
ACHE



Alabama Commission on Higher Education

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

PROJECT DIRECTORY

FISCAL YEAR 2007-2008

ALABAMA COMMISSION ON HIGHER EDUCATION

FY 2007-2008

PROJECT DIRECTORY

Alabama Commission on Higher Education

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**ACHE NCLB PROFESSIONAL DEVELOPMENT PROGRAM
IMPROVING TEACHER QUALITY:
MASTERY OF CONTENT**

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**Alabama Commission on Higher Education
No Child Left Behind Act (NCLB)
P. L. 107-110, Title II, Part A/Subpart 3
Professional Development Program
IMPROVING TEACHER QUALITY: MASTERY OF CONTENT**

PROGRAM SUMMARY

Fiscal Year 2007-2008*

Under authority of Public Law 107-110, the Alabama Commission on Higher Education (ACHE) is awarding a total of \$1,187,000 Fiscal Year 2007-2008 federal funds to Alabama institutions for K-12 teacher professional development. Of that amount, \$1,057,000 is awarded to continue long-term projects that received FY 2006-2007 professional development grants; \$130,000 is awarded to two new projects in this program. Six public universities and one private university were awarded these grants to support partnerships between universities and high-need school districts. One also includes co-project leadership with a non-profit agency. 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 emphasis on serving high need local school districts.

These projects provide K-12 teachers with individual hands-on training in the most current technology and proven learning strategies. Projects also include follow-up sessions and technical assistance during the academic year after summer workshops to refresh, reinforce, and re-establish principles and techniques learned. 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 continuing communication with on-line contact by e-mail, print material, 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 teachers participating 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. For information on the administration of the higher education NCLB Program in Alabama, contact Dr. Elizabeth French at (334)242-2179 [elizabeth.french@ache.alabama.gov] or 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. The Project Directory and additional information on this program are available online at <http://www.ache.state.al.us> in "Departmental Pages" under "No Child Left Behind – Title II."

* Projects with FY 2007-2008 funding have activities from spring 2008 through spring 2009.

Jacksonville State University (JSU)

IMPACTSEED: Improving Physics And Chemistry Teaching in Secondary Education

Partners: JSU College of Arts & Sciences
JSU College of Education and Professional Studies
Local Education Agencies (School Systems): Anniston City; Attalla City;
Autauga County; Blount County; Calhoun County; Cherokee
County; Clay County; Cleburne County; Etowah County; Gadsden
City; Guntersville City; Jacksonville City; Oxford City; Pell City;
Piedmont City; Roanoke City; St. Clair County; Talladega County
Private School: Westbrook Christian School

IMPACTSEED addresses two pressing problems: About 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 solve these problems, this 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 offers hands-on, inquiry-based instruction with a strong correlation 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.

Project Director: Dr. Nouredine Zettili, Professor

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

Telephone: (256)782-8077

E-mail: nzettili@jsu.edu

Internet: <http://www.jsu.edu/depart/pes/physics/impactseed/>

2008 Institute Date:
June 2-14

Location:
Jacksonville State University

Follow-up Dates:
TBA: Five school-year Saturdays

Jacksonville State University (JSU)

TIMES: ***Technological Integrations*** ***of Mathematical Environments and Studies***

Partners: JSU College of Arts & Sciences
JSU College of Education and Professional Studies
Local Education Agencies (School Systems): Anniston City;
Cherokee County; Cleburne County; Jacksonville City; Calhoun
County; Oxford City; Pell City; Piedmont City; Talladega City;
Talladega County; Etowah County;

TIMES is a professional development program for secondary education mathematics teachers as they strive to improve student achievement by increasing their own mathematical, technological, and pedagogical knowledge. Objectives include gaining (1) understanding of mathematical concepts, (2) awareness of applications of mathematics, (3) ability to use the technology to enhance student learning, and (4) competence in using a variety of instructional strategies. TIMES focuses on integrating the use of technology into the understanding and development of mathematical concepts. Workshops address classroom instruction, group inquiry learning opportunities with hands-on manipulatives and technologies, and computer lab learning sessions.

Project Director: Dr. Jan Wilson, Professor

Address: Department of Secondary Education
Jacksonville State University
700 Pelham Road North
Jacksonville, AL 36265

Telephone: (256)782-5852

FAX: (256)782-8308

E-mail: jwilson@jsu.edu

2008 Institute Date:
June 23-27

Location:
Jacksonville State University

Follow-up Dates:
TBA: Fall 2008; Spring 2009

Troy University (Troy)

Comp III: Composition, Comprehension, and Computation

Partners: Troy College of Education
Troy College of Arts and Sciences
Local Education Agency (School System): Crenshaw County
Private School: Pike Liberal Arts School

Comp III adds mathematics and science teachers to the previous year's Comp II project in English and social studies for tenth grade teachers. Teachers and pre-service secondary education candidates work teams to create and implement a collection of graphic organizers designed to support the Alabama Courses of Study for tenth grade. The "Makes Sense Strategies" graphic organizer collection, endorsed by the Alabama State Department of Education, is central to the implementation of this project. A sequence of professional development opportunities provides the participants with the knowledge and tools necessary to incorporate consistent, well-crafted strategies into their coursework. Determination of the success of the project will be based on a comparison of baseline and end-of-implementation-year data from the tenth grade Alabama Direct Assessment of Writing, SAT10 scores, and the Alabama High School Graduation Examinations in English, social studies, mathematics, and science. Products will be disseminated via a dedicated web presence.

Project Director: Dr. Marian J. Parker, Associate Professor

Address: College of Education
124A McCartha
Troy, AL 36082

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Fax: (334)670-3548

E-mail: mjparker@troy.edu

2008 Institute Dates:
TBA

Location:
Troy University, Troy campus

Follow-up Dates:
TBA

Troy University – Dothan Campus (Troy)

Wiregrass Math and Science Consortium *“Ignite and Excite: Aerospace Education Outreach”*

Partners: Troy College of Education
Troy College of Arts and Science
Local Education Agencies (School Systems): Dothan City; Eufaula City; Henry County; Houston County; Ozark City

Now in its seventh year, the Wiregrass Math and Science Consortium provides high-quality professional development for K-8 teachers and administrators focusing now on aerospace. Workshops and follow-up sessions emphasize inquiry-based instruction, highlighting the application of technology. These activities are designed to promote student interest in advanced careers in fields such as engineering and avionics. Workshops with nationally known presenters expand participating teachers' knowledge of astronomy, meteorology, physics of flight, the U. S. space program, and the practical applications that result in industry. Year-long activities include field trips to regional aerospace industries and facilities, a leadership session with an internationally recognized speaker, technology training with emphasis on NASA programs, and an Aerospace Day with astronauts and writers.

Project Directors: Ms. Sandy Armstrong

Address: College of Education
Troy University - Dothan Campus
P. O. Box 8368
Dothan, AL 36304

Telephone: (334)983-6556, ext. 1371

FAX: (334)983-6322

E-mail: sgarmstrong@troy.edu

2008 Institute Dates:
June 13; July 14-18

Location:
Troy University, Dothan Campus

Follow-up Dates:

Tentative:
September 11, 2008
November 21, 2008

TBA: January, February 2009

Tuskegee University (TU)

Utilizing an Inquiry Based Approach to Improve Teachers' Mastery of Content in Science and Mathematics in Greene and Wilcox Counties

Partners: TU College of Education
TU College of Agricultural, Environmental, and Natural Sciences
Local Education Agencies (School Systems): Greene County; Wilcox
County

Continuing a partnership begun in 2007, this project aims to increase 7th and 8th grade student achievement in the sciences and mathematics with the intention of expanding into grade 6 in Greene County and grade 9 in Wilcox County. Summer institutes and workshops train teachers, who learn rigorous research based classroom instructional materials consistent with State Standards for Professional Development along with the use of technology. The goal is to develop highly qualified teachers and ensure that they are provided with innovative approaches for teaching science and mathematics to diverse students with administrative support and appropriate technology.

Project Directors: Dr. Mohammed Qazi; Associate Director
Mathematics
qazima@aol.com

Dr. Carlton Morris, Interim Dean
College of Liberal Arts & Education
cmorris@tuskegee.edu

Address: College of Liberal Arts and Education
BIOE 70 - 402
Tuskegee University
Tuskegee, AL 36088

Telephone: Qazi: (334)728-2773 Morris: (334)724-4191

FAX: (334)724-4196

2008 Institute Dates:

July 7-11
July 21-25

Location:

Wilcox Central High School
Greene County High School

Follow-up Dates:

TBA
TBA

Location:

Wilcox Central High School
Greene County High School

The University of Alabama (UA)

Physical Science in the 21st Century: Improving Teacher Quality and Mastery of Content

Partners: **UA College of Education**
 UA College of Arts and Sciences
 Local Education Agency (School System): Hale County

This project provides professional development through a summer institute on motion, dynamics, and energy for high school and middle school teachers of physics and physical science in rural and small city schools. Objectives are to enable teachers to: (1) acquire and demonstrate deeper 21st century content knowledge on key focus concept themes in the physical sciences found in national and state standards, (2) acquire, demonstrate, and implement effective instructional pedagogy aimed at facilitating students' meaningful understanding of physics and physical science, (3) use laboratories and interactive physics approaches in computer-based graphing, sensors, and related 21st century technology, (4) continue professional development of both content and pedagogy during the school year via two one-day, face-to-face workshops accompanied by continuous online training and resources to acquire and maintain their practice as highly qualified professionals. Teachers are instructed in and use interactive 21st century technology, construct lessons and units utilizing interactive physics to deepen students' understanding, share and critique each other's lessons and units, and assess students' understanding of academic content.

Project Director: Dr. Dennis W. Sunal, Professor

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

Telephone: (205)348-7010

FAX: (205)348-9863

E-mail: dwsunal@bama.ua.edu

2008 Institute Dates:
June 11-13
(Daily: 9:00 a.m. – 5:00 p.m.)

Location:
Hale County

Follow-up Dates:
September 26, 2008
January 23, 2009

Location:
Hale County
Hale County

University of Alabama at Birmingham (UAB)

ALAHASP 2008-2009: Alabama Hands-On Activity Science Program

Partners: UAB School of Education
UAB Science and Technology Honors Program
University of Alabama in Huntsville, Institute for Science Education
Local Education Agencies (School Systems): Birmingham City;
Gadsden City; Jefferson County; Limestone County; Lowndes
County; Selma City; St. Clair County; Trussville City
Private Schools: Hope Academy (Presbyterian Home for Children);
Spring Valley; Catholic Diocese of Birmingham

ALAHASP is an inquiry-centered, hands-on elementary science education program aligned with state and national standards. Since 1995, the project has served K-8 teachers in 48 school systems across the state. In 2008-2009 the project is providing ongoing implementation of science reform in the partner school districts. A Leadership Academy addresses professional development needs of administrators and teachers in deepening understanding of inquiry teaching, science content, literacy connections, and the process of change. In addition, the project assists all current and past partners with long-range planning for on-going professional development for teachers and administrators. Partnership with the UAB Science and Technology Honors Program provides collaboration between Birmingham Area elementary teachers and Honors students to improve teacher and student science content knowledge.

Faculty Advisor: Dr. Joseph Burns, Associate Professor
jburns@uab.edu

Co-Directors: Mrs. Joan Dawson jdawson@uab.edu Mrs. Beverly Radford
bevrad@uab.edu

Address: School of Education/ALAHASP, EB 121
1530 3rd Avenue South
Birmingham, AL 35294-1250

Telephone: (205)934-6885 or 934-6843

FAX: (205)996-7081 or 934-4792

Internet: <http://www.uab.edu/alahasp>

2008-2009 Workshops:

View the ALAHASP website or call/e-mail the ALAHASP staff for current schedules.

University of Alabama at Birmingham (UAB)

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

Partners: UAB Center for Community Outreach Development (CORD)
UAB School of Education
Local Education Agencies (School Systems): Bessemer City;
Birmingham City; Chilton County; Jefferson County; Tarrant City
Private Agency: McWane Science Center

Continuing a program that has already trained over 225 Alabama high school teachers in cutting edge science education, "BioTeach" is a summer three-week cell and molecular biology module that is offered to sixteen high school science teachers, who receive high level content knowledge, hands-on research, teaching experiences and training in inquiry-based teaching methods. Several additional sessions during the academic year help teachers craft best practices for the Alabama science classroom in state-of-the-art science education. Their classes have the opportunity for on-site laboratory experiences in CORD's GENEius Lab at Birmingham's McWane Science Center. BioTeach advances the mission of the State Standards and the Alabama Course of Study for science.

Project Director: Dr. J. Michael Wyss, Professor

Address: Center for Community Outreach Development
CH19, Fifth Floor
University of Alabama at Birmingham
933 19th Street North
Birmingham, AL 35294

Telephone: (205)934-5171

FAX: (205)934-5158

E-mail: jmwyss@uab.edu

2008-2009 Institute Dates:

July 7-25; October 18; December 7;
March 14; April 17

Location:

Birmingham: McWane Science Center

Follow-up Dates (9:00-5:00):

September 18, 2008

February 12, 2009

May 14, 2009

TBA: Project staff assistant visits to teachers in their classrooms.

University of Alabama in Huntsville (UAH)

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

Partners: UAH Office of International Programs and Services
UAH Department of Education
UAH Institute for Science Education
Local Education Agency (School System): Monroe County

STAR provides meritorious Alabama K-12 teachers in “high need” schools with an opportunity for independent research and study in the subjects they teach to increase their expertise and teaching effectiveness. Teachers will be encouraged to develop plans for study or research in a foreign locale. The partnership includes specialists from all fields of teaching and research at UAH under the guidance of the UAH Office of International Programs and Services (OIPS) and the high-need school district. The district identifies teachers from its schools who meet minimal criteria of excellence and invites them to apply for scholarships of up to \$3,000 each. Then as space is available, applications from teachers in all other Alabama districts are accepted. All study programs include professional mentoring and follow-up.

Project Director: Dr. John R. Pottenger, Director

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Madison Hall, Room 137
University of Alabama in Huntsville
Huntsville, AL 35899

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FAX: (256)824-6142

E-mail: pottenj@uah.edu

2008-2009 Independent Study Dates and Locations:

Varies by teacher and study program

Follow-up:

TBA: Spring 2009

University of Alabama in Huntsville (UAH)

Teaching the Future: Mastery of Science and Mathematics through Space Exploration

Partners: UAH Division of Continuing Education
UAH Department of Education
UAH Institute for Science Education
Local Education Agency (School System): Birmingham City

"Teaching the Future" is a space science education project to help Alabama teachers meet the objectives of the Alabama Courses of Study in science and mathematics, correlated with the Stanford 10 Achievement Test. Assisted by NASA's Marshall Space Flight Center and the U. S. Space and Rocket Center, the project introduces important historical, theoretical, and practical implications of space exploration for teaching science and mathematics, provides on-site, first-hand exposure to operational space facilities of the United States space program, and facilitates interaction with educational, government, and corporate personnel who are or have been involved directly with space exploration and science education. Workshops provide hands-on experiences for classroom implementation of relevant concepts, constructivist pedagogies, and teaching materials.

Project Director: Dr. John R. Pottenger, Director

Address: Division of Continuing Education
Educator Programs
Wilson Hall, Room 110
University of Alabama in Huntsville
Huntsville, AL 35899

Telephone: (256)824-6835

FAX: (256)824-6760

E-mail: pottenj@uah.edu

Internet: <http://www.coned.uah.edu/educator.cfm>

Link: "Exploring Space"

2008 Summer Workshops:

June 9-14
July 14-19

Locations:

University of Alabama in Huntsville;
The U. S. Space & Rocket Center;
Redstone Arsenal

Follow-up:

TBA: Spring 2009

