustain the SECME program in the D.C. Public Schools
- Made plans to conduct an Inservice Program for all middle grade and junior high school principals
  - to get commitment from each participating school
  - to introduce SECME Partnership Leaders
  - to discuss goals and objectives for the SECME Program
- Established a time table for follow-up activities for program implementation
- Identified the D.C. Program Director - Ms. Dorothy Barton

An orientation meeting with the University of the District of Columbia school faculty was also held on September 29. The purpose of the meeting was to discuss the role of the university in the SECME partnership. Attending were Dean Philip Brock, Dr. Winson Coleman, Mr. Alfred Taylor, and Prof. Calvin Brooks of the university and R. Guy Vickers and Brenda J. Simmons of SECME.

The following objectives were achieved:

- Reviewed the DOE/SECME proposal and budget
- Discussed activities and program considerations at the university level
- Planned for the implementation of SECME in the D.C Public Schools
- Named an Engineering Faculty Consultant - Professor Calvin Brooks

### October, 1993

On October 27, a workshop was held for middle and junior high school principals and key team members to develop a working plan for the implementation of the SECME program. It was an interactive workshop led by R. Guy Vickers and Brenda Simmons of the SECME staff.

The following objectives were achieved:

- Discussed the Department of Energy/SECME proposal
- Presented the SECME model
- Presented information from each of SECME's partners
- Discussed steps for establishing a SECME program
- Established a date to complete SECME School Information forms and Longitudinal data forms
- Established a date for an Inservice Program for new SECME school teams

### November, 1993

On November 9, a meeting was held to plan for advancing the District of Columbia Public Schools' SECME program and to make necessary amendments in the grant. Participating in the meeting were Ms. Annie Whatley (DOE), Ms. Frances Brock and Ms. Dorothy Barton (D. C. Public Schools) and Ms. Brenda Simmons (SECME).

Dorothy Barton reported that ten middle and junior high schools would participate in the SECME programs as full SECME members. It was agreed that six additional schools would be identified to participate as SECME partner schools. The SECME partner schools will participate in SECME Inservice Programs and the Annual Mousetrap Car, Poster and Essay Competition. This change required a reallocation of school funds. Everyone contributed to the discussion and Ms. Whatley approved the following changes in the reallocation of funds.

#### **Original proposal**

- 16 SECME schools receiving \$2000 each for a **Total of \$32,000**

#### **Adopted amendment**

- 10 SECME schools receiving 2,000 each  
- 6 SECME partner schools receiving 500 each  
- Program Director will receive 6,000  
- Operational/Discretionary Funds 3,000  
**Revised Total \$32,000**

On November 10, a SECME Inservice workshop was held for the ten middle and junior high school SECME teams. The workshop was designed to give practical strategies in establishing SECME programs, to demonstrate interactive integrated class lessons by SECME Master Teachers (outstanding SECME teachers in existing SECME programs) and to begin to develop SECME action plans for each SECME School. A review of the agenda will show the outstanding level of participation from each of SECME's partners. Dean Brock (UDC), Ms. Whatley (DOE) and R. Guy Vickers (SECME) welcomed all participants. Ms. Brenda Simmons and SECME Master Teachers Mr. Ed Tymes and Ms. Chloe Garth-Elkins presented the SECME model. Dr. Brock (UDC) discussed the SECME annual competition. National Society of Black Engineers (NSBE) students discussed advantages and opportunities for participating schools. Ms. Yvonne Tilghman of Science Services discussed opportunities at the local and national science and engineering fairs. Educators received a copy of the SECME Handbook and SECME Video. Over 50 middle grade teachers and counselors participated in the first SECME Inservice Meeting for SECME School Teams. Each participating middle school was represented by four faculty members. Most schools were represented by an English, Mathematics, and Science teachers and a counselor. They teamed to develop their SECME program plans. After planning, each team gave enthusiastic outstanding presentations relative to how they plan to execute SECME in their school. One hundred percent of the participants rated the Inservice as excellent or outstanding.

Additionally, the following objectives were achieved:

- Presented teachers with successful and innovative strategies for classroom instruction through demonstration lessons
- Helped teachers select activities to implement that improve students' motivation and attitude toward math and science and to build strong SECME programs
- Discussed mini-grants to assist teachers in acquiring resources such as manipulative materials, calculators and other instructional materials
- Facilitated planning field trip and science competition planning
- Encouraged educators to attend the SECME Summer Institute.

#### December, 1993

On December 9 and 10, planning sessions were held with Ms. Dorothy Barton, SECME Program Director, and Professor Calvin Brooks, Engineering Faculty Consultant. The purpose of these sessions was to discuss the roles and responsibilities of both the Program Director and the Engineering Faculty Consultant. The Program Director is critical to the success of an effective long term SECME program. The need for strong leadership at the local level is essential. The Engineering Faculty Consultant provides leadership for the University in implementing SECME activities. The Annual SECME Competition and engineering activities are an integral part of building motivational SECME programs.

Additionally we accomplished the following:

- Reviewed and made recommendations for school Implementation/action plans
- Reviewed and approved mini-grant proposals
- Planned for SECME teacher and student awards and recognition
- Devised a plan for the coordination of students participation in competitions and special programs
- Coordinated the development of programs to meet SECME school team needs

#### Summary

The grant funded by the United States Department of Energy to establish the SECME model in the District of Columbia Public Schools commenced in September, 1993. Ten middle and junior high District of Columbia schools have active SECME programs designed to improve the quality and motivation of communication, mathematics and science instruction. The following work plan gives the status and lists the objectives spelled out in the grant. All objectives have been accomplished. Evaluations and interviews were conducted to understand how the program affected the teachers. All school teams are excited about the activities and programs planned for their students.

Additional findings are presented below:

- 100% of SECME member schools developed Implementation/action plans.
- All Implementation/action plans were based on input from the entire SECME team.
- All schools have made excellent progress in executing initial objectives of their plans.

We are excited about the opportunity this grant provides to increase the pool of pre-college minority students motivated to pursue mathematics, science and engineering careers. The participating students will be better prepared for success in challenging mathematics and science classes as a result of the direction, support, and hands-on opportunities that the new SECME middle grade program provides.

**SECME**  
**UNITED STATES DEPARTMENT OF ENERGY**  
**DISTRICT OF COLUMBIA PUBLIC SCHOOL PROJECT**

**Work Plan: September 1, 1993 - December 30, 1994**

A one year period of development for 16 SECME schools is planned beginning October 1, 1993 and continuing through September 30, 1994. Below are the sequential steps SECME will follow in developing the District of Columbia school programs.

	<b>STATUS</b>
Meet with Department of Energy officials, UDC College of Engineering and District of Columbia school system representatives to formalize the establishment of SECME.	COMPLETE October 1993
Meet with superintendent and mathematics/science coordinators to discuss SECME model and requirements for implementation. Secure program endorsement and support of school officials.	COMPLETE October 1993
Identify 16 schools to participate as SECME schools (site selection).	<sup>1</sup> 10 SECME Middle Schools identified. Plan to identify 6 SECME partner schools
Superintendent selects Program Director for the school system.	COMPLETE October 1993
Identify team of SECME teachers (mathematics, science, language arts and counselor) for each school.	COMPLETE November 1993
Identify SECME Coordinator for each team of teachers.	COMPLETE November 1993
Meet with UDC College of Engineering Dean to discuss SECME membership and program implementation time-frames.	COMPLETE November 1993
Identify UDC College of Engineering Faculty Consultant (EFC) or Minority Engineering Program Director (MEPD).	COMPLETE October 1993
Establish SECME teacher in-service workshop training time-frames.	COMPLETE October 1993
Establish District of Columbia SECME Program director and school principals in-service training time-frames.	COMPLETE October 1993
Establish in-service training for EFC/MEPD at UDC College of Engineering.	COMPLETE November 1993
SECME team develop integrated implementation plan (includes identification of students). Develop goals and objectives.	COMPLETE December 1993

<sup>1</sup>As agreed upon in the November 9 meeting

Conduct two in-service workshops for teachers facilitated by SECME staff.	COMPLETE October 27, 1993 November 10, 1993
First Quarterly Report due to DOE	COMPLETE January 1994
<b>Implementation: January - September 1994</b>	
Workshops 3-5 will be conducted by SECME staff (time-frame to be determined).	To Be Determined February 3, 1994 April 12, 1994
Mini-grants (\$2,000) will be distributed to 16 SECME schools (proposal will be approved by SECME and school system).	January, 1994
UDC College of Engineering Saturday Science Workshops will begin in February 1994 and culminate in May 1994.	To Be Scheduled
UDC College of Engineering EFC's/MEPD's will implement visitation schedule. At least two classroom visits will be made for each of the 16 schools.	Dr. Calvin Brooks, UDC, will work with each SECME school and two NSBE students are assigned to each SECME school.
Coordination (follow-up) meetings will be held with SECME program coordinator and District of Columbia SECME Program Director.	January, 1994 Also planned for March, April 1994
UDC College of Engineering will pilot SECME school competition. Competition will be held on UDC's campus.	April 9, 1994 SECME awards program tentatively scheduled May 14, 1994
SECME Program Coordinator and Executive Director will provide necessary follow-up with the District of Columbia.	March 1994, April 1994
Quarterly Reports due to DOE in March and June.	March 1994, June 1994
Selection of 16 teachers to attend 1994 Summer Institute held at the University of South Alabama, Mobile, AL.	March 1994
Upon successful completion of the Summer Institute, administer \$1,000 stipends to 16 teachers.	July 1994
Final Report due to DOE October 1994	October 1994

## **SEPTEMBER 1993 EXHIBITS**

### **APPENDIX 1**

**STATEMENT OF INTENT**  
**SECME PROGRAM 1993-94**  
(please print or type)

Superintendent Dr. Franklin L. Smith

School System District of Columbia Public Schools

Address 415 12th Street N.W.

City/State/Zip Washington, DC 20004

Office Phone (202) 724-4222 Fax 20-727-1516

My school system is interested in participating in a collaborative partnership with the College of Engineering at the University of the District of Columbia and the Southeastern Consortium for Minorities in Engineering (SECME).

Sept. 29, 1993  
Date

Franklin L. Smith  
Signature of Superintendent

# SECME

## SECME UNIVERSITY MEMBERSHIP FORM (Please Type)

The Engineering College of University of the District of Columbia  
INSTITUTION'S NAME  
affirms its' intention to become an active member of the Southeastern Consortium for Minorities  
in Engineering, Inc.

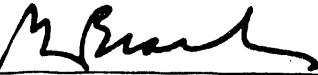
I will:

- endorse, lead, and support the SECME program; and serve as the member on the SECME University Council
- appoint engineering faculty (EFC) to provide support and serve as consultants to area SECME schools
- annually, establish scholarships for SECME students
- promote and support the Annual SECME Student Competition by:
  - assisting in the coordination of the local school systems student competition
  - sponsoring and hosting a regional semi-finals competition and a day of activities at the University for the winners of the school competitions
  - providing round trip transportation for one chaperon, a middle grades team of three students and a high school team of three students to participate in the Competition Finals at the Summer Institute (the meals, lodging and activities at the Summer Institute are provided by SECME)
- provide details and opportunities for SECME students to participate in the University's Summer, Saturday, and other precollege programs; and for SECME educators to participate in workshops, seminars and other professional development programs
- provide other appropriate leadership and assistance

UNIVERSITY ADDRESS 4200 Connecticut Avenue, N.W.

CITY Washington STATE DC ZIP 20008

OFFICE TELEPHONE NUMBER (202) 282-7427

  
DEAN OF ENGINEERING SIGNATURE

September 14, 1993  
DATE

**1993-94 AFFIRMATION STATEMENT**  
(Please Type)

**INSTITUTION:** University of the District of Columbia

**MAILING ADDRESS:** 4200 Connecticut Avenue, N.W.

**CITY:** Washington      **STATE:** D.C.      **ZIP CODE** 20008

**OFFICE TELEPHONE NUMBER:** (202) 282-7427      **FAX:** (202) 282-3677

The engineering college of The University of the District of Columbia  
Consortium Institution

affirms its intention to participate as an active member of the Southeastern  
Consortium for Minorities in Engineering, Inc.

**CHECK ONE:**

       I will serve as a member of the University Council.

X I hereby appoint Dr. Winson Coleman, Director, Sci. & Engr. Center  
(Name) (Title)  
(202) 282-7338 to serve as my representative, on the University  
(Telephone Number) Council.

Philip L. Brach, Ph.D., P.E.  
Dean of Engineering (Print or type)

  
Signature

September 14, 1993  
Date

**Please return to SECME on or before September 22, 1993.**

**UNIVERSITY SPONSOR  
1994 SECME SEMI-FINAL CONTEST**

Our institution will coordinate the competitions for the local SECME schools, sponsor a semi-final contest, and send SIX top winners (1st place high school team of 3 and the 1st place middle grades team of 3) and 2 chaperones to the finals at the 1994 SECME Summer Institute. The university will provide transportation cost to and from the Summer Institute. SECME will provide room and board during the Competition Finals Program (normally 3 days and 2 nights) at the University of South Alabama in Mobile, Alabama in June.

The following person will coordinate the contest for our university:

Calvin Brooks

Name \_\_\_\_\_

( 202 ) 282-3500

**Telephone Number**

University of the District of Columbia

**Name of SECME Member University**

**Dean of Engineering Signature**

September 14, 1993

Date

### Pending Funding

Contact the SECME office (404) 894-3314 regarding contest related questions.

**Please Return to SECME on or before September 22, 1993.**

**APPOINTMENT OF ENGINEERING FACULTY CONSULTANT**  
(Please Type)

**The following engineering faculty member will serve as the University's Engineering Faculty Consultant (EFC) and coordinate SECME School programs during the 1993-94 academic year:**

**INSTITUTION:** University of the District of Columbia

**NAME:** Calvin Brooks

**TITLE:** Chairman, Department of Mechanical Engineering

**MAILING ADDRESS:** 4200 Connecticut Avenue, N.W.

**CITY:** Washington      **STATE:** D.C.      **ZIP CODE** 20008

**OFFICE TELEPHONE NUMBER:** (202) 282-3500      **FAX:** (202) 282-3677

**HOME TELEPHONE NUMBER:** (202) 234-0718

Philip L. Brach, Ph.D., P.E.  
Dean of Engineering (Print or type)

Signature

September 14, 1993  
Date

**Please return to SECME on or before September 22, 1993.**



**WASHINGTON, D.C. 2000**

# ***The Challenge of America 2000***

***School Year 1991-92:  
A Year of Understanding  
and Commitment***

## **District of Columbia Public Schools**

**Franklin L. Smith**  
Superintendent of Schools  
Chief State School Officer

### **Education Goals for the Year 2000**



**National Goals:**

**1** All children in America will start school ready to learn.

**2** The high school graduation rate will increase to at least 90 percent.

**3** American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

**4** U.S. students will be first in the world in science and mathematics achievement.

**5** Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

**6** Every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

### **District of Columbia Goals:**

**7** All students will demonstrate an appreciation for the cultural arts.

**8** Parents will be actively involved in their children's education.

**DISTRICT OF COLUMBIA  
PUBLIC SCHOOLS****Office of the Superintendent**

415 12th Street, N.W.

Washington, D.C. 20004

(202) 724-4222

FAX (202) 727-1510

**Memorandum****To: Principals of**

- Eliot Junior High School
- Evans Junior High School
- Francis Junior High School
- Hart Junior High School
- Hine Junior High School
- Jefferson Junior High School
- Johnson Junior High School
- Kelly Miller Junior High School
- Kramer Junior High School
- Paul Junior High School
- Taft Junior High School
- Backus Middle School
- Roper Middle School
- Sousa Middle School
- Stuart Hobson Middle School

**From:**Joan W. Brown

Dr. Joan W. Brown  
Executive Assistant to  
the Superintendent

**Date:** October 20, 1993**Subject:** SECME Program

We are scheduling a planning meeting Wednesday, October 27, 1993, at 9:30 a.m. in the Superintendent's conference room for the principal and key team member to develop a working plan for the implementation of the Southeastern Consortium for Minorities in Engineering (SECME) project. We will meet in the Superintendent's Conference Room. The program works within the existing educational structure at the middle and secondary levels. At each participating school, a SECME team is formed to plan and carry out the program.

**Principals**

**2.**

**October 20, 1993**

**R. Guy Vickers, Executive Director, and Brenda Simmons, Teacher Training Coordinator will guide us through the planning process. It is anticipated that we will spend at least three (3) hours completing the work plan. Please be prepared to stay and plan with us. Most of you have responded with the names of team members, if you have not, please do so. This is your last opportunity to be included. Funding has been granted and we are anxious to implement the program in the D.C. Public Schools.**

**Thank you for your cooperation. I look forward to seeing you on the 27th.**

**JWB:ehh**

**cc: Dr. Franklin L. Smith  
Mr. Maurice Sykes**

**M E M O R A N D U M**

**TO:** R. Guy Vickers

**FROM:** Brenda J. Simmons *for*

**DATE:** September 9, 1993

**SUBJECT:** District of Columbia Planning Meeting - September 29, 1993

---

The following representatives will attend the SECME meeting in Washington, D.C. on September 29 at 9:30 a.m. in the Superintendent's Conference Room.

**The University of the District of Columbia**  
4200 Connecticut Ave. N.W.  
**MB 4201**  
**Washington, D.C. 20008**

**Dr. Philip Brach, Dean**  
College of Physical Science, Engineering and Technology

**Dr. Winson Coleman, Director**  
Director of Science & Engineering Center

Phone (202) 282-7427  
Fax (202) 282-3677

**From Department of Energy:**

**Office of Minority Economic Impact and Diversity**  
**Office of the Secretary**  
**U.S. Department of Energy**  
**1000 Independence Avenue, SE**  
**Washington, D.C. 20585**

Phone: (202) 586-0281  
Fax: (202) 586-3075

**From the District of Columbia Public Schools:**

**District of Columbia Public Schools  
415 12th Street N.W.  
Washington, D.C. 20004**

**Dr. Franklin L. Smith  
Superintendent  
Phone (202) 724-4222  
Fax (202) 727-1516**

**(Contact: Ms. June Gregory)**

**Dr. Joan Brown  
Executive Assistant to the Superintendent  
Phone (202) 724-4222  
Fax (202) 727-1516**

**Ms. Frances Brock  
Acting Supervisor/Director for Science  
20th & Evarts Streets, N.E.  
Washington, D.C. 20018  
Phone (202) 576-7817  
Fax (202) 576-7041**

**Ms. Dorothy Barton  
Backus Middle School  
5171 South Dakota Ave. N.E.  
Washington, D.C. 20017**

**Phone (202) 576-7449  
Fax (202) 576-6456**

**Dr. Brown will also invite other school leaders.**

**cc:Sandi  
Ramona**

# SECME

September 24, 1993

R. Guy Vickers  
Executive Director  
c/o Georgia Institute  
of Technology  
Atlanta, GA 30332-0270  
404/894-3314

## Southeastern Consortium for Minorities in Engineering

### Member Engineering Colleges:

University of Alabama  
Birmingham, AL 35294  
University of Alabama  
Huntsville, AL 35807  
The University of Alabama  
Tuscaloosa, AL 35486  
Tuskegee University  
Tuskegee, AL 36083  
Howard University  
Washington, DC 20059  
Florida A&M University  
Florida State University  
Tallahassee, FL 32316-2175  
Florida Atlantic University  
Boca Raton, FL 33432  
Florida Institute of Technology  
Melbourne, FL 32901

University of Central Florida  
Orlando, FL 32816  
University of Florida  
Gainesville, FL 32611  
University of Miami  
Coral Gables, FL 33124  
University of South Florida  
Tampa, FL 33620  
Georgia Institute of Technology  
Atlanta, GA 30332  
The University of Georgia  
Athens, GA 30602  
University of Louisville  
Louisville, KY 40292  
Southern University  
Baton Rouge, LA 70813  
The University of Mississippi  
University, MS 38677  
North Carolina A & T State Univ.  
Greensboro, NC 27411

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Knoxville, TN 37916  
University of Tennessee-Chattanooga  
Chattanooga, TN 37402  
Old Dominion University  
Norfolk, VA 23508  
University of Virginia  
Charlottesville, VA 22901

Dr. Philip Brach, Dean  
College of Physical Science, Engineering and Technology  
The University of the District of Columbia  
4200 Connecticut Ave. N.W.  
MB 4201  
Washington, DC 20008

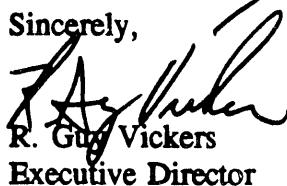
Dear Dr. Brach:

We are pleased that you will be able to attend the meeting on Wednesday, September 29th from 9:30 am to 11:30 am. The purpose of this session is to discuss forming a successful partnership with the Department of Energy (DOE), The University of the District of Columbia (UDC), The District of Columbia Public Schools and the Southeastern Consortium for Minorities in Engineering (SECME).

In attendance, representing The District of Columbia Public Schools will be Dr. Franklin L. Smith, Superintendent, Dr. Joan W. Brown, Executive Assistant to the Superintendent and Ms Frances Brock, Supervisor / Director for Science; from the University of the District of Columbia will be Dr. Philip Brach, Dean College of Physical Science, Engineering and Technology and Dr. Winson Coleman, Director of Science and Engineering Center; from the DOE will be Ms. Corlis Moody, Ms Gloria Smith and Ms. Annie Whatley, Office of Minority Economic Impact and Diversity; from SECME will be Ms. Brenda Simmons, Program Coordinator and R. Guy Vickers, Executive Director. The meeting will be held in the District of Columbia Public Schools Superintendent's Conference Room, Suite 1209 at 415 12th St. N.W.

Thank you for your time with this venture and we look forward to a most productive session.

Sincerely,



R. Guy Vickers  
Executive Director

Southeastern Consortium for Minorities in Engineering  
September 29, 1993  
9:30 A.M.

Name	School/Organization
Barbara J. Roberts	Eliot J.H.S.
Dorothy Barton	Math/Sci/Tech-Backus
Frances Brock	Science Office
Winson R. Coleman	SEC-UDC
Philip L. Brach	UDC/CPSET
Edward H. Moseley	Cluster VI
Raymond St. Poles	Kramer J.H.S.
Ronald A. Hasting	Kelly Miller J.H.s.
Emma Bonner	Hines Junior High
Carmen Contee	Lincoln Middle School
Natalie Jones-Wallace	Johnson J.H.S.
Robert L. Scott III	Backus
Lee E. Epps	Francis
Diane Brown	Jefferson J.H.S.
Mary Johnson	Jefferson J.H.S.
Mary Dura	Early Learning Years Branch
Helena N. Jones	Roper
Joan N. Brown	Supt. Office
R. Guy Vickers	SECME
Brenda Simmons	SECME



**DISTRICT OF COLUMBIA  
PUBLIC SCHOOLS**

**Office of the Superintendent**

**415 12th Street, N.W.  
Washington, D.C. 20004  
(202) 724-4222  
FAX (202) 727-1516**

**Southeastern Consortium  
for Minorities in Engineering  
September 29, 1993  
9:30 am**

**Welcome/Purpose . . . . .** **Dr. Franklin L. Smith**  
**Superintendent of Schools**  
**District of Columbia Public Schools**

**SECME Presentation . . . . .** **Guy Vickers**  
**Executive Director**  
**SECME**

**Department of Energy Support . . . . .** **Corlis Moody**  
**Director (pending)**  
**Office of Minority Economic Impact**  
**Department of Energy**

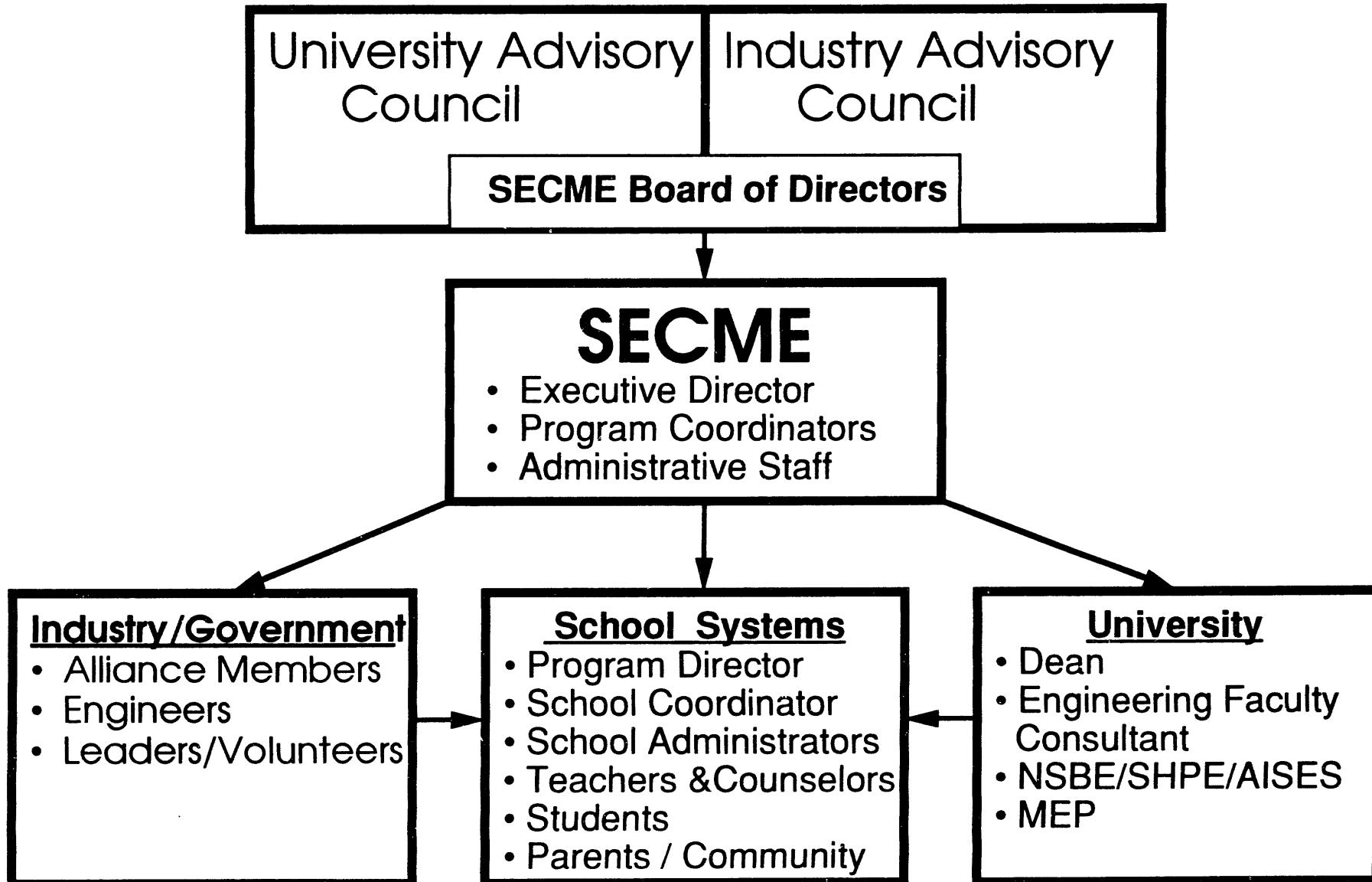
**University Support . . . . .** **Dr. Phillip Brach**  
**Dean**  
**College of Physical Science**  
**Engineering and Technology**

**Questions and Answers**

**Summary and Next Steps . . . . .** **Dr. Joan W. Brown**

# COMPREHENSIVE SECME MODEL

Delivery Process to Improve  
Mathematics, Science and Communications Literacy



# COMPREHENSIVE SECME MODEL

## SECME

- Matching scholarships to Summer Institute
- Staff Development
- Collaboration
- Resources and Materials
- Mini-grants
- Networking
- Longitudinal data
- People and Expertise

## School System

- Appoint a Program Director
- Sponsor teachers to Summer Institute
- Released time for teachers for training
- Longitudinal data
- Attend leadership workshop
- Provide grants for mathematics and science

## University

- Appoint an Engineering Faculty Consultant
- Sponsor Annual SECME Student Competition
- Sponsor winning team to Summer Institute
- Invite schools to campus, i.e. engineering day, etc.
- Plan and participate in program activities
- Coordinate Engineering Day, NSBE/SHPE
- Host Regional Workshops
- Provide Student Scholarships
- Host Summer Institute (Different Member University each year)
- Mentoring and coaching students
- Tutors
- Research Opportunities
- Summer/Saturday Academic Programs
- Staff Development Opportunities

## Industry/Gov't

- Select representatives to SECME Alliance
- Financial and In-kind Investment
- Guest speakers
- Serve as judges, and coaches
- Proposal writers
- Summer work opportuntites
- Tours and field trips
- Mini-grants
- Equipment and Materials
- Mentors and role models
- COOP/Scholarships and Fellowships
- People and expertise

## **SECME PARTNERSHIP MODEL**

### **SECME**

**Key People:** Executive Director  
Program Coordinators  
Administrative Staff

**Activity Base:** Longitudinal Data  
Teacher In-service  
Resources  
Annual Competition  
Scholarships  
Summer Opportunities

### **SCHOOL SYSTEMS**

**Endorsement:** Superintendent

**Key People:** Program Director (Central Office Level)  
School Coordinator (for each school)

**Activity Base:** Teacher(s) to attend the Summer Institute  
In-service time for teachers, counselors & principals

### **UNIVERSITY**

**Endorsement:** Dean of Engineering

**Key People:** Engineering Faculty Consultant  
Pre-college Program Coordinator (when available)  
Minority Engineering Program Director (when available)

**Activity Base:** School visits  
Regional Competition: Mousetrap, Poster, Essay  
Winners of SECME Regional Competition to Summer Institute  
Annual Regional SECME Workshops for SECME teams  
Student Scholarships  
Attendance at Leadership Workshops & Summer Institute  
Host Summer Institute with SECMe (Different University each year)

### **INDUSTRY/ALLIANCES**

**Endorsement:** Company Executive

**Key People:** Appoint a Representative to the Advisory Council

**Activity Base:** Financial and In-kind Investment to SECME  
Organize SECME Alliance to support local school system

Southeastern Consortium for Minorities in Engineering  
September 29, 1993  
9:30 A.M.

SIGN - IN SHEET

Name

School/Organization

Telephone

Barbara J. Rainey	East JHS	202-724-4665
Dorothy Barton	Math/Sci Tech. Studies	576-7449
Frances Brock	Science Office	576-7412
Richard L. Clemmer	SEC-CCDC	282-7228
Philip L. Brach	UDC/CPSBT	282-7427
Edward H. Mosley	Cluster VI	576-7687
Raymond St. John	Kramer J.H.S.	767-7686
Ronald A. Hasty	Kelly Miller JHS	724-4611
Ernest Bonner	Hu. Senior High	724-4772
James Cartee	Lincoln Middle School	673-7345
Natalie Jones-Wallace	Johnson J.H.S.	767-7110
<u>Patricia Scott</u>	<u>Frances Brockus</u>	576-6110

Southeastern Consortium for Minorities in Engineering  
September 29, 1993  
9:30 A.M.

SIGN - IN SHEET

Name	School/Organization	Telephone
Lee E. Epps	Finn. Ed. A.	(205) 724-4144
Diane Kilan	Technical Ed.	205-724-4144
Mary Johnson	MSU, Student, 2	205-724-4142
May Brown	Engineering, Jean Bund	(205) 724-4149
Patricia Simmons	Ed. A.	205-724-4141
Helenah T. Jones	Topper	(205) 724-4132
Jane Gregory	Supt's office	724-4222
Jan R. Brown	Engrg. office	724-4222

## **OCTOBER 1993 EXHIBITS**

### **APPENDIX 2**

**The District of Columbia Public Schools**  
**SECME Inservice Workshop for School System Administrators**  
**October 27, 1993**

Name	Position	School
Cynthia Harvey	Mathematics Teacher	Kelly Miller
Wilbert Miller	Guidance Counselor	Kelly Miller
Laurance M. Ringhart	Science Teacher	Eliot
Barbara J. Roberts	Dean of Students	Eliot
Mary H. Johnson	Exec. Asst. Cluster 2	Jefferson JHS
Mary D. Reed	Teacher Social Studies	Paul JHS
Dorothy Barton	Science Coordinator	Math/Sci/Tech Center
Frances G. Brock	Acting Supervisor Director for Science	Langdon Admin. Unit
A.H. Saeed	Math Teacher	Roper Jr. High
Lee E. Epps	Asst. Principal	Francis JHS
Helen S. Flagg	Principal	Stuart-Hobson MS
Evelyn H. Gainous	Principal	Hart JHS
Mary M. Johnson	English Teacher	Hart JHS
Ernest Garner	Mathematics Teacher	Stuart-Hobson MS
Winson Coleman	Director-SEC	UDC
Diane Brown	Director of Science	Jefferson JHS
Harriet L. Ford	Asst. Principal	Taft JHS
Helena Jones	Principal	Roper
Ronald A. Hasty	Principal	Kelly Miller
Annie Whatley	Manager	DOE
Joan Brown	Administrator	D.C. Public Schools
R. Guy Vickers	Executive Director	SECME
Brenda J. Simmons	Program Director	SECME

**SECME PLANNING WORKSHOP**  
**District of Columbia Public Schools**  
**Washington DC**  
**October 27, 1993**

1. **Welcome & Introductions**  
**Objectives & Agenda**
2. **Discuss SECME Program**
  - a. **SECME Overview & Update**
  - b. **SECME Model**
3. **Discuss School System Programs**
  - a. **Review current programs**
  - b. **Assess available resources(in the school, school system, business community, university, county, state or federal)**
  - c. **Consider cooperative efforts/joining existing programs**
4. **Discuss University Programs**
  - a. **Review current programs**
  - b. **Discuss new program possibilities**
5. **Develop the plan**
  - a. **Identify Major Program Activities**
  - b. **Establish Teacher in-service staff development workshops**
  - c. **Establish program planning session for university partners**
  - b. **Develop timetable**
  - c. **Identification of School Coordinators**

**Schools Participating in the  
Southeastern Consortium for Minorities in Engineering  
(SECME Program)**

<u>School</u>	<u>Principal</u>
<b>Backus Middle School</b>	<b>Dr. Ann Hilliard</b>
<b>Eliot Jr. High</b>	<b>Ms. Glennis Powell</b>
<b>Francis Jr. High</b>	<b>Dr. Courtney Fletcher</b>
<b>Hart Jr. High</b>	<b>Ms. Evelyn Gainous</b>
<b>Jefferson Jr. High</b>	<b>Ms. Vera White</b>
<b>Kelly Miller Jr. High</b>	<b>Mr. Ronald Hasty</b>
<b>Paul Jr. High</b>	<b>Ms. Cecile Middleton</b>
<b>Roper Middle School</b>	<b>Ms. Helena Jones</b>
<b>Stuart-Hobson Middle School</b>	<b>Dr. Helen Flagg</b>
<b>Taft Jr. High</b>	<b>Mr. James Howell</b>

**The SECME Program consists of:**

- School plan endorsed by Principal and Superintendent;
- SECME team of teachers and counselors who implement the plan, at least one of whom has attended a Summer Institute;
- Partnerships support of parents, community leaders, industry alliances, engineering college representatives and student engineering societies (NSBE, SHPE, AISES).

**The SECME Delivery System includes:**

- The Program Director - A school district level administrator appointed by the Superintendent to coordinate SECME activities for the school system;
- The School Coordinator - A principal, teacher or counselor designated by the school principal to coordinate program activities within the school and to chair the SECME team;
- The SECME Team - A group of educators consisting of a mathematics, a science and a language arts teachers, a counselor and other school staff members. Team members attend in-service workshops and plan for the schools' SECME program;
- The Engineering Faculty Consultant (EFC) - A university engineering faculty professional appointed by the Dean of Engineering to serve as curriculum resource person for SECME team members in area schools.

**SECME provides specialized staff development activities for educators to:**

- provide them with contemporary knowledge of engineering/computer science;
- develop strategies for incorporating knowledge into existing science and mathematics and language arts curricula;
- become more aware of the need to increase the number of minority persons that are currently underrepresented in engineering;
- create awareness, understanding and respect for various cultural groups, and facilitate teacher skills in providing all students an equal opportunity to achieve;
- expose minority students to the field of engineering;
- identify minority students at the pre-college level who have mathematics and science potential, and encourage them to consider engineering as a career.

## **Student Selection**

**SECME** students are not limited to the "creme de la creme" who would get involved in mathematics and science and who would succeed regardless. But rather, students are selected because of aptitude or potential, which is often not yet demonstrated. These students are involved in intervention strategies to nurture, develop self-esteem, and exposure to...so that they go on to succeed. While some are high academic achievers, many are average college preparatory students and others would never be in a college track except for SECME's encouragement.

Historically, African American, Hispanic, Native Americans and other minorities have not been exposed to and/or encouraged to choose technical careers. Recognizing this, SECME targets (but is not limited to) these under-represented groups. However, SECME is open to all students for participation and involvement.

Each school determines the specific criteria for student participation in the school's SECME program.

Keep in mind, SECME provides students "realistic hope" for success.

## **The Annual SECME Summer Institute**

The SECME Summer Institute is an intensive 12-day accredited graduate course for SECME team members. The participants are nominated by their school system program director and awarded full scholarships. The three-semester-hour graduate education course is designed to introduce participants to engineering and the objectives of SECME. It is also designed to assist them in formulating ways to enrich their instructional programs through the use of curriculum materials and computer applications and to help them develop motivational guidance activities for their students.

The Institute is held on a different member university campus each summer. Teachers spend time doing hands-on projects in engineering laboratories and observing engineering or manufacturing in an industrial setting. The instructors for this course are education and engineering faculty members at the host university and SECME Master Teachers who are former Summer Institute participants and have successful SECME programs.

Since 1977, over 1,600 teachers have participated in seventeen successful Institutes. Additionally, 97 teachers from pre-college programs across the country have also attended SECME Summer Institutes. The Institutes have produced convincing evidence that teachers can be trained to academically motivate students and when these teachers are given support from the school administration, a stable and academically productive program can be maintained.

## **The Leadership Workshop**

The leadership workshop is a 3-day workshop for SECME School Administrators. The workshop is held in conjunction with the Annual Meeting during the Summer Institute.

# **ELEMENTARY/JUNIOR HIGH/MIDDLE GRADES GENERAL CRITERIA FOR STUDENT SELECTION**

## **Signs and Behaviors to Look for in a Prospective Engineer**

Listed below are some of the indicators potential engineers may exhibit. Please note that this list is not inclusive but is designed to expand teachers' perspective in identifying SECME participants. Students may exhibit only one of these indicators or a number of them in a variety of combinations. This is not a checklist to exclude students but rather a tool to expand ways of identifying students with potential.

**The student:**

- Has an entrepreneurial bent: wants to sell things and make money
- Looks for ways to earn money in the home and community
- Loves to read for the fun of it
- Loves projects—manipulates materials such as paper, crayons and paints, pencils, pens, match sticks, craft sticks to make models at home or school
- Repairs things (such as a bike)
- Has a passion for building things—a skateboard, model building
- Likes to write—letters, stories, poems, essays
- Enjoys machines—spends spare time with a computer
- Excels in some classes but not necessarily in all
- Has a variety of interests outside the classroom
- Possesses a clear sequential thought process
- Is able to follow directions independently
- Is capable of functioning in a group
- Is a dreamer or visualizer
- Sees a project through to completion no matter how long it takes
- Draws or doodles
- Takes things apart and rebuilds them

**Page TWO, con't**

- **Enjoys puzzles and riddles**
- **Asks questions—especially about how things work**
- **Likes mathematics and science classes**
- **Likes and/or plays with colors and designs**
- **Participates in competitions**
- **Communicates well**
- **Sees the world from his or her own perspective**
- **Tries to beat the video games**
- **Enjoys sharing ideas**
- **Likes animals—has pets**
- **Exhibits an interest in the stars—finding constellations**
- **Loves problem solving activities**
- **Has a great curiosity about everything**
- **Enjoys SECME activities**
- **Wants to know more about engineering careers**
- **Has skills in project research, design, and completion**
- **Demonstrates commitment to academic effort**
- **Has enrolled in college preparatory mathematics, science, and English classes**

## **HIGH SCHOOL CRITERIA: GRADES NINE-TWELVE**

At the high school level, SECME students are encouraged to pursue college entrance and career options in science, mathematics and engineering. The Student Section of this Handbook has been provided for you to copy and distribute to students. To maximize opportunities, it is suggested that students follow these guidelines and the criteria listed below:

- Complete Algebra I with a grade of C+ or better (suggested timeline: end of ninth grade) and continues in college preparatory mathematics, English, and science classes each year
- Complete 4 years of mathematics and science
- Participate in individual and group projects
- Prepare for PSAT/PACT/SAT/ACT
- Initiate a systematic plan for college enrollment
- Take on leadership roles
- Strive for academic excellence
- Interact with parents, mentors, and high school faculty members
- Serve as a mentor to younger SECME students

# **SECME STUDENT CONTEST**

## **ELEMENTARY/JUNIOR/MIDDLE GRADES**

## **HIGH SCHOOL**

### **Middle Schools**

Mousetrap Car  
Poster\*  
Essay\*

### **High Schools**

Mousetrap Car  
Poster\*  
Essay\*  
Egg Drop

Students are to select a discipline and develop a theme to complete the essay and poster.

\*Each year a different theme is selected.

**ELIGIBILITY:** Students currently participating in SECME school programs.

### **CONTESTS:**

<u>Level</u>	<u>Location</u>
First . . . . .	Competition at SECME School/system
Second . . . . .	Semi-finals at SECME University
Third . . . . .	Finals at SECME Summer Institute

**DATES:** February/March are the months recommended for school contests, March/April for the university semi-finals, and June for the finals during the Summer Institute.

# **SECME STUDENT CONTEST**

## **ELEMENTARY/JUNIOR/MIDDLE GRADES**

## **HIGH SCHOOL**

**Middle Schools . . . . .**  
Mousetrap Car . . . . .  
Poster\* . . . . .  
Essay\* . . . . .  
.

**High Schools**  
Mousetrap Car  
Poster\*  
Essay\*  
Egg Drop

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Third . . . . .	Finals at SECME Summer Institute

**DATES:** February/March are the months recommended for school contests, March/April for the university semi-finals, and June for the finals during the Summer Institute.

## **Establishing SECME in the School System**

1. The school superintendent requests an informational packet from the SECME office.
2. The superintendent approves a SECME program for the system.
3. A program director is appointed to administer the SECME program at the system level.
4. Schools are selected to participate in SECME. Generally, they are chosen by the superintendent, program director, and/or principals.
5. Principals of selected SECME schools name a school coordinator to administer the SECME program at the school level.

## **Establishing SECME in the School**

1. Establish contact with university representatives and school system program director.
2. Decide on SECME team
  - Principal
  - Counselor
  - Mathematics teacher
  - Science teacher
  - Language Arts teacher
  - Social Studies teacher
  - Media specialist
3. Provide team orientation
  - Attend a Summer Institute
  - Show SECME video
  - Examine the SECME promotional materials
  - Assign specific roles to individual team members
  - Review Annual Longitudinal Data Reporting (See samples in Forms Section of this Handbook)
4. Decide on SECME approach
  - Enrichment in classroom
  - Enrichment outside classroom
  - Combination of the two

5. Identify students
  - Use selection criteria (Use Student Selection Section of this Handbook)
  - Focus on SECME target populations:  
African American, American Indian, Mexican-American, Puerto Rican, Females, and Other\*
6. Develop the SECME Action Plan
7. Develop calendar of activities. Consider:
  - Program orientation
  - Curriculum enhancement
  - Instructional strategies
  - Team meeting dates
  - Parent/Significant other club event
  - Test preparation and administration dates (HS)
  - Contests and events
    - Annual SECME Student Competition
    - University Career Days
    - Mathematics and science competitions
    - SECME Summer Institute
    - SECME Teacher of the Year
    - SECME Awareness Week
    - Local SECME Recognition Program
  - Scholarships (including university scholarships) (HS)
    - Amoco Oil Company Minority Scholarship, Texas City Refinery
    - AT&T Undergraduate Scholarship Programs
    - Dupont Minority Scholarship
    - NACME Techforce Scholarships
    - Pratt & Whitney Scholarship (Palm Beach County, FL only)
    - SECME university scholarships
    - Westinghouse Talent search
    - NAMEPA Region B Engineering Scholarships
    - NASA Undergraduate Student Researchers Program
8. Implement the SECME Action Plan
9. Complete and submit Annual Longitudinal Data information to the Program Director.
10. SECME School Coordinators complete and submit a SECME School's Annual Summary Report to the Program Director, including photographs, memorabilia, etc. from the program's activities.
11. SECME Program Director completes and submits the School System's Annual Summary Report to SECME.
12. Evaluate program activities.

\*Other underrepresented ethnic groups not listed.

## **SECME PROGRAM EVALUATION**

Assessment of the various components of the SECME program are accomplished through data collection, analysis and interpretation of findings and decision making. The assessments include both formative and summative measures during the year. Assessment of the various components of the program may include:

1. SECME Needs Assessment
2. SECME Longitudinal Data
3. Interviews
4. Classroom Observations
5. Pre-test and Post-test of Attitudes (teachers, students)
6. Student Preference Inventory – compare subject preference
7. Informal Checklist
8. Journals
9. Anecdotal records on students
10. Engineering Interest Survey
11. Review of Enrollment Data
12. Review of Local and State Test Data

The project coordinator will monitor program implementation through site visits, dialogue with participants, and review of all data.

Dissemination will take place through a variety of means: videotape programs; presentations to professionals; telecommunications; networks; meetings; civic, local, district and school publications, and RESAs. The project coordinator and/or participants will submit request to present papers at state, regional, and national conventions.

# **SECME PROGRAM IMPLEMENTATION**

## **THE SECME MODEL**

Board of Directors  
Industry/Government  
University  
School System

## **THE SECME DELIVERY SYSTEM**

Program Director  
School Coordinator  
SECME Team  
Engineering Faculty Consultant

## **KEY COMPONENTS OF THE SECME PROGRAM**

Student selection (orientation and recognition)  
Interdisciplinary Planning/Cooperative Teaming  
Multicultural Infusion  
Computer/Engineering Exposure  
Parent and Community Involvement  
Emphasis on: Instruction with hands-on manipulatives  
SECME Alliances  
University, Industry/Government participation  
Saturday/Summer Work and Scholarship opportunity  
Longitudinal Data  
Annual Student Competition  
"Summer Institute" and Leadership Workshop  
Follow-up Workshops and Inservice Programs

More detailed explanations are provided in the SECME Resource Guide

## **NOVEMBER 1993 EXHIBITS**

### **APPENDIX 3**



**DISTRICT OF COLUMBIA  
PUBLIC SCHOOLS**

RECEIVED NOV 1 1 1993

*Office of Educational Programs and Operations*

*Curriculum and Instruction*

*Langdon Administrative Unit*

*20th and Evans Streets, N.E. • Washington, D.C. 20018*

*(202) 576-7817 • Fax (202) 576-7041*

**MEMORANDUM**

**TO:** Sondra Legall  
Director  
Secondary Learning Years Branch

**FROM:** Frances G. Brock  
Frances G. Brock  
Acting Supervising Director for Science

**DATE:** November 4, 1993

**SUBJECT:** Program Director, Southeastern Consortium  
for Minorities in Engineering (SECME)

The D. C. Public Schools, Southeastern Consortium for Minorities in Engineering, and the Department of Energy are in partnership to implement the SECME Program in ten middle schools.

This memo is to confirm that Mrs. Dorothy Barton has been designated as the Program Director for SECME, and under my direction she will manage and coordinate the activities for the participating schools.

**cc:** Dr. Constance Clark  
Mrs. Saundra Handy  
Mr. Guy Vickers  
Mrs. Dorothy Barton

## MEMORANDUM

TO: R. Guy Vickers  
FROM: Brenda J. Simmons  
DATE: December 9, 1993  
SUBJECT: Department of Energy Re-allocation of School Mini-Grant Funds - \$32,000.00

This is to confirm our agreement for the re-allocation of school funds per our meeting on November 9, 1993.

Attending:

Ms. Frances Brock, District of Columbia Public Schools  
Ms. Annie Whatley, Department of Energy  
Ms. Dorothy Barton, District of Columbia Public Schools  
Ms. Brenda Simmons, SECME

Re-allocation

• 10 District of Columbia Public Schools mini-grants - \$2,000.00 each	\$20,000.00
• 6 Partner Schools mini-grants - \$500.00 each	3,000.00
• Program Administration - \$6,000.00	6,000.00
(includes \$2,000.00 stipend for Program Director and funds of Awards Banquet)	
• Refreshments for 2 half-day Inservice Programs - \$800.00	800.00
• Discretionary Funds - \$2,200.00	<u>2,200.00</u>
TOTAL:	\$32,000.00

cc: Frances Brock  
Dorothy Barton  
Annie Whatley

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS IN-SERVICE**

**November 10, 1993**

**OBJECTIVES**

**The objectives of the In-service workshop are to:**

- 1. Introduce School System, Industry/Government and University Partners for the District of Columbia Public Schools SBCME Program;**
- 2. Discuss key elements of the Department of Energy/SECME Grant;**
- 3. Present an overview of the SECME program;**
- 4. Discuss the SECME model, Delivery system and Components for implementing the SECME program;**
- 5. Explain mini grant distribution and requirements;**
- 6. Assist SECME school teams in planning activities for the 1993-94 school year; and**
- 7. Encourage educators participation at the 1994 annual SECME Summer Institute and Leadership workshop.**

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS  
SOUTHEASTERN CONSORTIUM FOR MINORITIES IN ENGINEERING  
FALL WORKSHOP  
WEDNESDAY, NOVEMBER 10, 1993  
8:30 A.M. - 3:30 P.M.  
BACKUS MATHEMATICS/SCIENCE/TECHNOLOGY MIDDLE SCHOOL - ROOM 309**

**AGENDA**

**8:30 A.M. - 9:00 A.M.** **REGISTRATION AND CONTINENTAL BREAKFAST**

**9:00 A.M. - 9:30 A.M.** **WELCOME AND INTRODUCTIONS**  
*Ms. Frances Brock, Acting Supervising Director of Science,  
District of Columbia Public Schools*

*Ms. Dorothy Barton-SECME Program Director and  
Mathematics/Science Coordinator for the Science  
Demonstration Center, District of Columbia Public Schools*

**INDUSTRY/GOVERNMENT PERSPECTIVE**  
*Ms. Annie Whaley  
Office of Economic Impact and Diversity, Department of Energy*

**UNIVERSITY PERSPECTIVE**  
*Dean Philip Brach, College of Physical Science,  
Engineering and Technology*

**9:30 A.M. - 10:00 A.M.** **THE SECME PROGRAM OVERVIEW**  
*R. Guy Vickers, Executive Director*

**10:00 A.M. - 10:15 A.M.** **BREAK**

**10:15 A.M. - 12:00 P.M.** **THE SECME PROGRAM IMPLEMENTATION**  
*Brenda J. Simmons, Program Coordinator*

*Ed Tymes, SECME Science Teacher, Buena Vista, GA*

*Chloe Garth-Elkins, SECME Language Arts Teacher, Chattanooga, TN*

*Dr. Calvin Brooks, Engineering Faculty Consultant  
Chairman, Department of Mechanical Engineering, UDC*

**SCIENCE AND ENGINEERING FAIRS**  
*Yvonne Tilgham, Youth Services Director, Science Services*

**12:00 NOON** **LUNCH**

**(OVER)**

# SECME

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS**  
**SECME FALL WORKSHOP**  
**WEDNESDAY, NOVEMBER 10, 1993**

NAME	SCHOOL	SUBJECT	PLANNING TIME
Gloria H. Thompson	TAFT	SCIENCE	Wed. 11-12:30
Charlie Smith	Jefferson	Science	11:00 - 11:55
Linda Brown	Eliot	Math	11:40 - 12:15
Shirley Grooms	Hart	Computer Science	9-9:45
Mary Johnson	Hart	English	12:30 - 1:15
JR. AKADEMIC JOHNSON	KELLY MILLER	SCIENCE	9:20 - 11:00
Reginald Arno	UDC/NSBE	STUDENT	
LAWRENCE Rinchard	Eliot	Science	8:30 - 3:30
Priscilla Henry	Hart	Counselor	8:30 - 3:30
Angela Jasper	Roper	Math	10:50 - 11:45
Glenda Carter H. I.	Roper	Counselor	12:45 - 1:45
Joan Dorsey	Roper	English	11:00 - 11:45
Robinson, Linda	Roper	Math	11:00 - 1:00
Suzanne Willett	Francis	Writing	
Thomasine Sidewater	BACKUS	Math	3:30 - 4:30
Robert Scott	BACKUS	Biology	8:00 am - 9:00 am
Wilbert Miller	Kelly Miller	Counselor	
Cynthia Harvey	Kelly Miller	Math	2:30 - 3:15 pm

# SECME

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS**  
**SECME FALL WORKSHOP**  
**WEDNESDAY, NOVEMBER 10, 1993**

NAME	SCHOOL	SUBJECT	PLANNING TIME
Lee F. Epps	FRANCIS ✓	ASST. PRIN.	Before and after school
Diane Brown	Jefferson JHS ✓	Gen. Science-7	Anytime
JANET TAFT	Paul JHS ✓	English 7	2:10 →
Clifford Lake	Francis	Math	10:45 ~ 12:25
Shonda Hinson	TAFT JHS ✓	Math	1:30-3:10 m-w Friday-10:40
Mary Reed	Paul	Resource	
Dorcas Crosby	Jefferson	Spanish	2:15
A-H Sand	Roper ✓	Math	
H. Abraham	Roper	Science	
Ronante Harrel	Paul	Science	9:00-9:50 class
Mollie Jenkins	HART	Science	11:25
Mattie Parham	Hart	Math	2:15
Alma Hillert	Jefferson JHS	English	1:30
Celita Lewis	Jefferson JHS	Math	11:00
Betty Wesson	Francis ✓	Counselor	
Paul Rudof	Barkus ✓	US History	1:15 - 2:15
Mattie Williams	Paul	Counselor	
Joan Rutherford	Taft	Media Spec	
Elaine Black	Taft	Counselor	Flexible

# SCENE

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS  
SECME FALL WORKSHOP  
WEDNESDAY, NOVEMBER 10, 1993**

NAME	SCHOOL	SUBJECT	PLANNING TIME
Donna Bradshaw	TAFT JHS	ENGLISH	MWF 3rd period 12:35-3:00
Pamela Tyler	Hart JHS	mechanical DRAWING/CADD	M-F 6th period
Michelle Pierce	UDC	Electrical Eng.	
Helene M. Iken	BACKUS	Counselor	
Cindy Melvin	Science Service	Outreach	
Yvonne Johnson	Science Service	Outreach	
Barbara Lipscomb Francis	Francis	English	M-F 1:00-2:00
Mary Shuster	Backus	Science	10:40-11:25 3rd Period
Brandy Bryan	Taft JHS	Computer Tech	
Catherine Taylor	Stuart-Hobson	Science	M-F 10:00-10:45
Sandra Jenkins	Stuart-Hobson	Science	M-F 11:35-12:25
Alberta Clement	Stuart-Hobson	English	10:00-10:45

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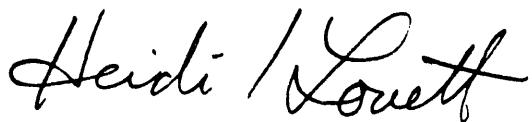
November 16, 1993

Guy R. Vickers  
Executive Director  
c/o Georgia Institute of Technology  
Atlanta, GA 30332-0270

Dear Mr. Vickers:

Greetings. I would like to sincerely thank you for allowing Reginald Arno and I to speak during the SECME Fall Workshop in Washington, DC. We are truly excited about the new relationships that we have formed and continue to form as a result of the meeting. We cordially invite you to call upon us whenever you are going to be in town. I can be reached at (202) 483-2258. Please do not hesitate to keep in touch.

Sincerely,



Heidi I. Lovett

14 Bryant Street  
DC, 20001

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SCIENCE SERVICE INC.

November 12, 1993

Ms. Brenda Simmons  
Program Coordinator  
Southeastern Consortium for Minorities  
in Engineering  
c/o Georgia Institute of Technology  
Atlanta, GA 30332-0270

Dear Brenda:

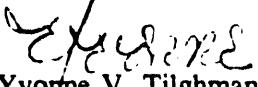
Congratulations on adding the District of Columbia to the SECME family. Also, a note of thanks to you and Guy for inviting Science Service to participate in the SECME Fall Workshop presented to the teachers at Backus Mathematics/Science Technology Middle School last week.

Not only was it nice to see you, it's nice to know that the fruits of our labor have begun to sprout. Also, it was exciting to hear that one of your initial contacts remembered you from your SECME presentation at Shoptalk during the International Science and Engineering Fair during your recent presentation to the DC Superintendent of Schools.

Finally, I was killing time in the mall by my house on Veteran's Day. To my surprise, a teacher from the workshop came up to me and said how much she enjoyed the presentations and activities of the day. I found myself sharing with her my experiences at the SECME Summer Institute and she got excited all over again.

It seems you all are still doing great things! Talk to you soon.

Sincerely,

  
Yvonne V. Tilghman  
Outreach Coordinator

Programs  
of Science News

Washington Science  
Talent Search (WSTS)

/yvt

## **DECEMBER 1993 EXHIBITS**

### **APPENDIX 4**

## **GUIDELINES FOR DISTRICT OF COLUMBIA PUBLIC SCHOOLS**

The District of Columbia Public Schools will award teacher mini-grants for the 1993-94 school year. These grants are designed to enable teachers to creatively develop enrichment activities for mathematics, science and language arts instruction that will enhance the thinking, study and content-application skills of students.

### **SELECTION CRITERIA** - Limit one grant per SECME school. Proposals must include:

- 1) a tentative schedule with a completion date not later than **June 2, 1994**,
- 2) all sections indicated in the grant format must be completed,
- 3) 1993-94 Longitudinal Data must be on file at SECME,
- 4) the enclosed Grant Commitment Letter must be completed, signed by the principal and returned with your proposal.

**PROJECT REPORTING** - The final report should include a detailed project description, a description of activities, photographs and a final budget accounting on or before June 2, 1994. Return the enclosed Grant Commitment Letter with your proposal:

Dorothy Barton  
Mathematics/Science Technology Center  
Backus Middle School  
Route No. 2

### **GRANT FORMAT**

The grant proposal must include:

- 1) **Cover Sheet** - which will include the name, address and phone number of the school and the name of the principal and project teachers. The name of the principal and project teacher(s) and the number of years the school has been active in SECME. Complete enclosed form.
- 2) **A Budget** - The grants will be in the amount of \$2000.00. Complete attached budget page.
- 3) **Commitment Letter** - Complete and sign the enclosed commitment letter and return it with your proposal.
- 4) **Project or Program Plan** - How will the goals be achieved? Discuss your specific plans for achieving the goals of the grant including a time schedule. Examples of SECME goals are:
  - Enrich the mathematics, communication, and/or science instructional activities.
  - Provide computer training for all students.
  - Provide students with cognitive, test-taking and study skills.
- 5) **Desired Outcome and Evaluation** - Did you achieve your goal(s)?

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS**

**COVER SHEET**

NAME: \_\_\_\_\_

SCHOOL: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY/STATE/ZIP: \_\_\_\_\_

PRINCIPAL: \_\_\_\_\_

TELEPHONE NUMBER: (      ) \_\_\_\_\_

PROJECT TEACHER(S): \_\_\_\_\_

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**DISTRICT OF COLUMBIA PUBLIC SCHOOLS**

**BUDGET**

<b><u>ITEMS</u></b>	<b><u>AMOUNT</u></b>
Materials/Supplies	_____
Equipment	_____
Transportation	_____
Postage/Communications	_____
Other (Explain)	_____
<b>TOTAL</b>	_____

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS  
COMMITMENT LETTER**

**RECIPIENT:** \_\_\_\_\_

**SCHOOL:** \_\_\_\_\_

**AMOUNT:** \$2000.00

**RESTRICTIONS:**

The grantee agrees:

1. To submit a full and complete report on the manner in which the funds are spent and on the progress made in accomplishing the purpose of the grant, no later than June 2, 1994;
2. To maintain records or receipts and expenditures, to send all to DOROTHY BARTON with the final report, and to keep such records for at least two years after the funds are spent.

\_\_\_\_\_  
Signature of School Principal

\_\_\_\_\_  
Signature of Project Teacher

\_\_\_\_\_  
Date

## **PROJECT/PROGRAM PLAN**

**What are your project/program goals and how will they be achieved? Briefly discuss your specific plans. SECME program/project goals may be achieved through field trips to business and industry or universities, use of enrichment materials, computer training and/or software purchase, and test-taking and study skills development, etc.**

**DESIRED OUTCOME AND METHOD OF EVALUATION**

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS REPORT  
1993-94 SCHOOL YEAR  
DUE June 2, 1994**

**Name** \_\_\_\_\_ **School** \_\_\_\_\_

Program Director \_\_\_\_\_ School District \_\_\_\_\_

#### **Participating faculty**

Please complete all questions that are applicable to your project or program and return this report to SECME by June 2, 1994 along with your project expenditure receipts.

**1. What did you achieve with this grant?**

2. How did you evaluate the success of your program/project?

3. Did others in your school benefit? If so, in what way?

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4. Will your colleagues use the resources from your project? How?

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5. What advice would you give your colleagues contemplating replication of this project?

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6. Please share with us any "memorable" quotes from your students or school faculty on the project and attach written evaluations used with your students.

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7. Do you have any suggestions for making your project and/or the mini-grants program in general more effective?

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**1993-1994 DISTRICT OF COLUMBIA PUBLIC SCHOOLS RECIPIENTS**  
**(Reports due June 2, 1994)**

## 1993-94 DISTRICT OF COLUMBIA PUBLIC SCHOOLS PROPOSAL EVALUATION FORM

School \_\_\_\_\_ School District \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Project Lead Teacher \_\_\_\_\_

### AREAS

Grant requirements which must be met: CHECK

a) Required recommendation:

• Program Director or principal \_\_\_\_\_

b) Tentative project/program schedule \_\_\_\_\_

c) All SECME reports have been submitted \_\_\_\_\_

• Longitudinal Data \_\_\_\_\_

• School Information \_\_\_\_\_

• School Plan and Calendar \_\_\_\_\_

• Senior Survey \_\_\_\_\_

This grant is recommended for funding: ( ) Yes ( ) No

Would like to discuss this proposal: ( ) Yes ( ) No

Comments: \_\_\_\_\_

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Evaluator's Signature

Date

**SAMPLE  
OF MINI-GRANT PROPOSAL**

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS  
COVER SHEET**

**NAME:** SECME Team

**SCHOOL:** Jefferson Junior High School

**ADDRESS:** 7th & H Streets S.W.

**CITY/STATE/ZIP:** Washington, D.C. 20024

**PRINCIPAL:** Mrs. Vera M. White

**TELEPHONE NUMBER:** (202) 724-4881

**PROJECT TEACHER(S):** Dorcas Crosby, Charlie Smith, Minnie Ly,

Alma Hilbert, Celita Lewis, Diane Brown

**NUMBER OF YEARS YOUR SCHOOL HAS BEEN AFFILIATED WITH  
SECME:** ONE

DISTRICT OF COLUMBIA PUBLIC SCHOOLS  
COMMITMENT LETTER

**RECIPIENT:** Jefferson's SECME Team

**SCHOOL:** Jefferson Junior High School

**AMOUNT:** \$2000.00

**RESTRICTIONS:**

The grantee agrees:

1. To submit a full and complete report on the manner in which the funds are spent and on the progress made in accomplishing the purpose of the grant, no later than **June 2, 1994**;
2. To maintain records or receipts and expenditures, to send all to **DOROTHY BARTON** with the final report, and to keep such records for at least two years after the funds are spent.

Doris M. Hite  
Signature of School Principal

Doris Brown  
Signature of Project Teacher

December 3, 1993  
Date

Dorothy Barton 12/3/93

**DISTRICT OF COLUMBIA PUBLIC SCHOOLS**  
**BUDGET**

<b><u>ITEMS</u></b>	<b><u>AMOUNT</u></b>
Materials/Supplies	<u>\$1,025.00</u>
Equipment	<u>\$700.00</u>
Transportation	<u>\$250.00</u>
Postage/Communications	<u>\$25.00</u>
Other (Explain)	_____
<b>TOTAL:</b>	<u>\$2000.00</u>

## PROJECT/PROGRAM PLAN

What are your project/program goals and how will they be achieved? Briefly discuss your specific plans. SECME program/project goals may be achieved through field trips to business and industry or universities, use of enrichment materials, computer training and/or software purchase, and test-taking and study skills development, etc.

The Jefferson Junior High School SECME team is involved in developing a program for increasing minorities in the field of mathematics, science and engineering. We hope this program will encourage students to elect these courses to prepare for higher education and careers in today's technology oriented society.

The objectives of the SECME program are the following: 1) To foster career exploration opportunities for students interested in working in science, mathematics and engineering fields. 2) To challenge students to acquire new competencies and interests in mathematics, science and engineering. 3) To establish a mentoring and peer group tutoring program for students. 4) To increase student's knowledge about the concept of work / career and how work is related to science, mathematics and engineering field.

We envision the program to include the following:

### **1) Roleplaying & Models in various occupations**

Roleplaying will be implemented through the assistance of twenty(20) professionals in the area of communications, mathematics, science and engineering. These professionals will serve as role-models and will allow SECME students to "shadow" them at their respective workplaces. Furthermore, students will prepare reports and interview the

professionals to further their understanding of the field. In addition, students will be introduced to writing resumes and selecting colleges and universities.

## **2) Networking with an elementary school and a high school in engineering.**

The purpose of this activity is to develop a network with an elementary school and high school. This activity will stimulate enthusiasm about mathematics, science and engineering. It will develop a support network that involves parents/guardians, teachers and volunteers. Tours, field trips and special projects will be implemented.

## **3) Agriculture/Gardening**

This project draws upon practical experiences in gardening and agriculture in order to bridge the gap between urban and rural life. A gardening and agriculture unit will be introduced and implemented at the school. This plan will be accomplished by researching in gardening. Then, a plot of land will be plowed and fertilized. A selection of flowers and vegetables will be grown.

## **4) Geological Engineering: Study of their Neighborhood**

The neighborhood study will empower the students by demystifying the planning of their community. They will study geological maps, talk with experts, study community plans made by others and finally redesign and make a model of their own community. Materials will be used to assess the students in doing the study.

## **5) SECME Pamplet/Newsletter**

The purpose of doing this literature is to serve as a communication link between the school, parents and community. It will also serve as a technique of introducing students to journalistic styles of writing. Students will use computers, glue, paste and clip art.

## **6) Test Preparation: SAT, PSAT, CTBS**

The purpose is to enable all students to have introductions on the skills and concepts that are assessed by SAT, PSAT and CTBS. Videos will be used to offer tips on test preparation and on assisting in alleviating test anxiety. Workbooks and software will be used for developing test-taking skills.

## Desired Outcome and Method of Evaluation

### *I. Roleplaying and Modeling*

#### OUTCOME :

Students will demonstrate knowledge of the skills required to begin and maintain a career in mathematics, engineering and communication through the use of evaluative measures.

#### EVALUATION :

1. Students will prepare an oral presentation identifying the necessary course requirements for the career explored.
2. Mentors will complete an evaluation of the student's performance.

### *II. Mentoring / Networking*

#### OUTCOME :

Students will be motivated to pursue higher level courses and careers in science, mathematics, engineering, and communication.

#### EVALUATION :

1. Videos will be created and used as an initial assessment of student's attitudes and interests in science, mathematics, engineering, and communications.
2. Videos will be used to demonstrate the development of positive attitudes toward these subjects.
3. Follow-up activities of field trips and tours will demonstrate students' interest in courses of studies in the identified subjects.

### *III. Agriculture / Gardening*

#### OUTCOME :

Students will demonstrate the use of scientific skills and concepts to produce a garden.

#### EVALUATION :

1. Students will be observed while working in the garden.
2. A horticulture mentor will inspect the aesthetic quality of the flowers and food.
3. Students will record the progress of the garden by maintaining a data analysis record.

### *IV. Geological / Neighboring Planning*

#### OUTCOME :

Students will design a community and construct a model of it using urban planning concepts.

**EVALUATION :**

1. Photographs of the existing area and its resources will be taken.
2. Work observation, photographs, and videos of the team designing and building the model will be made.

***V. SECME Pamphlet / Newsletter***

**OUTCOME :**

The production of the pamphlet and two newsletters.

**EVALUATION :**

The pamphlet and newsletter will be critiqued by a journalist, layout artist, and teachers for creative and journalistic styles of writing.

***VI. Test Preparation***

**OUTCOME :**

Students will produce improved test scores and demonstrate improved test taking strategies.

**EVALUATION :**

1. Students will be given pre and post tests.
2. A test taking progress chart will be used to measure individual performance and assess process.
3. A test taking management chart will be used to measure the group's performance and assess progress.

## SECME Implementation "Action" Plan

**Objectives:**

- 1). To begin identifying targeted students to participate in the SECME program.
- 2). To develop a survey to assess the needs and interests of our students.
- 3). To provide enjoyable , stimulating and educational opportunities in science, mathematics, communication and technology.

**Constraints/Enablers:** Team meeting time/ Alliance with COMSAT, Partnerships with Department of Energy, Department of the Navy and other Special Programs.

Task: Action Steps	Needed Resources	Cost	Evidence of Success	Facilitator	Begin	End
1) Roles playing & models in various occupations	Corporations, Industries, entrepreneurs	\$250.0 Transportation	Written reports and job evaluation	Team	January	May
2) Mentoring with a elementary school	The School (Amidon)	----	Improved test scores among elementary school students	Team	January	May
3) Agricultural / Gardening	Seeds, gardening utensils, plows, maintenance supplies	\$1,000	Production of fruits, vegetables, and flowers	Team	March	May
4) Geological / Engineering : Study of their Neighborhood	Geologist, research materials, miniature houses, schools, stores, etc.	\$400.00	Printout or plan of the neighborhood ( a designed city)	Team	April	May
5) Network with a Pre-Engineering High School	The School (Dunbar SHS)	\$50.00 Transportation	Improved math scores and career decisions	Team	December	May
6) SECME Pamphlet	Paper, access to computers	\$50.00	Production of Pamphlet	Team	December 10	December 22
7) SECME Newsletter	Paper, access to computers	\$50.00	Production of Newsletter	Team	February	May
8) Test Preparation SAT, PSAT, CTBS	Computer Software	\$200.00	Increased Test Scores	Team	December	June

Jefferson

SAMPLE  
**1993-94 SCHOOL INFORMATION FORM**

District of Columbia Public Schools  
(School System)

(Program Director's Name) (Telephone #)

Charles W. Eliot Junior High (202) 724-4665  
(Name of School) (Telephone #)

Ms. Glennis Powell (202) 724-4665  
(Principal's Name) (Telephone #)

1830 Constitution Ave., N.E.  
(School Address)

Washington, DC 20002  
(City/State/Zip)

Eastern HS, Dunbar HS, H.D. Woodson HS  
Middle Schools list high schools your students attend

High Schools list feeder schools

Dr. Franklin Smith (202) 724-4222  
(Superintendent's Name) (Telephone #)

Circle grades included in your school: 4 5 6 (7) (8) (9) 10 11 12

**Proposed SECME Team Members**

Name	Title	Years Taught	Subject
<u>Lawrence Rinehart</u> (School Coordinator's Name)	Teacher	30	Science
<u>Nancy Jones</u>	Counselor	20	English
<u>Linda Brown</u>	Teacher	10	Mathematics
<u>Barbara Roberts</u>	Dean of Students	28	Business Education
<u>Marvin Drummond</u>	Teacher	5	Industrial Arts
<u>Annette Chisolm</u>	Teacher	5	English/Social Studies

What is your current school enrollment of \*minorities? 450

Total School Enrollment (minority & non-minority) 0

The number of \*minority SECME students? 45

Total SECME Participants (minority & non-minority) 45

My school wishes to participate in the SECME School Program during the 1993-94 school year.

  
Signature of Principal

\*Defined as African American, Cuban, Hispanic, Mexican American, Native American, Puerto Rican, Other (minority groups not listed).

**1993-94 School Information Form (Cont'd.)**

**School Enrollment by Grade Level**

<b>Grade</b>	<b>Total Students</b>	<b>*Minority Total</b>	<b>Projected SECME Enrollment</b>
7	162	162	15
8	144	144	15
9	144	144	15

**Mathematics subjects currently offered:**

	<b>Subject</b>	<b># of Classes</b>	<b>Grade Levels</b>	<b># of Students</b>	<b># of *Minorities</b>	<b>Indicate if AP</b>
6-8	Mathematics	14	7, 8, 9	295	295	
	Computer Class					
	Pre-Algebra					
	Algebra I	5	8, 9	125	125	
	Algebra II					
	Algebra III					
	Geometry	1	9	35	35	
	Trigonometry					
	Pre-Calculus					
	Calculus					

**Science subjects currently offered:**

	<b>Subject</b>	<b># of Classes</b>	<b>Grade Levels</b>	<b># of Students</b>	<b># of *Minorities</b>	<b>Indicate if AP</b>
6-8	Science	6	7	162	162	
	Chemistry					
	Physics					
	Biology	2	9	64	64	
	Physical Science	5	8	144	144	
	Life Science					
	Earth Science					
	Human Anatomy					
	Enviro. Sci.	3	9	91	91	

\*Defined as African American, Cuban, Hispanic, Mexican American, Native American, Puerto Rican, Other (minority groups not listed).

## SECME Implementation "Action" Plan

Objective: To reinforce academic success towards preparing students for the 21<sup>st</sup> cent.

Constraints/Enablers: Parental Involvement / Partnership with Metcar, Dept. of Labor, Multi-Media Technology / Saturday Academy, SOS (Save our Streams, DOE)

Task: Action Steps	Needed Resources	Cost	Evidence of Success	Facilitator	Time Frame	
					Begin	End
Identification of Students	SECME TEAM	—	Student Participation Student Rosters	SECME Team	11/12	11/12
Student & Parent Orientation	SECME VIDEO NSBE SECME TEAM Refreshments	\$200.00	Student Participation Parent Participation Program/Agenda	SECME TEAM	11/19	11/19
Competitions: Rat-Trap Design Poster Contest Essay Contest	Supplies	\$500.00	Completed Projects	Pamela Tyler Nellie Jenkins Mary Johnson Shirley Grooms	1/19/94	6/3/94
Panel Discussions/Debates Teacher Workshops Student Field Trips (NASME, Sci. Museums, Labor Dept., Pepco)	Transportation	\$500.00	Evaluation tools Essays, Projects, Contests	SECME TEAM NSBE	Ongoing 1/94	6/94
End-of-year Banquet	Food Trophies Participation Certificates Supplies	\$800.00	Student / Parent Participation	Counselor Priscilla Hemby - Coordinator SECME TEAM	May 20 or 27	May 20 or 27

School Hart JHS

System Washington, D. C. Public Schools Filing Date 11/16/93  
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Paul Junior High School

**SECME Implementation "Action" Plan**

**Objective:** To provide activities to generate enthusiasm for math and science careers

**Constraints/Enablers:** Time and scheduling; SECME, NESBE, Booz-Allen will all be enablers

<b>Task: Action Steps</b>	<b>Needed Resources</b>	<b>Cost</b>	<b>Evidence of Success</b>	<b>Facilitator</b>	<b>Time Frame</b>	
					<b>Begin</b>	<b>End</b>
1. Introduce SECME to the students through the video.	Video, VCR, science teachers, brochures	To be determined	Initial signing up of students, continued attendance	Math, Science English teachers and		
2. Prepare a brochure parent notification				coordinator		
3. Contact NESBE and set up presentation to all interested students.	presenters from NESBE					
3. Plan a series of speakers and field trips to such places as NASA, Baltimore Aquarium, university engineering school, Nuclear science site, Smithsonian, Franklin Museum. Speakers would talk on the topic that would be later visited by the students.	Transportation, entrance fees honorarium if necessary					
4. Plan an adult/student competition as a culminating event.						

School Paul Junior High School

System DCPS

RECEIVED NOV 22 1993

Filing Date

END

DATE  
FILMED  
3/18/194

