PROJECT DIRECTORY
FISCAL YEAR
2012-2013
Under authority of Public Law 107-110, the Alabama Commission on Higher Education (ACHE) is awarding a total of $969,570 federal funds to Alabama institutions of higher education for professional development in grades K-12. The funding continues long-term projects that were awarded FY2011-2012 grants. Receiving these grants are six public universities and one state community college. The grants support partnerships between higher education and high-need school districts, with one including a non-profit agency in co-project leadership and three others providing direct support for the state-wide Alabama Math, Science, and Technology Initiative (AMSTI). All are designed to provide long-term, statewide professional development to improve teaching in Alabama public and private schools. A major objective is to achieve high student performance standards, with high-need local school districts as partners.

These projects provide K-12 teachers, administrators, and para-professionals with content knowledge in individual hands-on training using the most current technology and proven learning strategies. After initial sessions, projects also include follow-up sessions and technical assistance during the academic year to refresh, reinforce, and re-establish content knowledge and teaching techniques. Follow-up varies by project but usually includes one-day workshops during the school year and on-site observation/assistance visits to teachers in their schools. In addition, projects typically maintain support and service to participants by e-mail, voice contact, and internet websites.

Expenses for administering these projects and for providing project materials are covered by the ACHE NCLB program along with support from the host institutions, private corporations, and government agencies. One ACHE NCLB grant supports teachers’ independent research, including study abroad. Travel and related expenses for participants in other projects are provided by sources other than ACHE NCLB funds.

Information on the objectives, schedules, and activities of these projects may be obtained from the project directors listed in this directory. Information on the overall higher education NCLB Program in Alabama is available from Dr. Elizabeth French at (334)242-2179 [Elizabeth.French@ache.alabama.gov] and Dr. James Conely at (334)242-2235 [Jim.Conely@ache.alabama.gov] in the Office of Institutional Effectiveness and Planning at ACHE, P. O. Box 302000, Montgomery, Alabama, 36130-2000. Additional information on this program is available online at http://www.ache.alabama.gov/NCLB/Index.htm.

* Projects with FY 2012-2013 funding are active from spring 2013 through spring 2014.
## TABLE OF CONTENTS

### I. Alabama Math, Science, and Technology Initiative (AMSTI)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Project Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athens State University</td>
<td>AMSTI Lead Teacher Enhancement Project (Alabama Math, Science, and Technology Initiative)</td>
<td>2</td>
</tr>
<tr>
<td>Jacksonville State University</td>
<td>AMSTI Lead Teacher Enhancement Project (Alabama Math, Science, and Technology Initiative)</td>
<td>3</td>
</tr>
<tr>
<td>University of Alabama in Huntsville</td>
<td>AMSTI Lead Teacher Enhancement Project (Alabama Math, Science, and Technology Initiative)</td>
<td>4</td>
</tr>
</tbody>
</table>

### II. Multi-Year Projects

<table>
<thead>
<tr>
<th>Institution</th>
<th>Project Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snead State Community College</td>
<td>IMPACTSEED: Improving Physics and Chemistry Teaching in Secondary Education</td>
<td>6</td>
</tr>
<tr>
<td>Troy University – Dothan Campus</td>
<td>Wiregrass Math, Science, and Technology Leadership Academy</td>
<td>8</td>
</tr>
<tr>
<td>The University of Alabama</td>
<td>Physical Science in the 21st Century: Improving Teacher Quality and Mastery of Content</td>
<td>9</td>
</tr>
<tr>
<td>University of Alabama at Birmingham</td>
<td>ALAHASP 2012-2013 (ACHE Fiscal Year 2011-2012): Alabama Hands-On Activity Science Program</td>
<td>10</td>
</tr>
<tr>
<td>University of Alabama at Birmingham</td>
<td>The University-School Partnership for Secondary Science Advancement (&quot;BioTeach&quot;)</td>
<td>11</td>
</tr>
</tbody>
</table>
University of Alabama in Huntsville
*The Success Through Academic Research (STAR) Project:*
*The Independent Study Scholarship Program* ........................................... 13

The University of South Alabama /
Alabama Institute for Education in the Arts
*Comprehensive Arts Education: Alabama* ........................................... 14
I.

Alabama Math, Science, and Technology Initiative (AMSTI)
AMSTI (Alabama Math, Science, and Technology Initiative)  
Lead Teacher Enhancement Project

<table>
<thead>
<tr>
<th>University Partners</th>
<th>High-Need School District Partners</th>
<th>Other School District Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts and Sciences</td>
<td>Athens City</td>
<td>Blount County</td>
</tr>
<tr>
<td>College of Education</td>
<td>Cullman City</td>
<td>Cullman County</td>
</tr>
<tr>
<td>Regional In-Service Center</td>
<td></td>
<td>Lawrence County</td>
</tr>
<tr>
<td>Alabama Technology in Motion</td>
<td></td>
<td>Limestone County</td>
</tr>
<tr>
<td>Alabama Science in Motion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The AMSTI Lead Teacher Enhancement Project, in collaboration with the Alabama State Department of Education (ALSDE), is designed to provide professional development for Lead Teachers to promote a higher level of mastery of math and science content and in particular to promote the alignment of AMSTI curriculum and resource material with the Alabama Course of Study standards. Special focus is directed to implementing curriculum reform in mathematics as outlined in the Alabama College and Career Readiness Standards. The project draws upon research-based best practices to (1) provide specialized learning experiences that deepen participants’ content knowledge in math and science and (2) enable a higher level of content mastery and fidelity of implementation of AMSTI best practices. Ongoing Assessment Project (OGAP) training in either multiplicative or fractional reasoning is offered to the participating schools based on their grade level needs.

**Project Director:** Carrie S. Lin  
AMSTI Director

**Telephone:** (256) 216-6622  
**FAX:** (256) 216-6623

**E-mail:** carrie.lin@athens.edu

**Session Dates:**

*Phase I PLT Training*
May 2, 2013

*Phase II Content Deepening*
July 31-August 2, 2013  
August 5-8, 2013

**Location:**

Athens State Regional Inservice Center  
1115-A Hwy 31 South  
Athens, AL 35611-1902

---

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
This project is designed to (1) establish and implement Professional Learning Teams (PLTs) and (2) provide professional development for the PLTs in aligning the AMSTI curriculum and resource material with the Alabama Course of Study standards. Teachers work and learn collaboratively in PLTs. The goal is building sustained leadership by empowering and enhancing the leadership potential of lead teachers in AMSTI schools.

**Project Director:** Dr. Kelly Ryan, Acting Director
Regional In-Service Center

**Telephone:** (256) 782-5577

**E-mail:** kryan@jsu.edu

**AMSTI JSU:** Tanya Barnes, AMSTI Project Administrator
Regional In-Service Center
176 Rucker Street
Anniston, AL 36205-3903

**Session Dates:**
April 5, 2013
April 19, 2013

**Location:** JSU Regional In-Service Center

---

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
The AMSTI Lead Teacher Enhancement Project, in collaboration with the Alabama State Department of Education (ALSDE), is designed to provide professional development for Lead Teachers to promote a higher level of mastery of math and science content and in particular to promote the alignment of AMSTI curriculum and resource material with the Alabama Course of Study standards. Professional Learning Teams (PLTs) can promote teacher collaboration, enhance the teaching of content knowledge, and provide higher standards for all students.

Project Director: Ms. Carol Mueller
Institute for Science Education

Telephone: (256) 824-6156    FAX: (256) 824-6961

E-mail: muellerc@uah.edu

Session Dates: Projected: October, November 2013 (Dates TBA)
Location: Ft. Payne (site TBA)
II.

Multi-Year Projects
IMPACTSEED: Improving Physics And Chemistry Teaching in Secondary Education

<table>
<thead>
<tr>
<th>College Partners</th>
<th>High-Need School District Partners*</th>
<th>Other School District Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division of Natural Sciences</td>
<td>Anniston City</td>
<td>Oakland County</td>
</tr>
<tr>
<td>Division of Social Sciences</td>
<td>Cherokee County</td>
<td>Calhoun County</td>
</tr>
<tr>
<td></td>
<td>DeKalb County</td>
<td>Madison County</td>
</tr>
<tr>
<td></td>
<td>Guntersville City</td>
<td>St. Clair County</td>
</tr>
<tr>
<td></td>
<td>Jacksonville City</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marion County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marshall County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Morgan County</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oxford City</td>
<td>Public:</td>
</tr>
<tr>
<td></td>
<td>Pell City</td>
<td>Albertville City</td>
</tr>
<tr>
<td></td>
<td>Piedmont City</td>
<td>Attalla City</td>
</tr>
<tr>
<td></td>
<td>Russellville City</td>
<td>Baldwin County</td>
</tr>
<tr>
<td></td>
<td>Scottsboro City</td>
<td>Blount County</td>
</tr>
<tr>
<td></td>
<td>Talladega County</td>
<td>Boaz City</td>
</tr>
<tr>
<td></td>
<td>Tuscumbia City</td>
<td>Calhoun County</td>
</tr>
<tr>
<td></td>
<td>Walker County</td>
<td>Clay County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clear County</td>
</tr>
<tr>
<td>Public:</td>
<td>Colbert County</td>
<td>Etowah County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jackson County</td>
</tr>
<tr>
<td>Private:</td>
<td></td>
<td>Jefferson County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lamar County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Madison County</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St. Clair County</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IMPACTSEED addresses two pressing problems: Over 83% of chemistry teachers and 94% of physics teachers are teaching out of field, and regional student achievement in physical sciences is much lower than the state average. To resolve these problems, the project helps teachers to make physics and chemistry understandable and fun to learn within a hands-on, inquiry-oriented setting, and also to overcome the fear-factor for these subjects among students and teachers alike. Five major components comprise the project: (1) an intensive two-week summer professional development program; (2) five technology workshops during the academic year; (3) sustained, year-round on-site support to the teachers; (4) year-round physics and chemistry hotlines to offer immediate support to the teachers when needed; (5) a website to disseminate the results of the project and to list useful resources. IMPACTSEED correlates to the Alabama Course of Study and national standards with primary emphasis on having students discover rather than memorize and with teachers questioning rather than telling. The project gives special attention to entry-level teachers throughout the state, notably those from high-poverty schools, minorities, and underrepresented groups.

Project Director: Dr. Nouredine Zettili, Professor

Address: Division of Natural Sciences
Snead State Community College
P. O. Box 734
Boaz, AL 35957-1650

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
Telephone: (256) 782-8077       FAX: (256) 782-5336
E-mail:  nouredine.zettili@snead.edu
Internet: http://www.snead.edu/impactseed/

Session Dates:                Location:
Summer Institute:            Snead State Community College
    June 10-21, 2013           Elrod Science Building
Technology workshops:
    Five School-Year Saturdays [Dates TBA]
This Leadership Academy promotes inquiry-based math and science instruction highlighting the application of technology. Language Arts/Writing and cross-curriculum cultural enrichment strategies are presented to demonstrate the need for integrating all content areas. The Academy encourages professional development that has significant and meaningful math and science content that models research-based instructional strategies. Teachers in non-affiliated AMSTI schools are provided materials and equipment to implement instructional strategies to improve achievement in math and science. On-going support is provided to sustain their instructional strategies.

Project Directors: Dr. Vijaya Gompa  
College of Arts and Science  
Troy University-Dothan Campus  
P. O. Box 8368  
Dothan, AL 36304-1575

Telephone: (334) 983-6556 Ext. 387  
FAX: (334) 556-1054  
E-mail: vgompa@troy.edu

Session Dates  Location:  
June 19-21; 24-25, 2013  
Troy University- Dothan

Follow-up Dates  
November 9, 2013  
February 8, 2014

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
This project provides professional development for middle and high school physical science teachers in rural and urban city schools. Four one-day institutes are held during the school year with online resources provided in the interim periods. The physical science content focus is on advanced study of concepts aligned with the Alabama Course of Study – Science: refraction & reflection, lenses and mirrors, color and light, polarization of light, electricity and magnetism, periodic trends of elements, formation of ionic and covalent bonds, chemical reactions and writing equations with both the physics and chemistry basis of the concepts presented. Using technology in teaching physical science is also a component of the project with a focus on collecting data using sensors, Web 2.0 tools, simulations, use of Apps in the classroom, and combining Institute instruction with assistance at teachers’ school sites. Working with other teachers in a professional learning community and developing master lessons and trial teaching are also emphasized. Inquiry teaching strategies to foster students’ higher order thinking is woven throughout the project’s institutes.

**Project Director:** Dr. Dennis W. Sunal, Professor  
**Address:** Department of Curriculum and Instruction  
205C Graves Hall  
Tuscaloosa, AL 35487-0232  
**Telephone:** (205) 348-6050  
**FAX:** (205) 348-9863  
**E-mail:** dwsunal@bama.ua.edu  
**Internet:** [http://ps21pd.weebly.com/](http://ps21pd.weebly.com/)

**Session Dates:** (subject to change)  
September 27, 2013  
Friday, November 1, 2013  
Friday, January 31, 2014  
Friday, March 14, 2014  

Location:  
UA Tuscaloosa Campus  
3408 Science and Engineering Complex

+Continuous Online Professional Development with individual activities, communication, mentors.

---

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report *and* high number of non-highly qualified teachers.
ALAHASP 2013-2014: 
Alabama Hands-On Activity Science Program

<table>
<thead>
<tr>
<th>University Partners</th>
<th>High-Need School District Partners*</th>
<th>Other School District Partners</th>
<th>Other Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Education</td>
<td>Chilton County</td>
<td>Homewood City</td>
<td>Carolina Biological Supply Company</td>
</tr>
<tr>
<td>College of Arts &amp; Sciences</td>
<td>Gadsden City</td>
<td>Hoover City</td>
<td>McWane Science Center</td>
</tr>
<tr>
<td>Center for Community OutReach</td>
<td>Leeds City</td>
<td>Mountain Brook City</td>
<td>Tractor &amp; Equip Co.</td>
</tr>
<tr>
<td>Development (CORD)</td>
<td>Selma City</td>
<td>City</td>
<td>(TEC)</td>
</tr>
</tbody>
</table>

ALAHASP is an inquiry-centered, hands-on science program that provides on-going teacher and administrator professional development aligned with state and national science education standards. The primary focus is providing public and private school teachers with instruction firmly grounded in science content and research-based best practices in order to improve student understanding. External evaluation of previous work shows significant gains in content knowledge for teachers participating in ALAHASP workshops, as well as increased confidence in teaching science. Program objectives are to provide (1) guidelines and assistance to school system administrators conducting their own professional development in K-5 science curriculum modules for teachers in non-AMSTI schools, (2) technical assistance to selected teachers in implementation of science curriculum through partnerships with UAB science and technology students, (3) advanced teacher professional development in science education (including The Private Eye® process), and (4) guidance and professional development for school system administrators.

**Project Director:** Dr. J. Michael Wyss, Director  
Center for Community OutReach Development

**Co-Directors:** Joan Dawson; Beverly Radford

**Address:**  
College of Arts & Sciences, EB 121  
1720 2nd Avenue South  
Birmingham, AL 35294-1250

**Telephone:** (205) 934-6885  
**FAX:** (205) 996-7081

**E-mail:**  
jmwyss@uab.edu / jdawson@uab.edu / bevrad@uab.edu  
[Wyss] [Dawson] [Radford]

**Internet:**  
http://www.uab.edu/alahasp

**Project Dates:** View the ALAHASP website or call/e-mail the ALAHASP staff for schedules.

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
The BioTeach program in cell and molecular biology offers sixteen high school teachers a high level of content knowledge, hands-on research, teaching experiences, and training in inquiry-based methods for science education. The project includes a four-week summer classroom experience and additional sessions during the school year. The project also continues “BioTeach Express” to train Alabama Black Belt teachers in a course parallel to BioTeach. Training will be linked to the implementation of inquiry-based experiences. Mentoring during the academic year unites BioTeach teachers to craft “best practices” for Alabama science classrooms, and educational class trips to the GENEius Lab in Birmingham’s McWane Science Center to facilitate state-of-the-art science education. In past years BioTeach has enabled over 300 Alabama high school teachers to provide cutting-edge science education to their students. It continues in school-year 2013-2014 to provide cutting-edge science education.

Project Director: Dr. J. Michael Wyss, Professor and Director

Address: Center for Community Outreach Development (CORD)
933 19th Street South
Birmingham, AL 35294-2041

Telephone: (205) 934-5198       FAX: (205) 934-5158
E-mail: jmwyss@uab.edu
Internet: www.uab.edu/cord

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
BioTeach Session Dates:
  June 3-28, 2013 (Summer Session)
  September 14, 2013 (Saturday Session)
  October 12, 2013 (Saturday Session)
  November 16, 2013 (Saturday Session)

Location:
  Birmingham: McWane Science Center

BioTeach Express Session Dates:
  July 8-19, 2013 [tentative]
  July 22-26, 2013 [implementation with students]

Location:
  Selma: Concordia College Chemistry Lab and Lecture Room
University of Alabama in Huntsville (UAH)

The Success Through Academic Research (STAR) Project: The Independent Study Scholarship Program

<table>
<thead>
<tr>
<th>University Partners</th>
<th>High-Need School District Partner*</th>
<th>Other School District Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education Institute for Science Education</td>
<td>Mobile County</td>
<td>Depending on available space, other school districts may become partners.</td>
</tr>
</tbody>
</table>

Each year the STAR Project partners with a high-need school district to award a limited number of independent study scholarships to meritorious Alabama K-12 teachers. The scholarships are provided for independent research to enhance subject-matter expertise and teaching effectiveness. Administered by the UAH Office of International Programs and Services, this year’s partnership consists of the Mobile County School System as well as personnel from the arts and sciences at UAH. The Mobile County School System identifies teachers from the system’s schools who meet minimal criteria of excellence and invites them to apply for a STAR scholarship of up to $3,000 each. Scholarships for teachers in the partner school district are awarded in all core subjects for well thought-out and carefully planned individual research projects. The program also includes teacher mentors as well as follow-up assistance throughout the academic year as the teachers apply newly acquired content knowledge and other benefits of their study programs. If space becomes available, applications from teachers in other Alabama school districts are accepted.

Project Director: Dr. John R. Pottenger, Director

Address: Office of International Programs and Services
Madison Hall, Room 137
University of Alabama in Huntsville
Huntsville, AL 35899-0001

Telephone: (256) 824 6055
FAX: (256) 824 6142
E-mail: pottenj@uah.edu

Independent Study Dates and Locations:
Varies by teacher and study program

Follow-up Session:
Spring 2014 [Date and Location TBA]

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
Comprehensive Arts Education: Alabama

<table>
<thead>
<tr>
<th>University Partners</th>
<th>High-Need School District Partners*</th>
<th>Other School District Partners</th>
<th>Other Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts and Sciences College of Education</td>
<td>Mobile County Montgomery County Selma City</td>
<td>Baldwin County</td>
<td>St. James School, Montgomery Alabama Shakespeare Festival Montgomery Museum of Fine Arts</td>
</tr>
</tbody>
</table>

Comprehensive Arts Education is the only statewide comprehensive arts education professional development program offering sequential and intensive instruction in comprehensive arts education along with training in curriculum development and arts education advocacy. Highly qualified university faculty, nationally recognized teaching artists, and master teachers provide instruction and mentoring in the individual classrooms, also assisting with guided practice in final projects developed in this program. On-going “SuperSaturday” and “Arts in Education” renewal sessions are conducted throughout the year. Project staff assures that all work is directly tied to national and state curriculum standards reflecting best practices identified in research and the Alabama Arts Education Plan.

**Project Directors:** Dr. Jeannette Fresne, Associate Professor, USA
Martha Lockett, Grant Manager, AIEA

**Address:**
AIEA: Alabama Institute for Education in the Arts (AIEA)
One Festival Drive
Montgomery, AL 36117-4605

USA Arts in Education (AiE):
Department of Music
University of South Alabama
5751 USA Dr. S., LPAC 1072
Mobile, AL 36688-0002

**Telephone:**
(334) 396 2432 [Lockett] (251) 460 6697 [Fresne]

**E-mail:**
mlockett@att.net [Lockett] jfresne@usouthal.edu [Fresne]

**Internet:**
http://www.artseducation.org
http://www.southalabama.edu/music/artsineducation

* High-need school district partners are those that meet NCLB criteria for 20% percent or more of students in poverty households estimated in the U. S. Census Bureau’s most recent report and high number of non-highly qualified teachers.
**AIEA Session Dates:**
*Alabama Institute for Education in the Arts (AIEA)*

**Location:** Montgomery (all sessions)

**Summer Institute:**
June 17-21, 2013

**ACES for Students: (Dance & Music/Theatre)**
Teaching Artists in K-1 & 2-3 classrooms
one day per week each creating and leading
student and teacher-driven lessons designed
to address literacy and numeracy through the arts
Sept. 2013 through April, 2014

**AIEA SuperSaturdays:**
Four sessions throughout the year focusing on specific
disciplines and integrating the arts with other core
academic areas. [Dates TBA]

**AIEA Site Visits:**
Scheduled individually between instructors and
program participants from September 2013 through
April 2014

**AiE Session Dates:**
*Arts in Education: Elementary (AiE)*
September 21, 2013
October 19, 2013
November 2, 2013
November 16, 2013
December 7, 2013
January 11, 2014

*Arts in Education: Middle School (AiE)*
June 24-27, 2013
August 24, 2013
October 26, 2013

*Arts in Education (AiE) Reunion!*
January 25, 2014

**AiE Elementary and Middle School Mentoring Dates:**
Scheduled individually between instructors and
program participants from July 2013 through March
2014