



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.

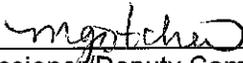
Contract with: **Northwest ESC**

Approved:  Date: 03/26/16
Unit Leader

Approved: _____ Date: _____
Assistant Commissioner

Approved:  Date: 4/7/16
Finance Office

Approved:  Date: 4/15/16
Legal Office

Approved:  Date: 4/20/16
Commissioner/Deputy Commissioner

Comments _____



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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: **Northwest Arkansas Education Service Cooperative**
Address: **4 North Double Springs Road**
Farmington, AR 72730
Contact Name: **Marcia Sanders**
Contact Email: **msanders@starfishnw.org**

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 **\$50,264.00** 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 **\$25,132.00** 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

Date

INSTITUTION Authorized Representative
Printed Name

INSTITUTION Authorized Representative
Title

INSTITUTION Authorized Representative
Signature

Date



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Johnny Key

Johnny Key, Commissioner of Education
Arkansas Department of Education

4/29/2016

Date

Marcia Sanders

INSTITUTION Authorized Representative
Printed Name

Assistant Director / ICC

INSTITUTION Authorized Representative
Title

Marcia Sanders

INSTITUTION Authorized Representative
Signature

4/22/16

Date

#16



COMPLETE

Collector: Web Link 1 (Web Link)
Started: Friday, February 26, 2016 9:17:53 AM
Last Modified: Friday, February 26, 2016 9:30:58 AM
Time Spent: 00:13:05
IP Address: 69.4.193.75

PAGE 1: General Information

Q1: Organization Name	Northwest Arkansas Education Service Cooperative
Q2: Organization Type	Arkansas Educational Service Cooperative
Q3: Organization LEA (if applicable)	72-21
Q4: Organization Mailing Address (Line 1)	4 North Double Springs Road
Q5: Organization Mailing Address (Line 2) - optional	<i>Respondent skipped this question</i>
Q6: Organization Mailing Address (City)	Farmington
Q7: Organization Mailing Address (Zip Code)	72730
Q8: Contact Person (First Name)	Marcia
Q9: Contact Person (Last Name)	Sanders
Q10: Contact Person (Email Address)	msanders@starfishnw.org
Q11: Contact Person (Telephone XXX-XXX-XXXX)	479-267-7450
Q12: Contact Person (Title)	Teacher Center Coordinator

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)	7th/8th Grade Coding Block and Embedded K-8 Computer Science Standards
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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

This grant project will focus on three areas: K-2 Computer science standards that will be embedded into other content standards, 3-6 Computer science standards that will be embedded into other content areas and a 7-8 coding block. Teachers will learn not only what needs to be taught in their grade level, but also learn how the standards progress over each grade to prepare Arkansas students to become proficient in computer science.

The teachers in the NWA Computer Science Project will learn how to embed Computer Science standards into the existing math, science and literacy content standards in a way that provides context for deeper student understanding of those skills necessary to develop computer programming and coding skills. Each teacher in grades K-6 will create two lesson plans over the school year that will be implemented with students, improved through revision and approved by computer science and curriculum experts. The 7th and 8th grade teachers will create coding blocks that can be utilized in middle and/or junior high schools in Arkansas. The final products will be shared with all Arkansas teachers via a wiki page.

All three PLCs will unpack the new Arkansas Computer Science standards (found at <http://www.arkansased.gov/divisions/learning-services/curriculum-and-instruction/curriculum-framework-documents/computer-science>) to examine the types of skills students will be learning as they move from kindergarten through 8th grade. Each group of teachers will identify the important concepts in each grade level to focus their lesson plans on the major areas of emphasis. Teachers will also receive substantial computer science content training as they prepare lessons and curriculum plans.

The K-2 PLC teachers will be given a Bee-bot robot to support their lesson planning. More details about the Bee-bot can be found here: <https://www.bee-bot.us>. The Bee-bot robot is a programmable robot that can move in four directions. Students will learn to program the robot so that it can move through a path and maneuver through obstacle courses. This robot was chosen because of its appropriateness for early elementary children as well as it being able to be programmed without a secondary device such as a computer, iPad or smart phone. Lesson plans will focus on developing lessons that are both focused on computer science standards as well as using other content standards as the context for the learning experience.

The 3-6 PLC teachers will be given a Pro-bot, which is a programmable robot that is able to turn using degree increments. More details about the Pro-bot can be found here: <https://www.bee-bot.us/probot.html>. These robots can be programmed to move in any direction for a variety of distances. The Pro-bot also contains a hole in the center where a pen or marker can be inserted so that the path of the robot is recorded on paper. Students will be able to program the robot to create shapes using degree rotations and distances traveled. The robot can also be programmed to maneuver through an obstacle course or other pre-determined path. Lesson plans will focus on using the robot to support learning in other content areas, especially in the area of mathematics where students learn about fractions and degree measurements.

Both the K-2 PLC and the 3-6 PLC will also develop lesson plans that encourage student collaboration and differentiation. Since only one robot will be provided per classroom, teachers will create lesson plans that allow students to work on different parts of the lesson at the same time. This type of lesson will allow teachers from all over Arkansas to understand how to increase student engagement in computer science standards on a limited budget.

The 7th and 8th grade teachers will develop a coding block that could be used in a variety of middle school and junior high settings. Each teacher will be taught the content they need to develop a deeper understanding of the computer science standards that will be taught to students. Lesson plans, activities and pacing guides will be developed by teams of teachers for use in schools across Arkansas.

The program will consist of two on-site teacher development days in the summer of 2016, one Saturday in January 2017 and an on-line component during the spring semester of the 2016-2017 school year. 48 teachers from Northwest Arkansas Schools will be placed in one of 3 professional learning communities depending on the grade they will teach in the upcoming school year.

Each PLC will have an instructor assigned to them to provide support and training. Each instructor served on the committee to help create the Arkansas Computer Science Standard so each one brings an in-depth knowledge of how the standards should be implemented in Arkansas classrooms. Each instructor also has experience in both computer science as well as providing professional development to teachers. These instructors will also review and help teachers revise all lesson plans and materials before the materials are published on-line.

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.

Day 1 (Summer 2016)

8:30 to 11:30 Pre-test, Unpacking the Computer Science Standards, Vertical Alignment

11:30 to 12:30 Lunch

12:30 to 3:30 Break into PLCs, plan for lesson work, computer science content instruction

Total: 6 hours

Day 2 (Summer 2016)

8:30 to 11:30 Computer science content instruction, create lesson plans

11:30 to 12:30 Lunch

12:30 to 3:30 Finish lessons for fall implementation introduce teachers to Moodle, continue computer science content instruction. 7-8 PLC will finish half of the coding block and implement lessons in the fall where possible.

Total: 6 hours

Day 3 (January 2017 – this will be a Saturday)

8:30 to 3:30 Review lesson implementation, revise lessons as needed, begin work on second lesson (K-2 and 3-6 PLCs). 7-8 PLC will continue to build coding block and learn computer science content.

Lunch will be taken from 11:30 to 12:30

Total: 6 hours

Day 4 (Online using Moodle)

For teachers to get 6 hours PD credit and the remaining \$150 stipend, the following products must be completed and uploaded to the Moodle site by April 15, 2017:

K-2 PLC: Two complete lesson plans using the Bee-bots to teach computer science. The lesson plans must contain both student and teacher commentary to increase implementation success. The Post-test is also required.

3-6 PLC: Two complete lesson plans using the Bee-bots to teach computer science. The lesson plans must contain both student and teacher commentary to increase implementation success. The Post-test is also required.

7-8 PLC: A complete coding block to last approximately 6 weeks that teaches the computer science standards for the 7th and 8th grades. The curriculum must include a pacing guide, student commentary and materials and complete instructions to teachers to ensure implementation success. The Post-test is also required.

Total: 6 hours

Total contact over the project timeline: 24 hours

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

The project will have several products required for teachers to complete. A pre-test will be given at the beginning of the first day to determine computer science knowledge based on the Arkansas Computer Science Standards from Kindergarten to 8th grade. A post-test will be given as part of the 4th day that will be implemented using Moodle. The pre and post-tests will be analyzed using a paired sample t-test to determine the growth of content knowledge over the span of the program.

The teachers in the K-2 and 3-6 PLCs will turn in two complete lesson plans. These plans will be reviewed by the instructors of each group as well as by Dr. Kelli Dougan to ensure that best practice instructional techniques have been used as well as the appropriate Arkansas Computer Science Standards. For the 7-8 Coding Block it will be reviewed by the instructor in charge of the 7-8 PLC, Dr. Kelli Dougan and at least two other curriculum experts outside the project to ensure that best practice instructional techniques have been used and that the lessons align properly with the 7th and 8th grade Computer Science Standards.

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.

PROJECT DIRECTOR: MARCIA SANDERS

Education

- UNIVERSITY OF ARKANSAS – Fayetteville, AR
Master of Education – August 1997
Additional 24 hours completed in administration above Master’s degree as of 5/31/14
- UNIVERSITY OF THE OZARKS – Clarksville, AR
Bachelor of Science in Education, December 1987
AR Teacher Licensure

- Building Level Administrator K-09
- Elementary Instruction – Grades 01-06
- Middle School English – Grades 05-08
- Middle School Social Studies – Grades 05-08
- Reading – Grades K -12

Professional Experience

- July 2011 – Present - Northwest AR Education Service Cooperative * Farmington, AR
- Assistant Director/Teacher Center Coordinator
 - o Develop the professional development program for NWAESC – during the school year and throughout the summer.
 - o Coordinate networking between job-alike group to promote collaboration throughout region
 - o Supervise content specialists and related classified staff
 - o Collaborate with ADE to provide support to and communication with area schools
 - o Work with area community leaders and institutions of higher education to promote public education
- July 1999 – June 2011 – Western AR Education Service Cooperative * Branch, AR
- Professional Development Facilitator
- Target Assessment Technical Support
- Wrote and supervised two multi-year grants. This role included development of the budgets, fiscal oversight, implementation, state and federal reporting
 - o Mathematics-Science Partnership – 3 year grant funded professional development related to the implementation of standards-based mathematics in grades 6-8.
 - o Tobacco Prevention and Education Program – provided tobacco prevention education, resources, and related activities to area schools.
- Mathematics Instructional Specialist – July 1999 through June 2003
- July 1988 – June 1999 – Lavaca, AR Public Schools
- Taught grades 4 – 6

ASSISTANT DIRECTOR: DR. KELLI L. DOUGAN

EDUCATION

Doctor of Philosophy, May 2014; University of Arkansas; Major: Curriculum and Instruction
Dissertation Title: The Effects of Kindergarten Redshirting from a Parental Perspective

Master of Education, August 2010; University of Arkansas; Major: Educational Leadership

Bachelor of Science in Business Administration, August 1993; University of Arkansas; Major: Management

PROFESSIONAL LICENSURE

- Building Level Administration (Grades 5-12)
- Mathematics (Grades 7-12)
- Business Technology (Grades 7-12)
- Computer Technology Endorsement (Grades 7-12)

PROFESSIONAL EXPERIENCE

Computer Science Professional Development Program Grant Application 2016

PROFESSIONAL EXPERIENCE

2011 to Present Mathematics Specialist: Northwest Arkansas Education Service Cooperative
2002 to 2011 Math Teacher: Springdale High School, Springdale, AR
2000 to 2002 Department Chair/Math Teacher: Scott Johnson Middle School, McKinney, TX
1998 to 2000 Math Teacher: Richardson West Technology Magnet (Grades 7-9), Richardson, TX
1990 to 1996 Tyson Foods, Inc.
Positions Held: Production Coordinator, Processing Plant Supervisor, Management Trainee, Quality Assurance Administrative Assistant, Quality Assurance Lab Technician.

PUBLICATIONS

Dougan, K.L. (2015). Kindergarten Redshirting: A Guide for Parents and Educators. ISBN: 9781312964099
Dougan, K.L. & Pijanowski, J.C. (2011). The effects of academic redshirting and relative age on student achievement. International Journal of Educational Leadership 6(2).
Range, B.G., Dougan, K.L., & Pijanowski, J.C. (2011). Rethinking grade retention and academic redshirting: Helping school administrators make sense of what works. International Journal of Educational Leadership Preparation 6(2).

CONFERENCE PRESENTATION

Dougan, K.L. & Pijanowski, J.C. (2012). The long-term benefits of kindergarten redshirting. University Council for Educational Administration Conference, Denver, CO, November 17, 2012.

GRANT-FUNDED PROJECTS

Co-Principal Investigator, "University of Arkansas Science and Engineering Partnership";
2015 to 2018 with Bryan Hill, Edgar Clausen, Carol Gattis and Virginia Rhame. Teachers from Kindergarten through fourth grade learn how to implement the new Arkansas Science Standards in a way that increases student understanding of engineering principles.
Co-Principal Investigator, "University of Arkansas Engineering, Science and Math Partnership";
2013 to 2016 with Bryan Hill, Edgar Clausen and Carol Gattis. Math and Science teachers learn to design integrated units of instruction that are focused on using student understanding to facilitate learning.
Co-Principal Investigator, "University of Arkansas Engineering and Math Partnership"; 2011 to 2014 with Bryan Hill, Edgar Clausen, Carol Gattis, Janet Woodland and Nick Tschepikow. Teachers learn to design units of instruction that are focused on using student understanding to facilitate learning.

INSTRUCTOR: MARIANNE D. HAUSER

Education

Numerous technical and software related workshops
Numerous instructional and curriculum workshops
MSEd - Computer Education, Lesley University, Cambridge, MA 1986
BSEd – Biology, Physical Education, University of Arkansas, AR 1975

Licensure

Building Level Administrator, grades 5-12
Health Education, grades 7-12
Life/Earth Science, grades 7-12
Physical Education, grades K-12
PLTW Flight & Space, grades 7-12, 2015
PLTW Magic of Electrons, grades 7-12, 2015

Professional Experience

AR Computer Science Frameworks Committee Member
AR TICAL Cadre Member

Fayetteville, AR – District Administrator, 2004 to present

- PLTW Teacher and Director of Career Education, 2015-2016
- Director of Professional Development, Director of Career Education and AIMM Coordinator, 2012-2016
- Professional Development Coordinator, 2008-2012

Computer Science Professional Development Program Grant Application 2016

- Instructional Technology Coordinator, 2004-2008
- Riyadh, Saudi Arabia – Technology and Computer Teacher, 1996-2004
- AP Computer Science, IB Computer Science, Computer Applications, Teacher trainer, Department Chair
Cairo, Egypt – Computer Teacher, 1991-1995
- AP Computer Science, Computer Applications, Teacher trainer, Department Chair, K-12 Curriculum Council member
Boston, MA – Distributed Systems Manager, 1987-1991
- Corporate wide technology training coordinator, hardware & software contract coordinator
Merrimack, NH, 1986-1987
- High School Technology Coordinator, computer applications instructor
Saudi Arabia, Venezuela and Bolivia, Teacher, 1975-1986

Conference Presentations

I have presented conference presentations in Arkansas, the United States and internationally. Topics have included instructional technology, computer science, STEM initiative, PLTW implantation, and coaching women's basketball. Most recently I have led sessions in the Fayetteville School District, at PLTW Conference in Russellville, at annual TICAL Conference in Little Rock.

INSTRUCTOR: MARION F. HARRIS

- MA in Secondary Mathematics, July 2015 University of Arkansas, Fayetteville, AR
 - BS in Computer and Information Science, Minors in Mathematics and Economics, Dec 1987 University of Alabama at Birmingham, Birmingham, AL
- #### CERTIFICATION/ENDORSEMENTS
- Mathematics (7-12), Physical Science (7-12), Transitional Math (9-12) • AP Calculus, AP Statistics, AP Physics I
- #### PROFESSIONAL EXPERIENCE
- Computers Science – Math Training for Arkansas Department of Education: Conduct professional development for math content of new Computer Science-Math frameworks to instructional facilitators and teachers through Educational Cooperatives throughout Arkansas. (Summer 2015)
 - Arkansas Department of Education Committees:
 - Mathematics in Computer Science Math Frameworks Committee (Oct. 2014);
 - Arkansas Mathematics Frameworks Committee – included co-writing frameworks for Mathematical Applications and Algorithms course (May 2012),
 - Bentonville West High School, Math & Science Teacher, beginning Fall 2016
 - Bentonville High School, Math Teacher 2015-2016
 - Lincoln High School, Math and Science Teacher/Mentor Teacher (2006-2015) Subjects taught include Computer Mathematics
 - SEAKO, Inc., Computer Programmer, Developed computer software for medical based industry, 1988-1989,
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INSTRUCTOR: MICKEY MCFETRIDGE

WORK EXPERIENCE

Springdale Public Schools

Technology Integration Specialist (June 2014 - Present)

- Presented to district level administrators, building level administrators, and teachers at events such as: TICAL, "The Group" at NWAESC, National eMINTS Conference, Innovation Institute, Springdale Joint Council, Springdale School Board Meetings, and Springdale Schools Administration Meetings.
- Member of the 2015 Arkansas Computer Science Standards Committee
- Facilitated custom training sessions at schools throughout the Springdale School District, impacting thousands of teachers and students.
- eMINTS Trainer - Trained and Coached over 58 teachers in the Springdale Public Schools eMINTS program.
- K-2 iPad Program Development - Coordinated with district instructional leadership team, building administrators, the district technology department, and teachers to create an iPad Best Practices program that promotes beneficial use of iPads in the primary classroom.
- District Wide SAMR Implementation - Coordinated with district instructional leadership team, building administrators, IFs, and ToSAs to create an online course to train every teacher in the Springdale School District on the SAMR Model

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of Technology Integration. Regularly conduct Class Walk-Throughs to see SAMR Implementation.

- Created Class Tech Integrate Blog - A blog that has been recognized by EdTech Magazine as one of the top 50 Tech Ed blogs. This blog has approximately 20,000 views world wide.
 - Completed year one training of eMINTS PD4ETS
 - Worked with the District Student Advisory Council at the Race to the Top Institute
- Elmdale Elementary School
Classroom Instructor (2004 - 2014)
- Leader of Elmdale Math Leadership PLC. Facilitated and worked with grade level lead teachers on aligning school wide CGI data analysis.
 - Member of the 3rd grade Unit 4 UBD curriculum writing team.
 - 2012 Elmdale Elementary Teacher of the Year.
 - Aligned math and science curriculum for the First Tee golf initiative, creating a meaningful student experience by working closely with the First Tee organization a Springdale Partner in Education.
 - Mentored two novice teachers and one teacher intern during the 2011-12 and 2013-14 school years
 - Completed years one and two of Extending Children’s Mathematical Thinking
 - Completed year one of Cognitively Guided Instruction
 - Founding advising member of Elmdale Elementary K-kids.
 - Leader of the Elmdale Instructional Leadership Team
 - Member of the Elmdale Student Advisory Committee
 - Organized school wide United Way Fundraising Campaign.
 - Instructed staff professional development of ESL strategies and explicit vocabulary instruction.
 - Taught adult education ESL classes to the Family Literacy Program
 - 2006 - 2013; Summer school instructor.
 - 2006; 2013 Member of district math text book selection committee.
 - 2005 - 2014; Point-in-Time after school instructor.

Administrative Internship

Harp Elementary School (2009 - 2010)

- Provided professional development to staff on the Gradual Release of Responsibility Model.
- Communicated with business partners and community stakeholders concerning the vision of the school.
- Analyzed and generated reports concerning benchmark test data and special education
- Conducted individual professional growth conferences with teachers

PAGE 4: Program Budget

Q19: Total Grant Amount Requested	51524.0
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.	\$25, 762
Q21: Proposed Cost Per Participant	1073.42
Q22: Estimated Number of Participants	48.0

Q23: Summary of the Program's Proposed Budget

1) Instructor costs:

- 3 instructors for 5 days (1 preparation day, 3 on-site days and 1 day of vetting lessons before publication) at \$500 per day: \$7,500,
- Plus robot and books for each instructor: \$800
- Total instructor cost: \$8,300

2) Teacher costs:

- 4 days (Moodle will be counted as one day), at \$150 per day: \$600 per teacher
- o Stipend total for 48 teachers: \$28,800
- Meals and supplies for 3 days: \$45 per teacher
- Robot, books: \$200 per teacher
- Total per teacher: \$845

3) 3 teachers from each district: 48 teachers at \$845 per teacher: \$40,560

4) Workshop Supplies:

- 9 pads of chart paper (1 per PLC per day): \$327
- Markers: \$53
- 2 inch binders for standards and curriculum resources: \$544
- One day overtime for co-op employee on Saturday workshop: \$250
- Total: \$1174

5) Moodle Costs at \$10 per teacher: \$480

Subtotal: \$50,514

6) Indirect costs at 2%: \$1010

Total grant costs: \$51,524

Q24: Completer Individual Stipend Amount (if applicable) 600.0

Q25: Total Amount Allocated for Participant Stipends (if applicable) 28800.0

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

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

Marcia Sanders

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

Teacher Center Coordinator/Assistant Director
