


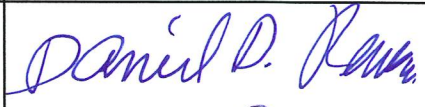
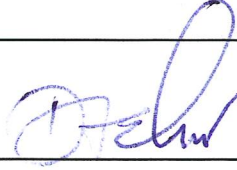
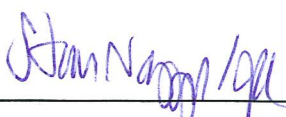



**LOUISIANA SYSTEMIC INITIATIVES PROGRAM  
2012-2013 PROFESSIONAL DEVELOPMENT PROJECTS COVER PAGE**

Indicate content focus: LIGO Science Grade Level(s) Targeted: Grades 6, 8-9 Number of Targeted Participants: 30 Number of Targeted LA GEAR UP Schools: <u>6</u>	<b>School Districts To Be Served</b> Avoyelles, East Feliciana, East Baton Rouge, Madison, Pointe Coupee, Tensas, St. Helena, St. Mary, Iberville, Lincoln, Union, Webster, Ouachita, and Morehouse	
<b>Name(s) of Submitting Institution(s) of Higher Education (Include Branch/Campus/Other Components):</b> SciTEC, College of Education, Louisiana Tech University		
<b>Address of Institution of Higher Education (Dept/Unit, Street Address/P.O. Box Number, City, State, Zip Code):</b> P.O. Box 3163, Ruston, LA 71272		
<b>Title of Proposed Project:</b> Project RIPPLE/MISE		
<b>Funds being requested for each funding cycle:</b>		
7/1/12-9/30/12 \$74,937.50	10/1/12-6/15/13: \$141,080.44	<b>Total Requested:</b> \$216,017.94
<b>Matching funds from partners:</b>		
<b>University:</b> \$55,853.19	<b>High-need LEAs:</b>	<b>Business/Community:</b>
<b>The signatories certify that the institution and the proposed project are in compliance with all applicable Federal and State laws and regulations.</b>		
<b>Name/Title/Institution (if different from the primary institution listed)</b>	<b>Dept./Telephone No. Email Address</b>	<b>Signature</b>
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**LOUISIANA SYSTEMIC INITIATIVES PROGRAM  
2012-2013 PROFESSIONAL DEVELOPMENT**

**PROJECTS**

**PROJECT ABSTRACT**

Name of Institution (Include Branch/Campus): **Louisiana Tech University**

College/Department:

**College of Education, Science & Technology Education Center (SciTEC)**

Principal Investigator: Glenn Beer

Phone: ( 318) 257-2866

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Title of Project: Project RIPPLE / MISE

**Abstract (maximum of 500 words): Address each item below in the order given. Include:**

- (1) A brief paragraph describing the overall vision of the project
- (2) The project's specific content focus and measurable objectives
- (3) The high need LEA(s) and targeted schools/districts involved
- (4) The participants for which the project is designed, i.e. classroom teachers special Ed teachers, paraprofessionals administrators
- (5) The number of days & contact hours during the summers & AY
- (6) The number of participants & content coaches
- (7) The targeted grade levels
- (8) The primary activities and proposed outcome

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The vision of the collaborative Project RIPPLE MISE is to increase the physical science content knowledge and pedagogy skills of 30 6<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grade educators from various high-need districts including the following: Avoyelles, East Feliciana, Madison, Pointe Coupee, Tensas, St. Helena, St. Mary, East Baton Rouge, Iberville, Lincoln, Union, Webster, Ouachita, and Morehouse. The professional development opportunity will also be offered to teachers from other LA GEAR UP schools, other high-need LEAs, and University pre-service educators. The increased content knowledge of the teachers will have a direct impact on the content knowledge of their students, and the state science test score results will reflect this by improving. By improving the pedagogy skills of the teachers, the students' attitudes toward science will improve and thus affect the students' desire to pursue careers in science. Project RIPPLE MISE builds on the success of LASIP-funded projects at both Louisiana Tech University and Southern University and A&M College. These projects have affected hundreds of middle and high school teachers across the state and focused on, and will continue to focus on, 1) developing teachers' content knowledge in the areas of waves, light, sound, electricity and magnetism, forces and motion (projectile motion), and optics, 2) introducing teachers to the use of "snacks" (tabletop models of museum exhibits) for the teaching of science, 3) providing teachers with curriculum materials tied to the Louisiana Comprehensive Curriculum, the Common Core State Standard, and the Louisiana GLEs, and Brazo's literacy strategies, 4) preparing teachers to teach physics/physical science through inquiry, 5) introducing teachers to the use of informal science venues as a mechanism for enhancing student learning, and 6) helping teachers understand the focus of LIGO research and the connections between that research and the science concepts being taught.

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### Project Progression Timeline with Measureable Objectives

<b>Time line</b>	<b>Contact Hours</b>	<b>Action/Activities</b>	<b>Measureable Objective for each activity</b>	<b>Staff Responsible</b>
<b>Time line</b>	<b>Contact Hours</b>	<b>Action/Activities</b>	<b>Measureable Objective for each activity</b>	<b>Staff Responsible</b>
April 2012	N/A	Recruitment and Registration of Participants	Recruitment will last one month at minimum.	All Project Staff
May 2012	N/A	Notification of Selection	The 30 selected participants will be notified no later than the first week of May of their selection.	Ms. Diane Madden and Ms. Bobby Remble
July 2012	63 hours	7-day Summer Institute in Baton Rouge	Waves, Light, Optics, and Motion will be addressed in addition to literacy and instructional strategies. Teachers will also construct Exploratorium “snacks,” and they will visit LIGO.	All Project Staff / Organized and Facilitated by SUBR instructors, Dr. Joseph Meyinnse, Dr. Luria Young, Dr. Bagayoko, and Mr. Roosevelt Peters.
August 2012	15 hours	Initial Two-day Academic Year Follow Up	Participants will visit The IDEA Place Math and Science Discovery Center and the Louisiana Tech Planetarium	Dr. Glenn Beer, Ms. Diane Madden and Ms. Lindsey Keith-Vincent
August 2012- November 2012	N/A	MOODLE Follow-Up Forum	Participants will utilize Moodle to upload materials, collaborate with staff, discuss, and reflect.	Ms. Diane Madden and Ms. Lindsey Keith- Vincent
August 2012- March 2013	N/A	Two AYF Site Visits to each Participant’s Classroom	Site Coordinators will visit each teacher twice during this time period and utilized the LOT to evaluate performance.	Ms. Bobby Remble and Ms. Lindsey Keith-Vincent as well as other project staff
March 2013	12 hours	Two-day Academic Year Follow Up	Teachers will engage in a NASA presentation by AESP staff and visit the observatory at Tech.	Dr. Glenn Beer, Ms. Diane Madden and Ms. Lindsey Keith-Vincent
May 2013	N/A	Final binders and portfolios to be submitted	All culminating documents are to be submitted.	Ms. Diane Madden and Ms. Lindsey Keith-Vincent

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## **Project Modeling Inquiry Science Education (RIPPLE/ MISE) Narrative**

### **A. Rationale and Need for the Project**

One of the major challenges in the State of Louisiana is student performance in science and mathematics, specifically physical science and measurement. Project RIPPLE/MISE proposes to vigorously address this challenge by immersing thirty science and mathematics teachers (6<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grades) in inquiry-based teaching and learning focusing on LIGO science concepts using exhibits and “snacks” developed by the San Francisco Exploratorium (a world-class museum, of science, art and human perception). This project will have significant impacts on reforming science and mathematics in each school and district.

A purpose of Project RIPPLE/MISE is to strengthen the physics/physical science content knowledge of teachers moving along a learning continuum toward a deeper understanding of science concepts and practices through the summer institute and academic year follow-up workshops. The professional development will focus on science (sound, light, optics, and wave properties) and mathematics (measurement and number sense) concepts. The targeted districts include the following: Avoyelles, East Feliciana, East Baton Rouge, Madison, Pointe Coupee, Tensas, St. Helena, St. Mary, Iberville, Lincoln, Union, Webster, Ouachita, and Morehouse. A total of 30 Professional Development District (PDD) participants and selected Southern University (SUBR) and Louisiana Tech College of Education pre-service teachers will participate in a seven (7) day, sixty-hour Professional Development Institute (PDI), July 15-21, 2012, at Southern University and LIGO SEC.

The PDI will expand the teachers’ ability to utilize LIGO resources in the design and delivery of state-approved science and mathematics curriculum to students and other teachers in their schools. The participants will disseminate information on successful strategies and models to other teachers in their school or district. A focal point for the process by which this infusion will occur is the inclusion of LIGO science concepts in all physics/physical science and mathematics activities for participants.

The districts that were chosen to participate in the PDI are lower performing districts and High Needs LEA’s. Standardized reference test scores were considered, indicating weaknesses in the areas of math and science. All districts selected for participation are High Need LEA’s.

Further evaluations reveal that all districts have a need to improve in content and best practices for teachers. Project RIPPLE /MISE will strive to improve science and mathematics teaching and learning in each participating school district by immersing PDD teachers in LIGO science teaching, learning, and research. Table 1 below provides pertinent information about each school district relative to the rationale and need for Project RIPPLE/ MISE.

**Table 1 - School District Demographics**

District	Access- ibility (Miles)	DPS Rank/ 69*	LEAP 8 Math %AB/U *	LEAP 8 Science %AB/U*	LA GEAR UP	High- Need LEA	% of Minority Students+	% Classes Taught by Highly Qualified Teachers+
Avoyelles	85	81.2/D	58	63	yes	30.29	48.5	80.2
East Feliciana	38	81.3/D	42	41	yes	21.87	72.8	77.4
East Baton Rouge	0	86.2/D	49	52	yes	22.99	89.1	84.2
Madison	165	72.8/D	51	53		45.75	94.0	62.9
Pointe Coupee	35	84.2/D	43	49		24.11	62.6	92.0
Tensas	132	77.3/D	72	68		43.96	93.1	55.8
St. Helena	52	58/F	NR	NR		27.13	95.3	96.4
St. Mary	106	96.7/C	52	42		23.36	53.6	85.3
Iberville	23	86.2/D	55	48	yes	24.81	69.7	90.7
Lincoln	210	99.5/C	44	39		25.63	51.9	99.7
Union	211	82.1/D	55	45	yes	25.24	53.3	91.9
Webster	250	88/D	47	49		25.13	45.2	97.0
Ouachita	180	105.3B	29	33		21.90	36.0	94.7
Morehouse	199	83.6/D	44	47	yes	34.19	67.7	96.7

A key goal of Project RIPPLE /MISE is to immerse participants in inquiry-based teaching and learning experiences using exhibits and “snacks” that focus on LIGO science concepts. Research tells us that an inquiry approach to science teaching motivates and engages every type of student, helping students understand science’s relevance to their lives as well as the nature of science itself (National Institutes of Health, 2005). The PDI will expand the teachers’ ability to

utilize LIGO resources in the design, development, and delivery of state-approved science and mathematics curriculum to students and to other teachers in their districts/schools. They will learn manageable ways for new and experienced teachers to bring inquiry into their science and mathematics classrooms. Each district/school has responded to Project RIPPLE/ MISE with their commitment to providing support to teachers and students. The participants will disseminate information on successful strategies and models to other teachers in their school. The professional development content will be driven by innovative instructional strategies, curriculum goals and connections to standards, and exemplary course models to facilitate the teaching and learning of physics/physical science (sound, light, optics, and wave properties) and mathematics (measurement and number sense). Emphasis will be placed on exploration of concepts, hands-on exhibits and “snacks,” and the use of technology to ensure that participants are familiar with the knowledge of concepts taught in pertinent grade levels as per the National Science Education Standards (NSES), Principles 2000 by the National Council for Teacher of Mathematics (NCTM), and Atlas of Science Literacy (PROJECT 2061) which support the State’s accountability efforts.

The project will consist of a seven-day (60 hours) summer professional development institute at Southern University and LIGO SEC in Livingston and four follow-up days (30 hours) during the academic year at Louisiana Tech University. After the one-year institute, the teachers, through collaboration, are expected to use the information gained from the project to develop mathematics and science activities, in accordance with the comprehensive curriculum and CCSS, to better prepare students in math and science.

## **B. Project Design**

Project RIPPLE /MISE will offer professional development that brings together cutting edge research (LIGO), informal science education (EXPLORATORIUM and IDEA Place exhibits and Science “Snacks”), and science as taught in K-12 classrooms in a professional development model that prepares teachers to teach through inquiry physics concepts related to waves, light, sound, electricity and magnetism, forces and motion (projectile motion), and optics. The PDI will expand the teachers’ ability to utilize LIGO resources that support ambitious science instruction at the middle school level in the design and delivery of state-approved science and mathematics curriculum using the guidelines of the Common Core State Standards (CCSS). The project’s aim is to get students of all backgrounds to understand science and mathematics big ideas, and solve authentic problems. The 4 core instructional strategies that describe and support



this kind of teaching are these “**high-leverage**” practices that make up the Science Learning Framework which was selected based on extensive research of how young people learn science, on authentic forms of science activity, and how teachers learn to appropriate new practices.

Current research indicates that it is best for knowledge to be constructed actively by the learner (Darling-Hammond, et al., 2008). This learning style offers a new role for the science teacher as a facilitator of learning versus an imparter of knowledge. Learning styles that call for student engagement in formal and informal learning is the primary goal of an on-going process of helping teachers to help students in Project RIPPLE MISE. The institute will use informal learning styles constructed actively by the learner to drive its PD. Through the use of research and effective practices Project RIPPLE/ MISE has acquired from, but not limited to the following literature: *Good to Great, The Comprehensive Toolkit: Language and Lessons for Active Literacy, I Read it but I don't Get It: Comprehension Strategies for Adolescent Readers, Atlas of Science Literacy, Uncovering Students Ideas in Science, Uncovering Students Thinking in Mathematics, Instructional Strategies that Engage the Brain, Force Concept Inventory, Wave Concept Inventory, NSES Standards and Exploratorium Cookbooks I-III, Talk Moves, Next Generation Science Standards(NRC 2011) Teacher Leader Model Standards and the Common Core State Standard (CCSS)*. Project RIPPLE/ MISE will strongly encourage teachers to adopt best practices that are more student-centered, active, experimental, authentic, democratic, collaborative, rigorous, and challenging and will establish a support infrastructure for the full implementation of these best practices. In support of the goals of LaSIP, and in keeping with the vision of this project, the following measurable objectives have been developed for this project (see Appendix I for worksheets):

#### **i. Measurable Objectives**

**LaSIP Goal 1: *Increase student achievement on State high-stakes testing.***

**Goal 1, Objective 1:** Students in grades 6 ,8 in participating schools will show a 10% gain in Average Percent Correct in Science of Inquiry and Physical Science as measured by the iLEAP and LEAP; and 100% of the high school physical science students will earn an average grade of a “C” or better in high school physical science.

**Goal 1, Objective 2:** Students in grades 6 and 8 in the participating schools will show a 10% gain in Average Percent Correct on the Constructed-Response Items section of the iLEAP and LEAP tests.

**LaSIP Goal 2:** *Plan effective PD based on the high-need LEA(s)/schools' data-driven needs and developed using research-based PD strategies that will take place in summer institutes, during the academic year (AY), and/or through on-line or web-based assignments and job-embedded activities.*

**Goal 2, Objective 1:** Project personnel will plan and present professional development opportunities for 6th, 8th, and 9th grade teacher of science that address student needs identified by iLEAP and LEAP.

**Goal 2, Objective 2:** A minimum of 85% of the participants will engage in the Professional Development activities provided by the project as evidenced by sign-in sheets, anecdotal records of faculty study groups, and records of peer-mentoring sessions.

**LaSIP Goal 3:** *Increase leadership capacity and pedagogical skills for target schools through school/district buy-in, school-based implementation, and mentoring during the AY.*

**Goal 3, Objective 1:** To increase teacher exposure to best practices and innovative pedagogies, 60 % of participants will participate in a local, state, national, or regional conference and share experiences aligned with the goals of RIPPLE/MISE on the Moodle forum with other participants.

**Goal 3, Objective 2:** To increase leadership capacity of participants, 90% of participant will participate in an online follow up course on LATECH Moodle on which they will utilize discussion board to collaborate with colleagues, reflect on project implementation, and explore current STEM instructional research.

## **ii. Specific Subject-Matter Content/Classroom Instructional Strategies**

### **Literacy**

Throughout the program project staff will model the following instructional, assessment, and literacy strategies:

*Instructional strategies:* cooperative learning; jigsaw cooperative learning; peer instruction; hands- on, minds-on learning experiences; teaching through inquiry; designing well controlled experiments and analyzing data graphically and through data tables; classroom management; safety in the science classroom; using the learning cycle to design effective lessons; using higher level questioning to improve students critical thinking and problem solving skills; incorporating writing within the science lesson; word walls, silent brainstorming, use of EXPLORATORIUM

“Snacks” as teaching and learning tools, relating science concepts to “cutting edge” research conducted at LIGO, integrating informal science experiences to enhance classroom learning. Many of the above strategies are recommended for improving students’ literacy skills (card sorts; concept maps; analyzing data in graphs, charts, and diagrams; the use of jigsaw cooperative learning, word walls). In addition, the project routinely incorporates writing as students record observations and describe conclusions in their Learning Logs, use a variety of creative writing techniques to explain science concepts (poems, RAFTS, creative stories, RICE, 4-square writing, development of analogies/metaphors), and present the results of their conclusions orally and in writing.

### **Physics/Physical Science and Mathematics**

WAVES – Participants will expand their knowledge about energy, types of energy, and energy transformations including wave properties and interference as it relates to LIGO science concepts. Participants will be exposed to such concepts as different types of waves, the measurement of wave frequency, length, velocity and amplitude through informal inquiry using snacks. Each teacher will have an opportunity to construct a snack that they will be able to take to their classroom and use to enhance teaching and student learning. This year, participants will build a multi-purpose snack that explores waves properties, oscillation, and thin film interference. Participants will also explore the wave interference phenomenon, which includes waves at boundaries between media, superposition of waves, wave reflection, refraction, diffraction, and thin film interference. At the institute, participants will explore in-depth the different types of electromagnetic radiation such as visible light, IR and UV radiation and observe how their everyday lives are affected. Teachers will investigate through scientific inquiry how waves transfer energy without transferring matter. They will distinguish the difference between longitudinal and transverse waves or a pulse and continuous wave using a giant slinky snack. Participants will become familiar with the terminology that scientists use to describe waves so that they will be able to communicate their knowledge of waves to other teachers and students. During the institute, participants will have an opportunity to interact with scientists and other science educators at LIGO SEC to get a more comprehensive understanding of the gravitational wave research being conducted at the LIGO Livingston Observatory.

Comprehensive Curriculum, Objectives and Benchmarks:

1. Demonstrate the understanding of similar characteristics shared by waves (PS-H-G2)

2. Describe wave differences (PS-H-G1)
3. Recognize waves associated with the electromagnetic spectrum and how they are important (PS- H-G4, PS-H-G3)
4. Recognize that waves exhibit predictable behavior (PS-H-G1)
5. Demonstrate an understanding of energy (PS-H-F1, PSS-M-A4)
6. Observe and describe the interactions of light and matter: reflection, refraction, absorption, transmission, scattering (PS-M-C4)
7. Use proportional reasoning and solve real-life problems (N-8-M)
8. Distinguish between an exact and an approximate answer, recognize errors introduced by the use of approximate number with technology (N-3, N-4-H, N-7-H)
9. Demonstrate an intuitive sense of relative sizes of common units in relation to real-life application and use this sense to estimate (M-2-M, G-1-M)
10. Distinguish between precision and accuracy (M-1-H)
11. Determine what kind of data display is appropriate for a given situation (D-1-M)

Additionally, all teachers will participate in a half-day “Literacy Strategies in the Content Area” for math and science teachers. Presenters will be consultants who develop the curriculum and have intensive training on the use of content area literacy strategies. Additionally, Educational Planning and Assessment System (EPAS) training will be an integral component of the summer institute, if funds are available.

Project RIPPLE/ MISE will employ the “Five E’s Teaching Strategy (engage, explore, explain, extend, and evaluate).” This model describes a teaching sequence that can help students build their own understanding from experiences and new ideas. During the project, participants will build snacks for classroom instructional supplements. Funding given to participants for classroom materials and supplies will be used to replicate and produce additional snacks for classroom use after the Summer Institute. It is expected that the participants will develop confidence in building snacks by the end of the Summer Institute. Some of the snacks to be built will include: Giant Slinky, Coupled Resonant Pendulum, Coupled Resonant Straw, Pendulum Snake, String Machine, Beating Gravity, Soap Film Painting, Pipe of Pan, and Pinhole Theater. After the teachers have created the snacks and have received instruction on the use of snacks, they will move snacks to the classroom setting, by integrating and implementing the following

assessment tools, including: class discussions, demonstrations, cooperative grouping, hands-on activities and utilization of technological tools.

### **Classroom Instructional Strategies**

Pedagogy for this project dictates that students thrive on hands-on approaches to learning science using inquiry. Participants will learn how to establish connections between concepts and actual experimentation. The PDI provided by SUBR and Louisiana Tech University will include formative and summative assessments. These assessments will be well-designed questions and strategies that will help the participants to uncover what they are actually thinking and to build a bridge between those ideas and the scientific ideas articulated in national and state science standards. The focus will be on 1) the scientific method; emphasis on experimental data, data collection, and data analysis; 2) measurement, measure systems, and symbolic representations in the science concepts; and 3) number sense, use of accuracy and precision in data collecting. The PDI method of delivery will include the use of LIGO SEC exhibits, “snacks”, the Five E’s Learning Cycle Model, and Instructional Strategies that engage the brain through informal learning.

### **Instructional Materials**

During the project, participants with the assistance of project staff will 1) build snacks and 2) conduct inquiry-based activities that teach physics/physical science and math content which will help participants gain math/science connections. The *Atlas of Science Literacy* will be used to identify the national standards and what should be known by a particular grade level. Formative assessments books will be used to identify content levels and missed concepts.

**Snacks:** Some of the snacks to be built are Giant Slinky, Coupled Resonant Pendulum, Coupled Resonant Straw, Pendulum Snake, String Machine, Beating Gravity, Soap Film Painting, Pipe of Pan, and Pinhole Theater.

**Inquiry Science & Math:** Some activities will include Developing the Laws of Exponents, Double Dog, Expand and Shrink Images, Exponential Folding, Handy Measuring Tool, Slope of a Parabola, Investigating Nano with Sugar, Logarithmic Stacking of Blocks, Pinhole Images, Walking Function, Wave Feature & Properties, What if you Double It, Universe is a Dollar, Bird in a Cage, Lens Roles, Earth Layers, Solar System in Your Pocket and Comparison of Worlds.

### **iii. Delivery Method**

The design of this project will capitalize on the existing collaboration among SUBR, Louisiana Tech University, LIGO SEC, LaSIP/LA GEAR UP, and the Exploratorium (LIGO Local Educational Outreach Partnership). Program components include a total of 90 hours of direct instructional contact. Components are listed as follows:

- A 7 day, 60-hour residential summer institute to be held July 2012 on the campus of Southern University Baton Rouge.
- Graduate credit for a three-hour course through Louisiana Tech University.
- Two two-day workshops totaling 30 hours on the campus of Louisiana Tech University.
- Documentation of project implementation through participants' individual project portfolios.

Attendance is expected for all 90 hours of the project. Participants will receive a maximum of \$25.00 per hour for attendance and participation. SUBR project staff and Louisiana Tech project staff utilize a variety of networks including district mailing lists, and various state contacts. As an additional recruitment measure, SUBR hosts an annual Share-a-Thon. We ask current and past Project RIPPLE/ MISE participants to bring a colleague to the Share-a-Thon who could possibly be a future participant. Upon notification of funding, the process for recruiting and selecting participants for the summer institute will start. Letters and flyers with information about the summer institute (dates, logistics, goals, objectives, and other pertinent information) will be disseminated to the school districts, principals, and former RIPPLE/ MISE participants via regular mail, fax, and e-mail. Additionally, information about the summer institute will be posted at the Project RIPPLE/ MISE, SUBR College of Education, Louisiana Tech University College of Education, the Department of Science/Mathematics Education Doctoral Program, and SUBR, Louisiana Tech, and LIGO websites. Interested participants will submit an application to participate in the summer institute. Project staff will review all applications. An electronic letter of acceptance or declination will be sent to interested participants based on the applicants' qualifications and commitment to project activities. In order to participate, applicants must fulfill the qualifications set forth by the Louisiana Department of Education to be deemed a teacher in Louisiana. Participants will contribute to the achievement of the project's objectives by attending at least 85% attendance of total project hours

and submitting a portfolio of evidence.

Upon acceptance to the summer institute, each school and participant will sign an agreement letter stating that they will fully attend all summer institute and academic year workshops; complete all required deliverables such as assignments, projects, and the capstone portfolio; share project curriculum and materials with other teachers in their school or district; and document efforts to implement project curriculum with samples of students' work that can be shared with project staff and other constituencies.

The Site Coordinator will make a minimum of two (2) visits per teacher during the academic year, and a monthly email and/or telephone call between August and May. The LaSIP Observation Tool (LOT) will be used to record all observations during the site visits. Project RIPPLE/MISE will provide a total of \$25 per hour for attendance and participation at the summer institute and the academic year follow up sessions as indicated by sign-in documentation (Option A). Participants will submit a quarterly mentoring log. The process for ensuring meaningful feedback and support will be ongoing. At the beginning of the summer institute, all participants will be provided with the contact information of all project staff members. The means of communication will include e-mail, regular mail, telephone conference calls, and site visits. The coordinators will monitor feedback from institute activities, reflective journals, classroom visits, face-to-face communication, surveys, and e-mail. In order to disseminate project findings to the participants, school administrators, parents and the community at large, the project staff will maintain a website at the Science/Mathematics Education Doctoral Program's website, with a link at the SUBR LIGO website and on Louisiana Tech University's SciTEC website. Participants will also be encouraged to create and link their homepages to this webpage to serve as part of social interaction among all participants. Additionally, project staff will make use of the social networking sites (Facebook, MySpace, Twitter, etc.) to ensure adequate project dissemination and communication.

Project staff and participants will make presentations at state and national conferences and publish articles in the local newspaper and refereed journals.

During 2012-2013, in collaboration with the LIGO SEC outreach staff, field trips will be arranged for participants to engage in continued PD. The out-of-school setting shows promise for affording access to cognitive tools and resources that teachers can use to provide students with "authentic science activities." The integration of formal classroom learning with informal LIGO SEC

exhibits is achieved through the connection of several processes: 1) PD for teachers, 2) classroom preparation for student LIGO SEC field trips, 3) student LIGO SEC field trips (informal learning that reinforces classroom learning), and 4) classroom follow-up (formal learning that integrates professional development and student field trips). Additional visits to The IDEA Place at Louisiana Tech University will also include experiences with inquiry based learning and Exploratorium exhibitory. This process is consistent with the San Francisco Exploratorium and the Center for Informal Learning and Schools (CILS) emphasis on developing and realizing the potential of science learning opportunities in out-of-school settings.

#### **iv. Collaborative Partnerships and Participant Recruitment**

The staff of Project RIPPLE/ MISE has a history of working with districts throughout the state. There is significant district support for the endeavor as indicated by the letters of support. (see appendices). We are collaborating with the selected districts to create an exemplary statewide educational and informational resource to promote scientific learning and understanding in Louisiana. By integrating the unique strengths of different partners (LIGO SEC, Louisiana Tech University College of Education, SciTEC, the SUBR College of Education and the Departments of Physics and Mathematics), we are providing limitless opportunities that will have profound impacts on pre-service and in-service teachers statewide, regionally and nationally.

The Coordinators are playing a key role of ensuring effective communication between the project staff and each district. They will be a vital component to ensuring the comprehensive, faithful implementation of this project. Details on how partnerships with districts/schools were developed have been discussed in the section on participant selection. In an effort to develop a mentoring and partnering relationship with workshop participants, the PDI will provide a session on developing an action plan. Each action plan will include examples of successful strategies and techniques for forming effective collaborations and sharing with other participants. PDD members will serve as a resource contact and peer coach on exploring ways for reforming science and math education in their district. These partnerships developed during the institute will assist teachers with 1) developing professional networks/participation in community of practice, 2) gaining valuable curricular resources, 3) increasing their own professional knowledge base in content domains, and 4) expanding their professional knowledge base in pedagogy (both inquiry and project-based).



### **C. Quality of Key Personnel**

**Dr. Glenn Beer**, a certified mathematics teacher and Director of SciTEC, a K-12 science/math education outreach center, will serve as the Principal Investigator for the project. Dr. Beer is an Assistant Professor in the College of Education and manages the operation of the IDEA Place Math & Science Discovery Center, the Louisiana Tech Planetarium, and the NASA Educator Resource Center. In addition, in fulfillment of the mission of SciTEC, Dr. Beer has 12-years' experience developing and directing professional development programs for teachers of both science and math. As Director of SciTEC, Dr. Beer manages approximately \$2 million per year in externally funded projects promoting student achievement and school improvement through various professional development initiatives. Dr. Beer will handle all project administrative duties including the oversight of the project budget, the analysis of project data, and the preparation and submission of all reports. He will consult on the development of professional development materials for the project and serve as a member of the instructional staff.

**Dr. Joseph Meyinsse** is a Professor of Mathematics, Chair of the Department of Science/Mathematics Doctoral Program, and Interim Dean of the Graduate School at Southern University in Baton Rouge, Louisiana. Dr. Meyinsse will serve as the project instructor/facilitator of the Summer Institute and academic year workshops. He is in the seventh year of leadership of a LASIP-funded project, and his duties will include supervising and managing the project. He will also be responsible for organizing the summer course work, and recruitment and selection of all participants. Since 1992, he has taught pre-service courses and worked with the 1994-95 LaCEPT program in conjunction with the Department of Mathematics LaSIP Project for middle school teachers. He was recently selected to join a team of 20 mathematicians and high school teachers to visit St. Petersburg and Moscow in the Republic of Russia to observe middle and high school mathematics and physics classrooms, supported by the National Science Foundation. He has also served as director and instructor for seven successful LaSIP projects at Southern University and the KHULA Project (1999-2001) for enhancing content knowledge of secondary math and science teachers in South Africa.

**Diane Madden** will serve as Co-PI. She has 16 years' experience teaching in high school science classrooms (including physical science). Ms. Madden served in this capacity for the Best of RIPPLE projects. She will oversee all follow up sessions and help develop and facilitate

activities. Ms. Madden has 13 years' experience as a professional developer and has attended a Jim Knight Instructional Coaching workshop in Kansas City. In addition, she attended the Inquiry Institute at the Exploratorium in February 2009.

**Dr. Luria Young** is the LIGO Science Education Specialist and an Associate Professor in the SUBR Department of Curriculum and Instruction. Dr. Young is in her sixth year as Co-Project Director of Project RIPPLE/ MISE and will serve again as co-director and an instructor/facilitator of the Summer Institute and academic year workshops. Her duties will include assisting with the supervision and management of the project and the daily management of the Summer Institute and overall project. Dr. Young has extensive experience with inquiry-based teaching and learning and reforming pre-service science teacher education. She was selected as the SUBR Teacher of the Year 2006 and appointed to the NSTA Pre-service Teacher Board of Reviewers in 2009.

**Bobbie Remble** has twenty-three years of teaching experience specializing in middle school mathematics, earth and physical science. Ms. Remble will serve as one of the Site Coordinator for the proposed project, with full salary support from the main NSF SUBR LIGO project. She will be responsible for coordinating the day to day activities of the project at SUBR. She will also teach sessions of the Summer Institute and follow-up workshops. Ms. Remble will be responsible for site visits in the participating schools in South Louisiana. Ms. Remble received her B.A. Degree from Southern University. She expanded her credentials by studying with NASA in aerospace education. Recently she completed advance studies in Mathematics and Physical Science Connections at the Exploratorium's Teacher Institute.

**Lindsey Keith-Vincent** will serve as a site coordinator for the project. The site coordinator's primary responsibilities will be to conduct visits to project participants in northern Louisiana, collect and help analyze project data, participate as an instructional team member in the follow-up workshops, and review participants' portfolios. She is a former classroom teacher with certification in Secondary English and Biology. She also serves as the Museum Educator for the Louisiana Tech University IDEA Place.

**Sheila Griffin** will assist the site coordinator and other project staff with the successful implementation of the project. She assists with coordinating instruction during the summer and AY workshops, mentoring of the participants during the AY, and site visits in the participating schools.

## **Other Key Personnel**

**Dr. Diola Bagayoko** is a SU System Distinguished Professor of Physics and will serve as the lead science content consultant on the project. An additional consultant will provide support to the project by ensuring the cohesiveness of the content, including literacy, and the activities for the classroom setting. **Mr. Roosevelt Peters** will serve as the math content consultant.

Additionally, a graduate assistant will serve in the capacity of a part-time administrative assistant and will assist with technology integration for the summer institute and AY workshops and the daily management of the project.

## **D. Project Evaluation**

Evaluation and assessment are key components of Project RIPPLE/MISE. The success of Project RIPPLE/MISE will be based on increases in student learning gains, increases in teacher content knowledge, enhanced instructional strategies, and changes in teacher and student attitudes about science. The project will be evaluated relative to progress towards the project's goals and objectives. Formative evaluation will be ongoing, and a summative evaluation will be conducted at the end of the project. The Diagnoser Tests will be used to assess the overall changes in physical science and mathematics content knowledge of teachers and their students. This assessment tool, which includes web-served assessments, is aligned with National Standards and Benchmarks in science and mathematics. This instrument was developed and tested by teachers and is based on research into the teaching and learning of math and science ([www.diagnoser.com](http://www.diagnoser.com)). The Diagnoser Test will be administered as a pre/post test, at the beginning and end of the Summer Institute at SUBR and at the end of the AY.

The Colorado Learning Attitudes about Science Survey (CLASS) will be used to assess teacher attitudes about science. This assessment has established reliability and validity. The CLASS assessment will be administered pre/post-test at the beginning of the Summer Institute and at the end of the AY ([www.colorado.edu/sei/class](http://www.colorado.edu/sei/class)). Student attitudes about science will be measured using the Students Attitudes about Science Instruction Survey (SAASIS). This instrument focuses on students' opinions and beliefs about science instruction in school and the importance of science in their lives. SAASIS will be administered as a pre/post-test at the beginning of the school year and at the end of the school year. This test has established validity and reliability ([www.ncrrsepa.org](http://www.ncrrsepa.org)).

Direct observation of classroom practices will also be conducted in the fall and spring to

target growth in three areas: instructional strategies, student engagement, and cognitive activity. The site coordinators with the assistance of the PD coordinator and university faculty will visit/observe each teacher at least two (2) times during the AY. The LaSIP Observation Tool (LOT) will be used to record all observations during the site visits. The LOT data, analyzed by LaSIP, will be used to drive instruction during future academic year workshops.

#### **E. Budget Request, Budget Narrative, and Cost Sharing**

Resources: SUBR will provide classroom space for the summer institute sessions and use of the SUBR LIGO Inquiry Laboratory, Physics labs, and computer labs. Additionally, SUBR LIGO funds from the NSF will be used to support the site coordinator, 5 pre-service teachers (stipends, funds for materials and supplies, and conference participation). All participants will have access to the SUBR LIGO Inquiry Laboratory and the Department of Curriculum and Instruction's Teacher Resource Center which houses the Exploratorium's inquiry-based teaching and learning resource materials. Additionally, the SUBR LIGO website (<http://suamconline.net>) has teacher tool boxes, lesson plans, LIGO virtual field trips, and LIGO science demonstrations to support inquiry-based teaching and learning that is accessible to all participants of the summer institute. Louisiana Tech University will provide classroom space for the academic year follow up sessions and use of The IDEA Place and the Louisiana Tech planetarium. Louisiana Tech University will also provide access to the University Moodle site to facilitate continued online instruction for course credit. In addition, a scholarship will also be provided for the course credit by the University. Please refer to the following pages for the budget, budget narrative, and cost sharing.

APPENDIX A  
BUDGET REQUEST FORM

**LOUISIANA SYSTEMIC INITIATIVES PROGRAM**

**PROPOSED PROJECT BUDGET REQUEST - FORM BR**

**PROJECT NAME:** Project RIPPLE/MISE

**PROJECT CONTENT AND STRAND FOCUS:**LIGO Science

**PROJECT DIRECTOR, UNIVERSITY:**Glenn Beer, Louisiana Tech University

A	B	C	D	E	F
Reference	Budget Item	Brief Description of Budget Item	Funds Requested 7/1/12-9/30/12 <u>Max of \$80k</u> <u>for this period</u>	Funds Requested 10/1/12- 6/15/13	Total Funds Requested
<b>A. University Employed Staff</b>					
1	Director/Faculty Member	Glenn Beer, PI	0.00	3,750.00	3,750.00
2	Co-Director/Faculty Member	Diane Madden, Co-PI	0.00	12,000.00	12,000.00
3	Faculty Member		0.00	0.00	0.00

4	Faculty Member		0.00	0.00	0.00
5	Graduate Student		0.00	0.00	0.00
6	Secretary/Student Worker	Misty Byrd	0.00	6,000.00	6,000.00
7	Site Coordinator	Lindsey Keith-Vincent	0.00	12,600.00	12,600.00
9		<b>Total Salaries and Wages</b>	<b>\$ -</b>	<b>\$ 34,350.00</b>	34,350.00
10	Fringe Benefits: Rate__41.86%		0.00	14,378.91	14,378.91
11		<b>Total Salaries, Wages, and Fringe</b>	<b>\$ -</b>	<b>\$ 48,728.91</b>	<b>\$ 48,728.91</b>
<b>B. Staff Not University Employed</b>					
12	Consultant	SoutherN University Staff	7,000.00	39,111.25	46,111.25
15		<b>Total Staff Not University Employed</b>	<b>7,000.00</b>	<b>39,111.25</b>	<b>46,111.25</b>
16		<b>Total Staff Costs</b>	<b>\$ 7,000.00</b>	<b>\$ 87,840.16</b>	<b>\$ 94,840.16</b>

<b>C. Participant Support</b>					
17	Stipends	30*90*25	45,000.00	22,500.00	67,500.00
18	Employer Contributions on Stipends: Enter rate (TRSL 25.15%)		11,317.50	5,658.75	16,976.25
19	Substitute Pay		0.00	0.00	0.00
20	School Resource Materials		0.00	0.00	0.00
21	Project Supplies		900.00	3,500.00	4,400.00
24		<b>Total Participant Support</b>	<b>\$ 57,217.50</b>	<b>\$ 31,658.75</b>	<b>\$ 88,876.25</b>
<b>D. Travel</b>					
25	Staff Travel		2,000.00	4,216.96	6,216.96
26	Participant Travel		8,000.00	10,000.00	18,000.00



27		<b>Total Travel Costs</b>	<b>10,000.00</b>	<b>14,216.96</b>	<b>24,216.96</b>
<b>E. Indirect Costs</b>					
28		<b>Direct Costs Minus Participant Support</b>	<b>\$ 9,000.00</b>	<b>\$ 92,057.12</b>	<b>\$ 9,000.00</b>
29	Indirect Costs	Line 27 x 8%	720.00	7,364.57	8,084.57
30		<b>TOTAL FUNDS REQUESTED</b>	<b>\$ 74,937.50</b>	<b>\$ 141,080.44</b>	<b>\$ 216,017.94</b>
<b>F. Core Costs</b>					
31	Core Costs	\$ 183,716.41			
32	Number of Participants	30			
33	<b>Core Cost per Participant</b>	<b>\$ 6,123.88</b>			

**APPENDIX B**  
**BUDGET NARRATIVE**

**LaSIP 2012-2013 Professional Development RFP**

**BUDGET NARRATIVE - FORM BN**

**PROJECT NAME: Project RIPPLE/MISE**

**PROJECT DIRECTOR/UNIVERSITY: Glenn Beer, Louisiana Tech University**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Section 1</b>				
Form BR Line Item	Staff Name and/or Title	Roles and Responsibilities	Cost Basis	Rationale/Justification
1	Glenn Beer, Project Director	Overall management and administrative responsibilities including recruiting, logistics, etc. Also consultant for project design and implementation, various	Based on monthly salary of \$7,500. Funds are requested for 1/2 month with one month provided as match	Based on a 1.5 month commitment to project with 1 month provided as institutional match

		presentations, and reporting requirements.		
2	Diane Madden, Co=-PI	Ms. Madden will assist with overall project management, project development and implementation, and literacy connections for the project.	Funds are requested based on an annual salary of \$48,000 and a three month commitment to the project	90 hours of actual project time, plus an additional month for planning and preparation and a month for administrative and reporting. Ms. Madden will also visit teachers during the AY
6	Misty Byrd, Clerical support	Ms. Byrd will provide clerical support including processing stipends, travel, supply orders, etc.	Funds requested based on an annual salary of \$36,000 and a 2-month commitment to the project	Time commitment is based on the estimated time needed to process all administrative paperwork associated with the project. It is expected that Miss Byrd will spend 60 days on project business.
7	Lindsey Keith-Vincent, Site Coordinator	Ms. Vincent will conduct site visits during the academic year and will also serve as a member of the instructional staff	Funds requested are based on a monthly salary of \$3,150 and a four month commitment to the project	Time estimate based on project days, travel time for site visits and to complete reporting requirements

10	Fringe Benefits	Calculated on salaries paid to university employees	based on university rate of 41.86%	
<b>Section 2</b>				
Form BR Line Item	Other Expenses	Description or Purpose	Cost Basis	Rationale/Justification
12	Consultants	Southern University Staff paid through a sub-contract with Louisiana Tech University which is included in the appendix to this proposal	Dr. Joseph Meyinsse: \$5,000; Dr. Luria Young: 4000, Part-time PD coordinator: 25,000, Dr. Bagayoko, 3,000; Mr. Roosevelt Peters 500 PLUS fringe for all payees. \$3000 for supplies for summer institute	Southern University will assume responsibility for content of summer institute and will collaboratively deliver all project sessions. In addition, Southern will assist with completion of academic year site visits.
17	Stipends	Participants will receive a stipend of \$25 per hour for 90 hours of participation	\$25 per hour and 90 hours equals \$2,250 per participant	Prevailing rate for PD
18	Fringe for Stipends	Required fringe benefits for participating teachers	Based on most recent experience paying stipends, districts request 25.15%	TRSL Mandated

21	Project supplies	Copying costs, binders, and workshop materials, including resources needed to facilitate project activities.	It is estimated that project supplies will cost \$230 per participant	Project materials include all materials necessary to conduct the project successfully
25	Staff Travel	Travel for project staff to project sites and to conduct site visits	Estimated travel based on Tech staff travel to Southern for summer institute and Southern staff travel to Tech during academic year as well as site viisits to schools	Necessary travel to accomplish project goals
26	Participant Travel	Mileage and hotel expenses where necessary	based on estimated costs with 0.51 per mile and \$90 per night for lodging	Travel paid based on current state guidelines

APPENDIX C  
COST SHARE WORKSHEET

<b>PROPOSED COST SHARE - FORM CS</b>				
<b>LaSIP PROFESSIONAL DEVELOPMENT RFP 2012-2013</b>				
<b>PROJECT NAME: PROJECT RIPPLE/MISE</b>				
<b>PROJECT DIRECTOR, UNIVERSITY: Glenn Beer, Louisiana Tech University</b>				
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Description</b>	<b>Type of Matching Funds (Cash or In-Kind)</b>	<b>Partner Providing Matching Funds (University, District, School, or Private)</b>	<b>Source of Funds (Federal, State, Local, or Private)</b>	<b>Cost Share</b>
Staff:				
Glenn Beer, PI	K	University	State	7,500.00
<b>Sub-Total Staff Cost Share</b>				<b>\$ 7,500.00</b>
Participant Support:				
Tuition waiver for graduate credit earned: 30 @ \$634 each	K	University	State	19,020.00
<b>Sub-Total Participant Support Cost Share</b>				<b>\$ 19,020.00</b>
Travel and Other Costs:				



Fringe benefits on matching salary @ 41.86%	K	University	State	3,139.50
Indirect costs waived at 52.23% of salaries and wages less allowed	K	University	State	9856.44
Indirect Costs waived at 52.23% of salaries and wages less allowed on Southern MOU	K	University	State	12,420.00
<b>Sub-Total Travel and Other Cost Share</b>				<b>\$ 25,415.94</b>
Indirect Costs (on match):	K	University	State	<b>\$ 3,917.25</b>
<b>COST SHARING TOTAL</b>				<b>\$ 55,853.19</b>

APPENDIX D  
CURRICULUM VITAE

## 2012-13 LaSIP PROFESSIONAL DEVELOPMENT PROJECTS

### CURRICULUM VITAE

#### BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and consultants and collaborators. Begin with the principal investigator/program director. Photocopy this page for each person.

NAME	POSITION TITLE
Joseph A. Meynsse	Professor & Chair

EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.)

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Knoxville College	B.S.	1980	Mathematics
Southern University	M.S.	1983	Mathematics
Southern University	M.S.	1987	Computer Science
Louisiana State University	Ph.D.	1995	Mathematics Education

#### RESEARCH AND PROFESSIONAL EXPERIENCE:

##### Appointments

Chair, Department of Science/Mathematics Education, 10/2011- Present

Interim Dean of Graduate Studies and Chair, 09/2009 – 10/2011

Chair, Department of Science/Mathematics Education, 1/2008- Present

Chair, Department of Mathematics, 7/2003 - 12/2007

Associate Professor, Department of Science/Mathematics Education, 1/2001 – 6/2003

Associate Professor and Assistant to the Chair, Department of Mathematics, 8/1998 – 12/2000

Assistant Professor, Department of Mathematics 8/1991 – 7/1998

##### Publications

Meynsse, J., and L. DeConge-Watson. "Fostering Innovative Professional Development and Teacher Outcomes: Lessons from Project MIME." Louisiana and LaSIP Best Practices: Innovative Standards-Based Approaches to Teaching Mathematics, Science, and Technology 55-60 (2002).

Meynsse, J. "New Technology's Promise for Mathematics Education." Communications, Third Southern Hemisphere Symposium on Undergraduate Mathematics Teaching Conference, 72-74. Kruger National Park, South Africa, July 1-5, 2001

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## **Synergistic Activities (Professional Development)**

- LaGEAR UP Inservice Professional Development Project (Project MISE, April 26, 2011-June 30, 2012 Summer, Fall, Spring, and Summer), \$180,000.00. Project Title: "Modeling Inquiry Science Education (MISE): A Professional Development for Math/Science Teachers using LIGO Concept." Grades 5-9. Funded by the Louisiana Board of Regents Systemic Initiatives Program Professional Development Project. Grant award number 11-215-SUBR-S.
- LaGEAR UP Inservice Professional Development Project (Project MISE, April 26, 2009-August 15, 2010 Summer, Fall, Spring, and Summer), \$209,623.00. Project Title: "Modeling Inquiry Science Education (MISE): A Professional Development for Math/Science Teachers using LIGO Concept." Grades 5-9. Funded by the Louisiana Board of Regents Systemic Initiatives Program Professional Development Project. Grant award number 09-215-SUBR-S.
- LIGO Science Education Center Partnership (SUBR) was awarded \$2.37 million dollars for 5 years (October 1 – September 30, 2013) for the second phase. The Outreach Center is an integral part of the NSF-funded Laser Interferometer Gravitational Wave Observatory (LIGO); Southern University-Baton Rouge. PI.
- Southern University Baton Rouge (SUBR), the East Baton Rouge Parish School System (EBRPSS) and Louisiana State University (LSU) Partnership for Noyce Scholars (SEL Partnership), \$750,000 (January 1, 2008 – December 31, 2011) funded by The National Science Foundation (Robert Noyce Scholarship Program) grant award number DUE-0733802. Co-PIs, Dr. Ann Henderson, Dr. Luria Stubblefield, Dr. Brenda Nixon, and James Madden.

### **I. International Professional Development Projects**

Mathematical Circles Tour of Russian Special Schools. November 22 – December 2, 2006

- Conducted a workshop at Vista University, Pretoria, South Africa. Theme: "Innovative Ways for Teaching Mathematical Sciences," Title: "New Technology's Promise for Mathematics Education," for faculty and graduate students on May 17, 2001.
- Lucent Technologies Fellow, 1999-2001 (KHULA Project Facilitator Summer 1999 and January 2000: Southern University/Rutgers University – Rhodes University, Grahamstown, South Africa). KHULA Project Facilitator Summer 2000 and January 2001: Vista University at Port Elizabeth campus, South Africa.
- Tertiary Education Linkage Project (TELP) Linkage Grant with Vista University (Beginning June 1, 2000 and ending May 31, 2003). Project Coordinator and Lead Faculty for Mathematics.

### **II. Academic Honors and Awards**

2009 Chancellor's Faculty and Staff Recognition Program Winner in the Competitive Grant Award category. Presented at the University and A&M College on May 7, 2009.

2009 Global Excellence Award in Grantsmanship. Presented at the Southern University and A&M College System Second Annual Faculty and Staff Recognition Reception

2008 Award for Innovative Excellence in Teaching, Learning and Technology

Southern University Beta Alpha Chapter of Sigma Gamma Rho Sorority, Inc. "Man of Excellence Award" for Spring 2007 in

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## Bobbie J. Remble

6936 Celia Avenue Baton Rouge, Louisiana 70811  
225-771-1360, bremble@cox.net

### Experience

2006- Present Southern University A&M Baton Rouge, La.

#### **Site Coordinator**

Project MISE  
Physical Science  
Mathematics

2003–2006 Baker Middle School, Baker, LA

#### **Science Teacher**

Lead Teacher for Science Teachers.  
NASA Team Leader.  
Earth and Physical Science.

2001-2003 West Feliciana Middle School, Saint Francisville, LA

#### **Science Teacher**

Taught 8<sup>th</sup> grade science in an integrated curriculum..

2000–2001 McKinley Middle Magnet School, Baton Rouge, LA

#### **Mathematics and Science Teacher**

Taught Mathematics and Science to 6<sup>th</sup> grade students.

1998–2000 Point Coupee Parish School Board, New Roads, LA

#### **Mathematics and Science Site Coordinator**

Conducted In-service for K-8<sup>th</sup> grade teachers.  
Modeled classroom activities and lessons.  
Supported teachers via site visits.  
1986-1998 Upper Pointe Coupee Elementary, Batchelor, LA  
Mathematics and Science Teacher  
Taught General Science to 6<sup>th</sup> grade students.  
Implemented the hands on method of Teaching Math and Science.

### Education

Summer 2006, Exploratorium San Francisco, Ca  
9 Post graduate credit hours  
Spring 2005 University of Idaho, Moscow, Idaho  
Earned 3 post graduate credit hours.  
Summer 2004 University of Oklahoma-Norman, OK  
Earned 9 post graduate credit hours.  
1998-1999 University of Louisiana, Lafayette, LA  
Earned 9 post graduate credit hours.  
1990-1998 Louisiana State University, Shreveport, LA  
Earned 18 post graduate credit hours.

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1990-1998 Louisiana State University, Baton Rouge, LA  
 Earned 3 post graduate credit hours.  
 1986-1989 Southern University, Baton Rouge, LA  
 Earned 24 credit hours toward a Masters Degree in Elementary  
 1974-1979 Southern University, Baton Rouge, LA  
 Earned BA degree in Elementary Education.  
 Performance Based Assessment, Standard Based Learning Styles, and  
 Robotics, Participant  
 NASA Explorer School Teacher Training, Participant  
 La SIP Louisiana Rural Institute Math Program, Presenter  
 Evelyn Daniel Science Program: Earth and Environmental Science,  
 Participant  
 Project Learning Tree  
 Project Wild  
 Wonders of the Wetlands and Aquatic Wild  
 Math, A Way of Thinking  
 Sum It Up in Math, Presenter  
 Pat Jones, Math Leadership Institute  
 2 LaSIP Chemistry (Project Chem)  
 MATELT Advance Leadership Programs  
 Regional Advisory Counsel for Delta RSI  
 University of Alabama Integrated Science Program  
 Geography Institute, Consultant  
 INTECH

**Staff Development  
Leadership**

**Awards and Other  
Recognition**

Teacher of the Year, Baker Middle School 2005-2006  
 NASA Explorer School Teacher of Excellence Award  
 Teacher of the Year, Pointe Coupee Parish  
 Teacher of the Year, Upper Pointe Coupee Elementary  
 Facilitator Award for the Delta Rural Systemic Program  
 Letter of Recognition of Sponsoring LA GEA In Service  
 National Award of Excellence-NASA Explorer School Program

**Professional  
Association  
Memberships**

National Science Teachers Association (NSTA), Convention Participant  
 Louisiana Science Teachers Association (LSTA), Workshop Presenter  
 Louisiana Computer Using Educators (LaCUE), Member of Workshop  
 Team  
 Louisiana Association of Math Teacher (LAMT)  
 National Educators Association (NEA)  
 Louisiana Association of Educators (LAE)  
 Baton Rouge Math Teachers Association (BRMTA)  
 Louisiana Geography (LaGeo)

**LOUISIANA SYSTEMIC INITIATIVES PROGRAM  
2012-2013 PROFESSIONAL DEVELOPMENT PROJECTS**

**CURRICULUM VITAE**

Name Diane S. Madden 309 Forest Creek Drive Ruston, LA 71270		Current Position Title SciTEC Professional Development Coordinator Project Position Title: Co PI	
EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Louisiana Tech University	Bachelor of Arts (BA)	1966	Elementary Education (Grades 1-8)
Louisiana Tech University	Masters of Science (MS)	1996	Curriculum and Instruction—Science Education
<u>Post Graduate</u>			
Louisiana Tech University	+30	2007	Certification in Adult Education
University of Kansas		Spring 2008	Instructional Coaching Institute, Train the Trainer, Dr. Jim Knight

**PROFESSIONAL EXPERIENCE**

Louisiana Tech University 8/2001-Present

IDEA Place/SciTEC Louisiana Tech University 08/02-present)

Professional Development Coordinator and STEM Education Specialist 2008-2012

Instructor for graduate extension courses in elementary science 2008-present

Presenter, Site Coordinator, CO-PI for Louisiana Systemic Initiate Programs

RIPPLE—Inquiry based Physics and literacy Co-PI 2011 Site

Coordinator 2008,2009,2010

Beacon Literacy—How to engage students in literacy 2009

Beacon Math—Integrating math and literacy 2009

Experiment Gallery Project—General science and literacy 2002-2003

Project Achieve 2007 Developed and presented professional development science for 3<sup>rd</sup> and 4<sup>th</sup> grade teachers.

Creating Science Task for Grades 3 through 8 2007

Developed LEAP-Like Science Tasks

Integrating Science and Technology 2007

Integrating technology into the science Classroom

“Live in Louisiana” 2005 and 2006 Ouachita Parish Second Grade Project. Presenter and Site Coordinator for the project.

Louisiana Tech Enhancing Science Teaching 2005 and 2006.

Presenter and Site Coordinator.

Engineering Higher Student Achievement in math and Science TIMA 489C & TISC 489C, hands on science and math lessons for improving state test scores      Presenter and Site Coordinator.

Standards Based Science Education Ouachita Parish Education 589 C 2003. Developed      and presented physical science lessons and served as site coordinator

LA GEAR UP Project Staff Developer and Presenter—2003,2005,2006,2007.

Environmental Science Exploration Coordinator

K-16 Partnership for School Reform—Monroe City Schools. 2006-2010.

Site coordinator.

Educational Planning and Assessment System. 2005-2007.

University Faculty for student teachers and interns. 2004-present.

Digital Edge Program—Louisiana Tech University 2004 Master Teacher for project.

PK-16+ Alternative Certification Program Louisiana Tech University 2003-2004

Engineering 289C Problem Solving for Future teachers Co Instructor 2002 -2003

Environmental Protection Agency (Mystery Litter Zone) project 2001-2002.

Graduate Assistant, College of Education, Louisiana Tech University, 2001-2002

#### Public School Teaching Experience

Ruston Junior High School, 8<sup>th</sup> Earth Science Teacher,1999-2002.

Lincoln Parish Secondary Alternative School, 1998-1999.

9<sup>th</sup>-12<sup>th</sup> grades Physical Science, Environmental Science, and Biological Sciences.

Choudrant High School, 1995-1998.

7<sup>th</sup> and 8<sup>th</sup> grade Life and Earth Sciences

Cedar Creek High School, Ruston, LA. 1992-1995.

7<sup>th</sup> and 8<sup>th</sup> grade Life and Earth Sciences

Platt Elementary School, Haughton, Louisiana, 1970-1972.

Librarian/Resource Director 1970-1972

Apollo Elementary School, Bossier City, Louisiana, 1969-1970.

Saline High School, Saline, Louisiana, 1-1969 to 5-1969.

West Springfield Elementary School, West Springfield, Virginia 1966-1969.

#### Professional organizations

- National Council of Teachers of Mathematics
- Louisiana Association of Teachers of Mathematics
- National society for Gifted and Talented
- National Council for Social studies
- National Science teachers Association
- Louisiana Science Teachers Association
- Louisiana Association of Computer Using educators



## Glenn S. Beer

**Director, Science and Technology Education Center, Louisiana Tech University;**

**Tel. (318) 257-2866; Fax (318) 257-4753; Email – [gbeer@latech.edu](mailto:gbeer@latech.edu)**

**Home: 318-255-5305 Cell: 318-548-7390**

### **(a) Professional Preparation**

- 2009 Ed.D. Curriculum, Instruction, and Leadership; Cognate: Educational Leadership, Louisiana Tech University
- 2002 M.S. Curriculum & Instruction, Adult Education, Louisiana Tech University
- 2000 B.S. Secondary Education, Mathematics, Louisiana Tech University

### **(b) Appointments**

- 2000-Pres. Director, Science and Technology Education Center, Louisiana Tech University
- 2009-Pres. Assistant Professor, College of Education, Louisiana Tech University
- 2002-2009 Instructor, College of Education, Louisiana Tech University
- 2000 Adjunct Professor, Business and Math Instructor, Career Technical College, Monroe, Louisiana
- 1999 Secondary Math Teacher, Glenbrook School, Minden, Louisiana  
Algebra I, Algebra II, and Geometry
- 1998-1999 Secondary Math Teacher, Bethel Christian School, Ruston, Louisiana  
Algebra I, Algebra II

### **( c). Publications**

- Beer, G., Livingston, M., & Tobacyk, J. (2011). Promoting college access in first generation college students through creating a college-going culture: A multipronged systemic approach in the spirit of appreciative advising. *The Mentor: An Academic Advising Journal*. <http://www.psu.edu/dus/mentor/>; In Press.
- Beer, G. (2010). Key institutional research area: Expanding college access. White paper submitted to the Louisiana Tech University Research Council.
- Beer, G. (2009). The impact of summer/academic year learning projects on the academic achievement of student participants. Louisiana Tech University.
- Beer, G., Robert, S., & Cobb, J. (2008). Louisiana GEAR UP summer camp counselor handbook, College of Education, Louisiana Tech University distributed by LaSIP/LA GEAR UP.

### **C(1) Grantsmanship**

- 2011 \$230,979.73; USDE through LaSIP/LA GEAR UP; Louisiana Tech/LA GEAR UP Explorers Camps
- 2011 \$288,315.50; USDE through LaSIP/LA GEAR UP; Statewide Management of the Summer Academic Year Learning Projects: Louisiana College Access and Mentoring Programs for Success (LaCAMPS)

2011	\$461,242.18; USDE through LaSIP/LA GEAR UP: Implementation of Quality Core in all LA GEAR UP Schools as Part of a Comprehensive School Reform Effort
2011	\$222,380.20; USDE through LaSIP; Best of RIPPLE IV: A Physical Science Project for Middle and High School Teachers
2011	\$222,570.76; USDE through LaSIP; W-7 Literacy Project (Co-PI with C. Cummins, A. Vessell, & K.K. Lopez)
2011	\$103, 711.75; USDE through LaSIP/LA GEAR UP; Building Bridges to the Future Camp (Co-PI with Don Schillinger)
2011	\$115,161.50; USDE through LaSIP/LA GEAR UP; Louisiana Tech Sports Medicine Camp (Co-PI with T. Schilling and L. Dornier)

## **Selected Presentations**

### **International**

Tobacyk, J., Livingston, M., Beer, G. (2009) Psychological type of children from underperforming schools: Implications for interventions. Paper presented at the annual meeting of the Association for Psychological Type International, Dallas, TX, August 6-9, 2009.

Beer, G. and Basinger, D. (2005). Year 2: Louisiana Tech Explorers Camps. Paper presented at the Hawaii International conference on Education, Honolulu, HI, January, 2005

### **National**

Beer, G. (2011). Promoting rigor and relevance in core content areas in all LA GEAR UP schools. Paper presented at the annual meeting of the National Council for Community and Education partnerships, San Francisco, CA, July 17-20.

Beer, G. and Schilling, T. (2009). Using adventure education to promote leadership development. Paper presented at the annual meeting of the National Council for Community and Educational Partnerships, San Francisco, CA, July 19-22.

**Lindsey Blair Keith-Vincent**

2049 Cedar Creek Road

Ruston, LA 71270

318-805-3277

[lbkv@latech.edu](mailto:lbkv@latech.edu)

[lindsey@relianted.com](mailto:lindsey@relianted.com)

=====

**Education:**

- Louisiana Tech University, Ruston, LA  
Graduated Magna Cum Laude May 2007  
BS Curriculum and Instruction, Secondary English Education  
\*Additional certification obtained in Secondary Biology Education per Praxis scores.
- Louisiana Tech University, Ruston, LA  
MS Curriculum and Instruction, Adult Education November 2008
- Louisiana Tech University, Ruston, LA  
Pursuing Ed.D. in Curriculum and Instruction through LEC  
Grambling State University, The University of Louisiana at Monroe,  
and Louisiana Tech University Expected Graduation May 2014

**Professional Experience:**

- August 2011-Present  
Louisiana Tech University College of Education- Special Topics Courses  
Ruston, LA  
Adjunct Faculty
- June 2008-Present  
The IDEA Place Math and Science Discovery Center  
Louisiana Tech University, Ruston, LA  
Museum Educator
- February 2008-June 2008  
Ruston High School, Ruston, LA  
Secondary English Teacher
- June 2007-June 2008  
Louisiana Tech University, Ruston, LA  
Graduate Assistant
- May 2006-August 2006  
Louisiana Tech University, Ruston, LA  
LA Gear Up Summer Camp Counselor

**Recent Grant Work and Professional Projects:**

- Graduate Assistant, EPAS Grant 07-07
- LA GEAR UP Preparing Parents for Possibilities (P3), Director, 07-08, 08-09, 10-11, 11-12
- LA GEAR UP Academic Summer Camp Session, Facilitator, 07-08, 08-09
- Summer Science Institute Director, 07-08, 08-09, 10-11, 11-12
- STEM Camp with the LA Center for the Blind, Educator, 08-09, 09-10
- Sci-Tech Space Institute for Teachers with Sci Port Discovery Center, Facilitator, 09-10
- LA GEAR UP Guidance and Counseling Project, Site Coordinator, 09-10, 10-11, 11-12
- The Best of RIPPLE (LASIP), Site Coordinator, 09-10, 10-11, 11-12
- Project INVEST Service Learning Grant, Director, 09-10, 10-11, 11-12
- LA GEAR UP Explorer Academic Summer Camp, Co-Director, 10-11
- NASA Summer of Innovation Summer Camp, Co-Director, 10-11
- LA GEAR UP/ ACT Quality Core, Site Coordinator, 10-11
- LA GEAR UP Explorer Academic Summer Camp, Director, 11-12
- LA GEAR UP Aviation Academic Summer Camp, Co-Director, 11-12
- LA GEAR UP STEM/ Ballooning Academic Summer Camp, Co-Director, 11-12
- LA GEAR UP Film/ Documentary Academic Summer Camp, Co-Director, 11-12

**LOUISIANA SYSTEMIC INITIATIVES PROGRAM  
2012-2013 PROFESSIONAL DEVELOPMENT PROJECTS  
CURRICULUM VITAE**

Name: <b>Dr. Luria Young</b>		Current Position Title: <b>Associate Professor &amp; LIGO Science Education Specialist</b> Project Position Title: <b>Co-PI</b>	
EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Southern University	B.S.	1993	Biology
Louisiana State University	M.Ed.	1995	Secondary Science
Louisiana State University	Ed.S.	1997	Secondary Science
Louisiana State University	Ph.D.	2004	Ed. Leadership & Research

RESEARCH AND PROFESSIONAL EXPERIENCE: DO NOT EXCEED TWO PAGES. Begin with present position, list in reverse chronological order previous relevant employment, experience, and honors.

**PROFESSIONAL POSITIONS**

**Southern University Department of Curriculum and Instruction (C&I)**, Baton Rouge, Louisiana  
Laser Interferometer Gravitational Wave Observatory (LIGO) Science Education Specialist and Associate Professor, August 2004-present, Responsibilities: Lead coordinator for the College of Education's involvement in a five-year collaboration with the California Institute of Technology (Caltech), the Exploratorium of San Francisco, and the Louisiana Gaining Early Awareness and Readiness for Undergraduate Programs (LA GEAR UP).

**Louis Stokes- Louisiana Alliance for Minority Participation (LS-LAMP)**, Southern University, Baton Rouge, Louisiana. Statewide Program Administrator, August 1999-2004

**Louis Stokes-Louisiana Alliance for Minority Participation (LS-LAMP)**, Southern University, Baton Rouge, Louisiana. Statewide Evaluation Coordinator, June 1998-July 1999

**Educational Opportunity Center (EOC), Southeastern Louisiana University**, Hammond Louisiana  
Outreach Generalist, July 1997 – May 1998

**Louisiana State University Office of Minority Student Services**, Baton Rouge, Louisiana  
Graduate Intern, August 1996 - December 1996  
Responsibilities: Coordinated the Genesis Program and Peer Mentoring Program

**Dryades YMCA**, New Orleans, Louisiana  
External Evaluator, August 1996-March 1997

**Louisiana State Department of Education**, Baton Rouge, Louisiana  
Graduate Intern, January 1996 - May 1996

**SELECTED SCHOLARLY PUBLICATIONS**

Young, L. (2010). *Defining Persistence: Students with a GED in Four-Year Institutions*. Hawaii International Conference on Social Sciences Proceedings, Honolulu, HI

Pitre, A., Ray, R., & Stubblefield, L. (2009). The Challenge of Implementing Black History: Student Narratives of a Black History Programs. In A. Pitre (Ed.), *Critical Black Pedagogy in Education*, Lanham, MD: Rowman and Littlefield Education

Stubblefield, L. (2006). Math Anxiety Among GED Recipients in Four-Year Institutions. *The Journal of Mathematical Sciences and Mathematics Education*, 1(2), 19-23.

Bagayoko, D., & Stubblefield, L. (2006). K-12 Outreach: The Model of the Timbuktu Academy. *Proceedings of the Conference on K-12 Outreach from University Science Departments, North Carolina State University Science House*, 15-21.

Bagayoko, D., Stubblefield, L., Reed, J., Kelley, E., & Hasan, S. (2005). A Significant Other for Effective Education Making Adequate Time for Teaching and Learning. *Journal of Urban Education Focus on Enrichment*, 2(1), 42-56.

Bagayoko, D. & Stubblefield, L. (2005). Competitive Mentoring: Deploying the Model of a US Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. *LS- LAMP National Student Research Conference Proceedings*, 139-140.

### **SELECTED PROFESSIONAL PRESENTATIONS**

*Hawaii International Conference on Social Sciences, Honolulu, HI (Luria Young)*

Defining Persistence: Students with a GED in Four-Year

Institutions, June 3, 2010

*Hawaii International Conference on Social Sciences, Honolulu, HI (Bobbie Remble, Luria Young, Joseph Meyinsse, Sheila Griffin)*

Interfacing Informal with Formal Science and Mathematics Education in the Classroom, June 3, 2010

*Hawaii International Conference on Social Sciences, Honolulu, HI (Joseph Meyinsse, Luria Young, Bobbie*

*Remble, Sheila Griffin)*

Learning Science and Mathematics for Teaching: Results from Louisiana's Professional Development Projects, June 3, 2010

*Mid-South Educational Research Association (MSERA) Annual Research Conference, Baton Rouge, LA, (Luria Young, Joseph Meyinsse, Ken Ford, Bobbie Remble)*

Inquiry-based Teaching and Learning in Science and

Mathematics using Exhibits and "Snacks", November 4, 2009

*University of South Africa (UNISA) Teacher Education at a Distance Conference, Pretoria, South Africa, (Joseph Meyinsse and Luria Stubblefield)*

Assessing the Effectiveness of Two Interventions on Pre-Service and In-Service Teachers Pedagogical Practices, October 3, 2008

*Dillard University Minority Serving Institutions Research Partnerships Conference 2008, New Orleans, LA, (presenting for Dr. Diola Bagayoko)*

Undergraduate Research and Innovation: Timbuktu Academy, May 14, 2008

*2YC<sub>3</sub> Conference, Baton Rouge, LA (Luria Stubblefield, Joseph Meyinsse, Bobbie Remble)*

Chemistry Connections in the Classroom (C3) using Inquiry, April 3, 2008

### **GRANTS FUNDED**

Co-Project Director, Project MISE, LaSIP; \$189,000; 2011-20012

Co-Project Director, Project MISE, LaSIP; \$162,000; 2010-20011

Co-Project Director, Project MISE, LaSIP; \$192,000; 2009-20010

Co-PI, National Science Mathematics Initiative, UTeach (in collaboration with Louisiana State University and Southeastern Louisiana University), \$1,578,218, 2007-2012

Co-PI, Robert Noyce Scholarships, NSF, \$750,000, 2007-2011

Co-Project Director, Project MISE, LaSIP; \$192,000; 2007-2008

Co-PI, Physics and Mathematics at the Timbuktu Academy (PMTA), NSF, \$496,800, 2006-2010.

### **HONORS, ACTIVITIES, AND AWARDS**

Board of Examiner, National Science Teachers Association Pre-service Teacher Education Program  
Reviewer, Appointed Spring 2009

Louisiana Board of Examiners, Appointed Spring 2008

APPENDIX E

CURRENT AND PENDING SUPPORT

## 2012-13 LaSIP PROFESSIONAL DEVELOPMENT PROJECTS

### CURRENT AND PENDING SUPPORT

List all State and federal funding support for each IHE faculty member during the funding cycle. Duplicate this form for each IHE faculty member, and use additional sheets as necessary.

NAME OF FACULTY: Joseph Meyinsse

Status of Support:      Current   X   Pending      Submission Planned in Near Future

Proposal Title (or Semester Teaching Support): Project RIPPLE/MISE 2012 - 2013

Source of Support: State

Award Amount (or Monthly Teaching Rate): \$      Period Covered: July 1, 2012 – June 15, 2013

Location of Activity: SUBR, LIGO, and La Tech

Person-Months or % of Effort Committed to the Project:      Cal Yr   X   AY   X   Summer

Status of Support:   X   Current      Pending      Submission Planned in Near Future

Proposal Title(or Semester Teaching Support): Project MISE 2011- 2012

Source of Support: State



Award Amount (or Monthly Teaching Rate): \$189,000.00 Period Covered: July 1, 2011 – June 15, 2012

Location of Activity: SUBR and LIGO

Person-Months or % of Effort Committed to the Project: Cal Yr X AY X Summer

Status of Support: X Current Pending Submission Planned in Near Future

Proposal Title (or Semester Teaching Support): LIGO Science Education Center Partnership (SUBR-LIGO)

Source of Support: National Science Foundation

Award Amount (or Monthly Teaching Rate): \$2.37 Million Period Covered September 3, 2009 – October 30, 2014

Location of Activity: SUBR and LIGO

Person-Months or % of Effort Committed to the Project: Cal Yr X AY X Summer

(Form 7 - 2012-13 LaSIP PD, Revised 7/2011)

## 2012-13 LaSIP PROFESSIONAL DEVELOPMENT PROJECTS

## CURRENT AND PENDING SUPPORT

List all State and federal funding support for each IHE faculty member during the funding cycle. Duplicate this form for each IHE faculty member, and use additional sheets as necessary.

NAME OF FACULTY: Glenn Beer

Status of Support: \_Current XXPending      Submission Planned in Near Future

Proposal Title (or Semester Teaching Support):La Tech Explorers Camps

Source of Support: USDOE through LA GEAR UP

Award Amount (or Monthly Teaching Rate): \$104,892.68    Period Covered:04/01/12-06/15/13

Location of Activity: Louisiana Tech University

Person-Months or % of Effort Committed to the Project:      Cal Yr      AY .75 mo. Summer

Status of Support:      Current XX Pending      Submission Planned in Near Future

Proposal Title(or Semester Teaching Support):Statewide management of Summer/Academic Year Learning Projects

Source of Support: USDOE through LaSIP

Award Amount (or Monthly Teaching Rate): \$\$282,751.55    Period Covered:04/01/12-06/15/13

Location of Activity: Louisiana Tech University

Person-Months or % of Effort Committed to the Project: 3 mo. Cal Yr AY Summer

Status of Support: Current XX Pending Submission Planned in Near Future

Proposal Title (or Semester Teaching Support): Aviation Summer Camp

Source of Support: USDOE Through LA GEAR UP

Award Amount (or Monthly Teaching Rate): \$105,826.02 Period Covered 04/01/12-09/30/12

Location of Activity: Louisiana Tech University

Person-Months or % of Effort Committed to the Project: Cal Yr AY 1 mo. Summer

Status of Support:      Current   XX Pending      Submission Planned in Near Future

Proposal Title (or Semester Teaching Support): Film Camp

Source of Support: USDOE Through LA GEAR UP

Award Amount (or Monthly Teaching Rate): \$107,112.29   Period Covered 04/01/12-09/30/12

Location of Activity: Louisiana Tech University

Person-Months or % of Effort Committed to the Project: .75 mo Cal Yr      AY      . Summer

Status of Support:      Current   XX Pending      Submission Planned in Near Future

Proposal Title (or Semester Teaching Support): C3 Chemistry Project

Source of Support: LaSIP

Award Amount (or Monthly Teaching Rate): \$200,392.22   Period Covered 07/01/12-06/15/13

Location of Activity: Louisiana Tech University

Person-Months or % of Effort Committed to the Project: .5 mo. Cal Yr      AY      Summer

**APPENDIX F**  
**MEASURABLE OBJECTIVES WORKSHEETS**

## 2012-13 LaSIP PROFESSIONAL DEVELOPMENT PROJECTS

### Measureable Objectives Worksheet (1)

Aligned with the first LaSIP goal stated below, design at least two measureable objectives which answer each of the following five questions:

- (1) **Who** is involved?
- (2) **What** is the desired outcome?
- (3) **How** will progress be measured?
- (4) **When** will the outcome occur?
- (5) What is the **level of proficiency**?

Refer to page \_\_\_\_ for a detailed explanation of each question. Combine the five answers to form a sentence for your measureable objective. Use the checklist provided on page \_\_\_\_ to ensure the objectives contain all necessary components. This page may be duplicated if additional objectives are desired.

#### **LaSIP Goal 1:** *Increase student achievement on State high-stakes testing.*

##### Objective 1:

Who: Students Grades 6,8,9

What: Increased science content knowledge

How: Increased school science content as measured by iLEAP and LEAP; successful completion of 9<sup>th</sup> grade physical science course work.

When: Summer Institute 2012, Academic Year 2012-2013.

Proficiency level: 10% growth in Science of Inquiry and Physical Science for students in grades 6 and 8 ; and 100% of 9<sup>th</sup> grade students will earn a grade of at least a "C" in high school physical science.

Written objective: Students in grades 6 ,8 in participating schools will show a 10% gain in Average Percent Correct in *Science of Inquiry* and *Physical Science* as measured by the *iLEAP* and *LEAP*, and 100% of the high school physical science students will earn an average grade of a "C" or better in high school physical science.

##### Objective 2:

Who: Students Grades 6, 8

What: Increased science literacy skills

How: Science Constructed-Response Item scores

When: Spring 2013

Proficiency level: A 10% gain in the average percent correct score on the Constructed-Response items section of *iLEAP* and *LEAP* tests.

Written objective: Students in grades 6 and 8 in the participating schools will show a 10% gain in Average Percent Correct on the Constructed-Response Items section of the *iLEAP* and *LEAP* tests.

## 2012-13 LaSIP PROFESSIONALDEVELOPMENT PROJECTS

### Measureable Objectives Worksheet (2)

Aligned with the first LaSIP goal stated below, design at least two measureable objectives which answer each of the following five questions:

- (1) **Who** is involved?
- (2) **What** is the desired outcome?
- (3) **How** will progress be measured?
- (4) **When** will the outcome occur?
- (5) What is the **level of proficiency**?

Refer to page \_\_\_\_\_ for a detailed explanation of each question. Finally, combine the five answers to form a sentence for your measureable objective. Use the checklist provided on page 44 to ensure the objectives contain all necessary components. This page may be duplicated if additional objectives are desired.

**LaSIP Goal 2:** *Plan effective PD based on the high-need LEA(s)/schools' data-driven needs and developed using research-based PD strategies that will take place in summer institutes, during the academic year (AY), and/or through on-line or web-based assignments and job-embedded activities.*

#### Objective 1:

Who: Project Director, Part-time University Coordinator, and School-based instructional Coaches

What: Summer Institutes 2012-2013, and Academic Year 2012-2013.

How: Sign-in sheets, anecdotal records of faculty study groups and records of peer-mentoring sessions

When: Summer 2012 and Academic Year 2012-2013 and Summer 2012

Proficiency level: A 6,8,9 grade levels learning strategies document for physical science, science of inquiry, Exploratorium snacks, and literacy strategies will be developed. These strategies will address student Content Achievement standards levels and Constructed Response portions of the iLEAP, LEAP and GEE tests

Written objective: Project personnel will plan and present professional development opportunities for 6<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> grade teacher of science that address student needs identified by iLEAP and LEAP.

#### Objective 2:

Who: Participating teachers grades 6,8,9

What: Attendance at the 2012 Summer Institute, 2012-2013 academic year follow-up sessions, and 2010 Summer Institute.

How: Implementation of research-based best practices in the teaching of middle school and high school science.

When: Academic year 2010-2011

Proficiency level: 85% teacher and instructional coach participation and a minimum of 12 content/literacy strategies 4 per area of physical science, science of inquiry, and literacy strategies.

Written objective: A minimum of 85% of the participants will engage in the Professional Development activities provided by the project as evidenced by sign-in sheets, anecdotal records of faculty study groups, and records of peer-mentoring sessions.

### Measureable Objectives Worksheet (3)

Aligned with the first LaSIP goal stated below, design at least two measureable objectives which answer each of the following five questions:

- (1) Who is involved?
- (2) What is the desired outcome?
- (3) How will progress be measured?
- (4) When will the outcome occur?
- (5) What is the level of proficiency?

Refer to page \_\_\_\_\_ for a detailed explanation of each question. Finally, combine the five answers to form a sentence for your measureable objective. Use the checklist on provided on page 44 to ensure the objectives contain all necessary components. This page may be duplicated if additional objectives are desired.

**LaSIP Goal 3:** Increase leadership capacity and pedagogical skills for target schools through school/district buy-in, school-based implementation, and mentoring during the AY.

#### Objective 1:

Who: Participating Teachers

What: Dissemination of Project Information

How: Materials for teachers to share at meetings, and to assist in the implementation of science content and literacy strategies.

When: Fall and Spring 2012

Proficiency level: At least 60% of participants will engage in participation at a local, state, national or regional conference.

#### Written objective:

To increase teacher exposure to best practices and innovative pedagogies, 60 % of participants will participate in a local, state, national, or regional conference and share experiences aligned with the goals of RIPPLE/MISE on the Moodle forum with other participants.

#### Objective 2:

Who: Participating Teachers

What: Collaboration and Project Content Dissmination

How: To increase leadership capacity

When: Fall 2012

Proficiency level: At least 90% of participants will engage in continual online learning through LATECH MOODLE

Written objective: To increase leadership capacity of participants, 90% of participant will participate in an online follow up course on LATECH Moodle on which they will utilize discussion board to collaborate with colleagues, reflect on project implementation, and explore current STEM instructional research.



APPENDIX G  
LETTERS OF SUPPORT



Office of the Superintendent  
1050 South Foster Drive, Baton Rouge, Louisiana 70806  
P.O. Box 2950, Baton Rouge, Louisiana 70821-2950  
Phone (225) 922-5618, Fax (225) 922-5499  
www.ebrschools.org

*John Dilworth, Superintendent*

February 10, 2012

Dr. Joseph Meyinsse  
Chair and Professor of Mathematics  
Southern University and A&M College  
P.O. Box 9757  
Baton Rouge, LA 70813

Dear Dr. Meyinsse:


The East Baton Rouge Parish School System (EBRPSS) applauds the efforts of Project Modeling Inquiry Science Education (MISE)/Ripple's goal of enhancing inquiry-based science and mathematics teaching and learning using exhibits and "snacks" that focus on Laser Interferometer Gravitational Wave Observatory (LIGO) science concepts. As Superintendent of the EBRPSS, I can personally attest to the opportunities this program offers by providing exceptional access to resources for our teachers and students that are not usually available. Using contemporary ideas to reinforce teaching and learning science and mathematics will help to ensure successful program effectiveness, increased teacher confidence and ensure students excel within our school system.

We are committed to providing the following support to Project MISE/Ripple on behalf of our teachers and students:

- Support a lead teacher by allowing time from class to work with other teachers.
- Support a field trip to the Southern University Inquiry Laboratory.
- Support one field trip per teacher to LIGO SEC at Livingston, LA (to be reimbursed up to \$500.00 to school or district by the LaSIP/ La GEAR-UP office).
- Provide materials and supplies for building "snacks."
- Allow teams to develop and implement a PD for all math/science teachers at their school during an early dismissal day.
- Allow one day for participating teachers, paid by project, to attend the Louisiana math or science conference.

I appreciate the opportunity that Southern University and A&M College is providing to our school district. I enthusiastically support this project and look forward to collaborating closely with SUBR as we work together to enhance science and mathematics teaching and learning for our teachers and students. If you need additional information, please contact me at (225) 922-5618.

Sincerely,

  
John Dilworth  
Superintendent of Schools

JLD:jem

cc: Dr. Herman Brister

# EAST FELICIANA PARISH SCHOOL BOARD

**DOUGLAS BEAUCHAMP, JR.**  
Superintendent

**MICHAEL RAY BRADFORD**  
President

225-683-8277 • 225-683-5420  
225-683-5378

12732 SILLIMAN STREET  
P.O. BOX 397  
CLINTON, LOUISIANA 70722

**MITCHELL HARRELL**  
Vice President

**FAX**  
225-683-3320

February 8, 2012

Dr. Joseph Meynsse  
Chair and Professor of Mathematics  
Southern University and A&M College  
P.O. Box 9757  
Baton Rouge, LA 70813

Dear Dr. Meynsse:

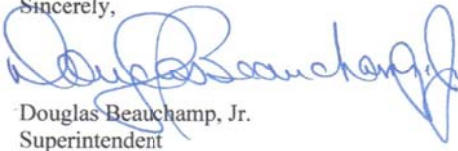
The East Feliciana Parish School System applauds the efforts of Project Modeling Inquiry Science Education (MISE/Ripple) goal of enhancing inquiry-based science and mathematics teaching and learning using exhibits and "snacks" that focus on Laser Interferometer Gravitational Wave Observatory (LIGO) science concepts. As Superintendent of the school system, I can personally attest that the proposed program offers exceptional access to resources for our teachers and students that are not usually available. Using contemporary ideas to reinforce teaching and learning science and mathematics will help to ensure successful program effectiveness, increased teacher confidence, and ensure students excel within our school system.

We are committed to providing the following support to Project MISE/Ripple on behalf of our teachers and students:

- Support a lead teacher by allowing her/him time from class to work with other teachers
- Support a field trip to the Southern University Inquiry Laboratory.
- Support one field trip per teacher to LIGO SEC at Livingston, LA (to be reimbursed up to \$500.00 to school or district by the LaSIP/ La GEAR-UP office).
- Materials and supplies for building "snacks"
- Allow teams to develop and implement a PD for all math/science teachers at their school during an early dismissal day.
- Allow one day for participating teachers, paid by project, to attend the Louisiana math or science conference.

I am greatly thankful for the opportunity that Southern University and A&M College is providing to my school district. I enthusiastically support this project and look forward to collaborating closely with SUBR as we work together to enhance science and mathematics teaching and learning for our teachers and students. If you need additional information, please contact me at 225-683-3040.

Sincerely,



Douglas Beauchamp, Jr.  
Superintendent

PUPIL APPRAISAL  
225-683-5683 • 225-683-8582

"An Equal Opportunity Employer"  
SPECIAL EDUCATION  
225-683-3318

IASA TITLE I  
225-683-6936

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DONALD W. AGUILLARD, PH.D.  
SUPERINTENDENT

EDWARD PAYTON, JR.  
VICE PRESIDENT

*St. Mary Parish School Board*

February 8, 2012

Dr. Joseph Meyinsse  
Chair and Professor of Mathematics  
Southern University and A & M College  
P.O. Box 9757  
Baton Rouge, LA 70813

Dear Dr. Meyinsse:

The St. Mary Parish School System commends the efforts of Project Modeling Inquiry Science Education (MISE)/Ripple aimed at strengthening inquiry-based science and mathematics teaching and learning using exhibits and "snacks" that focus on Laser Interferometer Gravitational Wave Observatory (LIGO) science concepts. As superintendent of the school system, I can personally confirm that the proposed program offers substantial access to resources for our teachers and students that are not typically available. Using innovative ideas to enhance teaching and learning science and mathematics will help to ensure successful program implementation, increased teacher confidence, and improved student achievement within our school system.

We are devoted to providing the following support to Project MISE on behalf of our teachers and students:

- Support a lead teacher by allowing her/him time from class to work with other teachers.
- Support a field trip to the Southern University Inquiry Laboratory.
- Support one field trip per teacher to LIGO SEC at Livingston, LA (to be reimbursed up to \$500.00 to school or district by the LaSIP/ La GEAR-UP office).
- Materials and supplies for building "snacks"
- Allow teams to develop and implement a PD for all math/science teachers at their school during a district professional development day.
- Allow one day for participating teachers, paid by project, to attend the Louisiana math or science conference.

We, as a school system, are extremely appreciative for the opportunity that Southern University and A&M College, in partnership with Exploratorium of San Francisco and Louisiana Technology, is contributing to our school district. By supporting this effort, we are looking forward to collaborating closely with SUBR as we work together to enhance science and mathematics instruction and student learning.

Sincerely,



Dr. Donald Aguillard  
Superintendent  
St. Mary Parish School Board

P.O. BOX 170, CENTERVILLE, LA 70522-0170  
(337) 836-9661

FAX NUMBER  
(337) 836-5461

474 HIGHWAY 317, CENTERVILLE, LA  
[www.stmary.k12.la.us](http://www.stmary.k12.la.us)



# Tensas Parish School Board

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ST. JOSEPH, LOUISIANA -71366  
PHONE (318) 766-3269 \* FAX (318) 766-3634  
EMAIL: csjohnsn@tensaspsb.org

February 8, 2012

Dr. Joseph Meynsse  
Chair and Professor of Mathematics  
Southern University and A&M College  
P.O. Box 9757  
Baton Rouge, LA 70813

Dear Dr. Meynsse:

The Tensas Parish School System commends the efforts of Project Modeling Inquiry Science Education (MISE) aimed at strengthening inquiry-based science and mathematics teaching and learning using exhibits and "snacks" that focus on Laser Interferometer Gravitational Wave Observatory (LIGO) science concepts. As Superintendent of the school system, I can personally confirm that the proposed program offers substantial access to resources for our teachers and students that are not typically available. Using innovative ideas to enhance teaching and learning science and mathematics will help to ensure successful program implementation, increased teacher confidence, and improved student achievement within our school system.

We are devoted to providing the following support to Project MISE on behalf of our teachers and students:

- Support a lead teacher by allowing her/him time from class to work with other teachers
- Support a field trip to the Southern University Inquiry Laboratory.
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- Materials and supplies for building "snacks"
- Allow teams to develop and implement a PD for all math/science teachers at their school during an early dismissal day.
- Allow one day for participating teachers, paid by project, to attend the Louisiana math or science conference.

We, as a school system, are extremely appreciative for the opportunity that Southern University and A&M College is contributing to our school district. By supporting this effort, we are looking forward to collaborating closely with SUBR as we work together to enhance science and mathematics instruction and student learning.

Educationally and sincerely yours,

*Carol S. Johnson*

Carol S. Johnson, Superintendent  
Tensas Parish School Board

CSJ/bv



## Avoyelles Parish School Board

221 Tunica Drive West  
Marksville, LA 71351  
7 February 2012

Dwayne A. Lemoine, Superintendent  
Craig W. Foster, Assistant Superintendent

Thelma J. Prater  
Director of Federal Programs/Curriculum

Mary L. Bonnette, CPA  
Director of Finance

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Bunkie: (318) 346-2994  
Cottonport: (318) 876-3391  
Marksville: (318) 253-5982  
FAX #: (318) 253-9680  
FAX #: (318) 253-5178

Dr. Joseph Meyinsse  
Chair and Professor of Mathematics  
Southern University and A and M College  
Post Office Box 9757  
Baton Rouge, Louisiana 70813

Dear Dr. Meyinsse:

The Avoyelles Parish School System applauds the efforts of Project Modeling Inquiry Science Education (MISE) goal of enhancing inquiry-based science and mathematics teaching and learning using exhibits and "snacks" that focus on Laser Interferometer Gravitational Wave Observatory (LIGO) science concepts. As Superintendent of the school system, I can personally attest that the proposed program offers exceptional access to resources for our teachers and students that are not usually available. Using contemporary ideas to reinforce teaching and learning science and mathematics will help to ensure successful program effectiveness, increased teacher confidence, and ensure students excel within our school system.

We are committed to providing the following support to Project MISE on behalf of our teachers and students:

- Support a lead teacher by allowing her/him time from class to work with other teachers.
- Support a field trip to the Southern University Inquiry Laboratory.
- Support one field trip per teacher to LIGO SEC at Livingston, Louisiana (to be reimbursed up to \$500.00 to school or district by the LaSIP/La GEAR-UP office).
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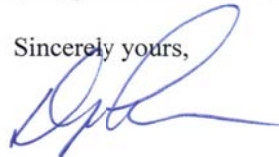
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Page 2  
Dr. Meyinsse  
February 7, 2012

I am greatly thankful for the opportunity that Southern University and A and M College is providing to my school district. I enthusiastically support this project and look forward to collaborating closely with SUBR as we work together to enhance science and mathematics teaching and learning for our teachers and students.

If you need additional information, please contact me at (318) 240-0201.

Sincerely yours,



Dwayne Lemoine  
Superintendent of Schools

DL/cj

**PROJECT RIPPLE/MISE**  
**LASIP Principal Commitment Form**  
**2012-2013**

We are excited about the possibility of offering Project RIPPLE/MISE to teachers in your district. In order to receive LASIP funding, it is imperative that we indicate your district's commitment to the project and willingness to share the opportunity with your teachers.

The goals of the proposed project are as follows:

- 1) Communicate LIGO-related science concepts to the public through exposing teachers to such concepts through work at LIGO with the teachers returning and disseminating the information to students and families through inquiry-based instruction.
- 2) Strengthen pre-service and in-service science teaching through modeling of effective pedagogical practices including various literacy strategies, construction of "snacks," and inquiry-based instruction.
- 3) Create a national model that demonstrates how Southern University and Louisiana Tech University, LASIP, high-need school districts, LIGO, and The IDEA Place can work together to support inquiry-based science teaching and learning.

It is not possible to accomplish these goals without your support. Therefore, we are asking that you complete and sign this commitment form indicating your understanding of the project requirements and your willingness to support the project participants as they work to implement the strategies presented through this project. The following statements describe the specific commitments we are seeking in support of the project.

As a representative of the district listed below, I agree to do the following:

1. Disseminate project recruitment information to area educators;
2. Allow project participants to attend the AYF sessions following the 2012 Summer Workshop;
3. Allow project participants to implement strategies and utilize materials obtained during the LASIP workshop sessions;
4. Allow project participants time to redeliver project content to the entire school faculty during a school professional development day or at scheduled school faculty meetings.

Names of school representatives participating in project:

District Representative : Sheldon Jones District: Richland Parish  
e-mail: srjones@richland.k12.la.us Contact Phone: (504) 728-5964



**PROJECT RIPPLE/MISE**  
**LASIP Principal Commitment Form**  
**2012-2013**

We are excited about the possibility of offering Project RIPPLE/MISE to teachers in your district. In order to receive LASIP funding, it is imperative that we indicate your district's commitment to the project and willingness to share the opportunity with your teachers.

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4. Allow project participants time to redeliver project content to the entire school faculty during a school professional development day or at scheduled school faculty meetings.

Names of school representatives participating in project:

District Representative: David Nordman District: Morehouse  
e-mail: dnordman@mpsb.us Contact Phone: 318-283-3477

David Nordman

**PROJECT RIPPLE/MISE**  
**LASIP Principal Commitment Form**  
**2012-2013**

We are excited about the possibility of offering Project RIPPLE/MISE to teachers in your district. In order to receive LASIP funding, it is imperative that we indicate your district's commitment to the project and willingness to share the opportunity with your teachers.

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4. Allow project participants time to redeliver project content to the entire school faculty during a school professional development day or at scheduled school faculty meetings.

Names of school representatives participating in project:

District Representative : Randy Hammett District: Orachita Parish  
e-mail: hammett@opsb.net Contact Phone: (318) 432-5209

**PROJECT RIPPLE/MISE**  
**LASIP Commitment Form**  
**2012-2013**

We are excited about the possibility of offering Project RIPPLE/MISE to teachers in your district. In order to receive LASIP funding, it is imperative that we indicate your district's commitment to the project and willingness to share the opportunity with your teachers.

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4. Allow project participants time to redeliver project content to the entire school faculty during a school professional development day or at scheduled school faculty meetings.

Names of school representatives participating in project:

District Representative :  District: Lincoln

e-mail: redmisto@lincolnschools.org Contact Phone: (318) 255-1430

xt-236


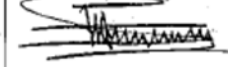
## APPENDIX H

### MEMORANDUM OF AGREEMENT AMONG PARTNERS

**2012-13 LaSIP PROFESSIONAL DEVELOPMENT PROJECTS**  
**Memorandum Of Agreement Among Partners**

<u>Louisiana Tech University and Southern University</u>	<u>Project RIPPLE/MISE</u> (Project Title)
<u>Glenn Beer</u> (Principal Investigator)	<u>Diane Madden and Joseph Meyinsse</u> (Co- Principal Investigator)

This cooperative agreement reflects the overall commitment as well as the specific responsibilities and the roles of each of the partners listed below. This MOA documents the actual working partners who are responsible for contributing to the writing of the proposal, collecting and reporting data, and for the day to day success of the project.

Type of Partner	Name of Active Partner	Title	IHE or District & School	Signature
Teacher Preparation Program (Required)	David Gullatt	Dean	Louisiana Tech University	
Dept./School of Arts & Sciences (Required)	Joseph Meyinsse	Dean	Southern University A & M	
High-need Local Education Agency/Agencies (LEA – Required)	See attached support letters.			
Additional Targeted Partners				

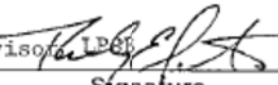
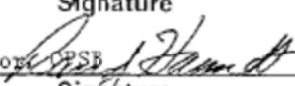
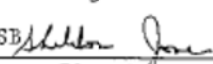
(Form 8 - 2012-13 LaSIP PD, Revised 7/2011)

APPENDIX I  
COOPERATIVE PLANNING EFFORTS

## 2012-13 LaSIP PROFESSIONAL DEVELOPMENT PROJECTS

### Cooperative Planning Efforts

Describe the process of collaboration between the high-need LEA(s), other targeted schools, and the IHE(s) in determining the needs of the LEA(s) in planning and writing this proposal. The statement should be endorsed and dated by an official from each participating institution. In addition, Letters of Support must be included in the appendices of the proposal.

1.	Ricky Edmiston, Secondary Supervisor, LPSE		2/14/12
	Typed Name, Title, Organization	Signature	Date
2.	Randy Hammett, Secondary Supervisor, RPSB		2-15-12
	Typed Name, Title, Organization	Signature	Date
3.	Sheldon Jones, Superintendent, RPSB		2-15-12
	Typed Name, Title, Organization	Signature	Date
4.			
	Typed Name, Title, Organization	Signature	Date
5.			
	Typed Name, Title, Organization	Signature	Date
6.			
	Typed Name, Title, Organization	Signature	Date
7.			
	Typed Name, Title, Organization	Signature	Date
8.			
	Typed Name, Title, Organization	Signature	Date
9.			
	Typed Name, Title, Organization	Signature	Date
10.			
	Typed Name, Title, Organization	Signature	Date

(Form 9 - 2012-13 LaSIP PD, Revised 7/2011)

APPENDIX J  
STIPEND OPTION



## 2012-13 LaSIP PROFESSIONAL DEVELOPMENT PROJECTS

### APPENDIX J: Stipend Options

You must choose either Option A or B for use in your project, and document your choice in your proposal. Should your proposal be funded, you must provide this information to your participants within a Participant Agreement or Project Syllabus. For either option, you must insert the number of days and hours for your project and the hourly stipend rate, and provide a list of your project deliverables. Projects must provide a total stipend hourly rate at a minimum of \$20 per hour and a maximum of \$30 per hour. LaSIP encourages the use of Option B.

#### Option A

Attendance is expected for all \_\_\_\_ days (total of \_\_\_\_ hours) of the project. Participants will receive a maximum fee of \$25 per hour for attendance participation at the summer institute and academic year workshops. Payment will be made only on approval of and documentation from the principal investigator, (Name of authorized person), according to the LaSIP Attendance Policy. Participant will be paid only for the actual hours he/she participates in the professional development program. If the Participant has unexcused absences for more than 15% of the scheduled program hours, Participant may be dropped from the program at the discretion of the principal investigator and will not be eligible to receive instructional materials from the project. Any instructional materials already received must be returned to the principal investigator. LaSIP Attendance Policy regarding unexcused absences will be enforced.

#### Option B

Attendance is expected for all 14 days (total of 90 hours) of the project. Participant will receive a \$20 per hour for attendance participation at the summer institute. Upon completion of the required activities/deliverables (designed by PI) and days of attendance during the AY, participant will receive the remaining \$5 for each full hour attended during the summer project. This will in effect raise the stipend rate to \$25 per hour attended and will only apply if participant meets required obligations. Stipends for the AY workshops will be \$25 per hour for attendance. Payment will be made only on approval of and documentation from the principal investigator, (Name of authorized person), according to the LaSIP Attendance Policy. Each participant must complete the assigned deliverables during the AY. If the participant has unexcused absences for more than 15% of the scheduled program hours, the participant may be dropped from the program at the discretion of the principal investigator and will not be eligible to receive either instructional materials from the project or the additional \$5 per hour for attendance participation at the summer institute. In this event, any instructional materials already received must be returned to the principal investigator. LaSIP Attendance Policy regarding unexcused absences will be enforced.