NO CHILD LEFT BEHIND (NCLB)
P.L. 107-110, TITLE 11, PART A/SUBPART 3
PROFESSIONAL DEVELOPMENT PROGRAM
IMPROVING TEACHER QUALITY:
MASTERY OF CONTENT

PROJECT DIRECTORY
FISCAL YEAR
2013-2014
Projects with FY 2013-2014 funding are active from spring 2014 through spring 2015.
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I.

*Alabama Math, Science, and Technology Initiative (AMSTI)*
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 College and Career Readiness Standards. Special focus is directed to implementing curriculum reform in mathematics. 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.

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

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**Session Dates:**  
*Phase II PLT Training*  
May 2, 2014  

*Phase II Content Deepening*  
OGAP Additive Reasoning  
June 17-19, 2014  
June 24-26, 2014  

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

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*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 College and Career Readiness 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

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

**Telephone:** (256) 782-8601
**FAX:** 256-782-5982
**Email:** tbarnes@jsu.edu

**Session Dates:**
Fall 2014

**Location:**
JSU In-Service Center

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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: Dr. James Miller  
Institute for Science Education

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FAX: (256) 824-6961  
E-mail: millerja@uah.edu

AMSTI UAH: Carol Mueller  
AMSTI Director  
Institute for Science Education  
301 Sparkman Drive  
SKH #205  
Huntsville, AL 35899

Telephone: (256) 824-6156  
FAX: (256) 824-6961  
Email: muellerc@uah.edu

Session Dates: TBA  
Location: TBA

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

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:**
Department of Physical and Earth Sciences
Jacksonville State University
700 Pelham Road North
Jacksonville, AL 36265

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**FAX:** (256) 782-5336

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

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Internet: http://www.jsu.edu/dep相声pes/physics/impactseed/

**Session Dates:**
Summer Institute: June 9-20, 2014
Technology workshops: Five School-Year Saturdays [Dates TBA]

**Location:**
Martin Hall, Jacksonville State University
Wiregrass Math, Science, and Technology Leadership Academy

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<th>University Partners</th>
<th>High-Need School District Partners</th>
<th>Other School District Partner</th>
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<tr>
<td>College of Arts and Sciences</td>
<td>Dale County</td>
<td>Enterprise City</td>
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<td>College of Education</td>
<td>Dothan City</td>
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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
Department of Mathematics
Troy University-Dothan Campus
501 University Drive; P. O. Box 8368
Dothan, AL 36304-1575

Telephone: (334) 983-6556, Ext. 387
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Session Dates
June 18-20, 23-24, 2014

Location: Troy University-Dothan

Followup Dates
November 15, 2014
February 7, 2015

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The University of Alabama (UA)

Physical Science in the 21st Century (PS-21): Improving Teacher Quality and Mastery of Content

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<td>Department of Chemistry</td>
<td>Birmingham City</td>
<td>Hale County</td>
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<td>Department of Physics and</td>
<td>Chilton County</td>
<td>Jefferson County</td>
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<td>Astronomy</td>
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<td>Shelby County</td>
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<tr>
<td>Department of Curriculum</td>
<td>Fayette County</td>
<td>Tuscaloosa City</td>
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<td>and Instruction</td>
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<td>Thomasville City</td>
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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 for continuous professional development in the interim periods. Professional development includes chemical reactions; chemical energy; measurement of chemical processes; characteristics of forces in nature; relating velocity, and acceleration; types of energy; transferring energy; light and optics; using technology tools (apps and sensors) in classrooms; and working with other teachers in a professional learning community. Project objectives are to enable teachers to: (1) demonstrate deeper content knowledge on key physical science focus themes found in national and state standards, (2) acquire and implement in science classrooms effective instructional pedagogy facilitating students’ meaningful understanding of physical science content, (3) use of laboratories in the physical sciences, and (4) engage in professional development of both content and pedagogy during the school year through varied venues. Participants use interactive technology to model 21st century understandings of the themes and construct interactive lessons using physics and chemistry to deepen and students’ understanding.

Project Director: Dr. Dennis W. Sunal, Professor

Address: Department of Curriculum and Instruction
205C Graves Hall, P. O. Box 870232
Tuscaloosa, AL 35487-0232

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Internet: http://ps21pd.weebly.com/

* 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.
**Session Dates:**
- Friday, September 26, 2014
- Friday, October 31, 2014
- Friday, January 30, 2015
- Friday, March 6, 2015

**Location:**
- UA Tuscaloosa Campus
- 3408 Science and Engineering Complex

+ Continuous Online Professional Development with individual activities, communication, mentors.
ALAHASP 2014-2015: 
Alabama Hands-On Activity Science Program

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<th>University Partners</th>
<th>High-Need School District Partners*</th>
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<th>Other Partner</th>
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<td>School of Education College of Arts &amp; Sciences Center for Community OutReach Development (CORD)</td>
<td>Birmingham City Gadsden City Bessemer City Fairfield City</td>
<td>Homewood City Hoover City Mountain Brook Vestavia Hills City</td>
<td>Carolina Biological Supply Company Spring Valley School</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, teacher leadership development, guidance to school system administrators on research-based classroom materials, and consultation services to system administrators. 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) K-8 teachers with advanced, on-going professional development in science education content and pedagogy, including access to the UAB Center for Community OutReach Development’s STEM education opportunity, (2) assistance to selected teachers in implementing science curriculum through partnerships with UAB STEM students and faculty, and (3) guidance and professional development for school system administrators.

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

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

**Address:** ALAHASP @ CORD 5th Fl, CHSB 19; 933 19th Street, S Birmingham, AL 35294-2041

**Telephone:** (205) 934-5171

**FAX:** (205) 934-5158

**E-mail:** jmwyss@uab.edu / kabusch@uab.edu / jdawson@uab.edu / bevrad@uab.edu

**Internet:** [http://www.uab.edu/alahasp](http://www.uab.edu/alahasp)

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

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The University-School Partnership for Secondary Science Education ("BioTeach")

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<th>Other Partners</th>
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</thead>
<tbody>
<tr>
<td>College of Arts and Sciences</td>
<td>Birmingham City Dallas County Selma City Fairfield City</td>
<td>Jefferson County</td>
<td>Concordia College Alabama McWane Science Center, Birmingham</td>
</tr>
</tbody>
</table>

The BioTeach program in cell and molecular biology offers high school teachers a high level of content knowledge, hands-on research, teaching experiences, and training in inquiry-based methods for science education. In recent years, we have also accepted a few outstanding middle school teachers into BioTeach, and we expect to continue doing so. The project is a summer classroom experience and with additional sessions during the school year. The project also continues training for Alabama Black Belt teachers to provide that area with highly-trained biology teachers. BioTeach includes Alabama Science in Motion (ASIM) modules facilitated by ASIM specialists and linked to implementing 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 350 Alabama high school teachers to provide cutting-edge science education to their students, and the 2014-2015 edition of BioTeach will continue this tradition.

**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) 934-5171 **FAX:** (205) 934-5158

**E-mail:** jmwyss@uab.edu

**Internet:** www.uab.edu/cord

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**BioTeach Session Dates (Subject to Change):**
- June 9-27, 2014 (Summer Session)
- September 13, 2014 (Saturday Session)
- October 11, 2014 (Saturday Session)
- November 15, 2014 (Saturday Session)

**Location:**
Birmingham: McWane Science Center

**BioTeach Express Session Dates:**
- July 7-11, 2014 [tentative]

**Location:**
Selma: Concordia College Chemistry Lab and Lecture Room
The STAR Project provides a limited number of independent study scholarships to meritorious teachers in a high-need school district. The scholarships are provided for independent research to enhance subject-matter expertise and teaching effectiveness. Administered by the UAH Department of Political Science and the Intensive Language and Culture Program, this year’s partnership consists of the Scottsboro City School System as well as personnel from the arts and sciences at UAH. The school district 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 $3,300 each. Scholarships for teachers in the partner school district are awarded in 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, Chair

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Department of Political Science
Morton Hall 250
University of Alabama in Huntsville
Huntsville, AL 35899-0001

**Telephone:** (256) 824-6192  
**FAX:** (256) 824-6949

**E-mail:** pottenj@uah.edu

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

**Followup Session:**
Spring 2015 [Date and Location TBA]

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Comprehensive Arts Education: Alabama

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<tbody>
<tr>
<td>College of Arts and Sciences</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>
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<tr>
<td>College of Education</td>
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Comprehensive Arts Education provides training in each of four arts with arts-specific learning goals: music, theatre, visual art, and dance. This 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. Follow-up training is 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.

Project Directors: Dr. Jeannette Fresne, Associate Professor, USA Martha Lockett, Executive Director, AIEA

Address: USA Arts in Education (AiE): Department of Music University of South Alabama 5751 USA Dr. S., LPAC 1072 Mobile, AL 36688-002 AIEA: Alabama Institute for Education in the Arts (AiE) One Festival Drive Montgomery, AL 36117-4605

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

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

Internet: [http://www.southalabama.edu/music/artsineducation](http://www.southalabama.edu/music/artsineducation) [http://www.artseducation.org](http://www.artseducation.org)

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AIE Session Dates:

Arts in Education: Elementary (AiE)
- September 13, 2014
- October 11, 2014
- November 1, 2014
- December 6, 2014
- January 17, 2015
- February 7, 2015

Arts in Education: Middle School (AiE)
- June 23-26, 2014
- October 18, 2014
- January 24, 2015

Arts in Education (AiE): Reunion Retreat
- February 14, 2015

AiE Elementary and Middle School Mentoring Dates:
Scheduled individually between instructors and program participants. Six one-hour mentor visitors per participant during the program.

AIEA Session Dates:

Alabama Institute for Education in the Arts (AIEA)
Summer Institute:
- June 16-20, 2014

ACES for Students: (Dance & Music/Theatre)
Teaching Artists in K-5 classrooms
one-hour lesson per week each creating and leading student and teacher-driven lessons designed to address literacy and numeracy through the arts
Sept. 2014 through April, 2015

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

AIEA Site Visits:
Scheduled individually between instructors and program participants from September 2014 through April 2015

Location:
Mobile (all sessions)

Location:
Montgomery (all sessions)