

Math problems. Science problems.
Our hope is that kids don't see them
as problems at all.

$$v_2 = \int_{-\pi/2}^{\pi/2} \sin \theta \, d\theta$$



$$h = z(x) + \frac{p(x)}{\rho g} + \frac{v(x)^2}{2g}$$

$$A_0 \phi_0 = \sum_{n=1}^{\infty} A_n \phi_n + S_0$$



EDUCATION
FOUNDATION

inspire • support • prepare



LETTER FROM THE PRESIDENT

Dear Friends,

For nearly 30 years, the mission of the SME Education Foundation has been to attract and develop the future manufacturing workforce by acquiring and intelligently applying resources to support the advancement of manufacturing education. As we close 2008, I am pleased to report that the SME Education Foundation remains true to our founding tenets.

Through our partnerships with like-minded corporations, organizations, foundations and you, the individual donor, we have been able to continue to *inspire, support* and *prepare* the next generation of manufacturing engineers and technologists.

Inspire: Once again, our youth activities rose to the forefront. In 2008, we impacted the lives of more than 4,000 middle and high school students across the nation through our Gateway Camps, Gateway Academies and sMe Institutes. In 2009, we will fund 220 programs and serve over 5,000 students.

Support: We continue to assist our next generation of manufacturing engineers and technologists through our scholarship program. In 2008, we awarded nearly \$600,000 in scholarships to more than 200 students across the country. In 2009, we anticipate awarding almost \$700,000 to deserving students.

In 2008, in partnership with 3M, we recognized 15 outstanding instructors through our Building the Future Award program. These instructors were selected from nominees across the country for their dedication to America's young people, opening doors and providing the inspiration to help young learners consider the possibilities of an engineering career.

It is because of the commitment and dedicated work of the Foundation Board of Directors, committees and staff that we have been able to accomplish so much. Even with the current economic uncertainty, in 2009, we plan to move forward boldly, to continue to forge partnerships with new corporations and foundations, and seek to increase our endowments so that we can continue to *inspire, support* and *prepare* young people to pursue careers in manufacturing and manufacturing technology.

All of this was possible because of you, our donors. Thank you! Because of you and your commitment to the work of the SME Education Foundation, we can move forward in confidence that we *can and will* change the state of the nation by preparing the future generation to compete in a global economy and keep our nation on the leading edge of innovation and creativity.

Sincerely,



Khalil S. Taraman, PhD, FSME, PE
President – 2009
SME Education Foundation



Inspire

Those of us involved in manufacturing have seen firsthand the impact that the rapid advancement of technology has had on virtually every aspect of the industry. And to keep pace with emerging technologies, we know the future of manufacturing will depend on large numbers of workers who are highly trained in industry-specific skills.

The SME Education Foundation is committed to giving the next generation the proficiency they need to be successful in a world of unprecedented technological change and global competition.

By developing innovative programs and resources, the SME Education Foundation ignites and fuels the curiosity of young people about science, technology, engineering and mathematics.

The ultimate goal is to meet the needs of the manufacturing industry by increasing the number of students choosing these career fields.



Gateway Camp – This pilot initiative for elementary students was rolled out in schools with *Engineering Is Elementary* programs, and where *Project Lead the Way*® is part of the middle school and high school curricula. In partnership with the Society of Automotive Engineers, Gateway Camp uses the “A World in Motion” curriculum to recruit young students into math, science and engineering.

Gateway Academy – This project-based experience introduces middle school students to the fundamentals of science, technology, engineering and mathematics.



During a week-long program, students work together using leading-edge technologies to sample such disciplines as robotics, aeronautics and computer design. A fun, exciting environment, Gateway Academy draws students into *Project Lead the Way* coursework at the middle school and high school levels.



Gateway Academy has received the endorsement of the Academy of Engineering, a dynamic partnership between the National Academy Foundation, the National Action Council for Minorities in Engineering and *Project Lead the Way*. In collaboration, these organizations are furthering the development of post-secondary engineering programs for America’s future engineers, scientists and technical workforce, with a special focus on recruiting more high school students and increasing the participation of women and minorities.



sMe Institute – An upper-level high school summer program, the Summer Manufacturing Experience (sMe) Institute is specialized and linked directly to industry. Drawing from *Project Lead the Way* high school students, the institute utilizes strong industry involvement to link students to specific career pathways and direct them toward post-secondary educational options.

“Bold Vision” Video – The SME Education Foundation helped fund a new DVD and discussion guide designed to inspire women in science and technology. The program provides a glimpse into the lives of a research scientist, an astronaut and a technologist who are involved in work that is exciting and collaborative, and improves the quality of our lives. Hosted by Emmy Award-winning executive producer Helene Lerner, “Bold Vision” contains highlights from a documentary broadcast on public television.

Support

With too few students entering manufacturing, engineering and technology fields, it is critical that we encourage and support those pursuing degrees in these areas. Scholarships provide an invaluable tool in this effort. Although every year the requests for scholarships exceed the supply, we are pleased that our program continues to grow as over 200 students received nearly \$600,000 in scholarships.



Since 1979, the SME Education Foundation has provided more than \$24 million in scholarships and awards.

Gene Haas Foundation Scholarships

Thanks to funding from the Gene Haas Foundation, two new scholarships were made available through the SME Education Foundation in 2008. Gene Haas Foundation Machining Technology Scholarship and Manufacturing Technology Scholarship awards were presented to a total of 37 students pursuing careers in machining and manufacturing technologies. Made possible through a \$160,000 grant, the one-year awards range from \$1,000 to \$5,000 each. Haas Automation partners with industry, schools and professional societies to support high-quality manufacturing education.

Prof. George Schneider Jr. Manufacturing Technology Education Scholarship

Established by Professor Emeritus George Schneider Jr., LSME, CMfgE, CMfgT, this scholarship benefits deserving students at Lawrence Technological University (LTU), MI, and Kent State University, OH. While at LTU, Prof. Schneider developed a manufacturing option for the mechanical engineering and the engineering technology programs, along with a cooperative education and a continuing education and professional development program for the School of Engineering. In 2007, he was recognized with the SME Education Foundation's Lifetime Achievement Award.



2008 SME EDUCATION FOUNDATION SCHOLARSHIPS

EDUCATION FOUNDATION 4-YEAR FAMILY SCHOLARSHIP



Kyle Riegel

*Iowa State University
Ames, Iowa*

Recipient of the four-year SME Education Foundation Family Scholarship, Kyle Riegel has known since junior high that he wanted to follow in the footsteps of his father, grandfather, aunt and uncle to become an engineer. He has excelled in such engineering-oriented courses as CAD, physics, AP calculus and honors geometry. After completing his undergraduate studies, Riegel plans to use his strong math, science, interpersonal and leadership skills to work his way up at a leading manufacturing company.

SME DIRECTORS SCHOLARSHIP



Christopher Bird

*Robert Morris University
Moon Township, Pennsylvania*

Christopher Bird is a senior at Robert Morris University where he has accumulated an impressive grade point average as a manufacturing engineering major. Bird decided to become an engineer after participating in the *Project Lead the Way* program during high school. Since then, he has become a peer tutor, assisting other students with physics, math and engineering coursework. He is currently president of Robert Morris University's SME student chapter.

SME DIRECTORS SCHOLARSHIP



Benjamin Ferron

*University of Wisconsin-Stout
Menomonie, Wisconsin*

A sophomore at UW-Stout, Benjamin Ferron is majoring in manufacturing engineering. Ferron says he has always been fascinated with the intricacies of mechanical components and how parts fit and work together. After graduation, he plans to pursue graduate studies in both manufacturing engineering and business. Ferron maintains an outstanding GPA and is a student member of SME, the Stout mini Baja Race Team, honors program and campus bands.

2008 SCHOLARSHIP RECIPIENTS

Of more than 375 applicants for the following awards, these 221 students received scholarships totaling nearly \$600,000.

SME Education Foundation Family Scholarship (4-Year Award)

Kyle Riegel – Iowa State University

SME Education Foundation Family Scholarship

Amanda O'Toole – University of California, Los Angeles
David Rauch – Clemson University, SC

Walt Bartram Memorial Education Award

Adrian Akerson – Embry-Riddle Aeronautical University, AZ

Caterpillar Scholars Award

Charles Cummings – University of Kentucky
Ryan Gee – Kettering University, MI
Crystal Geist – Kansas State University
Collene Heninger – Weber State University, UT
Dale Hogue – Ohio University
Keira Masters – Kansas State University
Timothy Morgan – Iowa State University
Hillary Shoop – Oregon State University
Brian Wilson – Brigham Young University, UT
Brian Wyns – Ferris State University, MI

Arthur & Gladys Cervenka Scholarship

Dustin Bloom – University of Cincinnati, OH
Holley Conner – Virginia Polytechnic Institute
Paul Cox – Pittsburg State University, KS
Michael Green – University of Central Florida
Emily Harrison – Michigan Technological University
John Muldowney – St. Cloud State University, MN
Diana Russells – Pennsylvania State University

Future Leaders of Manufacturing Scholarship

Pablo Colon – University of Colorado, Denver
Jessica Pauley – South Dakota State University
Jonathan Reding – Rochester Institute of Technology, NY
Tristan Wagner – Oregon State University

Connie & Robert T. Gunter Scholarship

Tristan Wagner – Oregon State University

Gene Haas Foundation Machining Technology Scholarship

Justin Amos – Vincennes University, IN
Kyle Baker – Louisiana Tech University
Mindy Birdwell – Calhoun Community College, AL
Clinton Bline – Vincennes University, IN
Lashanda Boykin – Calhoun Community College, AL
Marquetta Brown – Calhoun Community College, AL
Jarees Butts – Focus: HOPE, MI
Aaron Clark – South East Community College, NE
Cory Dankenbring – South East Community College, NE
Christopher Dennis – Calhoun Community College, AL
Kim Druschel – Calhoun Community College, AL
David Faulk – Calhoun Community College, AL
Jacob Hajny – Eastern Iowa Community College
John Hecker – Macomb Community College, MI
A. Daniel Holder – Calhoun Community College, AL
David Hughes – Focus: HOPE, MI

Michael Lamb – Focus: HOPE, MI

Joshua Logsdon – Pennsylvania College of Technology

Joseph Logsdon – Pennsylvania College of Technology

Nathan Miller – Vincennes University, IN

Jesse Milner – Maysville Community & Technology College, KY

Ethan Owens – Calhoun Community College, AL

Colton Parker – Calhoun Community College, AL

Joshua Phillips – Alpena Community College, MI

Gregory Pratt – Vincennes University, IN

Kelly Reid – Delaware County Community College, PA

James Simmers – Calhoun Community College, AL

David Sloan – Calhoun Community College, AL

Johnny Sly – Canadian Valley Technology Center, OK

Benton Smith – Tennessee Technology Center at Shelbyville

Tonnice Wallace – Calhoun Community College, AL

Clifford Williamson – Precision Manufacturing Institute, PA

D'Audre Wright – Focus: HOPE, MI

Gene Haas Foundation Manufacturing Technology Scholarship

Dennis Burke – Wayne State University, MI
Eric Lintula – Northern Michigan University
David Stevenson – Grand Valley State University, MI
Nicholas VanDeRoer – Kalamazoo Valley Community College, MI

Clinton J. Helton Manufacturing Scholarship

Harish Bagaitkar – University of Missouri, Rolla
Philip Tucker – Colorado State University

Lucile B. Kaufman Women's Scholarship

Mary Bruce – Oklahoma State University

E. Wayne Kay Community College Scholarship

Seth Carlin – Iowa Western Community College
Adam Gauci – Fanshawe College of Applied Arts & Technology, Ontario
Thomas Ready – Fanshawe College of Applied Arts & Technology, Ontario

E. Wayne Kay Co-Op Scholarship

Monica Denis – Kettering University, MI
Marcus Ritosa – Kettering University, MI

E. Wayne Kay Graduate Scholarship

Marcellus Angellford – Oregon Institute of Technology
Joshua Cramer – California University of PA
Paul Lynch – Pennsylvania State University
Sarah Warren – University of California, Los Angeles
Ryan Williams – Brigham Young University, UT

E. Wayne Kay High School Scholarship

Michael Adams – Ohio State University
Jason Cremer – Kettering University, MI
Matthew Derkach – Ohio State University
Justin Eckstein – Weber State University, UT

Karin Hanson – South Dakota State University
Kimberly Jozwiak – University of Michigan
Christine Lee – Princeton University, NJ
Justin Lesniak – Kettering University, MI
Julia O'Neil – University of Dayton, OH
Evan Parcher – Oregon State University
Josiah Perisho – University of Missouri, Rolla
Austin Peterson – Oklahoma State University
Courtney Polk – Iowa State University
Dana Saathoff – University of Oklahoma
Andy Scheppers – University of Missouri, Columbia
Sarah Shareef – Harvard University, MA
Andrew Varkonyi – Washington State University
Daniel Weinblatt – University of Michigan
Ryan Whitacre – North Dakota State University
Ryan Willis – Iowa State University

E. Wayne Kay Scholarship

Kevin Bagnall – University of Oklahoma
Scott Barnes – North Carolina State University
Brandon Bowsher – Ball State University, IN
Robyn Bradford – Central State University, OH
Thomas Collins – Bradley University, IL
Trevor Gross – South Dakota State University
Anthony Haller – Oregon State University
Hannah Higgins – Western Washington University
Ryan Holley – Indiana Institute of Technology
Jason Kintz – Oregon State University
Brandon Korgel – Bemidji State University, MN
Justin Laughner – Robert Morris University, PA
Kayla Miller – Robert Morris University, PA
Joshua Neaves – Clemson University, SC
Nathan Noble – North Dakota State University
Joel Rasmussen – University of Wisconsin, Stout
Lee Redden – University of Nebraska, Lincoln
Justin Schoenfeldt – Georgia Southern University
Brandon Wojdan – Oregon State University

Giuliano Mazzetti Scholarship

Gregory Bugielski – University of Hawaii, Manoa
Darin Schnoor – Oregon State University
Rebekah Towsley – University of North Florida

Clarence & Josephine Myers Scholarship

Andrew Schiller – Valparaiso University, IN

North Central (Region 9) Scholarship

Rex Reed – University of Northern Iowa
Marshall Zastrow – South Dakota State University

Edward S. Roth Manufacturing Engineering Scholarship

Clinton Sorensen – California Polytechnic State University of San Luis Obispo

Prof. George Schneider Jr. Manufacturing Technology Education Scholarship

Richard Nasutovich – Lawrence Technological University, MI

Myrtle & Earl Walker Scholarship

Anvar Alot – Central State University, OH
Adam Bawden – Arizona State University
Dean Bertone – University of Massachusetts, Dartmouth
Elizabeth Bowers – Tulane University, LA
Jonathan Brown – Pennsylvania College of Technology

AWARDS

Prof. George Schneider Jr. Faculty Award

Kenneth Cook – Lawrence Technology University, MI
William White – Lawrence Technology University, MI

JOSEPH F. NOVEK OUTSTANDING LEADER AWARD



Kevin M. Bock

*Ferris State University
Big Rapids, Michigan
Bachelor of Science-Engineering
Spring 2008*

Kevin Bock was the 2008 recipient of the Joseph F. Novek Award, a \$2,500 prize for a graduating senior who has demonstrated exemplary leadership. Only faculty advisors can nominate students for this award. Bock was nominated by Associate Professor Joe Wist, a faculty advisor for SME Student Chapter 129. Majoring in manufacturing engineering technology, Bock graduated with a bachelor of science degree in May.

Jacob Cipriano – Onondaga Community College, NY
Christopher Dieringer – Oregon State University
Corey Foltz – South Dakota State University
Bradley Hall – Carnegie Mellon University, PA
Tony Hummel – South Dakota State University
Andrea Kimbrough – New Jersey Institute of Technology
Corey Magnussen – Iowa State University
Jesse Marconett – University of Dayton, OH
Anna McLaughlin – Univ. of Missouri, Columbia
LaStella Miles – North Carolina State University
Craig Miller – Northwestern University, IL
Martin Moehl – California State Polytechnic University, Pomona
Robert Peterson – California Polytechnic State University of San Luis Obispo
Jesse Pischar – University of Wisconsin, Stout
Erik Reiersen – University of Dayton, OH
April Smith – Ohio State University
Mathew Stenger – University of Louisville, KY
Ruby Tarren – Ohio University
Andrew Wellington – Oregon State University
Michael Wesely – Iowa State University
John Wloch – University of Notre Dame, IN

Allen & Loureena Weber Scholarship

John Ashcraft – University of Kentucky
Josh Couch – Northern Kentucky University

William E. Weisel Scholarship

Caitlin Schneider – Johns Hopkins University, MD

Albert E. Wischmeyer Memorial Scholarship

Jonathan Reding – Rochester Institute of Technology, NY

SME Chapter 1 – Detroit Founding Chapter Scholarship

Thomas Nolte – Wayne State University, MI
Walter Schwartz – Lawrence Technological University, MI

SME Chapter 4 – Lawrence A. Wacker Memorial Award

Bradley Jacobs – University of Wisconsin, Madison
Michael Lawson – University of Wisconsin, Stout

SME Chapter 6 – Fairfield County Scholarship

James Ferguson – University of Rhode Island

SME Chapter 17 – St. Louis Scholarship

Norman Pai – Rice University, TX
Tyler Thompson – Missouri University of Science & Technology

SME Chapter 23 – Quad Cities Scholarship

Jesse Dobbs – Iowa State University

SME Chapter 31 – Peoria Endowed Scholarship

Luke DeJarnatt – Bradley University, IL

SME Chapter 52 – Wichita Scholarship

David Bartell – Kansas State University
Margaruette Finney – Kansas State University

SME Chapter 56 – Fort Wayne Scholarship

Joseph Bettenhausen – Purdue University, IN
Aaron Engels – Tri-State University, IN
Amber Knust – Rose-Hulman Institute of Technology, IN

SME Chapter 63 – Portland

James E. Marrow Scholarship

Kimberly Daeschel – Oregon State University
Wayne Johnson – Oregon State University

SME Chapter 63 – Portland

Uncle Bud Smith Scholarship

Suttipong Boonthong – University of Washington
Hyo-Sun Kim – Clark College, WA

SME Chapter 67 – Phoenix Scholarship

Andrew Davis – Arizona State University
Amir Malkoc – Arizona State University
Nathan McCray – Arizona State University
Matthew Sellers – Arizona State University

SME Chapter 116 – Kalamazoo

Roscoe Douglas Scholarship

Okwui Atueyi – Western Michigan University
Bradley Tudor – Western Michigan University
Joshua Wiese – Western Michigan University

SME Chapter 198 – Downriver Detroit Scholarship

Kimberly Avery – Kettering University, MI

SME Chapter 311 – Tri Cities Scholarship

Emily Petrach – Oakland University, MI

SME Directors Scholarship

Christopher Bird – Robert Morris University, PA
Benjamin Ferron – University of Wisconsin, Stout

SME Employee Scholarship

Jarrold Bathwell – Schoolcraft College, MI
Lindsey Clark – Wayne State University, MI
Kelly Kirby – University of Toledo, OH
Daniel Milantoni – Grand Valley State University, MI
Katheryn Milantoni – Grand Valley State University, MI
Christine Moulton – Olivet College, MI
Heather Quinlan – Henry Ford Community College, MI
Chelsea Renaud – Grand Valley State University, MI
Victoria Townsend – University of Windsor

SME Ford PAS Scholarship

Virginie Frizon – Rose-Hulman Institute of Technology, IN
Jackson Matheson – University of Michigan
Jasper Pettit – University of Michigan, Dearborn
Drew Pyles – Missouri University of Science & Technology

Summer Manufacturing Experience (sMe) Scholarship

Jake Freebolin – Kirkwood Community College, IA
Joseph Logsdon – Pennsylvania College of Technology
Madeline Mann – University of Akron, OH
Andrew Toms – Ohio Northern University
Kyle Willis – Iowa State University
Kathryn Wolf – Youngstown State University, OH

Prepare

As industry demands on the workforce increase, so must student knowledge of 21st century skills. The Bureau of Labor Statistics predicts the U.S. will face a skilled-worker shortage of 8 million by 2010; up to 14 million by 2014. Today, nearly 30% of workers with science and engineering degrees are age 50 and older. As a result, preparation of our future technical workforce is more important than ever.

Since its inception, the SME Education Foundation has forged partnerships with corporations and foundations who have particular interests in workforce development issues. Here are a couple of examples of SME corporate partners who made important contributions in 2008.

NFPA Partnership Integral to New Curriculum

The Challenge: Address the unmet need for engineers with knowledge of higher automation and the computer-based intelligence to run it.



The Solution: New curriculum in science, technology, engineering and manufacturing education for middle and high school students.

A collaboration of the SME Education Foundation and the National Fluid Power Association (NFPA), this innovative program will provide exciting and phenomenal career opportunities for a new generation of engineers. It all starts in summer 2009 at youth-based engineering programs offered by the SME Education Foundation through its Gateway Academies and sMe Institute.

The new fluid power curriculum will introduce future engineers to the industry's career potential – from electronics and motion control to aerospace to biotech – in a fun and exciting environment.

Through partnerships like this one with the NFPA, the SME Education Foundation is expanding programs to help prepare students today for highly skilled employment opportunities in the future.

The SME Education Foundation is expanding programs to help prepare students today for highly skilled employment opportunities in the future.





SME Education Foundation Recognized for Best Education Program of the Year

In September, the SME Education Foundation received a finalist award from Automation Alley for having the “Best Education Program of the Year.” The award honored the Foundation for its dedication to the advancement of grades K-16 manufacturing education – specifically for the Gateway Academy program and providing more than \$27 million to youth programs, scholarships and awards.



By honoring outstanding educators, the Building the Future Award program strives to attract, motivate and reward the achievements of talented educators.

BUILDING THE FUTURE AWARD

The Building the Future Award program provides public recognition and financial rewards to secondary schoolteachers, principals and other educational professionals who are furthering excellence in engineering education through the *Project Lead the Way*® program. Beyond rewarding the achievements of talented educators, the program supports the SME Education Foundation's goal to attract youth to pursue careers in science, technology, engineering and math through event publicity and localized educator visibility.

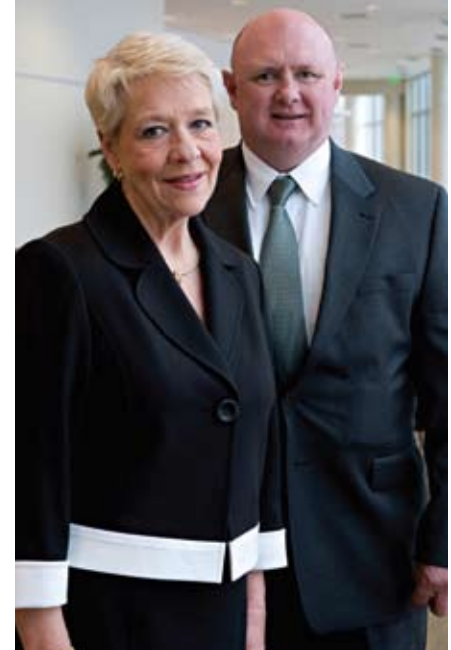
Recognition and Prizes

Building the Future Award winners receive a \$1,000 unrestricted cash award, and 3M donates an interactive classroom presentation system for the winner's classroom. The awards are presented by the SME Education Foundation at an annual gala celebration attended by business and education leaders and Foundation members. Travel expenses are paid for each award winner and a guest. In addition, winners receive state and national media recognition associated with the award.

2008 OUTSTANDING PARTNER AWARD WINNERS



From left: Bart Aslin, Director of the SME Education Foundation; Senior Master Sgt. Steven Sanchez and Cmdr. Charles Litchfield with their Outstanding Partner Awards; Glen Pearson, 2008 Foundation President, at the awards ceremony in Minneapolis, Oct. 6, 2008.



Outstanding Partner Award winner Kathy Sommers, Assistant Director for Career Tech and Adult Education in the Ohio Dept. of Education and State Leader for Project Lead the Way, with SME Education Foundation Director Bart Aslin.

Three talented educators were honored by the SME Education Foundation with Outstanding Partner Awards, in recognition of their achievements and commitment to furthering excellence in engineering education.

Senior Master Sgt. Steven Sanchez (USAF) and Cmdr. Charles Litchfield (USN), based at Peterson Air Force Base, CO, were distinguished for coordinating mentorship volunteers for a Summer Aerospace Institute. Part of NORAD and the U.S. Northern Command's school partnership agreement, the program was attended by 28 students from two Colorado Springs high schools. Topics addressed included space, weather, radiation, physiology, crisis management and communication. Based on NASA's Mission Alpha curriculum, the program was sponsored by the SME Education Foundation and conducted in partnership with the Challenger Learning Center.

The third educator to receive the Outstanding Partner Award was Kathy Sommers, Assistant Director for Career Tech and Adult Education in the Ohio Dept. of Education and State Leader for *Project Lead the Way* (PLTW). Instrumental in first bringing PLTW to 13 Ohio schools in 2004, she has continued to champion the initiative – helping it grow to 158 programs in 2008. Sommers travels the state, presenting PLTW to school administrators, teachers and students, as well as business and industry leaders. Truly committed to lifelong learning, she completed her doctoral degree in educational leadership in 2007.

Profiles In Giving

The generosity of many corporations, organizations and individuals enables the SME Education Foundation to continue serving as a valuable resource for students who aspire to excel in manufacturing careers rooted in math, science and engineering.

Major corporations and foundations provided funding for our extensive range of programs throughout 2008, including 3M, Autodesk, Caterpillar Inc., Chrysler LLC, Emerson, Ford Motor Company, H.B. Fuller, General Motors, Harley-Davidson, Intel Corporation and the Ewing M. Kauffman Foundation.

Highlights of Some 2008 Corporate Contributors



Autodesk® Autodesk – Autodesk donated \$50,000 to sponsor one student at each of the 25 Gateway Academy programs across the U.S. Autodesk has partnered with *Project Lead the Way®* for 10 years, providing powerful Autodesk 2D and 3D design software that allows students to visualize their ideas.

Caterpillar Foundation – Caterpillar Inc. provided funding for SME Education Foundation youth programs including STEPS camps and Gateway Academies. Caterpillar employees have also committed thousands of volunteer hours to Destination Technology® – a collaborative partnership with public schools in Peoria, IL, which builds from the Foundation’s summer youth programs.

Google Inc. AdWords Grant – An award from Google Grants™ provides the SME Education Foundation with free Google AdWords advertisements alongside related search results on google.com. Students from Community High School in Ann Arbor, MI, have supported the Foundation with unique opportunities to learn about the online ad community through a formal marketing course. This grant’s

monthly \$10,000 in-kind advertising will give the SME Education Foundation visibility on the Internet, providing lasting access to the very Internet-savvy generation we strive to reach.



Emerson Charitable Trust – An award for \$60,000 from the Emerson Charitable Trust to the SME Education Foundation made it possible for the expansion of Gateway Academy engineering camps to 26 states during the summer of 2008, including Missouri, Ohio and South Carolina, where Emerson has facilities.



INDIVIDUAL CONTRIBUTORS



Alvin & June Sabroff

The Alvin & June Sabroff Manufacturing Engineering Scholarship was established by the couple in recognition of the important role manufacturing education played in their lives, and because of its vital role in the economic health of the country. The scholarship is awarded to recognize, encourage and assist promising students pursuing careers in manufacturing engineering.

Al Sabroff is a lifelong member and Fellow of the Society of Manufacturing Engineers and an active participant in the SME Education Foundation. His 60-year career in manufacturing research, management and consulting began at Battelle Institute in Columbus and continued at Eaton Corporation in Cleveland.

A strong advocate of manufacturing engineering education, Sabroff was involved in establishing manufacturing research centers at Ohio State University and Cleveland State University, which provide students with real working experiences in manufacturing. In retirement, he leads Metalworking Consultant Group LLC, in Mentor, Ohio.



Robert & Janet Ralbovsky

Thanks to the foresight of Robert and Janet Ralbovsky, the SME Education Foundation will one day be a beneficiary of their estate plan. This generous gift will be used to help educate and prepare America's future manufacturing engineers and technologists to compete in a global economy.

Robert spent most of his career with Lockheed Missile and Space Company in California, where he started out in 1966 as a manufacturing design engineer. After 30 years of service, he retired as a manager responsible for a \$10 million annual tooling budget. Janet also worked at Lockheed, and was a support secretary for more than 30 years.

Prior to retiring, Robert was an active member of the SME's San Francisco chapter. Now, by including the SME Education Foundation in their estate plans, he and Janet will impact the lives of countless young people who share the same passion for engineering, and who will benefit from the Ralbovskys gift for years to come.

Donors

The individuals, organizations and corporations recognized in this Donor Honor Roll have made a commitment to support the SME Education Foundation. It is through their help that the Foundation is able to *inspire, support and prepare tomorrow's manufacturing engineers.*

The Heritage Society is named in honor of E. Wayne and Beulah S. Kay. The Kays moved to Detroit in the early 1940s where they established a successful chrome plating company. Wayne Kay was deeply committed to the SME Education Foundation, serving as chair of Detroit Chapter 1 in 1945. Later, he was instrumental in establishing Macomb Chapter 142.

The SME Education Foundation recognizes the following individuals who, through their estate planning, have named the Foundation as a beneficiary in their will or trust or established a giving vehicle such as an annuity or remainder trust.

Raymond G. Adams
P. D. Anderson
Gilbert R. Barr
Shaker Brackett
James B. Carson
Gladys H. Cervenka*
Marcus B. Crotts
Morton B. Estes
Lo Ree Ewing
Wayne Ewing*

Raymond E. Gariss
Frederick T. Gear
Ruth Jenkinson
Ralph B. Jonas
Lucile B. Kaufman*
E. Wayne & Beulah S. Kay*
B. Bernard Kitnovski
Robert C. Laumann
Carlton R. Lindell*
Frank Lizec

L. Buell Manning
Philip R. Marsilius
Frank G. Mendl
M. Eugene Merchant*
Jerome H. Newman*
Walter E. Panse*
Robert G. Rabovsky
Joe L. Randles
Jacob D. Schiller
George Schneider, Jr.

Merrill H. Shaeffer*
Franklin D. Snyder
Gene B. Stuessy*
Robert L. Vaughn
Virginia E. Vaughn*
Allen Weber
Marie Weisel
Robert J. Wilcox
Mildred M. Wischmeyer*
*Deceased

Earl & Myrtle Walker Founder's Society honors and recognizes our most generous supporters. Membership in the Founder's Society is based on cumulative gifts that support the SME Education Foundation.

\$1,000,000 Level

Caterpillar Foundation
Ford Motor Company Fund
E. Wayne & Beulah S. Kay
Siemens PLM Software Inc.
Toyota Motor Corporation
Allen Weber

\$500,000 Level

Emerson Charitable Trust –
Charles F. Knight
General Motors Foundation
Earl & Myrtle Walker
Albert F. Wright

\$250,000 Level

Bush Foundation
Gladys H. Cervenka
Herrick Foundation

\$100,000 Level

American Electric Power Foundation
Burton E. Belzer
Gene Haas Foundation
Heinz Endowments
Carlton R. Lindell
Lockheed Martin Corporation
Rockwell Automation
George Schneider, Jr.
SME Chapter 56 – Fort Wayne
State Farm Companies Foundation
TRW Inc.

\$50,000 Level

3M
Andersen Corporate Foundation
Autodesk, Inc.
Ralph E. Cross

DaimlerChrysler Corporation
Google Inc.
H.B. Fuller
Intel Foundation
Ewing M. Kauffman Foundation
Fred A. Lennon
Guiliano Mazzetti
Gordon & Betty Moore Foundation
Motorola Foundation
Nokomis Foundation
Northrop Grumman Corp.
Sally Novek – Carolyn Fisk –
Janet Henderson
PACCAR Foundation
Walter E. Panse
Rockwell Automation
Clyde A. Sluhan
SME Chapter 1 – Detroit
SME Chapter 4 – Milwaukee
SME Chapter 17 – St. Louis
SME Chapter 116 – Kalamazoo
Society of Manufacturing Engineers
Mildred M. Wischmeyer

\$25,000 Level

Chrysler Foundation
Marcus B. Crotts
Eaton Charitable Fund
Freightliner Corporation
Harley-Davidson Foundation
Haworth, Inc.
Clinton J. Helton
William F. Hoffman, Jr.
Intel Scholarship Fund of the
Pikes Peak Community Foundation
Lucile B. Kaufman
Kennametal Foundation

Philip R. Marsilius
Mazak Foundation
Estate of Josephine M. Myers
Eugene M. Nelson
Joe L. Randles
Joseph Richey, Jr.
Frank J. Riley, Jr.
Edward S. Roth
Alvin M. Sabroff
Albert Sargent
SME Region 9
SME Region 12
SME Chapter 52 – Wichita
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