



ARKANSAS DEPARTMENT OF EDUCATION

CONTRACT/GRANT AWARD ROUTING FORM

Use this routing form for obtaining approvals (in the order listed below) for **every Professional or Technical Services Contract, MOU, Grant Award or other agreement exceeding \$10,000**. When the form is complete, **the contract must be returned to the Finance Office**. The Finance Office will forward those exceeding \$50,000 to DFA for additional approvals.

Contract with: HSU

Approved: [Signature] Date: 03/26/16
Unit Leader

Approved: _____ Date: _____
Assistant Commissioner

Approved: [Signature] Date: 4/7/16
Finance Office

Approved: [Signature] Date: 4/15/16
Legal Office

Approved: [Signature] Date: 4/20/16
Commissioner/Deputy Commissioner

Comments _____



ARKANSAS DEPARTMENT OF EDUCATION

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Legal Office

Approved: _____ Date: _____
Commissioner/Deputy Commissioner

Comments _____



2016 Computer Science Professional Development Program Grant Memorandum of Understanding

This memorandum of understanding (MOU) is being entered into between the Arkansas Department of Education (ADE) and the Arkansas STEM Center, Arkansas Educational Service Cooperative, Arkansas public university, Arkansas public community college, or other public institution listed in Section I, hereinafter "INSTITUTION".

Section I – INSTITUTION Information

Name: **Henderson State University**
Address: **1100 Henderson State University, Box 7663**
Arkadelphia, AR 71999-0001

Contact Name: **Betty Ramsey**
Contact Email: **ramseyb@hsu.edu**

Section II – Funding Information

Grant funding is subject to the availability of funds appropriated by legislative act for the purpose stated in the grant award. ADE reserves the right to reduce or void the grant award upon appropriated funds becoming reduced or unavailable. In addition, a grant agreement may be terminated by ADE at any time for any reason upon notice to the grant recipient.

ADE reserves the right to reduce funding if the initial funding projections are determined not to have been realistic based upon the number of actual applicants or other factors. Should additional funds become available for distribution, ADE will determine how these funds will be distributed.

Program funds shall not be obligated for expenditure before the beginning date of the grant or after the ending date of the grant. Funds may be requested only for those items that are reasonable and necessary for accomplishing the objectives of the program as defined in the application notice and for implementing activities as described.

Costs not included in the approved grant budget, including approved budget revisions, will not be reimbursed by ADE. Any costs that are incurred either before the start of the grant award or after the expiration of the grant award performance period are not allowable.

INSTITUTION must receive the benefit and liquidate all obligations incurred under the grant award no later than June 30, 2017.

For costs to be allowable to be charged to a grant, costs must generally meet the following criteria:

- Be necessary and reasonable for the performance of the grant and be allocable under the applicable cost principles



- Conform to limitations or exclusions set forth in the grant agreement as to types or amount of costs
- Be consistent with policies and procedures that apply uniformly to federally or state-funded activities and activities funded from other sources
- Be determined in accordance with generally accepted accounting principles (GAAP)
- Be adequately documented.

ADE will provide INSTITUTION up to **\$37,972.00** in grant funding for the ADE approved 2016 Computer Science Professional Development Program. Forward funding, not to exceed 50% of total program funding, in the amount of **\$18,986.00** will be made available to INSTITUTION on or before **April 29, 2016**. The remaining funding amount will be made available to INSTITUTION as reimbursements per the following schedule, subject to ADE receipt of invoices and attestations of meeting program requirements and MOU assurances.

The grant period for this funding is April 1, 2016 – June 30, 2017; INSTITUTION will return all funds not liquidated before June 30, 2017 to ADE by July 31, 2017.

FY2016 – Q4 Reimbursement

- Expenses, beyond already transferred amount, through June 20, 2016
- Invoice and attestation due to ADE on or before June 22, 2016
- Made available on or before July 29, 2016

FY2017 – Q1 Reimbursement

- Expenses, beyond already transferred amounts, through September 30, 2016
- Invoice and attestation due to ADE on or before October 4, 2016
- Made available on or before November 11, 2016

FY2017 – Q2 Reimbursement

- Expenses, beyond already transferred amounts, through December 31, 2016
- Invoice and attestation due to ADE on or before January 13, 2017
- Made available on or before February 24, 2017

FY2017 – Q3 Reimbursement

- Expenses, beyond already transferred amounts, through March 31, 2017
- Invoice and attestation due to ADE on or before April 5, 2017
- Made available on or before May 5, 2017

FY2017 – Q4 Reimbursement

- Expenses, beyond already transferred amounts, through June 20, 2017
- Invoice and attestation due to ADE on or before June 26, 2017



- Made available on or before July 29, 2017

FY2017 – Final Reimbursement

- Expenses, beyond already transferred amounts, through June 30, 2017
- Invoice and attestation due to ADE on or before July 10, 2017
- Made available on or before August 4, 2017

Section III – Program Delivery

INSTITUTION will provide professional development in the content area of computer science in accordance with the attached Computer Science Professional Development Program Grant Application 2016 submitted to ADE by INSTITUTION. Any provisions within the attached Computer Science Professional Development Program Grant Application 2016 that are in conflict with any provision within this MOU are declared invalid, and INSTITUTION must adhere to all provisions within this MOU.

INSTITUTION must commence and perform project activities according to established timelines. Failure to do so may result in reduction and reallocation of funds.

Section IV - Funding Use

INSTITUTION will utilize all funding awarded under this grant for activities to provide professional development to Arkansas educators in the content area of computer science, at no charge to said educators or their employing institutions.

INSTITUTION will use Fiscal control and accounting procedures that permit the tracing of funds to a level of expenditure adequate to establish that funds have been used in accordance with grant award. The INSTITUTION must maintain effective control over and accountability for all funds, property, and other assets. The INSTITUTION'S financial management system must provide for the following:

- Identification, in its accounts, of grant awards received and expended for the program under which they were received.
- Accurate, current, and complete disclosure of the financial results of each grant award or program
- Records that identify adequately the source and application of grant funds
- Effective control over, and accountability for, all funds, property and other assets

INSTITUTION acknowledges that funding awarded under this grant is subject to all applicable federal and state laws and regulations in addition to the provisions herein Section II – Funding Information.

INSTITUTION acknowledges that it has reported planned uses for the funding and will not substantially deviate from the program approved and as indicated within the attached Computer



Science Professional Development Program Grant Application 2016 submitted to ADE by
INSTITUTION

INSTITUTION will not use any grant award funds to either forward fund or reimburse program participants for any PRAXIS fees; INSTITUTION will direct participants that are seeking licensure endorsement to use the ADE CS PRAXIS Reimbursement Form found at <http://goo.gl/yHWjFF>.

INSTITUTION will insure, prior to any participant receiving a stipend as allowed under this MOU, that participant must satisfy one of the following requirements on or before June 1, 2017:

- for classroom educators completing a K-8 focus program must take part in follow-up opportunities for one school year through which they demonstrate proper CS embedding within their classes and support of other educators within their school and/or district. (maximum stipend amount of \$1,250.00)
- for district or school level educators completing a K-8 focus program must take part in follow-up opportunities for one school year through which they demonstrate how they are supporting broad classroom integration of the CS embedded standards through ongoing and meaningful professional development. (maximum stipend amount of \$1,250.00)
- for classroom educators completing the 7th/8th Grade Coding Block focus program must successfully instruct students in the 7th/8th Grade Coding Block standards and demonstrate support of other educators within their school and/or district in the 7th/8th Grade Coding Block standards and the embedded K-8 Computer Science Standards. (maximum stipend amount of \$1,500.00)
- for district or school level educators completing the 7th/8th Grade Coding Block focus program must take part in follow-up opportunities for one school year through which they demonstrate how they are supporting district-wide or school-wide implementation and instruction of the 7th/8th Grade Coding Block and the embedded K-8 Computer Science Standards through ongoing and meaningful professional development. (maximum stipend amount of \$1,500.00)
- for any individual completing an approved professional development offering focused on preparation to pass the assessment necessary to gain an ADE Computer Science Endorsement or provisional license for non-traditional programs must be successful in attaining the ADE Computer Science Endorsement (or ADE Provisional License in Computer Science) and supporting the instruction of one or more of the approved Act 187 courses through either a face-to-face or hybrid instructional model for the 2016-2017 school year. (maximum stipend amount of \$1,750.00)

INSTITUTION and participant will ensure that acceptance of any stipend is allowed under all applicable laws and rules, including district policy, prior to stipend award.

If the INSTITUTION fails to comply with any of the terms of the grant award, whether stated in a federal statute or regulation, an assurance, a state plan, application, grant award notification, or elsewhere, ADE may take one or more of the following actions:



- Temporarily withhold payments pending correction of the deficiency by the grant recipient;
- Disallow or deny both use of funds and matching credit for all or part of the cost of the activity or action not in compliance with the grant;
- Wholly or partly suspend or terminate the grant award;
- Withhold further awards for the grant program; or,
- Take other remedies that may be legally available

Section V – Reporting

INSTITUTION will complete and submit with each reimbursement request an ADE Grant Budget/Expenditure Report and Budget Narrative found at <http://goo.gl/forms/1ed8hVU4x5>. Reimbursement funds will not be released to INSTITUTION until the requisite Grant Budget/Expenditure Report and Budget Narrative is submitted.

INSTITUTION will report to the ADE grant coordinator for this grant a list, in .xls file format, of all participants on July 1, 2016 and June 30, 2017 and include the following participant information:

- First and Last Name
- Arkansas Educator Licensure System Case ID – available at <https://goo.gl/gDI4hl>
- Official Email Address
- Employing LEA
- Current Licensure Codes – *same cell, comma delimited*
- Grades Currently Teaching – *using grade bands K-2, 3-5, 6-8, 9-12*
- Percentage of program competition – *INSTITUTION determined*
- Number of scheduled PD hours, as part of this MOU, in which participant was expected to participate
- Number of scheduled PD hours, as part of this MOU, in which participant has actually participated
- Amount of any stipend awarded to participant – *N/A for July 1, 2016 report*

Section VI – Failure to Comply

ADE reserves the right to revoke a grant award for reasons including but not limited to the following:

- Noncompliance with the specified purpose of the grant award
- Failure to account for grant funds in accordance with standards for financial management, to retain proper documentation for grant expenditures, or to provide information to auditors or program monitors
- Failure to provide accurate, timely, and complete information as requested by ADE to evaluate the effectiveness of the grantee



Section VII – Other Assurances

Administration of the program, activities, and services facilitated by the funding awarded within this MOU will be in accordance with all applicable state and federal statutes and regulations.

INSTITUTION will evaluate its program semiannually to assess its progress toward achieving its goals and objectives and use its evaluation results to refine, improve, and strengthen its program and to refine its goals and objectives as appropriate.

INSTITUTION will provide ADE representatives, and/or other state agency representatives, reasonable access to the campus and classrooms where programs and/or activities facilitated by grant funds awarded under this MOU.

INSTITUTION must disclose, in a timely manner, in writing to ADE all violations of criminal law involving, but not limited to fraud, bribery, or gratuity violations potentially affecting the grant recipient. Failure to make required disclosures can result in any of the actions described in the **Failure to Comply** section.

INSTITUTION will select and utilize a system of participant selection that is impartial and does not exclude, based on district of employ or federally protected class, any ADE Licensed Arkansas Educator.

INSTITUTION must disclose in writing any potential conflict of interest between the recipient and ADE employees. In addition, all grant recipients that receive in excess of \$25,000 will be required to complete the **“Contract and Grant Disclosure and Certification Form.”**

Section VIII – Commingling of Funds

INSTITUTION must not deposit or record funds in a general account without the ability to identify each specific source of funds for any expenditures, which is known as commingling of funds. Funds from each Federal, State, local, and private funding source must be identified with a clear audit trail for each source. The accounting systems of all grant recipients must ensure that grant funds are not commingled with funds from other State or Federal agencies or private entities. Funds specifically budgeted and/or received for one project may not be used to support another

Section IX – Record Retention

Financial records, supporting documents, statistical records and all other records pertinent to the grant award shall be retained by the grant recipient for four years following the end of the grant award performance period. The retention requirement extends to books of original entry, source documents supporting accounting transactions, the general ledger, subsidiary ledgers, personnel and payroll records, cancelled checks, and related documents and records.

- Source documents include paper or electronic copies of all grant awards, applications and required financial and narrative reports.



- Personnel and payroll records shall include the signed time and attendance reports for all individuals included in the project, whether they are employed full-time, part-time, or on a volunteer basis.
- Time and effort reports are required for employees with grant-funded salaries.

Grant recipients must further agree to permit access to these records to ADE program or fiscal staff, or any of their authorized representatives, as needed for monitoring purpose.

Section X – Carryover of Grant Funds

All encumbrances/obligations shall occur on or between April 1, 2016 and June 30, 2017.

INSTITUTION must receive the benefit and liquidate all obligations incurred under the grant award no later than June 30, 2017

If the grant recipient has not obligated all of its grant funds by June 30, 2017, any unexpended grant funds will be requested for return to ADE.

Johnny Key, Commissioner of Education
Arkansas Department of Education

4/26/16

Date

STEPHEN R. ADKISON

INSTITUTION Authorized Representative
Printed Name

INSTITUTION Authorized Representative
Signature

PROVOST, + VP FOR ACADEMIC AFFAIRS

INSTITUTION Authorized Representative
Title

4/25/16

Date



- Personnel and payroll records shall include the signed time and attendance reports for all individuals included in the project, whether they are employed full-time, part-time, or on a volunteer basis.
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Johnny Key, Commissioner of Education
Arkansas Department of Education

Date

INSTITUTION Authorized Representative
Printed Name

INSTITUTION Authorized Representative
Title

INSTITUTION Authorized Representative
Signature

Date

Subject: RE: Computer Science Professional Development Program Grant Application 2016 Additional Information

Date: Monday, March 14, 2016 at 2:05:01 PM Central Daylight Time

From: Ramsey, Betty K.

To: Anthony Owen (ADE)

CC: SCHOULTZ MATTHEW

Anthony, please see the attached grant with our amended budget. Please let me know if I need to change anything. Thank you for this opportunity.

-----Original Message-----

From: Anthony Owen (ADE) [<mailto:Anthony.Owen@arkansas.gov>]

Sent: Monday, March 14, 2016 1:05 PM

To: Ramsey, Betty K. <ramseyb@hsu.edu>; Julie Grady <jgrady@astate.edu>; Kenji Yoshigoe <kxyoshigoe@ualr.edu>; Karen McMahan <karen.mcmahan@scscoop.org>; Gail.Fulenwider@uafs.edu; saddison@uca.edu

Subject: Computer Science Professional Development Program Grant Application 2016 Additional Information

Greetings,

Thank you for responding to my inquiry regarding your grant funding. Your proposed programs have been slated to be funded at various percentages. I will need an amended proposal from each of your organizations, demonstrating a plan to provide the PD at or below the percentage communicated. These amended proposals will need to be submitted via email (in PDF format) before 4:00p.m. Friday, March 18th. ADE will conduct an internal review and make final determination of award by March 25th. Please note that the reduction in expenditures may not be met through a reduction in number of estimated participants; this statement applies to all except U.C.A. because of their already low cost per participant.

If your revised proposal is approved, ADE will begin work on creating Memorandums of Understanding for each of your programs, which should be delivered to you electronically on or before Friday, March 25, 2016. These MOU's will need to be signed and returned no later than 4:00 p.m. on March 31, 2016. If you requested forward funding, I will work as quickly as I can to process those disbursements, but as you know it can take some time.

A comprehensive list of requirements will be in the MOU, but here are few early reminders/notifications:

- * Participants may not be charged a fee to take part in any of these trainings
- * Your PD must be open to any ADE licensed educator in the state, preference may be given to your local institutions, but your organization may not exclude someone only because they are not part of your co-op or group.
- * Stipends may not be provided to the teachers until completion of the training (and other requirements as listed on the commissioner's memo announcing this grant)
- * If your proposal included PRAXIS fees, that amount should be/will be removed from your proposal, participants should use the CS PRAXIS reimbursement program already established by ADE

Feel free to contact me if you have any questions.

Thanks for all you do.

Sincerely,

Anthony A. Owen
Coordinator of Computer Science

Arkansas Department of Education
Four State Capitol Mall; Room 302A
Little Rock, AR 72201
Office Phone: (501) 682-3386
Cell Phone: (501) 218-4506
Linkedin: www.linkedin.com/in/AnthonyAOwen<<http://www.linkedin.com/in/AnthonyAOwen>>
Email: anthony.owen@arkansas.gov

Interested in the Arkansas Computer Science Initiative? Follow me on twitter
@AnthonyOwenADE<<https://twitter.com/AnthonyOwenADE>> and sign up for the Computer Science listserv at
<http://goo.gl/forms/FqGJ2CtXe1>.

NOTICE: The contents of this email are not intended or offered as legal advice. Transmission of this information is not intended to create, and receipt does not constitute, a lawyer - client relationship between, the author or the Arkansas Department of Education and the recipient or any other reader.

ITEMIZED BUDGET for Computer Science Grant-ADE

Expenditure	Amount
Faculty salary (one instructor @ \$400.00/day x 11 days + \$2000.00 preparation stipend for instructor)	\$ 6400.00
Employer fringes @ 32%	2048.00
Teacher stipends x 24 @ \$1226.00/teacher upon attaining the ADE Computer Science Endorsement or provisional license	29,424.00
Administrative costs (printing, paper, postage)	100.00
Total Grant Funds	\$ 37,972.00
Per Participant Cost Breakdown (\$50,648.00/24)	\$1583.00

#17

**COMPLETE**

Collector: Web Link 1 (Web Link)
Started: Thursday, February 11, 2016 11:22:08 AM
Last Modified: Friday, February 26, 2016 10:08:36 AM
Time Spent: Over a week
IP Address: 192.101.185.34

PAGE 1: General Information

Q1: Organization Name	Henderson State University
Q2: Organization Type	Arkansas based public university, Other Arkansas based public institution (subject to ADE approval) The STEM Center at Henderson State University
Q3: Organization LEA (if applicable)	N/A
Q4: Organization Mailing Address (Line 1)	1100 Henderson State University, Box 7663
Q5: Organization Mailing Address (Line 2) - optional	<i>Respondent skipped this question</i>
Q6: Organization Mailing Address (City)	Arkadelphia
Q7: Organization Mailing Address (Zip Code)	71999-0001
Q8: Contact Person (First Name)	Betty
Q9: Contact Person (Last Name)	Ramsey
Q10: Contact Person (Email Address)	ramseyb@hsu.edu
Q11: Contact Person (Telephone XXX-XXX-XXXX)	870-230-54417
Q12: Contact Person (Title)	Director of STEM Center

PAGE 2: Program Focus Selection

Q13: Please select a program focus for this application (NOTE: each organization may submit a separate application for each focus area for which they wish to offer)	Computer Science Endorsement and High School Level Computer Science Instruction Preparation
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PAGE 3: Program Information

Q14: Provide a program description. Be certain to provide information related to the curriculum, content guide, and materials to be utilized

Program Description

The primary goal of this program will be to prepare the teachers in attendance to successfully pass the Praxis™ Computer Science (5651) test. We will accomplish this through an eight-day series of structured course sessions which will present the information contained in the test in a way that will allow the greatest opportunity for full comprehension. The course dates are June 6-9 and June 13-16, 2016 in the Caplinger Computer Lab, Room 217 on the Henderson State University campus. The maximum number of 9th-12th grade teachers participating is 24. Follow-up days in the fall semester of 2016 are (tentatively) September 10, October 1, and October 15. In order to track progress in the program, we will give each attendee a pre-assessment to establish a baseline for content knowledge. (See the link below to view an example pre-assessment.) During the course of the program, the teachers will be given a series of content “checkpoint” assessments. The assessments will vary in nature from a multiple choice format to writing a fully functional and robust software program. These assessments will insure that each individual is progressing through the material with full comprehension.

After the eight-day course series is complete, the participants will be asked to complete several assessments during the course in the next five months. Each individual will be required to attend three follow-up course sessions during the fall semester of 2016. These sessions will be held on predetermined Saturdays and will be used to reinforce materials learned during the summer training. Further assessments will be given to each teacher during these Saturday meetings in order to determine the specific subjects of need. Assignments specific to each individual need areas will be given for them to complete in-between the Saturday meetings.

At the conclusion of the program, each participant will be given an exit exam, which will be similar in format to the pre-assessment. We will use the results of the exit exam to determine the overall progress each teacher made during the course of the program.

<http://reddie.henderson.edu/pretest.pdf>--Link for pretest

Explanation of Educational Materials

Below is a list of educational materials that will be used during the course of the program. Each participant will have access to a PC with all required software installed. The list is categorized by the competency to which it applies.

- Competency 001 & Competency 002:
 - o PC hardware – motherboards, RAM, CPU, hard drives etc...
 - o Network monitoring software
 - o Network hardware
 - o Microsoft Excel
 - o Microsoft Access
 - o Microsoft PowerPoint
 - o Prezi
 - o Google Docs
 - o Google Hangouts

- Competency 003 – 009
 - o Java
 - o IntelliJ Idea
 - o Android Studio
 - o FTP
 - o Visual Studio

Q15: If your organization plans to contract with an outside vendor/provider to provide professional development, provide the name and website URL for that vendor/provider. (N/A for not applicable)

N/A

Q16: Provide a schedule for the program. Be certain to include the days, times, and number of hours that the sessions are to meet.

The course dates are June 6-9 and June 13-16, 2016 in the Caplinger Computer Lab, Room 217 on the Henderson State University campus. The maximum number of 9th-12th grade teachers participating is 24. Follow-up days in the fall semester of 2016 are (tentatively) September 10, October 1, and October 15. Each day's class will be from 8:30-

Computer Science Professional Development Program Grant Application 2016

3:30 for a total of 66 hours.

Content Guide

The purpose of this guide is to give a day-by-day account of the content presented to the participants of the program as it relates to the Praxis™ Computer Science (5651) test.

Day 1 (Competency 001 & Competency 002):

- C001: The computer science teacher knows technology terminology and concepts; the appropriate use of hardware, software, and digital files; and how to acquire, analyze, and evaluate digital information.

o We will teach the basics of computer science as it relates to this domain. Topics included, but not limited to:

- Computer hardware/software
- Networking
- Terminology
- Ethics in computing
- Information acquisition and dissemination

- C002: The computer science teacher knows how to use technology tools to solve problems, evaluate results, and communicate information in a variety of formats for diverse audiences.

o This section will focus on the utilization of software tools in the classroom as both a teaching and communication instruments.

- Spreadsheets
- Database concepts
- Presentation creation
- Collaborative software

Day 2 (Competency 003 & Competency 004):

- C003: The computer science teacher knows how to plan, organize, deliver, and evaluate instruction that effectively utilizes current technology for teaching technology applications for all students.

o This section will present to each participant different methodologies of computer science classroom instruction. We will focus on student engagement through the use of technology.

- Lesson planning
- Keeping up with technology changes
- Teamwork driven project implementation
- Assessment strategies

- C004: The computer science teacher knows problem-solving strategies and different procedures for program design.

o We will introduce the basics of program design in this section. Focus will be centered on design and analysis.

- Algorithmic process
- Visual organizers
- Problem-solving strategies
- Process flow

Day 3 (Competency 005, Competency 006 & Competency 007):

- C005: The computer science teacher knows procedures for software development and implementation.

o This section will lay the groundwork for software development by exposing the teachers to development cycle and models.

- Development models
- Software lifecycle

- C006: The computer science teacher knows computer science terminology and concepts and the characteristics of different programming languages and paradigms.

o Software development terminology will be stressed in this section.

- High-level vs. machine/assembly languages
- Syntax
- Different types of modern programming languages

- C007: The computer science teacher correctly and efficiently uses data types, data structures and function in the

Computer Science Professional Development Program Grant Application 2016

development of code.

o The last part of the day 3 session will focus on the infancy of the participants programming development.

- Program structure in modern languages
- Variables
- Datatypes

Day 4 (Competency 005, Competency 006 & Competency 007):

• Day 4 will focus on software development in a high-level language utilizing a robust IDE (Integrated Development Environment). The topics covered in this section relate to the three competencies covered in day 3 but are new content areas from those competencies.

- o Programming style – C005
- o Commenting and documentation – C005
- o Syntax – C006
- o Primitive vs. complex datatypes – C007
- o Methods/functions – C007
- o Method parameters and return types – C007

Day 5 (Competency 007 & Competency 008):

• We will focus solely on program development during the second week of sessions. Day 5 is the start of that week where teachers will be maturing in their software development knowledge.

- o Reference vs. value parameters – C007
- o Input and Output – C008
- o Mathematical operators – C008
- o Assignment vs. equivalency operators – C008
- o Strings – C007
- o Classes – C007

Day 6 (Competency 007 & Competency 008):

• Day 6 will focus on the implementation and utilization tracks of condition and iterative statements.

- o If-else statement – C008
- o Switch statement – C008
- o While loop – C008
- o Do-while loop – C008
- o For and for each loop – C008
- o Menus – C008
- o Classes – C007

Day 7 (Competency 007, Competency 008 7 Competency 009):

• This day will introduce more complex datatypes to the participants. We will show them the implementation and utilization of the objects in practical applications.

- o Arrays – C007
- o Multidimensional Arrays – C007
- o File input and output – C007
- o Array list – C007
- o Menus cont. – C008
- o Linear search – C009
- o Binary search – C009

Day 8 (Competency 007 & Competency 009):

• The last day of the summer sessions will include an introduction to sorting an searching algorithms. We will also reinforce the array concepts included in day 7.

- o Recursion – C009
- o Arrays cont. – C008

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- o Arrays cont. – C008
- o Selection sort – C009
- o Insertion sort – C009
- o Bubble sort – C009
- o Merge sort – C009
- o Quick sort – C009

End of Summer Sessions

Day 9 (Competency 007 & Competency 009):

- The first Saturday session will focus on data structures and algorithm efficiency analysis. Leading up to this session, the participating teachers will have completed multiple assignments and assessments related to the material presented during the summer sessions.
 - o Stacks – C007
 - o Queues – C007
 - o Linked lists – C007
 - o Trees – C007
 - o Graphs – C007
 - o Compare and contrast searching and sorting algorithms – C009
 - o Analyze sorting algorithms for best, worst and average case – C009

Day 10:

- The second Saturday session will be held approximately one month after the first. Before attending, each participant will have completed an assessment that will cover each of the nine competencies. We will use the results of this assessment to determine the subject of study for this session. Whichever competencies the participants are struggling with the most, will be reinforced during this time.

Day 11 (Wrap-up day):

- Much like the session previous to this one, time will be spent answering content questions and covering material in which the teachers feel they are lacking. During this session, the participants will complete an exit assessment. This test will cover all nine competencies and will serve as a gauge to determine each teacher's level of material comprehension.

Q17: Provide a detailed plan to document evidence of program performance and success of the participants including all required and requested reporting.

During the course of the program, the teachers will be given a series of content “checkpoint” assessments. The assessments will vary in nature from a multiple choice format to writing a fully functional and robust software program. These assessments will insure that each individual is progressing through the material with full comprehension. After the eight-day course series is complete, the participants will be asked to complete several assessments during the course in the next five months.

At the conclusion of the program, each participant will be given an exit exam, which will be similar in format to the pre-assessment. We will use the results of the exit exam to determine the overall progress each teacher made during the course of the program.

<http://reddie.henderson.edu/pretest.pdf>--Link for pretest

Q18: Provide the qualifications required for all staff and instructors. If a project manager or director can be identified, please do so at this time.

Matt Schoultz
4020 Holy Ridge RD, Traskwood, AR 72167
Contact
Tel : 501-627-4278
e-mail : mattschoultz@gmail.com

Education

2002 to 2003 Master of Business Administration – GPA 3.65 (4.0 Scale)
Henderson State University, Arkadelphia, Arkansas

Computer Science Professional Development Program Grant Application 2016

1998 to 2002 Bachelor of Science in Computer Science – GPA 3.57 (4.0 Scale)

Henderson State University, Arkadelphia, Arkansas

Work Experience

Hendrix College, Conway, Arkansas Full-time job

Software Developer/Analyst November 2005 to August 2012

Database

- Maintain a SQL Server based campus-wide ERP system (Jenzabar) and associated reporting software (InfoMaker)
- Installed, maintain and upgrade Jenzabar Web portal (JICS) on both production and testing servers;
- Train users on the utilization of Jenzabar and InfoMaker
- Developed dozens of SQL-based user reports in both InfoMaker and Microsoft Reporting Services

Software Development

- Utilize the .NET Framework (C#) to develop software for campus users
- Successfully integrated the Jenzabar ERP system Web portal (JICS) with existing Web site CMS (Ektron) to develop and internet campus information solution for students, faculty and staff
- Developed Web-based software to automate the annual campus-wide housing process eliminating most of the housing department's workload during this time
- Created an interface to maintain data for expanded curriculum (Odyssey Program)

Security

- Utilize the AndOver Controls system to maintain a campus-wide security system including door locks, proximity readers, motion sensors, climate controls and alarms
- Created a process to manage on-campus building access for all student, faculty and staff related to the Arkansas Governor's School program
- Work with service company (Commercial Air) on a constant basis to expand and improve the system
- Worked closely with campus security to develop software to automate building access schedules for students

Henderson State University, Arkadelphia, Arkansas Full-time job

Instructor of Computer Science August, 2012 to Present

Teaching Responsibilities

- The courses I teach vary in nature from beginning level introduction to computer science to senior-level advanced software development. My rotation of courses includes:
 - o Introduction to Computers
 - o Microsoft Office
 - o Foundations of Computer Science I (Java programming)
 - o Foundations of Computer Science II (Advanced Java programming)
 - o Web Development (HTML/CSS)
 - o Client-Server Programming
 - o Visual Programming (.NET Framework using C#)

Professional Development

- I have provided professional development to high school teachers in Arkansas who were preparing to teach computer science. I lead four PD sessions that showed the teachers different approaches on how to present CS materials in a high school classroom.

Professional Service

- (Presenter) Arkansas Computer Science Education Leadership Summit (Fall 2015)
 - o I was asked to give a presentation at last year's Arkansas Computer Science Education Leadership summit. The session was entitled "Developing the Computer Science Pipeline to 4-Year colleges". I was joined by Bryan Hill, Assistant Dean, College of Engineering, University of Arkansas Fayetteville. We both gave presentations on what our respective institutions are doing to meet the goal of the session. We then took questions from the individuals who were in attendance.

Institutional Committees

- 2015 Ellis College Faculty Excellence Award Committee in the Math Department (Henderson State University) Spring 2015 - Fall 2015

Computer Science Professional Development Program Grant Application 2016

2015 - Fall 2016

Community Service

- Reddie to Serve Day

o I have taken part in Reddie to Serve Day each semester since I joined HSU as a faculty member. This is a community outreach program where by participants travel to local community resident's homes and perform maintenance on their homes or lawns that they could otherwise not complete. It is a very rewarding program in which I am enthusiastically involved.

Key Skills

Proficient or familiar with:

.NET Framework (C#) SQL Server, MySQL Microsoft Office Window Server
PHP, VBA, VB.NET HTML, CSS Adobe Photoshop PC Hardware, Networking

Activities and Interests

Hobbies

Organizations Woodworking, Residential Construction/Remodeling, PC Building
Conway .NET Users Group Member

PAGE 4: Program Budget

Q19: Total Grant Amount Requested	50648.0
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Q20: Grant Forward Funding Requested in Dollar Amount (maximum of 50% of total proposed grant) - NOTE: organization will be required to return all unused or excess funding once program completion information is submitted.	25324.00
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Q21: Proposed Cost Per Participant	2110.33
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Q22: Estimated Number of Participants	24.0
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Q23: Summary of the Program's Proposed Budget

ITEMIZED BUDGET for Computer Science Grant-ADE

Expenditure Amount

Faculty salary (one instructor @ \$400.00/day x 11 days + \$2000.00 preparation stipend for instructor \$ 6400.00

Employer fringes @ 32% 2048.00

Teacher stipends x 24 @ \$1750.00/teacher upon attaining the ADE Computer Science Endorsement or provisional license 42,000.00

Administrative costs (printing, paper, postage) 200.00

Total Grant Funds \$ 50,648.00

Per Participant Cost Breakdown (\$50,648.00/24) \$2110.33

Q24: Completer Individual Stipend Amount (if applicable)	1750.0
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Q25: Total Amount Allocated for Participant Stipends (if applicable)	42000.0
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PAGE 5: Assurances and Certification

Q26: WE, THE UNDERSIGNED, CERTIFY that the information contained in this application, is complete and accurate to the best of our knowledge; that the necessary assurances of compliance with applicable state and federal statutes, rules, and regulations will be met; and, that the indicated organization designated in this application is authorized to administer this grant. WE FURTHER CERTIFY that the assurances listed above, have been or will be satisfied and that all facts, figures, and representations in this application are correct to the best of our knowledge.

Yes

Q27: First and last name of the authorized Representative certifying this application on behalf of the organization.

Dr. Judy Harrison

Q28: Title of authorized Representative certifying this application on behalf of the organization.

Dean of Teachers College Henderson