

THE SECME PARTNERSHIP: PREPARING EDUCATIONAL AND TECHNICAL LEADERSHIP FOR TODAY'S CYBER CIVILIZATION

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Abstract - SECME, Inc., the nation's largest pre-college alliance in science, mathematics, engineering, and technology, today links 41 member engineering universities, 109 school systems (including 900+ K-12 schools) in 17 states, and 70 corporate/government investors. Its mission is to increase the pool of historically under-represented and geographically under-served students who are prepared to enter and complete post-secondary studies in technical disciplines. A key focus is scientific renewal and technology retooling opportunities to build teacher capacity and encourage classroom innovation. SECME is an inclusive program that is delivered through the existing educational structure at the elementary-, middle-, and high-school levels.

SECME was established in 1975 by Engineering Deans at seven Southeastern universities: Alabama, Florida, Georgia Tech, South Carolina, Tennessee, Tennessee State, and Tuskegee. For its first 22 years, SECME was an acronym for Southeast Consortium for Minorities in Engineering. In 1997, as SECME grew beyond those geographic boundaries, the name was changed to SECME, Inc.

In creating SECME, the founding Deans acted to address two urgent--and enduring--national challenges: 1) declining engineering enrollments on campuses across the U.S., and 2) an evident and growing shortage of technical talent to sustain a national economy--and global leadership position--increasingly dependent on technology and innovation as primary engines of growth. Their solution: to tap new talent in two population groups then grossly under-represented (at less than 1 percent each) in the engineering profession--namely, women and minorities. The school-university partnership was the defining element in the original SECME "framework." That model was and is, very intentionally, teacher-centered. By impacting teachers, all students benefit.

For 25 years, SECME has maintained a singular focus on teacher professional development grounded in inquiry-based approaches to teaching and learning. That primary thrust has proved to be a wise investment. SECME results consistently demonstrate significant returns in three critical areas: improving student outcomes, helping to ensure their post-secondary success, and opening new technical career opportunities for many talented youth previously lost to the educational "pipeline" in engineering and related technical

disciplines. SECME last year enrolled 19,199 students at all levels, K through 12. Included were 3,657 seniors, bringing total graduates since 1980 to 63,364. SECME's annual Senior Survey shows consistently that 90 percent or more of these students go on to a four-year college or university--more than half to pursue technical majors. Another 25 percent plan to major in business, education, or pre-law.

Introduction

SECME, Inc., is a 25-year strategic alliance dedicated to: 1) renewing and strengthening the professional skills of K-12 educators, 2) motivating and mentoring students, and 3) empowering parents so that *all* young people can learn and achieve at higher levels.

SECME's vision is, quite simply, to be a benchmark for excellence and equity in pre-college education.

From the beginning, SECME's singular focus has been to elevate minority student achievement and to promote K-12 education reform.

The path toward that goal, then and now, is teacher professional development--renewing and retooling a dedicated cadre of elementary-, middle-, and high-school educators in mind and spirit.

SECME's stated mission is to increase the pool of historically under-represented, differently-abled, and geographically under-served students who will be prepared to enter and complete post-secondary studies in science, mathematics, engineering, and technology, thus creating a diverse and globally competitive workforce.

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Today that alliance extends to schools, universities, science- and technology-based business and industry, and public and private agencies in 17 states (from New York to Texas and Arizona), the District of Columbia, and Grand Bahamas--and 58 Congressional Districts.

The dynamic, growing SECME network links 42 member engineering universities, 110 school systems (900+ K-12 schools), and 70 corporate and government investors.

As we speak, SECME is reaching out in new directions geographically--in the Northeast (in Brooklyn, New York)

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and border communities of the Southwest—and through bold new initiatives, among them “Empowering Parents To Excel At Parenting,” and planned “SECME Kids Knowledge Centers” in urban centers.

In July, the centerpiece of the SECME program, the annual two-week Summer Institute for an expected 750 teachers, counselors, school leaders, student scholars, national competition finalists, parents, members and guests, will be hosted by our newest academic partner, the University of Arizona in Tucson.

For its first 22 years (until 1997), SECME was an acronym for SouthEastern Consortium for Minorities in Engineering).

In 1997, with those parameters now outgrown by an inclusive and increasingly national program, the name was changed to SECME, Inc. The organization continues to be chartered in the State of Georgia as a nonprofit, 501(c)(3) corporation.

From the beginning, SECME’s National Office and administrative home has been located in the College of Engineering at the Georgia Institute of Technology in midtown Atlanta.

In creating SECME, the founding Deans acted to address two urgent—and enduring—national challenges: 1) declining engineering enrollments on campuses across the U.S., and 2) growing evidence of shortfalls in technical talent to sustain an economy—and global leadership position—increasingly dependent on technology and innovation as primary engines of growth.

Their solution: to tap new talent in two population groups then grossly under-represented (at less than 1 percent each) in the engineering profession—namely, women and minorities.

Thus SECME began as a collaborative effort, joining school districts, engineering universities, and industry/government investors to promote excellence and equity as well as needed change in K-12 education.

The school-university partnership was the defining element in the original SECME “framework” that became the basis for a founding grant of \$1.2 million from the Alfred P. Sloan Foundation. That model is, very intentionally, teacher-centered. By impacting teachers, *all* students benefit.

SECME’s Mission and Impact

To date, SECME has trained thousands of educators and helped guide more than 60,000 minority high-school graduates toward undergraduate studies and rewarding future technical careers.

Since its founding in 1975, SECME has enjoyed outstandingly success—success in achieving meaningful, lasting, systemic change in many of our nation’s schools, classrooms, and communities.

SECME is **not** a band-aid or educational fad or formula. It is a determined and sustained partnership effort—backed by a quarter century of proven, measurable success—to build teacher capacity and thereby improve student performance and outcomes.

The SECME model is “results-oriented” and “teacher-centered.” It says simply that by impacting teachers, *all* students benefit.

The founders’ goal was classically simple. Not just to educate the best minds to the highest levels. But to deliver on the promise that *all* children can learn and achieve.

SECME has made a difference, first in the Southeast and now well beyond. It combines a passion for educational excellence and equality with a proven, rigorous, results-oriented process to drive positive change and needed reforms in our schools, classrooms, and communities.

Since the 1970’s, that initial impact has been multiplied in state after state across the U.S. SECME’s mission, its only mission, remains the quality—and *equality*—of educational opportunity.

Its goals is to continuously renew and revitalize, in mind and spirit, our classroom teachers, counselors, and education leaders—all of those who serve with such great patience and diligence and so often only the barest tangible recognition and reward.

The Challenge Today—and Tomorrow

The challenge today for SECME, as it begins its “second 25,” is no less daunting than the one that drove SECME’s founders in 1975, when the nation’s engineering work force comprised less than one per cent each women and minorities.

Many of our K-12 schools simply do not (and cannot) perform to the minimum standard our society requires, much less meet ambitious national goals—goals and expectations that we proclaim and then so consistently, mindlessly, and blatantly fail to properly resource.

Today we see clearly and must address a growing global “digital divide,” a disparity that unchecked will mock any claim of equal access to the benefits and by-products of our wondrous technology.

The same technology that has so drastically changed today’s workplace has the power not just to change but truly transform the learning place as well—and the lives, on and off the job, of citizens of all ages.

What U.S. “investment” can possibly provide any greater return than the one we now need to make in every single one of the precious young minds that represent our most valuable national resource.

SECME’s singular focus has been minority youth—those historically who have been the most severely under-served educationally and, as a direct consequence, the most

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severely under-represented in today's most rewarding and fulfilling technical career fields.

Many already recognize, and all of us must, that the indispensable foundation for academic excellence and achievement must be to reform and transform the whole environment in which today's youth learn and grow, both within and outside school classrooms.

No ingredient is more essential to our ultimate success in this endeavor than the dedicated, sustained, year-round total commitment--24-7-365--of our parents to their children's learning and continuing self-discovery.

SECME is a partnership--a successful "model" for how school systems, higher-education institutions, business and industry, and government at all levels, together with parents and community leaders, can work effectively toward common goals and rigorous standards in education.

SECME has enabled thousands of K-12 educators to receive the highest quality professional training and enrichment. Only in this way will they be enhanced, in their capacity as classroom coaches and mentors, to challenge, inspire, expand, and bring out the very best in young minds.

Author

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