From the Founders

The United States is losing its long-standing technical competitive edge. We may soon become a follower in research and engineering rather than the leader. If this trend is to be reversed, our nation must increase the number of highly qualified teachers of high school science and mathematics.

During the 1980’s, while we were building our company, Metrologic Instruments, Inc., many of our young engineering recruits, despite high grades and impressive credentials, lacked the science and mathematics training needed to be successful in our company. We felt certain that this problem was not just at our company but represented a national trend. The lack of adequate science and mathematics training has continued. Recently, President Bush, the National Academy of Sciences and the National Science Foundation have declared that the need to improve high school science and mathematics education in our country is critical.

In order to help our nation reverse the trend, in 1999 we recruited Dr. Angelo Collins to lead our fledging Foundation. She requested that she spend a year traveling across the U.S., meeting with other organizations with charters relating to ours: “To increase the quality and quantity of high school science and mathematics teachers.” During that quest, Angelo assembled a remarkable array of educators, each with a deep knowledge and experience in various aspects of science teacher education. From this group, and from her own experiences in teaching, research and program development such as with the Teacher Assessment Project at Stanford University and the National Science Education Standards work at the National Research Council, she began to lay out how KSTF could fulfill our charter. The Knowles Science Teaching Foundation is now in its 5th year. And our program shows that she has captured the Gold Ring of success. We find it remarkable that in one person, we found:

• the ability to abstractly and creatively conceive the current KSTF program;
• the ability to recruit talent in the form of our advisory committees;
• the remarkable ability to recruit and train a professional staff;
• management capability of an infant start-up foundation; and
• incredible persistence in the face of economic uncertainty in our early days as we began with thin funding.

The program that Angelo conceived and organized is the KSTF that we know today. It is structured around three tightly interrelated programs.

Teaching Fellows: At the heart of our efforts are the Teaching Fellows, who are carefully selected for the excellence of their science and mathematics training and experience. In order to qualify for the fellowship, our Fellows also must survive a rigorous assessment of their desire and ability to teach. On acceptance, we provide the selected Fellows with a 5-year program of mentoring, leadership training, learning contemporary classroom techniques, instructional materials, professional memberships, and monetary stipends. The Fellows meet together several times each year where they share their information on successes and failures under real classroom conditions. They also meet with national leaders in aspects of science and mathematics teaching. These meetings almost crackle with the mutual enthusiasm from the developing, budding science and mathematics teachers.

Research: KSTF sponsors research to inform the design, development and evaluation of all elements of our Teaching Fellows Program. The current Young Scholars Program supports early career researchers in universities and similar institutions. In addition KSTF conducts some research internally.

Conference: In September 2006, we will hold our first KSTF Conference at the Wingspread Center in Racine, Wisconsin. There we will convene a select group of educators and researchers in science teaching. The intent is to broaden and deepen an understanding about how the nation can better prepare its science and mathematics teachers and consequently their students and the future scientists, mathematicians, engineers and citizens for our nation.

We are proud to be part of an organization that is effectively creating high quality teachers and leaders in the fields of science and mathematics education. We are certain our Fellows will have a major, enduring effect on the next generations of young people in this country.

Janet H. Knowles

C. Harry Knowles
In 2005, public concern about the achievement of students in the United States in science and mathematics was heightened. This increased awareness was due, in part, to the many reports sponsored or prepared by government agencies, business leaders and the private sector that link understanding and skill in science and mathematics to the economic well-being of our country. In September of 2005, I was privileged to participate in a small working conference on *Science Education for the 21st Century Workforce* sponsored by BSCS and the National Institutes of Health. Participants analyzed twelve reports on the relationship between science and/or mathematics and the economy for common themes and recommendations about how to improve student achievement. I was not surprised that the theme mentioned most often across all these reports was the need for high quality teachers. Since our founding, we at KSTF have understood the pivotal role of teachers in the achievement of students. I smiled at one of the recommendations from the Business Roundtable which was to “Establish prestigious fellowships for exceptional recent college graduates…” Our intention is that the KSTF Teaching Fellowship eventually becomes recognized as a prestigious award. Further, KSTF offers fellowships to young people within five years of their college graduation, that is, recent graduates.

One aspect of the KSTF Teaching Fellowship that tends toward making it prestigious is the rigor of the selection process. Conducted in three phases culminating in a weekend-long interview event with many different activities, the potential fellows engage with teachers, discipline experts, education experts, the Board of Trustees, staff and one another. Another aspect of the Teaching Fellowship is the experiences both within the discipline and beyond that each fellow brings to KSTF. A final aspect of the Fellowship is what the Fellowship offers the fellows. Intentionally designed to address the four components of teaching (planning, instruction, assessment and reflection), aligned with standards, and conscious of the reasons beginning teachers choose to leave profession, KSTF activities with fellows are wide ranging from visits to classrooms where teachers, working with researchers, are implementing experimental instructional materials to opportunities to meet with authors of important books on teaching. KSTF’s research program and conference are intended to inform the recruitment, preparation, induction, mentoring and retention of high school science and mathematics teachers and thus influence the Teaching Fellowship Program.

2005 also brought another science program officer to KSTF. Ms. Roseanne Rostock, who has recent experience teaching physics, joined us at the end of summer and coordinated the recruitment and selection of the 2006 teaching fellows.

For KSTF, another noteworthy event of 2005 was the move to new headquarters in Moorestown, NJ. The property at 1000 N. Church Street is owned by KSTF’s supporting foundation, the Knowles Science and Mathematics Institute (KSMI). The move during the last week in November was preceded by an open house during which we introduced KSTF, its vision, programs, and people to new neighbors and dignitaries and celebrated with friends and supporters the significance of this move for KSTF.

Those of us at KSTF have thoughtfully placed ourselves at the forefront in addressing an issue of national concern - the quality of high school science and mathematics teachers. We are grateful to Janet and Harry Knowles for their commitment to and support of our endeavors.

Finally, although this event occurred in 2006, I cannot close my message without mourning the passing on June 21, 2006 of Mr. Boyce Adams, member of KSTF’s Board of Trustees, colleague and friend.

Angelo Collins

---

2005 Teaching Fellows

In 2005, thirteen new Science Teaching Fellowships were awarded. In this same year, KSTF awarded its first Mathematics Teaching Fellowships to seven teachers.

The selection process is rigorous. Applicants submit three essays, transcripts and letters of recommendation, which are reviewed. The staff then conducts telephone interviews of those applicants who appear to meet all the criteria. Finally, those applicants who show greatest promise are invited for personal interviews conducted by teams of scientists and mathematicians, teachers and education researchers. The interview meeting includes social events with the other applicants, interviewers, KSTF Staff and members of the Board of Trustees.

KSTF Teaching Fellowships are awarded based on ability and promise of becoming an exceptional high science or mathematics teacher, meeting the highest professional standards and demonstrating leadership abilities. The selection criteria are:

- Exceptional Understanding of Science or Mathematics
- A Commitment to High School Teaching
- Indications of the Ability to Teach
- Leadership and Character

2005 Cohort of Science Teaching Fellows

**Sarah Angell** grew up on a 300-acre farm in the New York countryside. She earned a bachelor’s degree in chemistry from George Fox University. In December 2005, she graduated from the State University of New York at Binghamton with a master’s degree in chemistry and a teaching credential. Sarah will begin teaching in New York State in January 2006.

**Glen Botha** was born in Cape Town, South Africa, and lived there until he was 12 years old. He earned a double major in chemistry and chemical engineering from Penn State University. As an undergraduate, he worked as a general chemistry tutor and taught sections of an organic chemistry laboratory course. He is currently working on his master’s degree and teaching credential at the University of California at Berkeley.

**Irene Frank** grew up in Izmir, Turkey, and received her bachelor’s degree in chemistry from Scripps College. She worked as a teaching assistant in general chemistry labs while an undergraduate at Scripps. She is currently pursuing her teaching credential at Claremont Graduate University while she teaches full-time at Diamond Bar High School in Diamond Bar, California.

**Heather Glasser** grew up in Southern California. She will complete her bachelor’s degree in chemistry and teaching credential from the University of Redlands in 2006. As an undergraduate, she conducted research in chemistry laboratories and is currently collecting data on inquiry-based learning in chemistry.

**Jeanine Greydanus** grew up in Lake Worth, Florida, and received her bachelor’s degree in engineering from Calvin College in Grand Rapids, Michigan. She worked as a field engineer after graduating from college before accepting a fellowship from Wake Forest University to study science education. She graduated in August 2005 with a master’s degree in science education and her teaching credential in physics. She is currently teaching full-time at Catholic Central High School in Grand Rapids, Michigan.
2005 Cohort of Science Teaching Fellows

Erica Johnson grew up in Lynchburg, Virginia, and received her bachelor's degree in physics from Virginia Commonwealth University. In 2001, she taught physics in the inner city of St. Louis, before moving to Knoxville, Tennessee. There she worked at Hiwassee College as a professional tutor and taught physics and mathematics with the Upward Bound Program. She is currently a teaching assistant and is completing her master's degree in physics at the University of Tennessee. In addition, Erica is in the beginning stages of the master's degree program in the theory and practice of teaching.

Rachel Love grew up in Baton Rouge, Louisiana, and received her bachelor's degree in chemistry from Louisiana State University. As an undergraduate, she worked as a teaching assistant for the freshman general chemistry laboratory course where she was awarded the Superiority in Performance And Productivity in Teaching Chemistry 1212 Award for the top teaching assistant in the department. She is currently working on her master's degree in teaching at the University of Virginia where she continues to teach in undergraduate chemistry laboratories.

Mary Lee McJimsey grew up in Spokane, Washington. She will receive her teaching credential and bachelor's degree in physics from California Polytechnic University at San Luis Obispo in 2006. As an undergraduate, she conducted research in different branches of physics and worked as a teaching assistant in physics labs.

Melanie McWilliams grew up in Lancaster, Pennsylvania, and received her bachelor's degree in chemistry from the University of Massachusetts at Amherst. As an undergraduate, she worked with the Chemistry Higher Education Workgroup developing interactive software for general and organic chemistry textbooks and with the STEMTEC program, which seeks to improve science education at the high school level. She is currently pursuing her teaching credential and master's degree in education in chemistry at the University of California at San Diego.

Janeen Oberlander grew up in Cold Spring Harbor, New York, and received a bachelor's degree in chemistry with a specialization in biochemistry from the University of Virginia in May of 2004. As an undergraduate she conducted research through the National Science Foundation's Research Experiences for Undergraduates Program. Janeen is currently working on her master's degree in teaching science-chemistry at Stony Brook University. When she graduates in 2006, she will hold a dual certification in chemistry and biology.

Amy Perlman grew up in Northern Virginia, and received her bachelor's degree in physics with minors in mathematics and astronomy from Haverford College. As an undergraduate, she conducted research in nanoscale physics and worked at the Naval Research Labs machining parts for plasma physics experiments. She also tutored students in local middle and high schools in physics and mathematics. She is currently teaching full-time at Annandale High School in Northern Virginia while she completes her teaching credential at George Washington University.

Charles Sabatier grew up in Oxford, Mississippi, and graduated from the University of Mississippi with a bachelor's degree in physics. After graduation, he worked for the federal government implementing technology and methods to improve airport security. He currently teaches physics at Mount Vernon High School in Alexandria, Virginia. He is finishing his teaching credential at George Mason University.

Howard Shen was born in Cleveland, Ohio, and map-hopped during his childhood from Ohio to West Virginia, Taiwan, California and back to West Virginia before attending college in California. He received his bachelor's degree in chemistry from Stanford University. Howard is currently in Stanford’s Teacher Education Program, working on his master’s and teaching credential, which he will receive in 2006.
2005 Cohort of Mathematics Teaching

**Arielle Alford** grew up in Birmingham, Alabama, and received her bachelor's degree in mathematics and biology from Oxford College of Emory University. As an undergraduate she worked with PRISM (Problems and Research to Integrate Science and Mathematics), a program at Emory that uses case-based learning in local schools to spark student interest in mathematics and science classes, where she explored the intersection between learning mathematics and learning science. She is currently working on a master's degree and teaching credential at the University of Georgia.

**Ashleigh Enlow** grew up in Columbia, South Carolina. She is currently working on her bachelor's degree in mathematics and teaching credential at the University of South Carolina. As an undergraduate, she has tutored students in after-school programs in Columbia. She will begin teaching in fall 2006.

**Sujata Ganpule** grew up in Los Altos, California, and received her bachelor's degree in mathematics from Cornell University. As an undergraduate she worked in a local high school and then entered the teacher preparation program at the University of California at Berkeley. She completed a master's degree in education and a teaching credential in May 2005. Sujata currently teaches at the Marin School of Arts and Technology, in Novato, California.

**Emily Kennedy** grew up in Acworth, Georgia, and received her bachelor's degree in mathematics from Georgia Institute of Technology. As an undergraduate, she tutored students in mathematics and reading and was a teaching and research assistant in mathematics. Emily is currently seeking her master's degree and teaching credential in mathematics from the University of Georgia.

**DeVita Lane** grew up in Columbia, South Carolina, and received her bachelor's degree in mathematics from the College of Charleston. She is currently pursuing her master's degree in mathematics education and teaching credential at the University of South Carolina. While in school, DeVita worked as an education instructor at a local Boys and Girls Club where she tutored students in mathematics.

**Andrew Lee** grew up in San Francisco and then San Mateo, California. He received his bachelor's degree in applied mathematics from the University of California at Berkeley. As an undergraduate, he tutored students in calculus and differential equations and became a study group leader at the student learning center. Andrew received his teaching credential in mathematics in June 2005 from San Francisco State University. He currently teaches at High Tech High, Bayshore, CA.

**Derek Pope** grew up in Yonkers, New York, and received his bachelor's degree in mathematics with a minor in computer science from Seton Hall University. As an undergraduate he worked with disabled children and adults, and spent time teaching teenagers at a psychiatric hospital. He graduated in December of 2005 with a master's degree in teaching in mathematics from Stony Brook University. He will begin teaching at Ward Melville High School in January 2006.
2004 Cohort of Science Teaching Fellows

2005 was a year of transitions for the 2004 Cohort of Science Teaching Fellows. Carey Borghi, Kim Lintker, Dana Pickering, Katie Pointer, Zach Powers and Heather Welch all completed a master’s degree and credential in secondary science teaching and began full-time teaching in high schools across the country. Casey O’Hara and Anne Watson completed their first year of teaching, while Katie Jennings and Holly Ristau completed their education coursework and began student teaching.

The 2004 fellows met as a cohort three times in 2005. The spring meeting took place April 22-23 at the MIT Endicott House in Dedham, MA where the fellows were introduced to the Living by Chemistry (LBC) curriculum. LBC is an innovative high school chemistry curriculum project designed by chemists and chemistry educators at the University of California, Berkeley. LBC consists of six units which cover all of the standard material in a typical yearlong high school chemistry course. Each unit consists of real-world investigations that encourage students to develop and test hypotheses and strengthen their conceptual understanding. Jennifer Claesgens, who has been working on the LBC project since its inception, led a workshop focused on two of the six units, plus a new unit titled Fire that focuses on concepts of energy transformation and conservation. At the Summer 04 meeting, all of the 04 Fellows began working on instructional sequences in both physics and chemistry that dealt with energy, so the fire unit was particularly timely. We also were fortunate to have Scott Balicki from the Boston Latin School (the oldest public school in the U.S.) join us for an afternoon. Scott’s experience as a new teacher implementing the LBC curriculum was a valuable addition to the meeting.

The 04 Cohort’s fall meeting was held at Arizona State University and focused on the Modeling Instruction in High School Physics curriculum. The Modeling Program is a systematic approach to the design of curriculum and instruction developed by ASU physics professor Dr. David Hestenes that uses computers to teach models and modeling, central components of modern science. The workshop was led by Larry Dukerich and Kelli Gamez-Warble, two veteran teachers with many years experience teaching modeling, both in their own classrooms and to other teachers. The workshop focused on specific methods of teaching concepts of energy transfer, since all of the 04 Cohorts’ lesson study lessons have energy as a central theme. The fellows also spent time at the fall meeting sharing their experiences as first-year teachers.

During the 2005 Summer Meeting in Camden, ME, the primary activity of the 2004 Cohort was refining the instructional sequence they began developing at the 2004 Summer Meeting. With the exception of Holly Ristau and Katie Jennings, who are still student teachers, each of the 2004 Fellows will be teaching their jointly-designed lessons in the 2005/2006 academic year. In addition to working on the lesson study process, the 2004 Cohort participated in the workshop on making and using video in science labs presented by Dr. Alicia Albaugh from the Rochester Institute of Technology and a day-long workshop by Dr. Eileen Lewis from U. C. Berkeley that addressed issues of student understanding and assessment.

In addition to participating in the Summer Fellows Meeting, each member of the 2004 Cohort participated in a professional development activity during the summer of 2005. Individual fellows’ activities included participating in a workshop on the physics of music, teaching chemistry in an Upward Bound summer program, taking graduate coursework in education, teaching laboratory course for prospective science teachers and working with other KSTF fellows to plan for the upcoming academic year.
In 2005, all of the 02-03 Science Teaching Fellows, Ben Buehler, Jennifer Barchie, Lisa Sitek, Ken Burns, Doug Dagan, Kevin Henson, Bradford Hill, Janae Pritchett, Emilie Rinner, Jill Rhoden, and Jennifer Stauffer, were teaching in United States High Schools.

The 02-03 Science Teaching Cohort had three meetings in 2005. In spring, they met at the University of Maryland, College Park. At this meeting all of the activities focused on inquiry-based teaching practices. Dr. David Hammer, an associate professor in the Physics Department, discussed his work on Discovery Learning and Discovery Teaching. Christina Smith, an experienced science teacher, explored ways to use authentic activities to assess student understanding from inquiry-based instruction. Daryl Taylor, also an experienced physics teacher, conducted an interactive workshop on inquiry teaching that encouraged the fellows to examine the way that they teach. Mr. Taylor’s workshop also gave them tools to begin to make minor adjustments in their teaching that provide major gains in student learning.

At their summer meeting in Camden, Maine, the 02-03 Fellows focused on their lesson study. During the previous summer (2004), their lesson study groups had designed instructional sequences on important science ideas. During the 04-05 academic year each fellow had taught some portion of these lessons. Now, in the summer, working in the same groups, they reviewed video clips and student work they had collected. Discussion focused on what had and what had not helped them enable student understanding. Amid much laughter and some tears, each group redesigned the instructional sequence to teach in the upcoming 05-06 academic year. Several of fellows noted that they were now more concerned about student understanding and less focused on covering the content. This iterative process of planning, teaching and reflecting is very productive as a way of thinking about their teaching. During the summer meeting, in addition to lesson study, the 02-03 Fellows also met with Dr. Eileen Lewis from the University of California at Berkeley for one day. The workshop she presented wove together the themes of metacognition, the nature of science, questioning, inquiry and misconceptions.

During their fall meeting in Seattle, Washington, the 02-03 Fellows observed students in the classrooms of teachers who had recently completed the University of Washington’s Physics Education Group’s (PEG) intensive, six-week inquiry-based physics summer course. PEG also conducted a workshop on light and shadows that intentionally challenged the fellows’ depth of understanding in physics and modeled for them ways to teach physics in an inquiry-based manner. Later the same day, the fellows participated in a panel discussion by PEG-educated teachers and had the opportunity to ask questions about how to effectively implement the instruction in Physics by Inquiry, the text produced by PEG. In combination, the classroom observations, the workshop and the panel led to a deeper understanding of how physics can be taught. On Saturday morning, the fellows participated in a workshop on assessing student misconceptions using the computer-based tool, DIAGNOSER. The workshop was given by Dr. James Minstrell, a physics teacher for over thirty years and now with of Facet Innovations, who is one of the designers of DIAGNOSER.

2005 also saw the birth of the first KSTF baby. Jane Katherine Shaver was born to Joe and Lisa Sitek-Shaver in October.
In 2005, KSTF restructured its research grants program into a two-year, postdoctoral research fellowship program for early career scholars. The goal of the KSTF Young Scholars Fellowship is to contribute to research about recruitment, preparation, induction, mentoring and retention by supporting early career scholars working in critical areas of education who show promise of making significant scholarly contributions to the field. The fellowships are intended both to replace salary and to cover other research expenses outlined in the proposal and may extend over two years. KSTF Young Scholars are expected to present their research at professional meetings and to publish. They also are expected to participate in meetings of the KSTF Teaching Fellows and the KSTF Conference.

In January of 2005, KSTF released a call for proposals for the Young Scholars Fellowship and received 26 applications. Twenty-one senior scholars with expertise in the fields of science and/or mathematics teacher education and experience mentoring junior scholars participated in reviewing the proposals. Proposals were judged on the quality of the research proposed as well as the applicant’s past research record and promise for significant future contributions to the field.

The first KSTF Young Scholars Fellowship was awarded to Assistant Professor Mark Olson from the Neag School of Education at the University of Connecticut for his project titled Knowing and Teaching School Science. Dr. Olson’s research is a qualitative inquiry into the instructional representations of subject matter used by a small number of both exemplary and novice physical science teachers. Building on the insights gained from his investigation of teaching practice, his second line of inquiry will be to iteratively develop open-ended assessment items to investigate the subject matter knowledge for teaching two topics in physical science: density and condensation/evaporation.

Dr. Olson’s fellowship began July 1, 2005. The call for proposals for the 2006 KSTF Young Scholars Award was released in August, 2005 with the intent of announcing the 2006 Young Scholar Fellowship Awardees in April with funding beginning in July.

In addition to funding external research, KSTF is currently conducting an internal evaluation of the KSTF Teaching Fellowship Program that has the potential to make a significant contribution to the knowledge base on teacher induction. The overarching goal of this internal evaluation is to determine what effect the KSTF Teaching Fellowship has on teacher quality and retention. A secondary goal is to compare the KSTF Teaching Fellowship with other models of teacher induction in terms of teacher quality and retention using data from the Schools and Staffing Survey and other existing research. Additional internal research was begun in 2005 with the 2004 Science Cohort to examine the change in teacher knowledge over the 5-year term of the fellowship.
The KSTF Conference Series will bring together scholars and practitioners committed to investigating, understanding and enhancing the continuum of experiences and knowledge that constitutes the preparation of secondary science and mathematics teachers. Planning for the first conference began in January, 2005 with a meeting of scholars and practitioners from across the country, including a KSTF Teaching Fellow. In June 2005 we submitted a proposal to The Johnson Foundation to hold the conference at Wingspread, the Johnson Foundation Conference Center located on Lake Michigan with original buildings designed by Frank Lloyd Wright and the proposal was approved.

The inaugural KSTF Conference will be held at the Wingspread Conference Facility in Racine, WI on September 19-21, 2006 and will focus on the preparation (broadly conceived) of secondary science teachers. This first conference of the series will be organized to address four common facets of the teacher preparation continuum for secondary science teachers: Teacher and Program Demographics, Subject Matter Preparation, Pedagogic Preparation, and Professional Development in the Induction Phase. The second conference of the series, tentatively planned for 2008, will focus similarly on the preparation of secondary mathematics teachers.

Our goals for the inaugural conference are fourfold:
• Drawing on existing syntheses of teacher preparation research as well as other appropriate research literature and resources, map out what we (meaning the broader community of individuals, institutions and programs involved in teacher preparation) know, how we know it, and what assumptions we hold about the four facets of the secondary science teacher preparation continuum.
• Identify crucial gaps in our knowledge and pose important questions that we as a community feel need to be answered with regard to each facet of teacher preparation, and justify why such knowledge is crucial.
• Outline specific research projects, both large- and small-scale, that will contribute to filling the knowledge gaps and answering the questions.
• Synthesize the above into a published document that will serve as a resource to the teacher preparation community, a call for proposals for KSTF funding and an agenda for future conferences in the KSTF Conference Series.

To facilitate these goals, we are inviting individuals with the intent of forming working groups within the four facets of teacher preparation. In order to encourage conversation among working group members prior to the conference and to help make the conference itself as productive as possible, an on-line discussion board for participants will be in place by spring 2006.

Participants at the Conference Planning Meeting.

L to R: Charles Anderson, Angela Calabrese-Barton, Lisa Sitek-Shaver, Ilana Horn
In early 2004, it became clear that the building at 20 E. Redman Ave in Haddonfield, New Jersey, where KSTF had its offices, was not adequate to accommodate our growth. Despite a diligent search for another building, nothing we found seemed to exactly meet our needs. And so in fall 2004, we began negotiations to purchase almost four acres of property with a building and a garage in Moorestown, NJ.

By January 1, 2005 KSTF was well into thinking about the new building. We had agreed to renovate the existing building rather than demolish it and build a new building. We had established a building committee. We had hired Herman Hassinger, FAIA, as architect. Kutteroff Construction was engaged as general contractor.

Throughout 2005 we watched our building take shape. Mr. Adams, chair of the building committee and member of the Board of Trustees, visited the site almost daily keeping an eye out for functional details such as HVAC and lighting. Mr. Hassinger assured us that the building would have aesthetic appeal. Mrs. Knowles chose colors for the walls, floor, appliances and cupboards. Dr. Collins kept watch that the building met the operational needs of the foundation and staff. Mr. Knowles oversaw all aspects of the work. The first row of photos below shows the building from skeleton to completion.

On November 5, 2005, KSTF held an open house at our empty building. Local dignitaries and educators, as well as friends and supporters came by for lunch. Several Fellows and an Advisory Committee member also were able to attend.

On November 21, everything at 20 Redman was either packed or marked for the movers. By noon a convoy of trucks and cars made the eight-mile journey from the former offices to the new ones and by the end of the day, 1000 N. Church Street was filled with furniture and boxes. The second row of photographs below shows the progression from empty rooms through unpacking to being settled. As 2006 began, we were settled enough to focus again on KSTF’s programs.
Board of Trustees

C. Harry Knowles
Founder & President

Janet H. Knowles
Founder & Treasurer

Scott McVay
Member

Boyce Adams
Member

Program Staff

Angelo Collins, Ph.D.
Executive Director

Nicole Gillespie, Ph.D.
Senior Program Officer
Science

Rachel Foster, Ph.D.
Program Officer
Science

Roseanne Rostock
Program Officer
Science

Jeffrey Kralik
Research Associate

Administrative Staff

Beth DiGesare
Administrative Assistant

Lisa Rosenberg-Howard
Bookkeeper
Science Advisory Committee

Paul Kuerbis, Ph.D.
Professor of Education
Director, Crown Teaching and Learning Center
The Colorado College

J. Steve Oliver, Ph.D.
Associate Professor
Science Education
University of Georgia

Samuel A. Spiegel, Ph.D.
Center for Professional Development
BSCS

Gerald M. Stokes, Ph.D.
Director
Joint Global Change Research Institute
Washington, DC

Deborah J. Trumbull, Ph.D.
Associate Professor
Director of Graduate Studies, Education
Cornell University

Mathematics Advisory Committee

Laurie Boswell
Mathematics Teacher
The Riverside School
Lyndonville, VT

Patrick Carney
Mathematics Teacher
DePaul Catholic High School
Wayne, NJ

Margaret Cozzens, Ph.D.
President and CEO
Colorado Institute of Technology
(Present: KSTF Associate Director)

Edwin Dickey, Ph.D.
Professor, Mathematics Education and Chair
Department of Instruction & Teacher Education
University of South Carolina

Eric Robinson, Ph.D.
Associate Professor, Mathematics
Ithaca College, New York

James Wilson, Ph.D.
Professor, Mathematics Education
The University of Georgia
### Statement of Assets, Liabilities and Net Assets - Modified Cash Basis  
**December 31, 2005**

#### Assets

**Current assets**
- Cash and cash equivalents: $223,213
- Investment - current: $1,941,000

**Property and equipment**
- Leasehold improvements: $324,066
- Equipment: $34,663
- Furniture and fixtures: $26,913
- Less: Accumulated depreciation and amortization: $(11,618)

**Net property and equipment**: $374,024

**Other assets**
- Long-term investment - net current portion: $27,812,997
- Due from KSMI: $104,976

**Total other assets**: $27,917,973

**Total assets**: $30,456,210

#### Liabilities and net assets

**Payroll taxes payable**: $190

**Unrestricted net assets**: $30,456,020

**Total liabilities and unrestricted net assets**: $30,456,210

### Statement of Revenue and Expenses - Modified Cash Basis

#### Revenue

- Contributions: $-
- Gain on investments: $224,418
- Dividend and interest income: $8,346

**Total revenue**: $232,764

#### Functional Expenses
- Program services: $1,348,695
- Supporting services: $110,759

**Total functional expenses**: $1,459,454

**Change in unrestricted net assets before income**: $(1,226,690)

#### Other income

- Unrealized (loss) gain on investment: $(2,993,370)

**Net change in unrestricted net assets**: $(4,220,060)

**Net unrestricted assets as of the beginning of the year**: $34,676,080

**Net unrestricted assets as of the end of the year**: $30,456,020